



**City of Columbia City Council
Study Session Agenda
February 6, 2025 - 5:30 PM**

**City Hall Council Chambers
700 North Garden Street
Columbia, TN 38401
Phone: 931-560-1510**

**Chaz Molder, Mayor
Randy McBroom, Vice Mayor
Council Member DaVena Hardison, Ward 1
Council Member Charlie Huffman, Ward 2
Council Member Cheryl E. Secrest, Ward 3
Council Member Kenny Marshall, Ward 4
Council Member Vacant, Ward 5**

**Tony Massey, City Manager
Jake Hubbell, City Attorney
Thad H. Jablonski, City Recorder
Liz Bermudez, Recording Secretary**

The City Council of the City of Columbia welcomes your presence and participation at this meeting. If you wish to address Council regarding any item on the Agenda, please sign the sign-up sheet and indicate which agenda item you would like to comment on. You will have the opportunity to comment on an item when it comes up on the Agenda and before Council votes on the item. Once recognized, you may then come to the podium and state your name and address. Anyone requesting accommodations due to disabilities should contact the ADA Coordinator, Wanda McClain, at 931-560-1570 prior to the meeting.

PUBLIC HEARINGS

1. PUBLIC HEARING ON ORDINANCE 4541 - AN ORDINANCE AMENDING ORDINANCE NO. 4400, THE SAME BEING THE ZONING ORDINANCE OF THE CITY OF COLUMBIA, TENNESSEE BY AMENDING STANDARDS FOR SHORT TERM RENTAL USE WITHIN ARTICLE 4 AND ARTICLE 9 - CITYWIDE, MORE ATTRACTIVE, LIVABLE CITY - DEVELOPMENT SERVICES DEPARTMENT.

RECOMMENDATION: Conduct the Public Hearing.

INFORMATION: The Department of Development Services is requesting to amend the Article 4 of Zoning Ordinance 4400. The proposed amendments include Uses, Limitations and Standards regarding Short Term Rentals. The Planning Commission recommended approval of this request with a vote of 6-0 at their December 4, 2024 meeting with the conditions from the Planning Commission recommending:

- Modification of the Planning Fee Schedule for Short Rentals requiring Conditional Use Approval with the Board of Zoning Appeals to be \$300 with staff approval of Short-Term Rentals being \$150.

City Council took this matter into consideration on January 9, 2025 and referred the item back to Planning Commission for further review and recommendation at the February 12, 2025 meeting.

The required notice of Public Hearing was advertised January 28, 2025 in *The Daily Herald*.

ATTACHMENTS: Staff Report Ordinance No. 4541 PH, Ordinance 4541, DS Staff Report.

- 1 CALL TO ORDER/ROLL CALL.**
- 2 INVOCATION BY T. LUSK OF ROLLING HILLS CHURCH.**
- 3 PLEDGE OF ALLEGIANCE.**
- 4 APPROVAL OF AGENDA.**

5 PRESENTATIONS.

5.1.PRESENTATIONS OF THE CITY OF COLUMBIA CITIZEN'S AWARD (REGULAR MEETING ONLY)

5.2.QUARTERLY PRESENTATION BY WIL EVANS, PRESIDENT OF MAURY COUNTY CHAMBER AND ECONOMIC ALLIANCE (REGULAR MEETING ONLY)

6 ORGANIZATIONAL BUSINESS.

6.1.ADMINISTRATION OF OATH OF OFFICE FOR THE POSITION OF WARD 5 CITY COUNCIL MEMBER

6.2.APPROVE THE MINUTES OF THE JANUARY 7, 2025 SPECIAL CALLED CITY COUNCIL MEETING - CITY MANAGER'S OFFICE.

RECOMMENDATION: Approve.

ATTACHMENTS: January 7, 2025 Special Called City Council Meeting Minutes

6.3.APPROVE THE MINUTES OF THE JANUARY 9, 2025, CITY COUNCIL MEETING - CITY MANAGER'S OFFICE.

RECOMMENDATION: Approve.

ATTACHMENTS: January 9, 2025 City Council Meeting Minutes

6.4.APPOINTMENT OF A CITY PROSECUTOR

6.5.APPROVE THE MAYOR'S APPOINTMENT OF COUNCIL MEMBER _____ TO THE CITY OF COLUMBIA MUNICIPAL PLANNING COMMISSION TO FILL AN UNEXPIRED TERM ENDING ON _____

RECOMMENDATION: Approve.

6.6.APPROVE THE APPOINTMENT OF WARREN FELD TO THE CITY OF COLUMBIA ARTS COUNCIL FOR A THREE-YEAR TERM

BEGINNING ON FEBRUARY 13, 2025 AND EXPIRING ON FEBRUARY 13, 2028

RECOMMENDATION: Approve.

6.7. RE-ELECTION OF BOB MORGAN TO THE BOARD OF DIRECTORS OF THE INDUSTRIAL DEVELOPMENT BOARD AND THE HEALTH, EDUCATIONAL AND HOUSING FACILITY BOARD FOR A SIX-YEAR TERM THAT BEGAN ON NOVEMBER 14, 2023 AND EXPIRES ON NOVEMBER 14, 2029

RECOMMENDATION: Approve.

6.8. RE-ELECTION OF BILL MARBET TO THE BOARD OF DIRECTORS OF THE INDUSTRIAL DEVELOPMENT BOARD AND THE HEALTH, EDUCATIONAL AND HOUSING FACILITY BOARD FOR A SIX-YEAR TERM THAT BEGAN ON NOVEMBER 14, 2023 AND EXPIRES ON NOVEMBER 14, 2029

RECOMMENDATION: Approve.

7 CONSENT AGENDA

7.1. APPROVE AND AUTHORIZE THE EXECUTION OF AN INTERGOVERNMENTAL COOPERATIVE PURCHASING AGREEMENT WITH BUY BOARD - FINANCE.

RECOMMENDATION: Approve.

INFORMATION: Pursuant to Tennessee Code Annotated 12-3-1205, the City may enter into cooperative agreements with local governments for the purchase of goods and services. Buy Board routinely invites bids and awards contracts for a variety of goods and services. From time to time it may be advantageous for the City of purchase goods or services utilizing Buy Board contracts.

ATTACHMENTS: Staff Report - Buy Board February 2025, Buy Board Purchasing Cooperative

7.2. APPROVE AND AUTHORIZE THE MAYOR TO SIGN A CONTRACT BETWEEN LOCALITY MEDIA, INC. DBA FIRST DUE AND THE CITY OF COLUMBIA TO PROVIDE SOFTWARE SERVICES IN THE AMOUNT OF \$58,371.50 FOR THE FIRST YEAR - FIRE & RESCUE.

RECOMMENDATION: Approve.

INFORMATION: Currently, Columbia Fire & Rescue utilizes three separate entities for software support which includes various reporting, scheduling and training services.

ESO Solutions is the software program currently providing incident reporting, reporting to the state, medical reporting, properties and inspections for Fire Marshal Office, personnel management and data analytics.

Aladtec, Inc is the software program currently used for data analytics for staffing, events, training and several important daily tasks.

Vector/Target Solutions is the software program currently used in the Training Division for online training and record storage.

First Due software program will replace these three software programs as each approaches their renewal date, beginning with Aladtec March 10, 2025. The first four-month term will be paid utilizing the funds which would have been used to renew the Aladtec subscription.

The initial agreement will be effective for an initial 4-month term commencing on the effective date and automatically renew for successive 12 month terms beginning July 1, 2025 including no more than 5% per annum increase beginning July 1, 2026.

Columbia Fire & Rescue requests City Council approval to enter into an Agreement for software applications and support services with Locality Media, Inc dba First Due.

CERTIFICATION: The Chief Financial Officer certifies \$58,372 is budgeted and unencumbered in Fire - Suppression-Software Services.

ATTACHMENTS: Staff Report Locality Media, Locality Media - First Due

7.3. APPROVE THE PURCHASE OF A 2025 FIRE MASTER RETAIL TANKER FROM SAFE INDUSTRIES IN THE AMOUNT OF \$468,100 UTILIZING BUY BOARD NATIONAL PURCHASING COOPERATIVE INTERLOCAL PARTICIPATION PROGRAM - FIRE & RESCUE.

RECOMMENDATION: Approve.

INFORMATION: Columbia Fire & Rescue requests City Council approval for the acquisition of a 2025 Fire Master Retail Tanker WT143 with an International Chassis, a Hale QFlo Pump and a 2000-gallon water tank from Safe Industries utilizing the Buy Board National Purchasing Cooperative Interlocal Participation Program.

This tanker is designed to carry 2,000 gallons of water, providing a crucial supplement in the event of water shortages during structure fires. In addition to its water-carrying capacity, the tanker is equipped with a 1250 GPM pump, fire hoses, and other essential firefighting equipment, enabling it to function as a pumper to actively fight fires. Tankers are vital for providing mobile water storage and enhancing fire suppression efforts, particularly when pumpers may be unable to access an adequate water supply. If approved, this will be the first tanker in the fleet for the City of Columbia Fire & Rescue Department.

CERTIFICATION: The Chief Financial Officer certifies that \$468,100 will be proposed in a forthcoming appropriations amendment.

ATTACHMENTS: Staff Report Pumper Tanker, City of Columbia TN Proposal 1.14.2025, Freightliner 2000 Gallon Pumper Tanker Cut Sheet, Proposal Format -- WT143 -- FMFE 2,000 Gallon -- With Options -- 03-28-2024

7.4. APPROVE DISBURSEMENTS FOR THE MONTH OF DECEMBER 2024 IN THE AMOUNT OF \$10,106,304.07 - FINANCE.

RECOMMENDATION: Approve.

ATTACHMENTS: December 2024 Disbursements

7.5. APPROVE AND AUTHORIZE THE DISPOSAL OF SURPLUS EQUIPMENT - FINANCE.

RECOMMENDATION: Approve and authorize the disposal of surplus equipment as listed on the attachment per policy as defined within the City of Columbia Purchasing Manual.

INFORMATION: Various items have been identified by the department as surplus. An attempt will be made to sell all items at public auction. The value of those not sold will be reassessed and disposed of as prescribed by City policy.

ATTACHMENTS: February 2025 Surplus

7.6. APPROVE PAYMENT TO MAURY COUNTY TO PROVIDE FUNDING FOR THE MAURY COUNTY/CITY OF COLUMBIA ANIMAL SERVICES FACILITY FOR THE FIRST QUARTER OF FY 2025 \$55,000 - FINANCE.

RECOMMENDATION: Approve.

INFORMATION: On April 14, 2016, the City Council approved an extension of the 2008 agreement with Maury County for operation of the Animal Services Facility. The 2008 agreement and extension specified that the City and County will split operating expenses (over and above revenue derived from the operation of the facility) 50/50.

The 2016 contract extension terminated on October 2, 2018. The City's FY 2025 budget includes \$270,000 for the City's contribution towards facility operations, or \$55,000 per quarter. An invoice has been received for the second quarter of FY 2025, which exceeds \$55,000. The invoice and supporting documentation have been reviewed by Finance.

As the operating agreement has expired, City Council approval is necessary prior to any payment towards shelter operation costs.

CERTIFICATION: The Chief Financial Officer certifies that \$55,000 is budgeted and unencumbered in General Government-Animal Control.

ATTACHMENTS: Staff Report Animal Shelter Invoice, Animal Shelter FY 25 Q2 Invoice

7.7. APPROVE THE ANNUAL RENEWAL OF LIABILITY AND AUTO INSURANCE WITH PUBLIC ENTITY PARTNERS IN THE AMOUNT OF \$483,758 - FINANCE.

RECOMMENDATION: Approve.

INFORMATION: The City of Columbia obtains several lines of insurance coverage through Public Entity Partners (PEP), formerly the TML Risk Management Pool, for the purpose of managing risk. The policy renewal for liability (general, law enforcement, errors and omissions and automobile) and auto physical damage coverage is January 1st of each year. An invoice for premium renewal for liability and auto insurance has been received from PEP and is due for payment.

The total annual premium due for 2025 is \$483,758 which includes a \$15,231 member dividend credit in 2025. No member dividend credit was issued in 2024. Prior year net premiums, i.e., premium after member dividend credit, for the past five (5) years, plus the proposed year, were as follows:

2025	\$498,989	\$15,231	\$483,758
2024	\$481,911	\$0	\$481,911
2023	\$404,178	\$43,544	\$360,634
2022	\$389,337	\$46,359	\$342,978
2021	\$347,543	\$84,110	\$263,433
2020	\$360,083	\$48,410	\$311,673

The net premium cost after the member dividend credit is applied for 2025 (\$483,758) increased approximately 3.5% compared with the prior year's net premium amount (\$481,911). The member dividend credit increased from \$0 to \$15,231.

The premium increase from 2024 follows from increased base insurance rates across various types of general liability coverage, a 2.46% "combined liability" increase.

A breakdown of cost by fund is as follows:

General Fund	\$389,893
Sanitation Fund	\$53,761
Wastewater Fund	\$40,104
Total	\$483,758

Deductible amounts for liability coverage lines are \$5,000 per occurrence, with a \$1,000 deductible for auto physical damage. Only vehicles valued over \$3,500 are included in the physical damage coverage.

The City Council is requested to approve the renewal of City liability and automobile physical damage insurance and to authorize payment to PEP in the amount of \$483,758.

ATTACHMENTS: Staff Report PEP Liability, General Liability Invoice PEP 2025

7.8. APPROVE AND AUTHORIZE THE MAYOR TO SIGN A CONTRACT BETWEEN THE CITY OF COLUMBIA AND THE WANDER DIARY IN THE AMOUNT OF \$4,000 FOR A SOCIAL MEDIA INFLUENCER SPRING MARKETING CAMPAIGN - CITY MANAGER'S OFFICE.

RECOMMENDATION: Approve.

INFORMATION: Visit Columbia is working more with social media influencers, like The Wander Diary, as part of the targeted marketing strategy designed to reach travelers through Instagram, the Visit Columbia website, and blog posts. This strategy is designed to encourage and inspire travel to Columbia while building brand awareness. *(This agreement was previously approved, but the company changed their name.)*

CERTIFICATION: The Chief Financial Officer certifies that \$4,000 is budgeted and unencumbered in Tourism Enhancement-General Fund - Professional Services.

ATTACHMENTS: Staff Report The Wander Diary, The Wander Diary Contract

7.9. APPROVE AND AUTHORIZE THE MAYOR TO SIGN AN AGREEMENT WITH SIMPLEVIEW IN THE AMOUNT OF \$1,200 ANNUALLY FOR THE XML DATA FEEDS THAT DISPLAY EVENTS & LISTINGS ON THE NEW, DIGITAL TOUCH SCREEN INFORMATION KIOSK IN THE WELCOME CENTER - CITY MANAGER'S OFFICE.

RECOMMENDATION: Approve.

INFORMATION: This agreement addresses the need for the Simpleview XML data feeds of the VisitColumbiaTn.com listings and events to be accessible through the new digital, touch screen kiosk being constructed for the Welcome Center. Visitors will now be able to explore the attractions and events on a large, touch screen kiosk to help plan their visit.

CERTIFICATION: The Chief Financial Officer certifies that \$1,200 is budgeted and unencumbered in Tourism Enhancement-General Fund - Software Maintenance.

ATTACHMENTS: Staff Report SimpleView , Simpleview

7.10. APPROVE AND AUTHORIZE MAYOR TO SIGN RENEWAL OF A "LICENSE AGREEMENT" WITH THE TENNESSEE DEPARTMENT OF TRANSPORTATION (TDOT) FOR A ROADSCAPES PROJECT LOCATED AT THE MEDIAN OF HIGHWAY 31 NEAR INTERSECTION OF DONALD F. EPHLIN PKWY - DEVELOPMENT SERVICES DEPARTMENT.

RECOMMENDATION: Approve.

INFORMATION: Licensee, The City of Columbia, desires to renew its use of a portion of the Licensed Premises to operate and maintain a Roadscapes project, including landscaping and welcome signage in Maury County, TN. The project is along state-owned right-of-way and median which required the city to renew the License Agreement. The City of Columbia will be responsible for maintenance of landscaping and signage. The original 10-year Agreement was signed and approved in August of 2014, expiring in 2024. There is no cost associated with the renewal, the Agreement has a 10-year term and is renewable.

ATTACHMENTS: Staff Report Roadscapes project renewal, License Agreement, including Exhibit A

7.11. APPROVE AND AUTHORIZE THE MAYOR TO SIGN THE NON-EXCLUSIVE USE AND OCCUPANCY PERMIT BETWEEN THE CITY OF COLUMBIA AND THE COLUMBIA AMERICAN LITTLE

LEAGUE FOR THE 2025 SEASON - WARD 3 AND 4 - PARKS & RECREATION DEPARTMENT.

RECOMMENDATION: Approve.

INFORMATION: The Columbia American Little League is requesting an annual Non-Exclusive Use Permit with the City of Columbia to use Buck Davis Field at Eva Gilbert Park and Ridley Sports Complex for their practices and games for the 2025 season. Once approved, the permit will cover their annual facility needs.

Columbia Little League and the Columbia Parks and Recreation Department amicably agree on the recommended user fees for each season. The league does not charge a gate fee for any of their events.

ATTACHMENTS: Staff Report, American Little League User Agreement w/insurance

7.12. APPROVE AND AUTHORIZE THE MAYOR TO SIGN THE NON-EXCLUSIVE USE AND OCCUPANCY PERMIT BETWEEN THE CITY OF COLUMBIA AND THE MULETOWN BASEBALL LEAGUE FOR THE 2025 SEASON - WARD 3 - PARKS & RECREATION DEPARTMENT.

RECOMMENDATION: Approve.

INFORMATION: The Mule Town Baseball League is requesting their annual Non-Exclusive Use Permit with the City of Columbia to utilize Fairview Park T-Ball Fields and the Baseball Field for the 2025 season for practices and games.

The Mule Town Baseball League provides the youth of Columbia and Maury County with another venue to learn and enjoy the experience of playing baseball in an organized environment. In lieu of paying user fees, the Mule Town Baseball League will be responsible for preparing the field for practice and league games.

There will be no fees collected for use of the facilities.

ATTACHMENTS: Staff Report, Muletown Baseball User Agreement w/insurance

7.13. APPROVE AND AUTHORIZE THE MAYOR TO SIGN THE NON-EXCLUSIVE USE AND OCCUPANCY PERMIT BETWEEN THE CITY OF COLUMBIA AND THE COLUMBIA SOCCER

ASSOCIATION FOR THE 2025 SEASON - WARDS 1 AND 4 - PARKS & RECREATION DEPARTMENT.

RECOMMENDATION: Approve.

INFORMATION: The Columbia Soccer Association is requesting the renewal of their annual Non-Exclusive Use and Occupancy Permit to utilize Cook Soccer Park and the Ridley Sports Complex soccer fields for the 2025 season. As in past years, in lieu of paying user fees, Columbia Soccer Association agrees to absorb expenditures to provide all turf management required to maintain the immediate playing surfaces at Cook Soccer Park; mowing, trimming, fertilization, weeding and marking fields for play. The Association will also assist with the litter pickup and janitorial upkeep as required for the restrooms and park areas near the fields. The City will maintain the park features up to the perimeter of each playing field.

ATTACHMENTS: Staff Report, Soccer Association User Agreement w/insurance

7.14. APPROVE AND AUTHORIZE THE MAYOR TO SIGN THE NON-EXCLUSIVE USE AND OCCUPANCY PERMIT BETWEEN THE CITY OF COLUMBIA AND THE EXCEL AQUATICS FOR THE 2025 SEASON - WARD 4 - PARKS & RECREATION DEPARTMENT.

RECOMMENDATION: Approve.

INFORMATION: Excel Aquatics is requesting an annual Non-Exclusive Use Permit with the City of Columbia to utilize the pools at The Columbia Aquatics and Recreation Center for their swim services, practices and swim meets for the 2025 season. Once approved, the permit will cover their annual facility needs.

Excel Aquatics and the Columbia Parks and Recreation Department amicably agree on the recommended user fees for each season. The organization will give back 25% of their revenues to the City along with charging the center membership fees for their participants.

ATTACHMENTS: Staff Report, Excel Aquatics user agreement w/insurance, Excel Aquatics Overview, Info & Statistics

7.15. APPROVE AND AUTHORIZE THE MAYOR TO SIGN THE NON-EXCLUSIVE USE AND OCCUPANCY PERMIT BETWEEN THE CITY OF COLUMBIA AND THE COLUMBIA GIRLS FASTPITCH

ASSOCIATION FOR THE 2025 SEASON - WARD 4 - PARKS & RECREATION DEPARTMENT.

RECOMMENDATION: Approve.

INFORMATION: The Columbia Girls Fastpitch Association is requesting their annual Non-Exclusive Use Permit with the City of Columbia to utilize Ridley Sports Complex for the 2025 season for practices and games. Once approved, the permit will cover their annual facility needs.

CGFPA and the Columbia Parks and Recreation Department amicably agree on the recommended user fees for each season. Families that express the need are eligible for discounts and CGFPA does not charge gate fees for any of their events.

ATTACHMENTS: Staff Report, CGFP User agreement w/insurance

7.16. APPROVE AND AUTHORIZE THE MAYOR TO SIGN A CONTRACT IN THE AMOUNT OF \$18,616 WITH PREVENTIA SECURITY SOLUTIONS PROVIDER FOR INSTALLATION OF CAMERAS AND OTHER SECURITY MEASURES ALONG WITH MONTHLY MONITORING OF THE MACEDONIA RECREATION CENTER, THE ARMORY RECREATION CENTER, THE DR. CHRISTA S. MARTIN COMMUNITY CENTER AND THE COLUMBIA AQUATICS AND RECREATION CENTER - PARKS & RECREATION DEPARTMENT.

RECOMMENDATION: Approve.

INFORMATION: The Parks and Recreation Department currently has Preventia Security Provider for security and monthly monitoring at the Rainey House in Woodland Park as well as Ridley Sports Complex. The department desires to extend those services to the Macedonia Recreation Center, The Armory Recreation Center, the Dr. Christa S. Martin Community Center and The Columbia Aquatics and Recreation Center in order to have the same company responsible for all Parks facilities. Services and fees are outlined in the provided agreements.

CERTIFICATION: The Chief Financial Officer certifies that \$18,616 is budgeted and unencumbered in Columbia Aquatics and Fitness Center-Maintenance and Repair Other.

ATTACHMENTS: Staff Report Preventia, Preventia Proposal, Preventia Monitoring Agreement

7.17. APPROVE THE PURCHASE OF ELECTRONIC SECURITY SYSTEMS INSTALLATION FOR THE COLUMBIA AQUATICS AND RECREATION CENTER IN THE AMOUNT OF \$70,450 UTILIZING STATE OF TN CONTRACT SWC-172 - PARKS & RECREATION DEPARTMENT.

RECOMMENDATION: Approve.

INFORMATION: The City of Columbia Parks and Recreation Department is requesting the purchase of a new electronic security system installation from Convergent for the amount of seventy thousand four hundred fifty dollars (\$70,450) utilizing State of TN contract SWC-172. The security system will provide the new Columbia Aquatics and Recreation Center with the amount of security necessary for that facility.

CERTIFICATION: The Chief Financial Officer certifies that \$70,450 is budgeted and unencumbered in Columbia Aquatics and Recreation Center - Computer Equipment.

ATTACHMENTS: Staff Report Convergent, Convergent - Electronic security proposal, Convergent TN State Contract #172

7.18. APPROVE AND AUTHORIZE THE MAYOR TO SIGN THE CONTRACT BETWEEN THE CITY OF COLUMBIA AND CUMBERLAND VALLEY CONSTRUCTORS, INC. IN THE AMOUNT OF \$1,713,000 FOR THE CONSTRUCTION OF THE DUCK RIVER SEWAGE PUMP STATION REPLACEMENT - WASTEWATER DEPARTMENT.

RECOMMENDATION: Approve.

INFORMATION: The City of Columbia's Wastewater Department requests the mayor to sign the Contract between the City of Columbia and Cumberland Valley Constructors, Inc for the construction of the Duck River Sewage Pump Station Replacement in the amount of \$1,713,000. The bid award was previously approved by City Council on January 9, 2025.

CERTIFICATION: The Chief Financial Officer certifies that \$1,713,000 is budgeted and unencumbered in Wastewater - Pump Stations - Duck River PS.

ATTACHMENTS: Staff Report Cumberland Valley Constructors Duck River Contract, Cumberland Valley Constructors Duck River Contract and Specs.

7. APPROVE BID AWARD TO CUMBERLAND VALLEY CONSTRUCTORS, INC. IN THE AMOUNT OF \$5,272,800 FOR CONSTRUCTION OF THE BEAR CREEK PIKE SEWAGE PUMP STATION REPLACEMENT - WASTEWATER DEPARTMENT.

RECOMMENDATION: Approve.

INFORMATION: The City of Columbia's Wastewater Department requests approval of the bid award to Cumberland Valley Constructors, Inc. for construction of the Bear Creek Pike Sewage Pump Station Replacement in the amount of \$5,272,800. This would replace an outdated pump station and provide continued quality service to the citizens of the City of Columbia.

CERTIFICATION:

The Chief Financial Officer certifies that \$5,272,800 is budgeted and unencumbered in Wastewater - Pump Stations - Duck River PS.

ATTACHMENTS: Staff Report Bid Award Cumberland Valley Constructors - Bear Creek Pike, Award Letter - Bear Creek Pike Sewage Pumping Station Replacement, Bid Tab - Bear Creek Pike Sewage Pumping Station Replacement

8 ADMINISTRATION.

9 RESOLUTIONS.

9.1.RESOLUTION NO. 25-09 - A RESOLUTION TO ACCEPT THE OWNERSHIP AND MAINTENANCE OF SEWER IMPROVEMENTS SERVING HONEY FARMS PHASE 3 - WASTEWATER DEPARTMENT.

RECOMMENDATION: Approve Resolution No. 25-09.

INFORMATION: Honey Farms Phase 3 consists of 710 linear feet of 8" sanitary sewer main. The Developers met all of the qualifications for acceptance. The Wastewater Department has performed the necessary testing and inspections.

ATTACHMENTS: Staff Report Resolution No. 25-09, Resolution No. 25-09, Resolution No. 25-09 Dedication Letter.

9.2. RESOLUTION NO. 25-11 - A RESOLUTION TO ACCEPT THE OWNERSHIP AND MAINTENANCE OF SEWER IMPROVEMENTS SERVING MCCLURE FARMS PHASE 1A - WASTEWATER DEPARTMENT.

RECOMMENDATION: Approve Resolution No. 25-11

INFORMATION: McClure Farms Phase 1A consists of 602 linear feet of 8" sanitary sewer main. The Developers met all of the qualifications for acceptance. The Wastewater Department has performed the necessary testing and inspections.

ATTACHMENTS: Staff Report Resolution No. 25-11, Resolution No. 25-11, Resolution No. 25-11 Dedication Letter.

9.3. RESOLUTION NO. 25-12 - TAX CORRECTIONS - CITY RECORDER'S OFFICE.

RECOMMENDATION: Approve Resolution No. 25-12.

INFORMATION: The City Recorder is presenting tax corrections through 1/24/2025 for Council consideration as submitted by Mr. Bobby Daniels, Maury County Tax Assessor.

ATTACHMENTS: Staff Report Resolution No. 25-12, Resolution No. 25-12, Resolution No. 25-12 Exhibit A

9.4. RESOLUTION NO. 25-13 - A RESOLUTION TO ACCEPT THE OWNERSHIP AND MAINTENANCE OF SEWER IMPROVEMENTS SERVING HAMPSHIRE HILLS - WASTEWATER DEPARTMENT.

RECOMMENDATION: Approve Resolution No. 25-13.

INFORMATION: Hampshire Hills consists of 2,340 linear feet of 8" sanitary sewer main. The Developers met all of the qualifications for acceptance. The Wastewater Department has performed the necessary testing and inspections.

ATTACHMENTS: Staff Report Resolution No. 25-13, Resolution No. 25-13, Resolution No. 25-13 Dedication Letter.

9.5. RESOLUTION NO. 25-14 - A RESOLUTION AUTHORIZING THE MAYOR TO SIGN A MEMORANDUM OF UNDERSTANDING WITH MAURY COUNTY 911 REGARDING THE RESPONSIBILITY OF ASSIGNING ALL ADDRESSES WITHIN THE CITY LIMITS OF COLUMBIA - CITY WIDE, FINANCIALLY RESPONSIBLE CITY PROVIDING EXCELLENT SERVICES - DEVELOPMENT SERVICES DEPARTMENT.

RECOMMENDATION: Approve Resolution No. 25-14.

INFORMATION: TCA §7-8-127(b) allows a municipality to authorize emergency communications to assign and address streets, roads and property numbers relating to such. The Memorandum of Understanding is the agreement with Maury County 911 to be responsible in processing these items in accordance to the fee schedule and the renewable three (3) year term of agreement.

ATTACHMENTS: Staff Report Resolution No. 25-14, Resolution No. 25-14, Resolution No. 25-14 - MOU.

9.6. RESOLUTION NO. 25-15 - A RESOLUTION ACCEPTING OWNERSHIP AND MAINTENANCE OF THE TRAFFIC SIGNAL AS WELL AS ROADWAY IMPROVEMENTS AT NASHVILLE HIGHWAY AND GREENS MILL ROAD IN THE CITY OF COLUMBIA. - DEVELOPMENT SERVICES DEPARTMENT.

RECOMMENDATION: Approve Resolution No. 25-15.

INFORMATION: This resolution refers to acceptance for ownership and maintenance of the traffic signal, as well as roadway improvements at Nashville Highway and Greens Mill Road in the City of Columbia. These improvements were a result of multiple subdivisions including Villages at Carters Station, Drumwright,

Preserve at Drumwright, The Landings at Greens Mill, and Steadfast at Greens Mill, as outlined in their associated traffic impact studies. The cost of all design and installation were covered by the Developers, and they now wish to turn the improvements over to the City of Columbia for ownership and maintenance.

ATTACHMENTS: Staff Report Resolution No. 25-15, Resolution No. 25-15, Resolution No. 25-15 Dedication Letter.

10 ORDINANCES.

10.1.2ND CONSIDERATION OF ORDINANCE NO. 4539 AS AMENDED - AN ORDINANCE TO AMEND ORDINANCE NO. 4504 - THE CLASSIFICATION AND COMPENSATION PLAN FOR THE EMPLOYEES OF THE CITY OF COLUMBIA FOR THE 2024-2025 FISCAL YEAR - HUMAN RESOURCES.

RECOMMENDATION: Approve Ordinance No. 4539 on second consideration as amended.

INFORMATION: The 2024-2025 Classification and Compensation Plan for the City of Columbia employees is reviewed and updated as necessary. The Parks and Recreation Department staff is expanding with the purchase of Muletown Recreation, which requires an Aquatics Manager position to oversee three pools and three splash pads. The Grade level for this position will be Grade Level I.

The City of Columbia will add the position of Special Legal Counsel to Section 2, Temporary Positions, of the Classification and Compensation Plan. This position is being created due to the retirement of Tim Tisher, our current City Attorney. Attorney Tisher has twenty-plus years of knowledge of City of Columbia legalities. Attorney Tisher will be temporarily available to counsel City Attorney Jake Hubbell for the introduction period.

The job title for Shift Commander in Fire & Rescue is changing to Battalion Chief, this is only a title change, the grade will remain the same.

The position of Recreation Aide II, Grade Level D is being added to Parks and Recreation.

ATTACHMENTS: Staff Report Ordinance No. 4539, Ordinance No. 4539 As Amended, Ordinance No. 4539 Exhibit A.

10.2.1ST CONSIDERATION ON ORDINANCE NO. 4536 - AN ORDINANCE AMENDING ORDINANCE NO. 4400, THE SAME BEING THE ZONING ORDINANCE OF THE CITY OF COLUMBIA, TENNESSEE BY REPEALING ARTICLE 4 AND REPLACING SUCH ARTICLE WITH NEW ARTICLE 4 BUILDING, LOT AND BUILDING SITE STANDARDS - CITYWIDE - DEVELOPMENT SERVICES DEPARTMENT.

RECOMMENDATION: Approve Ordinance 4536 on first consideration.

INFORMATION: The Department of Development Services is requesting to amend the Article 4 of Zoning Ordinance 4400. The proposed amendments include Uses, Limitations and Standards regarding Home Occupations, Vape, Tobacco, & Cannabinoids, and Bars, Taverns & Nightclubs. The Planning Commission recommended approval of this request with a vote of 6-0 at their December 4, 2024 meeting with the conditions from the Planning Commission recommending:

- That within the Columbia Arts District Overlay the applicant shall demonstrate that no pre-existing place of Worship, School, or Public Park be located within 200 ft. (reduced from 500 ft.) of a proposed bar, tavern, or nightclub.
- That the separation requirement for Tobacco, Vape, and Cannabinoid Retailers be increased from 500 feet to 1,000 feet from an already existing establishment from a new proposed Tobacco, Vape, and Cannabinoid Retailer, and keep the separation of such newly established retailer from schools, parks, and religious facilities remain at 500 feet and not allowed with a CD-5 district as drafted by Staff.

ATTACHMENTS: Ordinance 4536 Staff Report, Ordinance No. 4536, Ordinance 4536 Exhibit A, Ordinance No. 4536 Marked Changes "A" Bar, Tavern, Nightclub, Ordinance No. 4536 Marked Changes "B" Home Occupation, Ordinance No. 4536 Marked Changes "D" Vape, Tobacco, Cannabinoid, Ordinance No. 4536 Marked Changes Table "A" Home Occupation, Ordinance No. 4536 Marked Changes Table "C" Vape, Tobacco, Cannabinoid, DS Staff Report removing word Garage, DS Staff Report.

10.3.1ST CONSIDERATION ON ORDINANCE NO. 4537 - AN ORDINANCE AMENDING DEVELOPMENT SERVICES FILING FEE SCHEDULE FOR THE CITY OF COLUMBIA, TENNESSEE - CITYWIDE - DEVELOPMENT SERVICES DEPARTMENT.

RECOMMENDATION: Approve Ordinance 4537 on first consideration.

INFORMATION: The request is to amend the Fee Schedule for Development Services. The proposed amendments necessitate accompanying fees for the permits and processes that staff will be required to review and issue. The fees that were amended and added include a Short-Term Rental Fee of \$300 requiring Board of Zoning Appeals approval; \$150 Short Term Rental Fee requiring Administrative Approval; Small Accessory Permit fee of \$25; Circulation of Approved Final Plat Fee of \$35; and items for Annexation to notice and plan of services and resolutions to consist of an Advertising and Processing Fee of Cost. The Planning Commission recommended approval of this request with a vote of 6-0 at their December 4, 2024 meeting.

ATTACHMENTS: Ordinance 4537 Staff Report, Ordinance No. 4537, Ordinance No. 4537 Exhibit A.

10.4.1ST CONSIDERATION ON ORDINANCE NO. 4538 - AN ORDINANCE AMENDING ORDINANCE NO. 4400, THE SAME BEING THE ZONING ORDINANCE OF THE CITY OF COLUMBIA, TENNESSEE REGARDING DEFINITIONS IN ARTICLE 9 BY REPEALING SUCH ARTICLE AND REPLACING IT WITH A NEW ARTICLE 9, DEFINITIONS - DEVELOPMENT SERVICES DEPARTMENT.

RECOMMENDATION: Approve Ordinance No. 4538 on first consideration.

INFORMATION: The Department of Development Services is requesting to amend the Zoning Ordinance of Columbia, Ordinance 4400, with changes concerning Article 9: Definitions, as reviewed and recommended by the Planning Commission at the December 4th, 2024 meeting. The changes and additions to definitions include the following: Minor Home Occupation; Major Home Occupation; Kennel; Tobacco, Vape, and Cannabinoid Retailers

Approval was recommended by a vote of six to zero.

ATTACHMENTS: Ordinance 4538 Staff Report, Ordinance No. 4538, Ordinance No. 4538 Exhibit A, Ordinance No. 4538 Marked Changes, DS staff report.

10.5.1ST CONSIDERATION OF ORDINANCE NO. 4540 – AN ORDINANCE TO AMEND THE FISCAL YEAR 2024-2025 BUDGET ORDINANCE NO. 4503, AS AMENDED, PROVIDING FOR REVISIONS TO THE GENERAL, CAPITAL PROJECTS, GRANTS AND WASTEWATER FUNDS AND THE DATE OF MARCH 13, 2025 AS THE DATE OF PUBLIC HEARING - FINANCE.

RECOMMENDATION: Approve Ordinance No. 4540 on first consideration and establish the date of March 13, 2025 as the date of Public Hearing.

INFORMATION: The proposed ordinance is the third amendment to the FY 2025 Appropriation Ordinance, impacting the Capital Projects, Grants, Wastewater and General Fund Departments.

Within this budget amendment, the following items are included:

- Rebudget/transfer \$4,377,973.21 from General to Capital Projects,
- Budget transfer/expenses for Cap Projects totaling \$4,377,973.21,
- Budget Army Core flood mapping study at \$142,500 and Intersection Study at Country Club/Union totaling \$5,500.
- Budget FY 2024 funds due for JAG grant to closeout totaling

\$1,915.22,

- Budget Anonymous Donations totaling \$2,245.95 and \$812.19 and Office of Emergency Management incident funding totaling \$648.43,
- Budget capital projects including \$4.3 million for Muletown Rec acquisition, Public Works Building improvements totaling \$69,723.21 and tourism computer equipment totaling \$8,250,
- Reclassify Tourism Enhancement Grant project funds totaling \$75,000,
- Budget \$865,156.88 for 2024 G.O. Bonds interest related to new debt issued for the new WWTP project.

A detailed schedule of items included within this budget amendment is attached. This amendment increases the City's total budget for FY 2025 by \$9,787,225 to \$216,240,103.

ATTACHMENTS: Staff Report Ordinance No. 4540, Ordinance No. 4540, Supporting Documents, Budget Summary Grand Totals 2025 AA3.

10.6.1ST CONSIDERATION ON ORDINANCE 4541 -AN ORDINANCE AMENDING ORDINANCE NO. 4400, THE SAME BEING THE ZONING ORDINANCE OF THE CITY OF COLUMBIA, TENNESSEE BY AMENDING STANDARDS FOR SHORT TERM RENTAL USE WITHIN ARTICLE 4 AND ARTICLE 9 - CITYWIDE, MORE ATTRACTIVE, LIVABLE CITY - DEVELOPMENT SERVICES DEPARTMENT.

RECOMMENDATION: Approve Ordinance 4541 on first consideration.

INFORMATION: The Department of Development Services is requesting to amend the Article 4 of Zoning Ordinance 4400. The proposed amendments include Uses, Limitations and Standards regarding Short Term Rentals. The Planning Commission recommended approval of this request with a vote of 6-0 at their December 4, 2024 meeting with the conditions from the Planning Commission recommending:

- Modification of the Planning Fee Schedule for Short Rentals

requiring Conditional Use Approval with the Board of Zoning Appeals to be \$300 with staff approval of Short-Term Rentals being \$150.

City Council took this matter into consideration on January 9, 2025 and referred the item back to Planning Commission for further review and recommendation at the February 12, 2025 meeting.

ATTACHMENTS: Ordinance 4541, Ordinance 4541 Staff Report, DS Staff Report

11 PUBLIC COMMENT.

12 OTHER BUSINESS.

13 EXECUTIVE SESSION.

14 ADJOURNMENT.

15 UPCOMING EVENTS.



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Paul Keltner, AICP, Development Services Director pkeltner@columbiatn.gov 931-560-1560

AGENDA ITEM TITLE: PUBLIC HEARING ON ORDINANCE 4541 - AN ORDINANCE AMENDING ORDINANCE NO. 4400, THE SAME BEING THE ZONING ORDINANCE OF THE CITY OF COLUMBIA, TENNESSEE BY AMENDING STANDARDS FOR SHORT TERM RENTAL USE WITHIN ARTICLE 4 AND ARTICLE 9 - CITYWIDE, MORE ATTRACTIVE, LIVABLE CITY.

RECOMMENDATION: Conduct the Public Hearing.

INFORMATION: The Department of Development Services is requesting to amend the Article 4 of Zoning Ordinance 4400. The proposed amendments include Uses, Limitations and Standards regarding Short Term Rentals. The Planning Commission recommended approval of this request with a vote of 6-0 at their December 4, 2024 meeting with the conditions from the Planning Commission recommending:

- Modification of the Planning Fee Schedule for Short Rentals requiring Conditional Use Approval with the Board of Zoning Appeals to be \$300 with staff approval of Short-Term Rentals being \$150.

City Council took this matter into consideration on January 9, 2025 and referred the item back to Planning Commission for further review and recommendation at the February 12, 2025 meeting.

The required notice of Public Hearing was advertised January 28, 2025 in The Daily Herald.

CERTIFICATION: N/A

ATTACHMENTS: Ordinance 4541, DS Staff Report.

**AN ORDINANCE AMENDING ORDINANCE NO. 4400, THE SAME BEING
THE ZONING ORDINANCE OF THE CITY OF COLUMBIA, TENNESSEE BY
AMENDING STANDARDS FOR SHORT TERM RENTAL USE WITHIN
ARTICLE 4 AND ARTICLE 9**

WHEREAS, Section §13-7-201 of the Tennessee Code Annotated empowers the city to enact a zoning ordinance and to provide for its administration, enforcement, and amendment; and

WHEREAS, the City Council deems it necessary for the purpose of promoting the health, safety, morals and general welfare of the city to enact such an ordinance; and

WHEREAS, the City Council, pursuant to the provisions of Section §13-4-101 of the Tennessee Code Annotated has appointed a Planning Commission to recommend the appropriate regulations to be enforced therein; and

WHEREAS, on the 4th day of December 2024, and on the 12th day of February 2025, the Planning Commission reviewed and recommended specific changes in accordance to Section 8.5.18, to the Zoning Ordinance regarding Short Term Rental use within Article 4 and Article 9.

WHEREAS, the text within Zoning Ordinance 4400 Article 4.3.9.E.6.kk is being repealed and replaced with the following language:

“**Short-Term Rental Units** shall be permitted in accordance with the applicable Use Table, subject to the following:

(1) Permit Required

(a) No dwelling unit, accessory dwelling unit, or portion thereof shall be offered for rent as a Short-Term Rental unless the Zoning Administrator has first issued a short-term rental permit to the owner.

(b) Where the Building, Lot and Building Site Principal Uses Table identifies the principal use of a dwelling as a Short-Term Rental as permitted subject to limited use standards (PL), a Short-Term Rental may be established upon approval of a Short-Term Rental permit by the Zoning Administrator. The Zoning Administrator shall establish a process for review and issuance of permits for Short Term Rentals.

(c) Where the **Building, Lot and Building Site Principal Uses Table** identifies the principal use of a dwelling as a Short-Term Rental as a Conditional Use (CU), a Short-Term Rental may be established only upon approval by the Board of Zoning Appeals. Such approval shall follow the process established at Section 8.5.16. The Zoning Administrator shall review such Short-Term Rental requests and recommend appropriate conditions of approval to the Board

of Zoning Appeals. The Zoning Administrator shall issue a Short-Term Rental Permit only upon approval by the Board. The permit shall be subject to any unique conditions imposed by the Board. Conditional Use approval shall expire one year from date of issuance of the subsequent permit. The Board may authorize the Zoning Administrator to extend this time and renew the associated Short-Term Rental Permit, provided the operator adheres to all conditions of approval.

(d) Where the **Building, Lot and Building Site Accessory Uses Table** identifies accessory use of a dwelling, portion of a dwelling, or an accessory dwelling unit as permitted subject to limited use standards (PL), a Short-Term Rental may be established upon approval of a Short-Term Rental permit by the Zoning Administrator.

(e) If the Zoning Administrator denies a request for a Short-Term Rental permit, or revokes a previously issued permit, the applicant may appeal the decision to the Board of Zoning Appeals. Such a request shall be evaluated as a Conditional Use.

(f) A Short-Term Rental Permit shall expire one year from the date of issuance. Failure to renew the permit shall constitute a cessation of the Short-Term Rental and immediate change of use to Household Living.

(g) A Short-Term Rental Permit is granted to a specific operator for a specific dwelling unit or portion thereof and may not be sold or otherwise transferred. Changes in the ownership will result in revocation of the Short-Term Rental permit. A new Short-Term Rental Permit is required when the dwelling unit is sold or conveyed.

(2) Short Term Rental Local Point of Contact Designation

(a) The owner of a short-Term Rental shall designate a permanent local point of contact for each short-term rental property.

(b) If the owner is a natural person, the owner may serve as the local point of contact. Alternatively, the owner may designate another natural person over the age of eighteen as the short-term rental point of contact.

(c) Where Short-Term Rental is the principal use of a dwelling, the name and telephone number of the local point of contact shall be conspicuously posted where it can be seen by guests and law enforcement.

(d) The short-term rental local point of contact must be available to be contacted by the City at all times

(e) Failure of the local contact person to be available at all times for contact by the City constitutes an instance of non-compliance which may result in revocation of the Short-Term Rental permit

(f) When the local point of contact is notified by phone or email that the guests at a short-term rental are violating City ordinances or policies, the local contact person shall communicate with the owner, and the owner shall immediately commence remedial action and cause the violation to cease.

(3) Short-Term Rental operators shall provide a parking plan demonstrating sufficient parking for guests.

(a) Where Short-Term Rental is the principal use of the dwelling, the minimum number of parking spaces shall be equivalent to that required by **Table 4.3.12.B-1 Vehicular Parking Requirements** for a Single-Family Detached Dwelling.

- (b) Where Short-Term Rental is the accessory use of dwelling, portion of the dwelling, or accessory dwelling unit, the minimum number of parking spaces shall be equivalent to that required by **Table 4.3.12.B-1 Vehicular Parking Requirements** for the principal use, plus one.
- (4) Events are not permitted in conjunction with a short-term rental use. Examples of events include, but are not limited to, weddings, receptions, anniversaries, private parties, banquets, and business seminars.
- (5) External alterations or site improvements that change the residential character of the Lot or Building Site upon which a Short-Term Rental is located are prohibited.
- (6) Short-Term Rental properties must meet all applicable requirements of the state and local building, fire safety, and property maintenance codes.
- (7) Short-Term Rental operators and their guests shall comply with the laws of the state of Tennessee and all ordinances of the City of Columbia.
- (8) The Zoning Administrator may revoke a Short-Term rental permit for violations of these standards, violation of any City of Columbia Ordinances, or failure to adhere to conditions of approval imposed by the Board of Zoning Appeals.”

WHEREAS, Zoning Ordinance 4400 Table 4.3.9.A-2 Building, Lot and Building Site Accessory Use shall be amended to reflect the following allowance of conditional use (CU), Permitted Limited (PL) and Not Permitted (NP):

ACCESSORY USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Short-Term Rental Unit	CU	CU	CU	PL	PL	PL	PL	PL	PL	PL	NP	CU	CU	NP

WHEREAS, Zoning Ordinance 4400 Table 4.3.9.A-1 Building, Lot and Building Site Principal Use shall be amended to reflect the following allowance of conditional use (CU), Permitted Limited (PL) and Not Permitted (NP):

PRINCIPAL USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Short-Term Rental Unit	CU	CU	CU	PL	PL	PL	PL	CU	PL	PL	NP	CU	CU	NP

WHEREAS, Zoning Ordinance 4400 Table 4.3.12.B-1 Vehicular Parking Requirements for the Principal Use “Short-Term Rental Unit” shall be removed.

WHEREAS, Zoning Ordinance 4400 Article 4.3.9.E.6.a Accessory Dwelling the following language shall be removed: “An Accessory Dwelling Unit may not be used for Transient accommodations or as a Short-Term Rental Unit.”

WHEREAS, Zoning Ordinance 4400 Article 9.3 Definitions the term Short-Term Rental Unit shall be repealed and replaced with the following language:

“Short-Term Rental Unit: A Dwelling Unit or Accessory Dwelling Unit which is rented wholly or partially for a period of less than thirty (30) continuous days occupancy for a fee; specifically excluding however a “hotel” as defined in TSA section 68-14-302 or a “bed and breakfast establishment” or a “bed and breakfast homestay” as those terms are defined in TSA section 68-14-502, all as contemplated in TSA section 13-7-602. A Hotel, Extended Stay Hotel, Motel, Bed and Breakfast, or Inn is not a Short-Term Rental Unit.”

WHEREAS, said recommendations are being considered after a public hearing held on the 13th day of February, 2025, notice of which was published in the Daily Herald of Columbia fifteen (15) days or more prior to said meeting; and

NOW, THEREFORE, BE IT ORDAINED BY THE CITY OF COLUMBIA:

Section 1: That Ordinance number 4400, the same being the Zoning Ordinance of the City of Columbia, Tennessee is hereby amended being incorporated herein by reference;

Section 2: That pursuant to Section 8.5.18.J.4, the City Council makes the following specific findings:

- a. The extent to which the proposed Zoning Ordinance Amendment is consistent with the remainder of this Ordinance, including, specifically, any purpose and intent statements;
- b. The extent to which the proposed Zoning Ordinance Amendment represents a new idea not considered in this Ordinance, or represents a revision necessitated by changing circumstances over time;
- c. Whether or not the proposed Zoning Ordinance Amendment corrects an error in this Ordinance; and
- d. Whether or not the proposed Zoning Ordinance Amendment revises this Ordinance to comply with state or federal statutes or case law.

Section 3: That ordinances or parts of ordinances in conflict herewith are hereby repealed

PASSED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF
COLUMBIA, TENNESSEE, this the 13th day of March, 2025.

CHARLES (CHAZ) M. MOLDER, MAYOR

ATTEST:

THAD H. JABLONSKI, CITY RECORDER

LEGAL FORM APPROVED:

JAKE HUBBELL, CITY ATTORNEY

APPROVED FOR FIRST CONSIDERATION:

ANTHONY R. MASSEY – CITY MANAGER

Passed on 1st consideration _____

Passed on 2nd consideration: _____

Q4 Zoning Text Amendment Limited Use Standards

Project #:	24-0475	Location:	N/A
Applicant:	Kevin C. McCarthy, AICP	Case Type(s):	Text Amendment
Staff Planner:	Kevin C. McCarthy, AICP	Proposed Use:	N/A

SUMMARY

The applicant, the Zoning Administrator, requests to amend the text of Ordinance 4400, the zoning ordinance for the City of Columbia. This is the fifth of five rounds of zoning text amendments staff has presented to the Planning Commission between December 2023 and December 2024. These changes will implement Connect Columbia, better align zoning regulations with community preferences, and calibrate the standards based on “lessons learned” during the first two years administering the Ordinance. This round of proposed amendments is detailed in the attached track changes documents. Specifically the proposal relates to the limited used standards in Article 4 as well as related definition and procedural references in Articles 9 and 8.

- The Planning Commission is a **recommending body** for zoning text amendments. The City Council is the decision-making authority.
- The staff comments section details the proposed changes, which are provided in the agenda packet in ~~striketrough~~ and underlines.
- The specific limited uses impacted by this amendment include: Home Occupations; Bars, Taverns, and Nightclubs; retailers of CBD, Vape, and Tobacco; and Short Term Rentals.
- Planning Commission may recommend adoption of the proposed text, modify the proposal, or decline the request.
- Templates are provided at the end of the report to assist the Planning Commission in crafting properly formatted motions.

CONSISTENCY WITH CONNECT COLUMBIA

The ongoing current process of reviewing and updating the Zoning Ordinance and other regulating documents is part of the implementation of Connect Columbia, the City's comprehensive plan.

REVIEW PROCESS

Section **8.5.18** of the Zoning Ordinance directs the Planning Commission to review and make a recommendation on all proposed changes to the text of the Ordinance. The Planning Commission is the recommending body for text amendments under **§ 8.3.3.B.2** of the Zoning Ordinance.

Section **8.5.18.C** of the Zoning Ordinance requires that Planning Commission determine that the proposed changes are consistent with the comprehensive plan.

8.5.18.G of the Zoning Ordinance establishes the review criteria for approval of all changes to the text of the Ordinance:

- a. The extent to which the proposed Zoning Ordinance Amendment is consistent with the remainder of this Ordinance, including, specifically, any purpose and intent statements;*
- b. The extent to which the proposed Zoning Ordinance Amendment represents a new idea not considered in this Ordinance, or represents a revision necessitated by changing circumstances over time;*
- c. Whether or not the proposed Zoning Ordinance Amendment corrects an error in this Ordinance; and*
- d. Whether or not the proposed Zoning Ordinance Amendment revises this Ordinance to comply with state or federal statutes or case law.*

The criteria for City Council action on a Zoning Ordinance Amendment at § 8.5.18.J.4 are identical to the criteria for Planning Commission review at 8.5.18.G.3.

COMMENTARY FROM PROFESSIONAL PLANNING STAFF

The City Council adopted the current ordinance on July 14, 2022. The Zoning Ordinance implements the City's comprehensive plan, Connect Columbia. On November 8, 2023, the Planning Commission recommended adoption of a five-year update of the framework, land use, and transportation elements of Connect Columbia. The framework element of the plan directs planning staff to initiate revisions to the ordinance in order to bring it into consistency with changes to the future land use plan. It further directs staff to engage residents and property owners to solicit suggestions for further changes to the ordinance. As mentioned above, this is

the final round of zoning text amendments staff plans to present to the Planning Commission between December 2023 and December 2024.

The proposal includes the following changes:

- Home Occupations
 - Distinguishes between “Major” and “Minor” home occupations;
 - Creates a process to allow major home occupations as a conditional use approved by the Board of Zoning Appeals;
 - Continues to permit minor home occupations administratively; and
 - Modifies definition of Home Occupation and Kennels.
- Bars, Taverns & Nightclubs
 - Removes 500 ft exclusion from residential property;
 - Adds exclusions around schools and parks;
 - Prohibits the use on lots and building sites next to residentially zoned property; and
 - Requires a 50 ft separation from property in single-family use regardless of zoning.
- Vape, Tobacco & Cannabinoid Retailers
 - Creates a use category for Vape, Tobacco & Cannabinoid Retailers;
 - Creates a definition for Vape, Tobacco & Cannabinoid Retailers;
 - Imposes a 500 ft separation requirement;
 - Imposes a 500 ft exclusion around schools, parks, and religious facilities; and
 - Requires 50 ft separation from residentially zoned property.
- Short Term Rental
 - Removes requirement that all Short-Term Rentals be accessory uses in owner-occupied dwellings;
 - Modifies the definition of Accessory Dwelling Unit (ADU) to allow the use of ADUs as short-term rentals;
 - Creates an administrative review and permitting process;



- Removes prohibition on short-term rentals in single-family character districts and allows them as a conditional use approved by the Board of Zoning Appeals;
- Allows short-term rentals by administrative approval in mixed use character districts and special districts;
- Requires a local point of contact for each permitted short-term rental; and
- Removes onerous parking requirements for short-term rentals.

Planning staff will present detailed commentary at the December 4, 2024 meeting of the Planning Commission. The proposal

The Planning Commission may recommend approval of the proposed text amendments, direct staff to prepare an alternative text amendment, or decline to act on the proposed changes.

SAMPLE MOTIONS

Approve:

Move to find, based on the analysis provided by city staff, that the criteria listed in section **8.5.18** of the City of Columbia Zoning Ordinance have been satisfied and recommend approval of the proposed text amendments **[may be subject to modifications proposed by the Planning Commission]**.

Deny:

Move to recommend denial of the requested text amendment having found, based on the analysis provided by city staff, that the criteria listed in section **8.5.18** of the City of Columbia Zoning Ordinance are not satisfied *[list specific reasons for denial and provide direction to staff]*.

Defer:

Move to find that there is insufficient information to decide, defer the matter to the next regularly scheduled meeting of the Planning Commission, and direct staff to provide: *[list additional information]* for review at a future meeting.

January 7, 2025 - 5:00 PM

SPECIAL CALLED MEETING

Mayor called the meeting to order and read the notice of the Special Called Meeting.

CALL TO ORDER/ROLL CALL

Mayor Chaz Molder called the meeting to order, pursuant to proper public notice having been given. Present were Council Member DaVena Hardison, Council Member Kenny Marshall, Vice Mayor Randy McBroom, Mayor Chaz Molder, City Manager Tony Massey, City Recorder Thad Jablonski and Recording Secretary Liz Bermudez. Council Members Debbie Wiles, Tony Greene, Danny Coleman, and City Attorney Tim Tisher were absent.

SPREAD THE SPECIAL CALLED MEETING UPON THE MINUTES

Council Member Marshall moved to spread the Special Called Meeting upon the minutes. Vice Mayor McBroom seconded the motion.

All Council Members present voted aye.

INVOCATION

Fire & Rescue Chief Cummins offered the invocation.

PLEDGE OF ALLEGIANCE

Mayor Molder led the Pledge of Allegiance.

ADMINISTRATION OF OATH OF OFFICE FOR THE POSITIONS OF CITY COUNCIL MEMBERS

CITY COUNCIL SPECIAL CALLED MEETING - COLUMBIA, TENNESSEE

January 7, 2025 - 5:00 PM

Mayor Molder administered the following Oath of Office to Council Member DaVena Hardison:



STATE OF TENNESSEE

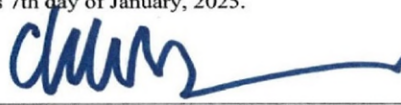
COUNTY OF MAURY

I, DaVena Hardison, duly elected member of the City Council for the First Ward for the City of Columbia, Maury County, Tennessee, for the term commencing January 7, 2025, do solemnly swear that I have all of the qualifications named in the Charter for the office I am about to assume, and that I will support the Constitution of the United States and of the State of Tennessee, and the Charter and Ordinances of the City of Columbia, Maury County, Tennessee, and that I will faithfully discharge the duties of said office and that I shall faithfully demean myself as such officer, so help me God.

In witness whereof, I have hereunto affixed my signature this the 7th day of January, 2025.


DaVena Hardison (First Ward)

Sworn to and subscribed before me
this 7th day of January, 2025.


Charles (Chaz) Molder, Mayor

CITY COUNCIL SPECIAL CALLED MEETING - COLUMBIA, TENNESSEE

January 7, 2025 - 5:00 PM

Judge Caleb Bayless administered the following Oath of Office to Council Member Kenny Marshall:



STATE OF TENNESSEE

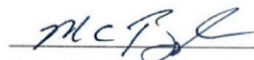
COUNTY OF MAURY

I, Kenny Marshall, duly elected member of the City Council for the Fourth Ward for the City of Columbia, Maury County, Tennessee, for the term commencing January 7, 2025, do solemnly swear that I have all of the qualifications named in the Charter for the office I am about to assume, and that I will support the Constitution of the United States and of the State of Tennessee, and the Charter and Ordinances of the City of Columbia, Maury County, Tennessee, and that I will faithfully discharge the duties of said office and that I shall faithfully demean myself as such officer, so help me God.

In witness whereof, I have hereunto affixed my signature this the 7th day of January, 2025.


Kenny Marshall (Fourth Ward)

Sworn to and subscribed before me
this 7th day of January, 2025.


Judge Caleb Bayless

CITY COUNCIL SPECIAL CALLED MEETING - COLUMBIA, TENNESSEE

January 7, 2025 - 5:00 PM

Judge Caleb Bayless administered the following Oath of Office for Council Member Charlie Huffman:



STATE OF TENNESSEE

COUNTY OF MAURY

I, Charlie Huffman, duly elected member of the City Council for the Second Ward for the City of Columbia, Maury County, Tennessee, for the term commencing January 7, 2025, do solemnly swear that I have all of the qualifications named in the Charter for the office I am about to assume, and that I will support the Constitution of the United States and of the State of Tennessee, and the Charter and Ordinances of the City of Columbia, Maury County, Tennessee, and that I will faithfully discharge the duties of said office and that I shall faithfully demean myself as such officer, so help me God.

In witness whereof, I have hereunto affixed my signature this the 7th day of January, 2025.

Charlie Huffman (Second Ward)

Sworn to and subscribed before me

this 7th day of January, 2025.

Judge Caleb Bayless

CITY COUNCIL SPECIAL CALLED MEETING - COLUMBIA, TENNESSEE

January 7, 2025 - 5:00 PM

Mayor Molder administered the following Oath of Office to Council Member Cheryl E. Secrest:



STATE OF TENNESSEE

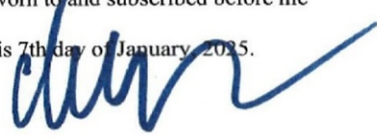
COUNTY OF MAURY

I, Cheryl E. Secrest, duly elected member of the City Council for the Third Ward for the City of Columbia, Maury County, Tennessee, for the term commencing January 7, 2025, do solemnly swear that I have all of the qualifications named in the Charter for the office I am about to assume, and that I will support the Constitution of the United States and of the State of Tennessee, and the Charter and Ordinances of the City of Columbia, Maury County, Tennessee, and that I will faithfully discharge the duties of said office and that I shall faithfully demean myself as such officer, so help me God.

In witness whereof, I have hereunto affixed my signature this the 7th day of January, 2025.


Cheryl E. Secrest (Third Ward)

Sworn to and subscribed before me
this 7th day of January, 2025.


Charles (Chaz) M. Molder, Mayor

CITY COUNCIL SPECIAL CALLED MEETING - COLUMBIA, TENNESSEE

January 7, 2025 - 5:00 PM

ADMINISTRATION OF OATH OF OFFICE FOR THE POSITION OF CITY ATTORNEY

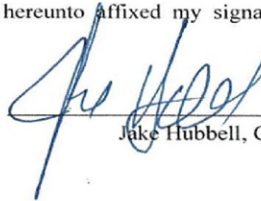
Mayor Molder administered the following Oath of Office for City Attorney Jake Hubbell:

STATE OF TENNESSEE

COUNTY OF MAURY

I, Jake Hubbell, being duly appointed on January 7, 2025, by the City Council of the City of Columbia, Maury County, Tennessee, to the office of City Attorney for the City of Columbia, do solemnly swear that I will support the Constitution of the United States and of the State of Tennessee; that I will comply with and observe the provisions of the Charter of the City of Columbia and the Ordinances of the City of Columbia; and that I will faithfully perform the duties of my office to the best of my ability, so help me God.

In witness whereof, I have hereunto affixed my signature this the 7th day of January 2024.



Jake Hubbell, City Attorney

Sworn to and subscribed before me this 7th day of January, 2025.



Charles (Chaz) M. Molder, Mayor

CITY COUNCIL SPECIAL CALLED MEETING - COLUMBIA, TENNESSEE

January 7, 2025 - 5:00 PM

ADMINISTRATION OF OATH OF OFFICE FOR THE POSITION OF CITY JUDGE

The City Judge Oath of Office will be conducted a different day.

ADJOURNMENT AND RESUMPTION OF THE JANUARY 7, 2025, SPECIAL CALLED CITY COUNCIL MEETING

Council Member Marshall moved to adjourn the meeting of the old City Council. Council Member Hardison seconded the motion. All Council Members present voted aye.

CALL TO ORDER/ROLL CALL

Mayor Chaz Molder called the meeting to order, pursuant to proper public notice having been given. Present were Council Member DaVena Hardison, Council Member Charlie Huffman, Council Member Cheryl E. Secrest, Council Member Kenny Marshall, Vice Mayor Randy McBroom, Mayor Chaz Molder, City Manager Tony Massey, City Attorney Jake Hubbell, City Recorder Thad Jablonski and Recording Secretary Liz Bermudez.

ADJOURNMENT

There being no further business Council Member Marshall moved to adjourn the meeting. Council Member Hardison seconded the motion. All members present voted aye. The meeting adjourned at 05:18 PM.

January 9, 2025 - 5:30 PM

PUBLIC HEARINGS

Item 1. - PUBLIC HEARING ON RESOLUTION NO. 25-02 - A RESOLUTION TO ANNEX AND APPROVE A PLAN OF SERVICES FOR A PORTION OF RIGHT OF WAY ALONG GREENS MILL ROAD WITH ALSO A 0.07 ACRE PORTION OF TAX MAP 51 PARCEL 34.03, LOCATED OFF GREENS MILL ROAD, INTO THE CITY OF COLUMBIA, TENNESSEE - WARD 5

Mayor Chaz Molder called the Public Hearing to order, pursuant to proper notice having been given. Present were Council Member DaVena Hardison, Council Member Charlie Huffman, Council Member Cheryl E. Secrest, Council Member Kenny Marshall, Vice Mayor Randy McBroom, Mayor Chaz Molder, City Manager Tony Massey, City Attorney Jake Hubbell, City Recorder Thad Jablonski and Recording Secretary Liz Bermudez.

There being no one present to speak on the Public Hearing, Council Member Marshall moved to close the Public Hearing on Resolution No. 25-02.. Council Member Hardison seconded the motion.

All Council Members present voted aye.

Item 2. - PUBLIC HEARING ON ORDINANCE NO. 4536 - AN ORDINANCE AMENDING ORDINANCE NO. 4400, THE SAME BEING THE ZONING ORDINANCE OF THE CITY OF COLUMBIA, TENNESSEE BY REPEALING ARTICLE 4 AND REPLACING SUCH ARTICLE WITH NEW ARTICLE 4 BUILDING, LOT AND BUILDING SITE STANDARDS - CITYWIDE

Mayor Chaz Molder called the Public Hearing to order, pursuant to proper notice having been given. Present were Council Member Kenny Marshall, Vice Mayor Randy McBroom, Mayor Chaz Molder, Council Member DaVena Hardison, Council Member Cheryl Secrest, Council Member Charlie Huffman City Manager Tony Massey, City Attorney Tim Tisher, City Recorder Thad Jablonski and Recording Secretary Liz Bermudez. was absent.

The speakers shared their concerns regarding this item.

Item 3. - PUBLIC HEARING ON ORDINANCE NO. 4537 - AN ORDINANCE AMENDING DEVELOPMENT SERVICES FILING FEE SCHEDULE FOR THE CITY OF COLUMBIA, TENNESSEE - CITYWIDE

Mayor Chaz Molder called the Public Hearing to order, pursuant to proper notice having been given. Present were Council Member Kenny Marshall, Vice Mayor Randy McBroom, Mayor Chaz Molder, Council Member DaVena Hardison, Council Member Cheryl Secrest, Council Member Charlie Huffman City Manager Tony Massey, City Attorney Tim Tisher, City Recorder Thad Jablonski and Recording Secretary Liz Bermudez. was absent.

CITY COUNCIL REGULAR MEETING - COLUMBIA, TENNESSEE

January 9, 2025 - 5:30 PM

Item 4. - PUBLIC HEARING ON ORDINANCE NO. 4538 - AN ORDINANCE AMENDING ORDINANCE NO. 4400, THE SAME BEING THE ZONING ORDINANCE OF THE CITY OF COLUMBIA, TENNESSEE REGARDING DEFINITIONS IN ARTICLE 9 BY REPEALING SUCH ARTICLE AND REPLACING IT WITH A NEW ARTICLE 9, DEFINITIONS

Mayor Chaz Molder called the Public Hearing to order, pursuant to proper notice having been given. Present were Council Member Kenny Marshall, Vice Mayor Randy McBroom, Mayor Chaz Molder, Council Member DaVena Hardison, Council Member Cheryl Secrest, Council Member Charlie Huffman City Manager Tony Massey, City Attorney Tim Tisher, City Recorder Thad Jablonski and Recording Secretary Liz Bermudez. was absent.

REGULAR MEETING

CALL TO ORDER/ROLL CALL

Mayor Chaz Molder called the meeting to order, pursuant to proper public notice having been given. Present were Council Member Kenny Marshall, Vice Mayor Randy McBroom, Mayor Chaz Molder, Council Member DaVena Hardison, Council Member Cheryl Secrest, Council Member Charlie Huffman City Manager Tony Massey, City Attorney Tim Tisher, City Recorder Thad Jablonski and Recording Secretary Liz Bermudez.

INVOCATION BY CHRIS CALDWELL OF FIRST CUMBERLAND PRESBYTERIAN CHURCH

PLEDGE OF ALLEGIANCE

Vice Mayor led the Pledge of Allegiance.

APPROVAL OF AGENDA

Council Member Marshall moved to approve the Agenda. Council Member Hardison seconded the motion.

All Council Members present voted aye.

PRESENTATIONS

Briefing from Public Works Director Jeff DeWire - the forecast has dialed back the amount of snow/ice to 3 to 4 inches, trucks have done two passes on most of the main thoroughfares and most residential areas have had one pass so far. Public Works will get going at 5 a.m. tomorrow.

ORGANIZATIONAL BUSINESS

CITY COUNCIL REGULAR MEETING - COLUMBIA, TENNESSEE

January 9, 2025 - 5:30 PM

Item 6.1. - APPROVE THE MINUTES OF THE DECEMBER 12, 2024, CITY COUNCIL MEETING

Council Member Marshall moved to approve the December 12, 2024 City Council Meeting Minutes. Council Member Hardison seconded the motion.

All Council Members present voted aye.

Item 6.2. - APPROVE THE RETIREMENT BENEFITS FOR ROGER HOWELL, MAINTENANCE WORKER, WASTEWATER DEPARTMENT AND PRESENTATION OF A RETIREMENT PLAQUE BY MAYOR MOLDER

Council Member Marshall moved to approve the retirement benefits for Roger Howell, Maintenance Worker, Wastewater Department. Council Member Hardison seconded the motion.

All Council Members present voted aye.

Presentation to Roger occurred. Mayor read the plaque and thanked Roger for his service. Donnie stated that he has been a huge asset to the Wastewater Department, he has stepped up the maintenance portion of their department. Roger, in his 2001 first interview said he was over qualified. Roger said he started in Parks and Recreation and had a blast, his son works at WasteWater and Roger wanted to finish where Travis was. Roger has enjoyed working for the City.

Item 6.3. - APPROVE THE RETIREMENT BENEFITS FOR JASON CARPENTER, FIRE CAPTAIN, COLUMBIA FIRE AND RESCUE

Council Member Hardison moved to approve the retirement benefits for Jason Carpenter, Fire Captain, Columbia Fire and Rescue. Council Member Marshall seconded the motion.

All Council Members present voted aye.

Item 6.4. - APPOINTMENT TO FILL THE WARD 5 COUNCIL MEMBER SEAT VACANCY

Mr. Huffman stated that he was on County Commission and his peers did not elect him to be a City Council Member so why did Council vote him in?

Council Member Marshall moved to approve the appointment to fill the Ward 5 Council Member seat vacancy. Council Member Hardison seconded the motion.

All members present voted aye with the exception of Council Member Huffman who all voted no. The motion Passed with a vote of 5 to 1.

Brian said he was seeking the position, and he was the only candidate that got votes that is seeking this position. He has spoken with many Ward 5 citizens and has had town hall meetings, he served on the county commission and believes he is qualified.

CITY COUNCIL REGULAR MEETING - COLUMBIA, TENNESSEE

January 9, 2025 - 5:30 PM

Item 6.5. - CONFIRMATION OF MAYOR'S REAPPOINTMENT OF THOMAS SNEED TO THE COLUMBIA HOUSING AND REDEVELOPMENT CORPORATION FOR A FIVE-YEAR TERM BEGINNING ON FEBRUARY 12, 2025 AND EXPIRING ON FEBRUARY 12, 2030.

Vice Mayor McBroom moved to approve the reappointment of Thomas Sneed to the Columbia Housing and Redevelopment Corporation for a five-year term beginning on February 12, 2025. Council Member Marshall seconded the motion.

All Council Members present voted aye.

CONSENT AGENDA

Council Member Huffman moved to approve all items for the Consent Agenda. Council Member Marshall seconded the motion.

All Council Members present voted aye.

Item 7.1. - APPROVE DISBURSEMENTS FOR THE MONTH OF NOVEMBER 2024 IN THE AMOUNT OF \$7,238,498.74

Item 7.2. - APPROVE AND AUTHORIZE THE EXECUTION OF AN INTERGOVERNMENTAL COOPERATIVE PURCHASING AGREEMENT WITH THE INTERLOCAL PURCHASING SYSTEM (TIPS)

Item 7.3. - APPROVE AND AUTHORIZE THE MAYOR TO EXECUTE AN AGREEMENT WITH QUALITY MANAGEMENT SERVICES, LLC IN THE AMOUNT OF \$13,500 TO INCLUDE REIMBURSEMENT OF TRAVEL EXPENSES TO PROVIDE PLANNING CONSULTING TO THE CITY OF COLUMBIA

Item 7.4. - APPROVE AND AUTHORIZE THE MAYOR TO SIGN THE 2025 LETTER OF AGREEMENT BETWEEN THE CITY OF COLUMBIA, COLUMBIA MAIN STREET, AND THE TENNESSEE MAIN STREET PROGRAM CONFIRMING PARTICIPATION IN THE MAIN STREET PROGRAM AND THE ANNUAL ACCREDITATION PROCESS WITH THE NATIONAL MAIN STREET CENTER

Item 7.5. - APPROVE AND AUTHORIZE THE MAYOR TO SIGN A CONTRACT BETWEEN THE CITY OF COLUMBIA AND MAIN STREET MENTOR, LLC, IN THE AMOUNT OF \$2,997, A ONE-TIME FEE FOR THE NEW COLUMBIA MAIN STREET WEBSITE

Item 7.6. - ACCEPTANCE OF THE RAILROAD AND UTILITY AD VALOREM ASSESSMENTS FOR THE TAX YEAR 2024

CITY COUNCIL REGULAR MEETING - COLUMBIA, TENNESSEE

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Item 7.7. - APPROVE BID AWARD TO CUMBERLAND VALLEY CONSTRUCTORS, INC. FOR CONSTRUCTION OF THE DUCK RIVER SEWAGE PUMP STATION REPLACEMENT IN THE AMOUNT OF \$1,713,000.

ADMINISTRATION

RESOLUTIONS

Item 9.1. - RESOLUTION NO. 25-01 - A RESOLUTION TO ACCEPT THE OWNERSHIP AND MAINTENANCE OF SEWER IMPROVEMENTS SERVING HILLCREST VILLAGE PHASE 1A

Council Member Marshall moved to approve Resolution No. 25-01. Council Member Hardison seconded the motion.

All Council Members present voted aye.

Item 9.2. - RESOLUTION NO. 25-02 - A RESOLUTION TO ANNEX AND APPROVE A PLAN OF SERVICES FOR A PORTION OF RIGHT OF WAY ALONG GREENS MILL ROAD WITH ALSO A 0.07 ACRE PORTION OF TAX MAP 51 PARCEL 34.03, LOCATED OFF GREENS MILL ROAD, INTO THE CITY OF COLUMBIA, TENNESSEE - WARD 5

Council Member Marshall moved to approve Resolution No. 25-02. Council Member Hardison seconded the motion.

All Council Members present voted aye.

Item 9.3. - RESOLUTION NO. 25-03 - A RESOLUTION TO RATIFY THE CITY OF COLUMBIA'S APPLICATION FOR THE 2024 ASSISTANCE TO FIREFIGHTER'S GRANT (AFG); ACCEPT THE AWARD AND AUTHORIZE THE MAYOR TO EXECUTE DOCUMENTS RELATED TO ACCEPTING AND ADMINISTERING THE GRANT PROJECT

Council Member Hardison moved to approve Resolution No. 25-03. Council Member Marshall seconded the motion.

All Council Members present voted aye.

Item 9.4. - RESOLUTION NO. 25-04 - A RESOLUTION TO ACCEPT THE OWNERSHIP AND MAINTENANCE OF SEWER IMPROVEMENTS SERVING QUAIL RUN MEADOWS PHASE 5

Council Member Marshall moved to approve Resolution No. 25-04. Council Member Hardison seconded the motion.

All Council Members present voted aye.

Item 9.5. - RESOLUTION NO. 25-05 - TAX CORRECTIONS

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Council Member Marshall moved to approve Resolution No. 25-05. Council Member Hardison seconded the motion.

All Council Members present voted aye.

Item 9.6. - RESOLUTION NO. 25-06 – A RESOLUTION APPROVING THE FACILITY/PROGRAM FEES FOR THE CITY OF COLUMBIA PARKS AND RECREATION DEPARTMENT

Council Member Hardison moved to approve Resolution No. 25-06. Council Member Marshall seconded the motion.

All Council Members present voted aye.

Item 9.7. - RESOLUTION NO. 25-07 - A RESOLUTION RENAMING THE MULETOWN REC CENTER TO THE COLUMBIA AQUATICS AND RECREATION CENTER

Council Member Marshall moved to approve Resolution No. 25-07. Council Member Hardison seconded the motion.

All Council Members present voted aye.

Item 9.8. - RESOLUTION NO. 25-08 - A RESOLUTION APPROVING THE PURCHASE OF REAL PROPERTY LOCATED AT 1446 OAK SPRINGS DRIVE, COLUMBIA, TN, MAP 089 PARCEL 039.01, ALSO KNOWN AS MULETOWN REC, AND ALL ASSETS ASSOCIATED WITH THE FACILITY AND AUTHORIZING THE MAYOR TO EXECUTE A CONTRACT TO PURCHASE SAID REAL AND PERSONAL PROPERTY

Mayor appreciates Mack Reagan, his team, finance, and their team for getting this ready.

Mayor Molder moved to approve Resolution No. 25-08. Council Member Hardison seconded the motion.

All Council Members present voted aye.

ORDINANCES

Item 10.1. - 1ST CONSIDERATION ON ORDINANCE NO. 4536 - AN ORDINANCE AMENDING ORDINANCE NO. 4400, THE SAME BEING THE ZONING ORDINANCE OF THE CITY OF COLUMBIA, TENNESSEE BY REPEALING ARTICLE 4 AND REPLACING SUCH ARTICLE WITH NEW ARTICLE 4 BUILDING, LOT AND BUILDING SITE STANDARDS - CITYWIDE

David Gebhardt states that prohibition is too broad on events, so expanding administrative approvals to residential districts is appropriate.

Sue Stephenson is proposing a compromise - covenants and hers say single family lot only, no commercial in their subdivision, conditions run with the land and shall be binding. Short-term rentals are considered commercial property. She asked that CD2 and CD3L remain not permitted. She asked that they amend this item.

Mayor asked Paul Keltner if an HOA exhibit that prohibits short-term rental would trump

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what the city is doing. Paul answered "yes" and that it is up to the HOA to uphold it. Davena asked about the events. Charlie asked for clarification on short term rental. Vice Mayor suggested sending it back to Planning Commission and asking them to come up with things to solve this problem.

Vice Mayor moved to send it back to the Planning Commission. DaVena asked about why it would go to Board of Zoning Appeals. Paul advised these are all handled a little differently. Different sides, some don't want it, some want it. Mayor states the Board of Zoning Appeals would look at the conditional use approval. Mayor asked about if the Board of Zoning Appeals has to be part of this. Vice Mayor advised that this was a big decision.

Vice Mayor McBroom moved to approve Ordinance No.4536 on first consideration and establish the date of January 9, 2025 as the date of Public Hearing. Council Member Marshall seconded the motion.

All Council Members present voted aye.

Item 10.2. - 1ST CONSIDERATION ON ORDINANCE NO. 4537 - AN ORDINANCE AMENDING DEVELOPMENT SERVICES FILING FEE SCHEDULE FOR THE CITY OF COLUMBIA, TENNESSEE - CITYWIDE

Mayor Molder moved to approve Ordinance No. 4537 on first consideration. Vice Mayor McBroom seconded the motion.

All Council Members present voted aye.

Item 10.3. - 1ST CONSIDERATION ON ORDINANCE NO. 4538 - AN ORDINANCE AMENDING ORDINANCE NO. 4400, THE SAME BEING THE ZONING ORDINANCE OF THE CITY OF COLUMBIA, TENNESSEE REGARDING DEFINITIONS IN ARTICLE 9 BY REPEALING SUCH ARTICLE AND REPLACING IT WITH A NEW ARTICLE 9, DEFINITIONS

Mayor Molder moved to approve Ordinance No.4538 on first consideration. Vice Mayor McBroom seconded the motion.

All Council Members present voted aye.

Item 10.4. - 1ST CONSIDERATION OF ORDINANCE NO. 4539 - AN ORDINANCE TO AMEND ORDINANCE NO. 4504 - THE CLASSIFICATION AND COMPENSATION PLAN FOR THE EMPLOYEES OF THE CITY OF COLUMBIA FOR THE 2024-2025 FISCAL YEAR

Council Member Marshall moved to approve Ordinance No. 4539 on first consideration. Council Member Hardison seconded the motion.

All Council Members present voted aye.

OTHER BUSINESS

CITY COUNCIL REGULAR MEETING - COLUMBIA, TENNESSEE

January 9, 2025 - 5:30 PM

Mayor welcomed Council Member Huffman and Secrest to their first meeting and appreciates them serving the City of Columbia. Mayor congratulated Brian McKelvy and looks forward to him joining us next month. Mayor thanked Public Works for what they are going to do. Today is National Law Enforcement day, grateful for them everyday every day, but especially today. Tony stated that Rotary recognized Law enforcement. Mayor welcomed Jake Hubbell.

EXECUTIVE SESSION

ADJOURNMENT

There being no further business Council Member Huffman moved to adjourn the meeting. Mayor Molder seconded the motion. All members present voted aye. The meeting adjourned at 06:23 PM.

UPCOMING EVENTS



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Sommar Jaynes, Purchasing Agent, sjaynes@columbiatn.gov, 931-560-1580

AGENDA ITEM TITLE: APPROVE AND AUTHORIZE THE EXECUTION OF AN INTERGOVERNMENTAL COOPERATIVE PURCHASING AGREEMENT WITH BUY BOARD

RECOMMENDATION: Approve

INFORMATION: Pursuant to Tennessee Code Annotated 12-3-1205, the City may enter into cooperative agreements with local governments for the purchase of goods and services. Buy Board routinely invites bids and awards contracts for a variety of goods and services. From time to time it may be advantageous for the City of purchase goods or services utilizing Buy Board contracts.

CERTIFICATION:

ATTACHMENTS:



NATIONAL PURCHASING COOPERATIVE INTERLOCAL PARTICIPATION AGREEMENT

This Interlocal Participation Agreement ("Agreement") is made and entered into on the date indicated below by and between the National Purchasing Cooperative ("Cooperative"), an administrative agency of cooperating local governments and other governmental entities, acting on its own behalf and the behalf of all participating governmental entities, and the undersigned governmental entity ("Cooperative Member").

I. RECITALS

WHEREAS, the National Purchasing Cooperative was formed on May 26, 2010, by certain local governments that entered into an Organizational Interlocal Agreement; and

WHEREAS, the purpose of the Cooperative is to facilitate compliance with state procurement requirements, to identify qualified vendors of commodities, goods and services, to relieve the burdens of the governmental purchasing function, and to realize potential economies of scale, including administrative cost savings, for Cooperative Members;

NOW THEREFORE, in consideration of the mutual covenants, promises and obligations contained herein, the undersigned Cooperative Member and the Cooperative agree as follows:

II. TERMS AND CONDITIONS

1. **Adopt Organizational Interlocal Cooperation Agreement.** The Cooperative Member by the execution or acceptance of this Agreement hereby adopts and approves the Organizational Interlocal Agreement, as last amended and restated, which agreement is incorporated herein by reference (and is available from the Cooperative upon request). The Organizational Interlocal Agreement establishes the Cooperative as an administrative agency of its collective participants, and Cooperative Member agrees to become a participant or additional party to the Organizational Interlocal Agreement.

2. **Term.** The initial term of this Agreement shall commence on the date it is executed by both parties and shall automatically renew for successive one-year terms unless sooner terminated in accordance with the provisions of this Agreement. If the Cooperative Member is an existing Cooperative Member that joined the Cooperative by executing a participation agreement which authorized amendment upon the Cooperative providing prior written notice, then this Agreement will be deemed an Amendment by Notice, effective on the 61st day that the Cooperative Member is sent notice of this Agreement. In addition, this Agreement will continue to automatically renew for successive one-year terms on the anniversary date of the Cooperative Member's initial term (not the effective date of the amendment), unless the Agreement is sooner terminated in accordance with the provisions herein.

3. Termination.

(a) **By the Cooperative Member.** This Agreement may be terminated by the Cooperative Member at any time by 30 days prior written notice to the Cooperative as provided in Article III, Section 14, provided any amounts owed to any vendor have been fully paid.

(b) **By the Cooperative.** The Cooperative may terminate this Agreement by:

(1) Giving 10 days notice as provided in Article III, Section 14, to the Cooperative Member if the Cooperative Member breaches this Agreement; or

(2) Giving 30 days notice as provided in Article III, Section 14, to the Cooperative Member with or without cause.

(c) **Termination Procedure.** If the Cooperative Member terminates its participation under this Agreement or breaches this Agreement, or if the Cooperative terminates participation of the Cooperative Member, the Cooperative Member shall bear the full financial responsibility for all of its purchases made from vendors under or through this Agreement. The Cooperative may seek the whole amount due, if any, from the terminated Cooperative Member. In addition, the Cooperative Member agrees it will not be entitled to any distribution which may occur after the Cooperative Member terminates from the Cooperative.

4. **Payments by Cooperative Member.** The Cooperative Member will make timely payments to the vendor for the goods, materials and services received in accordance with the terms and conditions of the bid invitation, instructions, and all other applicable procurement documents. Payment for goods, materials and services and inspections and acceptance of goods, materials and services ordered by the procuring Cooperative Member shall be the exclusive obligation of the procuring Cooperative Member, and not the Cooperative. Furthermore, the Cooperative Member is solely responsible for negotiating and securing ancillary agreements from the vendor on such other terms and conditions, including provisions relating to insurance or bonding, that the Cooperative Member deems necessary or desirable under federal, state or local law, local policy or rule, or within its business judgment.

5. **Payments by Vendors.** The parties agree that the Cooperative will require payment from vendors which are selected to provide goods, materials or services to Cooperative Members. Such payment (hereafter "Vendor Fees") may be up to two percent (2%) of the purchase price paid by Cooperative Members or a flat fee amount that may be set from time to time by the Cooperative Board of Directors. Cooperative Member agrees that these Vendor Fees fairly compensate the Cooperative for the services and functions performed under this Agreement and that these Vendor Fees enable the Cooperative to pay the administrative, licensing, marketing, and other expenses involved in successfully operating a program of electronic commerce for the Cooperative Members. Further, Cooperative Member affirmatively disclaims any rights to such Vendor Fees, acknowledging all such fees are the property of the Cooperative. Similarly, in no event shall a Cooperative Member be responsible for payment of Vendor Fees.



6. **Distribution.** From time to time, and at the sole discretion of the Cooperative Board of Directors, the Cooperative may issue a distribution to Cooperative Members under a plan developed by the Cooperative Board of Directors. The Cooperative Member acknowledges that a distribution is never guaranteed and will depend on the overall financial condition of the Cooperative at the time of the distribution and the purchases made by the Cooperative Member.
7. **Administration.** The Cooperative may enter into contracts with others, including non-profit associations, for the administration, operation and sponsorship of the purchasing program provided through this Agreement. The Cooperative will provide reports, at least annually, to the Cooperative Member electronically or by mail. Cooperative Member will report purchase orders generated under this Agreement to the Cooperative or its designee, in accordance with instructions of the Cooperative.
8. **BuyBoard®.** Cooperative Member will have a non-exclusive license to use the BuyBoard electronic purchasing application during the term of this Agreement. Cooperative Member acknowledges and agrees that the BuyBoard electronic application and BuyBoard trade name are owned by the Texas Association of School Boards, Inc. ("TASB"), and that neither the Cooperative nor the Cooperative Member has any proprietary rights in the BuyBoard electronic application or trade name. The Cooperative Member will not attempt to resell, rent, or otherwise distribute any part of BuyBoard to any other party; nor will it attempt to modify the BuyBoard programs on the server or acquire the programming code. The Cooperative Member may not attempt to modify, adapt, translate, distribute, reverse engineer, decompile, or disassemble any component of the application. The Cooperative Member will use BuyBoard in accordance with instructions from the Cooperative (or its designee) and will discontinue use upon termination of participation in the Cooperative. The Cooperative Member will maintain equipment, software and conduct testing to operate the BuyBoard system at its own expense.

III. GENERAL PROVISIONS

1. **Amendment by Notice.** The Board may amend this Agreement, provided that prior written notice is sent to the Cooperative Member at least 60 days prior to the effective date of any change described in such amendment and provided that the Cooperative Member does not terminate its participation in the Cooperative before the expiration of said 60 days.
2. **Authorization to Participate and Compliance with Local Policies.** Each Cooperative Member represents that its governing body has duly authorized its participation in the Cooperative and that the Cooperative Member will comply with all state and local laws and policies pertaining to purchasing of goods and services through its membership in the Cooperative.
3. **Bylaws.** The Cooperative Member agrees to abide by the Bylaws of the Cooperative, as they may be amended, and any and all written policies and procedures established by the Cooperative that apply to Cooperative Members. The Cooperative shall provide written notice to the Cooperative Member of any amendment to the Bylaws of the Cooperative and any written policy or procedure of the Cooperative that is intended to be binding on and applicable to the Cooperative Member. In addition to any other notice method specified in this Agreement, notice under this Section may be satisfied by posting of the applicable bylaws,

policy, or procedure on the Cooperative's website or BuyBoard application landing page for Cooperative Members.

4. **Cooperation and Access.** The Cooperative Member agrees that it will cooperate in compliance with any reasonable requests for information and/or records made by the Cooperative. The Cooperative reserves the right to review and audit the relevant and available records of any Cooperative Member. Any breach of this provision shall be considered material and shall make the Agreement subject to termination on 10 days written notice to the Cooperative Member.

5. **Coordinator.** The Cooperative Member agrees to appoint a program coordinator who shall have express authority to represent and bind the Cooperative Member, and the Cooperative will not be required to contact any other individual regarding program matters. Any notice to or any agreements with the coordinator shall be binding upon the Cooperative Member. The Cooperative Member reserves the right to change the coordinator as needed by giving written notice to the Cooperative. Such notice is not effective until actually received by the Cooperative.

6. **Current Revenue.** The Cooperative Member hereby represents that all payments, fees, and disbursements required of it hereunder shall be made from current revenues budgeted and available to the Cooperative Member.

7. **Defense and Prosecution of Claims.** The Cooperative Member authorizes the Cooperative to handle the commencement, defense, intervention, or participation in a judicial, administrative, or other governmental proceeding or in an arbitration, mediation, or any other form of alternative dispute resolution, or other appearances of the Cooperative (as an entity) in any litigation, claim or dispute which arises from the services provided by the Cooperative. Neither this provision nor any other provision in this Agreement will create a legal duty for the Cooperative to provide a defense or prosecute a claim; rather, the Cooperative may exercise this right in its sole discretion and to the extent permitted or authorized by law. The Cooperative Member shall reasonably cooperate and supply any information necessary or helpful in such prosecution or defense. Subject to specific revocation, the Cooperative Member hereby designates the Cooperative to act as a class representative on its behalf in matters arising out of this Agreement and pertaining to the collective or predominant interest of Cooperative Members. Nothing herein grants the Cooperative any rights to file, defend, or settle any claim on behalf of the Cooperative Member in its individual capacity.

8. **Governance.** The Board of Directors (Board) will govern the Cooperative in accordance with the Bylaws.

9. **Legal Authority.** The Cooperative Member represents to the Cooperative the following:

- a) The Cooperative Member has conferred with legal counsel and determined it is duly authorized by the laws of the jurisdiction in which the Cooperative Member lies to participate in cooperative purchasing, and specifically, the National Purchasing Cooperative.
- b) The Cooperative Member possesses the legal authority to enter into this Agreement and can allow this Agreement to automatically renew without subsequent action of its governing body.
- c) Purchases made under this Agreement will satisfy all procedural procurement requirements that the Cooperative Member must meet under all applicable local policy, regulation, or state law.

d) All requirements—local or state—for a third party to approve, record or authorize the Agreement have been met.

10. **Disclaimer.** THE COOPERATIVE, ITS ENDORSERS, SPONSORS, AND SERVICING CONTRACTORS, WHETHER CURRENT OR FORMER AND INCLUDING TASB, (“COOPERATIVE AND ASSOCIATES”) DO NOT WARRANT THAT THE OPERATION OR USE OF COOPERATIVE SERVICES WILL BE UNINTERRUPTED OR ERROR FREE.

THE COOPERATIVE AND ASSOCIATES HEREBY DISCLAIM ANY AND ALL WARRANTIES, EXPRESS OR IMPLIED, IN REGARD TO ANY INFORMATION, PRODUCT OR SERVICE FURNISHED UNDER THIS AGREEMENT, INCLUDING WITHOUT LIMITATION, ANY AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

11. **Limitation of Liability.** To the extent permitted by law and without waiver of the disclaimer or other limitation of liability in this Agreement, the parties agree that:

- a) Neither party waives any immunity from liability afforded under law;
- b) In regard to any lawsuit or formal adjudication arising out of or relating to this Agreement, neither party shall be liable to the other under any circumstance for special, incidental, consequential, or exemplary damages;
- c) The maximum amount of damages recoverable will be limited to the amount of fees which the Cooperative received as a direct result of the Cooperative Member’s purchase activity, within 12 months of when the lawsuit or action was filed; and
- d) In the event of a lawsuit or formal adjudication the prevailing party will be entitled to recover reasonable attorney’s fees.

Without waiver of the disclaimer or other limitation of liability in this Agreement, the parties further agree to limit the liability of Cooperative and Associates up to the maximum amount each received from or through the Cooperative, as a direct result of the undersigned Cooperative Member’s purchase activity, within 12 months of the filing of any lawsuit or action.

12. **Limitation of Rights.** Except as otherwise expressly provided in this Agreement, nothing in this Agreement is intended to confer upon any person, other than the parties hereto, any benefits, rights, or remedies under or by reason of this Agreement.

13. **Merger/Entirety.** This Agreement, together with the Cooperative’s Bylaws and Organizational Interlocal Agreement, as amended and restated, represents the complete understanding of the Cooperative and Cooperative Member. To the extent there exists any conflict between the terms of this Agreement and that of prior agreements, the terms of this Agreement shall control and take precedence over all prior participation agreements.

14. **Notice.** Any written notice to the Cooperative may be given by email to BuyBoard Administrator at membership@buyboard.com; by U.S. mail, postage prepaid, and delivered to the National Purchasing Cooperative, P.O. Box 400, Austin, Texas 78767-0400; by overnight courier or hand delivery to National Purchasing Cooperative, 12007 Research Blvd., Austin, Texas 78759; or by other mode of delivery typically



used in commerce and accessible to the intended recipient. Notices to Cooperative Member may be given by email to the Cooperative Member's Coordinator or other email address of record provided by the Cooperative Member; by U.S. mail, postage prepaid, and delivered to the Cooperative Member's Coordinator or chief executive officer (e.g., superintendent, city manager, county judge or mayor); or by other mode of delivery typically used in commerce and accessible to the intended recipient.

15. **Severability.** If any portion of this Agreement shall be declared illegal or held unenforceable for any reason, the remaining portions shall continue in full force and effect.

16. **Signatures/Counterparts.** The failure of a party to provide an original, manually executed signature to the other party will not affect the validity, enforceability or binding effect of this Agreement because either party may rely upon an electronic or facsimile signature as if it were an original, including any Cooperative Member signature executed by click and accept or similar electronic signature and acceptance. Furthermore, this Agreement may be executed in several separate counterparts, each of which shall be an original and all of which shall constitute one and the same instrument.

17. **Authority.** By the execution and delivery of this Agreement, the undersigned individual represents that the individual is duly authorized by all requisite administrative action required to enter into and bind the entity that is a party to this Agreement.

[Signature page follows.]



WHEREFORE, the parties, acting through their duly authorized representatives, accept this Agreement.

NATIONAL PURCHASING COOPERATIVE:

By: _____
Dan Troxell, Ph.D.
Assistant Secretary

Date: _____

COOPERATIVE MEMBER:

[Signature required unless accepted as an Amendment by Notice as described in the Agreement.]

City of Columbia

(Government Entity Name)

By: _____
Signature of authorized representative of Cooperative Member

Date: _____

Printed name and title of authorized representative

Coordinator for the Cooperative Member is:

Sommar Jaynes

Name

Purchasing Agent

Title

700 N Garden St

Mailing Address

Columbia

City

TN 38401

State Zip Code

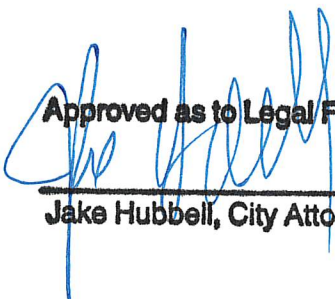
931-560-1580

Telephone

Fax

sjaynes@columbiatn.gov

Email

Approved as to Legal Form:


Jake Hubbell, City Attorney



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Jennnifer Luffman, Admin Asst to Deputy Fire Chief, 931-560-1734, JLuffman@columbiatn.gov

AGENDA ITEM TITLE: APPROVE AND AUTHORIZE THE MAYOR TO SIGN A CONTRACT BETWEEN LOCALITY MEDIA, INC DBA FIRST DUE AND THE CITY OF COLUMBIA TO PROVIDE SOFTWARE APPLICATIONS AND SUPPORT SERVICES IN THE AMOUNT OF \$58,371.50 FOR THE FIRST YEAR -

RECOMMENDATION: Approve.

INFORMATION: Currently, Columbia Fire & Resuce utilizes three separate entities for software support which includes various reporting, scheduling and training services.

ESO Solutions is the software program currently providing incident reporting, reporting to the state, medical reporting, properties and inspections for Fire Marshal Office, personnel management and data analytics.

Aladtec, Inc is the software program currently used for data analytics for staffing, events, training and several important daily tasks.

Vector/Target Solutions is the software program currently used in the Training Division for online training and record storage.

First Due software program will replace these three software programs as each approaches their renewal date, beginning with Aladtec March 10, 2025. The first four month term will be paid utilizing the funds which would have been used to renew the Aladtec subscription.

The initial agreement will be effective for an initial 4 month term commencing on the effective date and automatically renew for successive 12 month terms beginning July 1, 2025 including no more than 5% per annum increase beginning July 1, 2026.

Columbia Fire & Rescue requests City Council approval to enter into an Agreement for software applications and support services with Locality Media, Inc dba First Due.

CERTIFICATION: \$58,372 is budgeted and unencumbered in Fire - Suppression-Software Services.

ATTACHMENTS: Staff Report, Locality Media, Inc contract.



Agreement for Services

This Agreement for Services (this "Agreement") dated as of **March 1, 2025** (the "Effective Date") is made by and between Locality Media, Inc dba First Due a Delaware corporation, having offices at 107 7th St, Garden City, NY, 11530 ("Locality Media" or "First Due") and the **City of Columbia** located at **700 N Garden St, Columbia, TN 38401** (the "Customer").

1. Locality Media maintains a website through which Customer members may access Locality Media's **First Due Size-Up™** Community Connect™, Mobile Responder™ and/or other software-as-a-service platforms and solutions identified in Exhibit A (collectively, the "Service") in connection with the performance of their Customer duties. Locality Media agrees to grant the Customer access to the Service pursuant to the terms and conditions set forth below and in Exhibit A, and the Customer agrees to use the Service only in strict conformity with and subject to such terms and conditions.
2. Locality Media may provide the Customer with one or more user ID's, initial passwords, digital certificates and/or other devices (collectively, "Credentials") and/or application programming interfaces ("APIs") to access the Service. The Customer shall access the Service only by using such Credentials and APIs. The Customer authorizes Locality Media to act on any instructions Locality Media receives from users of the Service who present valid Credentials and such individuals shall be deemed authorized to act on behalf of the Customer, including, without limitation, to change such Credentials. It is the Customer's sole responsibility to keep all Credentials and other means of access within the Customer's direct or indirect possession or control both confidential and secure from unauthorized use. The Customer understands the utility of the First Due Size Up Service depends on the availability of data and information relating to Locations and structures in the Customer's jurisdiction, including but not limited to building system and structural information, building inspection codes and incident report data (collectively, "Location Data"). Locality Media also may process and furnish through the Service, in addition to Location Data, other data regarding residents and roadways within the Customer's jurisdiction ("Community Data"). Location Data and Community Data are referred to collectively herein as "Data". Locality Media may acquire Data from third party public and/or private sources in Locality Media's discretion. In addition, the Customer will upload to the Service or otherwise provide to Locality Media in such form and using such methods as Locality Media reasonably may require from time to time, any and all Data from the Customer's records and systems which the parties mutually designate for inclusion in the Service database. The Customer agrees not to filter or alter such records except to conform such Data to the formats reasonably required by Locality Media. Subject to any third-party license restrictions identified expressly in writing by the Customer, the Customer grants to Locality Media a perpetual, non-exclusive, worldwide, royalty-free right and license to process, use and disclose the Data furnished to Locality Media by the Customer in connection with the development, operation, and performance of Locality Media's business, including but not limited to the Service. Customer shall own all Customer data and upon termination or written request, Locality Media shall provide Customer data to Customer.
3. As between the parties, the Customer and its employees, contractors, members, users, agents, and representatives (collectively, "Customer Users") are solely responsible for determining whether and how to use Data accessed through the Service. The Customer acknowledges that Locality Media, through the Service, provides an interface for viewing Data compiled from the Customer and other sources over which Locality Media has no control and for which Locality Media assumes no responsibility. Locality Media makes no representations or warranties regarding any Location or structure (including but not limited to a Location's safety, construction, occupancy, materials, hazards, water supply, contents, location, surrounding structures, exposures, size, layout, compliance, condition or history), residents, roadways, or any actual or expected outcome from use of the Data, nor does Locality Media make any representation or warranty regarding the accuracy or reliability of the Data received by Locality Media. Locality Media provides administrative and information technology services only and does not advise, recommend, or render an opinion with respect to any information communicated through the Service and shall not be responsible for the Customer's or any third party's use of any information obtained through the Service.

4. The Customer shall obtain and maintain, at its own expense, computers, operating systems, Internet browsers, tablets, phones, telecommunications equipment, third-party application services and other equipment and software ("Equipment") required for the Customer to access and use the Service (the Service being accessible to users through standard Internet browsers subject to third party network availability and signal strength). Locality Media shall not be responsible for any problem, error or malfunction relating to the Service resulting from Customer error, data entry errors or malfeasance by the Customer or any third party, or the performance or failure of Equipment or any telecommunications service, cellular or Wi-Fi network, Internet connection, Internet service provider, or any other third-party communications provider, or any other failure or problem not attributable to Locality Media ("Technical Problems").
5. This Agreement will be effective for an initial term of **4 months** (the "Initial Term") commencing on the Effective Date. After the Initial Term, this Agreement will automatically renew for successive terms of **12 months** each (a "Renewal Term"), subject to the right of either party to cancel renewal at any time upon at least 60 days' written notice. Locality Media reserves the right to increase Customer's renewal Service fees by no more than **5%** per annum, applied to the Service fees set forth in the previous term. Either party also may terminate this Agreement immediately upon written notice if the other party: (i) becomes insolvent; (ii) becomes the subject of a petition in bankruptcy which is not withdrawn or dismissed within 60 days thereafter; (iii) makes an assignment for the benefit of creditors; or (iv) materially breaches its obligations under this Agreement and fails to cure such breach within 30 days after the non-breaching party provides written notice thereof.
6. Upon termination, the Customer shall cease use of the Service and all Credentials then in the Customer's possession or control. This Section 6 and Sections 8 through 11 and 15 through 25 hereof shall survive any termination or expiration of this Agreement.
7. The Customer agrees to pay the fees set forth in Exhibit A for use of those Service features described in Exhibit A (as available as of the Effective Date). Locality Media may charge separately for services offered from time to time that are not included in the scope of Exhibit A (such as new Service features, systems integration services and applications of the Service for new purposes), subject to the Customer's written acceptance of the terms of use and fees associated with such services. The Customer shall be responsible for the payment of all taxes associated with provision and use of the Service (other than taxes on Locality Media's income).
8. Locality Media owns and shall retain all right, title, and interest in and to the Service, all components thereof, including without limitation all related applications, APIs, user interface designs, software and source code (which shall further include without limitation any and all source code furnished by Locality Media to the Customer in connection with the delivery or performance of any services hereunder) and any and all future enhancements or modifications thereto howsoever made and all intellectual property rights therein but not Data furnished by the Customer. Except as expressly provided in this Agreement or as otherwise authorized in advance in writing by Locality Media, the Customer and Customer Users shall not copy, distribute, license, reproduce, decompile, disassemble, reverse engineer, publish, modify, or create derivative works from, the Service; provided, however, that nothing herein shall restrict the Customer's use of the Data that the Customer has provided.
9. "Confidential Information" means any and all information disclosed by either party to the other which is marked "confidential" or "proprietary," including oral information that is designated confidential at the time of disclosure. Without limiting the foregoing, all information relating to the Service and associated software and the terms of this Agreement shall be deemed Locality Media's Confidential Information. Notwithstanding the foregoing, "Confidential Information" does not include any information that the receiving party can demonstrate (i) was known to it prior to its disclosure hereunder; (ii) is or becomes publicly known through no wrongful act of the receiving party; (iii) has been rightfully received from a third party authorized to make such disclosure without restriction; (iv) is independently developed by the receiving party, without the use of any Confidential Information of the other party; (v) has been approved for release by the disclosing party's prior written authorization; or (vi) is required to be disclosed by court order or applicable law, provided that the party required to disclose the information provides prompt advance notice thereof to the other party (except to the extent such notice is prohibited by law).
10. Each party hereby agrees that it shall not use any Confidential Information belonging to the other party other than as expressly permitted under the terms of this Agreement or as expressly authorized in writing by the other party. Each party shall use the same degree of care to protect the other party's Confidential Information as it uses to protect its own confidential information of like nature, but in no circumstances with less than reasonable care. Neither party shall disclose the other party's Confidential Information to any person or entity other than its

employees, agents or consultants who need access thereto in order to effect the intent of this Agreement and in each case who have been advised of the confidentiality provisions of this Agreement, have been instructed to abide by such confidentiality provisions, entered into written confidentiality agreements consistent with Sections 9-11 or otherwise are bound under substantially similar confidentiality restrictions.

11. Each party acknowledges and agrees that it has been advised that the use or disclosure of the other's Confidential information inconsistent with this Agreement may cause special, unique, unusual, extraordinary, and irreparable harm to the other party, the extent of which may be difficult to ascertain. Accordingly, each party agrees that, in addition to any other remedies to which the nonbreaching party may be legally entitled, the nonbreaching party shall have the right to seek to obtain immediate injunctive relief, without the necessity of posting a bond, in the event of a breach of Section 9 or 10 by the other party, any of its employees, agents or consultants.
12. LOCALITY MEDIA REPRESENTS AND WARRANTS THAT IT SHALL USE COMMERCIALY REASONABLE EFFORTS TO PROVIDE THE SERVICE WITHOUT INTRODUCING ERRORS OR OTHERWISE CORRUPTING DATA AS SUBMITTED BY THE CUSTOMER. OTHER THAN THE FOREGOING, THE SERVICE, INCLUDING ALL DATA, IS PROVIDED ON AN "AS IS" AND "AS AVAILABLE" BASIS WITHOUT WARRANTY OF ANY KIND. WITHOUT LIMITING THE FOREGOING, LOCALITY MEDIA MAKES NO WARRANTY THAT THE SERVICE WILL BE UNINTERRUPTED, ERROR FREE OR AVAILABLE AT ALL TIMES, NOR DOES LOCALITY MEDIA WARRANT THAT THE SERVICE WILL REMAIN COMPATIBLE WITH, OR OPERATE WITHOUT INTERRUPTION ON, ANY EQUIPMENT OF THE CUSTOMER OR CUSTOMER USERS. Locality Media will provide the service on a 24X7X365 basis with an uptime guarantee of 99.5% availability excluding scheduled maintenance. Locality Media will respond to Customer and provide Initial Responses, Temporary Resolutions and Final Resolutions in accordance with the time requirements set forth in the table below.

Severity Level:	Vendor's Initial Response will be provided within:	Vendor's Temporary Resolution will be provided within:	Vendor's Final Resolution will be provided within:
1: Mission Critical – Software is down /undiagnosed but feared critical; situation may require a restore and Software use is suspended until a diagnosis is given	60 minutes from receipt of initial notice from the Customer, or discovery, of the error	24 hours from receipt of initial notice from the Customer, or discovery, of the error	2 days from receipt of initial notice from the Customer, or error discovery
2: Critical Issue – Software is not down, but operations are negatively impacted	2 hours from receipt of initial notice from the Customer, or discovery, of the error	48 hours from receipt of initial notice from the Customer, or discovery, of the error	3 days from receipt of initial notice from the Customer, or error discovery
3: Non-Critical Issue – resolution period to be mutually agreed upon	4 hours from receipt of initial notice from the Customer, or discovery, of the error	3 days from receipt of initial notice from the Customer, or discovery, of the error	15 days from receipt of initial notice from the Customer, or error discovery

13. EXCEPT AS SET FORTH ABOVE IN SECTION 12, LOCALITY MEDIA MAKES AND THE CUSTOMER RECEIVES NO WARRANTIES, WHETHER EXPRESS, IMPLIED, OR STATUTORY REGARDING OR RELATING TO THE SUBJECT MATTER HEREOF. LOCALITY MEDIA SPECIFICALLY DISCLAIMS, TO THE FULLEST EXTENT PERMITTED BY LAW, ALL IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT WITH RESPECT TO THE SUBJECT MATTER HEREOF, INCLUDING WITHOUT LIMITATION THE SERVICE.
14. The Customer represents and warrants that the Customer is authorized and has all rights necessary to enter into this Agreement, to provide the Data furnished by the Customer to Locality Media, and to use the Service and Data, and Customer will only use the Service and Data, as permitted under this Agreement and in accordance with the laws, regulations, and any third-party agreements applicable to the Customer and Customer Users. Without limiting the generality of the foregoing, Customer shall not cause or permit any Data to be uploaded to the Service or used in connection with the Service in any manner that would violate any third-party intellectual property rights or license between Customer and any third party. Customer agrees not to use or permit the use of the Service and Data in connection with any public or private enterprise other than operation and performance of the Customer's functions and services. In addition, the Customer and the Customer Users shall not copy, distribute, license, reproduce, publish, modify, or otherwise use any Personally Identifiable Information

(PII) contained within the Data accessed through the Service for any purpose other than to lawfully carry out the services and duties of the Customer. The Customer shall remain responsible for the performance, acts and omissions of each Customer User as if such activities had been performed by the Customer.

15. Locality Media will indemnify, defend and hold harmless the Customer from and against any and all damages, liabilities, losses, costs and expenses (including, but not limited to, reasonable attorneys' fees) (collectively, "Losses") resulting from any third-party claim, suit, action, investigation or proceeding (each, an "Action") brought against the Customer based on the infringement by Locality Media of any third-party issued patent, copyright or registered trademark, except to the extent such Action is based on Data furnished from the Customer, the Customer's breach of any third party agreement, or any combination or integration of the Service with any Customer- or third-party property, method or system.
16. The Customer will indemnify, defend and hold Locality Media harmless from and against any and all Losses arising from or relating to: (i) any breach by the Customer of Section 8; or (ii) any Action by a Customer User or third party arising from or relating to the use of the Service or Data accessed through the Service, except to the extent such Losses are subject to Section 15 above or result from the gross negligence or willful misconduct of Locality Media.
17. Such indemnification under Sections 15 and 16 will be provided only on the conditions that: (a) the indemnifying party is given written notice reasonably promptly after the indemnified party receives notice of such Action; (b) the indemnifying party has sole control of the defense and all related settlement negotiations, provided any settlement that would impose any monetary or injunctive obligation upon the indemnified party shall be subject to such party's prior written approval; and (c) the indemnified party provides assistance, information and authority as reasonably required by the indemnifying party.
18. EXCEPT FOR ITS INDEMNIFICATION OBLIGATIONS IN SECTION 15, AND EXCEPT FOR CLAIMS OF GROSS NEGLIGENCE, WILLFUL MISCONDUCT OR FRAUD, LOCALITY MEDIA SHALL NOT BE LIABLE TO THE CUSTOMER OR CUSTOMER USERS FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL OR EXEMPLARY DAMAGES ARISING FROM OR RELATING TO THIS AGREEMENT OR THE SERVICES OR DATA, EVEN IF THE CUSTOMER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. EXCEPT FOR ITS INDEMNIFICATION OBLIGATIONS IN SECTION 15, AND EXCEPT FOR CLAIMS OF GROSS NEGLIGENCE, WILLFUL MISCONDUCT OR FRAUD, LOCALITY MEDIA SHALL NOT BE LIABLE TO THE CUSTOMER OR CUSTOMER USERS FOR ANY DAMAGES IN CONNECTION WITH THIS AGREEMENT IN EXCESS OF THE AMOUNT OF FEES PAID OR PAYABLE BY THE CUSTOMER TO LOCALITY MEDIA WITHIN THE 12 MONTH PERIOD IMMEDIATELY PRIOR TO THE EVENT GIVING RISE TO SUCH LIABILITY.
19. All notices, requests, demands, or consents under this Agreement must be in writing, and be delivered personally, by email or facsimile followed by written confirmation, or by internationally recognized courier service to the addresses of the parties set forth in this Agreement.
20. Except as otherwise provided below, neither party may assign this Agreement or any rights or obligations hereunder without the prior written consent of the other party. Locality Media may assign this Agreement or any rights or obligations hereunder to any Locality Media affiliate or in connection with the merger or acquisition of Locality Media or the sale of all or substantially all of its assets related to this Agreement, without such consent. This Agreement shall be binding upon and inure to the benefit of the parties, their respective successors and permitted assigns.
21. This Agreement shall be governed by and construed in accordance with the laws of the State of Tennessee.
22. Any modification, amendment or waiver to this Agreement shall not be effective unless in writing and signed by the party to be charged. No failure or delay by either party in exercising any right, power, or remedy hereunder shall operate as a waiver of such right, power, or remedy.
23. The parties are independent contractors with respect to each other, and neither shall be deemed an employee, agent, partner, or legal representative of the other for any purpose or shall have any authority to create any obligation on behalf of the other. Neither party intends to grant any third-party beneficiary rights as a result of this Agreement.
24. Any delay in or failure of performance by either party under this Agreement will not be considered a breach and will be excused to the extent caused by any event beyond the reasonable control of such party including, but not limited to, acts of God, acts of civil or military authorities, strikes or other labor disputes, fires, interruptions in telecommunications or Internet or network provider services, power outages, and governmental restrictions.

25. This Agreement supersedes all prior agreements, understandings, representations, warranties, requests for proposal and negotiations, if any. Each provision of this Agreement is severable from each other provision for the purpose of determining the enforceability of any specific provision.

26. Agreement Billing Information

a. **Accounts Payable Contact**

Name: Sommar Jaynes

Email: sjaynes@columbiatn.gov

Phone: 931-560-1515

b. **Tax Exempt** Yes (Yes/No)

If yes, please email a copy of the Exempt Certificate to accounting@firstdue.com.

c. **Purchase Order Required** Yes (Yes/No)

If yes, return a copy of the Purchase Order with the signed agreement or email a copy to accounting@firstdue.com.

LOCALITY MEDIA, INC.

By: _____
(Signature)

Name: _____

Title: _____

Date: _____

City of Columbia

By: _____
(Signature)

Name: Charles (Chaz) M. Molder

Title: Mayor

Date: _____

Attest:

By: _____
(Signature)

Name: Thad H. Jablonski

Title: City Recorder

Date: _____

Legal Form Approval:

By: 
(Signature)

Name: Jake Hubbell

Title: City Attorney

Date: 1/31/25



Locality Media, Inc. dba First Due
107 Seventh St
Garden City, NY 11530, United States
Phone: +1 (516) 874-2258
Website: <https://www.firstdue.com/>

Exhibit A - Quote

Prepared By: Eric Bambard
Valid Until: May 31, 2025
Quote Number: 1545132000395772518

BILL TO:

Nick Brown
City of Columbia
700 N Garden St
Columbia, TN 38401

Account: City of Columbia
Subscription Start: March 1, 2025
Initial Term: 4 months
Annual Subscription: \$ 8,550.00

Product Details	Total
Scheduling Manage staff schedules with an interactive shift board, configurable call shifts module, messaging, time-off and shift trades.	
Personnel Management Store, Manage and Access Employee Records including demographic data, certifications and employment information.	
Essentials Online Training Package Up to 4 Hours Online Training with certified First Due Instructor	
Implementation and Configuration Services Services related to configuring and customizing the First Due Platform as described in the Statement of Work.	
	One-Time Fees Subtotal \$ 2,100.00
	4-Month Subscription Fees Subtotal \$ 2,821.50
	Grand Total \$ 4,921.50
	<i>*Excluding Tax</i>

Statement of Work

Please see attached Statement of Work detailing the Implementation, Training, Data Migration, Integrations, Customer Success Manager, Customer Support, and Assumptions for this Exhibit A – Quote.

Terms and Conditions

The above-listed Grand Total will be invoiced on or around the Subscription Start date. For subsequent annual periods, the Service fees are due and payable annually in advance on July 1st.

Payment Terms: Net 30 days

For electronic ACH payment: Wells Fargo Bank | ACH Routing Number: 121000248 | Account #: 4192384907
[Signature Page Follows]

LOCALITY MEDIA, INC.

By: _____
(Signature)
Name: _____
Title: _____
Date: _____

City of Columbia

By: _____
(Signature)
Name: Charles (Chaz) M. Molder
Title: Mayor
Date: _____

Attest:

By: _____
(Signature)
Name: Thad H. Jablonski
Title: City Recorder
Date: _____

Legal Form Approved:

By: _____
(Signature)
Name: Jake Hubbell
Title: City Attorney
Date: _____



Locality Media, Inc. dba First Due
107 Seventh St
Garden City, NY 11530, United States
Phone: +1 (516) 874-2258
Website: <https://www.firstdue.com/>

Exhibit A - Quote

Prepared By: Eric Bambard
Valid Until: August 31, 2025
Quote Number: 1545132000395772609

BILL TO:

Nick Brown
City of Columbia
700 N Garden St
Columbia, TN 38401

First Due Additional Modules Quote: 1545132000395772609

Account: City of Columbia
Subscription Start Date: July 1, 2025
Initial Term: 12 months
Annual Subscription: \$ 38,450.00

First Due Additional Modules 07/01/2025 – 06/30/2026: Product Details	Total
Occupancy Management & Pre-Incident Planning Manage Occupancies, Pre-Incident Mapping, ArcGIS Maps, Fire Systems, Hazardous Material, and Contacts.	
Responder Web Responder dashboard and Responder iOS/Android App with notifications, statusing and routing.	
Command Comprehensive Incident Command Module with digital command board, drag and drop task assignment, customizable checklists, live map annotation and automated Incident log.	
Hydrant Management – Advanced Manage Hydrants including hydrants visible on pre-plan & response map, hydrant list, hydrant types, hydrant uploads, ArcGIS hydrant layers, hydrant setup, hydrant service checklist, data management, mapping, service inspections, hydrant flow test and reporting.	
Inspections Field Inspections, Configurable Checklists, Violation Management, Virtual Inspections, Inspections Scheduler, and Integrated Pre-Incident Planning.	
Permitting Permit Management, Customizable Permit Types, Plan Review and Permit Fees.	
Investigations Organize, analyze, and document investigations, keeping case information secure and separated from, but integrated with other modules.	
Incident Reporting – NFIRS NFIRS Incident Documentation, State and Federal Compliance with automated submission.	
Incident Reporting – NFIRS EMS+ NFIRS Incident Documentation, State and Federal Compliance with automated submission including standard NFIRS EMS Module with additional fields for enhanced patient documentation. Fields include Treatments, Procedures, Medications, Vitals, Signature	
Basic Training Records Assign Training, Record Completions, View Training Logs, and Manage Certifications.	
Events & Activities Create Events, View Global Activity Log, and Access Global Calendar.	
Assets & Inventory Assets, vehicles, equipment and inventory management, assets and equipment checks, and work order management.	

Community Connect

Online portal for residents and businesses to input critical occupant and property data that can be made available to Emergency Response Agencies during an incident.

CAD Integration (Other)

Receive CAD Data to support First Due Responder and Incident Reporting modules via sFTP, XML, or API.

Essentials Online Training Package

Up to 4 Hours Online Training with certified First Due Instructor

Implementation and Configuration Services

Services related to configuring and customizing the First Due Platform as described in the Statement of Work.

First Due Additional Modules One-Time Fees Subtotal	\$ 6,450.00
First Due Additional Modules Subscription Fees Subtotal	\$ 38,450.00
First Due Additional Modules Grand Total Year 1	\$ 44,900.00

*Excluding Tax

First Due Renewal Quote: 1545132000395772518

Account: City of Columbia

Renewal Subscription Start Date: July 1, 2025

Renewal Term: 12 months

Renewal Annual Subscription: \$ 8,550.00

First Due Renewal 07/01/2025 – 06/30/2026: Product Details	Total
Scheduling (Renewal)	
Manage staff schedules with an interactive shift board, configurable call shifts module, messaging, time-off and shift trades.	
Personnel Management (Renewal)	
Store, Manage and Access Employee Records including demographic data, certifications and employment information.	
First Due Renewal One-Time Fees Subtotal	\$ 0.00
First Due Renewal Subscription Fees Subtotal	\$ 8,550.00
First Due Renewal 07/01/2025 – 06/30/2026 Total	\$ 8,550.00

*Excluding Tax

First Due Fee Summary	
First Due Additional Modules One-Time Fees Subtotal	\$ 6,450.00
First Due Additional Modules Subscription Fees Subtotal	\$ 38,450.00
First Due Renewal 07/01/2025 – 06/30/2026 Total	\$ 8,550.00
Grand Total for 07/01/2025 – 06/30/2026	\$ 53,450.00

*Excluding Tax

Statement of Work

Please see attached Statement of Work detailing the Implementation, Training, Data Migration, Integrations, Customer Success Manager, Customer Support, and Assumptions for this Exhibit A – Quote.

Terms and Conditions

The above-listed Grand Total for 07/01/2025 – 06/30/2026 will be invoiced on or around July 1, 2025. For subsequent annual periods, the Service fees are due and payable annually in advance on July 1st.

Payment Terms: Net 30 days

For electronic ACH payment: Wells Fargo Bank | ACH Routing Number: 121000248 | Account #: 4192384907

[Signature Page Follows]

LOCALITY MEDIA, INC.

By: _____
(Signature)
Name: _____
Title: _____
Date: _____

City of Columbia

By: _____
(Signature)
Name: Charles (Chaz) M. Molder
Title: Mayor
Date: _____

Attest:

By: _____
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Name: Thad H. Jablonski
Title: City Recorder
Date: _____

Legal Form Approved:

By: _____
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Name: Jake Hubbell
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Date: _____



Locality Media, Inc. dba First Due
107 Seventh St
Garden City, NY 11530, United States
Phone: +1 (516) 874-2258
Website: <https://www.firstdue.com/>

Statement of Work

For Quote Numbers: 1545132000395772518
and 1545132000395772609

Statement of Work | City of Columbia

1. Introduction

1.1 Purpose

The purpose of this Statement of Work (SoW) document is to clearly define the Implementation, Training, Data Migration, Integrations, Customer Success Manager, Customer Support, and Assumptions for **City of Columbia** ("Customer") from Locality Media, Inc. dba First Due ("First Due") for the purchased product(s) set forth in Exhibit A – Quote ("Purchased Products") attached to the Agreement.

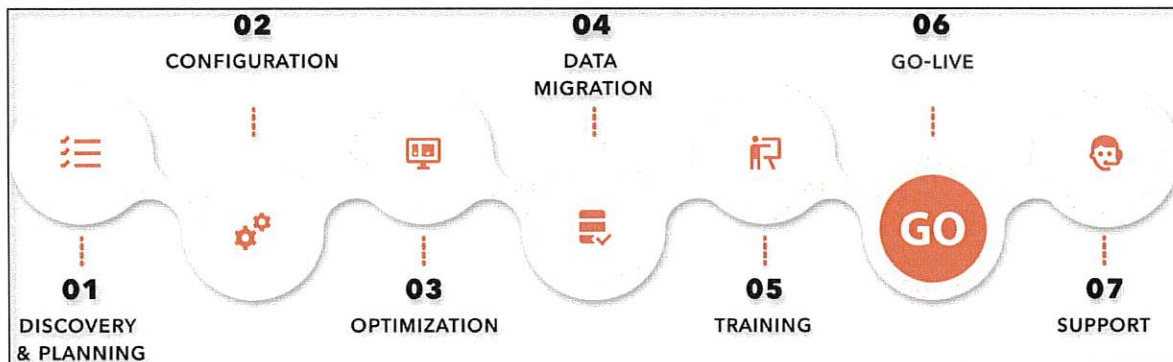
1.2 Scope:

This SOW includes the configuration, optimization, and deployment of the Purchased Products with the goal of meeting the organizational needs of the Customer.

2. Implementation

2.1 Overview

First Due utilizes a combination waterfall and iterative approach to implementation. This includes Discovery, Configuration, Optimization, Data Migration, Training, and Go-Live.



2.2 Implementation Resources

- **Implementation Manager:** Project lead and go-to person, acting as the primary liaison between the Customer and the First Due project team. The Implementation Manager will develop and execute the project plan, manage communication, and ensure adherence to predefined timelines and quality standards. This individual is also responsible for helping to configure the core system and some of the more straightforward modules.
- **Implementation Product Specialist(s):** While the Implementation Manager will lead the overall project, Product Specialists will be brought in to help configure and optimize specialty modules such as Fire Prevention, ePCR, Assets & Inventory, Training, Scheduling, and Reporting. They are product experts in First Due and are versed in industry best practices for their specific product specialties. Depending on the modules purchased and complexity, your project may be assigned 1-3 Product Specialists.
- **Technical Implementation Specialist:** Responsible for managing data migration from your current vendor to First Due and the integration between First Due and CAD. The Technical Implementation Specialist

team comes from a diverse background, ranging from database management to public safety software integration.

- **Customer Success Manager:** As the point person after project completion, the Customer Success Manager (CSM) will be part of the implementation as an advocate and to ensure a seamless transition to support post go-live. During the Implementation they will regularly check-in to ensure progress is being made and help with the addition of new modules or scope from a commercial perspective. Post go-live, they will provide regular check-ins to ensure the Customer is adopting the Purchased Products and deriving value from them.
- **Training Manager:** Responsible for developing and executing the training plan, with the goal of effective adoption of the Purchased Products by Customer. The Training Manager will be involved throughout the project to ensure they have the Customer specific knowledge to design the most effective training plan possible.

2.3 Implementation Phases

- 2.3.1 Discovery & Planning:** Once the Project has been assigned, Customer will receive a set of tailored discovery questionnaires. Once filled out, the Implementation Manager will schedule a Project Kick-Off. During this meeting the Customer will receive access to the First Due platform, meet the project team and receive an initial product tour. The Implementation Manager will also provide an overview of the project plan, decide the meeting cadence, and formalize the next steps. CAD Integration and Data Migration planning meetings are also held during this phase, if required. These meetings will be led by the Technical Implementation Specialist.
- **Key Meeting(s):** Project Kick-Off, CAD Kick-Off, Data Migration Planning
 - **Milestone(s):** Project Kick-Off, System Access
 - **Customer Task(s):** Fill Discovery Questionnaires
 - **Deliverable(s):** Welcome email, Initial Account Set-Up, System Logins Provided
- 2.3.2 Configuration:** After planning is complete, the Implementation Manager will begin scheduling the Configuration sessions. Before each configuration session there will be some light prep work for the Customer to complete. Generally, there will generally be one (1) configuration session per module, but in cases where there is more complexity, there may be multiple. These sessions will be either be run by the Implementation Manager or the Implementation Product Specialist, depending on the module.
- **Key Meeting(s):** Module Configuration Sessions (1-2 per module)
 - **Milestone(s):** N/A
 - **Customer Task(s):** Configuration Prep Work (per module)
 - **Deliverable(s):** Initial Module Configuration
 - **Scope:** All Purchase Products
- 2.3.3 Optimization:** After the configuration is complete, the Customer will be provided with test work (module User Acceptance Testing (UAT)) to complete. Following the completion of the UAT work, Optimization Sessions will be held to review Customer feedback, correct any issues, and finalize the configuration of the module. There will generally be one (1) Optimization session per module, but in cases where there is more complexity, there may be multiple. Once a module is configured and optimized, the Customer will be provided a module sign-off document to review and sign. Note Configuration and Optimization sessions may run interchangeably to ensure the project stays on-track.
- **Key Meeting(s):** Module Optimization Sessions (1-2 per module)
 - **Milestone(s):** Module Acceptance and Sign-Off (1 per module)
 - **Customer Task(s):** Optimization Prep Work (UAT per module)
 - **Deliverable(s):** Module Optimization resulting in Customer Acceptance
 - **Scope:** All Purchase Products

2.3.4 Data Migration: Data Migration will occur through-out the project and can be summarized in three steps: (1) initial data migration at the beginning of the project required for configuration, (2) import of historical records, usually occurring throughout the project, and (3) final data migration immediately before go-live. First Due's Data Migration team will review your legacy data environment and provide guidance on the best path to extract, map, and import the data into First Due.

- **Key Meeting(s):** Data Migration Planning
- **Milestone(s):** Data Migration Sign-Off
- **Customer Task(s):** Extract or provide access to legacy data based on guidance from First Due Data Migration team, Data Mapping Assistance, review and approve data load.
- **Deliverable(s):** Data Migration Plan, Data Mapping Assistance, Data Import

2.3.5 Training: As the project is in the final stages, the Training Manager will work with the Customer to arrange a training plan that will result in the successful adoption of the Purchased Products. Note that while Webinar Administrator training will occur during configuration and optimization sessions, the Training Manager will arrange formal Webinar and/or Onsite Train-the-Trainer and/or End User Training Session(s). Additive to the provided training, Customer will also have access to live weekly training academy sessions as well as on demand online training videos and training guides via the First Due Knowledgebase.

- **Key Meeting(s):** Training Planning, Training Sessions
- **Milestone(s):** Training Completed
- **Customer Task(s):** Coordinate staff to be trained
- **Deliverable(s):** Training Plan and Training Session(s)

2.3.6 Go-Live: Once all modules have been signed off and training has been arranged or completed, First Due will work with the Customer to kick-off the Go-live process. This includes: (1) Final System Acceptance, (2) Go-live planning meeting, (3) Final Data Migration, (4) Go-live, and (5) Post go-live implementation support.

- **Key Meeting(s):** Go-live planning, Post Go-live Check-Ins
- **Milestone(s):** System Acceptance, Go-live
- **Customer Task(s):** Final Testing
- **Deliverable(s):** Post Go-live Implementation Support (2-4 weeks)

2.3.7 Transition to Customer Success: Following the completion of the post go-live support period and assuming all critical implementation tasks are complete, Customer will be transitioned to their Customer Success Manager (CSM) and to the First Due Support team.

- **Key Meeting(s):** Customer Success Transition Meeting
- **Milestone(s):** Transition to Customer Success and Support
- **Customer Task(s):** N/A
- **Deliverable(s):** N/A

3. Training

Training is an integral part of any successful implementation. First Due is focused on providing your agency adequate training to ensure effective user adoption of the platform. As part of this Statement of Work, the Customer shall receive:

- Formal training as outlined in Exhibit A - Quote
- Administrator Training as part of the Configuration / Optimization
- Access to live First Due Academy Webinars
- Access to online recorded training videos and guides via an interactive knowledgebase

Any additional scope or detail related to Training will be listed below.

4. Data Migration

First Due understands the importance of data migration to our customers and has extensive experience working to migrate historical records into the platform. First Due will use best efforts to migrate applicable data from Customer's existing systems utilizing data migration best practices. This includes:

- Data Migration Planning Session
- Assistance/Guidance in extracting data from existing system/s
- Mapping extracted data to First Due import workbooks
- Importing of Data into First Due

The Data Migration scope of this Statement of Work will be to import legacy data from Customer existing systems in order for the Purchased Products to be operational. This includes operational data and historic records. Note that there are times when certain data is not seen as valuable to migrate to First Due. First Due and Customer will agree during the planning phase on what data needs to be migrated and priorities around data migration.

5. Integrations

As part of this Statement of Work, First Due will implement all integrations and relevant scope outlined in Exhibit A – Quote. Integrations will be implemented during the configuration and optimization phases outlined above. In most cases, these integrations will be aligned with the module they are related. The only exception to this is the CAD Integration which, if part of scope, will have its own dedicated session at the beginning of an implementation. Customer or complex integrations may follow this same exception and have their own sessions to implement.

First Due will support these integrations post go-live. Note First Due is not responsible for outages, issues, and failures of 3rd Party Vendors. First Due will, however, always endeavor to work with Customer to resolve issues, regardless of responsibility.

Any additional scope or detail related to Integrations will be listed below.

6. Customer Success Manager

First Due understands the value of ongoing Customer Success activities post go-live. As part of this Statement of Work, Customer will receive a Customer Success Manager who will be the point person for Customer post go-live. Customer will receive regular check-ins to ensure the adoption of the Purchased Products. As part of the regular check-ins, the Customer Success Manager can help Customer with any major enhancements or issues, new feature updates, interest in other modules and additional training needs.

7. Customer Support

A customer's success is important to First Due and we understand having a reliable, knowledgeable Customer Support (or Support) team there to help is vital. Customer Support provides a central point of contact to ensure that all customer support requests are responded to and resolved. Below is a summary of the support components.

7.1 Contacting Customer Support

Customer Support is a service provided to our customers when they have questions, requests, or issues with the Services. When Customer submits a support request, a Support Ticket (or Ticket) is created within First Due's Support CRM and a unique ID (or ticket number) is assigned to track and document Customer's support request.

We offer a variety of channels to communicate with our Support team:

- **Online:** <https://support.firstduesizeup.com/portal/en/kb/first-due-community-connect-support>
- **Email:** support@firstdue.com
- **Phone:** (516) 874-5818

7.2 Self-Service Resources

First Due strives to provide useful, empowering self-service resources that are available 24/7 on our [online Support Center](#). Our Knowledgebase contains step-by-step/how-to articles, FAQs, videos, best practices, etc.

7.3 Hours of Operation

Customer Support hours of operation (Business Hours) are:

- Monday to Friday, 9:00am – 6:00pm ET**
- ** 24x7 Support available for Sev 1 (Down/Urgent) issues.

8. Assumptions

8.1 Customer Participation

Every successful implementation requires adequate participation from the Customer. Although First Due is ultimately responsible for deliverables in the SoW, Customer agrees to attend the necessary calls and complete required preparatory work in order to help drive the project forward. At a minimum, Customer resources will be required for one (1) hour per week for meetings, and half an hour to one (0.5-1) hour of prep work per week by one or multiple individuals. Customer understands the importance of ensuring the correct Customer resources are available when required.

8.2 Statement of Work Expiration

Excluding significant delays caused by the First Due team, this Statement of Work will expire within twelve (12) months of the Subscription Start Date as detailed in Exhibit A – Quote. In situations where the project is delayed for no fault of either party, First Due agrees to extend the term, only if there is an agreed plan to complete the project within the extension period. Note the term expiration does not apply to section 6 & 7 above and will not impact First Due's ability to support the Customer post go-live.

8.3 Best Practice and Standard Workflow

First Due intends to meet the organizational needs of the Customer and their respective software requirements by configuring the Purchased Products to closely align with existing workflows. Although First Due is incredibly flexible, there may be times when First Due recommends using standard functionality or best practice to ensure a timely implementation, and simplification of current process. These workflows may differ from Customer existing workflows. Customer understands the importance of collaboration to achieve the ultimate goal of successfully adopting the Purchased Products and is aware there may be changes to existing workflow to accomplish this.

8.4 Go-live Requirements & Gaps

Over the course of the Implementation, both parties may uncover functionality gaps in the Purchased Products. Some of these gaps may have a material impact on the ability to implement or adopt the product. Gaps of this nature, deemed Go-Live Requirements, will be prioritized to ensure a timely go-live and project completion. However, in the case that certain features are not complete before go-live, they will be added to module and system signoffs as exceptions and will be completed within an agreed upon timeframe.



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Ginger Adams, Sr Administrative Assistant to Fire Chief, 931-560-1723, GAdams@columbiatn.gov

AGENDA ITEM TITLE: APPROVE THE PURCHASE OF A 2025 FIRE MASTER RETAIL TANKER FROM SAFE INDUSTRIES IN THE AMOUNT OF \$468,100 UTILIZING BUY BOARD NATIONAL PURCHASING COOPERATIVE INTERLOCAL PARTICIPATION PROGRAM -

RECOMMENDATION: Approve.

INFORMATION: Columbia Fire & Rescue requests City Council approval for the acquisition of a 2025 Fire Master Retail Tanker WT143 with an International Chassis, a Hale QFlo Pump and a 2000-gallon water tank from Safe Industries utilizing the Buy Board National Purchasing Cooperative Interlocal Participation Program.

This tanker is designed to carry 2,000 gallons of water, providing a crucial supplement in the event of water shortages during structure fires. In addition to its water-carrying capacity, the tanker is equipped with a 1250 GPM pump, fire hoses, and other essential firefighting equipment, enabling it to function as a pumper to actively fight fires. Tankers are vital for providing mobile water storage and enhancing fire suppression efforts, particularly when pumpers may be unable to access an adequate water supply. If approved, this will be the first tanker in the fleet for the City of Columbia Fire & Rescue Department.

CERTIFICATION: The Chief Financial Officer certifies that \$468,100 will be proposed in a forthcoming appropriations amendment.

ATTACHMENTS: Staff Report, Official Proposal, Freightliner 2000 Gallon Pumper Tanker Cut Sheet, Fire Master Proposal Format

Official Proposal for City of Columbia TN

All Source Enterprises LLC. dba Safe Industries herewith submits a proposal to City of Columbia TN for a fire apparatus manufactured by Fire Master on January 14, 2025:

<u>Package:</u>	Fire Master Retail Tanker WT143 with an International Chassis, a Hale QFlo Pump and a 2000 Gallon Water Tank	\$456,600.00
	• Prior to Delivery of the Apparatus, Safe Industries Will Perform a Bumper to Bumper Inspection and Pump Test at No Cost to the Customer.	Included
	• Additional Upfits for Ladder Brackets and Ladders from Fire Master	Included
	• Contingency Funds	\$10,000.00
	• Buy Board Cooperative Contract	\$1,500.00
<u>Total of Package:</u>		<u>\$468,100.00</u>

Final Pricing Shall be Subject to Surcharges Incurred on the Materials and Products Required to Build and Provide your Products. Final Invoices will Include a Line Item Labeled "Surcharge" Along with the Applicable Surcharge Amount. This is not a Negotiable Discussion with Safe Industries as we are Passing Through Costs Required to Build and Provide your Products.

Bidding Organization Name: All Source Enterprises LLC. dba Safe Industries
Bidding Organization Address: 5031 Hwy 153
Easley, SC 29642

Bidder's Representative:

Name: Lee Beckman
Title: Apparatus Sales Representative
Phone: (931) 242-1604
Email: LBeckman@safeindustries.com

Safe Industries (the Company) shall not be held liable for any delay, failure to make delivery due to, war, fire, labor disputes, acts of God, governmental regulations, supplier issues beyond Fire Master reasonable control, breakdown of machinery, or any other causes or circumstances beyond the reasonable control of the Company which prevent or hinder the Company's manufacture and/or delivery of the Apparatus. Any changes after order submittal, including those made during a pre-construction conference, may void any penalty clauses or require that delivery and penalty be re-negotiated in good faith by both parties. The Bidder's right to withdraw this proposal, if not accepted within thirty (30) days from the above date is hereby acknowledged. The above price is good for 30 days or until the unit is sold by the dealer.



2,000 GALLON STANDARD FEATURES

FREIGHTLINER M2 CHASSIS

- ✓ Cummins L9 350 HP Diesel Engine
- ✓ Allison 3000EVS Automatic Transmission
- ✓ 45,600 #GVWR
- ✓ Aluminum Wheels
- ✓ 275 Amp Alternator
- ✓ Engine Exhaust Brake
- ✓ Air Ride Driver Seat
- ✓ Tilt Steering Column
- ✓ Power Windows
- ✓ AM/FM WB Radio
- ✓ Dual Air Horns
- ✓ Air-Conditioned Cab
- ✓ Aluminum Extrusion Body Construction
- ✓ ROM Roll up doors

PUMP AND PLUMBING

- ✓ Hale 1,250 GPM Pump w/ 5 Year Warranty
- ✓ (2) 2.5" Discharges on Left Side Panel
- ✓ (2) 2.5" Discharges on Right Side Panel
- ✓ (2) 1.75" Crosslays each to hold 200' of 1.75" hose
- ✓ (1) 3" Deck Gun Plumbing
- ✓ (1) 3" Tank to Pump Line
- ✓ (2) 6" Pump Inlets (Suctions) One on Each Side
- ✓ (1) 2.5" Plumbed Suction/Intake on Drivers Side Pump Panel
- ✓ 2,000 Gallon Poly-Tank w/ Lifetime Warranty
- ✓ (1) Tank Level Gauge on Pump Panel
- ✓ Newton 10" Stainless Rear Dump Valve w/ Swivel Elbow & Extension
- ✓ (2) 2.5" Rear Direct Tank Fills w/ Akron Valves

LIGHTING/ELECTRICAL

- ✓ LED Compartment Lights
- ✓ LED Light Bar & LED Perimeter Lighting
- ✓ Electronic Siren w/ 100-Watt Speaker
- ✓ (6) LED Scene Lights – (2) Rear, (2) Right Side & (2) Left Side of Body
- ✓ LED Chassis Tail / Brake & Back Up Lighting

ADDITIONAL EQUIPMENT

- ✓ EZ load Folding Tank Storage above Right Side Compartments
- ✓ (1) 2,100 Gallon Portable Tank
- ✓ (2) 10' Sections of 6" Lite Weight Suction Hose & Strainer
- ✓ Lettering and Reflective Striping

www.firemaster.com



Shown with optional Ladders





2,000 GALLON PUMPER TANKER



Similar Unit Shown

Fire Master Fire Equipment, Inc.
2049 E. Division St.
Springfield, MO 65803
1-800-641-4724

www.firemaster.com



2,000 Gallon Pumper / Tanker

INTENT OF SPECIFICATION

It is the intent of these specifications to cover our bid for furnishing and delivery to the purchaser of a complete apparatus equipped as hereinafter specified. With a view to obtaining the best results and the most acceptable apparatus for service in the fire department, these specifications cover the general requirements as to the type of construction, together with certain details as to finish, equipment, and appliances with which the successful bidder must conform. Minor details of construction and materials where not otherwise specified are left to the discretion of the contractor, who will be solely responsible for the design and construction of all features.

ADHERENCE TO SPECIFICATIONS

In order to closely evaluate all bids and determine the responsiveness to the customer request, each proposal must be submitted in the same order as the customer specification for ease of comparison. Each item must have a check mark in the appropriate column indicating compliance. Those items that are different by brand, model number (when applicable), and operational performance must be clearly defined and listed separately on a document clearly identified as "Clarifications and Substitutions". Vendors failing to comply with this request are subject to immediate rejection without further cause.

SAFETY REQUIREMENTS

The unit specified meets all State and Federal safety standards and laws that are in effect on the date of the bid for the item(s) that are being specified and the particular use for which they are meant.

QUALITY AND WORKMANSHIP

The design of the apparatus shall embody the latest approved automotive engineering practices. Experimental designs and methods shall not be acceptable. The workmanship shall be of the highest quality in its respective field. Special consideration is given to the following points: accessibility of the various units that require periodic maintenance, ease of operation (including both pumping and driving) and symmetrical proportions. Construction shall be rugged and ample safety factors shall be provided to carry loads as specified.



2,000 Gallon Pumper / Tanker

PAYMENT TERMS

The apparatus shall be paid in full upon completion and acceptance at the manufacturer's facility.

The vehicle(s) shall not be released from the manufacturer until full payment is made.

GENERAL CONSTRUCTION

The complete apparatus, assemblies, subassemblies, component parts, etc. will be designed and constructed with due consideration to the nature and distribution of the load to be sustained and to the general character of the service to which the apparatus is to be subjected when placed in service. All parts of the apparatus will be strong enough to withstand the general service under full load. The apparatus will be designed so the various parts are readily accessible for lubrication, inspection, adjustment, and repair.

The apparatus will be designed, constructed, and equipment mounted, with due consideration to distribution of the load between the front and rear axles, so the specified equipment, including a full compliment of specified ground ladders, full water tank, loose equipment, and firefighters; will be carried without overloading or injuring the apparatus.

OPERATION AND SERVICE DOCUMENTATION

The documentation will address at least the inspection, service, and operations of the fire apparatus and all major components thereof. The manufacturer shall also provide documentation of the following items for the entire apparatus and each major operating system or major component of the apparatus:

1. Manufacturer's name and address
2. Country of manufacture
3. Source of service and technical information
4. Parts and replacement information
5. Descriptions, specifications, and ratings of the chassis, pump, and aerial device
6. Wiring diagrams for low voltage and line voltage systems to include the following information: representations of circuit logic for all electrical components and wiring, circuit identification, connector pin identification, zone location of electrical



2,000 Gallon Pumper / Tanker

components, safety interlocks, alternator-battery power distribution circuits, and input/output assignment sheets or equivalent circuit logic implemented in multiplexing systems

7. Lubrication charts
8. Operating instructions for the chassis and major components such as a pump and any auxiliary systems
9. Precautions related to multiple configurations of aerial devices, if applicable
10. Instructions regarding the frequency and procedure for recommended maintenance
11. Overall apparatus operating instructions
12. Safety considerations
13. Limitations of use
14. Inspection procedures
15. Recommended service procedures
16. Troubleshooting guide
17. Apparatus body, chassis, and other component manufacturers warranties
18. Special data required by this standard
19. Copies of required manufacturer test data or reports, manufacturer certifications, and independent third-party certifications of test results (Mid-ship Pump)

MANUFACTURING LABELS

A permanent plate shall be mounted in a compartment specifying the quantity and type of the following fluids that may be used in the apparatus for normal maintenance.

Where a fluid is not applicable to the unit, the plate shall be marked N/A to inform the service technician who may not be familiar with the apparatus.

- Engine oil
- Engine coolant
- Transmission fluid
- Pump transmission fluid
- Pump primer fluid
- Drive axle fluid
- Air conditioning refrigerant
- Power steering fluid



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- Cab tilt mechanism fluid
- Transfer case fluid
- Equipment rack fluid
- Air compressor system lubricant
- Generator system lubricant
- Front tires air pressure
- Rear tires air pressure

SAFETY LABELS:

SEAT BELT SIGN: An accident prevention sign stating, **"Danger Personnel Must Be Seated And Seat Belts Must Be Fastened While Vehicle Is In Motion Or Death or Serious Injury May Result."** shall be visible from each seating position.

SEATING CAPACITY SIGN: A permanent sign shall be installed in the driver's compartment specifying the maximum number of personnel the vehicle is designed to carry (seating capacity) per NFPA standards. It shall be located in an area visible to the driver and shall read **"SEATING CAPACITY (2)"**.

OVERALL TRAVEL CLEARANCE PLATE: There shall be a travel clearance warning label located in the chassis cab. The travel clearance warning label to be located in easy view of the driver. The travel clearance warning label to include the following information: **Overall travel clearance height in feet and inches.**

GVW SIGN: The manufacturer shall supply the final manufacturer's furnished certification of GVWR and GAWR on a nameplate affixed to the vehicle.

TYPE OF FUEL SIGN: A **"Diesel Fuel Only"** name tag shall be attached to fuel fill access door.

NFPA COMPLIANCE

After acceptance of the fire apparatus, the purchaser shall be responsible for ongoing training of personnel to develop and maintain proficiency regarding the proper and safe use of the apparatus and the associated equipment.



2,000 Gallon Pumper / Tanker

It shall be the responsibility of the end user to procure all associated loose equipment as suggested by the NFPA standards for automotive fire apparatus.

Special notice is given to the following areas that were changed in the 2016 revision. It is the responsibility of the successful bidder to be familiar with all applicable areas of NFPA. This list is not all-inclusive and shall not be construed as such.

APPARATUS TOP SPEED

The maximum top speed of fire apparatus with a GVWR over 26,000 lbs. (11,800 kg) shall not exceed either 68 mph (105 km/hr) or the manufacturer's maximum fire service speed rating for the tires installed on the apparatus, whichever is lower.

If the combined water tank and foam agent tank capacities on the fire apparatus exceed 1,250 gal. (4732 L), or the GVWR of the vehicle is over 50,000 lbs. (22,680 kg), the maximum top speed of the apparatus shall not exceed either 60 mph (85 km/hr.) or the manufacturer's maximum fire service speed rating for the tires installed on the apparatus, whichever is lower.

SEAT BELT INDICATORS

A seat belt warning system shall be provided.

The warning system shall consist of an audible warning device that can be heard at all seating positions designed to be occupied while the vehicle is in motion.

The warning shall be activated anytime the parking brake is released or the automatic transmission is not in park.

ELECTRONIC STABILITY CONTROL

This vehicle is equipped with the Electronic Stability Control system (ESC) to meet the requirements of NFPA 1901, 2016 Edition Section 4.13.1.2.



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GENERAL WARRANTY

The following warranty will be furnished. We warrant each new piece of Fire Apparatus to be free from defects in material and workmanship under normal use and service. Our obligation under this warranty is limited to repairing or replacing, as the Company may elect, any part or parts thereof which will be returned to us with transportation charges prepaid and as to which examination will disclose to the Company's satisfaction to have been defective, provided that such part, or parts will be returned to us no later than two (2) years after delivery of covered apparatus. Such defective part or parts will be returned or replaced free of charge and without charge for installation to the original purchaser.

This warranty will not apply to:

1. Normal maintenance services or adjustments.
2. To any vehicle which has been repaired or altered outside of the original manufacturing facility in any way so as, in the manufacturer's judgment, to affect its stability
3. To any vehicle which has been subject to misuse, negligence, or accident
4. To any vehicle made by us which will have been operated to a speed exceeding the factory rated speed or loaded beyond the factory rated load capacity.
5. Commercial chassis and associated equipment furnished with chassis, signaling devices, generators, batteries, or other trade accessories as they are usually warranted separately by their respective manufacturers. This warranty is in lieu of all other warranties, expressed or implied.
6. All other representations as to the original purchaser and all other obligations or liabilities, including for incidental or consequential damage on the Company's behalf unless made in writing by the Company.

PUMP WARRANTY

Five (5) year (minimum) pump warranty to the original owner. This warranty varies by pump manufacturer.

TANK WARRANTY

"Lifetime" warranty on the water tank.



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5 YEAR PAINT WARRANTY

The manufacturer shall warrant each new fire and rescue apparatus manufactured by it, if used in a normal and reasonable manner, against rust through, blistering, peeling, or cracking of painted surfaces for a period of five (5) years or 50,000 miles, parts & labor to the original purchaser starting the day of final delivery.

The manufacturer's obligation under this warranty is strictly limited to repairing or repainting, as the Company may elect any defective part.

10 YEAR BODY & SUBFRAME WARRANTY

The manufacturer shall warrant each new fire body manufactured by it, if used in a normal and reasonable manner, against structural defects caused by defects in material, design, or workmanship for a period of ten (10) years or 100,000 miles, the parts & labor to the original purchaser starting the day of final delivery.

CHASSIS

Freightliner M2-106

2-Door Commercial Chassis

GVWR:	45,600 lbs.
Front Axle:	14,600 lbs.
Rear Axle:	31,000 lbs.
Engine:	Cummins ISL9 350 hp.
Transmission:	Allison 3000 EVS
Wheels:	Aluminum Alcoa
Color:	Bright RED

PRINCIPLE DIMENSIONS (STANDARD SPECIFICATION)

Overall Length:	28' 06"
Overall Height:	9' 06"
C/A:	142"
W/B:	210"



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Principle dimensions are configured for “Standard” specifications. Alterations to pump and optional equipment will affect the overall height and overall length of the vehicle.

CHASSIS MODIFICATIONS (STANDARD SPECIFICATION)

TRANSMISSION LOCK-UP EVS-3000

An electronic lock-up relay system shall be installed between the engine and transmission and the fire pump. The lock-up shall place the transmission into the 1:1 gear automatically for pump operations.

FRONT & REAR MUD FLAPS

There shall be a pair of front and rear mud flaps installed at the rear of the fenders.

REAR TOW EYES

There shall be two (2) tow eyes, one (1) on each side. They shall be attached to the frame rails, located in the rear center, through the rear wall above the tailboard.

EXHAUST SYSTEM

The exhaust system supplied shall be in compliance with the latest EPA Emission standard.

MASTER BATTERY SWITCH

A master battery on/off switch with shall be provided in the cab, near the driver’s door.

BACK-UP ALARM

One (1) Back up Alarm 97 DB shall be provided and installed at the rear of the unit. It shall be wired to activate when the transmission is placed in reverse.



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NFPA 1901 COMPLIANT PUMP

The fire pump and related plumbing on the specified apparatus shall be installed in accordance with applicable NFPA 1901 guidelines at the time the contract was placed.

SIDE PANEL MODULE

A pump operator's side panel pump module shall be provided. It shall be assembled and mounted independently from both the chassis and the body to properly allow sufficient flexing and prevent component fatigue.

The module shall be constructed using square aluminum tubing. The welded ends of the tubing shall be chamfered prior to welding and shall be ground smooth prior to finishing.

SIDE PANELS

The pump compartment module shall have left, and right-side pump panels constructed of polished stainless steel sheets. The side pump panels shall be removable.

GAUGE PANEL

The pump operator's upper gauge panel shall be located on the left side of the pump module above the main control panel. It shall be constructed of polished stainless steel sheets. It shall be horizontally hinged and shall have two latches.

ACCESS PANEL

There shall be a hinged upper access panel located above the main pump panel on the right side of the pump module. It shall be constructed from stainless steel. It shall be vertically hinged and shall have three latches.



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COLOR CODED LABELS

A set of color coded and function described labels shall be provided on the apparatus for the pump operator's controls, gated inlets, discharge outlets, drains, intake gauge, and pressure gauges (as applicable). The labels shall be a high-quality plastic material with a durable adhesive on the back.

PUMP PANEL LIGHT SHIELD – LEFT

One (1) polished, extruded aluminum light shield assembly shall be provided above the left side pump panel area. There shall be a minimum of two (2) weather resistant lights installed within the shield. A switch, located on the pump operator's panel shall be provided to activate the lights.

PUMP PANEL LIGHT SHIELD – RIGHT

One (1) polished, extruded aluminum light shield assembly shall be provided above the right-side pump panel area. There shall be a minimum of two (2) weather resistant lights installed within the shield. A switch, located at the pump operator's panel shall be provided to activate the lights.

PUMP COMPARTMENT LIGHTS

One (1) LED light strip shall be provided inside the pump compartment area. Light shall be switched on the light itself. The lights shall have a minimum 20 candlepower.

RUNNING BOARDS

Running boards shall be installed on each side of the pump compartment module. The running boards shall be constructed of 1/8" embossed fire apparatus bright aluminum treadplate. Each shall be a minimum of approximately 11" deep x the width of the side panel module. The running boards shall have a 1-1/4" upward bend on the inside edge to act as a kick plate.

The aluminum treadplate shall meet recommendations for slip resistant surfaces at the time of proposal. The running boards shall be attached to a frame mounted outrigger support



2,000 Gallon Pumper / Tanker

structure. Each running board to have a 3" downward bend on the front and side faces with a 1" underside return for superior strength.

HALE QFLO 1,250 GPM PUMP

1. The pump shall be of a size and design to mount on the chassis rails of commercial and custom truck chassis and have the capacity of 1,250 gallons per minute (U.S. GPM), NFPA-1901 rated performance.
2. The entire pump shall be assembled and tested at the pump manufacturer's factory.
3. The pump shall be driven by a drive line from the truck transmission. The engine shall provide sufficient horsepower and RPM to enable pump to meet and exceed its rated performance.
4. The entire pump, both suction and discharge passages, shall be hydrostatically tested to a pressure of 600 PSI. The pump shall be fully tested at the pump manufacturer's factory to the performance points as outlined by the latest NFPA Pamphlet No. 1901. Pump shall be free from objectionable pulsation and vibration.
5. The pump body and related parts shall be of fine grain alloy cast iron, with a minimum tensile strength of 30,000 PSI (2,069 bar). All metal moving parts in contact with water shall be of high-quality bronze or stainless steel. Pump utilizing castings made of lower tensile strength cast iron will not be acceptable.
6. Pump body shall be vertically split on a single plane for easy removal of entire impeller assembly including wear rings and bearings from the pump without disturbing piping or the mounting of the pump in chassis.
7. The pump body shall extend as one piece across the truck chassis from side mounting to side mounting and incorporate the discharge manifold system with a minimum of (1) 4" ports and (9) 3" ports.
8. Pump shaft to be rigidly supported by bearings for minimum deflection. The bearings shall be heavy-duty, deep groove ball bearings in the gearbox, and they shall be splash lubricated.
9. The pump shaft shall have: one (1) mechanical seal on the suction (inboard) side of the pump. The mechanical seal must be spring loaded, maintenance free and self-adjusting. Mechanical seal construction shall be a carbon sealing ring, stainless steel coil spring, Viton rubber cup, and a tungsten carbide seat.
10. Pump impeller shall be hard, fine grain bronze of the mixed flow design; accurately machined and individually balanced. The vanes of the impeller intake eyes shall be of



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sufficient size and design to provide ample reserve capacity utilizing minimum horsepower.

11. Impeller clearance rings shall be bronze, easily renewable without replacing impeller or pump volute body.
12. The pump shaft shall be heat-treated, electric furnace, corrosion resistant stainless for longer shaft life. Pump shaft must be sealed with double-lip oil seal to keep road dirt and water out of gearbox.

GEARBOX

1. The pump gearbox shall be of sufficient size to withstand up to 16,000 lb./ft (7,257 kg/m) of drive through torque of the engine system. The drive unit shall be designed of ample capacity for lubrication reserve and to maintain the proper operating temperature.
2. The gearbox drive shafts shall be of heat-treated chrome nickel steel and at least 2- $\frac{3}{4}$ " (6.99 cm) in diameter, on both the input and output drive shafts. The drive shaft shall withstand the full torque of the engine.
3. All drive and pump gears shall be manufactured of the highest quality electric furnace chrome nickel steel. All bores shall be ground to size, teeth integrated and hardened, to create an extremely accurate gear for long life, smooth, quiet running, and higher load carrying capability. An accurately cut spur design shall be provided to eliminate all possible end thrust.
4. The pump ratio shall be selected by the apparatus manufacturer to give maximum performance with the engine and transmission selected.
5. If the gearbox is equipped with a power shift, the shifting mechanism shall be a heat-treated, hard anodized aluminum power cylinder, with stainless steel shaft. An in-cab control for rapid shift shall be provided that locks in road or pump.
6. All apparatus' built with automatic transmissions shall be provided three (3) green warning lights to indicate to the operator(s) when the pump has completed the shift from road to pump position. The warning lights will be located as stated: two (2) in the truck driving compartment and one (1) on the pump operator's panel adjacent to the throttle control. For manual transmissions, one (1) green warning light will be provided for the driving compartment. All lights shall have appropriate identification/instruction plates.



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CERTIFICATION

The pump will perform and meet the following tests:

100% of rated capacity @150 PSI net pump press.

100% of rated capacity @ 165 PSI net pumps press.

70% of rated capacity @ 200 PSI net pump press.

50% of rated capacity @ 250 PSI net pump press.

Pump shall be tested at manufacturer under full NFPA suction conditions.

PRIMING PUMP

The priming pump shall be a positive displacement, oil-less rotary vane electric motor driven pump conforming to NFPA-1901 rated performance requirements. The pump body shall be manufactured of heat-treated anodized aluminum for wear and corrosion resistance.

The pump shall be capable of producing a minimum of 24 Hg vacuum at 2,000 feet (609.6m) above sea level. The electric motor shall be a 12 VDC totally enclosed unit.

The priming pump shall not require lubrication. The priming pump shall operate by a single pull control valve mounted on the pump operator's panel. The control valve shall be manufactured of bronze construction.

6" STEAMER INLETS

Two 6" (15.24cm) steamer inlets will be provided, one (1) on the left side and one (1) on the right side. Both inlets shall have long handle chrome vented caps and a screen.

RELIEF VALVE

There shall be one (1) suction side stainless steel relief pump valve provided on the pump system.



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PUMP CERTIFICATION TEST PLATE

A permanently affixed plate shall be installed at the pump operator's position that will provide the rated discharge and pressures together with the speed of the engine as determined by the certification test for each unit, the position of the parallel/series pump used, and the no load governed speed of the engine as stated by the engine manufacturer on a certified brake horsepower curve.

DISCHARGE VALVES

The valves including the ball shall be constructed of brass or stainless steel. The valves shall be bi-directional with full flow capability. The valves shall be of fixed pivot ball design with a flow pressure rating to meet NFPA-1901 standards. The valve shall have a single piece seat and seal design and shall have an operating pressure of 400 psi. All 2.5" (6.35cm) discharge valves shall be supplied with a true slow close mechanism per NFPA specifications. The valve shall be warranted for a period of ten (10) years on all stainless-steel components, against defects in design and manufacturing processes.

PIPING AND MANIFOLDS

All the plumbing and/or piping in the pump module shall be of 304 stainless steel or flexible piping for long life. All stainless-steel castings shall be a minimum of schedule 40. All NPT pipe thread connections larger than ¾" connections shall be avoided in the construction of the plumbing system. The following valves shall have groove connection: rear discharge, tank fill, all 2" and 2-½" (5.08 and 6.35cm) pre-connect valves.

The flexible piping shall be black SBR synthetic rubber hose with 300 working pounds and 1,200 pounds burst pressure for sizes 1.5 through 4". Sizes ¾", 1" and 5" are rated at 250 pound working and 1000-pound burst pressure. All sizes are rated at 30 HG vacuum. Reinforcement consists of two plies of high tensile strength tire cord for all sizes and helix wire installed in sizes 1 through 5" for maximum performance in tight bend applications. The material has a temperature rating of -40 degrees F to 210 degrees F.

Full flow couplings are precision machined from high tensile strength stainless steel. All female couplings are brass. ¾" and 1" male and Victaulic couplings are brass.



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PUMP COOLER and ENGINE COOLER VALVES

An engine cooler and pump cooler valve shall be installed in the instrument panel. The valves shall be a 1/4" multi-turn valve installed thru the instrument panel and labeled.

MASTER PUMP DRAIN

The pump shall be equipped with a Class 1 Master Pump drain to allow draining of the lower pump cavities, volute and selected water carrying lines and accessories. The drain shall have an all-brass body with a stainless-steel return spring.

U.L. TEST POINTS

Two (2) U.L. test points shall be mounted on the pump panel for testing of the vacuum and pressures. The test points shall be a single piece with individual ports for suction and discharge.

VALVE CONTROLS

Locking side mount controls shall be provided for valve actuation. The chrome plated zinc handles shall have a recessed area for 2" (5.08cm) round identification tags. The controls shall be locked in any position.

DISCHARGE GAUGES

Individual Class 1 2-½(6.35cm) line gauges for each 2" (5.08cm) or larger discharge shall be provided and mounted adjacent to the discharge valve control handle. The gauges shall indicate pressure from 0 to 400 PSI. The pressure gauge shall be fully filled with pulse and vibration dampening Interlube® to lubricate the internal mechanisms to prevent lens condensation and to ensure proper operation to minus 40 degrees F. To prevent internal freezing and to keep contaminants from entering the gauge, the stem and Bourdon tube.

The discharge gauges shall be filled with low temperature material and be sealed from the water system using an insulating Sub Z diaphragm located in the stem. A colored bezel shall be supplied for resistance to corrosion and to protect the lens and case from damage.



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INDIVIDUAL DRAINS

All 2" (5.08cm) or larger discharge outlets shall be equipped with a ¾" ball valve drain valve or larger.

LEFT SIDE FRONT DISCHARGE

One (1) 2-½" (6.35cm) discharge with a stainless-steel valve shall be located on the left side panel. The valve shall be a quarter turn ball type and fixed pivot design to allow easy operation at all pump pressures. The 2-½" (6.35cm) outlet shall be equipped with an integral, stainless steel, 30-degree elbow terminating with 2-½" (6.35cm) NH threads. A chrome vented cap and chain shall also be supplied. The valve shall be controlled at the pump panel with a top mount control. There shall be a Class 1 2 ½" pressure gauge mounted on the panel near the control to indicate pressure. The discharge shall also come equipped with a quarter-turn ¾" drain valve. The discharge must be capable of flowing 700 GPM or greater.

LEFT SIDE REAR DISCHARGE

One (1) 2-½" (6.35cm) discharge with a stainless-steel valve shall be located on the left side panel. The valve shall be a quarter turn ball type and fixed pivot design to allow easy operation at all pump pressures. The 2-½" (6.35cm) outlet shall be equipped with an integral, stainless steel, 30-degree elbow terminating with 2-½" (6.35cm) NH threads. A chrome vented cap and chain shall also be supplied. The valve shall be controlled at the pump panel with a top mount control. There shall be a Class 1 2 ½" pressure gauge mounted on the panel near the control to indicate pressure. The discharge shall also come equipped with a quarter-turn ¾" drain valve. The discharge must be capable of flowing 700 GPM or greater.

LEFT SIDE AUXILIARY SUCTION

One (1) 2-½" (6.35cm) intake with a stainless-steel valve shall be located on the left side panel. The valve shall be a quarter turn ball type and fixed pivot design to allow easy operation at all pump pressures. The valve shall be controlled at the pump panel with a top mount control. The valve shall come equipped with a chrome plug, chain, inlet strainer, 2-½" (6.35 cm) FNH chrome inlet swivel and ¾" drain valve.



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RIGHT SIDE FRONT DISCHARGE

One (1) 2-½" (6.35cm) discharge with a stainless-steel valve shall be located on the right-side panel. The valve shall be a quarter turn ball type and fixed pivot design to allow easy operation at all pump pressures. The 2-½" (6.35cm) outlet shall be equipped with an integral, stainless steel, 30-degree elbow terminating with 2-½" (6.35cm) NH threads. A chrome vented cap and chain shall also be supplied. The valve shall be controlled at the pump panel with a top mount control. There shall be a Class 1 2 ½" pressure gauge mounted on the panel near the control to indicate pressure. The discharge shall also come equipped with a quarter-turn ¾" drain valve. The discharge must be capable of flowing 700 GPM or greater.

RIGHT SIDE REAR DISCHARGE

One (1) 2-½" (6.35cm) discharge with a stainless-steel valve shall be located on the right-side panel. The valve shall be a quarter turn ball type and fixed pivot design to allow easy operation at all pump pressures. The 2-½" (6.35cm) outlet shall be equipped with an integral, stainless steel, 30-degree elbow terminating with 2-½" (6.35cm) NH threads. A chrome vented cap and chain shall also be supplied. The valve shall be controlled at the pump panel with a top mount control. There shall be a Class 1 2 ½" pressure gauge mounted on the panel near the control to indicate pressure. The discharge shall also come equipped with a quarter-turn ¾" drain valve. The discharge must be capable of flowing 700 GPM or greater.

DECK GUN PLUMBING, 3"

A 3" deck pipe shall be installed above the pump in such a manner that a monitor can be mounted and used effectively. The piping shall be installed securely so no movement develops when the line is charged. The piping shall terminate with 3" NPT threads and a 4-bolt flange for mounting a monitor. The 3" valve shall be lever controlled from the operator's panel.

TANK FILL

One (1) 2"(5.08cm) discharge with a stainless-steel valve shall be plumbed to the tank. The valve shall be a quarter turn ball type and fixed pivot design to allow easy operation at all pump pressures. The 2"(5.08cm) valve outlet terminates with 2"(5.08cm) grooved connection. The valve shall be controlled at the pump panel with a top mount control.



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CROSSLAYS - 1 ¾"

Two (2) double lay crosslays shall be installed on apparatus. Each section of the crosslay shall hold 200' of 1-3/4" double jacket fire hose. A 1-1/2" mechanical swivel hose connector shall be used in each crosslay to provide access of hose in either direction. Each crosslay shall have one (1) 2" (5.08cm) stainless steel valve. The valve shall be a quarter turn ball type and fixed pivot design to allow easy operation at all pump pressures. The 2" (5.08cm) valve outlet terminates with 2" (5.08cm) grooved connection. The discharge shall be plumbed to the crosslay trays using 2" (5.08cm) schedule 10 stainless steel pipe. The pipe shall terminate in a stainless-steel swivel with 1 ½" (3.81cm) NH thread. The swivel shall allow the hose to be pulled from either side of the apparatus. The pipe shall be held in place by a 2-piece stainless steel bracket. Each valve shall be controlled at the pump panel with a top mount control. There shall be a Class 1 2 ½" pressure gauge mounted on the panel near each control to indicate pressure. Each discharge shall also come equipped with a quarter-turn ¾" drain valve. Each discharge shall be foam capable. Each discharge must be capable of flowing 180 GPM or greater.

CROSSLAY COVER

A hypalon cover will be provided.

TANK TO PUMP

One (1) 3" (7.62cm) valve shall be installed between the water tank and the pump. The valve shall be a quarter turn ball type. The valve shall be actuated with a manual pull handle.

MASTER GAUGES

Class 1 4-½ (11.43cm) gauges shall be provided. The master discharge gauge shall indicate pressure from 0 to 600 PSI. The master intake gauge shall indicate pressure from -30hg to 600 PSI. The gauges shall be Interlube filled pressure gauges and handle pressures from 0 to 400 PSI. The pressure gauge shall be fully filled with pulse and vibration dampening Interlube® to lubricate the internal mechanisms to prevent lens condensation and to ensure proper operation to minus 40 degrees F. To prevent internal freezing and to keep contaminants from entering the gauge, the stem and Bourdon tube shall be filled with low temperature material and be sealed from the water system using an insulating Sub Z diaphragm located in the stem.



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TPG PRESSURE GOVERNOR SYSTEM

The apparatus shall be equipped with the Class1 TPG Pressure Governor System.

The Total Pressure Governor (TPG) is an SAE J1939 Controller Area Network (CAN) device that controls engine speed using data communications directly to the engine ECU or with an analog control signal. By operating on the J1939 network, the governor is able to monitor engine RPM and other pertinent data directly from the engine ECU. Engine information is available directly so that NFPA required instrumentation is delivered through a single unit saving panel space and delivering engine specific warnings as determined by each engine manufacturer. Control algorithms are optimized to take advantage of the J1939 CAN data to yield crisp and accurate control of engine and subsequently pump speed and pressure output. On units with starting with software version 7.xx the Governor when first installed and powered will step through a CAN Auto BAUD rate detection sequence. Once the Governor determines which BAUD rate the CAN bus is running on it will save it to memory. For engines that may not support the data link control, an analog output signal is available to provide precise control of the engine speed and pressure.

The Total Pressure Governor (TPG) comes standard with integrated engine instruments (battery voltage, coolant temperature, oil pressure and engine RPM). It utilizes the J1939 CAN bus for engine control and has an analog throttle output for those engines that do not support CAN control. It has easy-to-read alphanumeric displays and programmable presets. The integrated alarm output provides a warning whenever anything is out of parameters.

TANK LEVEL GAUGE

The apparatus shall be equipped with a Class1 "Intelli-Tank" Tank Level Gauge for indicating water or foam level. The Tank Level Gauge shall indicate the liquid level on an easy to read LED display and show increments of 1/8 of a tank.

Each tank level gauge system shall include:

- 1) A pressure transducer that is mounted on the outside of the tank in an easily accessible area. Sealed foam tanks will require zero pressure vacuum vents.
- 2) A super bright LED 4-light display with a visual indication at nine accurate levels.



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3) A set of weather resistant connectors to connect to the digital display, to the pressure transducer and to the apparatus power.

WATER TANK

The water tank shall have a capacity of **2,000 U.S. Gallons**. Certification of the tank capacity shall be recorded on the manufacturer's record of construction and shall be provided to the purchaser upon delivery of the apparatus.

The rear of the tank shall have a water level indicator. A sight tube or electronic indicator shall be acceptable based on the design approved by the tank manufacturer.

POLY TANK CONSTRUCTION

The Poly-Tank shall be constructed of a minimum of 1/2" thick polypropylene sheet stock. **The rear wall of the tanker shall be a minimum of 1" thick.** This will provide a solid surface for mounting steps, lights, handrails, and other requested options. A tank with a rear wall thickness of less than 1" will be cause for immediate rejection. This material shall be a noncorrosive stress relieved thermoplastic, natural in color, and U.V. stabilized for maximum protection.

The tank shall be designed and manufactured with the ability to deliver 100% of the tanks rated capacity from each dump valve while on level ground. Tanks whose total discharge capacity cannot be achieved while on level ground through the side or rear dump valves independent of each other will not be considered.

TANK

The "Wetside" **2,000 Gallon tank** shall be of a specific configuration and shall be so designed to be completely independent of the body and compartments. All joints and seams shall be nitrogen or equivalent welded and tested for maximum strength and integrity. The top of the booster tank shall be fitted with removable lifting eyes designed with a 3 to 1 safety factor to facilitate easy removability.



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TANK FINISH

The tank shall be painted single color to match the apparatus chassis.

TANK BAFFLES

The transverse swash partitions shall be manufactured of a minimum of 3/8" polypropylene (natural or black in color) and extend from approximately 4" off the floor to just under the cover. The longitudinal swash partitions shall be constructed of a minimum of 3/8" polypropylene (natural or black in color) and extend to the floor of the tank through the cover to allow for positive welding and maximum integrity. All partitions shall be equipped with sufficient vent and air holes to permit sufficient movement of air and water between compartments. The partitions shall also be designed to provide maximum water flow. All swash partitions shall interlock with one another and be welded to each other as well as to the walls of the tank.

TANK SUMP

There shall be one (1) sump in the bottom of the water tank. The sump shall be constructed of a minimum of 1/2" polypropylene and shall be located in the left front quarter of the tank unless otherwise specified. On all tanks that require a front suction, a 4" schedule 40 polypropylene pipe shall be installed that will incorporate a dip tube from the front of the tank at or near the sump location. The sump shall be used as a combination clean-out and drain. All tanks shall have an anti-swirl plate located approximately 2" above the sump to pre-vent air from being entrained in the water while pumping.

TANK FILL CONNECTION

All tank fill couplings shall be backed with flow deflectors to break up the stream of water entering the tank and shall be capable of withstanding sustained fill rates of up to 1,000 GPM.

TANK LID

The tank lid shall be constructed of a minimum of 1/2" thick polypropylene to incorporate a multi three-piece locking design which allows for individual removal and inspection if necessary.



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The tank lid shall be recessed 3/8" from the top of the tank and shall be welded to both sides and longitudinal partitions for maximum integrity. Each one of the lids shall have hold downs consisting of 2" polypropylene dowels or baffle tabs spaced a maximum of 30" apart. These dowels and baffle tabs shall extend through the covers and shall assist in keeping the covers rigid under fast filling conditions. A minimum of two lifting dowels shall be drilled and tapped 1/2" x 13" to accommodate the lifting eyes.

TANK MOUNTING

The Poly-Tank shall rest on the body cross members in conjunction with such additional cross members, as required by the tank manufacturer.

The tank shall be isolated from the cross members through the use of 1.5" poly strips. Additionally, the tank shall be supported around the entire perimeter and captured both front and rear as well as side to side to prevent the tank from shifting during vehicle operation.

Although the tank shall be designed on a free-floating suspension principle, it shall be required that the tank have adequate hold down restraints to minimize movement during vehicle operation.

The tank shall be completely removable without disturbing or dismantling the apparatus structure.

WATER TANK FILL TOWER

The tank shall have a combination vent and manual fill tower, marked "Water Fill." The fill tower shall be constructed of 1/2" polypropylene and shall be a minimum dimension of 14" x 14" at the outer perimeter. The tower shall be located in the center of the tank. Fill towers located at the front or rear of the tank shall not be permitted due to the increased chance of spillage during operation which could cause a hazardous environment under certain conditions. The tower shall have a 1/4" thick removable polypropylene screen and a polypropylene hinged-type cover.



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TANK OVERFLOW

The tank shall be equipped with a minimum of a 6" schedule 40 polypropylene overflow / air vent pipe. The pipe shall be installed in the fill tower and extend through the tank and dump to the rear of the rear axle.

HOSEBED

A hosebed with storage dimensions of approximately 154" L x 70" W will be provided.

HOSEBED COVER

A hypalon cover will be provided.

REAR DUMP VALVES

One (1) 10" stainless steel Newton Quick Dump Valve, Model # 1070-34 shall be installed at the rear of the tank. The valve shall be electrically operated from the rear of the apparatus.

A stainless-steel Newton Model # 6021SW-34 180-degree swivel dump chute shall be installed.

The chute shall include a stainless-steel Newton 4036-34 telescopic extension to allow the chute to extend past the body side for dumping.

The water tank design shall include additional support for the chute.

The tank and dump chute shall be installed high enough to dump into a standard thirty (30)" tall dump tank.

REAR DIRECT TANK FILLS

There shall be two (2) external 2.5" direct tank fill ports furnished on the rear of the apparatus, (1) each side. The tank fills shall have 2.5" Akron Brass valves with built-in 30-degree elbow and manual swing type control handles located on each valve. A chrome plug and chain shall be supplied and installed on each valve.



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BODY SUB-STRUCTURE

The body and compartment sub structure shall be an all-welded steel structure and bolted to chassis frame. Ultimate strength shall be accomplished with 1-1/2" x 3" x 3/16" structural channel members extended across chassis frame.

In addition, there shall be 1-1/2" x 3" x 3/16" structural channel connecting the front and rear sub structure transverse members for additional strength and to form a full perimeter base for supporting the booster tank. Hangers and brackets shall be reinforced at all corners with gussets to prevent potential sag and warp over an extended period of fire service operations.

The sub-structure shall be coated with Linex, Rhino Liner, or a polyurethane type of material. Substructures that are just primed and painted shall not be permitted.

The tank frame and compartment sub-assembly shall be supported by using two 4" x 3" structural steel longitudinal support members.

There shall be a minimum of two (2) 1-1/2" x 3" x 3/16" structural steel channel affixed to the sub-assembly for the compartment downriggers. Each compartment shall be supported 3" X 3" steel channel with corner gussets.

A minimum of twelve (12) 3/4" Grade 8 bolts shall attach the compartment sub-assembly to the vehicle chassis.

The tank cradle, compartment sub-assembly shall be continuously welded to form an unprecedented body support system.

BODY CONSTRUCTION

The body compartments shall be fabricated entirely of aluminum extrusions and flat sheet material to offer a superior strength to weight ratio. Each compartment shall be welded on all exterior front seams with MIG spot welds on the rear and interior seams for maximum strength. All major structural mounting bolts shall be grade five type with locking style nuts.

All mounting bolts shall be stainless steel 1/4" with nylon lock nuts for rust prevention and a lasting



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appearance while providing maximum strength. All fasteners shall be easily removed with standard tools. Wherever possible, all fasteners shall have locking style nuts or shall be threaded into panel and locked by an acorn nut, to eliminate loosening fasteners.

All screws that do not have locking nuts shall have threads coated with Loctite. Acorn nuts shall be used throughout the body to prevent the possibility of snags and injuries, including fasteners which protrude into compartments and hosebed.

The entire body shall be painted with the exception of areas where polished aluminum treadplate is utilized. Bodies that are fabricated entirely of polished aluminum treadplate or other non-painted surfaces shall not be permitted due to increased upkeep and the increased chance of corrosion.

SWEEP-OUT CONSTRUCTION

All side body compartments shall have sweep out type floors. All compartments shall be made to the largest practical dimensions to provide maximum storage capacity for fire department equipment. Compartments that are fabricated without a "Sweep Out" design shall be immediately rejected.

ROLL UP DOOR CONSTRUCTION

All doors shall be ROM roll up doors or equal.

COMPARTMENT DOOR FINISH

Compartment roll up doors shall have a satin finish.

REAR FENDERS & FENDERWELLS

Two (2) polished aluminum treadplate style rear fender assemblies shall be included on each side of the vehicle over the wheels of the rear axle.

Two (2) Stainless fenderettes shall be provided and installed around each wheel well.



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RUNNING BOARDS

Running boards shall be fabricated of 3/16" polished aluminum diamond treadplate, supported by the structural steel sub-frame. The running boards when apparatus is fully loaded shall have a maximum ground clearance of 24" when sitting on a level surface. They shall be flanged down to provide added strength and rigidity and to prevent injury while washing the apparatus. All stepping surfaces shall be in compliance with the latest version of all applicable NFPA standards.

REAR TAILBOARD

The rear step shall be constructed of 3/16" polished aluminum diamond treadplate and supported by the structural steel sub-frame. The tailboard when apparatus is fully loaded shall have a maximum ground clearance of 24" when sitting on a level surface. The tailboard shall be flanged down to provide added strength and rigidity and to prevent injury while washing the apparatus. The rear step shall be spaced away from body a minimum of 1/4". The rear step shall be 18" deep and run the entire width of the apparatus. All stepping surfaces shall be in compliance with the latest version of all applicable NFPA standards.

INTERMEDIATE ACCESS PLATFORM

There shall be an intermediate access platform installed at the rear of the apparatus and shall extend the full width of the tank. The platform shall be a minimum of 10" deep and shall be supported by a minimum of six (6) supports and shall be an integral part of the tank assembly. The platform shall be covered in 3/16" polished aluminum diamond treadplate.

The intermediate platform shall be located 18" below the hosebed floor.

ACCESS LADDER

There shall be an access ladder extending from the rear tailboard to the intermediate platform and shall be located at the left-rear area of the apparatus.

HANDRAILS

All handrails used on apparatus shall be 1-1/4" diameter aluminum tube with ribbed rubber



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inserts supported at each end by a chrome plated stanchion. All handrails shall be designed and mounted to reduce the possibility of injury to personnel and equipment. Drain holes shall be provided in the bottom of all vertically mounted assist handles. Handrails shall be installed in the following locations:

Two (2) 24" vertical handrails shall be installed on the left and right side at the rear.

FOLDING TANK STORAGE

A "EZ Load" folding tank rack shall be provided over the right-side compartments. The rack shall be fabricated on top of the right-side compartments. It shall be large enough to transport a 2,100 gallon folding tank.

FOLDING TANK

One (1) 2,000-gallon capacity Husky brand folding tank shall be supplied. The tank shall feature a tubular aluminum frame with 22-ounce vinyl sides and 30-ounce vinyl floor.

BODY COMPARTMENTS

L1: Street Side, forward of axle

Interior Dimensions: 60" W x 27" H x 24" D

Door Opening: 53.5" W x 20" H

L2: Street Side, rearward of axle

Interior Dimensions: 28" W x 27" H x 24" D

Door Opening: 21.5" W x 20" H

R1: Curb Side, forward of axle

Interior Dimensions: 60" W x 27" H x 24" D

Door Opening: 53.5" W x 20" H

R2: Curb Side, rearward of axle

Interior Dimensions: 28" W x 27" H x 24" D

Door Opening: 21.5" W x 20" H



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ELECTRICAL STANDARDS

All electrical equipment shall meet SAE standards. All lighting and reflectors shall meet Federal Motor Vehicle Standards.

The apparatus wiring shall be color and function coded.

The optical warning devices shall be constructed or arranged to avoid the projection of light either directly or through mirrors into any driving or crew compartments.

Illumination shall be provided for controls switches, essential instructions, gauges, and instruments necessary for the operation of the apparatus and the equipment provided on it. Where external illumination is provided, it shall be a minimum of 5 foot-candles on the face of the device. Where external illumination is provided, it shall be a minimum of 4-foot candles.

Hydraulic lines, air system tubing, control cables, and electrical lines shall be clipped to the frame or body structure of the apparatus and shall be furnished with protective heat looms and/or grommets at each point where they pass through body panels or structural members.

All relays and circuit breakers shall be "plug in" type for easy replacement. All components shall be protected against corrosion, heat, vibration, and moisture. The relay panel shall be installed in the cab on the floor, between the seats and have an easily removable, aluminum cover. Relay panels mounted in compartments shall not be permitted due to the increased risk of damage from moisture.

CAB CENTER CONSOLE

A Jotto Desk console tower shall be installed between the driver and officer seats. The tower shall house the following components.

- Door Ajar Indicator
- Whelen Siren Controller with Switches
- One (1) Blank panel for customer installed radio components



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DOT LIGHTING

Two (2) amber and two (2) red side body running lights shall be provided and mounted, one (1) amber and one (1) red on each side. There shall be one (1) amber turn signal light with protective covers furnished and mounted in front of the axle since it is 32.5" long. There shall be five (5) lights located on the rear of the vehicle. Three (3) of the lights shall be in the tailboard area for use as identification lamps. Two (2) lights shall be provided on top of the tank, located as high and wide as possible, one (1) each side, for use as clearance lamps. All required reflectors shall be bolted onto body.

COMPARTMENT LIGHTING

Two (2) LED strip lights shall be provided in Compartments L1 / R1.

One (1) LED strip light shall be provided in Compartment L2 / R2.

DOOR OPEN HAZARD LIGHT

There shall be a flashing red light located on the Jotto Desk in clear view of the driver. This light shall be illuminated automatically whenever any passenger or equipment compartment door is open. The light shall be marked "Do Not Move Apparatus When Light Is On".

LICENSE PLATE LIGHT

A license plate bracket with light shall be provided and installed on the left-hand rear of the body. It shall be wired to come on with the headlights.

UNDERBODY/CAB GROUND LIGHTS

Six (6) Truck-Lite 4" clear ground illumination lights, with outward facing angle brackets shall be provided and installed. Two (2) shall be located under the cab doors, two (2) under the pump module and two (2) shall be located to light the rear tailboard area. The lights shall activate with the parking brake.



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BACK UP CAMERA SYSTEM

One-(1) color camera system shall be installed on the vehicle. The system shall be wired to the vehicles 12-volt electrical system. The color monitor shall be installed in the cab in easy reach of the driver while in the seated position. The color camera shall be installed facing rearward giving a clear and unobstructed view behind the rear of the vehicle. The system shall activate when the transmission is shifted into the reverse position.

The system shall consist of the following components:

- One 7" LCD color monitor
- One color camera with weather and vibration proof housing
- 65' extension cable

EMERGENCY LIGHTING

NFPA-1901 Emergency lighting shall consist of:

CAB UPPER ZONE A WARNING LIGHTS

One (1) Whelen #W-IX2RRRR Liberty II 54" lightbar shall be installed on the cab roof.

LOWER ZONE A WARNING LIGHTS

Two (2) TecNiq K60-RC00 Auto Sync RED LED warning lights with clear lens and chrome K60-1C00-1 bezel shall be mounted on the chassis grille.

LOWER ZONE B/D WARNING LIGHTS

Two (2) TecNiq K60-RC00 Auto Sync RED LED warning lights with clear lens and chrome K60-1C00-1 bezel shall be mounted mid-ship of the body in the area of the rear wheels.

UPPER ZONE B/D WARNING LIGHTS

Two (2) TecNiq K60-RC00 Auto Sync RED LED warning lights with clear lens and chrome K60-



2,000 Gallon Pumper / Tanker

1C00-1 bezel shall be mounted on the side upper front corners of the tank.

Two (2) TecNiq K60-RC00 Auto Sync RED LED warning lights with clear lens and chrome K60-1C00-1 bezel shall be mounted on the side upper rear corners of the tank.

LOWER ZONE C WARNING LIGHTS

Two (2) TecNiq K60-RC00 Auto Sync RED LED warning lights with clear lens and chrome K60-1C00-1 bezel shall be mounted in the rear quad taillight assemblies on the rear of the apparatus.

UPPER ZONE C WARNING LIGHTS

Two (2) TecNiq K60-RC00 Auto Sync RED LED warning lights with clear lens and chrome K60-1C00-1 bezel shall be mounted, one each side of the upper rear corners of the tank.

STOP/TURN/BACKUP LIGHTS

Two (2) TecNiq K60-A2S0-1 LED steady burn AMBER with arrow mask turn signal light shall be installed in a chrome quad light bezel, one each side of the rear of the body.

Two (2) TecNiq K60-STR0-1 LED steady burn RED rear tail/stop light shall be installed in a chrome quad light bezel, one each side of the rear of the body.

Two (2) TecNiq K60-WUB0-1 LED steady burn CLEAR backup light shall be installed in a chrome quad light bezel, one each side of the rear of the body.

UPPER ZONE B/D SCENE LIGHTS

Two (2) TecNiq K90-SW00-1 12 volt flush mounted LED scene lights shall be mounted on the side upper front corners of the tank.

Two (2) TecNiq K90-SW00-1 12 volt flush mounted LED scene lights shall be mounted on the



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side upper rear corners of the tank.

UPPER ZONE C SCENE LIGHTS

Two (2) TecNiq K90-SW00-1 12 volt flush mounted LED scene lights shall be mounted on the rear upper rear corners of the tank.

ELECTRONIC SIREN

One (1) Whelen #W-295SLSA6 siren/control center shall be furnished and installed in the Jotto desk located between the driver and officer seating positions. The hard-wired noise-canceling microphone shall be installed on the Jotto desk within easy reach of the driver or officer. It shall have a two (2) year standard warranty from the manufacturer.

SIREN SPEAKER

There shall be one (1) Whelen #W-SA315P black plastic 100-watt siren speaker furnished and installed in the front bumper.

REFLECTIVE STRIPING

One (1) 6" White Scotchlite stripe on each side, conforming to Federal Specification for Reflectivity, shall be provided down both sides of the cab and body. The reflective stripe shall cover at least at least 50 percent of the cab and body length on each side, at least 50 percent of the width of the rear, and at least 25 percent of the width of the front of the apparatus.

STRIPE, REAR CHEVERON

A minimum of fifty percent of the rear vertical surface of the unit shall be overlaid with a reflective material, installed in an alternating "Chevron" pattern (sloping down and away from the centerline) at a 45-degree angle. Each stripe shall be 6" wide and the colors of stripping shall be in compliance, with the current edition of NFPA 1901.

Color: Red / Yellow



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TOUCH-UP PAINT

A container of touch-up paint will be provided to match the cab color.

HARD SUCTION HOSE

There shall be two (2) 10' x 6" sections of Kocheck PVC flexible suction hose supplied with the apparatus. Lightweight aluminum couplings shall be provided on the suction hose. A long handle female swivel shall be provided on one end and a rocker lug male shall be provided for the other end.

The suction hose shall be mounted on left side of body.

SUCTION STRAINER

One (1) 6" Barrel strainer shall be provided.

INCLUDED OPTIONS

BOOSTER REEL – DUNNAGE AREA

Hannay aluminum booster reel with aluminum discs shall be installed over the pump compartment. The reel shall be plumbed with 1-1/2" high-pressure flexible hose, tested to 1200 PSI, with stainless steel couplings. The reel shall be constructed utilizing an aluminum-welded base. A 12-volt electric rewind motor shall control the chain driven reel. The booster reel shall have an automatic brake to prevent the booster hose from unwinding. The reel shall have a capacity for 100' of 1" booster hose. A rewind switch shall be provided at the pump operator's position. All electric switch connections shall be coated to protect against moisture. A gear driven manual rewind shall be included.

Chrome rollers and guides shall be provided on each side of pumper.

The booster reel shall be controlled from the pump operator's panel.



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BOOSTER HOSE

There shall be one (1) 100' length of 1" synthetic rubber booster hose provided on the hose reel.

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DISBURSEMENTS FOR MONTH ENDING DECEMBER 31, 2024

FUND	GROSS	TRANSFERS & CD's	PAYROLL TRANSFERS	NET TOTAL
General Fund	4,354,278.50	763,453.42	2,531,824.06	1,059,001.02
Sanitation Fund	380,985.90	51,103.66	137,789.57	192,092.67
Wastewater Fund	3,404,594.88	58,103.45	315,592.62	3,030,898.81
Street & Transportation Fund				-
State Street Aid	27,200.03			27,200.03
Drug Fund	3,381.35			3,381.35
Debt Service Fund	151,581.25			151,581.25
Capital Projects Fund	1,288,885.06	-		1,288,885.06
Sewer Revenue & Tax Bond Issue				-
Sewer Impact Fee #2				-
Insurance Fund	431,370.85	298,149.56		133,221.29
2017 GO Public Imp Bonds				-
2010 GO Bond Issue				-
Cleary Construction Escrow				-
Industrial Development Board	64,026.25			64,026.25
Grant Fund	-			-
	\$ 10,106,304.07	\$ 1,170,810.09	\$ 2,985,206.25	\$ 5,950,287.73

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201570	12/5/2024	Advanced Turf Solutions Inc	138.25
201571	12/5/2024	Automation Controls Training & Consulting	1,343.91
201572	12/5/2024	Better Business Solutions	860.10
201573	12/5/2024	BOOMER AND IRISH LLC	820.00
201574	12/5/2024	CHARTER COMMUNICATIONS	1,099.00
201575	12/5/2024	Cintas Corporation #241	2,092.32
201576	12/5/2024	City Of Columbia	11,353.00
201577	12/5/2024	Columbia Machine Works	440.00
201578	12/5/2024	Columbia Oil Company Inc	19,608.77
201579	12/5/2024	COLUMBIA POWER & WATER SYSTEMS	26,344.46
201580	12/5/2024	Crawford Electric Supply Co., Inc	4,457.46
201581	12/5/2024	CrowdRiff Inc.	9,450.00
201582	12/5/2024	Duck River Electric	645.99
201583	12/5/2024	Elvis Kilpatrick	150.00
201584	12/5/2024	Fleming Sheet Metal Shop	1,200.00
201585	12/5/2024	Freedom Hill Land Management	4,948.15
201586	12/5/2024	Daily Herald (Ads)	923.13
201587	12/5/2024	Guthrie Sales & Service Inc	1,616.77
201588	12/5/2024	J R Wauford & Co Cons Eng, Inc	37,000.00
201589	12/5/2024	Johnson Controls	599.00
201590	12/5/2024	KCS BUILDING GROUP LLC	213,800.00
201591	12/5/2024	KS Supply Pressure Washer	9,817.67
201592	12/5/2024	LENNAR HOMES OF TENNESSEE, LLC	669.00
201593	12/5/2024	MAIN STREET MEDIA OF TN	189.00
201594	12/5/2024	MAINSTREET DESIGNS, INC	1,218.54
201595	12/5/2024	Mary R Horton	75.00
201596	12/5/2024	Maury County 911	7,806.96
201597	12/5/2024	Maury County Trustees Office	21,902.00
201598	12/5/2024	MAURY REGIONAL HEALTH SYSTEM	825.40
201599	12/5/2024	Barbara A. Hooten	75.00
201600	12/5/2024	Edward I. Lee	75.00
201601	12/5/2024	Eileen G. Clor	75.00
201602	12/5/2024	James A. Underwood	75.00
201603	12/5/2024	Nancy McCombs	75.00
201604	12/5/2024	Nora O. Gross	75.00
201605	12/5/2024	Patricia S. Woolum	75.00
201606	12/5/2024	North Central Laboratories-NCL of Wisconsin, Inc	933.19
201607	12/5/2024	Parman Energy Group LLC	496.81
201608	12/5/2024	PROCARE PBM	42,693.63
201609	12/5/2024	Reach Technologies	139.89
201610	12/5/2024	WANDA KELLEY	19.00
201611	12/5/2024	Robert J Young Company LLC	47.62
201612	12/5/2024	Robyn Barber	150.00

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201613	12/5/2024	Ryan Homes	954.00
201614	12/5/2024	S & W Contracting Co Inc	2,850.00
201615	12/5/2024	Siddons-Martin Emergency Group LLC	1,164.36
201616	12/5/2024	Southern Computer Warehouse	278.64
201617	12/5/2024	SRM Concrete	620.00
201618	12/5/2024	State Of TN Attn: Lily White	95.00
201619	12/5/2024	State Of TN Dept Of Revenue	9.50
201620	12/5/2024	Tennessee One-Call	13,817.96
201621	12/5/2024	TN DEPT OF LABOR & WORKFORCE	55.00
201622	12/5/2024	Tn Dept Of Revenue	445.13
201623	12/5/2024	TN Dept Of Safety	23.75
201624	12/5/2024	TN Property Management	9,666.93
201625	12/5/2024	Tops Business Systems	178.91
201626	12/5/2024	Trojan Technologies Inc	1,561.15
201627	12/5/2024	United Waste Haulers Of TN LLC	1,020.65
201628	12/5/2024	Volunteer Paving LLC	284.24
201629	12/5/2024	Water Management Services LLC	8,310.00
201630	12/5/2024	Waynes Pest Control	485.00
201631	12/5/2024	Wells Fargo Financial Leasing, Inc	512.08
201632	12/5/2024	WILCOLOCAL MEDIA	1,620.00
201633	12/10/2024	Dannie Holmes Catering	1,995.00
201634	12/10/2024	Farmers Family Restaurant	5,625.00
201635	12/10/2024	TRACY LATHAM	600.00
201636	12/12/2024	JUDY - ESCROW	79,800.48
201637	12/12/2024	JUDY CONSTRUCTION COMPANY	1,563,269.30
201638	12/12/2024	AMER FAMILY LIFE ASSURANCE	40.30
201639	12/12/2024	AT&T	1,027.78
201640	12/12/2024	Atmos Energy	1,935.78
201641	12/12/2024	Automation Controls Training & Consulting	393.76
201642	12/12/2024	Best One Tire	2,281.68
201643	12/12/2024	Bradley Arant Boult Cummings	6,053.25
201644	12/12/2024	BREAK TIME SERVICES	208.50
201645	12/12/2024	BRENDEN PAVLIK	200.00
201646	12/12/2024	BRINDLEY CO	367,480.26
201647	12/12/2024	Camfil Usa Inc	2,095.98
201648	12/12/2024	CANINE COMMAND LLC	500.00
201649	12/12/2024	Chrysler Dodge Jeep Ram of Columbia	401,222.25
201650	12/12/2024	Cintas Corporation #241	1,327.00
201651	12/12/2024	CITY OF COL & BRINDLEY CO	19,341.07
201652	12/12/2024	Columbia Firefighter Assn	496.25
201653	12/12/2024	Columbia Oil Company Inc	7,973.24
201654	12/12/2024	Copycats Print Services Llc	17.50
201655	12/12/2024	D & D Towing & Recovery	175.00
201656	12/12/2024	Dell Marketing L P	207.00

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201657	12/12/2024	Dominion Window Washing	40.00
201658	12/12/2024	Duck River Electric	457.63
201659	12/12/2024	Fleming Sheet Metal Shop	1,200.00
201660	12/12/2024	Freedom Hill Land Management	12,169.75
201661	12/12/2024	GEO-TECHNOLOGY ASSOCIATES, INC	792.50
201662	12/12/2024	Good Grit Magazine	3,822.00
201663	12/12/2024	INTERSTATE BILLING SERVICE, INC	69.29
201664	12/12/2024	J & M Supply Solutions	116.44
201665	12/12/2024	Jim's Auto Accessories Inc	72.11
201666	12/12/2024	LAMAR COMPANIES	2,250.00
201667	12/12/2024	Lively Florist	260.75
201668	12/12/2024	Lose Design - Lose & Associates, Inc	3,375.00
201669	12/12/2024	Marshall County Solid Waste and Recycling	1,720.55
201670	12/12/2024	Maury Co United Way	538.25
201671	12/12/2024	MID-STATE TITLE & ESCROW	8.49
201672	12/12/2024	Mutual Of Omaha	16,452.94
201673	12/12/2024	NexAir LLC	41.75
201674	12/12/2024	Nuber Architecture LLC	4,635.00
201675	12/12/2024	Cornerstone Properties, LLC	535.00
201676	12/12/2024	JLL Real Estate Capital, LLC	112.00
201677	12/12/2024	Law Office of K. Brian Hay	21.00
201678	12/12/2024	Rogers Group Inc	143.40
201679	12/12/2024	Safe Industries	727.85
201680	12/12/2024	Sewah Studios Inc	3,510.00
201681	12/12/2024	Southeastern Shirt Corp.	110.65
201682	12/12/2024	Southern Computer Warehouse	10,847.30
201683	12/12/2024	Southern Duplicating of Middle Tennessee	447.76
201684	12/12/2024	Southern Software Inc	16,241.00
201685	12/12/2024	SRM Concrete	1,969.00
201686	12/12/2024	Sun Life Financial	39,413.42
201687	12/12/2024	Ted's Sporting Goods	150.00
201688	12/12/2024	Thad Jablonski	252.38
201689	12/12/2024	Thompson Machinery	4,480.00
201690	12/12/2024	Thomson Reuters - West	74.00
201691	12/12/2024	TN Fire Svs & Codes Enf Academy	435.00
201692	12/12/2024	TN Property Management	7,266.93
201693	12/12/2024	Trailer Store	7,975.00
201694	12/12/2024	Tri Star Energy	101.30
201695	12/12/2024	UNITED FARM & HOME COOPERATIVE	104.99
201696	12/12/2024	United Waste Haulers Of TN LLC	5,165.09
201697	12/12/2024	US Travel Association	1,075.00
201698	12/12/2024	Verizon	3,625.47
201699	12/12/2024	VERIZON CONNECT	322.15
201700	12/12/2024	Waypoint Business Solutions LLC	4,434.55

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201701	12/12/2024	WM CORPORATE SERVICES, INC	14673.24
201702	12/13/2024	City Of Columbia	11,747.77
201703	12/13/2024	First Farmers & Merchants Bank	1,204,706.25
201704	12/13/2024	Guthrie Sales & Service Inc	1,717.64
201705	12/13/2024	Impressions	60.00
201706	12/13/2024	Maury County Trustees Office	27,194.58
201707	12/13/2024	Maury Regional Medical Group	220.00
201708	12/13/2024	Home American Mortgage Corp	670.00
201709	12/13/2024	Southern Software Inc	1,727.00
201710	12/13/2024	Waypoint Analytical, LLC	1,368.00
201711	12/13/2024	WM CORPORATE SERVICES, INC	20,541.16
201712	12/19/2024	ACE HARDWARE	365.25
201713	12/19/2024	Advanced Turf Solutions Inc	2,802.44
201714	12/19/2024	AT&T	74.67
201715	12/19/2024	AT&T	149.64
201716	12/19/2024	AT&T (Fiber Optics)	726.44
201717	12/19/2024	Atmos Energy	2,851.43
201718	12/19/2024	BEST CLEANERS OF COLUMBIA, LLC	1,063.68
201719	12/19/2024	BREAK TIME SERVICES	72.00
201720	12/19/2024	Cintas Corporation #241	3,174.71
201721	12/19/2024	City of Col Petty Cash	200.00
201722	12/19/2024	CMS Uniforms & Equipment	1,662.88
201723	12/19/2024	Columbia Firefighter Assn	496.25
201724	12/19/2024	Columbia Oil Company Inc	2,055.26
201725	12/19/2024	COLUMBIA POWER & WATER SYSTEMS	11,746.46
201726	12/19/2024	COMBINED INSURANCE, A CHUBB COMPANY	901.76
201727	12/19/2024	Consolidated Pipe & Supply	2,816.00
201728	12/19/2024	CPWS - Broadband	300.00
201729	12/19/2024	Dell Marketing L P	72,850.39
201730	12/19/2024	Donnie Boshers	259.48
201731	12/19/2024	Duck River Electric	2,443.37
201732	12/19/2024	Freedom Hill Land Management	1,069.79
201733	12/19/2024	Daily Herald (Ads)	434.29
201734	12/19/2024	Hal Haywood	150.00
201735	12/19/2024	Henderson, Hutcherson & McCullough	5,580.00
201736	12/19/2024	Heritage-Crystal Clean, LLC	514.10
201737	12/19/2024	Holston Gases	5,231.95
201738	12/19/2024	Impressions	291.86
201739	12/19/2024	Jones & Lang Sporting Goods	60.00
201740	12/19/2024	Kimley-Horn & Associates, Inc	19,950.00
201741	12/19/2024	Leaf Capital Funding LLC	668.26
201742	12/19/2024	Lee Company	3,458.50
201743	12/19/2024	Mail Call	2,982.19
201744	12/19/2024	Maury Co United Way	538.25

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201745	12/19/2024	Maury County Solid Waste	97,921.14
201746	12/19/2024	DONNA B. SMITH	75.00
201747	12/19/2024	MICHAEL H. GIBSON	75.00
201748	12/19/2024	SHIRLEY CLANTON	75.00
201749	12/19/2024	VIRGINIA G. DAVIDSON	75.00
201750	12/19/2024	Neel-Schaffer	7,653.01
201751	12/19/2024	Parman Energy Group LLC	2,479.16
201752	12/19/2024	PREMIER DESIGN BUILD	1,900.00
201753	12/19/2024	PROCARE PBM	38,504.24
201754	12/19/2024	Public Entity Partners	35,394.50
201755	12/19/2024	Bernhard LLC	336.97
201756	12/19/2024	Robert J Young Company LLC	58.00
201757	12/19/2024	Safe Industries	1,251.00
201758	12/19/2024	Sewah Studios Inc	3,710.00
201759	12/19/2024	Simple Com	42.00
201760	12/19/2024	South Central Tennessee Development District	6,500.00
201761	12/19/2024	Southern Sales Co	1,930.00
201762	12/19/2024	SRM Concrete	1,234.75
201763	12/19/2024	Steve Walters	150.00
201764	12/19/2024	Sunbelt Rentals Inc	6,042.50
201765	12/19/2024	Ted's Sporting Goods	150.00
201766	12/19/2024	TN DEPT ENV & CONSERVATION	1,380.00
201767	12/19/2024	TN Fire Svs & Codes Enf Academy	73.00
201768	12/19/2024	Turner & Osborne Tire Co	217.75
201769	12/19/2024	Tyler Technologies, Inc	4,200.00
201770	12/19/2024	United Waste Haulers Of TN LLC	660.89
201771	12/19/2024	Unum Life Insurance Co Of Amer	2,913.63
201772	12/19/2024	Virtual Academy	2,651.25
201773	12/19/2024	Visual Media Co LLC	600.00
201774	12/19/2024	Volunteer Paving LLC	311.52
201775	12/19/2024	Vulcan Materials Co	1,540.89
201776	12/19/2024	Waypoint Business Solutions LLC	1,061.27
201777	12/19/2024	Woodward & Stinson Printing	305.00
201778	12/27/2024	ACE HARDWARE	181.68
201779	12/27/2024	Advance Paving	14,600.00
201780	12/27/2024	Atmos Energy	203.71
201781	12/27/2024	Auto Trim Design	2,695.00
201782	12/27/2024	Cedarchem Llc	619.46
201783	12/27/2024	CHARLES MURPHY	120.00
201784	12/27/2024	CHOICE SCREENING	80.00
201785	12/27/2024	Cintas Corporation #241	695.46
201786	12/27/2024	CMS Uniforms & Equipment	195.00
201787	12/27/2024	Columbia Oil Company Inc	18,123.59
201788	12/27/2024	Columbia Paint & Wallcover	25.99

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201789	12/27/2024	COLUMBIA POWER & WATER SYSTEMS	12,306.39
201790	12/27/2024	COMMONWEALTH HERITAGE GROUP LLC	5,317.50
201791	12/27/2024	Copycats Print Services Llc	32.50
201792	12/27/2024	Corelogic Centralized Refunds	8,177.00
201793	12/27/2024	Culleoka Company LLC	607.00
201794	12/27/2024	David's Lock & Key Inc	213.02
201795	12/27/2024	Duck River Electric	298.21
201796	12/27/2024	EDDIE CAMPBELL & ASSOCIATES	750.00
201797	12/27/2024	Fernwood Garden Center, LLC	1,450.00
201798	12/27/2024	Fleming Sheet Metal Shop	1,200.00
201799	12/27/2024	Freedom Hill Land Management	910.00
201800	12/27/2024	Gresham Smith & Partners	20,795.17
201801	12/27/2024	HURST-ROSCHE, INC	2,670.00
201802	12/27/2024	IDEXX Distribution, Inc.	1,405.80
201803	12/27/2024	J & M Supply Solutions	94.23
201804	12/27/2024	Jerry Scott Moore	150.00
201805	12/27/2024	Jim's Auto Accessories Inc	1.80
201806	12/27/2024	Johnson Controls	926.17
201807	12/27/2024	K & K SAFETY	173.39
201808	12/27/2024	KREBS KUBOTA	372.97
201809	12/27/2024	Lee Company	6,550.79
201810	12/27/2024	MAIN STREET MEDIA OF TN	187.50
201811	12/27/2024	Maury Co Animal Shelter	55,000.00
201812	12/27/2024	Maury Co Government	14,958.63
201813	12/27/2024	MAURY REGIONAL MEDICAL CENTER	60.00
201814	12/27/2024	Maury Regional Hospital Marshall Medical Ctr	11,355.00
201815	12/27/2024	Mid South Recreation	3,289.00
201816	12/27/2024	D Nickell Company LLC	34,045.00
201817	12/27/2024	PULTE GROUP INC - TN DIVISION	2,948.00
201818	12/27/2024	AILEEN PRAK	905.00
201819	12/27/2024	GUSTAVO ALMODOVAR	480.00
201820	12/27/2024	Holston Gases	25.00
201821	12/27/2024	JACOB RAY	546.00
201822	12/27/2024	JOSHUA SNIDER	421.00
201823	12/27/2024	MATTHEW HUTCHISON	393.00
201824	12/27/2024	MYRON HUGHES	1,061.00
201825	12/27/2024	NOAH CARR	482.00
201826	12/27/2024	Robert J Young Company LLC	357.00
201827	12/27/2024	Roger Howell	150.00
201828	12/27/2024	Southeastern Sound Inc	285.00
201829	12/27/2024	T-MOBILE	96.54
201830	12/27/2024	Timothy McMeans	18.00
201831	12/27/2024	TraStar Inc	1,020.00
201832	12/27/2024	Uline	88.11

**CITY OF COLUMBIA
DISBURSEMENT REPORT
FOR THE PERIOD 12/1/2024 - 12/30/2024**

POOLED CASH CHECK LISTING

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201833	12/27/2024	United Waste Haulers Of TN LLC	69.00
201834	12/27/2024	Verizon	3,768.79
201835	12/27/2024	Verizon Wireless 01	177.76
201836	12/27/2024	Verizon Wireless 03	41.94
201837	12/27/2024	Verizon Wireless 04	2,511.19
201838	12/27/2024	Verizon Wireless 09	938.87
201839	12/27/2024	Volunteer Welding Supply, Inc.	40.45
201840	12/27/2024	Wascon Inc.	322.29
201841	12/27/2024	Waynes Pest Control	150.00
201842	12/27/2024	Waypoint Business Solutions LLC	500.00
201843	12/31/2024	City Of Col Employees Retireme	457,368.40
201844	12/31/2024	City Of Col Tn Retirement	52,090.17

GENERAL FUND

Total Purchase Cards:	\$ 37,864.60
Total Payroll Transfers:	\$ 2,531,824.06
Total Misc. Transfers:	\$ 763,453.42
Total Checks:	<u>\$ 1,021,136.42</u>
Total:	\$ 4,354,278.50

STATE STREET AID

Total Purchase Cards:	\$ 123.52
Total Misc. Transfers:	\$ -
Total Checks:	<u>\$ 27,200.03</u>
Total:	\$ 27,323.55

SANITATION

Total Purchase Cards:	\$ 43,617.45
Total Payroll Transfers:	\$ 137,789.57
Total Misc. Transfers:	\$ 51,103.66
Total Checks:	<u>\$ 148,475.22</u>
Total:	\$ 380,985.90

WASTEWATER

Total Purchase Cards:	\$ 33,410.29
Total Payroll Transfers:	\$ 315,592.62
Total Misc. Transfers:	\$ 58,103.45
Total Checks:	<u>\$ 2,997,488.52</u>
Total:	\$ 3,404,594.88

**CITY OF COLUMBIA
DISBURSEMENT REPORT
FOR THE PERIOD 12/1/2024 - 12/30/2024**

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DRUG

Total Purchase Cards:	\$	1,960.65
Total Checks:	\$	<u>1,420.70</u>
Total:	\$	3,381.35

INSURANCE

Total Misc. Transfers:	\$	298,149.56
Total Checks:	\$	<u>133,221.29</u>
Total:	\$	431,370.85

CAPITAL PROJECTS

Total Purchase Cards:	\$	4,049.37
Total Misc. Transfers:	\$	-
Total Checks:	\$	<u>1,284,835.69</u>
Total:	\$	1,288,885.06

Debt Service

Total Misc. Transfers:	\$	-
Total Checks:	\$	<u>151,581.25</u>
Total:	\$	151,581.25

IDB

Total Misc. Transfers:	\$	-
Total Checks:	\$	<u>64,026.25</u>
Total:	\$	64,026.25

Surplus Listing for Council Agenda 2/13/2025

<u>Inv ID</u>	<u>Description</u>	<u>Serial#</u>	<u>Department</u>
3861	2014 Chevy Impala	2G1WD5E39E1143063	Police
3862	2014 Chevy Impala	2G1WD5E3XE1143248	Police
3863	2014 Chevy Impala	2G1WD5E33E1144399	Police
3864	2010 Dodge Avenger	1B3CC4FD6AN145670	Police
3865	2003 Chevy Impala	2G1WF52E839300001	MIS
3866	TV - Element	E2SW3918	Fire
3867	Microwave - Sharp		Fire



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Thad H. Jablonski, Assistant City Manager/CFO, tjablonski@columbiatn.gov, (931) 560-1559

AGENDA ITEM TITLE: APPROVE PAYMENT TO MAURY COUNTY TO PROVIDE FUNDING FOR THE MAURY COUNTY/CITY OF COLUMBIA ANIMAL SERVICES FACILITY FOR THE FIRST QUARTER OF FY 2025 \$55,000

RECOMMENDATION: Approve.

INFORMATION: On April 14, 2016, the City Council approved an extension of the 2008 agreement with Maury County for operation of the Animal Services Facility. The 2008 agreement and extension specified that the City and County will split operating expenses (over and above revenue derived from the operation of the facility) 50/50.

The 2016 contract extension terminated on October 2, 2018. The City's FY 2025 budget includes \$270,000 for the City's contribution towards facility operations, or \$55,000 per quarter. An invoice has been received for the second quarter of FY 2025, which exceeds \$55,000. The invoice and supporting documentation have been reviewed by Finance.

As the operating agreement has expired, City Council approval is necessary prior to any payment towards shelter operation costs.

ATTACHMENTS: Staff Report, Animal Shelter Invoice.

Bill To:
Thad Jablonski, Finance Director
City of Columbia
700 North Garden Street
Columbia, TN.
931.560.1510

DESCRIPTION				AMOUNT
Revenue:				
Animal Shelter Revenue, 10/1/2024-12/31/2024				\$ 2,157.00
Subtotal				\$ 2,157.00
Expenditures:				
Operational, 10/1/2024-12/31/2024				\$ 239,756.13
Labor to repair & replace security lights on 10/10/2024	Hourly Rate	Hours Worked		
Johnnie Shipp	\$31.76	2		\$63.52
Robert Walker	\$30.13	2		\$60.26
Parts 10/10/24	Hourly Rate	Hours Worked		
Lowes - 2 wall sconces	\$75.96	1		\$75.96
Subtotal				\$ 239,955.87
Net Total for Q2 FY 2024/2025 Operating Expenses				\$ 237,798.87
TOTAL DUE				\$ 118,899.44

Make all checks payable to Maury County Government
If you have any questions concerning this invoice, contact Abby Chapman (931) 375-3115 achapman@maurycounty-tn.gov

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Fund: 101 General

Account Number : 101- -44150 Sale Of Animals/Livestock

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/14/2024	15193		CR	Animal Services	0.00	747.00	(747.00)
10/28/2024	15309		CR	Animal Shelter - Fees	0.00	129.00	(876.00)
Monthly Totals: 101- -44150					0.00	876.00	(876.00)
11/01/2024	15349		CR	Animal Shelter - Fees	0.00	132.00	(132.00)
11/15/2024	15442		CR	Healthy Petz Vet Hospital - Money from Local Vets	0.00	478.50	(610.50)
Monthly Totals: 101- -44150					0.00	610.50	(610.50)
12/12/2024	15612		CR	Animal Shelter - Money from Local Vets	0.00	555.00	(555.00)
12/30/2024	15723		CR	Eastside Animal Hospital - Fees	0.00	115.50	(670.50)
Monthly Totals: 101- -44150					0.00	670.50	(670.50)
Fund Totals:			101		0.00	2,157.00	

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Fund: 101 General

Account Number : 101- -55120-101-55010

Animal Shelter - County Official/Administrative Officer - Animal

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/15/2024	107		PA	Payroll Summary - 3-Salary	2,800.21	0.00	2,800.21
10/31/2024	120		PA	Payroll Summary - 3-Salary	2,800.21	0.00	5,600.42
Monthly Totals: 101- -55120-101-55010					5,600.42	0.00	5,600.42
11/15/2024	133		PA	Payroll Summary - 3-Salary	2,800.21	0.00	2,800.21
11/27/2024	146		PA	Payroll Summary - 3-Salary	2,800.21	0.00	5,600.42
Monthly Totals: 101- -55120-101-55010					5,600.42	0.00	5,600.42
12/13/2024	170		PA	Payroll Summary - 3-Salary	2,800.21	0.00	2,800.21
12/30/2024	175		PA	Payroll Summary - 3-Salary	2,800.21	0.00	5,600.42
Monthly Totals: 101- -55120-101-55010					5,600.42	0.00	5,600.42

Fund: 101 General

Account Number : 101- -55120-169-55010

Animal Shelter - Part-Time Personnel - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/04/2024	104		PA	Payroll Summary - 2-Hourly	2,188.98	0.00	2,188.98
10/18/2024	116		PA	Payroll Summary - 2-Hourly	2,160.84	0.00	4,349.82
Monthly Totals: 101- -55120-169-55010					4,349.82	0.00	4,349.82
11/01/2024	131		PA	Payroll Summary - 2-Hourly	2,168.14	0.00	2,168.14
11/15/2024	134		PA	Payroll Summary - 2-Hourly	2,218.90	0.00	4,387.04
11/27/2024	147		PA	Payroll Summary - 2-Hourly	2,003.01	0.00	6,390.05
Monthly Totals: 101- -55120-169-55010					6,390.05	0.00	6,390.05
12/13/2024	171		PA	Payroll Summary - 2-Hourly	2,054.69	0.00	2,054.69
12/27/2024	174		PA	Payroll Summary - 2-Hourly	1,691.80	0.00	3,746.49
Monthly Totals: 101- -55120-169-55010					3,746.49	0.00	3,746.49

Fund: 101 General

Account Number : 101- -55120-186-55010

Animal Shelter - Longevity Pay - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
11/22/2024	144		PA	Payroll Summary - 2-Hourly	350.00	0.00	350.00
Monthly Totals: 101- -55120-186-55010					350.00	0.00	350.00

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Maury County Finance Department
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Fund: 101 General

Account Number : 101- -55120-187

Animal Shelter - Overtime Pay

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
11/01/2024	131		PA	Payroll Summary - 2-Hourly	450.24	0.00	450.24
Monthly Totals: 101- -55120-187					450.24	0.00	450.24
12/13/2024	171		PA	Payroll Summary - 2-Hourly	646.43	0.00	646.43
12/27/2024	174		PA	Payroll Summary - 2-Hourly	88.40	0.00	734.83
Monthly Totals: 101- -55120-187					734.83	0.00	734.83

Fund: 101 General

Account Number : 101- -55120-187-55010

Animal Shelter - Overtime Pay - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/04/2024	104		PA	Payroll Summary - 2-Hourly	300.14	0.00	300.14
10/18/2024	116		PA	Payroll Summary - 2-Hourly	878.85	0.00	1,178.99
Monthly Totals: 101- -55120-187-55010					1,178.99	0.00	1,178.99
11/01/2024	131		PA	Payroll Summary - 2-Hourly	1,097.63	0.00	1,097.63
11/15/2024	134		PA	Payroll Summary - 2-Hourly	164.29	0.00	1,261.92
11/27/2024	147		PA	Payroll Summary - 2-Hourly	398.90	0.00	1,660.82
Monthly Totals: 101- -55120-187-55010					1,660.82	0.00	1,660.82
12/13/2024	171		PA	Payroll Summary - 2-Hourly	493.59	0.00	493.59
12/27/2024	174		PA	Payroll Summary - 2-Hourly	424.82	0.00	918.41
Monthly Totals: 101- -55120-187-55010					918.41	0.00	918.41

Fund: 101 General

Account Number : 101- -55120-189

Animal Shelter - Other Salaries & Wages

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/04/2024	104		PA	Payroll Summary - 2-Hourly	3,082.23	0.00	3,082.23
10/18/2024	116		PA	Payroll Summary - 2-Hourly	3,160.94	0.00	6,243.17
Monthly Totals: 101- -55120-189					6,243.17	0.00	6,243.17
11/01/2024	131		PA	Payroll Summary - 2-Hourly	4,988.81	0.00	4,988.81
11/15/2024	134		PA	Payroll Summary - 2-Hourly	2,915.56	0.00	7,904.37
11/27/2024	147		PA	Payroll Summary - 2-Hourly	3,051.67	0.00	10,956.04

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Fund: 101 General

Account Number : 101- -55120-189 Animal Shelter - Other Salaries & Wages

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
Monthly Totals: 101- -55120-189					10,956.04	0.00	10,956.04
12/13/2024	171		PA	Payroll Summary - 2-Hourly	3,282.65	0.00	3,282.65
12/27/2024	174		PA	Payroll Summary - 2-Hourly	3,099.79	0.00	6,382.44
Monthly Totals: 101- -55120-189					6,382.44	0.00	6,382.44

Fund: 101 General

Account Number : 101- -55120-189-55010 Animal Shelter - Other Salaries & Wages - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/04/2024	104		PA	Payroll Summary - 2-Hourly	10,288.50	0.00	10,288.50
10/18/2024	116		PA	Payroll Summary - 2-Hourly	15,827.89	0.00	26,116.39
Monthly Totals: 101- -55120-189-55010					26,116.39	0.00	26,116.39
11/01/2024	131		PA	Payroll Summary - 2-Hourly	12,821.75	0.00	12,821.75
11/15/2024	134		PA	Payroll Summary - 2-Hourly	12,836.50	0.00	25,658.25
11/27/2024	147		PA	Payroll Summary - 2-Hourly	14,484.46	0.00	40,142.71
Monthly Totals: 101- -55120-189-55010					40,142.71	0.00	40,142.71
12/13/2024	171		PA	Payroll Summary - 2-Hourly	14,491.33	0.00	14,491.33
12/27/2024	174		PA	Payroll Summary - 2-Hourly	14,177.86	0.00	28,669.19
Monthly Totals: 101- -55120-189-55010					28,669.19	0.00	28,669.19

Fund: 101 General

Account Number : 101- -55120-201 Animal Shelter - Social Security

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/04/2024	104		PA	Payroll Summary - 2-Hourly	188.67	0.00	188.67
10/18/2024	116		PA	Payroll Summary - 2-Hourly	193.56	0.00	382.23
Monthly Totals: 101- -55120-201					382.23	0.00	382.23
11/01/2024	131		PA	Payroll Summary - 2-Hourly	337.00	0.00	337.00
11/15/2024	134		PA	Payroll Summary - 2-Hourly	180.55	0.00	517.55
11/27/2024	147		PA	Payroll Summary - 2-Hourly	189.20	0.00	706.75
Monthly Totals: 101- -55120-201					706.75	0.00	706.75

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Fund: 101 General

Account Number : 101- -55120-201

Animal Shelter - Social Security

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
12/13/2024	171		PA	Payroll Summary - 2-Hourly	243.16	0.00	243.16
12/27/2024	174		PA	Payroll Summary - 2-Hourly	197.22	0.00	440.38
Monthly Totals: 101- -55120-201					440.38	0.00	440.38

Fund: 101 General

Account Number : 101- -55120-201-55010

Animal Shelter - Social Security - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/04/2024	104		PA	Payroll Summary - 2-Hourly	785.97	0.00	785.97
10/15/2024	107		PA	Payroll Summary - 3-Salary	171.21	0.00	957.18
10/18/2024	116		PA	Payroll Summary - 2-Hourly	1,163.53	0.00	2,120.71
10/31/2024	120		PA	Payroll Summary - 3-Salary	171.22	0.00	2,291.93
Monthly Totals: 101- -55120-201-55010					2,291.93	0.00	2,291.93
11/01/2024	131		PA	Payroll Summary - 2-Hourly	991.87	0.00	991.87
11/15/2024	133		PA	Payroll Summary - 3-Salary	171.22	0.00	1,163.09
11/15/2024	134		PA	Payroll Summary - 2-Hourly	938.05	0.00	2,101.14
11/22/2024	144		PA	Payroll Summary - 2-Hourly	21.70	0.00	2,122.84
11/27/2024	146		PA	Payroll Summary - 3-Salary	171.21	0.00	2,294.05
11/27/2024	147		PA	Payroll Summary - 2-Hourly	1,046.98	0.00	3,341.03
Monthly Totals: 101- -55120-201-55010					3,341.03	0.00	3,341.03
12/13/2024	170		PA	Payroll Summary - 3-Salary	171.22	0.00	171.22
12/13/2024	171		PA	Payroll Summary - 2-Hourly	1,041.49	0.00	1,212.71
12/27/2024	174		PA	Payroll Summary - 2-Hourly	995.26	0.00	2,207.97
12/30/2024	175		PA	Payroll Summary - 3-Salary	171.21	0.00	2,379.18
Monthly Totals: 101- -55120-201-55010					2,379.18	0.00	2,379.18

Fund: 101 General

Account Number : 101- -55120-204

Animal Shelter - State Retirement

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/04/2024	104		PA	Payroll Summary - 2-Hourly	235.79	0.00	235.79
10/18/2024	116		PA	Payroll Summary - 2-Hourly	241.81	0.00	477.60

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Fund: 101 General

Account Number : 101- -55120-204

Animal Shelter - State Retirement

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
Monthly Totals: 101- -55120-204					477.60	0.00	477.60
11/01/2024	131		PA	Payroll Summary - 2-Hourly	363.49	0.00	363.49
11/15/2024	134		PA	Payroll Summary - 2-Hourly	223.04	0.00	586.53
11/27/2024	147		PA	Payroll Summary - 2-Hourly	233.45	0.00	819.98
Monthly Totals: 101- -55120-204					819.98	0.00	819.98
12/13/2024	171		PA	Payroll Summary - 2-Hourly	300.57	0.00	300.57
12/27/2024	174		PA	Payroll Summary - 2-Hourly	243.89	0.00	544.46
Monthly Totals: 101- -55120-204					544.46	0.00	544.46

Fund: 101 General

Account Number : 101- -55120-204-55010

Animal Shelter - State Retirement - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/04/2024	104		PA	Payroll Summary - 2-Hourly	810.03	0.00	810.03
10/15/2024	107		PA	Payroll Summary - 3-Salary	214.22	0.00	1,024.25
10/18/2024	116		PA	Payroll Summary - 2-Hourly	859.48	0.00	1,883.73
10/31/2024	120		PA	Payroll Summary - 3-Salary	214.22	0.00	2,097.95
Monthly Totals: 101- -55120-204-55010					2,097.95	0.00	2,097.95
11/01/2024	131		PA	Payroll Summary - 2-Hourly	1,044.78	0.00	1,044.78
11/15/2024	133		PA	Payroll Summary - 3-Salary	214.22	0.00	1,259.00
11/15/2024	134		PA	Payroll Summary - 2-Hourly	994.54	0.00	2,253.54
11/22/2024	144		PA	Payroll Summary - 2-Hourly	26.78	0.00	2,280.32
11/27/2024	146		PA	Payroll Summary - 3-Salary	214.22	0.00	2,494.54
11/27/2024	147		PA	Payroll Summary - 2-Hourly	1,138.59	0.00	3,633.13
Monthly Totals: 101- -55120-204-55010					3,633.13	0.00	3,633.13
12/13/2024	170		PA	Payroll Summary - 3-Salary	214.22	0.00	214.22
12/13/2024	171		PA	Payroll Summary - 2-Hourly	1,146.36	0.00	1,360.58
12/27/2024	174		PA	Payroll Summary - 2-Hourly	1,117.11	0.00	2,477.69
12/30/2024	175		PA	Payroll Summary - 3-Salary	214.22	0.00	2,691.91
Monthly Totals: 101- -55120-204-55010					2,691.91	0.00	2,691.91

Fund: 101 General

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Account Number : 101- -55120-206

Animal Shelter - Life Insurance

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/04/2024	104		PA	Payroll Summary - 2-Hourly	4.20	0.00	4.20
10/18/2024	116		PA	Payroll Summary - 2-Hourly	4.20	0.00	8.40
Monthly Totals: 101- -55120-206					8.40	0.00	8.40
11/01/2024	131		PA	Payroll Summary - 2-Hourly	2.10	0.00	2.10
11/15/2024	134		PA	Payroll Summary - 2-Hourly	2.10	0.00	4.20
Monthly Totals: 101- -55120-206					4.20	0.00	4.20
12/13/2024	171		PA	Payroll Summary - 2-Hourly	4.20	0.00	4.20
12/27/2024	174		PA	Payroll Summary - 2-Hourly	4.20	0.00	8.40
Monthly Totals: 101- -55120-206					8.40	0.00	8.40

Fund: 101 General

Account Number : 101- -55120-206-55010

Animal Shelter - Life Insurance - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/04/2024	104		PA	Payroll Summary - 2-Hourly	13.97	0.00	13.97
10/04/2024	306143	306143	CD	LINCOLN FINANCIAL GROUP	8.39	0.00	22.36
10/15/2024	107		PA	Payroll Summary - 3-Salary	2.10	0.00	24.46
10/18/2024	116		PA	Payroll Summary - 2-Hourly	13.97	0.00	38.43
10/31/2024	120		PA	Payroll Summary - 3-Salary	2.10	0.00	40.53
Monthly Totals: 101- -55120-206-55010					40.53	0.00	40.53
11/01/2024	131		PA	Payroll Summary - 2-Hourly	12.60	0.00	12.60
11/05/2024	306949	306949	CD	LINCOLN FINANCIAL GROUP	0.00	2.74	9.86
11/15/2024	133		PA	Payroll Summary - 3-Salary	2.10	0.00	11.96
11/15/2024	134		PA	Payroll Summary - 2-Hourly	12.60	0.00	24.56
11/27/2024	146		PA	Payroll Summary - 3-Salary	2.10	0.00	26.66
Monthly Totals: 101- -55120-206-55010					29.40	2.74	26.66
12/03/2024	307530	307530	CD	LINCOLN FINANCIAL GROUP	0.00	8.40	(8.40)
12/13/2024	170		PA	Payroll Summary - 3-Salary	2.10	0.00	(6.30)
12/13/2024	171		PA	Payroll Summary - 2-Hourly	18.90	0.00	12.60
12/27/2024	174		PA	Payroll Summary - 2-Hourly	18.90	0.00	31.50
12/30/2024	175		PA	Payroll Summary - 3-Salary	2.10	0.00	33.60

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Fund: 101 General

Account Number : 101- -55120-206-55010

Animal Shelter - Life Insurance - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
Monthly Totals: 101- -55120-206-55010					42.00	8.40	33.60

Fund: 101 General

Account Number : 101- -55120-207

Animal Shelter - Medical Insurance

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/04/2024	104		PA	Payroll Summary - 2-Hourly	701.16	0.00	701.16
10/18/2024	116		PA	Payroll Summary - 2-Hourly	701.16	0.00	1,402.32
Monthly Totals: 101- -55120-207					1,402.32	0.00	1,402.32
11/01/2024	131		PA	Payroll Summary - 2-Hourly	350.58	0.00	350.58
11/15/2024	134		PA	Payroll Summary - 2-Hourly	350.58	0.00	701.16
Monthly Totals: 101- -55120-207					701.16	0.00	701.16
12/13/2024	171		PA	Payroll Summary - 2-Hourly	638.66	0.00	638.66
12/27/2024	174		PA	Payroll Summary - 2-Hourly	638.66	0.00	1,277.32
Monthly Totals: 101- -55120-207					1,277.32	0.00	1,277.32

Fund: 101 General

Account Number : 101- -55120-207-55010

Animal Shelter - Medical Insurance - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/04/2024	104		PA	Payroll Summary - 2-Hourly	1,752.90	0.00	1,752.90
10/04/2024	306119	306119	CD	BLUE CROSS BLUE SHIELD OF TN	288.01	0.00	2,040.91
10/18/2024	116		PA	Payroll Summary - 2-Hourly	1,752.90	0.00	3,793.81
Monthly Totals: 101- -55120-207-55010					3,793.81	0.00	3,793.81
11/01/2024	131		PA	Payroll Summary - 2-Hourly	1,752.90	0.00	1,752.90
11/05/2024	306938	306938	CD	BLUE CROSS BLUE SHIELD OF TN	0.00	0.07	1,752.83
11/15/2024	134		PA	Payroll Summary - 2-Hourly	1,752.90	0.00	3,505.73
Monthly Totals: 101- -55120-207-55010					3,505.80	0.07	3,505.73
12/03/2024	307521	307521	CD	BLUE CROSS BLUE SHIELD OF TN	0.00	576.21	(576.21)
12/13/2024	171		PA	Payroll Summary - 2-Hourly	2,736.53	0.00	2,160.32
12/27/2024	174		PA	Payroll Summary - 2-Hourly	2,736.53	0.00	4,896.85

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Fund: 101 General

Account Number : 101- -55120-207-55010 Animal Shelter - Medical Insurance - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
Monthly Totals: 101- -55120-207-55010					5,473.06	576.21	4,896.85

Fund: 101 General

Account Number : 101- -55120-208 Animal Shelter - Dental Insurance

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/04/2024	104		PA	Payroll Summary - 2-Hourly	24.32	0.00	24.32
10/18/2024	116		PA	Payroll Summary - 2-Hourly	18.12	0.00	42.44
Monthly Totals: 101- -55120-208					42.44	0.00	42.44
11/01/2024	131		PA	Payroll Summary - 2-Hourly	12.16	0.00	12.16
11/15/2024	134		PA	Payroll Summary - 2-Hourly	9.06	0.00	21.22
Monthly Totals: 101- -55120-208					21.22	0.00	21.22
12/13/2024	171		PA	Payroll Summary - 2-Hourly	24.32	0.00	24.32
12/27/2024	174		PA	Payroll Summary - 2-Hourly	18.12	0.00	42.44
Monthly Totals: 101- -55120-208					42.44	0.00	42.44

Fund: 101 General

Account Number : 101- -55120-208-55010 Animal Shelter - Dental Insurance - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/04/2024	104		PA	Payroll Summary - 2-Hourly	85.12	0.00	85.12
10/04/2024	306147	306147	CD	Maury County Self Insurance Fund	3.10	0.00	88.22
10/15/2024	107		PA	Payroll Summary - 3-Salary	12.16	0.00	100.38
10/18/2024	116		PA	Payroll Summary - 2-Hourly	63.42	0.00	163.80
10/31/2024	120		PA	Payroll Summary - 3-Salary	9.06	0.00	172.86
Monthly Totals: 101- -55120-208-55010					172.86	0.00	172.86
11/01/2024	131		PA	Payroll Summary - 2-Hourly	72.96	0.00	72.96
11/05/2024	306952	306952	CD	Maury County Self Insurance Fund	0.00	3.10	69.86
11/15/2024	133		PA	Payroll Summary - 3-Salary	12.16	0.00	82.02
11/15/2024	134		PA	Payroll Summary - 2-Hourly	54.36	0.00	136.38
11/27/2024	146		PA	Payroll Summary - 3-Salary	9.06	0.00	145.44

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Fund: 101 General

Account Number : 101- -55120-208-55010 Animal Shelter - Dental Insurance - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
Monthly Totals: 101- -55120-208-55010					148.54	3.10	145.44
12/03/2024	307536	307536	CD	Maury County Self Insurance Fund	0.00	3.10	(3.10)
12/13/2024	170		PA	Payroll Summary - 3-Salary	12.16	0.00	9.06
12/13/2024	171		PA	Payroll Summary - 2-Hourly	109.44	0.00	118.50
12/27/2024	174		PA	Payroll Summary - 2-Hourly	81.54	0.00	200.04
12/30/2024	175		PA	Payroll Summary - 3-Salary	9.06	0.00	209.10
Monthly Totals: 101- -55120-208-55010					212.20	3.10	209.10

Fund: 101 General

Account Number : 101- -55120-209-55010 Animal Shelter - Disability Insurance - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/04/2024	306143	306143	CD	LINCOLN FINANCIAL GROUP	75.67	0.00	75.67
Monthly Totals: 101- -55120-209-55010					75.67	0.00	75.67
11/05/2024	306949	306949	CD	LINCOLN FINANCIAL GROUP	61.88	0.00	61.88
Monthly Totals: 101- -55120-209-55010					61.88	0.00	61.88
12/03/2024	307530	307530	CD	LINCOLN FINANCIAL GROUP	44.48	0.00	44.48
Monthly Totals: 101- -55120-209-55010					44.48	0.00	44.48

Fund: 101 General

Account Number : 101- -55120-210 Animal Shelter - Unemployment Compensation

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
11/01/2024	131		PA	Payroll Summary - 2-Hourly	4.25	0.00	4.25
11/15/2024	134		PA	Payroll Summary - 2-Hourly	4.05	0.00	8.30
11/27/2024	147		PA	Payroll Summary - 2-Hourly	4.30	0.00	12.60
Monthly Totals: 101- -55120-210					12.60	0.00	12.60
12/13/2024	171		PA	Payroll Summary - 2-Hourly	4.94	0.00	4.94
12/27/2024	174		PA	Payroll Summary - 2-Hourly	3.46	0.00	8.40
Monthly Totals: 101- -55120-210					8.40	0.00	8.40

Fund: 101 General

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Account Number : **101- -55120-210-55010**

Animal Shelter - Unemployment Compensation - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/04/2024	104		PA	Payroll Summary - 2-Hourly	9.74	0.00	9.74
10/18/2024	116		PA	Payroll Summary - 2-Hourly	6.49	0.00	16.23
Monthly Totals: 101- -55120-210-55010					16.23	0.00	16.23
11/01/2024	131		PA	Payroll Summary - 2-Hourly	14.86	0.00	14.86
11/15/2024	134		PA	Payroll Summary - 2-Hourly	15.42	0.00	30.28
11/27/2024	147		PA	Payroll Summary - 2-Hourly	18.81	0.00	49.09
Monthly Totals: 101- -55120-210-55010					49.09	0.00	49.09
12/13/2024	171		PA	Payroll Summary - 2-Hourly	20.24	0.00	20.24
12/27/2024	174		PA	Payroll Summary - 2-Hourly	13.83	0.00	34.07
Monthly Totals: 101- -55120-210-55010					34.07	0.00	34.07

Fund: **101** General

Account Number : **101- -55120-212**

Animal Shelter - Employer Medicare

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/04/2024	104		PA	Payroll Summary - 2-Hourly	44.12	0.00	44.12
10/18/2024	116		PA	Payroll Summary - 2-Hourly	45.27	0.00	89.39
Monthly Totals: 101- -55120-212					89.39	0.00	89.39
11/01/2024	131		PA	Payroll Summary - 2-Hourly	78.81	0.00	78.81
11/15/2024	134		PA	Payroll Summary - 2-Hourly	42.23	0.00	121.04
11/27/2024	147		PA	Payroll Summary - 2-Hourly	44.25	0.00	165.29
Monthly Totals: 101- -55120-212					165.29	0.00	165.29
12/13/2024	171		PA	Payroll Summary - 2-Hourly	56.87	0.00	56.87
12/27/2024	174		PA	Payroll Summary - 2-Hourly	46.12	0.00	102.99
Monthly Totals: 101- -55120-212					102.99	0.00	102.99

Fund: **101** General

Account Number : **101- -55120-212-55010**

Animal Shelter - Employer Medicare - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/04/2024	104		PA	Payroll Summary - 2-Hourly	183.81	0.00	183.81
10/15/2024	107		PA	Payroll Summary - 3-Salary	40.04	0.00	223.85
10/18/2024	116		PA	Payroll Summary - 2-Hourly	272.11	0.00	495.96

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Fund: 101 General

Account Number : 101- -55120-212-55010

Animal Shelter - Employer Medicare - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/31/2024	120		PA	Payroll Summary - 3-Salary	40.05	0.00	536.01
Monthly Totals: 101- -55120-212-55010					536.01	0.00	536.01
11/01/2024	131		PA	Payroll Summary - 2-Hourly	231.98	0.00	231.98
11/15/2024	133		PA	Payroll Summary - 3-Salary	40.04	0.00	272.02
11/15/2024	134		PA	Payroll Summary - 2-Hourly	219.40	0.00	491.42
11/22/2024	144		PA	Payroll Summary - 2-Hourly	5.07	0.00	496.49
11/27/2024	146		PA	Payroll Summary - 3-Salary	40.04	0.00	536.53
11/27/2024	147		PA	Payroll Summary - 2-Hourly	244.83	0.00	781.36
Monthly Totals: 101- -55120-212-55010					781.36	0.00	781.36
12/13/2024	170		PA	Payroll Summary - 3-Salary	40.04	0.00	40.04
12/13/2024	171		PA	Payroll Summary - 2-Hourly	243.57	0.00	283.61
12/27/2024	174		PA	Payroll Summary - 2-Hourly	232.78	0.00	516.39
12/30/2024	175		PA	Payroll Summary - 3-Salary	40.05	0.00	556.44
Monthly Totals: 101- -55120-212-55010					556.44	0.00	556.44

Fund: 101 General

Account Number : 101- -55120-334-55010

Animal Shelter - Maintenance Agreements - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/15/2024	306477	306477	CD	Cintas Corporation	129.17	0.00	129.17
10/17/2024	306633	306633	CD	Cintas Corporation	129.17	0.00	258.34
Monthly Totals: 101- -55120-334-55010					258.34	0.00	258.34
12/10/2024	307865	307865	CD	Cintas Corporation	132.40	0.00	132.40
12/12/2024	307961	307961	CD	Cintas Corporation	132.40	0.00	264.80
Monthly Totals: 101- -55120-334-55010					264.80	0.00	264.80

Fund: 101 General

Account Number : 101- -55120-336-55010

Animal Shelter - Maintenance And Repair Services-Equipment - Animal

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/24/2024	306759	306759	CD	ACTS MICROSCOPES COMPANY LLC	400.00	0.00	400.00
10/24/2024	306800	306800	CD	Preventia Security Llc	395.04	0.00	795.04

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Fund: 101 General

Account Number : 101- -55120-336-55010

Animal Shelter - Maintenance And Repair Services-Equipment - Animal

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
Monthly Totals: 101- -55120-336-55010					795.04	0.00	795.04

Fund: 101 General

Account Number : 101- -55120-338

Animal Shelter - Maintenance And Repair Services-Vehicles

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/15/2024	306518	306518	CD	Maury Co Central Maintenance	94.00	0.00	94.00
Monthly Totals: 101- -55120-338					94.00	0.00	94.00
11/12/2024	307126	307126	CD	Maury Co Central Maintenance	311.25	0.00	311.25
Monthly Totals: 101- -55120-338					311.25	0.00	311.25

Fund: 101 General

Account Number : 101- -55120-338-55010

Animal Shelter - Maintenance And Repair Services-Vehicles - Animal

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/03/2024	306282	306282	CD	Maury Co Central Maintenance	94.00	0.00	94.00
10/11/2024	306282	Maury Co Central	CD	Void payment number 306282	0.00	94.00	0.00
Monthly Totals: 101- -55120-338-55010					94.00	94.00	0.00

Fund: 101 General

Account Number : 101- -55120-348-55010

Animal Shelter - Postal Charges - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
12/20/2024	308143	308143	CD	FIRST HORIZON BANK	11.30	0.00	11.30
Monthly Totals: 101- -55120-348-55010					11.30	0.00	11.30

Fund: 101 General

Account Number : 101- -55120-357-55010

Animal Shelter - Veterinary Services - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/01/2024	306236	306236	CD	STATE OF TENNESSEE	50.00	0.00	50.00
10/08/2024	306452	306452	CD	Zoetis US, LLC	85.00	0.00	135.00
Monthly Totals: 101- -55120-357-55010					135.00	0.00	135.00

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Fund: 101 General

Account Number : 101- -55120-357-55010

Animal Shelter - Veterinary Services - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
11/05/2024	307045	307045	CD	STATE OF TENNESSEE	105.00	0.00	105.00
11/15/2024	307304	307304	CD	Zoetis US, LLC	1,760.00	0.00	1,865.00
Monthly Totals: 101- -55120-357-55010					1,865.00	0.00	1,865.00
12/10/2024	307925	307925	CD	Zoetis US, LLC	50.00	0.00	50.00
12/10/2024	307925	307925	CD	Zoetis US, LLC	85.00	0.00	135.00
12/20/2024	308139	308139	CD	FIRST HORIZON BANK	248.00	0.00	383.00
Monthly Totals: 101- -55120-357-55010					383.00	0.00	383.00

Fund: 101 General

Account Number : 101- -55120-357-55012

Animal Shelter - Veterinary Services - Animal Shelter-Spay/Neuter Rev

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/08/2024	306439	306439	CD	TENNSOUTH VETERINARY SERVICES	600.00	0.00	600.00
10/08/2024	306439	306439	CD	TENNSOUTH VETERINARY SERVICES	600.00	0.00	1,200.00
10/08/2024	306439	306439	CD	TENNSOUTH VETERINARY SERVICES	600.00	0.00	1,800.00
10/08/2024	306439	306439	CD	TENNSOUTH VETERINARY SERVICES	1,200.00	0.00	3,000.00
10/31/2024	306922	306922	CD	TENNSOUTH VETERINARY SERVICES	600.00	0.00	3,600.00
10/31/2024	306922	306922	CD	TENNSOUTH VETERINARY SERVICES	600.00	0.00	4,200.00
10/31/2024	306922	306922	CD	TENNSOUTH VETERINARY SERVICES	600.00	0.00	4,800.00
Monthly Totals: 101- -55120-357-55012					4,800.00	0.00	4,800.00
12/03/2024	307631	307631	CD	TENNSOUTH VETERINARY SERVICES	600.00	0.00	600.00
12/03/2024	307631	307631	CD	TENNSOUTH VETERINARY SERVICES	600.00	0.00	1,200.00
Monthly Totals: 101- -55120-357-55012					1,200.00	0.00	1,200.00

Fund: 101 General

Account Number : 101- -55120-359-55010

Animal Shelter - Disposal Fees - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/24/2024	306775	306775	CD	Columbia Power & Water Sys	196.00	0.00	196.00
Monthly Totals: 101- -55120-359-55010					196.00	0.00	196.00
11/26/2024	307462	307462	CD	Columbia Power & Water Sys	196.00	0.00	196.00

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Fund: 101 General

Account Number : 101- -55120-359-55010 Animal Shelter - Disposal Fees - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
Monthly Totals: 101- -55120-359-55010					196.00	0.00	196.00

Fund: 101 General

Account Number : 101- -55120-401-55010 Animal Shelter - Animal Food And Supplies - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
11/19/2024	307316	307316	CD	Amazon Capital Services Inc	297.74	0.00	297.74
Monthly Totals: 101- -55120-401-55010					297.74	0.00	297.74
12/10/2024	307918	307918	CD	UNITED FARM AND HOME COOPERATIVE	380.00	0.00	380.00
Monthly Totals: 101- -55120-401-55010					380.00	0.00	380.00

Fund: 101 General

Account Number : 101- -55120-410-55010 Animal Shelter - Custodial Supplies - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/01/2024	306220	306220	CD	Midwest Veterinary Supply, Inc	1,881.49	0.00	1,881.49
Monthly Totals: 101- -55120-410-55010					1,881.49	0.00	1,881.49

Fund: 101 General

Account Number : 101- -55120-413-55010 Animal Shelter - Drugs And Medical Supplies - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/01/2024	306220	306220	CD	Midwest Veterinary Supply, Inc	159.32	0.00	159.32
10/01/2024	306220	306220	CD	Midwest Veterinary Supply, Inc	109.03	0.00	268.35
10/01/2024	306220	306220	CD	Midwest Veterinary Supply, Inc	0.00	0.00	268.35
10/17/2024	306665	306665	CD	Midwest Veterinary Supply, Inc	496.83	0.00	765.18
10/24/2024	306797	306797	CD	Midwest Veterinary Supply, Inc	910.59	0.00	1,675.77
10/24/2024	306810	306810	CD	Zoetis US, LLC	1,274.00	0.00	2,949.77
10/31/2024	306888	306888	CD	ELANCO US INC.	660.00	0.00	3,609.77
10/31/2024	306891	306891	CD	IDEXX DISTRIBUTION INC	740.68	0.00	4,350.45
10/31/2024	306909	306909	CD	Midwest Veterinary Supply, Inc	5.86	0.00	4,356.31
10/31/2024	306909	306909	CD	Midwest Veterinary Supply, Inc	721.17	0.00	5,077.48
10/31/2024	306909	306909	CD	Midwest Veterinary Supply, Inc	83.40	0.00	5,160.88

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Fund: 101 General

Account Number : 101- -55120-413-55010

Animal Shelter - Drugs And Medical Supplies - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/31/2024	306928	306928	CD	Zoetis US, LLC	793.37	0.00	5,954.25
Monthly Totals: 101- -55120-413-55010					5,954.25	0.00	5,954.25
11/05/2024	306999	306999	CD	COVETRUS NORTH AMERICA	241.71	0.00	241.71
11/15/2024	307282	307282	CD	Midwest Veterinary Supply, Inc	1,966.34	0.00	2,208.05
11/15/2024	307304	307304	CD	Zoetis US, LLC	359.85	0.00	2,567.90
11/15/2024	307304	307304	CD	Zoetis US, LLC	833.00	0.00	3,400.90
11/19/2024	307314	307314	CD	Airgas Usa, Llc	137.81	0.00	3,538.71
11/26/2024	307489	307489	CD	Midwest Veterinary Supply, Inc	1,508.72	0.00	5,047.43
Monthly Totals: 101- -55120-413-55010					5,047.43	0.00	5,047.43
12/03/2024	307612	307612	CD	Midwest Veterinary Supply, Inc	241.40	0.00	241.40
12/03/2024	307612	307612	CD	Midwest Veterinary Supply, Inc	164.53	0.00	405.93
12/12/2024	307982	307982	CD	Midwest Veterinary Supply, Inc	669.09	0.00	1,075.02
12/12/2024	307982	307982	CD	Midwest Veterinary Supply, Inc	325.56	0.00	1,400.58
12/12/2024	307982	307982	CD	Midwest Veterinary Supply, Inc	255.61	0.00	1,656.19
12/12/2024	308001	308001	CD	Zoetis US, LLC	1,570.00	0.00	3,226.19
12/12/2024	308001	308001	CD	Zoetis US, LLC	468.00	0.00	3,694.19
12/20/2024	308093	308093	CD	Airgas Usa, Llc	177.80	0.00	3,871.99
Monthly Totals: 101- -55120-413-55010					3,871.99	0.00	3,871.99

Fund: 101 General

Account Number : 101- -55120-415-55010

Animal Shelter - Electricity - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/24/2024	306775	306775	CD	Columbia Power & Water Sys	2,468.75	0.00	2,468.75
Monthly Totals: 101- -55120-415-55010					2,468.75	0.00	2,468.75
11/26/2024	307462	307462	CD	Columbia Power & Water Sys	2,022.16	0.00	2,022.16
Monthly Totals: 101- -55120-415-55010					2,022.16	0.00	2,022.16

Fund: 101 General

Account Number : 101- -55120-425

Animal Shelter - Gasoline

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
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Template Name:
Created By: LGC

Maury County Finance Department
Account Analysis
October 2024 - December 2024

User:
Date/Time:

Brooke Brady
1/9/2025 2:10 PM
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Fund: 101 General

Account Number : 101- -55120-425

Animal Shelter - Gasoline

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/15/2024	306518	306518	CD	Maury Co Central Maintenance	587.72	0.00	587.72
Monthly Totals: 101- -55120-425					587.72	0.00	587.72
11/12/2024	307126	307126	CD	Maury Co Central Maintenance	705.51	0.00	705.51
Monthly Totals: 101- -55120-425					705.51	0.00	705.51
12/03/2024	307609	307609	CD	Maury Co Central Maintenance	554.03	0.00	554.03
Monthly Totals: 101- -55120-425					554.03	0.00	554.03

Fund: 101 General

Account Number : 101- -55120-425-55010

Animal Shelter - Gasoline - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/03/2024	306282	306282	CD	Maury Co Central Maintenance	587.72	0.00	587.72
10/11/2024	306282	Maury Co Central	CD	Void payment number 306282	0.00	587.72	0.00
Monthly Totals: 101- -55120-425-55010					587.72	587.72	0.00

Fund: 101 General

Account Number : 101- -55120-434-55010

Animal Shelter - Natural Gas - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
12/05/2024	307648	307648	CD	AMERIGAS PROPANE LP	1,756.89	0.00	1,756.89
12/17/2024	308011	308011	CD	AMERIGAS PROPANE LP	177.80	0.00	1,934.69
12/17/2024	308011	AMERIGAS PROPANE LP	CD	Void payment number 308011	0.00	177.80	1,756.89
Monthly Totals: 101- -55120-434-55010					1,934.69	177.80	1,756.89

Fund: 101 General

Account Number : 101- -55120-435-55010

Animal Shelter - Office Supplies - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/31/2024	306872	306872	CD	Amazon Capital Services Inc	142.39	0.00	142.39
Monthly Totals: 101- -55120-435-55010					142.39	0.00	142.39
12/03/2024	307548	307548	CD	Amazon Capital Services Inc	826.08	0.00	826.08
Monthly Totals: 101- -55120-435-55010					826.08	0.00	826.08

Template Name:
Created By: LGC

Maury County Finance Department
Account Analysis
October 2024 - December 2024

User:
Date/Time:

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Fund: 101 General

Account Number : 101- -55120-451

Animal Shelter - Uniforms

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/17/2024	306642	306642	CD	FIRST HORIZON BANK	224.93	0.00	224.93
10/24/2024	306786	306786	CD	Impressions	114.60	0.00	339.53
Monthly Totals: 101- -55120-451					339.53	0.00	339.53
11/15/2024	307236	307236	CD	Amazon Capital Services Inc	199.94	0.00	199.94
11/19/2024	307342	307342	CD	FIRST HORIZON BANK	254.94	0.00	454.88
Monthly Totals: 101- -55120-451					454.88	0.00	454.88
12/03/2024	307593	307593	CD	Impressions	679.44	0.00	679.44
Monthly Totals: 101- -55120-451					679.44	0.00	679.44

Fund: 101 General

Account Number : 101- -55120-454-55010

Animal Shelter - Water And Sewer - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/24/2024	306775	306775	CD	Columbia Power & Water Sys	1,403.36	0.00	1,403.36
Monthly Totals: 101- -55120-454-55010					1,403.36	0.00	1,403.36
11/26/2024	307462	307462	CD	Columbia Power & Water Sys	1,400.38	0.00	1,400.38
Monthly Totals: 101- -55120-454-55010					1,400.38	0.00	1,400.38

Fund: 101 General

Account Number : 101- -55120-499-55010

Animal Shelter - Other Supplies And Materials - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/01/2024	306167	306167	CD	Amazon Capital Services Inc	123.16	0.00	123.16
10/01/2024	306167	306167	CD	Amazon Capital Services Inc	453.01	0.00	576.17
10/08/2024	306373	306373	CD	Amazon Capital Services Inc	25.94	0.00	602.11
10/15/2024	306540	306540	CD	UNITED FARM AND HOME COOPERATIVE	380.00	0.00	982.11
10/24/2024	306760	306760	CD	Amazon Capital Services Inc	443.08	0.00	1,425.19
10/31/2024	306872	306872	CD	Amazon Capital Services Inc	37.59	0.00	1,462.78
10/31/2024	306872	306872	CD	Amazon Capital Services Inc	236.80	0.00	1,699.58
Monthly Totals: 101- -55120-499-55010					1,699.58	0.00	1,699.58
11/15/2024	307236	307236	CD	Amazon Capital Services Inc	809.51	0.00	809.51

Template Name:
Created By: LGC

Maury County Finance Department
Account Analysis
October 2024 - December 2024

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Fund: 101 General

Account Number : 101- -55120-499-55010

Animal Shelter - Other Supplies And Materials - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
11/15/2024	307236	307236	CD	Amazon Capital Services Inc	24.91	0.00	834.42
11/19/2024	307342	307342	CD	FIRST HORIZON BANK	30.81	0.00	865.23
11/19/2024	307342	307342	CD	FIRST HORIZON BANK	95.41	0.00	960.64
Monthly Totals: 101- -55120-499-55010					960.64	0.00	960.64

Fund: 101 General

Account Number : 101- -55120-524

Animal Shelter - Training, In-Service, Staff Development

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/17/2024	306642	306642	CD	FIRST HORIZON BANK	500.00	0.00	500.00
Monthly Totals: 101- -55120-524					500.00	0.00	500.00
11/19/2024	307342	307342	CD	FIRST HORIZON BANK	500.00	0.00	500.00
Monthly Totals: 101- -55120-524					500.00	0.00	500.00

Fund: 101 General

Account Number : 101- -55120-790

Animal Shelter - Other Equipment

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
10/17/2024	306642	306642	CD	FIRST HORIZON BANK	570.00	0.00	570.00
Monthly Totals: 101- -55120-790					570.00	0.00	570.00

Fund: 101 General

Account Number : 101- -55120-790-55010

Animal Shelter - Other Equipment - Animal Shelter

Date	Trans #	Reference #	Type	Transaction Description	Debits	Credits	Balance
12/10/2024	307884	307884	CD	Lowe's Companies Inc. ANM	478.40	0.00	478.40
Monthly Totals: 101- -55120-790-55010					478.40	0.00	478.40

Fund Totals: 101

241,209.27 1,453.14

- 1453.14

239,756.13

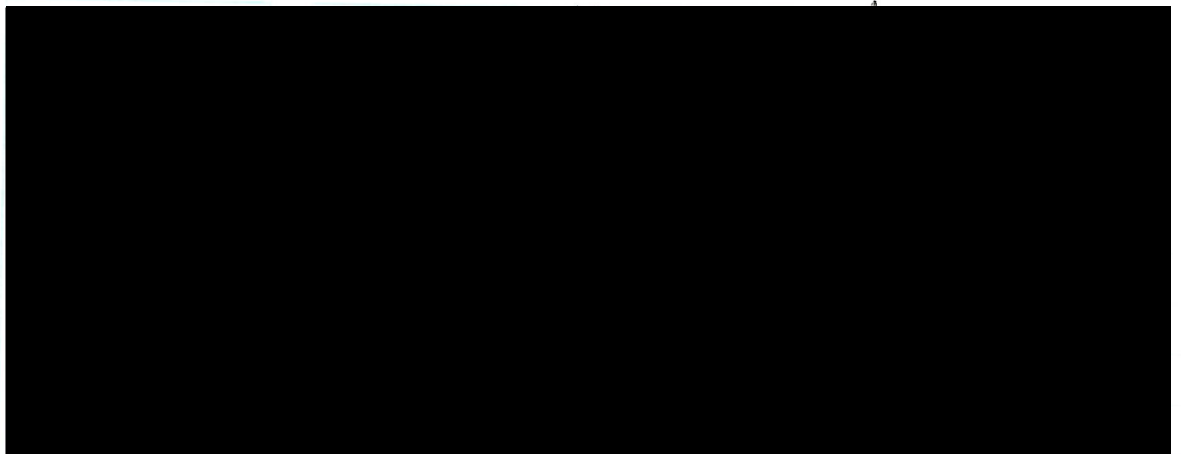
Animal Shelter

PREPARED BY:

2024

DATE:

PROJECT TITLE:



10-10-24

Robin + Johnnie 2 Hr. each
replaced + repaired outside security lights
(~~about \$60?~~) \$ 75.96

mylowe's Rewards



LEARN MORE AT LOWES.COM/MYLOWESREWARDS

LOWE'S HOME CENTERS, LLC
2000 HILLARY DR.
COLUMBIA, TN 38401 (931) 380-9499

- SALE -

SALES#: S0729AJ2 4339650 TRANS#: 972176458 10-09-24

Animal Shelter
5429811 WALL LED SCONCE 2 LENS CC 75.96
39.98 DISCOUNT EACH -2.00
2 @ 37.98
1049262 CM 6-PC HEX BIT SOCKET MM 25.63
26.98 DISCOUNT EACH -1.35
Shop 1049261 CM 6-PC HEX BIT SOCKET SA 25.63
26.98 DISCOUNT EACH -1.35

SUBTOTAL: 127.22
TOTAL TAX: 0.00
INVOICE 79025 TOTAL: 127.22
LAR: 127.22

TOTAL SAVINGS THIS TRIP: \$6.70

LAR: XXXXXXXXXXXX9920 AMOUNT: 127.22 AUTHCD: 001402
KEYED REFID: 790250 10/09/24 13:06:59
LAR PD: gov-11788
ACCOUNT NAME: MAURY COUNTY COURTHOUSE
AUTH BUYER: WALKER ROBIN

ACCOUNT WILL BE BILLED UPON MERCHANDISE TRANSACTION
DATE FOR STOCK MERCHANDISE AND NO LATER THAN 90 DAYS
FROM TRANSACTION DATE FOR SUS OR DIRECT DELIVERY
MERCHANDISE.

STONE: 0729 TERMINAL: 54 10/09/24 13:07:09
OF ITEMS PURCHASED: 4
EXCLUDES FEES, SERVICES AND SPECIAL ORDER ITEMS



THANK YOU FOR SHOPPING LOWE'S.
FOR DETAILS ON OUR RETURN POLICY, VISIT
LOWES.COM/RETURNS
A WRITTEN COPY OF THE RETURN POLICY IS AVAILABLE
AT OUR CUSTOMER SERVICE DESK

MY LOWE'S REWARDS CREDIT CARDHOLDERS GET MORE.
FOR DETAILS VISIT LOWES.COM/MYLOWESREWARDS

* SHARE YOUR FEEDBACK! *
* ENTER FOR A CHANCE TO BE *
*



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Thad H. Jablonski, Assistant City Manager/CFO, tjablonski@columbiatn.gov, (931) 560-1559

AGENDA ITEM TITLE: APPROVE THE ANNUAL RENEWAL OF LIABILITY AND AUTO INSURANCE WITH PUBLIC ENTITY PARTNERS IN THE AMOUNT OF \$483,758

RECOMMENDATION: Approve.

INFORMATION: The City of Columbia obtains several lines of insurance coverage through Public Entity Partners (PEP), formerly the TML Risk Management Pool, for the purpose of managing risk. The policy renewal for liability (general, law enforcement, errors and omissions and automobile) and auto physical damage coverage is January 1st of each year. An invoice for premium renewal for liability and auto insurance has been received from PEP and is due for payment.

The total annual premium due for 2025 is \$483,758 which includes a \$15,231 member dividend credit in 2025. No member dividend credit was issued in 2024. Prior year net premiums, i.e., premium after member dividend credit, for the past five (5) years, plus the proposed year, were as follows:

2025	\$498,989	\$15,231	\$483,758
2024	\$481,911	\$0	\$481,911
2023	\$404,178	\$43,544	\$360,634
2022	\$389,337	\$46,359	\$342,978
2021	\$347,543	\$84,110	\$263,433
2020	\$360,083	\$48,410	\$311,673

The net premium cost after the member dividend credit is applied for 2025 (\$483,758) increased approximately 3.5% compared with the prior year's net premium amount (\$481,911). The member dividend credit increased from \$0 to \$15,231.

The premium increase from 2024 follows from increased base insurance rates across various types of general liability coverage, a 2.46% "combined liability" increase.

A breakdown of cost by fund is as follows:

General Fund	\$389,893
Sanitation Fund	\$53,761
Wastewater Fund	\$40,104
Total	\$483,758

Deductible amounts for liability coverage lines are \$5,000 per occurrence, with a \$1,000 deductible for auto physical damage. Only vehicles valued over \$3,500 are included in the physical damage coverage.

The City Council is requested to approve the renewal of City liability and automobile physical damage insurance and to authorize payment to PEP in the amount of \$483,758.

ATTACHMENTS: Staff Report, PEP Invoice.



PUBLIC ENTITY PARTNERS

(800) 624-9698

www.PEpartners.org

Invoice Date: 1/13/2025

Invoice Due Date: 2/27/2025

Invoice Number: 2520505-IN

COLUMBIA, CITY OF
FINANCE DEPARTMENT
700 NORTH GARDEN STREET
COLUMBIA, TN 38401

Location Code: 8341

Agent Number: 2089

Account Number: 20-0102960

Policy No.: PLI-0004-25

Policy Period: 12/31/2024 to 12/31/2025

Renewal-Single Payment

Billing Period: 12/31/2024 to 12/31/2025

Code	Description of Coverages	Amount
23C	GENERAL LIABILITY	\$77,753.00
26C	LAW ENFORCEMENT LIABILITY	\$76,346.00
25C	ERRORS OR OMISSIONS LIABILITY	\$76,420.00
33C	AUTOMOBILE LIABILITY	\$138,267.00
43C	AUTO PHYSICAL DAMAGE	\$130,203.00
DCL	MEMBER DIVIDEND CREDIT - LIA	\$(15,231.00)

*Please send a copy of invoice
with payment to:*

Total Invoice: \$483,758.00

PUBLIC ENTITY PARTNERS
PO BOX 116553
ATLANTA, GA 30368-6553



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Tourism & Marketing Department -Kellye Murphy

AGENDA ITEM TITLE: 7.13 - APPROVE AND AUTHORIZE THE MAYOR TO SIGN A CONTRACT BETWEEN THE CITY OF COLUMBIA AND THE WANDER DIARY IN THE AMOUNT OF \$4,000 FOR A SOCIAL MEDIA INFLUENCER SPRING MARKETING CAMPAIGN

RECOMMENDATION: Approve.

INFORMATION: Visit Columbia is working more with social media influencers, like The Wander Diary, as part of the targeted marketing strategy designed to reach travelers through Instagram, the Visit Columbia website, and blog posts. This strategy is designed to encourage and inspire travel to Columbia while building brand awareness.

CERTIFICATION: The Chief Financial Officer certifies that \$4,000 is budgeted and unencumbered in Tourism Enhancement-General Fund - Professional Services.

ATTACHMENTS: Staff Report
The Wander Diary Contract

Client Service Agreement

February 2025

Parties:

Known as "Provider"

The Wander Diary

and City of Columbia TN

Collectively, all of the above people or businesses entering this Agreement will be referred to as the "Parties."

Purpose of the Agreement

Client wishes to hire Provider to provide services as detailed in this Agreement. Provider has agreed to provide such services according to the terms of this Agreement.

Terms

Services

Provider shall provide Client with the following services and/or products

- o Daily Instagram Stories
- o 2 Instagram reels reposted to Facebook
- o 5 images and 5 videos (Unlimited use for social, web, visitor guide), All images will be high resolution original files, that include both vertical and horizontal formats with the ability to resize

Cost, Fees and Payment

Cost.

City of Columbia TN will pay \$4,000

Impossibility

Force Majeure. Notwithstanding the above, either party may choose to be excused of any further performance obligations in the event of a disastrous occurrence outside the control of either party, such as, but not limited to:

1. A natural disaster (fires, explosions, earthquakes, hurricane, flooding, storms or infestation); or
2. War, Invasion, Act of Foreign Enemies, Embargo, or other Hostility (whether declared or not); or

3. Any hazardous situation created outside the control of either party such as a riot, disorder, nuclear leak or explosion, or act or threat of terrorism.

General Provisions

0. Email

0. Provider's Email:

0. Client Email:

Merger. This Agreement constitutes the final, exclusive agreement between the parties relating to the fee and Services contained in this Agreement. All earlier and contemporaneous negotiations and agreements between the parties on the matters contained in this Agreement are expressly merged into and superseded by this Agreement.

Amendment. The parties may amend this Agreement only by the parties' written consent via proper Notice.

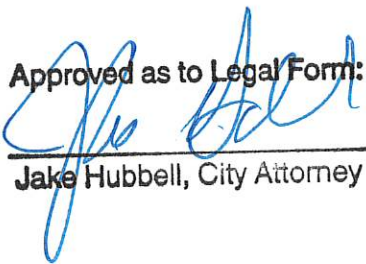
The content created pursuant to this agreement is a "work for hire" and is owned by client. Provider warrants that the content is created by the provider for client and provider has the legal right to use all images and content for the product being delivered.

The Wander Diary

Connor Ursin

Charles (Chaz) M. Molder Mayor

Approved as to Legal Form:


Jake Hubbell, City Attorney



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Tourism & Marketing Department -Kellye Murphy

AGENDA ITEM TITLE: 7.4 - APPROVE AND AUTHORIZE THE MAYOR TO SIGN A WORKORDER WITH SIMPLEVIEW IN THE AMOUNT OF \$1,200 ANNUALLY FOR THE XML DATA FEEDS THAT DISPLAY EVENTS & LISTINGS ON THE NEW, DIGITAL TOUCH SCREEN INFORMATION KIOSK IN THE WELCOME CENTER.

RECOMMENDATION: Approve.

INFORMATION: This agreement addresses the need for the Simpleview XML data feeds of the VisitColumbiaTn.com listings and events to be accessible through the new digital, touch screen kiosk being constructed for the Welcome Center. Visitors will now be able to explore the attractions and events on a large, touch screen kiosk to help plan their visit.

CERTIFICATION: The Chief Financial Officer certifies that \$1,200 is budgeted and unencumbered in Tourism Enhancement-General Fund - Software Maintenance.

ATTACHMENTS: Staff Report
Simpleview Agreement



Listing & Events XML Feeds

Date: 1/3/25

Customer Success Rep: Matt Pesek matt.pesek@granicus.com

Objective

Simpleview will create a Listings XML feed to transfer listings & events data.

Specifications

Following the specifications outlined below, Simpleview will:

- Create and maintain all data listing feeds
- Facilitate the maintenance of all data by constantly monitoring the feeds to ensure all data is transferring through correctly and all data is refreshed at regular intervals
- Monitor feeds regularly to determine how much they are being used, and to make certain they are not abused (only one third party vendor allowed per feed)
- Feeds are not customizable. (Cannot set up filters other than what is in the content syndication setup and cannot add or remove fields from feed). It is up to the web vendor to write code to display listings/events
- Be responsible for informing third party vendors of database updates and ensuring data is continuously feeding into the correct places

Cost Summary

The cost outlined below includes the project management fee, implementation and training. The quote is valid for thirty days. Any change or addition to the above scope of work will result in the creation of a new work order.

Data Feed	Data Type / Cost
1	Listings \$625/year
1	Events \$625/year
Total Cost	Annual Cost of \$1,250/year -\$50 professional discount \$1,200/year

**Please note a 30-day cancellation timeframe is required for feeds to be turned off.*

Moving Forward

In order for Simpleview to proceed with the project execution, we will need your signature accepting the project and budget.

Authorized Signature (required to begin work)

Today's Date

Printed Name

Organization

Approved as to Legal Form:

Jake Hubbell, City Attorney



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Lauryn Shockey, Administrative Assistant, LShockey@Columbiatn.gov, 931-560-1529

AGENDA ITEM TITLE: APPROVE AND AUTHORIZE MAYOR TO SIGN RENEWAL OF A "LICENSE AGREEMENT" WITH THE TENNESSEE DEPARTMENT OF TRANSPORTATION (TDOT) FOR A ROADSCAPES PROJECT LOCATED AT THE MEDIAN OF HIGHWAY 31 NEAR INTERSECTION OF DONALD F. EPHLIN PKWY - DEVELOPMENT SERVICES DEPARTMENT

RECOMMENDATION: Approve.

INFORMATION: Licensee, The City of Columbia, desires to renew its use of a portion of the Licensed Premises to operate and maintain a Roadscapes project, including landscaping and welcome signage in Maury County, TN. The project is along state-owned right-of-way and median which required the city to renew the License Agreement. The City of Columbia will be responsible for maintenance of landscaping and signage. The original 10-year Agreement was signed and approved in August of 2014, expiring in 2024. There is no cost associated with the renewal, the Agreement has a 10-year term and is renewable.

CERTIFICATION:

ATTACHMENTS: Staff Report Roadscapes Project Renewal, License Signature Request, License Agreement including Exhibit A.



**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

REGION 3 RIGHT OF WAY DIVISION
6601 CENTENNIAL BOULEVARD
NASHVILLE, TENNESSEE 37243-0360
(615) 350-4200

BUTCH ELEY
COMMISSIONER

BILL LEE
GOVERNOR

SENT BY EMAIL

1-14-2025

City of Columbia
Glenn Harper / City Engineer
700 North Garden St.
Columbia, TN. 38401
gharper@columbiatn.gov

Re: Lease / License Renewal Agreement

Request No. 6637
Project: F-006-2(6)
County: Maury
Tract: Multi
Requestor: City of Columbia

Please see the attached License Agreement and Exhibit A for Review.

You have 2 options for your signatures.

Option 1, print **2 legal size** copies, (printed on one side only), sign and mail to me for execution. One Original would be returned to you after the license agreement is executed.

Option 2, sign and return the document to me electronically. You will receive an executed PDF in return.

***Please date your signature but leave all other dates blank.**

Please let me know which option you choose.

If you choose to mail the 2 copies to me. Please use the below mailing address.

Mail to.
Tennessee Department of Transportation
Attention; Bird Armstrong
Region 3 Right of Way Division
6601 Centennial Blvd.
Nashville, TN. 37243

Thank you.

Jon "Bird" Armstrong TDOT/Region 3/Excess Land Office
(615) 350-4213
Jon.Armstrong@tn.gov

This Instrument prepared by:
State of Tennessee
Department of Transportation
Region 3
6601 Centennial Blvd.
Nashville, TN 37243
(Local Government)

Project No. FI-006-2(6)
Tract Nos. Multiple
Maury County
Request No. 6637

RENEWED LICENSE AGREEMENT

THIS AGREEMENT is made and entered into as of this the _____ day of _____, 20____ by and between the STATE OF TENNESSEE, acting by and through its Commissioner of Transportation (hereinafter referred to as "State") and the CITY OF COLUMBIA, TENNESSEE (hereinafter referred to as "Licensee").

WHEREAS, Licensee desires to renew its use of a portion of the Licensed Premises to install, operate, and maintain a Roadscapes project, including landscaping and signage in Maury County, Tennessee being more specifically described in Exhibit A being attached to and made a part of this License; and

WHEREAS, the State is willing to permit said renewed use of the Licensed Premises subject to certain conditions.

NOW, THEREFORE, in consideration of the execution of this License Agreement, it is mutually agreed between the parties hereto as follows:

1. **LICENSE** – Licensee is hereby granted permission to use the Licensed Premises to install, operate, and maintain a Roadscapes project, including landscaping and signage in Maury County, Tennessee (hereinafter referred to as the "Improvements").
2. **USE OF LICENSED PREMISES** – Licensee shall be permitted to use the Licensed Premises **for a public use purpose, subject to cancellation for failure to continue public use** for the operation of the Improvements. Licensee shall not be permitted to use the Licensed Premises for any other purpose except by prior written permission of the State. Licensee's use of the Licensed Premises is subject to any easements of record and to the right of any utility owner to operate and maintain any existing utility facilities within the Licensed Premises.
3. **FEE** – Licensee shall pay \$0 per year to the State for the use of the Licensed Premises.
4. **TERM** – The License is a 10-year, renewable license which shall begin on _____, 20____ and shall end on _____, 20____.
5. **ACCESS** – The State shall provide Licensee access to the Licensed Premises at all times for the uses authorized herein.
6. **MAINTENANCE** – The costs of any maintenance and operation of the Improvements shall be at the sole expense of Licensee;

7. **IMPROVEMENTS:**

A. Any improvement(s) made pursuant to this License Agreement by Licensee shall be subject to the prior written approval of the State. Any improvement(s) erected upon said Licensed Premises, whether erected before or after this License Agreement, must be properly maintained in such manner as to cause no interference with traffic and said improvement(s) and area within the right-of-way boundaries shall be kept free of refuse, trash or any other unsightly materials. If said improvement(s) and area are not so maintained in accordance with the standards set by the State, the State shall be notified, and such improvement(s) and area shall immediately be brought up to such standards by the Licensee upon being directed to do so by a representative of the State.

B. If Licensee proposes to construct any improvement over or under the roadway, Licensee shall submit detailed plans to the State for prior approval. If approved, Licensee shall construct and maintain the improvement in accordance with the approved plans and any additional standards established by the State, as set forth in Exhibit A hereto or as it may hereafter be amended. Whether an improvement has been erected before or after this License Agreement, Licensee shall inspect the improvement at least one (1) time during any consecutive twelve (12) month period of this License Agreement to determine if the improvement is structurally sound and maintained in accordance with the standards set by the State. The inspections shall be conducted by, or under the supervision of, a professional engineer licensed in the State of Tennessee and in a manner substantially similar to the inspection standards for bridges and tunnels established in 23 C.F.R. Part 650, as determined by the State. Licensee shall submit a copy of each inspection report to the State, and Licensee shall retain a copy of all inspection reports made during the term of this License Agreement. Licensee grants the State, and its contractors or agents, a right to enter to the Licensed Premises upon the State's request for the purpose of conducting an inspection of any improvement made pursuant to this License Agreement. Licensee shall promptly repair any structural or other deficiencies in the improvement identified in the Licensee's or the State's inspection. Any repair(s) made by Licensee are subject to approval by the State.

8. **TRAFFIC CONTROL** – At no time will work authorized by this License Agreement interfere with the normal flow of traffic on roadways adjoining the Licensed Premises. Licensee is responsible for providing traffic control for this work zone in accordance with the requirements of the current *Manual on Uniform Traffic Control Devices*. If proper traffic control is not in place, TDOT may order Licensee to stop work until proper traffic control is put in place.

9. **FIRE HAZARD** – The Licensed Premises shall not be used for the manufacture or storage of flammable material or for any other purpose deemed by the State or the Federal Highway Administration to be a potential fire hazard or other hazard to the highway. The determination as to whether or not a use constitutes such a hazard shall be in the sole discretion of the State or the Federal Highway Administration. The operation and maintenance of said property will be subject to regulation by the State to protect against fire or other hazard which could impair the use, safety or appearance of the highway. Licensee shall provide access, at all times, for firefighters and accompanying equipment.

10. **DAMAGE TO STATE PROPERTY** – Licensee shall be liable for any damage to state property resulting from Licensee's use of the Licensed Premises and/or installation and operation of the Improvements, including but not limited to, the roadway, shoulders, guardrail, drainage, landscaping, signs and controlled-access fences. All repair or replacement of such damage shall be made in accordance with the current TDOT Standard Specifications for Road and Bridge Construction, TDOT Standard Drawings and any other applicable design and/or construction standards or guidelines.

11. **LIABILITY** – Licensee shall assume all liability for claims arising out of conduct on the part of the Licensee for which it would be liable under the Tennessee Governmental Tort Liability Act, Tenn. Code Ann. § 29-20-101, *et seq.*, up to the limits for which it can be held liable for such conduct under that act, arising from its use of the Licensed Premises. In addition, Licensee shall require that any contractor of Licensee that performs any work on the Licensed Premises, including any installation, maintenance, or operation of the Improvements, shall indemnify and hold harmless the State and all of its officers, agents and employees from all suits, actions or claims of any character arising from the contractor's acts or omissions in the prosecution of the work.
12. **INSURANCE** – The Licensee, its successors and assigns, agrees to maintain adequate public liability insurance, which may include self-insurance, and will provide satisfactory evidence of such insurance to the State. Further, the liability limits of this insurance must not be less than the exposure and limits of the Licensee's liability under the Tennessee Governmental Tort Liability Act, Tenn. Code Ann. § 29-20-101, *et seq.* The insurance policy shall include a provision for the insurance company to notify the State in writing of any cancellation or changes of the policy at least 30 days in advance of the cancellation or change. In addition, Licensee shall require that any contractor of Licensee that performs any work on the Licensed Premises, including any installation, maintenance, or operation of the Improvements, shall provide proof of adequate and appropriate general liability insurance providing liability coverage in an amount not less than \$1 million dollars per occurrence and \$300,000 per claimant, naming the State of Tennessee as an additional insured.
13. **PERMITS** – Licensee is responsible for obtaining and paying the costs of all permits, licenses or other approvals by any regulatory body having jurisdiction over the uses authorized herein. Prior to commencing the work authorized herein, Licensee shall notify Tennessee One Call regarding any excavation(s) and shall ensure that the provisions of Tenn. Code Ann. § 65-31-101 *et seq.* are met.
14. **COMPLIANCE** – All work on the Licensed Premises shall be performed in compliance with current TDOT Landscape Design Guidelines and TDOT Standard Drawings in addition to applicable federal, state and local laws and regulations. Should Licensee fail or neglect to comply with any term or condition of this License Agreement or to comply with written notice and demand, this License shall be subject to termination. In the event of such termination, Licensee shall immediately remove any and all of its Improvements from the Licensed Premises and surrender all rights and privileges under this License Agreement; otherwise, on written notification by the State, the Improvements will be removed and said Licensed Premises restored to its former condition in a timely manner at the expense of the Licensee.
15. **TITLE VI ASSURANCES** – The Licensee for itself, its successors in interest and assigns, as part of the consideration hereof does hereby covenant and agree that in the event facilities are constructed, maintained, or otherwise operated on the property described in this License Agreement for a purpose for which the State or a State program or activity is extended or for another purpose involving the provision of similar services or benefits, the Licensee shall maintain and operate such facilities and services in compliance with all other requirements imposed pursuant to Title 49, Code of Federal Regulations, Part 21, Nondiscrimination in Federally Assisted Programs of the Department of Transportation – Effectuation of Title VI of the Civil Rights Act of 1964, and as said regulations shall be amended.
16. **AMERICANS WITH DISABILITIES ACT ASSURANCES** – The Licensee for itself, its successors in interest and assigns, as part of the consideration hereof does hereby covenant and agree that in the event facilities are constructed,

maintained, or otherwise operated on the property described in this License Agreement for a purpose for which the State or a State program or activity is extended or for another purpose involving the provision of similar services or benefits, the Licensee shall maintain and operate such facilities and services in compliance with all other requirements imposed pursuant to Title 28, Code of Federal Regulations, Parts 35 and 36, Nondiscrimination on the Basis of Disability in State and Local Government Services and Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities, and as said regulations shall be amended. The Licensee further agrees that if any pedestrian facilities are constructed, maintained, or operated on the property described in this License Agreement, the Licensee shall construct, maintain, and operate such facilities in compliance with the Architectural and Transportation Barriers Compliance Board's "Accessibility Guidelines for Pedestrian Facilities in Public Rights-of-Way" (36 C.F.R. Part 1190; published in the Federal Register, August 8, 2023).

17. **REVERSION** – In the event that the Licensed Premises is needed for a transportation project, Licensee shall remove any and all of its Improvements from the Licensed Premises and surrender all rights and privileges under this License Agreement within 60 days of receiving written notice from the State. In the event that the Licensed Premises is needed for a highway maintenance project, the use of the Licensed Premises will cease temporarily until the maintenance project is completed. In the event that a utility owner needs to maintain an existing utility facility, the Licensee's use of the Licensed Premises may cease or be impaired until the utility maintenance activity is completed.
18. **ADJACENT PROPERTY** – Licensee states and affirms that the Improvements constructed and maintained on the Licensed Premises are not relevant to any adjacent property's activities, features, or attributes that qualify the adjacent property for protection under Section 4(f) of the Department of Transportation Act of 1966 (Pub. L. 89—670, 80 Stat. 931) now codified at 23 U.S.C. § 138, 49 U.S.C. § 303, and 23 C.F.R. Part 774 (hereinafter referred to as "Section 4(f)"). Therefore, neither the act of reversion nor termination of this Agreement, nor any transportation related activities occurring on the Licensed Premises (including, but not limited to, maintenance activities, construction activities, etc.), would result in a substantial impairment to the activities, features, or attributes that may qualify Licensee's adjacent or nearby property for protection under Section 4(f).
19. **NO PERMANENT OWNERSHIP** – Licensee does not currently possess, nor through this License Agreement acquire, permanent ownership or control over the Licensed Premises.
20. **TERMINATION** – The State may terminate this License Agreement at will with 60 days written notice to Licensee.
21. **ASSIGNMENT** – The License shall not be transferred, conveyed or assigned to another party without prior written approval from the State.

TO THE LICENSEE:

City of Columbia, Tennessee
Glenn Harper, P.E.
700 North Garden Street
Columbia, TN 38401

TO THE STATE:

Department of Transportation
Brian Dickerson, Excess Land Office
James K. Polk Bldg., 6th Floor
505 Deaderick Street
Nashville, Tennessee 37243

License Agreement
Request No. 6637

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be
executed the day and year first above written.

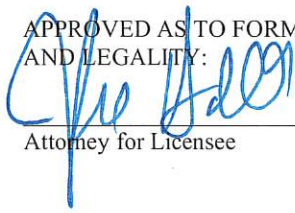
LICENSEE:

CITY OF COLUMBIA, TENNESSEE

Mayor Chaz Molder

DATE: _____

APPROVED AS TO FORM
AND LEGALITY:



Attorney for Licensee

DATE: 1/31/25

STATE OF TENNESSEE

Howard H. Eley
Deputy Governor and Commissioner
Tennessee Department of Transportation

DATE: _____

APPROVED AS TO FORM
AND LEGALITY:

Leslie South, General Counsel
Tennessee Department of Transportation

DATE: _____

INDEX OF SHEETS

SHEETS	DESCRIPTION
1	COVER AND KEY PLAN
2	ENLARGEMENT AREA I
3	ENLARGEMENT AREA II
4	DETAIL SHEET

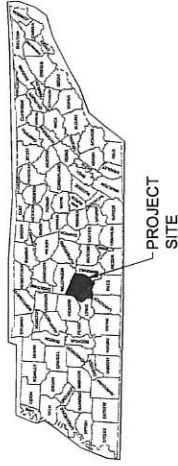
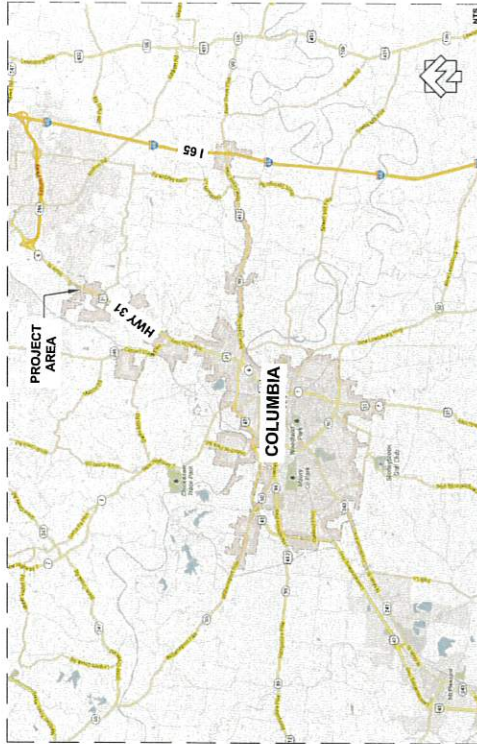
Special Note

Proposals may be rejected by the city if any of the unit prices contained therein are either excessive or below the reasonable cost analysis value.

CITY OF COLUMBIA
MAURY COUNTY

LOCALLY MANAGED PROJECT

TYPE	YEAR	PROJECT NO.	SHEET NO.
STATE #	13	60LPLM-F3-017	0
FEDERAL #	13	STP-EN-9302(18)	0



NOTE:
THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED MARCH 1, 2008 AND ADDITIONAL SPECIFICATIONS AND NOTES CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

PREPARED BY: LOBE & ASSOCIATES, INC.

PROJECT NO. 60LPLM-F3-017

TDOT PIN: 105525.48

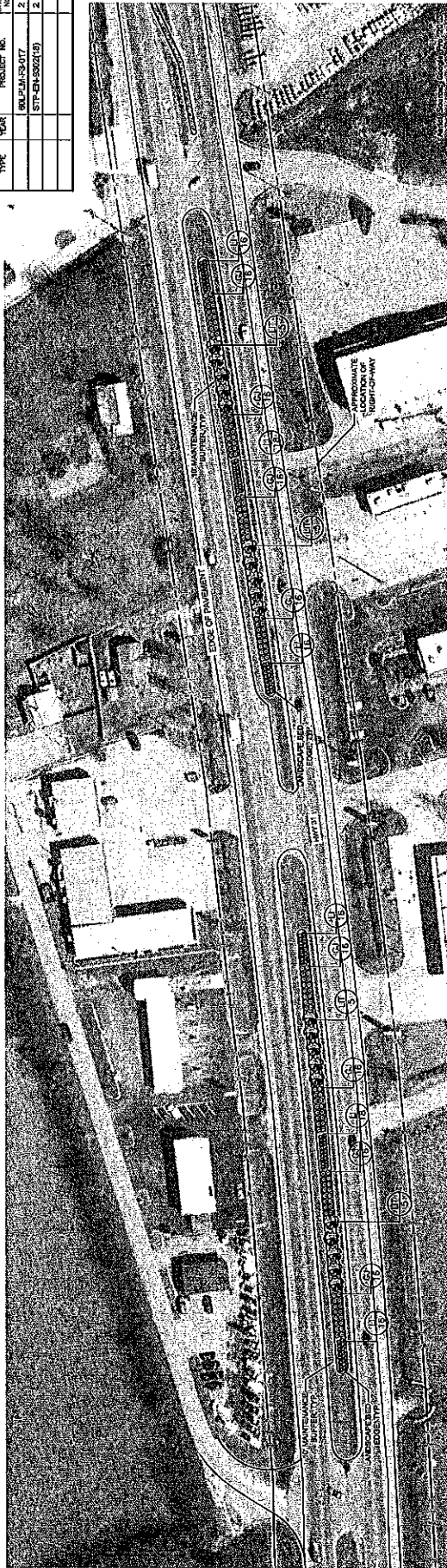
TDOT PIN# 105525.48



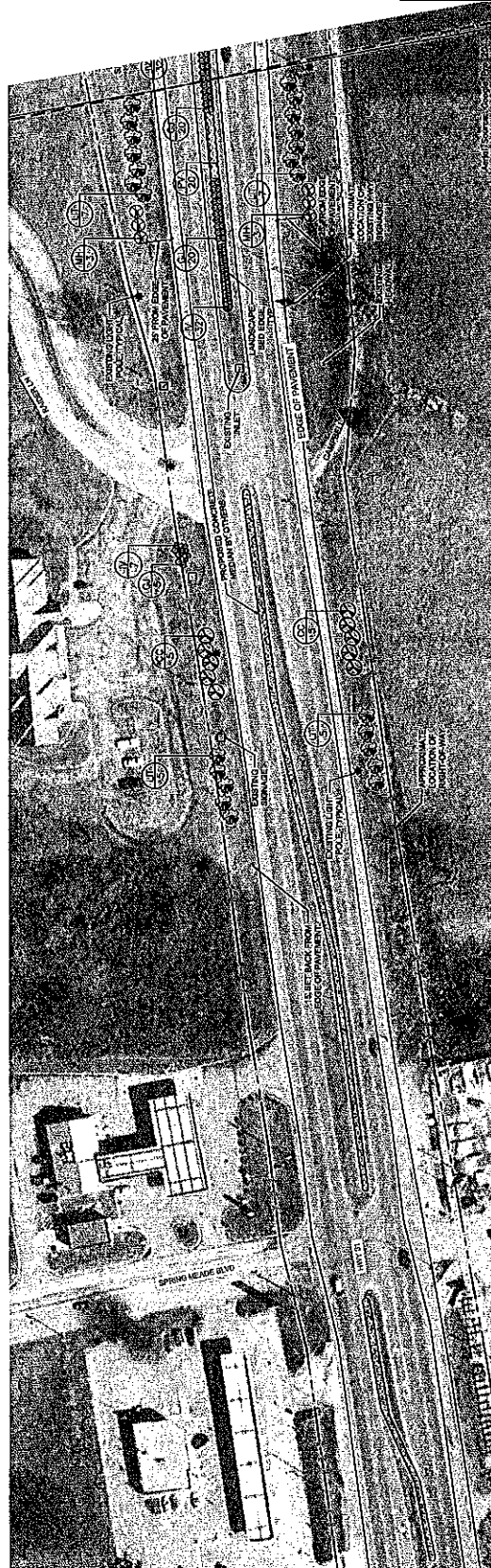
March 13, 2014

SHEET 1
Cover
Columbia, TN

TYPE	YEAR	PROJECT NO.	SHEET NO.
		801-11-3417	2
		STP-EN-002(16)	2



A AREA "A" PLANTING PLAN ENLARGEMENT



B AREA "B" PLANTING PLAN ENLARGEMENT

8/17/14 801-11-3417
FILED # STP-EN-002(16)
DOT PIN# 105525-48



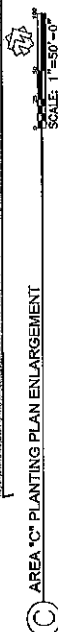
TEENNESSEE ONE-CALL SYSTEM
800-251-1111
1-800-251-1111



March 18, 2014

SHEET 2
ENLARGEMENT
AREA 1
Columbia, TN

DOT PIN# 105525-48

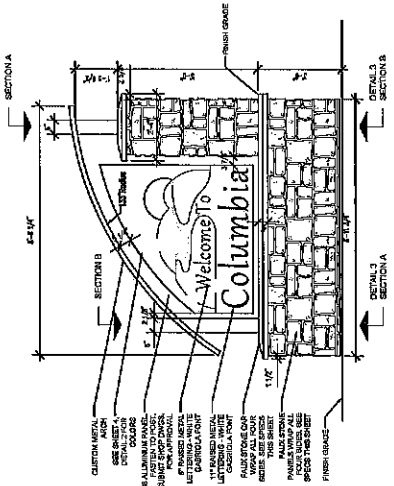
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**TENNESSEE ONE-CALL SYSTEM
BEFORE YOU DIG CALL
1-800-351-1111**

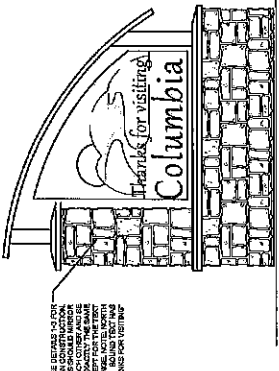


March 13, 2014

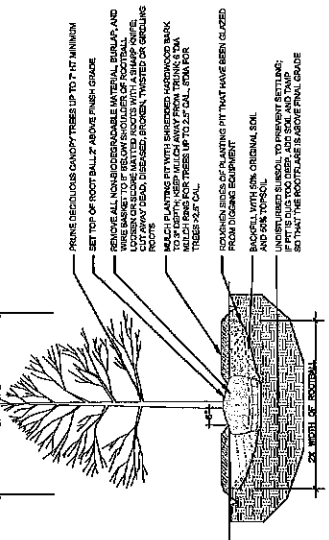
SHEET 3
ENLARGEMENT
AREA II
Columbia, TN



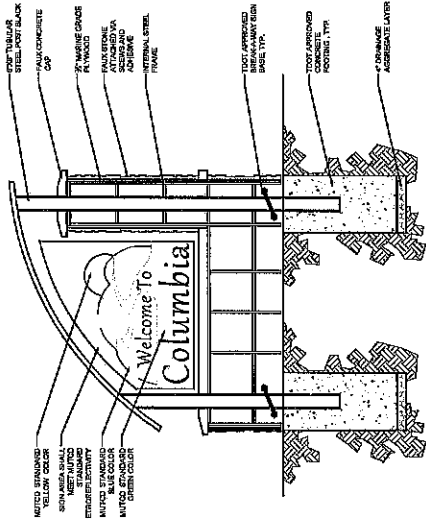
1 MONUMENT SIGN - SOUTH BOUND $1'' = 2'-0''$



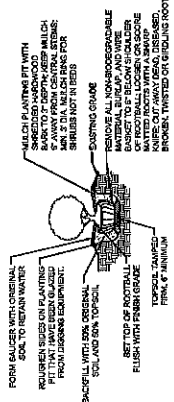
④ MONUMENT SIGN - NORTH BOUND



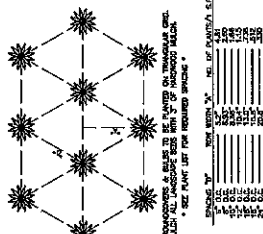
⑥ DECIDUOUS TREE PLANTING DETAIL



② MONUMENT SIGN SECTION DETAIL

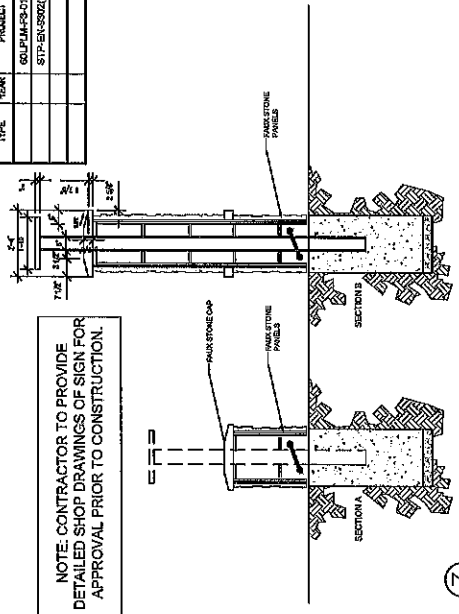


5 SHRUB PLANTING DETAIL



7 GROUND COVER SPACING

**NOTE: CONTRACTOR TO PROVIDE
DETAILED SHOP DRAWINGS OF SIGN FOR
APPROVAL PRIOR TO CONSTRUCTION.**



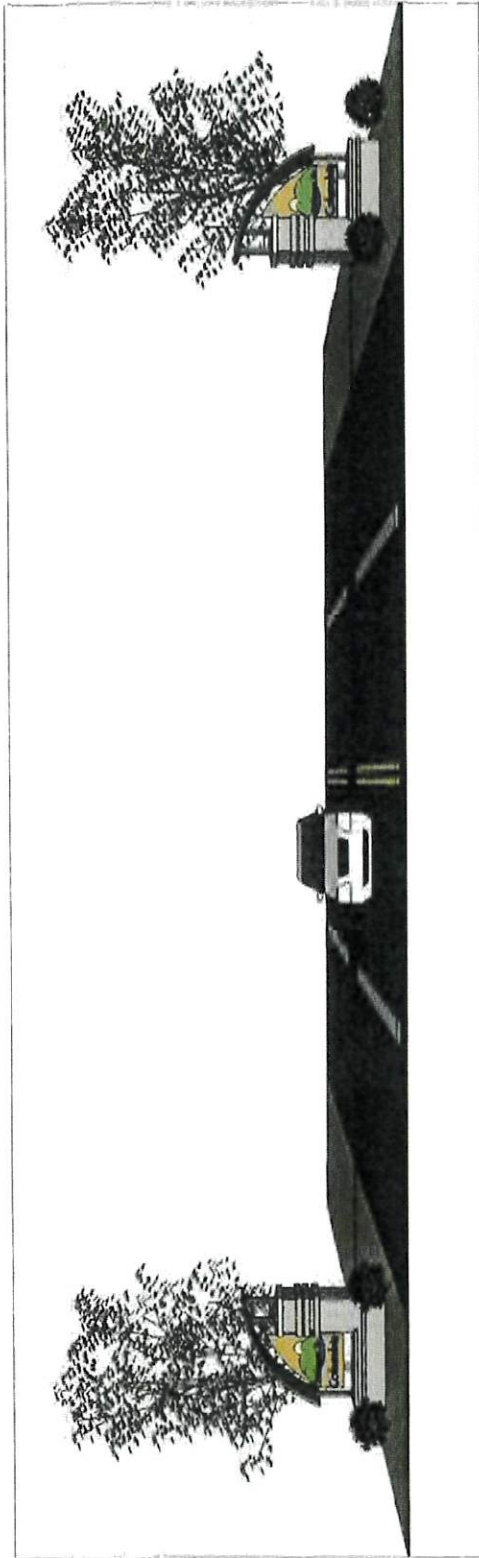
③ $1^n = 2 \cdot 0^n$

FAUX PANEL AND CAP SPECIFICATIONS

1. ISSUANCE CONSTRUCTION TO MEET TOOT CONSTRUCTION REQUIREMENTS PER SECTION 11.4.04 OF THE 2007 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. SEE DETAIL FOR FOOT STYLE. CONTRACTOR TO PROVIDE CONSTRUCTION IN SHIP DOWNWARDS FOR MEET PRIOR TO CONSTRUCTION.
3. SIGN FACE AND LETTERING TO BE SEE DETAIL AND MEET MINIMUM LEVELS AS REQUIRED BY TOOT FOR ROADWAY BRIDGE.
4. POSTS AND FRAME TO BE PRIMED AND PAINTED BLACK AND FINISHED WITH 2 COATS OF 100% SOLIDS NON-AROMATIC PAINT SYSTEM FOR STEEL STRUCTURE.
5. ALL SUBSTITUTIONS CONFORM TO THE REQUIREMENTS OF SPECIFICATION 602.19.
6. ALL EXPONDS DESIRED TO BE SMOOTH. ALL EXPONDED SHEET METAL DESIRED TO BE ROLLED FOR SAFETY.

UNIVERSITY OF CALIFORNIA, BERKELEY			
UNIVERSITY INDUSTRIAL INFORMATION			
Physical Properties	Year Published	Source	
Boiling Point (°C)	100.0 at 1 atm	100.0	100.0
Melting Point (°C)	10.0 at 1 atm	10.0	10.0
Density (g/cm³)	0.80 at 20°C	0.80	0.80
Refractive Index (n _D ²⁰)	1.37 at 20°C	1.37	1.37
Viscosity (cP)	0.3 at 20°C	0.3	0.3
Heat of Vaporization (kJ/mol)	30.0 at 100°C	30.0	30.0
Heat of Fusion (kJ/mol)	5.0 at 10°C	5.0	5.0
Specific Heat (J/g·°C)	1.8 at 25°C	1.8	1.8
Thermal Stability	Stable up to 200°C	Stable	Stable
Flammability	Flammable	Flammable	Flammable
Corrosivity	Corrosive to metals	Corrosive	Corrosive
Environmental Impact	Biodegradable	Biodegradable	Biodegradable
Regulatory Status	Not regulated	Not regulated	Not regulated
Other Properties	Other properties as reported	Other properties	Other properties
Notes	Notes	Notes	Notes
References	References	References	References
1. Smith, J. D. "Properties of Water." <i>Journal of Chemical Engineering</i> , 1980, 15, 1-10.	1. Smith, J. D. "Properties of Water." <i>Journal of Chemical Engineering</i> , 1980, 15, 1-10.	1. Smith, J. D. "Properties of Water." <i>Journal of Chemical Engineering</i> , 1980, 15, 1-10.	1. Smith, J. D. "Properties of Water." <i>Journal of Chemical Engineering</i> , 1980, 15, 1-10.
2. Jones, A. B. "Thermodynamic Data for Water." <i>Thermodynamic Data Series</i> , 1975, 1, 1-10.	2. Jones, A. B. "Thermodynamic Data for Water." <i>Thermodynamic Data Series</i> , 1975, 1, 1-10.	2. Jones, A. B. "Thermodynamic Data for Water." <i>Thermodynamic Data Series</i> , 1975, 1, 1-10.	2. Jones, A. B. "Thermodynamic Data for Water." <i>Thermodynamic Data Series</i> , 1975, 1, 1-10.
3. Brown, C. E. "Physical Properties of Water." <i>Physical Properties of Water</i> , 1970, 1, 1-10.	3. Brown, C. E. "Physical Properties of Water." <i>Physical Properties of Water</i> , 1970, 1, 1-10.	3. Brown, C. E. "Physical Properties of Water." <i>Physical Properties of Water</i> , 1970, 1, 1-10.	3. Brown, C. E. "Physical Properties of Water." <i>Physical Properties of Water</i> , 1970, 1, 1-10.
4. White, R. L. "Environmental Impact of Water." <i>Environmental Impact of Water</i> , 1975, 1, 1-10.	4. White, R. L. "Environmental Impact of Water." <i>Environmental Impact of Water</i> , 1975, 1, 1-10.	4. White, R. L. "Environmental Impact of Water." <i>Environmental Impact of Water</i> , 1975, 1, 1-10.	4. White, R. L. "Environmental Impact of Water." <i>Environmental Impact of Water</i> , 1975, 1, 1-10.
5. Black, D. M. "Regulatory Status of Water." <i>Regulatory Status of Water</i> , 1980, 1, 1-10.	5. Black, D. M. "Regulatory Status of Water." <i>Regulatory Status of Water</i> , 1980, 1, 1-10.	5. Black, D. M. "Regulatory Status of Water." <i>Regulatory Status of Water</i> , 1980, 1, 1-10.	5. Black, D. M. "Regulatory Status of Water." <i>Regulatory Status of Water</i> , 1980, 1, 1-10.

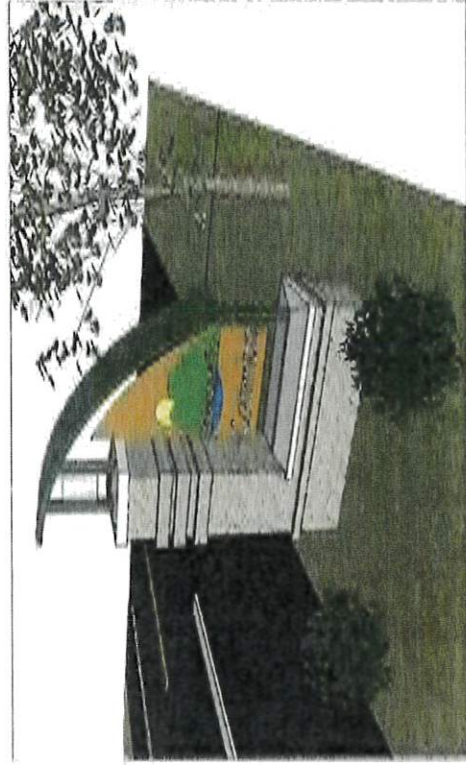
Signage Plan



The gateway signage is intended to front both sides of the road, at a safe distance from the edge of pavement, within Highway 412's right-of-way. The expected location of the signage is indicated within the Landscape Plan.



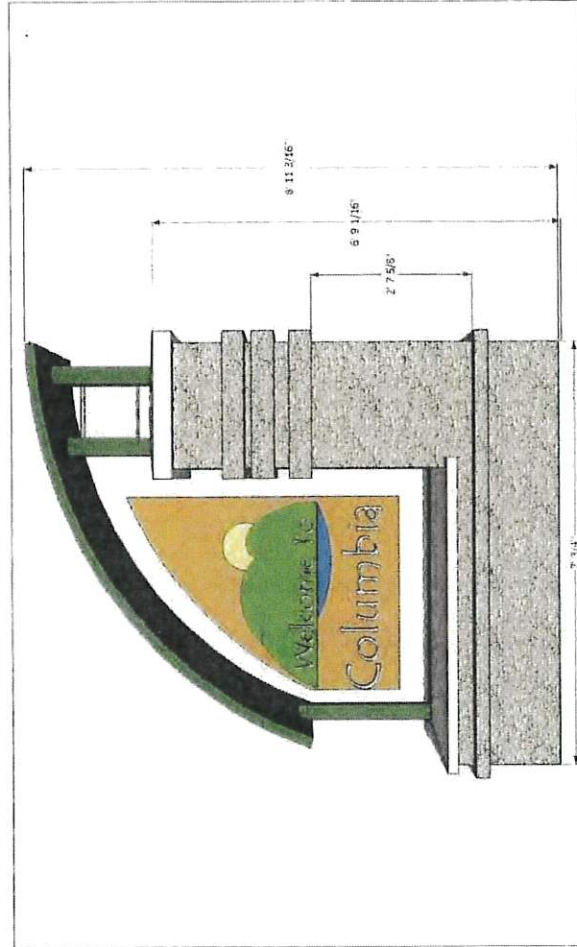
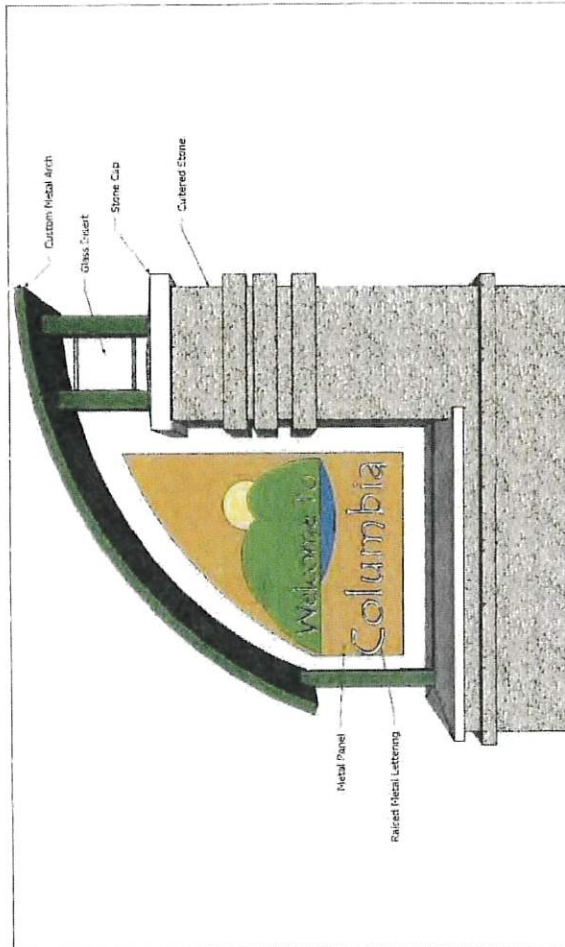
Signage will include ground-based lighting to help illuminate during the night.



The signage will also include landscaping to help frame the entrance.

Gateway Signage Continued...

Materials for the signs are chosen on the basis of durability and quality. Materials include culture stone, metal, and glass. The metal panel bearing the City Logo and message will be bracketed to the stone but will maintain a "floating" appearance.



The structure's height is approximately nine feet at peak with the pedestal reaching 6' 10". The structure's width is roughly 7' for a total base square footage of 63 square feet.



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Jill Carlson, Sr. Administrative Assistant, jcarlson@columbiatn.gov 931-560-1451

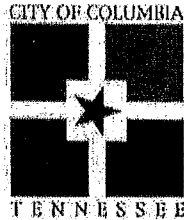
AGENDA ITEM TITLE: Approve and authorize the Mayor to sign the non-exclusive use and occupancy permit between the City of Columbia and the Columbia Little League for the 2025 season - Ward 4

RECOMMENDATION: Approve.

INFORMATION: The Columbia American Little League is requesting an annual Non-Exclusive Use Permit with the City of Columbia to use Buck Davis Field at Eva Gilbert Park for their practices and games for the 2025 season. Once approved, the permit will cover their annual facility needs.

CERTIFICATION: N/A

ATTACHMENTS: Staff Report, Columbia American Little League Non-Exclusive Use and Occupancy Permit w/insurance.



Parks and Recreation Department

NON-EXCLUSIVE
USE AND OCCUPANCY PERMIT
2025

This permit is executed by and between the City of Columbia, hereinafter called "City", and Columbia American Little League, whose address is 8497 Lawrenceburg Hwy, Mt. Pleasant, TN 38474, hereinafter called "Permittee".

WHEREAS, the City desires to provide facilities to its citizens, and non-commercial local societies, clubs and organizations engaged in civic, social, educational, cultural, recreational or philanthropic work or activities.

WHEREAS, the Permittee is such an organization and, in the promotion and sponsorship of such activities, generates revenues from voluntary contributions, special events, membership dues, fees and charges, and fund-raising projects.

NOW, THEREFORE, it is mutually agreed by and between the City and Permittee as follows:

1. PREMISES
City does hereby grant to Permittee a Non-Exclusive Use Permit for the use and occupancy of those certain premises described as, Eva Gilbert Park - Baseball Field, hereinafter called "Premises."
2. TERM
The term of this permit shall begin on February 13, 2025 and shall terminate on February 12, 2026 unless sooner terminated as specified herein.
3. PURPOSE
The premises specified in this permit shall be used only for the purposes of developing, operating and maintaining a sports field complex in accordance with Permittee's league franchise(s) and for no other purpose other than provided herein.
4. PUBLIC USE
The general public shall not be excluded from these premises or any portion thereof. Permittee shall open premises to the public in accordance with the schedule approved by the Parks and Recreation Department Director or designated representative. Whenever the facility is not in use and it is reasonably practical, Permittee shall allow other organizations to utilize the premises for activities; provided said organizations have prior authorization by the Parks and Recreation Department Director or designated representative.

5. FEES

- A. Permittee shall pay the City a user fee of \$0.00 per use of the facilities.
- B. Any additional monetary or other contributions from the Permittee above the stated fees are appreciated.
- C. Permittee shall have the right to charge participants a reasonable fee designed to cover maintenance and program operation. Said fees will be subject to prior written approval of the Parks and Recreation Department Director or designated representative. Excessive fees or charges, which will have the effect of precluding low and moderate-income persons from using the site, shall not be permitted. All funds collected by the Permittee from the operation of the premises shall be used for the development, maintenance and program operation on the premises.

6. BY-LAWS

Membership in Permittee's organization shall be open to anyone meeting the requirements of its rules and by-laws. Permittee will not discriminate against a member because of age, race, color, religion, physical handicap, ancestry, sex or national origin. All restrictions, rules, and by-laws, if any, and changes thereto proposed by Permittee's organization shall require prior written approval from the Parks and Recreation Department Director or designated representative. A current copy of by-laws shall be on file in the Parks and Recreation Department office.

7. MAINTENANCE

Permittee shall assist in Premises maintenance by following means:

- A. Permittee shall, at its sole cost and expense, provide for all turf management and routine maintenance to include, but not to be limited to: litter pick up, restroom cleaning, fertilizing, watering, mowing, weeding, and dragging and lining of fields.
- B. Permittee shall provide all maintenance of improvements and structures installed by Permittee. The premises shall remain in a safe, clean, and sanitary condition acceptable to the Parks and Recreation Department Director, or designated representative.
- C. City shall provide routine, non-routine and major maintenance for all grounds and facilities, other than improvements and structures installed by Permittee to include but not to be limited to: the repair of water and sewer lines, roadways and parking lots, and drainage systems.

8. IMPROVEMENTS/DEVELOPMENT

Permittee shall not make any improvements, changes or alterations or cause same to be made to the premises, without written authorization and approval from the Parks and Recreation Department Director or designated representative. All improvements shall be at no cost to City.

9. REMOVAL OF IMPROVEMENTS

City agrees that all fixtures and improvements installed by Permittee in accordance with the provisions herein provided, and not being a replacement or repair of or for any improvement or improvements now existing and belonging to City, shall be and remain the property of Permittee. Permittee shall have the right to remove at Permittee's own expense said fixtures and improvements prior to the automatic termination of this agreement or within fifteen (15) days after such earlier termination; provided that any damage to City's property or improvements shall be repaired and the premises left in as good order and condition as when Permittee took possession of the premises. In the event Permittee does not so remove said fixtures and improvements within the above specified time, the City may remove, or sell, or destroy the same at the expense of Permittee, and Permittee shall pay to City the reasonable cost of any such removal, sale or destruction together with the reasonable cost of repair of damages to City's property or improvements resulting from such removal, sale or destruction. At the option of the City, any property, real or personal, not so removed by Permittee may be deemed abandoned.

10. OPERATION

All recreational programs, events, and activities sponsored by Permittee at said premises shall be at the sole cost and expense of Permittee and shall be approved by the Parks and Recreation Department Director, or designated representative, at least two weeks prior to the activity.

11. INDEMNITY

Permittee agrees to indemnify and save the City of Columbia and its agents and employees harmless from any and all liability, claims, damages or injuries to any person, including injury to Permittee or any of Permittee's employees, representatives, agents, guests, licensees, patrons or of any other person whomsoever, and all expenses of investigating and defending against same:

- A. Arising from or alleged to have arisen from or connected with the use of or operations on the permit premises; or
- B. Caused or claimed to be caused by the independent acts of Permittee, Permittee's agents or employees, or the concurrent acts of the Permittee, the City or their agents or employees.

12. CONCESSION RIGHTS: (LEAGUE PLAY)

Permittee shall have the right to operate a concession stand for the sale of confections, soft drinks, gum and other food products which are prepared and served in accordance with City of Columbia regulations, during league events; PROVIDED, HOWEVER, that all profits there from shall be used by the Permittee for improvements, operation and maintenance of the premises.

Permittee shall also have the right to sell, at its discretion, T-shirts, helmet customization and other items as long as such items are directly related to the sport of Babe Ruth Baseball and promote the league and its ideals of sportsmanship and fair play. All concessions sales and profits shall be used by the Permittee for improvements, operation and maintenance of the premises and other budget items necessary for league operations.

The Permittee shall be solely responsible for any thefts, vandalism, loss or damages to any concession goods that may be stored in the concession stand.

13. ADVERTISING

Permittee shall not place or cause to be placed upon the premises any billboards, banners, posters, or any other media advertising products or services, without the approval of Columbia Parks & Recreation Department. Signs of any nature installed on said premises must be first authorized and approved by City. This provision does not include uniforms as provided by team sponsors.

14. POSSESSOR INTEREST AND TAXES

This permit may create a taxable possessor interest in Permittee; therefore, as further consideration for the execution of this permit, Permittee agrees to pay and discharge before delinquency, all taxes and assessments, which may be levied against said premises by reason of any interest of Permittee during, said term.

15. NON-EXCLUSIVE OCCUPANCY

It is specifically understood and agreed that Permittee's use hereunder shall be non-exclusive and shall not result in any proprietary rights. City reserves, and shall always have the right to enter said premises for the purpose of viewing and ascertaining the condition thereof, or to protect its interest in the premises or to inspect the operations.

16. COMPLIANCE WITH THE LAW

Permittee shall, at its sole cost and expense, comply with all the requirements of all Municipal, State and Federal authorities now in effect or which may be in effect which pertain to the permit premises or any operations of the Permittee conducted thereon.

17. INSURANCE

On or before the execution date of this Permit by the City, Permittee shall submit to City an Insurance policy or Certificate of Insurance evidencing that Permittee has obtained from a generally recognized insurer, insurance in the following form and minimum amounts specified.

Comprehensive General Liability Insurance of:

- | | | |
|----|-------------|---------------------------------|
| A. | \$2,000,000 | Bodily Injury - per person |
| B. | \$2,000,000 | Bodily Injury - Each Occurrence |
| C. | \$ 250,000 | Property Damage |

The Policy shall name the City of Columbia as additional insured. The Policy of Insurance shall contain the following clauses:

"It is agreed that the Policy shall not be cancelled nor the coverage reduced until thirty (30) days after the Parks and Recreation Department Director of the City of Columbia, shall have received written notice of such cancellation or reduction. The notice shall be deemed effective the date delivered to said Director, as evidenced by properly validated return receipt."

"The insured waives any right of subrogation against City of Columbia which might arise by reason of any payment under this Policy."

The City reserves the right to re-evaluate the amount and type of insurance required during the term of this permit. Permittee shall provide the amount and type of insurance as required by the Parks and Recreation Department Director within thirty (30) days after Permittee shall have received written notice of such requirement.

18. EQUAL OPPORTUNITY

Permittee will not discriminate against any employee or applicant for employment because of age, race, color, religion, physical handicap, ancestry, sex or national origin. This provision shall include, but is not limited to, the following: Employment, upgrading, demotion, transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training including apprenticeship.

19. NON-DISCRIMINATION

Permittee, in the operations to be conducted pursuant to the provisions of this permit and otherwise in the use of the facility, will not discriminate or permit discrimination against any person or class of persons by reason of race, color, creed or national origin, sex, age, handicap, or marital status in any manner.

20. DRUG AND ALCOHOL POLICY

In accordance with City of Columbia Substance Abuse Policy (Change 1) dated November 1, 1993, neither Permittee nor its employees, consultants agents or contractors while in any way using the permitted property, shall be in any way impaired because of being under the influence of alcohol or a drug, shall possess an open container of alcohol or consume alcohol or possess or be under the influence of an illegal drug, or shall sell, offer or provide alcohol or a drug to another person.

21. UTILITIES AND SERVICES

The City shall provide all utilities and services on the Baseball Field.

22. AMENDMENT TO PERMIT

This Permit fully expresses all understanding of the parties to this Permit and no verbal understanding of the parties, their officers, employees or agents shall be valid unless made in the form of a written amendment to this Permit and duly approved and executed by Permittee and Parks and Recreation Department Director.

23. PARTIAL INVALIDITY

If any provision of this Permit or the application thereof to any person or circumstances shall to any extent, be invalid or unenforceable, the remainder of this Permit, or the application of such provision to persons or circumstances other than those as to which it is invalid or unenforceable, shall not be affected thereby, and each provision of this Permit shall be valid and be enforced to the fullest extent permitted by law.

24. GOVERNING LAW

This Permit shall in every respect be binding upon the parties hereto and their respective successors and assigns. The laws of the State of Tennessee shall govern this Permit.

25. PROVISIONS REQUIRED BY LAW

Each and every provision of law and clause required by law to be inserted in this Permit shall be deemed to be inserted herein and the Permit shall be read and enforced as though it were included herein, and if for any reason any such provision is not inserted, or is not correctly stated, then upon application of either party the Permit shall forthwith be physically amended to make such insertion or correction.

26. NOTICE

Any notices required or permitted to be given pursuant to this Permit may be personally served on the other party by the party giving such notice, or may be served by certified mail, return receipt requested, to the following address:

PERMITTEE

Columbia American Little League
Chase Dale, President
8497 Lawrenceburg Hwy
Mt Pleasant, TN 38474
Phone: (931) 638-9293

CITY

Columbia Parks & Recreation Department
c/o Mackel Reagan, Director
821 West 9th Street
Columbia, TN 38401
Phone: (931) 388-8119

27. SPECIAL PROVISIONS

In the event there is any conflict between the following special provisions and any other provisions of this permit, the special provisions shall govern. The special provisions are as follows:

- The permittee shall provide proof of insurance and a copy of previous year / season financial records to the Parks and Recreation Department to be submitted with the agenda packet for council approval.
- Permittee must also provide a copy of the league rules and by-laws when returning this document to Columbia Parks & Recreation Department. A copy of the weekly game schedule must be provided when it is completed.
- The Permittee shall not commence practice sessions or games at premises until contract terms are approved by Council and signed by all parties as required.
- The Permittee agrees to turn off all lights in concession area, press boxes, and restrooms at the conclusion of each practice and game.
- Permittee shall not sublet, transfer, or assign the fields to any other organizations or groups outside of Permittee for any reason.
- All organizations and groups outside of Permittee must have written permission from the Parks & Recreation Director or his Designee prior to use of fields.
- The Parks & Recreation Director or his Designee will coordinate efforts with the Permittee to confirm field availability prior to approving other organizations usage of the facilities during the term of this agreement.
- Permittee shall have the right to charge a fee for groups or individuals to provide clinics, teachings, or instructional classes for league participants. All funds collected by Permittee shall be used for premises development, maintenance, and program operation.
- The parties agree to attempt to execute any renewal of this agreement with such revisions as necessary within 30 days of the expiration date on this agreement.

28. TERMINATION

- A. FOR CAUSE: The Parks and Recreation Department Director, by giving written notification specifying an effective date, not less than five (5) days after the date of written notification, may terminate this Permit on behalf of the City, in whole or part, for cause which shall include:
- 1.) Failure for any reason of Permittee to fulfill its obligations under this Permit in a timely manner acceptable to the Parks and Recreation Department Director, including non-compliance with other City directives, Federal, State and local statutes, rules, laws, regulations or directives non-applicable or as may become applicable.
 - 2.) Any ineffective or improper use of the site by Permittee, its employees, agents, subcontractors, guests, or any person or group under Permittee's responsibility.
 - 3.) Any conduct on the site by Permittee, its employees, agents or subcontractors unacceptable to the Parks and Recreation Department Director.
- B. FOR CONVENIENCE: Either City or Permittee may seek termination of this Permit upon thirty (30) days written notice to the other party.

PERMITTEE

By 
Chase Dale, President
Columbia American Little League
Date 1-22-25

Legal Form Approved:


Jake Hubbell,
City Attorney
Date: 1/31/25

CITY OF COLUMBIA

By _____
Mackel Reagan, Director
Parks & Recreation
Date _____

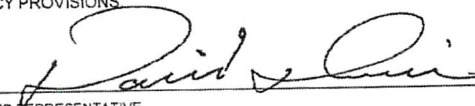
By _____
Charles (Chaz) M. Molder,
Mayor
Date _____

By _____
Thad H. Jablonski
City Recorder
Date _____

Title VI Policy

City of Columbia, Tennessee

It is the policy of the City of Columbia to ensure that no citizen shall, on the grounds of race, color or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.

CERTIFICATE OF INSURANCE						DATE (MM/DD/YY) 11/28/24	
PRODUCER Keystone Risk Managers, LLC 1995 Point Township Drive Northumberland, PA 17867				CERTIFICATE #: 3420301-2025-1		3 42 08	
				INSURERS AFFORDING COVERAGE:			
ADDITIONAL NAMED INSURED: COLUMBIA AMERICAN LL 8497 Lawrenceburg highway Mt Pleasant, TN 38474				INSURER A: Interstate Fire & Casualty Company			
				INSURER B: National Union Fire Insurance Company of Pittsburgh, PA (Non-Liability)			
				INSURER C: AIG Specialty Insurance Company			
				INSURER D: Markel American Insurance Company			
THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN. THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. * SUBJECT TO \$5,000,000 AGGREGATE SUBLIMIT OF LIABILITY FOR ALL LEAGUES, COMBINED, UNDER THE MASTER D&O POLICY, FOR ALL LOSS ARISING FROM ALL CLASS ACTION CLAIMS AND COMMON LEAGUE CLAIMS, AS MORE FULLY DESCRIBED IN ENDORSEMENT #31 OF THE MASTER D&O POLICY. ** SUBJECT TO \$5,000,000 AGGREGATE SUBLIMIT OF LIABILITY FOR ALL LEAGUES, COMBINED, UNDER THE MASTER CYBER POLICY, FOR SPECIFIED DEFENSE COSTS, AS MORE FULLY DESCRIBED IN ENDORSEMENT #14 OF THE MASTER CYBER POLICY.							
INSR LTR	ADD'L NAMED INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	LIMITS	
A	X	GENERAL LIABILITY	UST030987250	01/01/2025	01/01/2026	EACH OCCURRENCE	\$2,000,000
		X OCCURRENCE				GENERAL AGGREGATE	\$2,000,000
		X INCL PARTICIPANTS				PRODUCTS/COMP OPS AGGREGATE	\$2,000,000
		X SEXUAL ABUSE				Sexual Abuse OCCURRENCE	\$1,000,000
						Sexual Abuse AGGREGATE	\$1,000,000
	MEDICAL PAYMENTS		Any One Person				
C	X	DIRECTORS & OFFICERS	016033012	01/01/2025	01/01/2026	EACH LOSS	\$1,000,000*
						AGGREGATE	\$1,000,000
C	X	CYBER LIABILITY COVERAGE	017011565	01/01/2025	01/01/2026	LIMIT OF LIABILITY CLAIMS MADE	\$100,000 PER LEAGUE AGGREGATE
		S&P	SECURITY AND PRIVACY LIABILITY INSURANCE	\$100,000 PER LEAGUE SUBLIMIT OF LIABILITY** \$1,000 PER LEAGUE RETENTION		RETROACTIVE DATE	CONTINUITY DATE
			REGULATORY ACTION SUBLIMIT OF LIABILITY	\$100,000 PER LEAGUE SUBLIMIT OF LIABILITY \$1,000 PER LEAGUE RETENTION		POLICY INCEPTION	POLICY INCEPTION
		EM	EVENT MANAGEMENT INSURANCE	\$100,000 PER LEAGUE SUBLIMIT OF LIABILITY** \$1,000 PER LEAGUE RETENTION		NOT APPLICABLE	POLICY INCEPTION
D	X	INLAND MARINE/PROPERTY FLOATER	MKLM7IM0055290	01/01/2025	01/01/2026	EACH LOSS	\$35,000 Deductible: \$500
A	X	CRIME	UST030998250	01/01/2025	01/01/2026	EACH LOSS	\$35,000 Deductible: \$1,000
B	X	SPORTS EXCESS ACCIDENT	SRG9105434	01/01/2025	01/01/2026	As in Master Policy: Med. Max. \$100,000 Deductible \$50	As in Master Policy Excess
"X" INDICATES COVERAGE(S) SELECTED FOR ADDITIONAL NAMED INSURED							
ADDITIONAL INSURED Who is an Insured (SECTION II) of the General Liability policy is amended to include as an insured the person or organization shown in the schedule, but only with respect to liability arising out of the above-named Little League's maintenance or use of ball fields, or other premises loaned, donated, or rented to that Little League by such person or organizations and subject to the following additional exclusions: 1. Structural alterations, new construction, maintenance, repair, or demolition operations performed by or on behalf of the person or organization designated in the Schedule and/or performed by the above-named Little League; and 2. That part of the ball field or other premises not being used by the above-named Little League.							
NAME AND ADDRESS OF PERSON OR ORGANIZATION: 1. City of Columbia 2. Maury County Board of Education 3. Maury County Parks and Recreation Department							
INSURED Little League Baseball Risk Purchasing Group, Incorporated 539 U.S. RT. 15 Highway South Williamsport, PA 17702				CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.			
				 AUTHORIZED REPRESENTATIVE			



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
11/28/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Keystone Risk Managers, LLC 1995 Point Township Drive Northumberland PA 17867		CONTACT NAME: David Irwin PHONE (A/C, No, Ext): (670) 473-2150 E-MAIL ADDRESS: Dirwin@KeystoneInsrp.com FAX (A/C, No): (570) 473-2151
INSURED Little League Baseball Risk Purchasing Group, Incorporated COLUMBIA AMERICAN LL 8497 Lawrenceburg highway Mt Pleasant TN 38474		INSURER(S) AFFORDING COVERAGE INSURER A: Interstate Fire & Casualty Company INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:
		NAIC # 22829

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

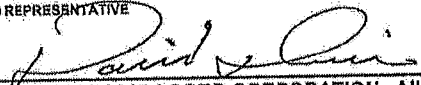
INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSD WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS		
A	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☐ PROJECT ☐ LOC ☒ OTHER: Per League	X	X	UST030987250	01/01/2025	01/01/2026	EACH OCCURRENCE	\$ 2,000,000
	DAMAGE TO RENTED PREMISES (Ea occurrence)						\$ 300,000	
	MED EXP (Any one person)						\$ Excluded	
	PERSONAL & ADV INJURY						\$ 2,000,000	
	☐ AUTOMOBILE LIABILITY ☐ ANY AUTO ☐ OWNED AUTOS ONLY ☐ SCHEDULED AUTOS ☐ HIRED AUTOS ONLY ☐ NON-OWNED AUTOS ONLY						GENERAL AGGREGATE	\$ 2,000,000
	☐ UMBRELLA LIAB ☐ OCCUR ☐ EXCESS LIAB ☐ CLAIMS-MADE DED RETENTION \$						PRODUCTS - COM/OP AGG	\$ 2,000,000
	☐ WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below						SEXUAL ABUSE OCC/AGG	\$ 1M/\$1M
							COMBINED SINGLE LIMIT (Ea accident)	\$
							BODILY INJURY (Per person)	\$
							BODILY INJURY (Per accident)	\$
							PROPERTY DAMAGE (Per accident)	\$
							EACH OCCURRENCE	\$
							AGGREGATE	\$
							PER STATUTE	\$
							OTH-ER	\$
							E.L. EACH ACCIDENT	\$
							E.L. DISEASE - EA EMPLOYEE	\$
							E.L. DISEASE - POLICY LIMIT	\$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Certificate Holder is named as Additional Insured per form CG 2026 (12/19)

CERTIFICATE HOLDER

CANCELLATION

City of Columbia 700 North Garden Street Columbia TN 38401	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
--	---

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ACORD 25 (2016/03)

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POLICY NUMBER: UST030987250

COMMERCIAL GENERAL LIABILITY
CG 24 04 05 09

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

This endorsement modifies Insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

SCHEDULE

Name Of Person Or Organization:

City of Columbia
700 North Garden Street
Columbia, TN 38401

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The following is added to Paragraph 8. **Transfer Of Rights Of Recovery Against Others To Us** of Section IV – Conditions:

We waive any right of recovery we may have against the person or organization shown in the Schedule above because of payments we make for injury or damage arising out of your ongoing operations or "your work" done under a contract with that person or organization and included in the "products-completed operations hazard". This waiver applies only to the person or organization shown in the Schedule above.



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Jill Carlson, Sr. Administrative Assistant, jcarlson@columbiatn.gov 931-560-1451

AGENDA ITEM TITLE: APPROVE AND AUTHORIZE THE MAYOR TO SIGN THE NON-EXCLUSIVE USE AND OCCUPANCY PERMIT BETWEEN THE CITY OF COLUMBIA AND THE MULETOWN BASEBALL LEAGUE FOR THE 2025 SEASON - WARD 3

RECOMMENDATION: Approve.

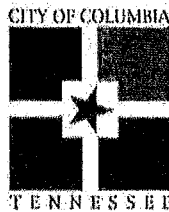
INFORMATION: The Muletown Baseball League is requesting an annual Non-Exclusive Use Permit with the City of Columbia to utilize Fairview Park T-ball fields and the baseball field for the 2025 season for their practices and games.

The Muletown Baseball League provides the youth of Columbia and Maury County with an additional opportunity to learn and enjoy the experience of playing baseball in an organized environment. In lieu of paying user fees, the Muletown Baseball League will be responsible for preparing the fields for practice and league games.

There will be no fees collected for use of the facilities.

CERTIFICATION: N/A

ATTACHMENTS: Staff Report, Muletown Baseball League Non-Exclusive Use and Occupancy Permit w/insurance.



Parks and Recreation Department

**NON-EXCLUSIVE
USE AND OCCUPANCY PERMIT
2025**

This permit is executed by and between the City of Columbia, hereinafter called "City", and Mule Town Baseball League, whose address is 210 West 8th Street, Columbia, TN 38401, hereinafter called "Permittee".

WHEREAS, the City desires to provide facilities to its citizens, and non-commercial local societies, clubs and organizations engaged in civic, social, educational, cultural, recreational or philanthropic work or activities.

WHEREAS, the Permittee is such an organization and, in the promotion and sponsorship of such activities, generates revenues from voluntary contributions, special events, membership dues, fees and charges, and fund-raising projects.

NOW, THEREFORE, it is mutually agreed by and between the City and Permittee as follows:

1. PREMISES

City does hereby grant to Permittee a Non-Exclusive Use Permit for the use and occupancy of those certain premises described as, Fairview Little League Field and T-Ball Fields hereinafter called "Premises."

2. TERM

The term of this permit shall begin on February 13, 2025 and shall terminate on February 12, 2026, unless sooner terminated as specified herein.

3. PURPOSE

The premises specified in this permit shall be used only for the purposes of developing, operating and maintaining a sports field complex in accordance with Permittee's league franchise(s) and for no other purpose other than provided herein.

4. PUBLIC USE

The general public shall not be excluded from these premises or any portion thereof. Permittee shall open premises to the public in accordance with the schedule approved by the Parks and Recreation Department Director or designated representative. Whenever the facility is not in use and it is reasonably practical, Permittee shall allow other organizations to utilize the premises for activities; provided said organizations have prior authorization by the Parks and Recreation Department Director or designated representative.

5. FEES

A. Permittee shall pay the City a user fee of \$0.00 per use of the facilities.

B. Any additional monetary or other contributions from the Permittee above the stated fees are appreciated.

C. Permittee shall have the right to charge participants a reasonable fee designed to cover maintenance and program operation. Said fees will be subject to prior written approval of the Parks and Recreation Department Director or designated representative. Excessive fees or charges, which will have the effect of precluding low and moderate-income persons from using the site, shall not be permitted. All funds collected by the Permittee from the operation of the premises shall be used for the development, maintenance and program operation on the premises.

6. BY-LAWS

Membership in Permittee's organization shall be open to anyone meeting the requirements of its rules and by-laws. Permittee will not discriminate against a member because of age, race, color, religion, physical handicap, ancestry, sex or national origin. All restrictions, rules, and by-laws, if any, and changes thereto proposed by Permittee's organization shall require prior written approval from the Parks and Recreation Department Director or designated representative. A current copy of by-laws shall be on file in the Parks and Recreation Department office.

7. MAINTENANCE

Permittee shall assist in Premises maintenance by following means:

- A. Permittee shall, at its sole cost and expense, provide for all turf management and routine maintenance to the soccer fields to include but not to be limited to: mowing, fertilizing, watering, weeding, marking/lining of fields; maintaining the park grounds / facilities to include litter pickup and restroom cleaning.
- B. In addition, Permittee shall provide all maintenance of improvements and structures installed by Permittee. The premises shall remain in a safe, clean, and sanitary condition acceptable to the Parks and Recreation Department Director, or designated representative.
- C. City shall provide routine, non-routine and major maintenance for all grounds and facilities, other than improvements and structures installed by Permittee and the soccer fields, to include but not to be limited to: repairs associated with the restroom / concession facilities, park equipment, water and sewer lines, roadways and parking lots, and drainage systems; and also the regular mowing and grooming of the entire park up to the border of each playing field.

8. IMPROVEMENTS/DEVELOPMENT

Permittee shall not make any improvements, changes or alterations or cause same to be made to the premises, without written authorization and approval from the Parks and Recreation Department Director or designated representative. All improvements shall be at no cost to City.

9. REMOVAL OF IMPROVEMENTS

City agrees that all fixtures and improvements installed by Permittee in accordance with the provisions herein provided, and not being a replacement or repair of or for any improvement or improvements now existing and belonging to City, shall be and remain the property of Permittee. Permittee shall have the right to remove at Permittee's own expense said fixtures and improvements prior to the automatic termination of this agreement or within fifteen (15) days after such earlier termination; provided that any damage to City's property or improvements shall be repaired and the premises left in as good order and condition as when Permittee took possession of the premises.

In the event Permittee does not so remove said fixtures and improvements within the above specified time, the City may remove, or sell, or destroy the same at the expense of Permittee, and Permittee shall pay to City the reasonable cost of any such removal, sale or destruction together with the reasonable cost of repair of damages to City's property or improvements resulting from such removal, sale or destruction. At the option of the City, any property, real or personal, not so removed by Permittee may be deemed abandoned.

10. OPERATION

All recreational programs, events, and activities sponsored by Permittee at said premises shall be at the sole cost and expense of Permittee and shall be approved by the Parks and Recreation Department Director, or designated representative, at least two weeks prior to the activity.

11. INDEMNITY

Permittee agrees to indemnify and save the City of Columbia and its agents and employees harmless from any and all liability, claims, damages or injuries to any person, including injury to Permittee or any of Permittee's employees, representatives, agents, guests, licensees, patrons or of any other person whomsoever, and all expenses of investigating and defending against same:

- A. Arising from or alleged to have arisen from or connected with the use of or operations on the permit premises;
- B. Caused or claimed to be caused by the independent acts of Permittee, Permittee's agents or employees, or the concurrent acts of the Permittee, the City or their agents or employees.

12. CONCESSIONS RIGHTS – COOK SOCCER PARK

Permittee shall have the right to operate a concession stands at Cook Soccer Park and Ridley Sports Complex for sale of confections, soft drinks, gum and other food products which are prepared and served in accordance with City of Columbia regulations, during soccer league events, PROVIDED, HOWEVER, that all profits there from shall be used by the Permittee for improvements, operation and maintenance of the premises.

13. ADVERTISING

Permittee shall not place or cause to be placed upon the premises any billboards, banners, posters, or any other media advertising products or services, without the approval of Columbia Parks & Recreation Department. Signs of any nature installed on said premises must be first authorized and approved by City. This provision does not include uniforms as provided by team sponsors.

14. POSSESSOR INTEREST AND TAXES

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Permittee shall, at its sole cost and expense, comply with all the requirements of all Municipal, State and Federal authorities now in effect or which may be in effect which pertain to the permit premises or any operations of the Permittee conducted thereon.

17. INSURANCE

On or before the execution date of this Permit by the City, Permittee shall submit to City an insurance policy or Certificate of Insurance evidencing that Permittee has obtained from a generally recognized insurer, insurance in the following form and minimum amounts specified.

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- A. \$2,000,000 Bodily Injury - per person
- B. \$2,000,000 Bodily Injury - Each Occurrence
- C. \$ 250,000 Property Damage

The Policy shall name the City of Columbia as additional insured. The Policy of Insurance shall contain the following clauses:

"It is agreed that the Policy shall not be cancelled nor the coverage reduced until thirty (30) days after the Parks and Recreation Department Director of the City of Columbia, shall have received written notice of such cancellation or reduction. The notice shall be deemed effective the date delivered to said Director, as evidenced by properly validated return receipt."

"The Insured waives any right of subrogation against City of Columbia which might arise by reason of any payment under this Policy."

The City reserves the right to re-evaluate the amount and type of Insurance required during the term of this permit. Permittee shall provide the amount and type of Insurance as required by the Parks and Recreation Department Director within thirty (30) days after Permittee shall have received written notice of such requirement.

18. EQUAL OPPORTUNITY

Permittee will not discriminate against any employee or applicant for employment because of age, race, color, religion, physical handicap, ancestry, sex or national origin. This provision shall include, but is not limited to, the following: Employment, upgrading, demotion, transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training including apprenticeship.

19. NON-DISCRIMINATION

Permittee, in the operations to be conducted pursuant to the provisions of this permit and otherwise in the use of the facility, will not discriminate or permit discrimination against any person or class of persons by reason or race, color, creed or national origin, sex, age, handicap, or marital status in any manner.

20. DRUG AND ALCOHOL POLICY

In accordance with City of Columbia Substance Abuse Policy (Change 1) dated November 1, 1993, neither Permittee nor its employees, consultants agents or contractors while in any way using the permitted property, shall be in any way impaired because of being under the influence of alcohol or a drug, shall possess an open container of alcohol or consume alcohol or possess or be under the influence of an illegal drug, or shall sell, offer or provide alcohol or a drug to another person.

21. UTILITIES AND SERVICES

The City shall provide all utilities and services required.

22. AMENDMENT TO PERMIT

This Permit fully expresses all understanding of the parties to this Permit and no verbal understanding of the parties, their officers, employees or agents shall be valid unless made in the form of a written amendment to this Permit and duly approved and executed by Permittee and Parks and Recreation Department Director.

23. PARTIAL INVALIDITY

If any provision of this Permit or the application thereof to any person or circumstances shall to any extent, be invalid or unenforceable, the remainder of this Permit, or the application of such provision to persons or circumstances other than those as to which it is invalid or unenforceable, shall not be affected thereby, and each provision of this Permit shall be valid and be enforced to the fullest extent permitted by law.

24. GOVERNING LAW

This Permit shall in every respect be binding upon the parties hereto and their respective successors and assigns. The laws of the State of Tennessee shall govern this Permit.

25. PROVISIONS REQUIRED BY LAW

Each and every provision of law and clause required by law to be inserted in this Permit shall be deemed to be inserted herein and the Permit shall be read and enforced as though it were included herein, and if for any reason any such provision is not inserted, or is not correctly stated, then upon application of either party the Permit shall forthwith be physically amended to make such insertion or correction.

26. NOTICE

Any notices required or permitted to be given pursuant to this Permit may be personally served on the other party by the party giving such notice, or may be served by certified mail, return receipt requested, to the following address:

PERMITTEE

Mule Town Baseball League
c/o Kerry Buchanan, President
kerry@bagtn.com
Columbia, TN 38401
Phone: (931) 215-4421

CITY

Columbia Parks & Recreation Department
c/o Mackel Reagan, Director
821 West 9th Street
Columbia, TN 38401
Phone: (931) 388-8119

27. SPECIAL PROVISIONS

In the event there is any conflict between the following special provisions and any other provisions of this permit, the special provisions shall govern. The special provisions are as follows:

- The permittee shall provide proof of insurance and a copy of previous year / season financial records to the Parks and Recreation Department to be submitted with the agenda packet for council approval.
- The Permittee shall not commence practice sessions or games at premises until permit terms are approved by council and signed by all parties as required.
- Permittee shall not sublet, transfer, or assign the fields to any other organizations or groups outside of Permittee for any reason.
- All organizations and groups outside of the Permittee must have written permission from the Parks & Recreation Director or Designee prior to use of fields.
- The City shall have the right to schedule and collect fees associated with other organizations or groups outside of Permittee using the fields. All fees collected by the City shall be tracked and used for future development, maintenance, and /or program operation at Cook Soccer Park.
- City shall be responsible for all damages outside of normal wear and tear that occurs during usage by other organizations, specifically including damage to the irrigation system.
- The Parks & Recreation Director or Designee will coordinate efforts with the Permittee to confirm field availability prior to approving other organizations usage of Cook Soccer Park during the term of this agreement.
- Permittee shall have the right to charge a fee to organizations outside of Permittee that request use of their supplies and equipment during the permit period.
- Permittee shall have the right to charge a fee for groups or individuals to provide clinics, teachings, or instructional classes for league participants. All funds collected by Permittee shall be used for premises development, maintenance, and program operation.
- Columbia Soccer Association shall have the right to charge an admission fee not to exceed Five Dollars (\$5.00) per person; however, persons refusing to pay the admission fee shall be permitted to enter the park. Persons entering the park for general public usage shall not be charged this admission fee.
- The parties agree to attempt to execute any renewal of this agreement with such revisions as necessary within 30 days of the expiration date on this agreement.

- The parties agree to attempt to execute any renewal of this agreement with such revisions as necessary within 30 days of the expiration date on this agreement.

-5-

28. **TERMINATION**

- A. **FOR CAUSE:** The Parks and Recreation Department Director, by giving written notification specifying an effective date, not less than five (5) days after the date of written notification, may terminate this Permit on behalf of the City, in whole or part, for cause which shall include:
- 1.) Failure for any reason of Permittee to fulfill its obligations under this Permit in a timely manner acceptable to the Parks and Recreation Department Director, including noncompliance with other City directives, Federal, State and local statutes, rules, laws, regulations or directives nonapplicable or as may become applicable.
 - 2.) Any ineffective or improper use of the site by Permittee, its employees, agents, subcontractors, guests, or any person or group under Permittee's responsibility.
 - 3.) Any conduct on the site by Permittee, its employees, agents or subcontractors unacceptable to the Parks and Recreation Department Director.
- B. **FOR CONVENIENCE:** Either City or Permittee may seek termination of this Permit upon thirty (30) days written notice to the other party.

IN WITNESS WHEREOF, the City and the Permittee have caused this Permit to be executed, effective the date first above written, by their duly authorized agents.

PERMITTEE

By Kerry Buchanan President
Kerry Buchanan, President
Mule Town Baseball League

Date 1/22/2025

Legal Form Approved:

Jake Hubbell
Jake Hubbell,
City Attorney

Date: 1/30/25

CITY OF COLUMBIA

By _____
Mackel Reagan, Director
Parks & Recreation

Date _____

By _____
Charles (Chaz) M. Molder,
Mayor

Date _____

By _____
Thad H. Jablonski,
City Recorder

Date _____

Title VI Policy

City of Columbia, Tennessee

It is the policy of the City of Columbia to ensure that no citizen shall, on the grounds of race, color or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.



CERTIFICATE OF LIABILITY INSURANCE

OP ID: JL

DATE (MM/DD/YYYY)

01/25/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Mid State/Sharpton Ins. Agency
P.O. Box 710
Columbia, TN 38402-0710
Buck Young

CONTACT NAME
PHONE (A/C No. Excl)
E-MAIL
ADDRESS
PRODUCER
CUSTOMER ID # MULET-1

INSURED
MULE TOWN BASEBALL LEAGUE
STEPHEN SHARP
2807 DENHAM AVE
COLUMBIA, TN 38401

INSURER(S) AFFORDING COVERAGE
INSURER A: PHILADELPHIA INS. COMPANY
INSURER B:
INSURER C:
INSURER D:
INSURER E:
INSURER F:

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	☒ GENERAL LIABILITY ☐ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☐ OCCUR	☒ ☒	PHPK2506605	02/23/2024	02/23/2025	EACH OCCURRENCE \$ 2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COM/OP AGG \$ 2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☐ PRO ☐ LOC					
	☐ AUTOMOBILE LIABILITY ☐ ANY AUTO ☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS ☐ HIRED AUTOS ☐ NON-OWNED AUTOS					COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (PER ACCIDENT) \$ \$ \$
	☐ UMBRELLA LIAB ☐ OCCUR ☐ EXCESS LIAB ☐ CLAIMS-MADE ☐ DEDUCTIBLE RETENTION \$					EACH OCCURRENCE \$ AGGREGATE \$ \$ \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	☒ N/A				WC STATUS: ☐ TORY LIMITS ☐ OTH. CR. E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101 Additional Remarks Schedule if more space is required)
CITY OF COLUMBIA IS LISTED AS AN ADDITIONAL INSURED. WAIVER OF SUBROGATION IN FAVOR OF CERTIFICATE HOLDER APPLIES. 30 DAY NOTICE OF CANCELLATION.

CERTIFICATE HOLDER

CANCELLATION

CITYC-1

CITY OF COLUMBIA
700 N GARDEN STREET
COLUMBIA, TN 38401

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE
Buck Young



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Jill Carlson, Sr. Administrative Assistant, jcarlson@columbiatn.gov 931-560-1451

AGENDA ITEM TITLE: APPROVE AND AUTHORIZE THE MAYOR TO SIGN THE NON-EXCLUSIVE USE AND OCCUPANCY PERMIT BETWEEN THE CITY OF COLUMBIA AND THE COLUMBIA SOCCER ASSOCIATION - WARD 1 AND 4

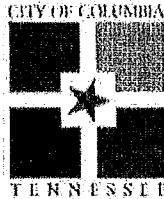
RECOMMENDATION: Approve.

INFORMATION: The Columbia Soccer Association is requesting an annual Non-Exclusive Use Permit with the City of Columbia to utilize Cook Soccer Park and the Ridley Sports Complex soccer fields for the 2025 season.

As in years past, in lieu of paying user fees, Columbia Soccer Association agrees to absorb expenditures to provide all turf management required to maintain the immediate playing surfaces at Cook Soccer Park; mowing, trimming, fertilization, weeding and marking fields for play. The Association will also assist with the litter pick up and janitorial upkeep as required for the restrooms and park areas near the fields. The City will maintain the park features up to the perimeter of each playing field.

CERTIFICATION: N/A

ATTACHMENTS: Staff Report, Columbia Soccer Association Non-Exclusive Use and Occupancy Permit w/insurance.



Parks and Recreation Department

**NON-EXCLUSIVE
USE AND OCCUPANCY PERMIT
2025**

This permit is executed by and between the City of Columbia, hereinafter called "City", and Columbia Soccer Association, whose address is 220 Hams Creek Road, Pulaski, TN 38478, hereinafter called "Permittee".

WHEREAS, the City desires to provide facilities to its citizens, and non-commercial local societies, clubs and organizations engaged in civic, social, educational, cultural, recreational or philanthropic work or activities.

WHEREAS, the Permittee is such an organization and, in the promotion and sponsorship of such activities, generates revenues from voluntary contributions, special events, membership dues, fees and charges, and fund-raising projects.

NOW, THEREFORE, it is mutually agreed by and between the City and Permittee as follows:

1. PREMISES

City does hereby grant to Permittee a Non-Exclusive Use Permit for the use and occupancy of those certain premises described as, Cook Soccer Park and Ridley Park Sports Complex hereinafter called "Premises."

2. TERM

The term of this permit shall begin on February 13, 2025 and shall terminate on February 12, 2026, unless sooner terminated as specified herein.

3. PURPOSE

The premises specified in this permit shall be used only for the purposes of developing, operating and maintaining a sports field complex in accordance with Permittee's league franchise(s) and for no other purpose other than provided herein.

4. PUBLIC USE

The general public shall not be excluded from these premises or any portion thereof. Permittee shall open premises to the public in accordance with the schedule approved by the Parks and Recreation Department Director or designated representative. Whenever the facility is not in use and it is reasonably practical, Permittee shall allow other organizations to utilize the premises for activities; provided said organizations have prior authorization by the Parks and Recreation Department Director or designated representative.

5. FEES

A. Permittee shall pay the City a user fee of \$0.00 per use of the facilities.

B. Any additional monetary or other contributions from the Permittee above the stated fees are appreciated.

C. Permittee shall have the right to charge participants a reasonable fee designed to cover maintenance and program operation. Said fees will be subject to prior written approval of the Parks and Recreation Department Director or designated representative. Excessive fees or charges, which will have the effect of precluding low and moderate-income persons from using the site, shall not be permitted. All funds collected by the Permittee from the operation of the premises shall be used for the development, maintenance and program operation on the premises.

-1-

6. BY-LAWS

Membership in Permittee's organization shall be open to anyone meeting the requirements of its rules and by-laws. Permittee will not discriminate against a member because of age, race, color, religion, physical handicap, ancestry, sex or national origin. All restrictions, rules, and by-laws, if any, and changes thereto proposed by Permittee's organization shall require prior written approval from the Parks and Recreation Department Director or designated representative. A current copy of by-laws shall be on file in the Parks and Recreation Department office.

7. **MAINTENANCE**

Permittee shall assist in Premises maintenance by following means:

- A. Permittee shall, at its sole cost and expense, provide for all turf management and routine maintenance to the Cook soccer fields to include but not to be limited to: mowing, fertilizing, watering, weeding, marking/lining of fields; maintaining the park grounds/facilities to include litter pickup and restroom cleaning.
- B. In addition, Permittee shall provide all maintenance of improvements and structures installed by Permittee. The premises shall remain in a safe, clean, and sanitary condition acceptable to the Parks and Recreation Department Director, or designated representative.
- C. City shall provide routine, non-routine and major maintenance for all grounds and facilities, other than improvements and structures installed by Permittee and the soccer fields, to include but not to be limited to: repairs associated with the restroom/concession facilities, park equipment, water and sewer lines, roadways and parking lots, and drainage systems; and also, the regular mowing and grooming of the entire park up to the border of each playing field.

8. **IMPROVEMENTS/DEVELOPMENT**

Permittee shall not make any improvements, changes or alterations or cause same to be made to the premises, without written authorization and approval from the Parks and Recreation Department Director or designated representative. All improvements shall be at no cost to City.

9. **REMOVAL OF IMPROVEMENTS**

City agrees that all fixtures and improvements installed by Permittee in accordance with the provisions herein provided, and not being a replacement or repair of or for any improvement or improvements now existing and belonging to City, shall be and remain the property of Permittee. Permittee shall have the right to remove at Permittee's own expense said fixtures and improvements prior to the automatic termination of this agreement or within fifteen (15) days after such earlier termination; provided that any damage to City's property or improvements shall be repaired and the premises left in as good order and condition as when Permittee took possession of the premises.

In the event Permittee does not so remove said fixtures and improvements within the above specified time, the City may remove, or sell, or destroy the same at the expense of Permittee, and Permittee shall pay to City the reasonable cost of any such removal, sale or destruction together with the reasonable cost of repair of damages to City's property or improvements resulting from such removal, sale or destruction. At the option of the City, any property, real or personal, not so removed by Permittee may be deemed abandoned.

10. **OPERATION**

All recreational programs, events, and activities sponsored by Permittee at said premises shall be at the sole cost and expense of Permittee and shall be approved by the Parks and Recreation Department Director, or designated representative, at least two weeks prior to the activity.

11. **INDEMNITY**

Permittee agrees to indemnify and save the City of Columbia and its agents and employees harmless from any and all liability, claims, damages or injuries to any person, including injury to Permittee or any of Permittee's employees, representatives, agents, guests, licensees, patrons or of any other person whomsoever, and all expenses of investigating and defending against same:

- A. Arising from or alleged to have arisen from or connected with the use of or operations on the permit premises;
- B. Caused or claimed to be caused by the independent acts of Permittee, Permittee's agents or employees, or the concurrent acts of the Permittee, the City or their agents or employees.

12. **CONCESSIONS RIGHTS – COOK SOCCER PARK/Ridley Sports Complex**

Permittee shall have the right to operate a concession stands at Cook Soccer Park and Ridley Sports A, F, and S Complex for sale of concessions, soft drinks, gum and other food products which are prepared and served in accordance with City of Columbia regulations, during soccer league events, PROVIDED, HOWEVER, that all profits there from shall be used by the Permittee for improvements, operation and maintenance of the premises.

13. **ADVERTISING**

Permittee shall not place or cause to be placed upon the premises any billboards, banners, posters, or any other media advertising products or services, without the approval of Columbia Parks & Recreation Department. Signs of any nature installed on said premises must be first authorized and approved by City. This provision does not include uniforms as provided by team sponsors.

14. **POSSESSOR INTEREST AND TAXES**

This permit may create a taxable possessor interest in Permittee; therefore, as further consideration for the execution of this permit, Permittee agrees to pay and discharge before delinquency, all taxes and assessments, which may be levied against said premises by reason of any interest of Permittee during, said term.

15. **NON-EXCLUSIVE OCCUPANCY**

It is specifically understood and agreed that Permittee's use hereunder shall be non-exclusive and shall not result in any proprietary rights. City reserves, and shall always have the right to enter said premises for the purpose of viewing and ascertaining the condition thereof, or to protect its interest in the premises or to inspect the operations.

16. **COMPLIANCE WITH THE LAW**

Permittee shall, at its sole cost and expense, comply with all the requirements of all Municipal, State and Federal authorities now in effect or which may be in effect which pertain to the permit premises or any operations of the Permittee conducted thereon.

17. **INSURANCE**

On or before the execution date of this Permit by the City, Permittee shall submit to City an insurance policy or Certificate of Insurance evidencing that Permittee has obtained from a generally recognized insurer, insurance in the following form and minimum amounts specified.

Comprehensive General Liability insurance of:

- A. \$2,000,000 Bodily Injury - per person
- B. \$2,000,000 Bodily Injury - Each Occurrence
- C. \$ 250,000 Property Damage

The Policy shall name the City of Columbia as additional insured. The Policy of Insurance shall contain the following clauses:

"It is agreed that the Policy shall not be cancelled nor the coverage reduced until thirty (30) days after the Parks and Recreation Department Director of the City of Columbia, shall have received written notice of such cancellation or reduction. The notice shall be deemed effective the date delivered to said Director, as evidenced by properly validated return receipt."

"The insured waives any right of subrogation against City of Columbia which might arise by reason of any payment under this Policy."

The City reserves the right to re-evaluate the amount and type of insurance required during the term of this permit. Permittee shall provide the amount and type of insurance as required by the Parks and Recreation Department Director within thirty (30) days after Permittee shall have received written notice of such requirement.

18. EQUAL OPPORTUNITY

Permittee will not discriminate against any employee or applicant for employment because of age, race, color, religion, physical handicap, ancestry, sex or national origin. This provision shall include, but is not limited to, the following: Employment, upgrading, demotion, transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training including apprenticeship.

19. NON-DISCRIMINATION

Permittee, in the operations to be conducted pursuant to the provisions of this permit and otherwise in the use of the facility, will not discriminate or permit discrimination against any person or class of persons by reason or race, color, creed or national origin, sex, age, handicap, or marital status in any manner.

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In accordance with City of Columbia Substance Abuse Policy (Change 1) dated November 1, 1993, neither Permittee nor its employees, consultants agents or contractors while in any way using the permitted property, shall be in any way impaired because of being under the influence of alcohol or a drug, shall possess an open container of alcohol or consume alcohol or possess or be under the influence of an illegal drug, or shall sell, offer or provide alcohol or a drug to another person.

21. UTILITIES AND SERVICES

The City shall provide all utilities and services required.

22. AMENDMENT TO PERMIT

This Permit fully expresses all understanding of the parties to this Permit and no verbal understanding of the parties, their officers, employees or agents shall be valid unless made in the form of a written amendment to this Permit and duly approved and executed by Permittee and Parks and Recreation Department Director.

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If any provision of this Permit or the application thereof to any person or circumstances shall to any extent, be invalid or unenforceable, the remainder of this Permit, or the application of such provision to persons or circumstances other than those as to which it is invalid or unenforceable, shall not be affected thereby, and each provision of this Permit shall be valid and be enforced to the fullest extent permitted by law.

24. GOVERNING LAW

This Permit shall in every respect be binding upon the parties hereto and their respective successors and assigns. The laws of the State of Tennessee shall govern this Permit.

25. PROVISIONS REQUIRED BY LAW

Each and every provision of law and clause required by law to be inserted in this Permit shall be deemed to be inserted herein and the Permit shall be read and enforced as though it were included herein, and if for any reason any such provision is not inserted, or is not correctly stated, then upon application of either party the Permit shall forthwith be physically amended to make such insertion or correction.

26. NOTICE

Any notices required or permitted to be given pursuant to this Permit may be personally served on the other party by the party giving such notice, or may be served by certified mail, return receipt requested, to the following address:

PERMITTEE

Columbia Soccer Association
c/o, Rufus Woodard, President
220 Hams Creek Road
Pulaski, TN 38478

Phone: (931) 703-0412

CITY

Columbia Parks & Recreation Department

c/o Mackel Reagan, Director
821 W. 9th Street
Columbia, TN. 38401
Phone: (931) 388-8119

27. SPECIAL PROVISIONS

In the event there is any conflict between the following special provisions and any other provisions of this permit, the special provisions shall govern. The special provisions are as follows:

- The permittee shall provide proof of insurance and a copy of previous year / season financial records to the Parks and Recreation Department to be submitted with the agenda packet for council approval.
- The Permittee shall not commence practice sessions or games at premises until permit terms are approved by council and signed by all parties as required.
- Permittee shall not sublet, transfer, or assign the fields to any other organizations or groups outside of Permittee for any reason.
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- The City shall have the right to schedule and collect fees associated with other organizations or groups outside of Permittee using the fields. All fees collected by the City shall be tracked and used for future development, maintenance, and/or program operation at Cook Soccer Park.
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- Permittee shall have the right to charge a fee to organizations outside of Permittee that request use of their supplies and equipment during the permit period.
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- A. **FOR CAUSE:** The Parks and Recreation Department Director, by giving written notification specifying an effective date, not less than five (5) days after the date of written notification, may terminate this Permit on behalf of the City, in whole or part, for cause which shall include:
- 1.) Failure for any reason of Permittee to fulfill its obligations under this Permit in a timely manner acceptable to the Parks and Recreation Department Director, including non-compliance with other City directives, Federal, State and local statutes, rules, laws, regulations or directives non-applicable or as may become applicable.
 - 2.) Any ineffective or improper use of the site by Permittee, its employees, agents, subcontractors, guests, or any person or group under Permittee's responsibility.
 - 3.) Any conduct on the site by Permittee, its employees, agents or subcontractors unacceptable to the Parks and Recreation Department Director.
- B. **FOR CONVENIENCE:** Either City or Permittee may seek termination of this Permit upon thirty (30) days written notice to the other party.

IN WITNESS WHEREOF, the City and the Permittee have caused this Permit to be executed, effective the date first above written, by their duly authorized agents.

PERMITTEE

By Rufus Woodard
Rufus Woodard, President
Columbia Soccer Association

Date _____

CITY OF COLUMBIA

By _____
Mackel Reagan, Director
Columbia Parks & Recreation

Date _____

By _____
Charles (Chaz) M. Molder,
Mayor

Date _____

Legal Form Approved:

Jake Hubbell
Jake Hubbell,
City Attorney
Date: 1/31/23

By _____

Thad H. Jablonski,
City Recorder
Date _____

Title VI Policy
City of Columbia, Tennessee

It is the policy of the City of Columbia to ensure that no citizen shall, on the grounds of race, color or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.

The City of Columbia does not allow unfair treatment because of race, color, religion, sex (including pregnancy), national origin, age (40 or older), disability, sexual orientation, gender identity or expression, genetic information or any other characteristic protected by law.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

8/7/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

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PRODUCER LIC #40558248 Player's Health Cover USA Inc. 718 Washington Ave North #402 Minneapolis MN 55401		CONTACT NAME: PHONE (A/C, No, Ext): 612-345-9683 FAX (A/C, No): E-MAIL: certificates@playershealth.com ADDRESS: certificates@playershealth.com	
INSURED Tennessee State Soccer Association 237 Castlewood Drive, Suite H Murfreesboro TN 37129		INSURER(S) AFFORDING COVERAGE INSURER A: Everest National Insurance Company NAIC # 10120 INSURER B: Great American Insurance Company 16691 INSURER C: INSURER D: INSURER E: INSURER F:	

COVERAGES

CERTIFICATE NUMBER: 116680

REVISION NUMBER: 43

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDITIONAL SUBROGATION	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☐ PROJECT ☐ LOC ☒ OTHER: PER EVENT	Y	SI8ML03061-241	8/1/2024	8/1/2025	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 MED EXP (Any one person) \$ EXCLUDED PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 5,000,000 PRODUCTS - COMP/OP AGG PARTICIPANT LEGAL LIAB \$ 1,000,000 COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
A	☐ AUTOMOBILE LIABILITY ☐ ANY AUTO ☐ OWNED AUTOS ONLY ☒ HIRED AUTOS ONLY ☐ SCHEDULED AUTOS ☒ NON-OWNED AUTOS ONLY		SI8ML03061-241	8/1/2024	8/1/2025	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
A	☒ UMBRELLA LIAB ☒ EXCESS LIAB ☐ DED ☐ RETENTION \$ 0 ☒ OCCUR ☐ CLAIMS-MADE		SI8EX01699-241	8/1/2024	8/1/2025	EACH OCCURRENCE \$ 6,000,000 AGGREGATE \$ 6,000,000
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N ☐ N/A				PER STATUTE E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
B	Accident Medical		E426831-03	8/1/2024	8/1/2025	PER INJURY LIMIT \$ 100,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Operations of the Tennessee State Soccer Assn, its teams, leagues & clubs. Coverage applies only to official, sanctioned and approved activities of TSSA. Certificate holder has automatic additional insured status when required direct written contract. This certificate is issued on behalf of: Columbia Soccer Association

CERTIFICATE HOLDER**CANCELLATION**

City of Columbia 700 North Garden Street Columbia TN 38401	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
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ACORD 25 (2016/03)

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THIS ENDORSEMENT CHANGES THE COVERAGE PART. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED – AUTOMATIC STATUS WHEN
REQUIRED IN A WRITTEN AGREEMENT WITH YOU**

This endorsement modifies Insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

- A. Section II – Who Is An Insured** is amended to include as an additional insured any person or organization with whom you have a written agreement that such person or organization be added as an additional insured on your Coverage Part. Such person or organization is an additional insured only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" but only to the extent caused, in whole or in part, by:
1. Your acts or omissions; or
 2. The acts or omissions of those acting on your behalf;
- in the performance of your operations for an additional insured.
- B.** The Insurance afforded to an additional insured shall only include the Insurance required by the terms of the written agreement and shall not be broader than the coverage provided within the terms of the Coverage Part.
- C.** The Limits of Insurance afforded to an additional insured shall be the lesser of the following:
1. The Limits of Insurance required by the written agreement between the parties; or
 2. The Limits of Insurance provided by this Coverage Part.
- D.** With respect to the Insurance afforded to an additional insured, this Insurance does not apply to "bodily injury", "property damage" or "personal and advertising injury" arising out of any act or omission of an additional insured or any of its employees.

POLICY NUMBER: SI8ML03061-241

COMMERCIAL GENERAL LIABILITY
ECG 24 522 04 02

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name of Person or Organization:

ANY PERSON OR ORGANIZATION FOR WHOM THE NAMED INSURED HAS
AGREED BY WRITTEN CONTRACT TO FURNISH THIS WAIVER.

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

The TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US Condition (Section IV – COMMERCIAL GENERAL LIABILITY CONDITIONS) is amended by the addition of the following:

We waive any right of recovery we may have against the person or organization shown in the Schedule above because of payments we make for injury or damage arising out of your operations or "your work" done under a written agreement that requires you to waive your rights of recovery. The written agreement must be made prior to the date of the "occurrence". This waiver applies only to the person or organization shown in the Schedule above.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**AMENDMENT – OTHER INSURANCE
(PRIMARY NONCONTRIBUTORY)**

This endorsement modifies Insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

A. Paragraph a. Primary Insurance of 4. Other Insurance of SECTION IV COMMERCIAL GENERAL LIABILITY CONDITIONS is replaced by the following:

a. Primary Insurance

This Insurance is primary except when b. below applies. If this Insurance is primary, our obligations are not affected unless any of the other Insurance is also primary. Then, we will share with all that other Insurance by the method described in c. below, except that we will not seek contribution from any party with whom you have agreed in a written contract or agreement that this Insurance will be primary and noncontributory, if the written contract or agreement was made prior to the subject "occurrence" or offense.



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Jill Carlson, Sr. Administrative Assistant, jcarlson@columbiatn.gov 931-560-1451

AGENDA ITEM TITLE: APPROVE AND AUTHORIZE THE MAYOR TO SIGN THE NON-EXCLUSIVE USE AND OCCUPANCY PERMIT BETWEEN THE CITY OF COLUMBIA AND EXCEL AQUATICS FOR THE 2025 SEASON - WARD 4

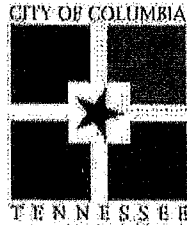
RECOMMENDATION: Approve.

INFORMATION: Excel Aquatics is requesting an annual Non-Exclusive Use Permit with the City of Columbia to utilize the pools at The Columbia Aquatics and Recreation Center for their swim services, practices and swim meets for the 2025 season. Once approved, the permit will cover their annual facility needs.

Excel Aquatics and the Columbia Parks and Recreation Department amicably agree on the recommended user fees for each season. The organization will give back 25% of their revenues to the City along with charging the center membership fees for their participants.

CERTIFICATION: N/A

ATTACHMENTS: Staff Report, Excel Aquatics Non-Exclusive Use and Occupancy Permit w/insurance.



Parks and Recreation Department

**NON-EXCLUSIVE
USE AND OCCUPANCY PERMIT
2025**

This permit is executed by and between the City of Columbia, hereinafter called "City", and Excel Aquatics, whose address is 920 Heritage Way, Brentwood, TN 37027, hereinafter called "Permittee".

WHEREAS, the City desires to provide facilities to its citizens, and non-commercial local societies, clubs and organizations engaged in civic, social, educational, cultural, recreational or philanthropic work or activities.

WHEREAS, the Permittee is such an organization and, in the promotion and sponsorship of such activities, generates revenues from voluntary contributions, special events, membership dues, fees and charges, and fund-raising projects.

NOW, THEREFORE, it is mutually agreed by and between the City and Permittee as follows:

1. PREMISES

City does hereby grant to Permittee a Non-Exclusive Use Permit for the use and occupancy of those certain premises described as, The Columbia Aquatics and Recreation Center, hereinafter called "Premises."

2. TERM

The term of this permit shall begin on February 13, 2025 and shall terminate on February 12, 2026, unless sooner terminated as specified herein.

3. PURPOSE

The premises specified in this permit shall be used only for the purposes of developing, operating and maintaining a swimming pool facility in accordance with Permittee's league franchise(s) and for no other purpose other than provided herein.

4. PUBLIC USE

The general public shall not be excluded from these premises or any portion thereof. Permittee shall open premises to the public in accordance with the schedule approved by the Parks and Recreation Department Director or designated representative. Whenever the facility is not in use and it is reasonably practical, Permittee shall allow other organizations to utilize the premises for activities; provided said organizations have prior authorization by the Parks and Recreation Department Director or designated representative.

5. **FEES**

The Permittee shall pay the Columbia Parks & Recreation Department 25% of user fees from swim school and programs as well as charge facility membership fees for participants.

Permittee shall have the right to charge participants a reasonable fee designed to cover maintenance and program operation. Said fees will be subject to prior written approval of the Parks and Recreation Department Director or designated representative. Excessive fees or charges, which will have the effect of precluding low and moderate-income persons from using the site, shall not be permitted. All funds collected by the Permittee from the operation of the premises shall be used for the development, maintenance and program operation on the premises.

6. **BY-LAWS**

Membership in Permittee's organization shall be open to anyone meeting the requirements of its rules and by-laws. Permittee will not discriminate against a member because of age, race, color, religion, physical handicap, ancestry, sex or national origin. All restrictions, rules, and by-laws, if any, and changes thereto proposed by Permittee's organization shall require prior written approval from the Parks and Recreation Department Director or designated representative. A current copy of by-laws shall be on file in the Parks and Recreation Department office.

7. **MAINTENANCE**

Permittee shall assist in Premises maintenance by following means:

- A. Permittee shall assist with routine janitorial services to include litter pick-up, monitoring of rest rooms and cleanliness of pool areas.
- B. Permittee shall provide all maintenance of improvements and structures installed by Permittee. The premises shall remain in a safe, clean, and sanitary condition acceptable to the Parks and Recreation Department Director, or designated representative.
- C. City shall provide routine maintenance to rest rooms to ensure overall cleanliness, sanitation and operation including maintaining adequate supplies for use. Permittee shall monitor supplies in the City's absence to help prevent misuse.
- D. City shall provide all routine and major maintenance for all grounds and facilities.

8. **IMPROVEMENTS/DEVELOPMENT**

Permittee shall not make any improvements, changes or alterations or cause same to be made to the premises, without written authorization and approval from the Parks and Recreation Department Director or designated representative. All improvements shall be at no cost to City.

9. **REMOVAL OF IMPROVEMENTS**

City agrees that all fixtures and improvements installed by Permittee in accordance with the provisions herein provided, and not being a replacement or repair of or for any improvement or improvements now existing and belonging to City, shall be and remain the property of Permittee. Permittee shall have the right to remove at Permittee's own expense said fixtures and improvements prior to the automatic termination of this agreement or within fifteen (15) days after such earlier termination; provided that any damage to City's property or improvements shall be repaired and the premises left in as good order and condition as when Permittee took possession of the premises. In the event Permittee does not so remove said fixtures and improvements within the above specified time, the City may remove, or sell, or destroy the same at the expense of Permittee, and Permittee shall pay to City the reasonable cost of any such removal, sale or destruction together with the reasonable cost of repair of damages to City's property or improvements resulting from such removal, sale or destruction. At the option of the City, any property, real or personal, not so removed by Permittee may be deemed abandoned.

10. OPERATION

All recreational programs, events, and activities sponsored by Permittee at said premises shall be at the sole cost and expense of Permittee and shall be approved by the Parks and Recreation Department Director, or designated representative, at least two weeks prior to the activity.

11. INDEMNITY

Permittee agrees to indemnify and save the City of Columbia and its agents and employees harmless from any and all liability, claims, damages or injuries to any person, including Injury to Permittee or any of Permittee's employees, representatives, agents, guests, licensees, patrons or of any other person whomsoever, and all expenses of investigating and defending against same:

- A. Arising from or alleged to have arisen from or connected with the use of or operations on the permit premises;
- B. Caused or claimed to be caused by the independent acts of Permittee, Permittee's agents or employees, or the concurrent acts of the Permittee, the City or their agents or employees.

12. ADVERTISING

Permittee shall not place or cause to be placed upon the premises any billboards, banners, posters, or any other media advertising products or services, without the approval of Columbia Parks & Recreation Department. Signs of any nature installed on said premises must be first authorized and approved by City. This provision does not include uniforms as provided by team sponsors.

13. POSSESSOR INTEREST AND TAXES

This permit may create a taxable possessor interest in Permittee; therefore, as further consideration for the execution of this permit, Permittee agrees to pay and discharge before delinquency, all taxes and assessments, which may be levied against said premises by reason of any interest of Permittee during, said term.

14. NON-EXCLUSIVE OCCUPANCY

It is specifically understood and agreed that Permittee's use hereunder shall be non-exclusive and shall not result in any proprietary rights. City reserves, and shall always have the right to enter said premises for the purpose of viewing and ascertaining the condition thereof, or to protect its interest in the premises or to inspect the operations.

15. COMPLIANCE WITH THE LAW

Permittee shall, at its sole cost and expense, comply with all the requirements of all Municipal, State and Federal authorities now in effect or which may be in effect which pertain to the permit premises or any operations of the Permittee conducted thereon.

16. INSURANCE

On or before the execution date of this Permit by the City, Permittee shall submit to City an Insurance policy or Certificate of Insurance evidencing that Permittee has obtained from a generally recognized insurer, Insurance in the following form and minimum amounts specified.

Comprehensive General Liability Insurance of:

- | | | |
|----|-------------|---------------------------------|
| A. | \$2,000,000 | Bodily Injury - per person |
| B. | \$2,000,000 | Bodily Injury - Each Occurrence |
| C. | \$ 250,000 | Property Damage |

The Policy shall name the City of Columbia as additional insured. The Policy of Insurance shall contain the following clauses:

"It is agreed that the Policy shall not be cancelled nor the coverage reduced until thirty (30) days after the Parks and Recreation Department Director of the City of Columbia, shall have

received written notice of such cancellation or reduction. The notice shall be deemed effective the date delivered to said Director, as evidenced by properly validated return receipt."

"The Insured waives any right of subrogation against City of Columbia which might arise by reason of any payment under this Policy."

The City reserves the right to re-evaluate the amount and type of Insurance required during the term of this permit. Permittee shall provide the amount and type of Insurance as required by the Parks and Recreation Department Director within thirty (30) days after Permittee shall have received written notice of such requirement.

19. EQUAL OPPORTUNITY

Permittee will not discriminate against any employee or applicant for employment because of age, race, color, religion, physical handicap, ancestry, sex or national origin. This provision shall include, but is not limited to, the following: Employment, upgrading, demotion, transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training including apprenticeship.

20. NON-DISCRIMINATION

Permittee, in the operations to be conducted pursuant to the provisions of this permit and otherwise in the use of the facility, will not discriminate or permit discrimination against any person or class of persons by reason of race, color, creed or national origin, sex, age, handicap, or marital status in any manner.

21. DRUG AND ALCOHOL POLICY

In accordance with City of Columbia Substance Abuse Policy (Change 1) dated November 1, 1993, neither Permittee nor its employees, consultants agents or contractors while in any way using the permitted property, shall be in any way impaired because of being under the influence of alcohol or a drug, shall possess an open container of alcohol or consume alcohol or possess or be under the influence of an illegal drug, or shall sell, offer or provide alcohol or a drug to another person.

22. UTILITIES AND SERVICES

The City shall provide all utilities and services at the Columbia Aquatics and Recreation Center.

23. AMENDMENT TO PERMIT

This Permit fully expresses all understanding of the parties to this Permit and no verbal understanding of the parties, their officers, employees or agents shall be valid unless made in the form of a written amendment to this Permit and duly approved and executed by Permittee and Parks and Recreation Department Director.

24. PARTIAL INVALIDITY

If any provision of this Permit or the application thereof to any person or circumstances shall to any extent, be invalid or unenforceable, the remainder of this Permit, or the application of such provision to persons or circumstances other than those as to which it is invalid or unenforceable, shall not be affected thereby, and each provision of this Permit shall be valid and be enforced to the fullest extent permitted by law.

25. GOVERNING LAW

This Permit shall in every respect be binding upon the parties hereto and their respective successors and assigns. The laws of the State of Tennessee shall govern this Permit.

26. PROVISIONS REQUIRED BY LAW

Each and every provision of law and clause required by law to be inserted in this Permit shall be deemed to be inserted herein and the Permit shall be read and enforced as though it were included herein, and if for any reason any such provision is not inserted, or is not correctly stated, then upon application of either party the Permit shall forthwith be physically amended to make such insertion or correction.

27. NOTICE

Any notices required or permitted to be given pursuant to this Permit may be personally served on the other party by the party giving such notice, or may be served by certified mail, return receipt requested, to the following address:

PERMITTEE

Excel Aquatics
c/o Steven Murry, Head Coach
920 Heritage Way
Brentwood, TN. 37027
coachsteven@excelaquatics.org

CITY

Columbia Parks & Recreation Department
c/o Mackel Reagan, Director
821 W. 9th Street
Columbia, TN 38401
Phone: (931) 388-8119

28. SPECIAL PROVISIONS

In the event there is any conflict between the following special provisions and any other provisions of this permit, the special provisions shall govern. The special provisions are as follows:

- The Permittee shall provide proof of indemnification insurance and a copy of previous year / season financial records to the Parks and Recreation Department to be submitted with the agenda packet for council approval.
- Permittee must also provide a copy of the league rules and by-laws when returning this document to Columbia Parks & Recreation Department. A copy of the weekly schedule must be provided when it is completed.
- The Permittee shall not commence practice sessions or competitions at premises until contract terms are approved by Council and signed by all parties as required.
- Permittee shall not sublet, transfer, or assign the fields to any other organizations or groups outside of Permittee for any reason.
- All organizations and groups outside of Permittee must have written permission from the Parks & Recreation Director or Designee prior to use of pools.
- The City's Logo may not be used on any concession products without the City's approval.
- The Parks & Recreation Director or his Designee will coordinate efforts with the Permittee to confirm pool availability prior to approving other organizations usage of the facilities during the term of this agreement.
- Permittee shall have the right to charge a fee for groups or individuals to provide clinics, teachings, or instructional classes for group participants. All funds collected by Permittee shall be used for premises development, maintenance, and program operation.
- The Permittee reserves the right to govern its membership according to the published by-laws provided and on-file with Columbia Parks & Recreation Department.
- The parties agree to attempt to execute any renewal of this agreement with such revisions as necessary within 30 days of the expiration date on this agreement.

29. **TERMINATION**

- A. **FOR CAUSE**: The Parks and Recreation Department Director, by giving written notification specifying an effective date, not less than five (5) days after the date of written notification, may terminate this Permit on behalf of the City, in whole or part, for cause which shall include:
- 1.) Failure for any reason of Permittee to fulfill its obligations under this Permit in a timely manner acceptable to the Parks and Recreation Department Director, including non-compliance with other City directives, Federal, State and local statutes, rules, laws, regulations or directives non-applicable or as may become applicable.
 - 2.) Any ineffective or improper use of the site by Permittee, its employees, agents, subcontractors, guests, or any person or group under Permittee's responsibility.
 - 3.) Any conduct on the site by Permittee, its employees, agents or subcontractors unacceptable to the Parks and Recreation Department Director.
- B. **FOR CONVENIENCE**: Either City or Permittee may seek termination of this Permit upon thirty (30) days written notice to the other party.

IN WITNESS WHEREOF, the City and the Permittee have caused this Permit to be executed, effective the date first above written, by their duly authorized agents.

PERMITTEE

By Steven Murry
Steven Murry, Head Coach
Excel Aquatics
Date 01/24/2025

Legal Form Approved: [Signature]
Jake Hubbell,
City Attorney
Date: 1/31/25

CITY OF COLUMBIA

By _____
Mackel Reagan, Director
Parks & Recreation

Date _____

By _____
Charles (Chaz) M. Molder,
Mayor

Date _____

By _____
Thad H. Jablonski,
City Recorder

Date _____

Title VI Policy

It is the policy of the City of Columbia to ensure that no citizen shall, on the grounds of race, color or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

1/24/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Insurance Office of America
1855 W. State Road 434
Longwood FL 32750

CONTACT
NAME:
PHONE
(A/C, No, Ext):
FAX
(A/C, No):
E-MAIL
Address: usascol@loausa.com

INSURER(S) AFFORDING COVERAGE

NAIC #

INSURER A: Accredited Surety and Casualty Company, Inc.

26379

INSURER B: United States Fire Insurance Company

21113

INSURER C:**INSURER D:****INSURER E:****INSURER F:**

INSURED
USA Swimming, Inc.; USA Swimming Foundation, and USA
Swimming Local Swimming
Committees & Member Clubs
1 Olympic Plaza
Colorado Springs CO 80909-5780

USASWIM-01

COVERAGES**CERTIFICATE NUMBER:** 448040539**REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR ☒ Participant LL GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☐ PROJECT ☐ LOC ☒ OTHER: Event	Y	Y	1-RSL-CO-17-01538639-00	1/1/2025	1/1/2026	EACH OCCURRENCE \$2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$2,000,000 MED EXP (Any one person) \$5,000 PERSONAL & ADV INJURY \$2,000,000 GENERAL AGGREGATE \$4,000,000 PRODUCTS - COM/OP AGG \$2,000,000 Abuse/Molestation \$2,000,000 COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
	AUTOMOBILE LIABILITY ☐ ANY AUTO ☐ OWNED AUTOS ONLY ☐ HIRED AUTOS ONLY ☐ SCHEDULED AUTOS ☐ NON-OWNED AUTOS ONLY						
A	☐ UMBRELLA LIAB ☒ OCCUR ☒ EXCESS LIAB ☐ CLAIMS-MADE ☐ DED ☐ RETENTION \$	Y	Y	1-RSL-CO-17-01538640-00	1/1/2025	1/1/2026	EACH OCCURRENCE \$3,000,000 AGGREGATE \$3,000,000 \$ PER STATUTE ☐ OTH-ER ☐ E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below Y/N ☐ N/A		N/A				
B	Participant Accident			US1929937	1/1/2025	1/1/2026	Excess Medical 50,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Verification of General Liability and Excess Liability coverage for COVERED ACTIVITIES: Abuse and Molestation Aggregate on the General Liability policy is \$4,000,000. Medical Expense Coverage applies to Office Premises and Event Spectators only. General Liability policy includes a 30 Day Notice of Cancellation per policy provisions.

Other Insureds includes the following: Individual Members of USA Swimming, Inc., while acting in that capacity; Group Members, including Member Clubs, of USA Swimming, Inc., while acting in that capacity but solely as respects to "bodily injury" and "property damage" arising from "covered activities" for which a group member has received approval from USA Swimming, Inc. or its authorized representative.

See Attached...

CERTIFICATE HOLDER**CANCELLATION**

City of Columbia
700 N Garden Street
Columbia TN 38401

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE



ADDITIONAL REMARKS SCHEDULE

Page 1 of 1

AGENCY Insurance Office of America		NAMED INSURED USA Swimming, Inc.; USA Swimming Foundation, and USA Swimming Local Swimming Committees & Member Clubs 1 Olympic Plaza Colorado Springs CO 80909-5780	
POLICY NUMBER		EFFECTIVE DATE:	
CARRIER	NAIC CODE		

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,

FORM NUMBER: 25 FORM TITLE: CERTIFICATE OF LIABILITY INSURANCE

Covered Activities (For Commercial General Liability Coverage)

With respect to USA Swimming, Inc. Member Clubs, Group Members, Member Coaches, and Member Officials (all if in good standing); volunteers and additional insured owner/lessors of premises, sponsors and co-promoters, coverage hereunder for these entities applies only to:

1) Swimming meets that have been issued a written Sanction (pursuant to USA Swimming Rule 202.4 and Rule 202.5) or Approval (pursuant to USA Swimming Rule 202.6). Approved meets means a competition where an Approval is issued by USA Swimming, Inc., or one of the USA Swimming, Inc. Local Swimming Committees for swimming meets conducted in conformance with USA Swimming, Inc. technical rules in which members and non-members may compete, including foreign meets under the USA Swimming, Inc. open border policy. USA Swimming, Inc. member clubs that either host or participate in a swimming meet that has been issued a Sanction or Approval or participate in an open border competition will be considered an insured provided that all of its athletes competing and coaches on deck are members of USA Swimming, Inc. in good standing.

2) Swimming practices, dry land training activities, camps, and learn to swim programs where all swimmers are members of USA Swimming, Inc. or U.S. Masters Swimming, Inc. and are conducted under direct and active supervision of a USA Swimming, Inc. member coach in good standing. Dry land training activities mean weight training, running, calisthenics, and exercise machine training, and any other training activities for which an insured has received approval from USA Swimming, Inc. or its authorized representative.

3) USA Swimming, Inc. Swim-A Thons sponsored by or registered with USA Swimming, Inc.

4) Social events and fund-raising activities that are events or activities for which an insured has received approval from USA Swimming, Inc. or its authorized representative.

5) Swimming tryouts. Swimming Tryouts mean swimming practices where a swimmer(s) who is not and who has never been a member of USA Swimming, Inc. participates in swimming activities with a USA Swimming, Inc. member club for a period not to exceed thirty days from the first day of practice to determine the swimmer's interest in becoming a member of USA Swimming, Inc. Tryout swimmers may not participate in more than one tryout period within the same twelve month span.

6) Safety Training for Swim Coaches, CPR, and Lifeguard Certifications of USA Swimming, Inc. member coaches and/or USA Swimming, Inc. members completing requirements to become member coaches, conducted by USA Swimming, Inc. member coaches that are member representatives of one of the approved agencies listed on the USA Swimming, Inc. Swim Training for Swim Coaches In-Water Skills Checklist.

7) USA Swimming official members in good standing attending an Observed Swim Meet (pursuant to USA Swimming Rule 202.8). An Observed Swim Meet is defined as a swim meet observed by an assigned USA Swimming, Inc. official(s) for conformance with USA Swimming, Inc. technical rules in a meet conducted under rules other than USA Swimming rules.

8) "Organized practices" that have been reported and a premium has been paid for. Organized practices are defined as recreation league meets hosted by USA Swimming member club with community teams that are not USA Swimming member teams.

The Certificate Holder is included as an Additional Insured on a Primary and Non-Contributory basis as required by written agreement. Waiver of Subrogation applies per written agreement.

Member Club: Excel Aquatics
RE: practice

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

BLANKET ADDITIONAL INSURED

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

1. Additional Insured

Paragraph 2. of **Section II – Who Is An Insured** is amended by the addition of the following:

- e. Any person or organization is included as an additional insured, but only to the extent such person or organization is held liable for "bodily injury", "property damage" or "personal and advertising injury" caused by your acts or omissions. With respect to the insurance afforded to such insured, all of the following additional provisions apply:
 - (1) You and such person or organization have agreed in a written "insured contract" that such person or organization be added as an additional insured under this policy;
 - (2) The "bodily injury", "property damage" or "personal and advertising injury" for which said person or organization is held liable occurs subsequent to the execution of such "insured contract";
 - (3) The most we will pay is the lesser of either the Limits of Insurance shown in the Declarations or the Limits of Insurance required by the "insured contract";
 - (4) Such person or organization is an insured only with respect to:
 - (a) Their ownership, maintenance, or use of that part of the premises, or land, owned by, rented to, or leased to you, except such person or organization is not an insured with respect to structural alterations, new construction or demolition operations performed by or on behalf of such person or organization;
 - (b) Your ongoing operations performed for that insured;
 - (c) Their financial control of you, except such person or organization is not an insured with respect to structural alterations, new construction or demolition operations performed by or on behalf of such person or organization;
 - (d) The maintenance, operation or use by you of equipment leased to you by such person or organization;
 - (e) Operations performed by you or on your behalf and for which a state or political subdivision has issued a permit, provided such operations are not performed for such state or political subdivision, and are not included within the "products-completed operations hazard";
 - (5) This insurance does not apply to "bodily injury", "property damage", "personal and advertising injury", "occurrence" or offense:
 - (a) Which takes place at a particular premise after you cease to be a tenant of that premises;
 - (b) Which takes place after all work, including materials, parts or equipment furnished in connection with such work to be performed by or on behalf of the additional insured at the site of the covered operations, has been completed;
 - (c) Which takes place after that portion of "your work" out of which the injury or damage arises has been put to its intended use by any other person or organization other than another contractor or subcontractor engaged in performing operations for a principal as part of the same project;
 - (d) Which takes place after the expiration of any equipment lease to which (4)(d) above applies;

(6) With respect to architects, engineers or surveyors, coverage does not apply to "bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering or failure to render any professional services by or for you, including:

(a) The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders, or drawings and specifications;

(b) Supervisory, inspection, architectural or engineering services.

However, if an Additional Insured endorsement is attached to this policy that specifically names a person or organization as an Insured, then this subsection 2.e. does not apply to such person or organization.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**WAIVER OF TRANSFER OF RIGHTS OF RECOVERY
AGAINST OTHERS TO US (WAIVER OF SUBROGATION)**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
ELECTRONIC DATA LIABILITY COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
POLLUTION LIABILITY COVERAGE PART DESIGNATED SITES
POLLUTION LIABILITY LIMITED COVERAGE PART DESIGNATED SITES
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART
RAILROAD PROTECTIVE LIABILITY COVERAGE PART
UNDERGROUND STORAGE TANK POLICY DESIGNATED TANKS

SCHEDULE

Name Of Person(s) Or Organization(s):

ANY PERSON OR ORGANIZATION FOR WHOM THE NAMED INSURED HAS AGREED BY WRITTEN CONTRACT TO FURNISH THIS WAIVER.

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The following is added to Paragraph 8, **Transfer Of Rights Of Recovery Against Others To Us** of Section IV – Conditions:

We waive any right of recovery against the person(s) or organization(s) shown in the Schedule above because of payments we make under this Coverage Part. Such waiver by us applies only to the extent that the insured has waived its right of recovery against such person(s) or organization(s) prior to loss. This endorsement applies only to the person(s) or organization(s) shown in the Schedule above.

POLICY NUMBER: 1-RSL-CO-17-01538639-00

COMMERCIAL GENERAL LIABILITY
CG 20 01 12 19

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

PRIMARY AND NONCONTRIBUTORY – OTHER INSURANCE CONDITION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

The following is added to the **Other Insurance** Condition and supersedes any provision to the contrary:

Primary And Noncontributory Insurance

This Insurance is primary to and will not seek contribution from any other Insurance available to an additional insured under your policy provided that:

- (1) The additional insured is a Named Insured under such other Insurance; and

- (2) You have agreed in writing in a contract or agreement that this insurance would be primary and would not seek contribution from any other insurance available to the additional insured.

Mule Town & Excel Aquatics

Excel Aquatics Mission/Vision Statement

Excel Aquatics is dedicated to swimming technique, training, and performance in a positive environment for swimmers of all ability levels. We are committed to a "team" environment where every swimmer feels important and is encouraged to take the disciplines learned at the pool into their every day life.

To provide a complete teaching and training environment where every participant is valued and afforded every opportunity to EXCEL.

Excel is a parent-governed, 501c3 not-for-profit organization dedicated to fulfilling our mission statement and to providing an exceptional athletic experience for the Middle Tennessee aquatic athletes.

Mule Town Rec Membership

Excel Aquatics is open to adding the facility membership fee to our program registrations, or monthly billing..

Insurance Coverage Overview

The Certificate of Insurance (COI) is attached.

Facility Rental Fee Structure & Recommendation

We recommend that Excel Aquatics pay 25% of the gross revenue from our Swim School and Scholastic programs to the City of Columbia for the use of the Mule Town Rec Center pools.

Comparable rates from other facilities

- **Williamson County:**
 - 25% of swim school gross revenue
 - \$7.00 per lane per hour for year-round training
- **City of Murfreesboro:**
 - 30% of swim school gross revenue
 - \$8.00 per lane per hour for year-round training
- **City of Gallatin:**
 - 25% of swim school gross revenue
 - \$10.00 per lane per hour for year-round training

Local Participation Numbers by Program

- Scholastic Middle School Teams: 60 swimmers
- Scholastic High School Teams: 28 swimmers
- Swim U Training: 29 swimmers
- Year-Round Training: 15 swimmers
- Summer League Swim Team: 43-62 swimmers

2024-25 Participating School Teams

- Agathos High School
- Agathos Middle School
- Battle Creek Middle School
- Columbia Academy Middle School
- Columbia Academy High School
- Columbia Central High School
- E.O. Coffman Middle School
- Lawrence County High School
- Loretto High School
- Maury Marlins High School (homeschool)
- Santa Fe Unit School (High School) – does not attend meets
- Summertown High School
- Spring Hill High School
- Whitthorne Middle School
- Zion Christian Academy (High School & Middle School)

Columbia Residents Who Have Competed in College Swimming

- Faith Powel
- Siaka Weidenbaum
- Chase Hickman
- Steven Murry
- Macy Webb
- Caroline Poling
- Chris Janowicz
- Lisa Janowicz
- Josh Seltz
- Colton Kinzler
- Mykala Chavez
- Alli Wells

2024-25 Muletown Rec

- I. August pre-scholastic: 22 participants. 8/6-8/29 (Tue, Wed, Thurs) - parents paid Muletown directly.
Aim prepare participants to safely participate on their scholastic team.
- II. Scholastic Training: registered with Excel Aquatics
 - A. Dates
 1. Evaluations: 8/26-30
 2. Program start: Sept 3, 2024 - through January 23, 2025, or February 6th for HS State Qualifiers
 - B. Scholastic season participant numbers:
 1. Middle School: 60 @ 260 each
 2. High School: 28 @ \$300 each
 3. Train at Longview, or Brentwood (4) - participate 1 X per week (Anabelle Gray, McKennon Jones, Adrianna Llanes & Noah Garner)
 4. Swim-U: 4 from summer team grades 1-4
 - a. Fee: \$275
 - b. Tues & Thursdays; 10/15 through 1/23 (except public school holidays)
- III. 2024-25 Club-team participants: 15

2023-24:

- I. Spring Swim-U: total 29 participants (don't know the fee)
 - A. Advanced: 18 participants
 - B. Intermediate: 11 participants
- II. Summer Team:
 - A. 2023-24: 43 participants @160 each
 - B. 2022-23: 62 participants
 - C. Train from 7:00-9:45 AM – weekday mornings, outside
 - a. Advanced: 7:00-8:00 AM – whole pool
 - b. Intermediate: 8:00-9:00 AM– whole pool
 - c. Beginner: 9:00-9:45 AM – half-the pool; w/ water aerobics when water is warm

How scholastic 'works':

1. August: each school-authorized coach submits a roster.
 - a. New participants, are required to attend an evaluation
 - b. Each school's evaluations are scheduled for the last week of August.
2. I create a spreadsheet of all returning & new swimmers
3. I assign each swimmer to one of 4 – one-hour groups (see below)
 - a. Group assignment lists are emailed to the school-authorized coaches.
 - b. This only 'works' because I remember the skill level of returning swimmers & make notes about the skill-level of each evaluated swimmer.
4. Middle School swimmers train Mondays through Thursdays (4 hours/week)
5. High School swimmers train Mondays through Fridays (5 hours/week)
6. Pool-use hours & space: in 2024-25
 - a. Mondays – Thursdays:
 - 3:30-4:30 – Advanced Middle School
 - 4:30 – 5:30 – Advanced High School
 - 5:30-5:45 – break
 - 5:45-6:45 – Beginner & Intermediate Middle School
 - 6:45-7:45 – Intermediate High School (includes some Middle School)
 - b. Fridays: 4:30-5:30 – High School only
 - c. Space: up to 5 lanes of the indoor lap pool



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Jill Carlson, Sr. Administrative Assistant, jcarlson@columbiatn.gov 931-560-1451

AGENDA ITEM TITLE: APPROVE AND AUTHORIZE THE MAYOR TO SIGN THE NON-EXCLUSIVE USE AND OCCUPANCY PERMIT BETWEEN THE CITY OF COLUMBIA AND THE COLUMBIA GIRLS FASTPITCH ASSOCIATION FOR THE 2025 SEASON - WARD 4

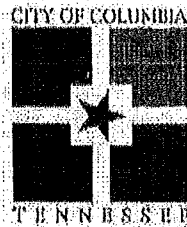
RECOMMENDATION: Approve.

INFORMATION: The Columbia Girls Fastpitch Association is requesting an annual Non-Exclusive Use Permit with the City of Columbia to utilize the Ridley Sports Complex softball fields for their practices and games for their 2025 season. Once approved, the permit will cover their annual facility needs.

CGFPA and the Columbia Parks and Recreation Department amicably agree on the recommended user fees for each season. Families that express the need are eligible for discounts and CGFPA does not charge gate fees for any of their events.

CERTIFICATION: N/A

ATTACHMENTS: Staff Report, Columbia Girls Fastpitch Association Non-Exclusive Use and Occupancy Permit w/insurance.



Parks and Recreation Department

**NON-EXCLUSIVE
USE AND OCCUPANCY PERMIT
2025**

This permit is executed by and between the City of Columbia, hereinafter called "City", and Columbia Girls Fast Pitch Association, whose address is P.O. Box 8153, Columbia, TN 38402, hereinafter called "Permittee".

WHEREAS, the City desires to provide facilities to its citizens, and non-commercial local societies, clubs and organizations engaged in civic, social, educational, cultural, recreational or philanthropic work or activities.

WHEREAS, the Permittee is such an organization and, in the promotion and sponsorship of such activities, generates revenues from voluntary contributions, special events, membership dues, fees and charges, and fund-raising projects.

NOW, THEREFORE, it is mutually agreed by and between the City and Permittee as follows:

1. PREMISES

City does hereby grant to Permittee a Non-Exclusive Use Permit for the use and occupancy of those certain premises described as, Ridley Park Complex "B" hereinafter called "Premises."

2. TERM

The term of this permit shall begin on February 13, 2025 and shall terminate on February 12, 2026, unless sooner terminated as specified herein.

3. PURPOSE

The premises specified in this permit shall be used only for the purposes of developing, operating and maintaining a sports field complex in accordance with Permittee's league franchise(s) and for no other purpose other than provided herein.

4. PUBLIC USE

The general public shall not be excluded from these premises or any portion thereof. Permittee shall open premises to the public in accordance with the schedule approved by the Parks and Recreation Department Director or designated representative. Whenever the facility is not in use and it is reasonably practical, Permittee shall allow other organizations to utilize the premises for activities, provided said organizations have prior authorization by the Parks and Recreation Department Director or designated representative.

5. **FEES**

The Permittee shall pay the Columbia Parks & Recreation Department the following user fee with payments due on or before the 1st Friday of each month preceding use.

- A. **Spring Season, April – June, \$50.00 per game day** beginning March 23, 2025 and continuing through June 28, 2025. Permittee reserves the right to request extension of user fee rights through July 2, 2025 should such extension be necessary to complete the regular season schedule.

Games will be scheduled on Monday, Tuesday, Thursday and Friday evenings. However, games may be scheduled on Saturday if needed. The necessary fields will be dug and lined each day that games are scheduled according to the Leagues Master Schedule provided to the Columbia Parks & Recreation Department. The Columbia Parks & Recreation Department will be notified of any schedule changes within 24 hours.

- B. **Fall Season, August – November, \$100.00 per game day** beginning August 17, 2025 and continuing through November 1, 2025. All games are held on Monday, Tuesday and Thursday and the fields are lined twice per week.

Permittee shall have the right to charge participants a reasonable fee designed to cover maintenance and program operation. Said fees will be subject to prior written approval of the Parks and Recreation Department Director or designated representative. Excessive fees or charges, which will have the effect of precluding low and moderate-income persons from using the site, shall not be permitted. All funds collected by the Permittee from the operation of the premises shall be used for the development, maintenance and program operation on the premises.

6. **BY-LAWS**

Membership in Permittee's organization shall be open to anyone meeting the requirements of its rules and by-laws. Permittee will not discriminate against a member because of age, race, color, religion, physical handicap, ancestry, sex or national origin. All restrictions, rules, and by-laws, if any, and changes thereto proposed by Permittee's organization shall require prior written approval from the Parks and Recreation Department Director or designated representative. A current copy of by-laws shall be on file in the Parks and Recreation Department office.

7. **MAINTENANCE**

Permittee shall assist in Premises maintenance by following means:

- A. Permittee shall assist with routine janitorial services to include litter pick-up, monitoring of rest rooms, press boxes, dug outs and any trash removal.
- B. Permittee shall provide all maintenance of improvements and structures installed by Permittee. The premises shall remain in a safe, clean, and sanitary condition acceptable to the Parks and Recreation Department Director, or designated representative.
- C. City shall provide routine maintenance to rest rooms to ensure overall cleanliness, sanitation and operation including maintaining adequate supplies for use. Permittee shall monitor supplies in the City's absence to help prevent misuse.
- D. City shall provide all routine and major maintenance for all grounds and facilities, other than improvements and structures installed by Permittee, to include but not limited to: fertilizing, watering, mowing, weeding, dragging and lining of fields, the repair of water and sewer lines, roadways and parking lots, and drainage systems.
- E. City shall provide field marking supplies (chalk, paint, string), equipment (chalk machine, paint machine, field groomer), and personnel as necessary to prep all scheduled fields before games as agreed under Fee, Item #5: bullets A and B above.

8. IMPROVEMENTS/DEVELOPMENT

Permittee shall not make any improvements, changes or alterations or cause same to be made to the premises, without written authorization and approval from the Parks and Recreation Department Director or designated representative. All improvements shall be at no cost to City.

9. REMOVAL OF IMPROVEMENTS

City agrees that all fixtures and improvements installed by Permittee in accordance with the provisions herein provided, and not being a replacement or repair of or for any improvement or improvements now existing and belonging to City, shall be and remain the property of Permittee. Permittee shall have the right to remove at Permittee's own expense said fixtures and improvements prior to the automatic termination of this agreement or within fifteen (15) days after such earlier termination; provided that any damage to City's property or improvements shall be repaired and the premises left in as good order and condition as when Permittee took possession of the premises. In the event Permittee does not so remove said fixtures and improvements within the above specified time, the City may remove, or sell, or destroy the same at the expense of Permittee, and Permittee shall pay to City the reasonable cost of any such removal, sale or destruction together with the reasonable cost of repair of damages to City's property or improvements resulting from such removal, sale or destruction. At the option of the City, any property, real or personal, not so removed by Permittee may be deemed abandoned.

10. OPERATION

All recreational programs, events, and activities sponsored by Permittee at said premises shall be at the sole cost and expense of Permittee and shall be approved by the Parks and Recreation Department Director, or designated representative, at least two weeks prior to the activity.

11. INDEMNITY

Permittee agrees to indemnify and save the City of Columbia and its agents and employees harmless from any and all liability, claims, damages or injuries to any person, including injury to Permittee or any of Permittee's employees, representatives, agents, guests, licensees, patrons or of any other person whomsoever, and all expenses of investigating and defending against same:

- A. Arising from or alleged to have arisen from or connected with the use of or operations on the permit premises;
- B. Caused or claimed to be caused by the independent acts of Permittee, Permittee's agents or employees, or the concurrent acts of the Permittee, the City or their agents or employees.

12. CONCESSION RIGHTS: (LEAGUE PLAY)

Permittee shall have the right to operate a concession stand for the sale of confections, soft drinks, gum and other food products which are prepared and served in accordance with City of Columbia regulations, during league events; PROVIDED, HOWEVER, that all profits there from shall be used by the Permittee for improvements, operation and maintenance of the premises.

Permittee shall also have the right to sell, at its discretion, T-shirts, helmet customization and other items as long as such items are directly related to the sport of girls' fast pitch softball and promote the league and its ideals of sportsmanship and fair play. All concessions sales and profits shall be used by the Permittee for improvements, operation and maintenance of the premises and other budget items necessary for league operations.

The Permittee shall be solely responsible for any thefts, vandalism, loss or damages to any concession goods that may be stored in the concession stand.

13. **CONCESSION RIGHTS: (NON-LEAGUE TOURNAMENT PLAY)**

Permittee shall have the right to operate a concession stand for the sale of confections, soft drinks, gum and other food products which are prepared and served in accordance with City of Columbia regulations, during non-league tournament play.

The Permittee shall be solely responsible for any thefts, vandalism, loss or damages to any concession goods that may be stored in the concession stand.

14. **ADVERTISING**

Permittee shall not place or cause to be placed upon the premises any billboards, banners, posters, or any other media advertising products or services, without the approval of Columbia Parks & Recreation Department. Signs of any nature installed on said premises must be first authorized and approved by City. This provision does not include uniforms as provided by team sponsors.

15. **POSSESSOR INTEREST AND TAXES**

This permit may create a taxable possessor interest in Permittee; therefore, as further consideration for the execution of this permit, Permittee agrees to pay and discharge before delinquency, all taxes and assessments, which may be levied against said premises by reason of any interest of Permittee during, said term.

16. **NON-EXCLUSIVE OCCUPANCY**

It is specifically understood and agreed that Permittee's use hereunder shall be non-exclusive and shall not result in any proprietary rights. City reserves, and shall always have the right to enter said premises for the purpose of viewing and ascertaining the condition thereof, or to protect its interest in the premises or to inspect the operations.

17. **COMPLIANCE WITH THE LAW**

Permittee shall, at its sole cost and expense, comply with all the requirements of all Municipal, State and Federal authorities now in effect or which may be in effect which pertain to the permit premises or any operations of the Permittee conducted thereon.

18. **INSURANCE**

On or before the execution date of this Permit by the City, Permittee shall submit to City an Insurance policy or Certificate of Insurance evidencing that Permittee has obtained from a generally recognized insurer, insurance in the following form and minimum amounts specified.

Comprehensive General Liability Insurance of:

- | | | |
|----|-------------|---------------------------------|
| A. | \$2,000,000 | Bodily Injury - per person |
| B. | \$2,000,000 | Bodily Injury - Each Occurrence |
| C. | \$ 250,000 | Property Damage |

The Policy shall name the City of Columbia as additional insured. The Policy of Insurance shall contain the following clauses:

"It is agreed that the Policy shall not be cancelled nor the coverage reduced until thirty (30) days after the Parks and Recreation Department Director of the City of Columbia, shall have received written notice of such cancellation or reduction. The notice shall be deemed effective the date delivered to said Director, as evidenced by properly validated return receipt."

"The Insured waives any right of subrogation against City of Columbia which might arise by reason of any payment under this Policy."

The City reserves the right to re-evaluate the amount and type of insurance required during the term of this permit. Permittee shall provide the amount and type of insurance as required by the Parks and Recreation Department Director within thirty (30) days after Permittee shall have received written notice of such requirement.

19. EQUAL OPPORTUNITY

Permittee will not discriminate against any employee or applicant for employment because of age, race, color, religion, physical handicap, ancestry, sex or national origin. This provision shall include, but is not limited to, the following: Employment, upgrading, demotion, transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training including apprenticeship.

20. NON-DISCRIMINATION

Permittee, in the operations to be conducted pursuant to the provisions of this permit and otherwise in the use of the facility, will not discriminate or permit discrimination against any person or class of persons by reason of race, color, creed or national origin, sex, age, handicap, or marital status in any manner.

21. DRUG AND ALCOHOL POLICY

In accordance with City of Columbia Substance Abuse Policy (Change 1) dated November 1, 1993, neither Permittee nor its employees, consultants agents or contractors while in any way using the permitted property, shall be in any way impaired because of being under the influence of alcohol or a drug, shall possess an open container of alcohol or consume alcohol or possess or be under the influence of an illegal drug, or shall sell, offer or provide alcohol or a drug to another person.

22. UTILITIES AND SERVICES

The City shall provide all utilities and services on the Ridley Park Sports Complex.

23. AMENDMENT TO PERMIT

This Permit fully expresses all understanding of the parties to this Permit and no verbal understanding of the parties, their officers, employees or agents shall be valid unless made in the form of a written amendment to this Permit and duly approved and executed by Permittee and Parks and Recreation Department Director.

24. PARTIAL INVALIDITY

If any provision of this Permit or the application thereof to any person or circumstances shall to any extent, be invalid or unenforceable, the remainder of this Permit, or the application of such provision to persons or circumstances other than those as to which it is invalid or unenforceable, shall not be affected thereby, and each provision of this Permit shall be valid and be enforced to the fullest extent permitted by law.

25. GOVERNING LAW

This Permit shall in every respect be binding upon the parties hereto and their respective successors and assigns. The laws of the State of Tennessee shall govern this Permit.

26. PROVISIONS REQUIRED BY LAW

Each and every provision of law and clause required by law to be inserted in this Permit shall be deemed to be inserted herein and the Permit shall be read and enforced as though it were included herein, and if for any reason any such provision is not inserted, or is not correctly stated, then upon application of either party the Permit shall forthwith be physically amended to make such insertion or correction.

27. NOTICE

Any notices required or permitted to be given pursuant to this Permit may be personally served on the other party by the party giving such notice, or may be served by certified mail, return receipt requested, to the following address:

PERMITTEE

Columbia Girls Fast Pitch Association
c/o April Watson, President
P.O. Box 8153
Columbia, TN 38402
Phone: (931) 374-8993
awatson@springhilltn.org

CITY

Columbia Parks & Recreation Department
c/o Mackel Reagan, Director
821 W. 9th Street
Columbia, TN 38401
Phone: (931) 388-8119

28. SPECIAL PROVISIONS

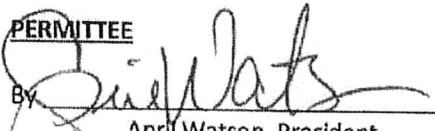
In the event there is any conflict between the following special provisions and any other provisions of this permit, the special provisions shall govern. The special provisions are as follows:

- The Permittee shall provide proof of Indemnification Insurance and a copy of previous year / season financial records to the Parks and Recreation Department to be submitted with the agenda packet for council approval.
- Permittee must also provide a copy of the league rules and by-laws when returning this document to Columbia Parks & Recreation Department. A copy of the weekly game schedule must be provided when it is completed.
- The Permittee shall not commence practice sessions or games at premises until contract terms are approved by Council and signed by all parties as required.
- Permittee shall not sublet, transfer, or assign the fields to any other organizations or groups outside of Permittee for any reason. This includes nonfood items to be sold as concessions: hats, helmets, t-shirts, customizations, and etc.
- All organizations and groups outside of Permittee must have written permission from the Parks & Recreation Director or Designee prior to use of fields.
- The City's Logo may not be used on any concession products without the City's approval.
- The Parks & Recreation Director or his Designee will coordinate efforts with the Permittee to confirm field availability prior to approving other organizations usage of the facilities during the term of this agreement.
- Permittee shall have the right to charge a fee for groups or individuals to provide clinics, teachings, or instructional classes for league participants. All funds collected by Permittee shall be used for premises development, maintenance, and program operation.
- The Permittee reserves the right to govern its membership according to the published by-laws provided and on-file with Columbia Parks & Recreation Department. The by-laws limit membership in the Columbia Girls Fast Pitch League to female participants between the ages of four (4) and eighteen (18) in accordance with its sanctioning body, the Amateur Softball Association (ASA).
- The parties agree to attempt to execute any renewal of this agreement with such revisions as necessary within 30 days of the expiration date on this agreement.

29. TERMINATION

- A. **FOR CAUSE:** The Parks and Recreation Department Director, by giving written notification specifying an effective date, not less than five (5) days after the date of written notification, may terminate this Permit on behalf of the City, in whole or part, for cause which shall include:
- 1.) Failure for any reason of Permittee to fulfill its obligations under this Permit in a timely manner acceptable to the Parks and Recreation Department Director, including non-compliance with other City directives, Federal, State and local statutes, rules, laws, regulations or directives non-applicable or as may become applicable.
 - 2.) Any ineffective or improper use of the site by Permittee, its employees, agents, subcontractors, guests, or any person or group under Permittee's responsibility.
 - 3.) Any conduct on the site by Permittee, its employees, agents or subcontractors unacceptable to the Parks and Recreation Department Director.
- B. **FOR CONVENIENCE:** Either City or Permittee may seek termination of this Permit upon thirty (30) days written notice to the other party.

IN WITNESS WHEREOF, the City and the Permittee have caused this Permit to be executed, effective the date first above written, by their duly authorized agents.

PERMITTEE
By 
April Watson, President
Columbia Girls Fast Pitch Association
Date 1/28/25

CITY OF COLUMBIA
By _____
Mackel Reagan, Director
Parks & Recreation
Date _____

By _____
Charles (Chaz) M. Molder,
Mayor
Date _____

Legal Form Approved: 
Jake Hubbell,
City Attorney
Date 1/31/25

By _____
Thad H. Jablonski,
City Recorder
Date _____

Title VI Policy

It is the policy of the City of Columbia to ensure that no citizen shall, on the grounds of race, color or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
01/23/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER

Chappell Insurance
4335 Cox Rd, Ste 4335
Glen Allen, VA, 23060

CONTACT

NAME: Daryl Chappell

PHONE (A/C, No, Ext): 804-733-2020

FAX (A/O, No): 804-591-1803

E-MAIL ADDRESS: daryl@chappellinsurance.com

INSURED

Columbia Girls Fast Pitch
1618 London Drive
Columbia, TN 38401

(B) Teams In Columbia Girls Fast Pitch group

INSURER(S) AFFORDING COVERAGE**NAIC #**

INSURER A: SiriusPoint America Insurance Company

38776

INSURER B: Axis Insurance Company

37273

INSURER C:

INSURER D:

INSURER E:

INSURER F:

COVERAGES

CERTIFICATE NUMBER:

NS-SB-10-001865

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDITIONAL INSURED	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	☒ COMMERCIAL GENERAL LIABILITY	X	PLH02GL00000601	01/01/2025 12:01 AM	01/01/2026 12:01 AM	EACH OCCURRENCE \$2,000,000
	☐ CLAIMS-MADE ☒ OCCUR					DAMAGE TO RENTED PREMISES (Ea occurrence) \$1,000,000
						MED EXP (Any one person) \$
	GEN'L AGGREGATE LIMIT APPLIES PER:					PERSONAL & ADV INJURY \$1,000,000
	☐ POLICY ☐ PROJECT ☐ LOC					GENERAL AGGREGATE \$5,000,000
	☒ OTHER:					PRODUCTS-COMP/OP AGG \$2,000,000
	UMBRELLA LIAB		SRPO167022-00	01/01/2025 12:01 AM	01/01/2026 12:01 AM	Participant Legal Liability \$1,000,000
	☐ EXCESS LIAB					EACH OCCURRENCE \$
	☐ DED					AGGREGATE \$
	☐ RETENTION					\$
B	PARTICIPANT ACCIDENT					EXCESS MEDICAL \$100,000
						DEDUCTIBLE \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Coverage includes amateur play and practice in the insured sport for Columbia Girls Fast Pitch NS-SB-10-001865. The certificate holder is named as an additional insured but only with respect to the operations of the named insured. Sport Insured: Softball. Age Group: 12 & Under.

Coverage Effective From 12:52 PM on 01/23/2025 TO 01/01/2026

CERTIFICATE HOLDER

City of Columbia
700 N Garden Street
Columbia, TN 38401

Certificate Number: NS-SB-10-001865

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

ACORD 25 (2016/03)

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Notice to Texas Insureds: The insurer for the purchasing group may not be covered by an Insurance Insolvency guarantee fund or similar mechanism and the insurer of the group is not subject to all the insurance laws and regulations of this state.



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Jill Carlson, Sr. Administrative Assistant, jcarlson@columbiatn.gov 931-560-1451

AGENDA ITEM TITLE: APPROVE AND AUTHORIZE THE MAYOR TO SIGN A CONTRACT IN THE AMOUNT OF \$18,616 WITH PREVENTIA SECURITY SOLUTIONS PROVIDER FOR INSTALLATION OF CAMERAS AND OTHER SECURITY MEASURES ALONG WITH MONTHLY MONITORING OF THE MACEDONIA RECREATION CENTER, THE ARMORY RECREATION CENTER, THE DR. CHRISTA S. MARTIN COMMUNITY CENTER AND THE COLUMBIA AQUATICS AND RECREATION CENTER

RECOMMENDATION: Approve.

INFORMATION: The Parks and Recreation Department currently has Preventia Security Provider for security and monthly monitoring at the Rainey House in Woodland Park as well as Ridley Sports Complex. The department desires to extend those services to the Macedonia Recreation Center, The Armory Recreation Center, the Dr. Christa S. Martin Community Center and The Columbia Aquatics and Recreation Center in order to have the same company responsible for all Parks facilities. Services and fees are outlined in the provided agreements.

CERTIFICATION: The Chief Financial Officer certifies that \$18,616 is budgeted and unencumbered in Columbia Aquatics and Fitness Center-Maintenance and Repair Other.

ATTACHMENTS: Staff Report, Preventia proposal and agreements



Proposal

PO Box 1563
Columbia, TN 38402
(615) 422-5276

Proposal #	Customer #	System Type	PO Number	Term	Proposal Date
38995	SCT-C560	Brivo		Due upon receipt	January 10, 2025

Customer:
Columbia Parks and Recreation
821 W. 9th St.
Columbia, TN 38401

Site Location:
Muletown Rec Center
1446 Oak Springs Drive
Columbia, TN 38401

Contact Information:	Brief Description:
Customer Contact Columbia Parks and Recreation Phone: (931) 388-8119 x1451 Email: jcarlson@columbiatn.com Salesperson Name: Jacob Liber Phone: (931) 982-3604 Email: jliber@preventiasecurity.com	Proposal to install Brivo Access on (14) existing doors & upgrade readers. Client will be able to manage Brivo system from smartphone or computer via Brivo cloud. Preventia assumes all existing wiring & devices are in working condition.

Charges

Description	QTY	Rate	Amount
Brivo Access Control Equipment	1.00	0.00	0.00
Brivo ACS6100 Regular Main Panel (Accommodates (2) ACS6100 expansion boards) 1- B-ACS6000-MBE Two (2) Reader Ethernet Control Board with Wi-Fi antenna	1.00	1,699.00	1,699.00
Brivo ACS6100 Regular Expansion Chassis (Accommodates four (4) ACS6100 expansion boards)	3.00	639.00	1,917.00
Brivo (2) Reader Expansion Board	6.00	515.00	3,090.00
Brivo Full Size Smart Reader w/ Keypad - Mobile Pass Ready - Tri-Technology - Black - Main Entry	1.00	495.00	495.00
Brivo Full Size Smart Reader - Mobile Pass Ready - Tri-Technology - Black	13.00	380.00	4,940.00
Take-Over Existing Power Supplies & Existing Lock Hardware	1.00	0.00	0.00
Back Up Battery - 12V 7AH	4.00	50.00	200.00
Labor Charge - Install Devices & Educate Client	1.00	5,950.00	5,950.00
Brivo Remote (1) Hour On-Boarding & Training	1.00	150.00	150.00
Brivo Existing User Database Upload - Up to 2500 Users - Requires Properly Formatted CSV File	1.00	175.00	175.00
Total Charges:			18,616.00
Sales Tax:			1,203.25
Grand Total:			\$19,819.25

Recurring Services Added

Description	Activation Date	Next Invoice Date	Billing Cycle	Monthly Amount	Cycle Amount
Brivo Cloud Access Standard Edition - monthly software charge for (13) additional readers.	01/10/25	01/01/25	Monthly	195.00	195.00
Brivo Cloud Access - Standard Edition, includes monthly software access and first reader.	01/10/25	01/01/25	Monthly	35.00	35.00
Total Recurring Services:					\$230.00



Proposal

PO Box 1563
Columbia, TN 38402
(615) 422-5276

Notes

Note	Modified Date	User
- Preventia assumes that all existing lock hardware & wiring is in working condition. If wiring or lock device is defective, a change order will be provided to remedy the issue.	01/10/2025 13:04:02	Jacob (J.D.) Liber

x _____
Agreed To By Name Date

CONTACT US

Billing Questions (615) 422-5276	Sales (615) 422-5276	Central Station (931) 286-1907	Service (615) 422-5276	Email support@preventiasecurity.com
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To view this proposal online, please visit: <http://preventiasecurity.alarmbiller.com> | Registration Key: 3F62D6



Proposal

PO Box 1563
Columbia, TN 38402
(615) 422-5276

Proposal #	Customer #	System Type	PO Number	Term	Proposal Date
38996	SCT-C560	Starlink/Napco		Net 30 Days	January 10, 2025

Customer:
Columbia Parks and Recreation
821 W. 9th St.
Columbia, TN 38401

Site Location:
Muletown Rec Center
1446 Oak Springs Drive
Columbia, TN 38401

Contact Information:	Brief Description:
Customer Contact Columbia Parks and Recreation Phone: (931) 388-8119 x1451 Email: jcarlson@columbiatn.com Salesperson Name: Jacob Liber Phone: (931) 982-3604 Email: jliber@preventiasecurity.com	Proposal to transfer over existing MS9200 fire panel & monitor Fire System. Proposal includes 24/7 Cellular commercial fire monitoring & NFPA Annual Fire Inspection in monthly cost.

Charges

Description	QTY	Rate	Amount
FIRE ALARM EQUIPMENT	1.00	0.00	0.00
Reprogram Existing Fire System	1.00	149.00	149.00
Total Charges:			149.00
Sales Tax:			0.00
Grand Total:			\$149.00

Recurring Services Added

Description	Activation Date	Next Invoice Date	Billing Cycle	Monthly Amount	Cycle Amount
24/7 Preventia Premier Commercial Cellular Fire Monitoring	01/10/25	01/01/25	Monthly	65.00	65.00
Annual Fire Inspection - NFPA 72	12/23/24	01/01/25	Monthly	68.00	68.00
Inspection performed annually to ensure operations and compliance of fire alarm system. Monthly Charge					
Total Recurring Services:					\$133.00

Notes

Note	Modified Date	User
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x _____
Agreed To By Name Date

CONTACT US

Billing Questions	Sales	Central Station	Service	Email
(615) 422-5276	(615) 422-5276	(931) 286-1907	(615) 422-5276	support@preventiasecurity.com

To view this proposal online, please visit: <http://preventiasecurity.alarmbiller.com> | Registration Key: 3F62D6



Proposal

PO Box 1563
Columbia, TN 38402
(615) 422-5276

Proposal #	Customer #	System Type	PO Number	Term	Proposal Date
38994	SCT-C560	Burglar Alarm	POPSUS-0000207	Net 30 Days	January 10, 2025

Customer:
Columbia Parks and Recreation
821 W. 9th St.
Columbia, TN 38401

Site Location:
Muletown Rec Center
1446 Oak Springs Drive
Columbia, TN 38401

Contact Information:	Brief Description:
Customer Contact Columbia Parks and Recreation Phone: (931) 388-8119 x1451 Email: jcarlson@columbiatn.com Salesperson Name: Jacob Liber Phone: (931) 982-3604 Email: jliber@preventiasecurity.com	Proposal to take-over Burglar Alarm system & provide 24/7 monitoring of system. Client will be able to control system through Total Connect app. Preventia assumes that all existing equipment will be in full operational condition prior to take-over.

Charges

Description	QTY	Rate	Amount
MAIN BUILDING ALARM EQUIPMENT	1.00	0.00	0.00
Honeywell Vista 128BPT Control Panel	1.00	599.00	599.00
RESIDEO - Verizon LTE Cell/IP Communicator	1.00	275.00	275.00
RESIDEO - Wireless Commercial Hold Up Switch / Panic Button - Fixed Mounting	1.00	199.00	199.00
RESIDEO - Wireless Door Sensor (interior doors to complete partition)	3.00	50.00	150.00
RESIDEO - Wireless Receiver - High Unlimited Zones	1.00	199.00	199.00
Take-Over Existing Vista Keypads & Sensors	1.00	0.00	0.00
Wiring, Connectors, Project Supplies	1.00	125.00	125.00
Install Labor Charge	1.00	1,490.00	1,490.00
Total Charges:			3,037.00
Sales Tax:			138.65
Grand Total:			\$3,175.65

Recurring Services Added

Description	Activation Date	Next Invoice Date	Billing Cycle	Monthly Amount	Cycle Amount
24/7 Preventia Premier Cellular Monitoring with Interactive Services	01/10/25	01/01/25	Monthly	44.95	44.95
Total Recurring Services:					\$44.95

Notes

Note	Modified Date	User
Install Notes: Split system into (3) partitions: A - Pool, fitness, common areas B - Admin Area C - IT Dept	01/10/2025 12:42:40	Jacob (J.D.) Liber



Proposal

PO Box 1563
Columbia, TN 38402
(615) 422-5276

x _____
Agreed To By Name Date

CONTACT US

Billing Questions	Sales	Central Station	Service	Email
(615) 422-5276	(615) 422-5276	(931) 286-1907	(615) 422-5276	support@preventiasecurity.com
To view this proposal online, please visit: http://preventiasecurity.alarmbiller.com Registration Key: 3F62D6				



PREVENTIA SECURITY LLC
P.O. Box 1563
Columbia, Tennessee 38402
(615) 422-5276

STANDARD COMMERCIAL SECURITY AGREEMENT

Date:02/03/2025

Subscriber's Name: _____

Telephone No.:

Address: _____

Cell Phone No.:

1. PREVENTIA SECURITY LLC (hereinafter referred to as "PREVENTIA" or "ALARM COMPANY") agrees to sell, install, and program, at Subscriber's premises, and Subscriber agrees to buy an electronic security system consisting of the equipment and services described in the **attached Schedule of Equipment and Services or Proposal # See Attached 4 Locations**

Purchase Price: \$ See attached (plus applicable taxes) ***All locations are tax exempt**

2. DESCRIPTION OF EQUIPMENT AND SERVICES:

Check Services Provided:

- ☒ Monitoring Center Services ☐ Repair Service ☐ Inspection ☒ Remote Subscriber Access ☐ Cameras ☒ Access Control
☒ Access Control Administration ☐ Self-Monitoring ☐ Other: (See Attached Schedule of Equipment and Services.)

3. CHECK BOX FOR APPROPRIATE SERVICES: Only services selected are included:

SERVICES AND RECURRING CHARGES: All charges are billed in advance and are plus tax, if applicable [select one option]:

Billing shall be: ☒ Monthly ☐ Quarter Annually ☐ Semi-Annually ☐ Annually

(a) MONITORING CENTER CHARGES: Subscriber agrees to pay PREVENTIA:

☐ (i) The sum of \$ _____, payable in advance for the installation and programming of the communication software and communication devices if separate from the alarm panel if not already installed.

☒ (ii) The sum of \$ 44.95 per month for the monitoring of the Security System for the term of this agreement. **Per Location (4)**

(b) SERVICE (Select i or ii) **Fire alarm monitoring - \$65.00 per month - 1 Location**

☒ (i) Subscriber agrees to pay PREVENTIA on a per call basis. If this agreement provides for service on a per call basis, Subscriber agrees to pay PREVENTIA for all parts and labor at time of service. Subscriber is not obligated to call PREVENTIA for per call service and PREVENTIA is under no duty to provide service except its warranty service during warranty period. Service by anyone other than PREVENTIA during warranty period relieves PREVENTIA of any further obligations under the Limited Warranty. **Subscriber to initial for per call service option:**

☐ (ii) Subscriber agrees to pay PREVENTIA for a Repair Service Plan for the security equipment the sum of \$ _____ per month for the term of this agreement. **Check Box for Appropriate Repair Service Plan: ☐ Total Care Service Plan ☐ Extended Warranty Service Plan ☐ Preventive Care Service Plan**

☒ (c) INSPECTION AND TESTING: Subscriber agrees to pay PREVENTIA \$ 68.00 per month for the term of this agreement for inspection service. If this option is selected PREVENTIA will make _____ inspection(s) per year. Unless otherwise noted in the Schedule of Equipment and Services inspection service includes testing of all accessible components to insure proper working order. If the system is UL Certified, the inspection will comply with UL requirements. PREVENTIA will notify Subscriber 3 days in advance of inspection date. It is Subscriber's responsibility to reschedule or permit access. Testing at inspection tests only that components are in proper working order at time of inspection unless otherwise reported to Subscriber at time of inspection. Inspection does not include repair. If sprinkler alarm or other device monitoring water flow is inspected the inspection does not include inspection or testing of sufficiency of water supply, for which PREVENTIA has no responsibility or liability.

☐ (d) REMOTE SUBSCRIBER ACCESS / VIDEO STREAMING DATA [VSD] / CAMERAS / AUDIO: Subscriber agrees to pay PREVENTIA the sum of \$ _____ per month for the term of this agreement. Select remote access / video / audio services to be provided:

- ☐ Access Control ☐ Recording Device ☐ Monitoring Center Remote Video / Audio Monitoring for Live Streaming
☐ Video Clips Monitored Upon Alarm Activation Only ☐ Verification Recorded Video Clips ☐ Cloud Service Data Storage and Retrieval
☐ Remote Access By Subscriber ☐ Video Data to Subscriber's Smart Phone ☐ Other (describe):

☒ (e) ACCESS CONTROL ADMINISTRATION SERVICES: Subscriber agrees to pay PREVENTIA the sum of \$ 230 per month for the term of this agreement. Select Access Control Administration services to be provided:

- ☒ Remote Access Administration ☐ On-Site Administration ☐ Data Storage ☐ Data Backup

☒ **IN LIEU OF SEPARATE RECURRING CHARGES IN PARAGRAPHS 4(a)-(i) ABOVE, SUBSCRIBER SHALL PAY \$ 542.80 PER MONTH WHICH INCLUDES ALL THE CHECKED SERVICES IN PARAGRAPHS 3(a)-(e).**

4. **TERM OF AGREEMENT / RENEWAL:** The term of this agreement shall be for a period of 36 months and shall automatically renew in 12 month increments thereafter under the same terms and conditions, unless either party gives written notice to the other of their intention not to renew the agreement at least 30 days prior to the expiration of any term. After the expiration of one year from the date hereof PREVENTIA shall be permitted from time to time to increase all charges by an amount not to exceed ten percent each year and Subscriber agrees to pay such increase. PREVENTIA may invoice Subscriber in advance monthly, quarterly, or annually at PREVENTIA's option. Unless otherwise specified herein, all recurring charges for 3(a)-(i) services shall commence on the first day of the month next succeeding the date hereof, all payments being due on the first day of the month.

5. **MONITORING CENTER SERVICES:** Upon receipt of an alarm signal, video or audio transmission, from Subscriber's security system, PREVENTIA or its designee Monitoring Center shall make every reasonable effort to notify Subscriber and the appropriate municipal police or fire department [First Responders] depending upon the type of signal received. Not all signals or transmissions will require notification to the authorities and Subscriber may obtain a written response policy from PREVENTIA. No response shall be required for supervisory, loss of communication pathway, trouble or low battery signals. Subscriber acknowledges that signals transmitted from Subscriber's premises directly to municipal police or fire departments are not monitored by personnel of PREVENTIA or PREVENTIA's designee Monitoring Center and PREVENTIA does not assume any responsibility for the manner in which such signals are monitored or the response, if any, to such signals. Subscriber acknowledges that signals and transmissions are transmitted over telephone lines, wire, air waves, internet, VOIP, radio or cellular, or other modes of communication, and pass through communication networks wholly beyond the control of PREVENTIA and are not maintained by PREVENTIA except PREVENTIA may own the radio network, and PREVENTIA shall not be responsible for any failure which prevents transmission signals from reaching the Monitoring Center or damages arising therefrom, or for data corruption, theft or viruses to Subscriber's computers if connected to the alarm communication equipment. Subscriber agrees to furnish PREVENTIA with a written Call List of names and telephone numbers of those persons Subscriber wishes to receive notification of alarm signals. Unless otherwise provided in the Call List, PREVENTIA will make a reasonable effort to contact the first person reached or notified on the list either via telephone call, text or email message. No more than one call to the list shall be required and any form of notification provided for herein, including leaving a message on an answering machine, shall be deemed reasonable compliance with PREVENTIA's notification obligation. All changes and revisions shall be supplied to PREVENTIA in writing. Subscriber authorizes PREVENTIA to access the control panel to input or delete data and programming. If the equipment contains video or listening devices permitting Monitoring Center to monitor video or sound then upon receipt of an alarm signal, Monitoring Center shall monitor video or sound for so long as Monitoring Center, in its sole discretion, deems appropriate to confirm an alarm or emergency condition. If Subscriber requests PREVENTIA to remotely activate or deactivate the system, change combinations, openings or closings, or re-program system functions, Subscriber shall pay PREVENTIA \$90.00 for each such service. PREVENTIA may, without prior notice, suspend or terminate its services, in PREVENTIA's sole discretion, in event of Subscriber's default in performance of this agreement or in event Monitoring Center facility or communication network is nonoperational or Subscriber's alarm system is sending excessive false alarms or runaway signals. Monitoring Center is authorized to record and maintain audio and video transmissions, data and communications, and shall be the exclusive owner of such property. All Subscriber information and data shall be maintained confidentially by PREVENTIA.

6. **REPAIR SERVICE:** Repair service pursuant to paragraph 3(b)(ii), includes the following based on the selected plan; **Total Care Service Plan includes all parts and labor. Extended Warranty Service Plan includes parts and reduced service rates. Preventive Care Service Plan includes one annual inspection and reduced service rates.** PREVENTIA shall service upon Subscriber's request the security system installed in Subscriber's premises between the hours of 8 a.m. and 5 p.m. Monday through Friday, within reasonable time after receiving notice from Subscriber that service is required, exclusive of Saturdays, Sundays and legal holidays. All repairs, replacement or alteration of the security system made by reason of alteration to Subscriber's premises, or caused by unauthorized intrusion, water, insects, vermin, lightning or electrical surge, or caused by any means other than normal usage, wear and tear, shall be made at the cost of the Subscriber. Batteries, electrical surges, lightning damage, software upgrades and repairs, communication devices no longer supported by communication pathways, obsolete components and components exceeding manufacturer's useful life are not included in service and will be repaired or replaced at Subscriber's expense payable at time of service. No apparatus or device shall be attached to or connected with the security system as originally installed without PREVENTIA's written consent.

7. **SUBSCRIBER REMOTE ACCESS:** If Remote Access is included in the Schedule of Equipment and Services to be installed and services provided by PREVENTIA, the equipment will transmit data via Subscriber's high speed Internet, cellular or radio communication service from remote device supplied by PREVENTIA or Subscriber's Internet or wireless connection device which is compatible with PREVENTIA's remote services. PREVENTIA will grant access to server permitting Subscriber to monitor the security system, access the system to arm, disarm and bypass zones on the system, view the remote video camera(s) and control other remote automation devices that may be installed or, when system design permits, connect the system to the Internet, over which PREVENTIA has no control. The remote services server is provided either by PREVENTIA or a third party. PREVENTIA shall install the camera(s) in a permissible legal location in Subscriber's premises to permit Subscriber viewing. PREVENTIA shall have no responsibility for failure of data transmission, corruption or unauthorized access by hacking or otherwise and shall not monitor or view the camera data. Electronic data may not be encrypted and wireless components of the alarm system may not meet Advanced Encryption Standard specifications for encryption of electronic data established by the US National Institute of Standards and Technology [NIST] or any other established criteria for encryption and PREVENTIA shall have no liability for access to the alarm system by others.

8. **WIRELESS AND INTERNET ACCESS CAPABILITIES:** Subscriber is responsible for supplying high-speed Internet access and/or wireless services at Subscriber's premises. PREVENTIA does not provide Internet service, maintain Internet connection, wireless access or communication pathways, computer, smart phone, electric current connection or supply, or in all cases the remote video server. In consideration of Subscriber making its monthly payments for remote access to the system, PREVENTIA will authorize Subscriber access. PREVENTIA is not responsible for Subscriber's access to the Internet or any interruption of service or down time of remote access caused by loss of Internet service, radio or cellular or any other mode of communication used by Subscriber to access the system. Subscriber acknowledges that Subscriber's security system can be compromised if the codes or devices used for access are lost or accessed by others and PREVENTIA shall have no liability for such third party unauthorized access. PREVENTIA is not responsible for the security or privacy of any wireless network system or router. Wireless systems can be accessed by others, and it is the Subscriber's responsibility to secure access to the system with pass codes and lock out codes. PREVENTIA is not responsible for access to wireless networks or devices that may not be supported by communication carriers and upgrades to Subscriber's system will be at Subscriber's expense. If Subscriber is Self-Monitoring, no signals will be received unless Subscriber has access to the selected mode of communication pathway such as cellular, radio or Internet service.

9. **ACCESS CONTROL SYSTEM OPERATION AND LIMITATIONS / ACCESS CONTROL ADMINISTRATION:** If Access Control is selected as a service to be provided and included in the Schedule of Equipment and Services, Access Control equipment shall be connected to a computer supplied by the Subscriber and connected to Subscriber's computer network. If data storage or backup is a selected service PREVENTIA or its designee shall store and/or backup data received from Subscriber's system for a period of one year. PREVENTIA shall have no liability for data corruption or inability to retrieve data even if caused by PREVENTIA's negligence. Subscriber's data shall be maintained confidential and shall be retrieved and released only to Subscriber or upon Subscriber's authorization or by legal process. Internet access is not provided by PREVENTIA and PREVENTIA has no responsibility for such access or IP address service. PREVENTIA shall have no liability for unauthorized access to the system through the Internet or other communication networks or data corruption or loss for any reason whatsoever. If Access Control Administration is selected as a

service to be provided PREVENTIA will maintain the data base for the operation of the Access Control System. Subscriber will advise PREVENTIA of all change in personnel and/or changes in access levels of authorization and restrictions, providing access card serial numbers or biometric data and such information that Subscriber deems necessary to identify personnel. All communication by Subscriber to PREVENTIA regarding personnel access must be in writing via email or fax to addresses designated by PREVENTIA. PREVENTIA shall have remote Internet access to the Subscriber's designated access control computer to program and make data base updates to the system. Subscriber is responsible for maintaining its computer and computer network and Internet access.

10. AUDIO / VIDEO SYSTEM OPERATION AND LIMITATIONS: If Audio / Video System is selected as a service to be provided and included in the Schedule of Equipment and Services, and if video equipment is attached to a recorder, it shall not be used for any other purpose. PREVENTIA shall be permitted to access and make changes to the system's operation on site and over the internet. If data storage is selected service, PREVENTIA shall store data received from Subscriber's system for one year. PREVENTIA shall have no liability for data corruption or inability to retrieve data even if caused by PREVENTIA's negligence. Subscriber's data shall be maintained confidential and shall be retrieved and released only to Subscriber or upon Subscriber's authorization or by legal process. Telephone or internet access is not provided by PREVENTIA and PREVENTIA has no responsibility for such access or IP address service. If system has remote access PREVENTIA is not responsible for the security or privacy of any wireless network system or router, and it is the Subscriber's responsibility to secure access to the system with pass codes and lock outs. PREVENTIA shall have no liability for unauthorized access to the system through the internet or other communication networks or data corruption or loss for any reason whatsoever. If audio or video devices are installed, Subscriber has been advised to independently ascertain that the audio or video devices are used lawfully. PREVENTIA has made no representations and has provided no advice regarding the use of audio or video devices, and it is Subscriber's sole responsibility to use the camera and audio devices lawfully.

LIMITED WARRANTY ON SALE

11. In the event that any part of the security equipment becomes defective, PREVENTIA agrees to make all repairs and replacement of parts without costs to the Subscriber for a period of ninety (90) days from the date of installation. PREVENTIA reserves the option to either replace or repair the alarm equipment, and reserves the right to substitute materials of equal quality at time of replacement or to use reconditioned parts in fulfillment of this warranty. This warranty does not include batteries, electrical surges, lightning damage, software upgrades and repairs, communication devices that are no longer supported by communication pathways, obsolete components, and components exceeding manufacturer's useful life. PREVENTIA is not the manufacturer of the equipment and other than PREVENTIA's limited warranty Subscriber agrees to look exclusively to the manufacturer of the equipment for repairs under its warranty coverage if any. **Except as set forth in this agreement, PREVENTIA makes no express warranties as to any matter whatsoever, including, without limitation to, unless prohibited by law, the condition of the equipment, its merchantability, or its fitness for any particular purpose and PREVENTIA shall not be liable for consequential damages.** PREVENTIA does not represent nor warrant that the security system may not be compromised or circumvented, or that the system will prevent any loss by burglary, hold-up, or otherwise; or that the system will in all cases provide the protection for which it is installed. **PREVENTIA expressly disclaims any implied warranties, including implied warranties of merchantability or fitness for a particular purpose.** The warranty does not cover any damage to material or equipment caused by accident, misuse, attempted or unauthorized repair service, modification, or improper installation by anyone other than PREVENTIA. Subscriber acknowledges that any affirmation of fact or promise made by PREVENTIA shall not be deemed to create an express warranty unless included in this agreement in writing; that Subscriber is not relying on PREVENTIA's skill or judgment in selecting or furnishing a system suitable for any particular purpose and that there are no warranties which extend beyond those on the face of this agreement, and that PREVENTIA has offered additional and more sophisticated equipment for an additional charge which Subscriber has declined. Subscriber's exclusive remedy for PREVENTIA's breach of this agreement or negligence to any degree under this agreement is to require PREVENTIA to repair or replace, at PREVENTIA's option, any equipment which is non-operational. This Limited Warranty is independent of and in addition to service contracted under paragraph 4(b)(ii) of this agreement. This Limited Warranty gives you specific legal rights and you may also have other rights which vary from state to state. If required by law, PREVENTIA will procure all permits required by local law and will provide a Certificate of Workman's Compensation prior to starting work.

GENERAL PROVISIONS

12. DELAY IN DELIVERY / INSTALLATION / RISK OF LOSS OF MATERIAL: PREVENTIA shall not be liable for any damage or loss sustained by Subscriber as a result of delay in delivery and/or installation of equipment, equipment failure, or for interruption of service due to electric failure, strikes, walk-outs, war, acts of God, or other causes, including PREVENTIA's negligence or failure to perform any obligation. The estimated date work is to be substantially completed is not a definite completion date and time is not of the essence. In the event the work is delayed through no fault of PREVENTIA, PREVENTIA shall have such additional time for performance as may be reasonably necessary under the circumstances. Subscriber agrees to pay PREVENTIA the sum of \$1,000 per day for each business day the work is re-scheduled or delayed by Subscriber or others engaged by Subscriber through no fault of PREVENTIA on less than 24 hour notice to PREVENTIA. If installation is delayed for more than one year from date hereof by Subscriber or other contractors engaged by Subscriber and through no fault of PREVENTIA, Subscriber agrees to pay an additional 5% of the contract Purchase Price upon installation. Subscriber assumes all risk of loss of material once delivered to the job site. Should PREVENTIA be required by existing or hereafter enacted law to perform any service or furnish any material not specifically covered by the terms of this agreement Subscriber agrees to pay PREVENTIA for such service or material.

13. TESTING OF SECURITY SYSTEM: The parties hereto agree that the security equipment, once installed, is in the exclusive possession and control of the Subscriber, and it is Subscriber's sole responsibility to test the operation of the security equipment and to notify PREVENTIA if any equipment is in need of repair. Service, if provided, is pursuant to paragraphs 4 and 7. PREVENTIA shall not be required to service the security equipment unless it has received notice from Subscriber, and upon such notice, PREVENTIA shall, during the warranty or repair service plan period, service the security equipment to the best of its ability within 36 hours, exclusive of Saturday, Sunday and legal holidays, during the business hours of 9 a.m. and 5 p.m. Subscriber agrees to test and inspect the security equipment and to advise PREVENTIA of any defect, error or omission in the security equipment. In the event Subscriber complies with the terms of this agreement and PREVENTIA fails to repair the security equipment within 36 hours after notice is given, excluding Saturdays, Sundays, and legal holidays, Subscriber agrees to send notice that the security equipment is in need of repair to PREVENTIA, in writing, by certified or registered mail, return receipt requested, and Subscriber shall not be responsible for payments due while the security equipment remains inoperable. In any lawsuit between the parties in which the condition or operation of the security equipment is in issue, the Subscriber shall be precluded from raising the issue that the security equipment was not operating unless the Subscriber can produce a post office certified or registered receipt signed by PREVENTIA, evidencing that warranty service was requested by Subscriber.

14. CARE AND SERVICE OF SECURITY SYSTEM: Subscriber agrees not to tamper with, remove or otherwise interfere with the Security System which shall remain in the same location as installed. All repairs, replacement or alteration of the security system made by reason of alteration to Subscriber's premises, or caused by unauthorized intrusion, lightning or electrical surge, or caused by any means other than normal usage, wear and tear, shall be made at the cost of the Subscriber. Batteries, electrical surges, lightning damage, software upgrades and repairs, communication devices that are no longer supported by communication pathways, obsolete components and components exceeding manufacturer's useful life, are not included in warranty or service under paragraph 4(b) (ii) and will be repaired or replaced at Subscriber's expense payable at time of service. No apparatus or device shall be attached to or connected with the security system as originally installed without PREVENTIA's written consent.

15. ALTERATION OF PREMISES FOR INSTALLATION: PREVENTIA is authorized to make preparations such as drilling holes, driving nails, making attachments or doing any other thing necessary in PREVENTIA's sole discretion for the installation and service of the security system, and PREVENTIA shall not be responsible for any condition created thereby as a result of such installation, service, or removal of the security system, and Subscriber represents that the owner of the premises, if other than Subscriber, authorizes the installation of the security system under the terms of this agreement.

16. SUBSCRIBER'S DUTY TO SUPPLY ELECTRIC AND TELEPHONE SERVICE: Subscriber agrees to furnish, at Subscriber's expense, all 110 Volt AC power, electrical outlet, ARC Type circuit breaker and dedicated receptacle, Internet connection, high-speed broadband cable or DSL and IP Address, telephone hook-ups, RJ31x Block or equivalent, as deemed necessary by PREVENTIA.

17. LIEN LAW: PREVENTIA or any subcontractor engaged by PREVENTIA to perform the work or furnish material who is not paid may have a claim against purchaser or the owner of the premises if other than the purchaser which may be enforced against the property in accordance with the applicable lien laws.

19. EXCULPATORY CLAUSE: PREVENTIA and Subscriber agree that PREVENTIA is not an insurer and no insurance coverage is offered herein. The security system, equipment, and PREVENTIA's services are designed to detect and reduce certain risks of loss, though PREVENTIA does not guarantee that no loss or damage will occur. PREVENTIA is not assuming liability, and, therefore, shall not be liable to Subscriber or any other third party for any loss, economic or non-economic, business loss or interruption, consequential damages, in contract or tort, data corruption or inability to retrieve data, personal injury or property damage sustained by Subscriber or others as a result of equipment failure, human error, burglary, theft, hold-up, fire, smoke, water or any other cause whatsoever, regardless of whether or not such loss or damage was caused by or contributed to by PREVENTIA's breach of contract, negligent performance to any degree in furtherance of this agreement, any extra contractual or legal duty, strict products liability, or negligent failure to perform any obligation pursuant to this agreement or any other legal duty, except for gross negligence and willful misconduct.

20. INSURANCE / ALLOCATION OF RISK: Subscriber shall maintain a policy of Comprehensive General Liability and Property Insurance for liability, casualty, fire, theft, and property damage under which Subscriber is named as insured and PREVENTIA is named as additional insured and which shall on a primary and non-contributing basis cover any loss or damage PREVENTIA's services are intended to detect to one hundred percent of the insurable value or potential risk. The parties intend that the Subscriber assume all potential risk and damage that may arise by reason of failure of the equipment, system or PREVENTIA's services and that Subscriber will look to its own insurance carrier for any loss or assume the risk of loss. PREVENTIA shall not be responsible for any portion of any loss or damage which is recovered or recoverable by Subscriber from insurance covering such loss or damage or for such loss or damage against which Subscriber is indemnified or insured. Subscriber and all those claiming rights under Subscriber waive all rights against PREVENTIA and its subcontractors for loss or damages caused by perils intended to be detected by PREVENTIA's services or covered by insurance to be obtained by Subscriber, except such rights as Subscriber or others may have to the proceeds of insurance.

21. LIMITATION OF LIABILITY: SUBSCRIBER AGREES THAT, EXCEPT FOR PREVENTIA'S GROSS NEGLIGENCE AND WILLFUL MISCONDUCT, SHOULD THERE ARISE ANY LIABILITY ON THE PART OF PREVENTIA AS A RESULT OF PREVENTIA'S BREACH OF THIS CONTRACT, NEGLIGENT PERFORMANCE TO ANY DEGREE OR NEGLIGENT FAILURE TO PERFORM ANY OF PREVENTIA'S OBLIGATIONS PURSUANT TO THIS AGREEMENT OR ANY OTHER LEGAL DUTY, EQUIPMENT FAILURE, HUMAN ERROR, OR STRICT PRODUCTS LIABILITY, WHETHER ECONOMIC OR NON-ECONOMIC, IN CONTRACT OR IN TORT, THAT PREVENTIA'S LIABILITY SHALL BE LIMITED TO THE SUM OF \$250.00 OR 6 TIMES THE MONTHLY PAYMENT FOR SERVICES BEING PROVIDED AT TIME OF LOSS, WHICHEVER IS GREATER. IF SUBSCRIBER WISHES TO INCREASE PREVENTIA'S AMOUNT OF LIMITATION OF LIABILITY, SUBSCRIBER MAY, AS A MATTER OF RIGHT, AT ANY TIME, BY ENTERING INTO A SUPPLEMENTAL AGREEMENT, OBTAIN A HIGHER LIMIT BY PAYING AN ANNUAL PAYMENT CONSONANT WITH PREVENTIA'S INCREASED LIABILITY. THIS SHALL NOT BE CONSTRUED AS INSURANCE COVERAGE AND NOTWITHSTANDING THE FOREGOING, PREVENTIA'S LIABILITY SHALL NOT EXCEED ITS AVAILABLE INSURANCE COVERAGE.

SUBSCRIBER ACKNOWLEDGES THAT THIS AGREEMENT CONTAINS EXCULPATORY CLAUSE, INDEMNITY, INSURANCE, ALLOCATION OF RISK AND LIMITATION OF LIABILITY PROVISIONS.

22. LEGAL ACTION / BREACH / LIQUIDATED DAMAGES / AGREEMENT TO BINDING ARBITRATION: The parties agree that due to the nature of the services to be provided by PREVENTIA, the payments to be made by the Subscriber for the term of this agreement form an integral part of PREVENTIA's anticipated profits; that in the event of Subscriber's default it would be difficult if not impossible to fix PREVENTIA's actual damages. Therefore, in the event Subscriber defaults in any payment or charges to be paid to PREVENTIA, Subscriber shall be immediately liable for any unpaid installation and invoiced charges plus 80% of the balance of all payments for the entire term of this agreement as LIQUIDATED DAMAGES and PREVENTIA shall be permitted to terminate all its services, including but not limited to terminating monitoring service, under this agreement and to remotely re-program or delete any programming without relieving Subscriber of any obligation herein. SUBSCRIBER ACKNOWLEDGES THAT THIS AGREEMENT CONTAINS A LIQUIDATED DAMAGE CLAUSE. The prevailing party in any litigation or arbitration is entitled to recover its legal fees from the other party. In any action commenced by PREVENTIA against Subscriber, Subscriber shall not be permitted to interpose any counterclaim. SUBSCRIBER MAY BRING CLAIMS AGAINST PREVENTIA ONLY IN SUBSCRIBER'S INDIVIDUAL CAPACITY, AND NOT AS A CLASS ACTION PLAINTIFF OR CLASS ACTION MEMBER IN ANY PURPORTED CLASS OR REPRESENTATIVE PROCEEDING. ANY DISPUTE BETWEEN THE PARTIES OR ARISING OUT OF THIS AGREEMENT INCLUDING ISSUES OF ARBITRABILITY, SHALL, AT THE OPTION OF ANY PARTY, BE DETERMINED BY BINDING AND FINAL ARBITRATION BEFORE A SINGLE ARBITRATOR ADMINISTERED BY ARBITRATION SERVICES INC. ITS SUCCESSORS OR ASSIGNS, PURSUANT TO ITS ARBITRATION RULES AT WWW.ARBITRATIONSERVICESINC.COM AND THE FEDERAL ARBITRATION ACT, EXCEPT THAT NO PUNITIVE OR CONSEQUENTIAL DAMAGES MAY BE AWARDED. The arbitrator shall be bound by the terms of this agreement, and shall on request of a party, conduct proceedings by telephone, video, submission of papers or in-person hearing. By agreeing to this arbitration provision the parties are waiving their right to a trial before a judge or jury, waiving their right to appeal the arbitration award and waiving their right to participate in a class action. Service of process or papers in any legal proceeding or arbitration between the parties may be made by First-Class Mail delivered by the U.S. Postal Service addressed to the party's address designated in this agreement, on file with an agency of the state, or any other address provided by the party in writing to the party making service. The parties submit to the jurisdiction and laws of Tennessee, except for arbitration which is governed by the FAA and the arbitration rules and agree that any litigation or arbitration between the parties shall be commenced and maintained in the county where PREVENTIA's principal place of business is located or Nassau County, New York. The parties waive trial by jury in any action between them unless prohibited by law. Any action between the parties must be commenced within one year of the accrual of the cause of action or shall be barred. All actions or proceedings by either party must be based on the provisions of this agreement. Any other action that Subscriber may have or bring against PREVENTIA in respect to other services rendered in connection with this agreement shall be deemed to have merged in and be restricted to the terms and conditions of this agreement.

SUBSCRIBER ACKNOWLEDGES THAT THIS AGREEMENT CONTAINS AN AGREEMENT TO ARBITRATE DISPUTES AND THAT ARBITRATION IS BINDING AND FINAL AND THAT SUBSCRIBER IS WAIVING SUBSCRIBER'S RIGHT TO TRIAL IN A COURT OF LAW AND OTHER RIGHTS.

23. PREVENTIA'S RIGHT TO SUBCONTRACT SPECIAL SERVICES: Subscriber agrees that PREVENTIA is authorized and permitted to subcontract any services to be provided by PREVENTIA to third parties who may be independent of PREVENTIA, and that PREVENTIA shall not be liable for any loss or damage sustained by Subscriber by reason of fire, theft, burglary or any other cause whatsoever caused by the negligence of third parties. Subscriber appoints PREVENTIA to act as Subscriber's agent with respect to such third parties, except that PREVENTIA shall not obligate Subscriber to make any payments to such third parties. Subscriber acknowledges that this agreement, and particularly those paragraphs relating to PREVENTIA's disclaimer of warranties, exemption from liability, even for its negligence, limitation of liability and indemnification, inure to the benefit of and are applicable to any assignees, subcontractors, manufacturers, vendors and Monitoring Center of PREVENTIA.

24. MOLD, OBSTACLES AND HAZARDOUS CONDITIONS: Subscriber shall notify PREVENTIA in writing of any undisclosed, concealed or hidden conditions in any area where installation is planned, and Subscriber shall be responsible for removal of such conditions. In the event PREVENTIA discovers the presence of suspected asbestos or other hazardous material, PREVENTIA shall stop all work immediately and notify Subscriber. It shall be Subscriber's sole obligation to remove such conditions from the premises, and if the work is delayed due to the discovery of suspected asbestos or other hazardous material or conditions then an extension of time to perform the work shall be allowed and Subscriber agrees to compensate PREVENTIA for any additional expenses caused by the delay but not less than \$1000.00 per day until work can resume. If PREVENTIA, in its sole discretion, determines that continuing the work poses a risk to PREVENTIA or its employees or agents, PREVENTIA may elect to terminate this agreement on 3 day notice to Subscriber and Subscriber shall compensate PREVENTIA for all services rendered and material provided to date of termination. PREVENTIA shall be entitled to remove all its equipment and uninstalled equipment and material from the job site. Under no circumstances shall PREVENTIA be liable to Subscriber for any damage caused by mold or hazardous conditions or remediation thereof.

25. NON-SOLICITATION: Subscriber agrees that it will not solicit for employment for itself, or any other entity, or employ, in any capacity, any employee of PREVENTIA assigned by PREVENTIA to perform any service for or on behalf of Subscriber for a period of two years after PREVENTIA has completed providing service to Subscriber. In the event of Subscriber's violation of this provision, in addition to injunctive relief, PREVENTIA shall recover from Subscriber an amount equal to such employee's salary based on the average three months preceding employee's termination of employment with PREVENTIA, times twelve, together with PREVENTIA's counsel and expert witness fees.

26. FALSE ALARMS / PERMIT FEES / WITNESS FEES: Subscriber is responsible for all alarm permits and fees, agrees to file for and maintain any permits required by applicable law and indemnify or reimburse PREVENTIA for any fees or fines relating to permits or false alarms. PREVENTIA shall have no liability for permit fees, false alarms, false alarm fines, the manner in which police or fire department responds, or the refusal of the police or fire department to respond. In the event of termination of police or fire department response this agreement shall nevertheless remain in full force and Subscriber shall remain liable for all payments provided for herein. In the event Subscriber or any third party subpoenas or summons PREVENTIA requiring any services or appearances, Subscriber agrees to pay PREVENTIA \$150 per hour for such services and appearances. Subscriber shall reimburse PREVENTIA for any Monitoring Center charges for excessive, run-a-way or false alarm signals.

27. SECURITY INTEREST / COLLATERAL: To secure Subscriber's obligations under this agreement Subscriber grants PREVENTIA a security interest in the security equipment installed by PREVENTIA and PREVENTIA is authorized to file a financing statement.

28. CREDIT INVESTIGATION: Subscriber and any guarantor authorize PREVENTIA to conduct credit investigations from time to time to determine Subscriber's and guarantor's credit worthiness.

29. FULL AGREEMENT / SEVERABILITY: This agreement along with the Schedule of Equipment and Services constitute the full understanding of the parties and may not be amended, modified or canceled, except in writing signed by both parties. Subscriber acknowledges and represents that Subscriber has not relied on any representation, assertion, guarantee, warranty, collateral agreement or other assurance, except those set forth in this Agreement. Subscriber hereby waives all rights and remedies, at law or in equity, arising, or which may arise, as the result of Subscriber's reliance on such representation, assertion, guarantee, warranty, collateral agreement or other assurance. To the extent this agreement is inconsistent with any other document or agreement, whether executed prior to, concurrently with or subsequent to this agreement the terms of this agreement shall govern. This agreement shall run concurrently with and shall not terminate or supersede any existing agreement between the parties unless specified herein. Should any provision of this agreement be deemed void, the remaining parts shall be enforceable.

SUBSCRIBER ACKNOWLEDGES RECEIVING A FULLY EXECUTED COPY

OF THIS AGREEMENT AND SCHEDULE OF EQUIPMENT AND SERVICES AT TIME OF EXECUTION.

PREVENTIA SECURITY LLC:

SUBSCRIBER:

By: 

Signature

Subscriber: Signature by Authorized Officer
Signing

Title of Person

Print Name of Subscriber

Subscriber's Email Address:

Tax ID or EIN

The undersigned personally guarantees Subscriber's performance of this agreement and agrees to be bound by all terms as a party herein.

Signature (Name Must Be Printed Below) SS#

Print Name

Residence Address

Columbia Parks & Rec - New Location Breakdown

All locations are Tax Exempt

Columbia Aquatic and Recreational Center

- Security Alarm - \$44.95 Monthly
- Brivo Access Control - \$230.00 Monthly
- Fire Alarm - \$133.00 Monthly

Macedonia Recreation Center

- Security Alarm - \$44.95 Monthly

Columbia Armory

- Security Alarm - \$44.95 Monthly

Fairview Recreation Center

- Security Alarm - \$44.95 Monthly



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Jill Carlson, Sr Administrative Assistant, jcarlson@columbiatn.gov, 931-560-1451

AGENDA ITEM TITLE: APPROVE THE PURCHASE OF ELECTRONIC SECURITY SYSTEMS
INSTALLATION FOR THE COLUMBIA AQUATICS AND RECREATION CENTER IN THE AMOUNT OF
\$70,450.00 UTILIZING STATE OF TN CONTRACT SWC-172.

RECOMMENDATION: Approve.

INFORMATION: The City of Columbia Parks and Recreation Department is requesting the purchase of a new electronic security system installation from Convergent for the amount of seventy thousand four hundred fifty dollars (\$70,450) utilizing State of TN contract SWC-172. The security system will provide the new Columbia Aquatics and Recreation Center with the amount of security necessary for that facility.

CERTIFICATION: The Chief Financial Officer certifies that \$70,450 is budgeted and unencumbered in Columbia Aquatics and Recreation Center - Computer Equipment.

ATTACHMENTS: Staff report, Convergent proposal, State of TN contract SWC-172

January 23, 2025

Muletown Rec
1446 Oak Springs Dr. Columbia, Tennessee 38401

Quotation: GT03772361P
RFP #:
Revision #: 1

Attention:
Jason Shockley

Reference:
Muletown Rec-CCTV New (012225)
New Video Surveillance System Installation

Contract Vehicle Used:
NASPO ValuePoint Tennessee (Contract # SWC 172)

On behalf of Convergent's global network of colleagues, I would like to personally thank you for providing Convergent with the opportunity to present this proposal addressing your Electronic Security System needs. We are confident that this proven solution is both comprehensive and customized to meet your needs today, and in the future.

Convergent's reputation for service excellence is backed by a foundational commitment to our core value of service, and we have been recognized as the #1 Systems Integrator by SDM Magazine. This recognition reflects the strong relationships Convergent has developed with the industry's top technology manufacturers, and our history of success with providing exceptional service to our customers.

Our guiding principle has always been to be our customers' best service provider. Our dedicated and certified team of professionals strives to uphold our customer-focused, service-based mission to make a daily difference for our customers. After achieving a successful on-time and on-budget project installation, Convergent will provide you with the industry's best ongoing service, including our 24/7 customer portal iCare, designed to track service work orders, project progress, and provide you with detailed metric reporting for continuous improvement.

The following security proposal is specifically designed to meet your needs. As your single point of contact, please feel free to contact me with any additional questions you may have. Thank you again for trusting Convergent as your partner.

Revision Log:

- Revision 1, 01/23/25: Change BoM table to reflect Material and Labor Breakout

SCOPE OF WORK

ELECTRONIC SECURITY SYSTEMS: VIDEO SURVEILLANCE OVERVIEW

Convergent Technologies proposes to furnish and install a **HANWHA** Video Surveillance System with **MILESTONE XPROTECT, PROFESSIONAL+ EDITION** (Video Management Software) for viewing and recording **(13)** indoor IP cameras and **(6)** outdoor IP cameras (including weather-proof housings) with a minimum of **4MP resolution** as shown on the plans and assumed as identified. All labor, materials, tools, and equipment required for the complete installation of this system are included in this proposal unless listed under the "Exclusions" section.

The video management Customer software will be installed on **(1)** Customer-provided, Windows-based video server ([recommended specifications are listed below **](#)). The video management software will provide video stream management, search capabilities, and storage management. The video surveillance system will require a connection to the Customer's internet in order to access the cameras remotely. Once the internet connection has been established, the system will have the capability to be viewed via a Windows-based computer and/or an app through iOS and Android smartphones.

Field devices will be installed at the following locations:

COVERAGE	CAMERA / RESOLUTION	LOCATION
Main Entrance, Indoor	Dome / 4MP x 1	Ceiling Mount by Entry Doors
North Entrance, Indoor	Dome / 4MP x 1	Ceiling Mount by Entry Doors
Basketball Court, Indoor	180-Degree with Wire Cage / 8MP x 1	Wall-Mount on Longer Wall
Basketball Court Corridor, Indoor	Dual-Lens / 4MP x 1	Ceiling Mount in Corridor Center
Fitness Room, Indoor	180-Degree / 8MP x 1	Wall-Mount in Room Center
Weight-Lifting Room, Indoor	180-Degree / 8MP x 1	Wall-Mount in Room Center
Dance Studio, Indoor	Dome / 4MP x 1	Wall-Mount in Room Corner
Spin Room, Indoor	Dome / 4MP x 1	Wall-Mount in Room Corner
Indoor Pool, Indoor	Dome / 5MP x 4	Wall-Mount in each Corner
Indoor Pool Corridor, Indoor	Dual-Lens / 4MP x 1	Ceiling Mount in Corridor Center
Outdoor Pool, Outdoor	270-Degree / 20MP x 2	Building Corners by Pool
North Entrance, Outdoor	270-Degree / 20MP x 2	Building Corners by North Entry
Basketball Court, Outdoor	270-Degree / 20MP x 1	Building Corner, N.W.
Basketball Court, Outdoor	Dome / 5MP x 1	Building Junction, North

EXISTING EQUIPMENT

- Software: Milestone XProtect, Professional+ Edition (edition is assumed)
 - Convergent to download and program software on video server (server by owner) to include the cameras within this proposal.
- Head End:
 - Video Server (by owner) - Convergent to setup for Milestone software
 - PoE Switches (by owner)
 - Patch Panels (by owner) - Convergent to terminate Cat6 into patch panels (assuming patch panels are not modular)
- Field Devices:
 - Convergent to remove existing, non-functional cameras
- Cabling:
 - Convergent to remove existing, cabling from the non-functional cameras

PROGRAMMING EXPECTATIONS

- For New Installations, Convergent Technologies to provide programming and commissioning of all proposed devices provided within this proposal on (1) Customer-Provided Video Server

- Frames per Second Recording: (12) Frames per Second
- Motion Recording Configuration: Determined once the installed camera is operating in its designated environment
- Convergent Technologies to adjust cameras (aim and focus) with the coordination of the Customer. Convergent Technologies will provide up to **(4) hours** to ensure that the installed camera field-of-views are acceptable.
- Convergent Technologies to program Camera Call-Ups:
- Convergent Technologies to program the following Integration(s):
 - **Convergent iTrac** - a client-facing solution that orchestrates project workflows, showcases actual project progress, and enables tracking and reporting of project activities
- Convergent Technologies to provide Workstation setup on up to (2) Customer-provided Computer(s)

TRAINING EXPECTATIONS

- Convergent will provide up to **(4) hours** for Customer Training towards the close of this project. Any additional training or return trips for this purpose shall be performed by Convergent with an approved change order. Customer Training includes:
 - How to setup up Customer on Customer-provided Computer(s)
 - How to access/view/retrieve stored video
 - How to add users and configure their profiles
 - How to use the search features

WORK TYPE

- ☐ New Construction
- ☒ Retrofit / System Addition
- ☐ CSP Mobilization

WORK REQUIREMENTS

- ☒ Normal Business Hours
- ☐ After Hours
- ☐ Weekend Hours

REFERENCED PLANS

- Drawing Set: Customer-Provided Plans with Convergent mark-ups
- Specification Set: N/A

INSTALLATION TIMELINE / IMPORTANT MILESTONES

TBD

**** RECOMMENDED VIDEO SERVER INFORMATION**

- Operating Software: Windows Server 2022
- Processor: Intel Silver 4410Y x 1
- Memory (includes additional 25% spare capacity): 32GB RAM
- Storage (includes additional 25% spare capacity): 60TB
- Throughput/Bandwidth (includes additional 25% spare capacity): 295 Mbps

SITE CONDITIONS

- Office Space with drywall and 10' drop tile ceilings.
- Warehouse Space with block walls and 30-35' ceilings.

SUBMITTAL / HAND-OFF REQUIREMENTS

- Product Data Submittals
- As-Built Drawings
- Related User Manuals
- Related Software – *Video Surveillance System*

BILL OF MATERIAL

The following bill of materials is intended to describe the scope of work / equipment provided by Convergent for this project by identifying major device and panel quantities. This bill of material is not intended to be a comprehensive list of all security system parts, components or accessories.

LINE	QTY	PART	DESCRIPTION	UNIT PRICE	EXT PRICE
1		VIDEO HEAD-END			
2	1.00	DTK-WM8NETS	Surge Protection for PoE RJ-45 / IP Camera. DITEK; 8-Port Wall Mount, CAM OR BASE SIDE	\$ 326.37	\$ 326.37
3		VIDEO SOFTWARE			
4	1.00	XPPPLUSBL	VMS BASE-XProtect Professional+. Milestone; (UNL) NVRs, Multi Site	\$ 454.15	\$ 454.15
5	19.00	XPPPLUSDL	CAM License-XProtect Professional+. Milestone; (UNL) Cam	\$ 154.15	\$ 2,928.85
6		VIDEO FIELD DEVICES			
7	4.00	QND-7082R	Indoor Dome Camera. Hanwha; Surface, 4MP, VF 2.8-12mm, Day/Night	\$ 334.70	\$ 1,338.80
8	4.00	SBP-122HWMW	Pendant Cap. Hanwha	\$ 20.81	\$ 83.24
9	4.00	SBP-120WMW	Wall Mount. Hanwha (Needs Pendant Cap)	\$ 15.26	\$ 61.04
10	5.00	QNV-8080R	Outdoor Dome Camera. Hanwha; Surface, 5MP, VF 3.2-10mm, Day/Night	\$ 406.93	\$ 2,034.65
11	5.00	SBP-301HWMW2	Pendant Cap. Hanwha	\$ 30.54	\$ 152.70
12	5.00	SBP-137WMW1	Wall Mount. Hanwha (Needs Pendant Cap)	\$ 38.87	\$ 194.35
13	2.00	PNM-7082RVD	Indoor / Outdoor Two-Way / Corridor Camera. Hanwha; 2x2MP (4MP), VF 3-6mm, Day/Night	\$ 837.48	\$ 1,674.96
14	2.00	SBP-215HWMW	Pendant Cap. Hanwha	\$ 24.98	\$ 49.96
15	2.00	SBP-300WMW1	Wall Mount. Hanwha (Needs Pendant Cap)	\$ 47.20	\$ 94.40
16	5.00	PNM-9085RQZ	Indoor / Outdoor Multi-Lens, 360-Degree Camera. Hanwha; 4x5MP (20MP), VF 4.13-9.4mm, Day/Night	\$ 2,270.81	\$ 11,354.05
17	5.00	SBP-317HWMW	Pendant Cap. Hanwha	\$ 45.81	\$ 229.05
18	5.00	SBP-390WMW2	Wall Mount. Hanwha (Needs Pendant Cap)	\$ 129.15	\$ 645.75
19	5.00	SBP-300KMW1	Corner Mount. Hanwha (Needs Pendant Cap & Wall Mount)	\$ 47.20	\$ 236.00
20	3.00	PNM-9022V	Indoor / Outdoor Multi-Lens, 180-Degree Camera. Hanwha; 4x2MP (8MP), FIXED 3.2mm, Day/Night	\$ 1,076.37	\$ 3,229.11
21	3.00	SBP-276HM	Pendant Cap. Hanwha	\$ 45.81	\$ 137.43
22	3.00	SBP-300WMW1	Wall Mount. Hanwha (Needs Pendant Cap)	\$ 47.20	\$ 141.60
23	2.00	SSU00481	Ceiling Tile Support, Pack of 5. Space Age	\$ 86.09	\$ 172.18
24	1.00	STI-9729	Wire Guard Damage Stopper, 7 x 7 x 7. STI-USA; White	\$ 69.43	\$ 69.43
25		VIDEO CABLE			
26	4.00	CAT6P-BLK	Cat6, Min Comp, Plenum. Windy City Wire; 1000' Box, CMP Black	\$ 408.33	\$ 1,633.32
27	10.00	523911	3/4" IMC Conduit. Allied Tube; (+25% for fittings, boxes, straps, etc.), per 10' Stick	\$ 46.87	\$ 468.70
28	6.00	DTK-MRJOPE	Surge Protection for PoE RJ-45 / IP Camera. DITEK; 1-Port Indoor, CAM SIDE	\$ 69.43	\$ 416.58
29	6.00	AC6BLK-3	Patch Cable, Cat6. Windy City Wire; 3', Black	\$ 2.77	\$ 16.62
30	6.00	AC6BLK-10	Patch Cable, Cat6. Windy City Wire; 10', Black	\$ 6.18	\$ 37.08
31	2.00	OE-WT850B	Wire Ties (100 Pack) - Black // 1 Pack every 2,000' Box	\$ 7.62	\$ 15.24
32	12.00	OE-JHK3425	3/4 Hooks (25 Pack) // 1 Hook every 10'	\$ 49.98	\$ 599.76
33	1.00	OE-JHK225	2 Hooks (25 Pack) // 10% of every 3/4 Hook (only needed for centralized HeadEnd locations)	\$ 94.43	\$ 94.43

Total Material	\$ 28,889.80
Total Labor	\$ 41,560.20
Total Project Price	\$ 70,450.00

This Proposal is subject to NASPO ValuePoint Tennessee Statewide Contract 172 dated August 1, 2024 between The State of Tennessee and Convergent Technologies LLC for security technology installation and services. All the terms and conditions of the

NASPO ValuePoint State of Tennessee, SWC # 172, to the extent not expressly supplement herein, are hereby incorporated into the terms and conditions of this Proposal as set out in full herein.

CLARIFICATIONS AND ALTERNATES

1. **Terms & Conditions, NASPO ValuePoint.** All terms and conditions of the NASPO ValuePoint State of Tennessee, SWC # 172, to the extent not expressly supplement herein, are hereby incorporated into the terms and conditions of this Proposal as set out in full herein.
2. **Business Hours.** Customer to provide access to Convergent to all working areas during normal business hours, Monday-Friday 08:00-17:00 (pricing below does not include after hour or weekend work).
3. **Training.** Customer to provide trainees for installation training towards completion of work.
4. **Wiring.** Low voltage wiring shall be installed via open air, code approved methods.
5. **CAD Files.** Pricing assumes that Electronic Auto CAD files are available from customer for our use in creating submittal drawings.
6. **Damages.** Anything in the Contract Documents notwithstanding, in no event shall either Contractor or Subcontractor be liable for special, indirect, incidental or consequential damages, including commercial loss, loss of use, or lost profits, even if either party has been advised of the possibility of such damages.
7. **Negotiation.** Convergent reserves the right to negotiate mutually acceptable contract terms and conditions with customer by making mutually agreeable changes to the formal contract included in the Bid Documents.
8. **Supply Chain.** Customer acknowledges that supply-chain and shipping difficulties may result in unavoidable delays in deliveries of materials despite timely placement of orders and efforts by Convergent and its suppliers to avoid such delays. Customer agrees to provide Convergent with reasonable extensions of time to the extent of any such delays and Convergent agrees to make reasonable efforts to avoid or minimize such delays. Customer further acknowledges that the above-referenced supply-chain and shipping difficulties may result in unanticipated increases to Convergent's proposal pricing on products covered by this quote or any resulting agreement and that such increases may occur between the time this quote is provided, or any resulting contract is executed and the time when Convergent actually purchases the products covered by this quote or a resulting agreement. Customer agrees that it will pay any such increase in Convergent's initial pricing of obtaining the products above the proposal pricing upon which the quote or agreement was based, by change order or otherwise, and Convergent agrees that it shall make commercially reasonable efforts to minimize any such increase.

EXCLUSIONS

1. **Power.** 120 VAC power in the field furnished and installed by Others where required.
2. **Networking.** Connection to Customer's Network (via Cat5e/Cat6 network drop) furnished and installed by Others where required.
3. **PoE Switches.** PoE Switches will be furnished and installed by Others where required. PoE Budget will at least need to be to PoE Plus (30W per port) to accommodate the Cameras listed in this proposal.
4. **Uninterruptible Power Supply (UPS).** UPS will be furnished and installed by Others where required.
5. **Plywood Backboard.** MDF / IDF Wall Plywood furnished and installed by Others where required.
6. **Staging and Storage.** Customer to provide a secured staging & storage area for project related materials.
7. **Site Dependencies.** Convergent Technologies cannot finalize the Video Surveillance System for this project before the following conditions are achieved at the site:
 - a. Site has Permanent Power
 - b. Site has Final Paint
 - c. Site has Active Network
8. **Client Workstation.** Customer to provide a Computer(s) that meets the video management software specifications. This computer cannot leave the facility.
9. **IT Coordination.** Customer to provide IT support for connection to Customer's network, including but not limited to, providing static or dynamic IP addresses, configuring ports, etc.
10. **Equipment Room Coordination.** Customer to provide access to the necessary equipment closets and rack/wall space within those equipment closets as required for the Video Surveillance System Headend Equipment.
11. **No Monitors.** Convergent is not furnishing nor installing monitors. The intent is that live or recorded viewing will be provided via the client provided PC and/or app running the VMS software.

RESPONSIBILITY MATRIX SUMMARY

The following checklist is intended to describe the major performance items being provided by Convergent for this project. This checklist is not intended to be a comprehensive list of all performance items.

PERFORMANCE ITEM	INCLUDED			RESPONSIBILITY		
	YES	NO	QTY	CONVERGINT	OWNER	OTHERS
Electronic Security Systems – General						
Freight (prepaid)	☒	☐	N/A	X		
Applicable Taxes	☒	☐	N/A	X		
Payment & Performance Bonds	☐	☒	N/A			
AHJ Plan Review and Submittals	☐	☒	N/A			
Provide Permit for Electronic Security Systems	☒	☐	N/A	X		
Submittals for Product Data	☒	☐	N/A	X		
Submittals for Shop Drawings	☐	☒	N/A			
Submittals for Record Drawings (As-Built)	☒	☐	N/A	X		
Submittals for O&M Manuals	☒	☐	N/A	X		
One-Year Warranty on Labor	☒	☐	N/A	X		
One-Year Warranty on Parts	☒	☐	N/A	X		
Attend GC / EC Project Meetings	☐	☒	N/A			
Attend Owner Project Meetings	☒	☐	N/A	X		
Project Management	☒	☐	N/A	X		
Electronic Security Systems – Site Conditions						
120V Dedicated Circuits to Control Equipment	☐	☒	1		X	
Network Drops with IP Addresses	☐	☒	N/A		X	
Horizontal Core Drilling	☐	☒	N/A			
Vertical Core Drilling	☐	☒	N/A			
Patch and Paint	☐	☒	N/A			
Lift(s) Rental	☒	☐	N/A	X		
Electronic Security Systems – Controls, Software, Programming, and Commissioning						
Windows Server(s), Video Surveillance System Furnish	☐	☒	1		X	
Windows Server(s), Video Surveillance System Installation	☐	☒	1		X	
Windows Client Workstation(s), Video Surveillance System Furnish	☐	☒	2		X	
Windows Client Workstation(s), Video Surveillance System Installation	☐	☒	2		X	
PoE Switch(es) Furnish	☐	☒	N/A		X	
PoE Switch(es) Installation	☐	☒	N/A		X	
Patch Cords at Head End Equipment Furnish (for Surge Protection)	☒	☐	6	X		
Patch Cords at Head End Equipment Installation (for Surge Protection)	☒	☐	6	X		
Network Equipment Rack(s)	☐	☒	N/A		X	
Programming IP Addresses into Control Panels and Servers	☐	☒	N/A		X	
Programming Software, Video Surveillance System	☒	☐	N/A	X		
Programming for all Proposed Devices	☒	☐	19	X		
Testing for all Proposed Devices	☒	☐	19	X		
Transmit Signals to Monitoring for Account Setup	☐	☒	N/A			
Acceptance Testing with the Owner's Representative	☐	☒	N/A			
Owner Training	☒	☐	N/A	X		
Electronic Security Systems – Field Devices						
Pathways, Rough-In, Conduit, Boxes, and Fittings Furnish & Installation	☒	☐	LOT	X		
Wire, Video Surveillance System Furnish	☒	☐	LOT	X		
Wire, Video Surveillance System Installation	☒	☐	LOT	X		
Correction of Wiring Faults Caused by Others	☐	☒	N/A			
Firestopping (excluding existing penetrations) Furnish & Installation	☒	☐	LOT	X		
Cameras Furnish	☒	☐	19	X		
Cameras Installation	☒	☐	19	X		
Demolition / Relocation of Existing System / Hardware	☒	☐	N/A	X		

PRICING SUMMARY

TOTAL PROJECT INVESTMENT

\$ 70,450.00

PRICING IS VALID FOR 30 DAYS

CUSTOMER SUPPORT PROGRAM ¹

N/A

TOTAL ANNUAL CUSTOMER SUPPORT PROGRAM

N/A

☐ Accept

☐ Decline

¹ Execution of the following Customer Support Program services are Initiated on a Separate Agreement

Thank you for considering our proposal. If you have any questions or would like additional information, please don't hesitate to contact me immediately. If you would like to proceed with the scope of work as outlined in this proposal, please sign below and return to my attention.

Sincerely,

Greg Thompson

Convergent Technologies

By signing below, I accept this proposal and agree to the Terms and Conditions contained herein

Jason Shockley

January 23, 2025

Customer Name (Printed)

Date

Authorized Signature

Title

Approved as to Legal Form:

Jake Hubbell, City Attorney

Master Agreement #: **99SWC-NV23-16270**

Contractor: **Convergint Technologies LLC**

Participating Entity: **STATE OF TENNESSEE, CENTRAL
PROCUREMENT OFFICE**

The following products or services are included in this contract portfolio:

- All products and accessories listed on the Contractor page of the NASPO ValuePoint website.

Participating Addendum Terms and Conditions:

1. Scope: This addendum covers the ***Security and Fire Protection Services (2023-2028)*** led by the State of Nevada for use by state agencies and other entities located in the Participating State authorized by that State's statutes to utilize State contracts with the prior approval of the State's Chief Procurement Official.
2. Participation: The NASPO ValuePoint Master Agreement referenced above may be used by all state agencies, institutions of higher institution, political subdivisions and other entities authorized to use statewide contracts in the State of Tennessee. Issues of interpretation and eligibility for participation are solely within the authority of the State Chief Procurement Official. Please see Attachment A: Specific State of Tennessee Terms and Conditions, Section E.3. for more details regarding eligibility.
3. Primary Contacts: The primary contact individuals for this Participating Addendum are as follows (or their named successors):

Contractor

Name:	Convergint Technologies LLC
Address:	One Commerce Drive Schaumburg, Illinois 60173
Telephone:	207-239-2903
Fax:	
Email:	NASPO@convergint.com

Participating Entity

Name:	State of Tennessee, Central Procurement Office
Address:	312 Rosa L. Parks Ave., Nashville, TN 37243
Telephone:	615-361-4868
Fax:	615-741-0684
Email:	Lauryen.Harris@tn.gov

4. PARTICIPATING ENTITY MODIFICATIONS OR ADDITIONS TO THE MASTER AGREEMENT

These modifications or additions apply only to actions and relationships within the Participating Entity.

☐ No changes to the terms and conditions of the Master Agreement are required.

☒ The following changes are modifying or supplementing the Master Agreement terms and conditions:

This Participating Addendum with Specific State of Tennessee Terms and Conditions are attached below as Attachment A and if conflict, take precedence over the NASPO Master Agreement Number 99SWC-NV23-16270 terms and conditions.

5. Term:

The term, renewal, and extension provisions of this Participating Addendum are set forth in Attachment A, Specific State of Tennessee Terms and Conditions, Section B.

IN WITNESS, WHEREOF, the parties have executed this Addendum as of the date of execution by both parties below.

Participating Entity: State of Tennessee, Central Procurement Office	Contractor: Convergent Technologies LLC
Signature: Michael F. Perry-EL Digitally signed by Michael F. Perry-EL Date: 2024.07.12 12:09:55 -05'00'	Signature: 
Name:	Name: Sean Flint
Title: State of Tennessee, Chief Procurement Officer	Title: President North America
Date:	Date: June 24, 2024

For questions on executing a participating addendum, please contact:

NASPO ValuePoint

Cooperative Portfolio Manager:	Joel E. Atkinson
Telephone:	850-848-1250
Email:	jatkinson@naspo.org

[Please email fully executed PDF copy of this document to

PA@naspovaluepoint.org

to support documentation of participation and posting in appropriate data bases.]

**SPECIFIC STATE OF TENNESSEE TERMS AND CONDITIONS
TO MASTER AGREEMENT #: 99SWC-NV23-16270**

A. SCOPE:

A.1. The Contractor shall provide all goods or services and deliverables as required, described, and detailed below and shall meet all service and delivery timelines as specified by the Master Agreement and the Participating Addendum with State specific Terms and Conditions (hereinafter "Contract"). The requested services will be made available for use by all State facilities, inclusive of group homes, prisons, military bases, including military bases located in Catoosa, Georgia and Fort Campbell, Kentucky, and other Authorized Users as defined in Section E.3.

A.2. Contractor Requirements.

- a. Contractor must follow all applicable federal, State, local, environmental, and security standards and regulations. Contractor must adhere to all Federal codes as required for federal facilities serviced under the Contract. Contractors awarded Military and Air National Guard locations shall follow any specific regulations that apply to those facilities.
- b. The Contractor must comply with the National Fire Protection Association ("NFPA") Codes, as adopted by the Tennessee State Fire Marshall's Office and Unified Facilities Criteria (UFC) 3-601-02, as may be amended.
- c. Any Contractor servicing fire related systems under the Contract shall be certified by the International Code Council (ICC), NFPA and shall be licensed by the appropriate State of Tennessee licensing board. National Institute for Certification in Engineering Technologies (NICET) Level III Certification is required for Contractors handling special hazard suppression systems.
- d. As required, the Contractor shall hold all current licenses, certifications, or permits necessary to perform the Contract tasks and shall provide copies of all applicable licenses, certifications, or permits for each employee assigned to work under this Contract as listed in Section A.7.
- e. At the Authorized User's request, the Contractor shall be required to furnish evidence of training or licenses.
- f. The Authorized User shall maintain control of the equipment or system(s) covered by this Contract, with full authority determining if and when the Contractor shall be called to perform work. Upon request by the Central Procurement Office ("CPO") or Authorized User, the Contractor will make available information on system codes for proprietary and non-proprietary systems, system manufacturer brands and models, and locations of the systems serviced. At the request of the Authorized User or CPO, the Contractor shall relinquish the pass codes to the State's systems or set the pass codes to default at no cost to the State or its Authorized Users.

- g. The Contractor is responsible for programming and must have access to repair and replacement parts. There will be no additional charge for programming.

A.3. Service Level Agreement.

a. Contractor Response Time:

- 1) The Contractor shall have a maximum of twenty-four (24) hours response time during Normal State Operating Hours. Response time begins when the Contractor receives authorization from the Authorized User via phone or email to perform service and ends when the Contractor arrives on-site. It is up to the discretion of the Authorized User to schedule a time outside of this response time. (This excludes "trouble calls," which shall require the Contractor to meet the service time as outlined in the Master Agreement).
- 2) Not to Exceed Estimates shall be provided to the Authorized User within five (5) business days after the initial request is made by the Authorized User unless otherwise specified by the Authorized User.

b. Contractor Service Personnel:

- 1) The Contractor must use personnel who are trained to work on the equipment or system(s) as described or as listed to perform the services as requested. The trained personnel can be the Contractor's Subcontractor personnel.
- 2) The Contractor must have personnel to receive and act on service calls twenty-four (24) hours a day, seven (7) days a week and on holidays. An automated answering system will not be acceptable as a contact. Service calls may include:
 - i. Dispatching service technicians
 - ii. Providing technical assistance via telephone or email

A.4. Additional Job Requirements.

- a. All Contractors contacted to provide a Not to Exceed Estimate should visit the facility or facilities to take exact measurements and examine the premises to become familiar with any problems or unusual circumstances which might exist. No allowances will be made by the Authorized User for errors in Not to Exceed Estimates due to any Contractor not visiting the site(s) prior to submitting their Not to Exceed Estimate. Contractors shall be responsible for their own measurements.
- b. At the discretion of the Authorized User, Contractors will be required to attend any mandatory site visit(s) held at the Authorized User's facility in order to provide a Not to Exceed Estimate. Any Contractor who fails to attend a mandatory site visit cannot submit a Not to Exceed Estimate for that particular job. If the Authorized User does not deem a mandatory site visit necessary, the Contractor may request to visit the site prior to providing a Not to Exceed Estimate.

A.5. Security and Safety Policy and Procedure.

- a. Security and safety requirements and State and Authorized User regulations and policies must be adhered to while on-site. This includes, but is not limited to; key control, tool control, compliance with prohibitory contraband items, etc.

- b. Under no circumstances shall service be provided by Contractor without proper contact with the Authorized User or designated authority as instructed.
 - c. Contractor Service Personnel may be required to provide picture identification for inspection upon entering the Authorized User facilities. Contractor Service Personnel will be required to wear an identification badge while on the Authorized User's property.
 - d. The Contractor must ensure that all vehicles, equipment, fuel, tools, chemicals, and supplies used at the Authorized User's locations are appropriately accounted for at all times, including while vehicles are in parking areas or on campus roads and drives.
 - 1) No equipment, tools, supplies or materials shall be left open or unattended.
 - 2) Equipment and supplies shall be secured when not in use.
 - 3) Vehicles must be turned off, keys must be removed from the ignition, and doors must be locked when left unattended.
 - e. The Contractor shall clean the work area of all equipment and waste or debris generated by the Contractor during the performance of a job; leaving the work site clean at the end of each workday, unless otherwise allowed by the Authorized User.
 - f. All materials used or generated by the Contractor while performing the tasks of this contract is the total responsibility of the Contractor. This includes waste or debris generated by the Contractor.
 - 1) Waste, excess, and debris generated by the Contractor, will be removed from the work site by the Contractor.
 - 2) Use, removal and disposal of materials must be done in accordance with any and all federal, State and local laws and regulations.
- A.6. State Building Commission. Jobs with the estimated or actual cost exceeding two hundred fifty thousand dollars (\$250,000) are excluded from being conducted under this Contract without the prior approval of the State Building Commission ("SBC") per By-Laws, Policy, and Procedure of the State Building Commission of Tennessee, Item 2.
- A.7. Licenses, Certifications, Permits.
- a. Category 1: Backflow Prevention System
 - b. Category 2: Standpipe Inspections – Fire Hose – NFPA 1962
 - c. Category 3: Automatic Fire Pumps – NFPA 20, 25
 - d. Category 4: Fire Sprinkler Systems – Persons who engage in the business of selling, installing, or servicing fire protection sprinkler systems regulated by Tenn. Code Ann. §62-32-101 et seq., Tenn. Comp. R. & Regs. 0780-02-07-.01, and NFPA 13, 25
 - e. Category 5: Fire Detection – Fire Alarm Systems – NFPA 72
 - f. Category 6: Emergency Lighting – International Fire Code
 - g. Category 7: Special Hazard Fire Suppression Systems – NFPA 11, 11A, 11C, 12, 12A, 15, 16, 17, 17A, 18
 - h. Category 8: Portable Fire Extinguisher Inspection – Service and Testing – The standards for the installation and service of portable fire extinguishers and fixed fire extinguisher systems in the State of Tennessee are found in Tenn. Code Ann. §62-32-101 et seq., Tenn. Comp. R. & Regs. 0780-02-14, and NFPA 10.
 - i. Category 9: New Portable Fire Extinguishers – The standards for the installation and service of portable fire extinguishers and fixed fire extinguisher systems in the State of

Tennessee are found in Tenn. Code Ann. §62-32-101 et seq., Tenn. Comp. R. & Regs. 0780-02-14, and NFPA 10.

- j. Category 10: Kitchen Fire Suppression Commercial Hood System – International Mechanical Code, International Fire Code
- k. Category 11: Commercial Hood System Cleaning
- l. Category 12: Access Control Systems - There are four classifications of Alarm System Contractors which require licensure. T.C.A. § 62-32-316, T.C.A. § 62-32-314 (licensure requirements), Tenn. Rules and Reg. 009-01-.02 (Access Control Definition), Tenn. Rules and Reg. 0090-01-.02(4) (access control may be a function of a burglar alarm system). Tenn Rules and Reg. 0090-01-.03: "Mechanical locks without electrical components and electro-mechanical locking devices securing a single entry point, which are not part of either an integrated system involving multiple access points or other alarm systems shall not be considered an "alarm system" as defined in T.C.A. § 62-32-303 paragraph (1)." (This will be limited to installation, the organization may need to be licensed in another classification as well, i.e. monitoring.) Exemptions from Alarm System Contractor requirements T.C.A. §62-32-305.
- m. Category 13: Burglar Alarm Systems - There are four classifications of Alarm System Contractors which require licensure, one of which is Burglar Alarm Systems. T.C.A. § 62-32-316, T.C.A. § 62-32-314 (licensure requirements). "Burglar alarm system means an alarm or monitoring system that has the primary function of detecting or responding to emergencies other than fire;" T.C.A. § 62-32-303(5). "BURGLAR ALARM SYSTEM – An alarm or monitoring system, including but not limited to access control that has the primary function of detecting or responding to emergencies other than fire." Tenn. Rules and Reg. 0090-01-.02(4). (This will be limited to installation, the organization may need to be licensed in another classification as well, i.e. monitoring.) Exemptions from Alarm System Contractor requirements T.C.A. §62-32-305.
- n. Category 14: Surveillance Services and Equipment - There are four classifications of Alarm System Contractors which require licensure, one of which is Closed Circuit Television. T.C.A. § 62-32-316, T.C.A. § 62-32-314 (licensure requirements). "CLOSED CIRCUIT TELEVISION – An alarm system that provides video surveillance of events primarily by means of transmission and recording of visual signals through the use of film, cameras, receivers, and other visual imaging systems. Closed circuit television systems may also include as secondary functions audio and related electrical signals. Tenn. Code Ann. 0090-01-.02(6). (This will be limited to installation, the organization may need to be licensed in another classification as well, i.e. monitoring.) Exemptions from Alarm System Contractor requirements T.C.A. §62-32-305.
- o. Category 15: High Security Controls Systems – There are four classifications of Alarm System Contractors which require licensure. T.C.A. § 62-32-316, T.C.A. § 62-32-314 (licensure requirements). Given the functions being performed in these high security facilities there is likely a need for an Alarm Systems Contractor with multiple classifications or multiple contractors depending on the function (burglar, monitoring, CCTV).
- p. Category 16: Inspections & Monitoring
 - 1) Fire Extinguishing Systems – The standards for the installation and service of portable fire extinguishers and fixed fire extinguisher systems in the State of Tennessee are found in Tenn. Code Ann. §62-32-101 et seq., Tenn. Comp. R. & Regs. 0780-02-14, and NFPA 10.NFPA 11, 11A, 11C, 12, 12A, 15, 16, 17, 17A, 18
 - 2) Fire Sprinkler Systems – Persons who engage in the business of selling, installing, or servicing fire protection sprinkler systems regulated by Tenn. Code Ann. §62-32-101 et seq., Tenn. Comp. R. & Regs. 0780-02-07-.01, and NFPA 13, 25
 - 3) Alarm Monitoring –There are four classifications of Alarm System Contractors which require licensure, one of which is Monitoring. T.C.A. § 62-32-316, T.C.A. § 62-32-314 (licensure requirements). Monitoring "means any off-site central monitoring station or

location that receives electronic burglar alarm, closed circuit television or fire alarm signals from multiple locations and notifies or dispatches, or both, other persons to emergency burglaries, hold ups, thefts, vandalism, civil unrest, personal emergencies or fire alarm conditions." T.C.A. § 62-32-303(12). NFPA 72. (This will be limited to monitoring the organization may need to be licensed in another classification as well for installation.) Exemptions from Alarm System Contractor requirements T.C.A. §62-32-305.

4) Fire Alarm/Protective Signaling Systems – NFPA 72

A.8. Security Requirements:

- 1) Contactors shall use hardwired connections (POTS lines), and avoid any State network or wi-fi dependencies.
- 2) All State data must remain in the United States, regardless of whether the data is processed, stored, in-transit, or at rest.
- 3) Access to State data shall be limited to US-based (onshore) resources only.
- 4) Configuration or development of software and code is permitted outside of the United States. However, software applications designed, developed, manufactured, or supplied by persons owned or controlled by, or subject to the jurisdiction or direction of, a foreign adversary, which the U.S. Secretary of Commerce acting pursuant to 15 CFR 7 has defined to include the People's Republic of China, among others are prohibited.
- 5) Any testing of code outside of the United States must use fake data. A copy of production data may not be transmitted or used outside the United States.

B. TERM OF CONTRACT:

This Contract shall be effective on August 1, 2024 ("Effective Date") and extend for a period of Forty-Eight (48) months after the Effective Date ("Term"). The State shall have no obligation for goods or services provided by the Contractor prior to the Effective Date.

- B.1. Renewal Options. This Contract may be renewed upon satisfactory completion of the Term. The State reserves the right to execute up to one (1) renewal options under the same terms and conditions for a period not to exceed twelve (12) months each by the State, at the State's sole option. In no event, however, shall the maximum Term, including all renewals or extensions, exceed a total of sixty (60) months or extend beyond the term of the Master Agreement.
- B.2. Term Extension. The State may extend the Term an additional period of time, not to exceed one hundred-eighty (180) days beyond the expiration date of this Contract, under the same terms and conditions, at the State's sole option. In no event, however, shall the maximum Term, including all renewals or extensions, exceed a total of sixty (60) months or extend beyond the term of the Master Agreement.

C. PAYMENT TERMS AND CONDITIONS:

- C.1. Estimated Liability. The total purchases of any goods or services under the Contract are not known. The State estimates the purchases during the Term shall be Nine million eight hundred twenty-seven thousand one hundred eleven dollars and forty-eight cents (\$6,249,445.78) ("Estimated Liability"). The Estimated Liability per category is:

Category 5: Fire Detection – Fire Alarm Systems: \$3,387,253.54

Category 12: Access Control Systems: \$788,134.72

Category 13: Burglar Alarm Systems: \$212,514.98

Category 14: Surveillance Services and Equipment: \$1,522,093.08

Category 16: Inspections & Monitoring: \$339,449.46

This Contract does not grant the Contractor any exclusive rights. The State does not guarantee that it will buy any minimum quantity of goods or services under this Contract. Subject to the terms and conditions of this Contract, the Contractor will only be paid for goods or services provided under this Contract after a purchase order is issued to Contractor by the State or as otherwise specified by this Contract.

- C.2. Compensation Firm. The payment methodology in Section C.3. of this Contract shall constitute the entire compensation due the Contractor for all goods or services provided under this Contract regardless of the difficulty, materials or equipment required. The payment methodology includes all applicable taxes, fees, overhead, and all other direct and indirect costs incurred or to be incurred by the Contractor.
- C.3. Payment Methodology. The Contractor shall be compensated based on the payment rates for goods and services contained in the Master Agreement and as authorized by the State in a total amount as set forth in Section C.1. The Contractor's compensation shall be contingent upon the satisfactory provision of goods or services as set forth in Section A.
- C.4. Travel Compensation. The Contractor shall not be compensated or reimbursed for travel time, travel expenses, meals, or lodging.
- C.5. Invoice Requirements. The Contractor shall invoice the State only for goods delivered and accepted by the State or services satisfactorily provided at the amounts stipulated in Section C.3., above. Contractor shall submit invoices and necessary supporting documentation, no more frequently than once a month, and no later than thirty (30) days after goods or services have been provided to the following address:

State Agency Billing Address

- a. Each invoice, on Contractor's letterhead, shall clearly and accurately detail all of the following information (calculations must be extended and totaled correctly):

- (1) Invoice number (assigned by the Contractor);

- (2) Invoice date;
- (3) Contract number (assigned by the State);
- (4) Customer account name: State Agency & Division Name;
- (5) Customer account number (assigned by the Contractor to the above-referenced Customer);
- (6) Contractor name;
- (7) Contractor Tennessee Edison registration ID number;
- (8) Contractor contact for invoice questions (name, phone, or email);
- (9) Contractor remittance address;
- (10) Description of delivered goods or services provided and invoiced, including identifying information as applicable;
- (11) Number of delivered or completed units, increments, hours, or days as applicable, of each good or service invoiced;
- (12) Applicable payment methodology (as stipulated in Section C.3.) of each good or service invoiced;
- (13) Amount due for each compensable unit of good or service; and
- (14) Total amount due for the invoice period.

b. Contractor's invoices shall:

- (1) Only include charges for goods delivered or services provided as described in Section A and in accordance with payment terms and conditions set forth in Section C;
- (2) Only be submitted for goods delivered or services completed and shall not include any charge for future goods to be delivered or services to be performed;
- (3) Not include Contractor's taxes, which includes without limitation Contractor's sales and use tax, excise taxes, franchise taxes, real or personal property taxes, or income taxes; and
- (4) Include shipping or delivery charges only as authorized in this Contract.

c. The timeframe for payment (or any discounts) begins only when the State is in receipt of an invoice that meets the minimum requirements of this Section C.5.

C.6. Payment of Invoice. A payment by the State shall not prejudice the State's right to object to or question any payment, invoice, or other matter. A payment by the State shall not be construed as acceptance of goods delivered, any part of the services provided, or as approval of any amount invoiced.

C.7. Invoice Reductions. The Contractor's invoice shall be subject to reduction for amounts included in any invoice or payment that is determined by the State, on the basis of audits conducted in accordance with the terms of this Contract, to not constitute proper compensation for goods delivered or services provided.

C.8. Deductions. The State reserves the right to deduct from amounts, which are or shall become due and payable to the Contractor under this or any contract between the Contractor and the State of Tennessee, any amounts that are or shall become due and payable to the State of Tennessee by the Contractor.

C.9. Prerequisite Documentation. The Contractor shall not invoice the State under this Contract until the State has received the following, properly completed documentation.

- a. The Contractor shall complete, sign, and present to the State the "Authorization Agreement for Automatic Deposit Form" provided by the State. By doing so, the Contractor acknowledges and agrees that, once this form is received by the State, payments to the Contractor, under this or any other contract the Contractor has with the State of Tennessee, may be made by ACH; and
- b. The Contractor shall complete, sign, and return to the State the State-provided W-9 form. The taxpayer identification number on the W-9 form must be the same as the Contractor's Federal Employer Identification Number or Social Security Number referenced in the Contractor's Edison registration information.

D. MANDATORY TERMS AND CONDITIONS:

- D.1. Required Approvals. The State is not bound by this Contract until it is duly approved by the Parties and all appropriate State officials in accordance with applicable Tennessee laws and regulations. Depending upon the specifics of this Contract, this may include approvals by the Commissioner of Finance and Administration, the Commissioner of Human Resources, the Comptroller of the Treasury, and the Chief Procurement Officer. Approvals shall be evidenced by a signature or electronic approval.
- D.2. Communications and Contacts. All instructions, notices, consents, demands, or other communications required or contemplated by this Contract shall be in writing and shall be made by certified, first class mail, return receipt requested and postage prepaid, by overnight courier service with an asset tracking system, or by email or facsimile transmission with recipient confirmation. All communications, regardless of method of transmission, shall be addressed to the respective Party at the appropriate mailing address, facsimile number, or email address as stated below or any other address provided in writing by a Party.

The State:

Lauryen Harris, Category Specialist
Central Procurement Office, Tennessee Tower, 3rd Floor
312 Rosa L. Parks Ave. Nashville, TN 37243
Lauryen.Harris@tn.gov
Telephone # 615-361-4868
FAX # 615-741-0684

The Contractor:

Veronica Miglin, Contract Vehicles Manager
Convergint Technologies LLC
One Commerce Drive Schaumburg, Illinois 60173
NASPO@convergint.com
Telephone # 207-239-2903

All instructions, notices, consents, demands, or other communications shall be considered effective upon receipt or recipient confirmation as may be required.

- D.3. Modification and Amendment. This Contract may be modified only by a written amendment signed by all Parties and approved by all applicable State officials.

- D.4. Subject to Funds Availability. The Contract is subject to the appropriation and availability of State or federal funds. In the event that the funds are not appropriated or are otherwise unavailable, the State reserves the right to terminate this Contract upon written notice to the Contractor. The State's exercise of its right to terminate this Contract shall not constitute a breach of Contract by the State. Upon receipt of the written notice, the Contractor shall cease all work associated with the Contract. If the State terminates this Contract due to lack of funds availability, the Contractor shall be entitled to compensation for all conforming goods requested and accepted by the State and for all satisfactory and authorized services completed as of the termination date. Should the State exercise its right to terminate this Contract due to unavailability of funds, the Contractor shall have no right to recover from the State any actual, general, special, incidental, consequential, or any other damages of any description or amount.
- D.5. Termination for Convenience. The State may terminate this Contract for convenience without cause and for any reason. The State shall give the Contractor at least thirty (30) days written notice before the termination date. The Contractor shall be entitled to compensation for all conforming goods delivered and accepted by the State or for satisfactory, authorized services completed as of the termination date. In no event shall the State be liable to the Contractor for compensation for any goods neither requested nor accepted by the State or for any services neither requested by the State nor satisfactorily performed by the Contractor. In no event shall the State's exercise of its right to terminate this Contract for convenience relieve the Contractor of any liability to the State for any damages or claims arising under this Contract.
- D.6. Termination for Cause. If the Contractor fails to properly perform its obligations under this Contract in a timely or proper manner, or if the Contractor materially violates any terms of this Contract ("Breach Condition"), the State shall have the right to immediately terminate the Contract and withhold payments in excess of compensation for completed services or provided goods. Notwithstanding the above, the Contractor shall not be relieved of liability to the State for damages sustained by virtue of any Breach Condition and the State may seek other remedies allowed at law or in equity for breach of this Contract.
- D.7. Assignment and Subcontracting. The Contractor shall not assign this Contract or enter into a subcontract for any of the goods or services provided under this Contract without the prior written approval of the State. Notwithstanding any use of the approved subcontractors, the Contractor shall be the prime contractor and responsible for compliance with all terms and conditions of this Contract. The State reserves the right to request additional information or impose additional terms and conditions before approving an assignment of this Contract in whole or in part or the use of subcontractors in fulfilling the Contractor's obligations under this Contract.
- D.8. Conflicts of Interest. The Contractor warrants that no part of the Contractor's compensation shall be paid directly or indirectly to an employee or official of the State of Tennessee as wages, compensation, or gifts in exchange for acting as an officer, agent, employee, subcontractor, or consultant to the Contractor in connection with any work contemplated or performed under this Contract.

The Contractor acknowledges, understands, and agrees that this Contract shall be null and void if the Contractor is, or within the past six (6) months has been, an employee of the State of Tennessee or if the Contractor is an entity in which a controlling interest is held by an individual who is, or within the past six (6) months has been, an employee of the State of Tennessee.

- D.9. Nondiscrimination. The Contractor hereby agrees, warrants, and assures that no person shall be excluded from participation in, be denied benefits of, or be otherwise subjected to discrimination in the performance of this Contract or in the employment practices of the Contractor on the grounds of handicap or disability, age, race, creed, color, religion, sex, national origin, or any other classification protected by federal or state law. The Contractor shall, upon request, show proof of nondiscrimination and shall post in conspicuous places, available to all employees and applicants, notices of nondiscrimination.
- D.10. Prohibition of Illegal Immigrants. The requirements of Tenn. Code Ann. § 12-3-309 addressing the use of illegal immigrants in the performance of any contract to supply goods or services to the state of Tennessee, shall be a material provision of this Contract, a breach of which shall be grounds for monetary and other penalties, up to and including termination of this Contract.
- a. The Contractor agrees that the Contractor shall not knowingly utilize the services of an illegal immigrant in the performance of this Contract and shall not knowingly utilize the services of any subcontractor who will utilize the services of an illegal immigrant in the performance of this Contract. The Contractor shall reaffirm this attestation by submitting to the State a completed Attestation (accessible through the Edison Supplier Portal) and included at Attachment 1, semi-annually during the Term. If the Contractor is a party to more than one contract with the State, the Contractor may submit one attestation that applies to all contracts with the State. All Contractor attestations shall be maintained by the Contractor and made available to State officials upon request.
 - b. Prior to the use of any subcontractor in the performance of this Contract, and semi-annually thereafter, during the Term, the Contractor shall obtain and retain a current, written attestation that the subcontractor shall not knowingly utilize the services of an illegal immigrant to perform work under this Contract and shall not knowingly utilize the services of any subcontractor who will utilize the services of an illegal immigrant to perform work under this Contract. Attestations obtained from subcontractors shall be maintained by the Contractor and made available to State officials upon request.
 - c. The Contractor shall maintain records for all personnel used in the performance of this Contract. Contractor's records shall be subject to review and random inspection at any reasonable time upon reasonable notice by the State.
 - d. The Contractor understands and agrees that failure to comply with this section will be subject to the sanctions of Tenn. Code Ann. § 12-3-309 for acts or omissions occurring after its effective date.
 - e. For purposes of this Contract, "illegal immigrant" shall be defined as any person who is not: (i) a United States citizen; (ii) a Lawful Permanent Resident; (iii) a person whose physical presence in the United States is authorized; (iv) allowed by the federal Department of Homeland Security and who, under federal immigration laws or regulations, is authorized to be employed in the U.S.; or (v) is otherwise authorized to provide services under the Contract.
- D.11. Records. The Contractor shall maintain documentation for all charges under this Contract. The books, records, and documents of the Contractor, for work performed or money received under this Contract, shall be maintained for a period of five (5) full years from the date of the final

payment and shall be subject to audit at any reasonable time and upon reasonable notice by the State, the Comptroller of the Treasury, or their duly appointed representatives. The financial statements shall be prepared in accordance with generally accepted accounting principles.

- D.12. Monitoring. The Contractor's activities conducted and records maintained pursuant to this Contract shall be subject to monitoring and evaluation by the State, the Comptroller of the Treasury, or their duly appointed representatives.
- D.13. Progress Reports. The Contractor shall submit brief, periodic, progress reports to the State as requested.
- D.14. Strict Performance. Failure by any Party to this Contract to require, in any one or more cases, the strict performance of any of the terms, covenants, conditions, or provisions of this Contract shall not be construed as a waiver or relinquishment of any term, covenant, condition, or provision. No term or condition of this Contract shall be held to be waived, modified, or deleted except by a written amendment signed by the Parties.
- D.15. Independent Contractor. The Parties shall not act as employees, partners, joint venturers, or associates of one another. The Parties are independent contracting entities. Nothing in this Contract shall be construed to create an employer/employee relationship or to allow either Party to exercise control or direction over the manner or method by which the other transacts its business affairs or provides its usual services. The employees or agents of one Party are not employees or agents of the other Party.
- D.16. Patient Protection and Affordable Care Act. The Contractor agrees that it will be responsible for compliance with the Patient Protection and Affordable Care Act ("PPACA") with respect to itself and its employees, including any obligation to report health insurance coverage, provide health insurance coverage, or pay any financial assessment, tax, or penalty for not providing health insurance. The Contractor shall indemnify the State and hold it harmless from any costs to the State arising from Contractor's failure to fulfill its PPACA responsibilities for itself or its employees.
- D.17. Limitation of State's Liability. The State shall have no liability except as specifically provided in this Contract. In no event will the State be liable to the Contractor or any other party for any lost revenues, lost profits, loss of business, decrease in the value of any securities or cash position, time, goodwill, or any indirect, special, incidental, punitive, exemplary or consequential damages of any nature, whether based on warranty, contract, statute, regulation, tort (including but not limited to negligence), or any other legal theory that may arise under this Contract or otherwise. Notwithstanding anything else herein, the State's total liability under this Contract (including without limitation any exhibits, schedules, amendments or other attachments to the Contract) or otherwise shall under no circumstances exceed the Estimated Liability. This limitation of liability is cumulative and not per incident.
- D.18. Limitation of Contractor's Liability. In accordance with Tenn. Code Ann. § 12-3-701, the Contractor's liability for all claims arising under this Contract shall be limited to an amount equal to two (2) times the Estimated Liability amount detailed in Section C.1. and as may be amended, PROVIDED THAT in no event shall this Section limit the liability of the Contractor for: (i) intellectual property or any Contractor indemnity obligations for infringement for third-party intellectual property rights; (ii) any claims covered by any specific provision in the Contract

providing for liquidated damages; or (iii) any claims for intentional torts, criminal acts, fraudulent conduct, or acts or omissions that result in personal injuries or death.

- D.19. **Hold Harmless.** The Contractor agrees to indemnify and hold harmless the State of Tennessee as well as its officers, agents, and employees from and against any and all claims, liabilities, losses, and causes of action which may arise, accrue, or result to any person, firm, corporation, or other entity which may be injured or damaged as a result of acts, omissions, or negligence on the part of the Contractor, its employees, or any person acting for or on its or their behalf relating to this Contract. The Contractor further agrees it shall be liable for the reasonable cost of attorneys' fees, court costs, expert witness fees, and other litigation expenses for the State to enforce the terms of this Contract.

In the event of any suit or claim, the Parties shall give each other immediate notice and provide all necessary assistance to respond. The failure of the State to give notice shall only relieve the Contractor of its obligations under this Section to the extent that the Contractor can demonstrate actual prejudice arising from the failure to give notice. This Section shall not grant the Contractor, through its attorneys, the right to represent the State in any legal matter, as the right to represent the State is governed by Tenn. Code Ann. § 8-6-106.

- D.20. **HIPAA Compliance.** The State and Contractor shall comply with obligations under the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), Health Information Technology for Economic and Clinical Health ("HITECH") Act and any other relevant laws and regulations regarding privacy (collectively the "Privacy Rules"). The obligations set forth in this Section shall survive the termination of this Contract.

- a. Contractor warrants to the State that it is familiar with the requirements of the Privacy Rules, and will comply with all applicable requirements in the course of this Contract.
- b. Contractor warrants that it will cooperate with the State, including cooperation and coordination with State privacy officials and other compliance officers required by the Privacy Rules, in the course of performance of the Contract so that both parties will be in compliance with the Privacy Rules.
- c. The State and the Contractor will sign documents, including but not limited to business associate agreements, as required by the Privacy Rules and that are reasonably necessary to keep the State and Contractor in compliance with the Privacy Rules. This provision shall not apply if information received or delivered by the parties under this Contract is NOT "protected health information" as defined by the Privacy Rules, or if the Privacy Rules permit the parties to receive or deliver the information without entering into a business associate agreement or signing another document.
- d. The Contractor will indemnify the State and hold it harmless for any violation by the Contractor or its subcontractors of the Privacy Rules. This includes the costs of responding to a breach of protected health information, the costs of responding to a government enforcement action related to the breach, and any fines, penalties, or damages paid by the State because of the violation.

- D.21. Tennessee Consolidated Retirement System. Subject to statutory exceptions contained in Tenn. Code Ann. §§ 8-36-801, *et seq.*, the law governing the Tennessee Consolidated Retirement System ("TCRS"), provides that if a retired member of TCRS, or of any superseded system administered by TCRS, or of any local retirement fund established under Tenn. Code Ann. §§ 8-35-101, *et seq.*, accepts State employment, the member's retirement allowance is suspended during the period of the employment. Accordingly and notwithstanding any provision of this Contract to the contrary, the Contractor agrees that if it is later determined that the true nature of the working relationship between the Contractor and the State under this Contract is that of "employee/employer" and not that of an independent contractor, the Contractor, if a retired member of TCRS, may be required to repay to TCRS the amount of retirement benefits the Contractor received from TCRS during the Term.
- D.22. Tennessee Department of Revenue Registration. The Contractor shall comply with all applicable registration requirements contained in Tenn. Code Ann. §§ 67-6-601 – 608. Compliance with applicable registration requirements is a material requirement of this Contract.
- D.23. Debarment and Suspension. The Contractor certifies, to the best of its knowledge and belief, that it, its current and future principals, its current and future subcontractors and their principals:
- a. are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal or state department or agency;
 - b. have not within a three (3) year period preceding this Contract been convicted of, or had a civil judgment rendered against them from commission of fraud, or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or grant under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false statements, or receiving stolen property;
 - c. are not presently indicted or otherwise criminally or civilly charged by a government entity (federal, state, or local) with commission of any of the offenses detailed in section b. of this certification; and
 - d. have not within a three (3) year period preceding this Contract had one or more public transactions (federal, state, or local) terminated for cause or default.

The Contractor shall provide immediate written notice to the State if at any time it learns that there was an earlier failure to disclose information or that due to changed circumstances, its principals or the principals of its subcontractors are excluded, disqualified, or presently fall under any of the prohibitions of sections a-d.

- D.24. Force Majeure. "Force Majeure Event" means fire, flood, earthquake, elements of nature or acts of God, wars, riots, civil disorders, rebellions or revolutions, acts of terrorism or any other similar cause beyond the reasonable control of the Party except to the extent that the non-performing Party is at fault in failing to prevent or causing the default or delay, and provided that the default or delay cannot reasonably be circumvented by the non-performing Party through the use of alternate sources, workaround plans or other means. A strike, lockout or labor dispute shall not

excuse either Party from its obligations under this Contract. Except as set forth in this Section, any failure or delay by a Party in the performance of its obligations under this Contract arising from a Force Majeure Event is not a default under this Contract or grounds for termination. The non-performing Party will be excused from performing those obligations directly affected by the Force Majeure Event, and only for as long as the Force Majeure Event continues, provided that the Party continues to use diligent, good faith efforts to resume performance without delay. The occurrence of a Force Majeure Event affecting Contractor's representatives, suppliers, subcontractors, customers or business apart from this Contract is not a Force Majeure Event under this Contract. Contractor will promptly notify the State of any delay caused by a Force Majeure Event (to be confirmed in a written notice to the State within one (1) day of the inception of the delay) that a Force Majeure Event has occurred, and will describe in reasonable detail the nature of the Force Majeure Event. If any Force Majeure Event results in a delay in Contractor's performance longer than forty-eight (48) hours, the State may, upon notice to Contractor: (a) cease payment of the fees for the affected obligations until Contractor resumes performance of the affected obligations; or (b) immediately terminate this Contract or any purchase order, in whole or in part, without further payment except for fees then due and payable. Contractor will not increase its charges under this Contract or charge the State any fees other than those provided for in this Contract as the result of a Force Majeure Event.

- D.25. State and Federal Compliance. The Contractor shall comply with all State and federal laws and regulations applicable to Contractor in the Contractor's performance of this Contract.
- D.26. Governing Law. This Contract shall be governed by and construed in accordance with the laws of the State of Tennessee, without regard to its conflict or choice of law rules. The Tennessee Claims Commission or the state or federal courts in Tennessee shall be the venue for all claims, disputes, or disagreements arising under this Contract. The Contractor acknowledges and agrees that any rights, claims, or remedies against the State of Tennessee or its employees arising under this Contract shall be subject to and limited to those rights and remedies available under Tenn. Code Ann. §§ 9-8-101 - 408.
- D.27. Entire Agreement. This Contract is complete and contains the entire understanding between the Parties relating to its subject matter, including all the terms and conditions of the Parties' agreement. This Contract supersedes any and all prior understandings, representations, negotiations, and agreements between the Parties, whether written or oral.
- D.28. Severability. If any terms and conditions of this Contract are held to be invalid or unenforceable as a matter of law, the other terms and conditions of this Contract shall not be affected and shall remain in full force and effect. The terms and conditions of this Contract are severable.
- D.29. Headings. Section headings of this Contract are for reference purposes only and shall not be construed as part of this Contract.
- D.30. Incorporation of Additional Documents. Each of the following documents is included as a part of this Contract by reference. In the event of a discrepancy or ambiguity regarding the Contractor's duties, responsibilities, and performance under this Contract, these items shall govern in order of precedence below:
- a. any amendment to this Participating Addendum, with the latter in time controlling over any earlier amendments;

- b. this Participating Addendum with any attachments or exhibits (excluding the items listed at subsections c. through f., below), which includes Attachment A
 - c. the NASPO Master Agreement (Number 99SWC-NV23-16270);
 - d. any clarifications of or addenda to the Contractor's proposal seeking the NASPO Master Agreement;
 - e. the NASPO solicitation, as may be amended, requesting responses in competition for the NASPO Master Agreement;
 - f. any technical specifications provided to proposers during the procurement process to award the NASPO Master Agreement; and
 - g. the Contractor's response seeking the NASPO Master Agreement.
- D.31. Iran Divestment Act. The requirements of Tenn. Code Ann. § 12-12-101, *et seq.*, addressing contracting with persons as defined at Tenn. Code Ann. §12-12-103(5) that engage in investment activities in Iran, shall be a material provision of this Contract. The Contractor certifies, under penalty of perjury, that to the best of its knowledge and belief that it is not on the list created pursuant to Tenn. Code Ann. § 12-12-106.
- D.32. Insurance. Contractor shall maintain insurance coverage as specified in this Section. The State reserves the right to amend or require additional insurance coverage, coverage amounts, and endorsements required under this Contract. Contractor's failure to maintain or submit evidence of insurance coverage, as required, is a material breach of this Contract. If Contractor loses insurance coverage, fails to renew coverage, or for any reason becomes uninsured during the Term, Contractor shall immediately notify the State. All insurance companies providing coverage must be: (a) acceptable to the State; (b) authorized by the Tennessee Department of Commerce and Insurance ("TDCI"); and (c) rated A- / VII or better by A.M. Best. All coverage must be on a primary basis and noncontributory with any other insurance or self-insurance carried by the State. Contractor agrees to name the State as an additional insured on any insurance policy with the exception of workers' compensation (employer liability) and professional liability (errors and omissions) insurance. All policies must contain an endorsement for a waiver of subrogation in favor of the State. Any deductible or self insured retention ("SIR") over fifty thousand dollars (\$50,000) must be approved by the State. The deductible or SIR and any premiums are the Contractor's sole responsibility. The Contractor agrees that the insurance requirements specified in this Section do not reduce any liability the Contractor has assumed under this Contract including any indemnification or hold harmless requirements.

To achieve the required coverage amounts, a combination of an otherwise deficient specific policy and an umbrella policy with an aggregate meeting or exceeding the required coverage amounts is acceptable. For example: If the required policy limit under this Contract is for two million dollars (\$2,000,000) in coverage, acceptable coverage would include a specific policy covering one million dollars (\$1,000,000) combined with an umbrella policy for an additional one million dollars (\$1,000,000). If the deficient underlying policy is for a coverage area without aggregate limits (generally Automobile Liability and Employers' Liability Accident), Contractor shall provide a copy of the umbrella insurance policy documents to ensure that no aggregate limit applies to the umbrella policy for that coverage area. In the event that an umbrella policy is being provided to achieve any required coverage amounts, the umbrella policy shall be accompanied by an endorsement at least as broad as the Insurance Services Office, Inc. (also known as "ISO") "Noncontributory—Other Insurance Condition" endorsement or shall be written on a policy form that addresses both the primary and noncontributory basis of the umbrella policy if the State is otherwise named as an additional insured.

Contractor shall provide the State a certificate of insurance ("COI") evidencing the coverages and amounts specified in this Section. The COI must be on a form approved by the TDCI (standard ACORD form preferred). The COI must list each insurer's National Association of Insurance

Commissioners (NAIC) number and be signed by an authorized representative of the insurer. The COI must list the State of Tennessee – CPO Risk Manager, 312 Rosa L. Parks Ave., 3rd floor Central Procurement Office, Nashville, TN 37243 as the certificate holder. Contractor shall provide the COI ten (10) business days prior to the Effective Date and again thirty (30) calendar days before renewal or replacement of coverage. Contractor shall provide the State evidence that all subcontractors maintain the required insurance or that subcontractors are included under the Contractor's policy. At any time, the State may require Contractor to provide a valid COI. The Parties agree that failure to provide evidence of insurance coverage as required is a material breach of this Contract. If Contractor self-insures, then a COI will not be required to prove coverage. Instead Contractor shall provide a certificate of self-insurance or a letter, on Contractor's letterhead, detailing its coverage, policy amounts, and proof of funds to reasonably cover such expenses. The State reserves the right to require complete copies of all required insurance policies, including endorsements required by these specifications, at any time.

The State agrees that it shall give written notice to the Contractor as soon as practicable after the State becomes aware of any claim asserted or made against the State, but in no event later than thirty (30) calendar days after the State becomes aware of such claim. The failure of the State to give notice shall only relieve the Contractor of its obligations under this Section to the extent that the Contractor can demonstrate actual prejudice arising from the failure to give notice. This Section shall not grant the Contractor or its insurer, through its attorneys, the right to represent the State in any legal matter, as the right to represent the State is governed by Tenn. Code Ann. § 8-6-106.

The insurance obligations under this Contract shall be: (1)—all the insurance coverage and policy limits carried by the Contractor; or (2)—the minimum insurance coverage requirements and policy limits shown in this Contract; whichever is greater. Any insurance proceeds in excess of or broader than the minimum required coverage and minimum required policy limits, which are applicable to a given loss, shall be available to the State. No representation is made that the minimum insurance requirements of the Contract are sufficient to cover the obligations of the Contractor arising under this Contract. The Contractor shall obtain and maintain, at a minimum, the following insurance coverages and policy limits.

a. Commercial General Liability ("CGL") Insurance

- 1) The Contractor shall maintain CGL, which shall be written on an ISO Form CG 00 01 occurrence form (or a substitute form providing equivalent coverage) and shall cover liability arising from property damage, premises and operations products and completed operations, bodily injury, personal and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract).
The Contractor shall maintain single limits not less than one million dollars (\$1,000,000) per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this policy or location of occurrence or the general aggregate limit shall be twice the required occurrence limit.

b. Workers' Compensation and Employer Liability Insurance

- 1) For Contractors statutorily required to carry workers' compensation and employer liability insurance, the Contractor shall maintain:

- i. Workers' compensation in an amount not less than one million dollars (\$1,000,000) including employer liability of one million dollars (\$1,000,000) per accident for bodily injury by accident, one million dollars (\$1,000,000) policy limit by disease, and one million dollars (\$1,000,000) per employee for bodily injury by disease.
- 2) If the Contractor certifies that it is exempt from the requirements of Tenn. Code Ann. §§ 50-6-101 – 103, then the Contractor shall furnish written proof of such exemption for one or more of the following reasons:
 - i. The Contractor employs fewer than five (5) employees;
 - ii. The Contractor is a sole proprietor;
 - iii. The Contractor is in the construction business or trades with no employees;
 - iv. The Contractor is in the coal mining industry with no employees;
 - v. The Contractor is a state or local government; or
 - vi. The Contractor self-insures its workers' compensation and is in compliance with the TDCI rules and Tenn. Code Ann. § 50-6-405.

c. Automobile Liability Insurance

- 1) The Contractor shall maintain automobile liability insurance which shall cover liability arising out of any automobile (including owned, leased, hired, and non-owned automobiles).
- 2) The Contractor shall maintain bodily injury/property damage with a limit not less than one million dollars (\$1,000,000) per occurrence or combined single limit.

- D.33. Major Procurement Contract Sales and Use Tax. Pursuant to Tenn. Code Ann. § 4-39-102 and to the extent applicable, the Contractor and the Contractor's subcontractors shall remit sales and use taxes on the sales of goods or services that are made by the Contractor or the Contractor's subcontractors and that are subject to tax.
- D.34. Confidentiality of Records. Strict standards of confidentiality of records and information shall be maintained in accordance with applicable state and federal law. All material and information, regardless of form, medium or method of communication, provided to the Contractor by the State or acquired by the Contractor on behalf of the State that is regarded as confidential under state or federal law shall be regarded as "Confidential Information." Nothing in this Section shall permit Contractor to disclose any Confidential Information, regardless of whether it has been disclosed or made available to the Contractor due to intentional or negligent actions or inactions of agents of the State or third parties. Confidential Information shall not be disclosed except as required or permitted under state or federal law. Contractor shall take all necessary steps to safeguard the confidentiality of such material or information in conformance with applicable state and federal law.

The obligations set forth in this Section shall survive the termination of this Contract.

- D.35. Boycott of Israel. The Contractor certifies that it is not currently engaged in, and covenants that it will not, for the duration of the Contract, engage in a Boycott of Israel, as that term is defined in Tenn. Code Ann. § 12-4-119.
- D.36. Prohibited Contract Terms. The prohibited contract terms and conditions enumerated in Tenn. Code Ann. § 12-3-515, shall be a material provision of this Contract. The Contractor acknowledges, understands, and agrees that the inclusion of a term or condition prohibited by Tenn. Code Ann. § 12-3-515, shall be null and void and the Contract shall be enforceable as if the Contract did not contain such term or condition.

E. SPECIAL TERMS AND CONDITIONS:

- E.1. Conflicting Terms and Conditions. Should any of these special terms and conditions conflict with any other terms and conditions of this Contract, the special terms and conditions shall be subordinate to the Contract's other terms and conditions.
- E.2. Contractor Commitment to Diversity. The Contractor shall comply with and make reasonable business efforts to exceed the commitment to diversity represented by the Contractor's Response to Nevada Request for Proposal #99SWC-S1820 and resulting in this Contract.

The Contractor shall assist the State in monitoring the Contractor's performance of this commitment by providing, as requested, a monthly report of participation in the performance of this Contract by small business enterprises and businesses owned by minorities, women, service-disabled veterans, and persons with disabilities. Such reports shall be provided to the State of Tennessee Governor's Office of Diversity Business Enterprise in the TN Diversity Software available online at:

<https://tn.diversitysoftware.com/FrontEnd/StartCertification.asp?TN=tn&XID=9810>.

- E.3. Statewide Contract. This Contract establishes a source or sources of supply for all Tennessee State Agencies. "Tennessee State Agency" refers to the various departments, institutions, boards, commissions, and agencies of the executive branch of government of the State of Tennessee with exceptions as addressed in Tenn. Comp. R. & Regs. 0690-03-01-.01. The Contractor shall provide all goods or services and deliverables as required by this Contract to all Tennessee State Agencies. The Contractor shall make this Contract available to the following entities, who are authorized to and who may purchase off of this Statewide Contract ("Authorized Users"):
- a. all Tennessee State governmental entities (this includes the legislative branch; judicial branch; and, commissions and boards of the State outside of the executive branch of government);
 - b. Tennessee local governmental agencies;
 - c. members of the University of Tennessee or Tennessee Board of Regents systems;
 - d. any private nonprofit institution of higher education chartered in Tennessee; and,
 - e. any corporation which is exempted from taxation under 26 U.S.C. Section 501(c) (3), as amended, and which contracts with the Department of Mental Health and Substance Abuse to provide services to the public (Tenn. Code Ann. § 33-2-1001).

These Authorized Users may utilize this Contract by purchasing directly from the Contractor according to their own procurement policies and procedures. The State is not responsible or liable for the transactions between the Contractor and Authorized Users.

- E.4. Statewide Contract Reports. All reports shall be submitted electronically in Microsoft Excel format. Reports shall include the ability to sort or summarize data in accordance with the Contract Administrator's specifications. All reports shall be provided at no additional cost to the State.

Quarterly Reports: Contractor(s) will submit quarterly reports to the Contract Administrator no later than ten (10) days after the end of the State's quarter (e.g. a fiscal year quarter 2 report for October - December is due no later than January 10th). At the Contract Administrator's sole discretion, the State may extend the time allowed to complete quarterly reports. Quarterly reports shall provide statistical data on all purchases under this Contract by Tennessee State Agencies and Authorized Users. At minimum, the quarterly report's statistical data shall be detailed and broken down by line item to include:

1. Edison contract number
2. Contract line item number
3. Invoice date
4. Invoice number
5. Supplier part number
6. Item or bundle description
7. Quantity purchased
8. Unit of measure
9. Unit of measure description
10. Name of State Agency or Authorized User
11. Identity of purchaser: State entity or non-State entity
12. State Agency location
13. Unit/Contract price per line item
14. List price as listed in supplier's catalog if catalog item
15. Subtotals for each category above
16. Grand totals for each category above

Custom Reports: When requested by the State, the Contractor shall submit custom reports to the Contract Administrator within thirty (30) days of the request.

- E.5. Additional lines, items, or options. At its sole discretion, the State may make written requests to the Contractor to add lines, items, or options that are needed and within the Scope but were not included in the original Contract. Such lines, items, or options will be added to the Contract through a Memorandum of Understanding ("MOU"), not an amendment.
- a. After the Contractor receives a written request to add lines, items, or options, the Contractor shall have ten (10) business days to respond with a written proposal. The Contractor's written proposal shall include:
 - (1) The effect, if any, of adding the lines, items, or options on the other goods or services required under the Contract;
 - (2) Any pricing related to the new lines, items, or options;
 - (3) The expected effective date for the availability of the new lines, items, or options; and
 - (4) Any additional information requested by the State.
 - b. The State may negotiate the terms of the Contractor's proposal by requesting revisions to the proposal.
 - c. To indicate acceptance of a proposal, the State will sign it. The signed proposal shall constitute a MOU between the Parties, and the lines, items, or options shall be incorporated into the Contract as if set forth verbatim.
 - d. Only after a MOU has been executed shall the Contractor perform or deliver the new lines, items, or options.

- E.6. Extraneous Terms and Conditions. Contractor shall fill all orders submitted by the State under this Contract. No purchase order, invoice, or other documents associated with any sales, orders, or supply of any good or service under this Contract shall contain any terms or conditions other than as set forth in the Contract. Any such extraneous terms and conditions shall be void, invalid and unenforceable against the State. Any refusal by Contractor to supply any goods or services under this Contract conditioned upon the State submitting to any extraneous terms and conditions shall be a material breach of the Contract and constitute an act of bad faith by Contractor.
- E.7. Prohibited Advertising or Marketing. The Contractor shall not suggest or imply in advertising or marketing materials that Contractor's goods or services are endorsed by the State. The restrictions on Contractor advertising or marketing materials under this Section shall survive the termination of this Contract.
- E.8. Lobbying. The Contractor certifies, to the best of its knowledge and belief, that:
- a. No federally appropriated funds have been paid or will be paid, by or on behalf of the Contractor, to any person for influencing or attempting to influence an officer or employee of an agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
 - b. If any funds other than federally appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with any contract, grant, loan, or cooperative agreement, the Contractor shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
 - c. The Contractor shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into and is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. § 1352.

- E.9. Environmental Tobacco Smoke. Pursuant to the provisions of the federal "Pro-Children Act of 1994" and the Tennessee "Children's Act for Clean Indoor Air of 1995," the Contractor shall prohibit smoking of tobacco products within any indoor premises in which services are provided pursuant to this Contract to individuals under the age of eighteen (18) years. The Contractor shall post "no smoking" signs in appropriate, permanent sites within such premises. This prohibition shall be applicable during all hours, not just the hours in which children are present. Violators of the prohibition may be subject to civil penalties and fines. This prohibition shall apply to and be made part of any subcontract related to this Contract.

- E.10. Prison Rape Elimination Act (PREA). The Contractor must comply with the Prison Rape Elimination Act (PREA) of 2003 (Federal law 42 U.S.C. 15601 et. seq.), with all applicable Federal PREA standards, and with all State policies and standards related to PREA for preventing, detecting, monitoring, investigating, and eradicating any form of sexual abuse within facilities/programs/offices owned, operated, or contracted.
- E.11. Extraneous Terms and Conditions. Contractor shall fill all orders submitted by the State under this Contract. No purchase order, invoice, or other documents associated with any sales, orders, or supply of any good or service under this Contract shall contain any terms or conditions other than as set forth in the Contract. Any such extraneous terms and conditions shall be void, invalid and unenforceable against the State. Any refusal by Contractor to supply any goods or services under this Contract conditioned upon the State submitting to any extraneous terms and conditions shall be a material breach of the Contract and constitute an act of bad faith by Contractor.
- E.12. Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment. If applicable and as required by 2 CFR 200.216, Contractor is prohibited from obligating or expending loan or grant funds to procure or obtain; extend or renew a contract to procure or obtain; or enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as a critical technology as part of any system. As described in Public Law 115-232, Section 889, "covered telecommunications equipment" is as follows:
- a. Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
 - b. For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).
 - c. Telecommunications or video surveillance services provided by such entities or using such equipment.

Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

E.13. Contractor Hosted Services Confidential Data, Audit, and Other Requirements

- a. "Confidential State Data" is defined as data deemed confidential by State or Federal statute or regulation. The Contractor shall protect Confidential State Data as follows:
 - (1) The Contractor shall ensure that all Confidential State Data is housed in the continental United States, inclusive of backup data.

- (2) The Contractor shall encrypt Confidential State Data at rest and in transit using the current version of Federal Information Processing Standard ("FIPS") 140-2 or 140-3 (current applicable version) validated encryption technologies. The State shall control all access to encryption keys. The Contractor shall provide installation and maintenance support at no cost to the State.
- (3) The Contractor and the Contractor's processing environment containing Confidential State Data shall either (1) be in accordance with at least one of the following security standards: (i) International Standards Organization ("ISO") 27001; (ii) Federal Risk and Authorization Management Program ("FedRAMP"); or (2) be subject to an annual engagement by a CPA firm in accordance with the standards of the American Institute of Certified Public Accountants ("AICPA") for a System and Organization Controls for service organizations ("SOC") Type II audit. The State shall approve the SOC audit control objectives. The Contractor shall provide proof of current ISO certification or FedRAMP authorization for the Contractor and Subcontractor(s), or provide the State with the Contractor's and Subcontractor's annual SOC Type II audit report within 30 days from when the CPA firm provides the audit report to the Contractor or Subcontractor. The Contractor shall submit corrective action plans to the State for any issues included in the audit report within 30 days after the CPA firm provides the audit report to the Contractor or Subcontractor.

If the scope of the most recent SOC audit report does not include all of the current State fiscal year, upon request from the State, the Contractor must provide to the State a letter from the Contractor or Subcontractor stating whether the Contractor or Subcontractor made any material changes to their control environment since the prior audit and, if so, whether the changes, in the opinion of the Contractor or Subcontractor, would negatively affect the auditor's opinion in the most recent audit report.

No additional funding shall be allocated for these certifications, authorizations, or audits as these are included in the Maximum Liability of this Contract.

- (4) The Contractor must annually perform Penetration Tests and Vulnerability Assessments against its Processing Environment. "Processing Environment" shall mean the combination of software and hardware on which the Application runs. "Application" shall mean the computer code that supports and accomplishes the State's requirements as set forth in this Contract. "Penetration Tests" shall be in the form of attacks on the Contractor's computer system, with the purpose of discovering security weaknesses which have the potential to gain access to the Processing Environment's features and data. The "Vulnerability Assessment" shall be designed and executed to define, identify, and classify the security holes (vulnerabilities) in the Processing Environment. The Contractor shall allow the State, at its option, to perform Penetration Tests and Vulnerability Assessments on the Processing Environment.
- (5) Upon State request, the Contractor shall provide a copy of all Confidential State Data it holds. The Contractor shall provide such data on media and in a format determined by the State

- (6) Upon termination of this Contract and in consultation with the State, the Contractor shall destroy all Confidential State Data it holds (including any copies such as backups) in accordance with the current version of National Institute of Standards and Technology ("NIST") Special Publication 800-88. The Contractor shall provide a written confirmation of destruction to the State within ten (10) business days after destruction.

b. Minimum Requirements

- (1) The Contractor and all data centers used by the Contractor to host State data, including those of all Subcontractors, must comply with the State's Enterprise Information Security Policies as amended periodically. The State's Enterprise Information Security Policies document is found at the following URL:
<https://www.tn.gov/finance/strategic-technology-solutions/strategic-technology-solutions/sts-security-policies.html>.
- (2) The Contractor agrees to maintain the Application so that it will run on a current, manufacturer-supported Operating System. "Operating System" shall mean the software that supports a computer's basic functions, such as scheduling tasks, executing applications, and controlling peripherals.
- (3) If the Application requires middleware or database software, Contractor shall maintain middleware and database software versions that are at all times fully compatible with current versions of the Operating System and Application to ensure that security vulnerabilities are not introduced.

- E.14. Performance Bond. The Contractor shall provide to the State a performance bond guaranteeing full and faithful performance of all undertakings and obligations under this Contract, specifically faithful performance of the work in accordance with the plans, specifications, and contract documents. The performance bond shall be in an amount equal to one hundred percent (100%) of the Maximum Liability, Written Dollar Amount (\$50,000.00). The State reserves the right to review the bond amount and bonding requirements at any time during the Term. The Contractor shall submit the bond no later than the day immediately preceding the Effective Date and in the manner and form prescribed by the State at Attachment Reference. The bond shall be issued by a company licensed to issue such a bond in the state of Tennessee. The performance bond shall guarantee full and faithful performance of all undertakings and obligations for the Term, as the Contract is extended or renewed.

Failure to provide to the State the performance bond(s) as required under this Contract may result in this Contract being terminated by the State. The performance bond required under this Contract shall not be reduced during the Term without the State of Tennessee Central Procurement Office's prior written approval.

- E.15. Payment Bond. The Contractor shall provide to the State a payment bond guaranteeing that the Contractor's subcontractors, laborers, and material suppliers will be paid for performance under this Contract with the additional obligation that such contractor shall promptly make payment of all taxes, licenses, assessments, contributions, penalties, and interest. The payment bond will be in an amount equal to twenty-five percent (25%) of the Maximum Liability Written Dollar Amount (\$50,000.00). The State reserves the right to review the bond amount and bonding requirements at any time during the Term. The Contractor shall submit the bond no later than the day immediately preceding the Effective Date and in the manner and form prescribed by the State at

Attachment Reference. The bond shall be issued by a company licensed to issue such a bond in the State of Tennessee. The payment bond shall guarantee that the Contractor's subcontractors, laborers, and material suppliers will be paid for performance during the Term and all extensions or renewals of the Contract.

Failure to provide to the State the payment bond as required under this Contract may result in this Contract being terminated by the State. The payment bond required under this Contract shall not be reduced during the Term without the State of Tennessee Central Procurement Office's prior written approval.

ATTESTATION RE PERSONNEL USED IN CONTRACT PERFORMANCE

SUBJECT CONTRACT NUMBER:	
CONTRACTOR LEGAL ENTITY NAME:	Convergint Technologies, LLC
EDISON VENDOR IDENTIFICATION NUMBER:	██████████

The Contractor, identified above, does hereby attest, certify, warrant, and assure that the Contractor shall not knowingly utilize the services of an illegal immigrant in the performance of this Contract and shall not knowingly utilize the services of any subcontractor who will utilize the services of an illegal immigrant in the performance of this Contract.



CONTRACTOR SIGNATURE

NOTICE: This attestation MUST be signed by an individual empowered to contractually bind the Contractor. Attach evidence documenting the individual's authority to contractually bind the Contractor, unless the signatory is the Contractor's chief executive or president.

Sean Flint, President North America

PRINTED NAME AND TITLE OF SIGNATORY

June 24, 2024

DATE OF ATTESTATION



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Michele Stevens, Administrative Assistant, mstevens@columbiatn.gov, 931-560-1010

AGENDA ITEM TITLE: APPROVE AND AUTHORIZE THE MAYOR TO SIGN THE CONTRACT BETWEEN THE CITY OF COLUMBIA AND CUMBERLAND VALLEY CONSTRUCTORS, INC. IN THE AMOUNT OF \$1,713,000 FOR THE CONSTRUCTION OF THE DUCK RIVER SEWAGE PUMP STATION REPLACEMENT

RECOMMENDATION: Approve.

INFORMATION: The City of Columbia's Wastewater Department requests the mayor to sign the Contract between the City of Columbia and Cumberland Valley Constructors, Inc for the construction of the Duck River Sewage Pump Station Replacement in the amount of \$1,713,000.00. The bid award was previously approved by City Council on January 9, 2025.

CERTIFICATION: The Chief Financial Officer certifies that \$1,713,000 is budgeted and unencumbered in Wastewater - Pump Stations - Duck River PS.

ATTACHMENTS:

Cumberland Valley Constructors Duck River Contract and Specs

ADDENDUM NO. 1
SEWER SYSTEM IMPROVEMENTS
CONTRACT 22-01
DUCK RIVER SEWAGE PUMPING STATION REPLACEMENT
COLUMBIA, TENNESSEE
WAUFORD PROJECT NO. 2162

Date of Addendum: Tuesday, December 10, 2024
Bid Opening: Tuesday, December 17, 2024, 2:00 p.m. Central Time

1. Clarification Regarding Bypass Pumping:

The Contractor is required to complete all bypass pumping on this project as specified in Section 1. The Contractor shall provide a bypass pumping system designed to pump at least 700 GPM at 60' TDH. A detail of the existing bypass pumping connection taken from previous plans has been added to the Plans for reference.

2. Clarification Regarding Existing Station Demolition:

This addendum adds the demolition of the existing Duck River SPS to this construction contract as shown on the updates to the Plans. The Contractor may schedule a visit to the station by contacting Wayne Pruitt, Pump Station Maintenance Supervisor, at 931-560-1031.

3. Detailed Specifications, Section 3, Concrete and Reinforcing Steel:

Replace with attached Section 3, Concrete and Reinforcing Steel dated April 2024

4. Detailed Specifications, Section 4, Site Preparation and Development, Piping and Valves, Paragraph 14, Pump Discharge Check Valves, Page DS 4-18:

Modify the paragraph as follows:

“Check valves on pump discharges shall be of the flexible disc type and shall have cast iron body ASTM A126 Class B and shall be suitable for operation in horizontal lines. The valve shall achieve a tight closure and a non-slam characteristic by means of short disc stroke – not more than **45** degrees.

Check valves shall have a ductile iron body and Buna N disc. Check valves shall be Val-Matic Bulletin 500, **Pratt RD Series**, or approved equal. Check valves shall be flanged with flanges dimensioned and drilled ANSI Class 125.”

5. Detailed Specifications, Section 4, Site Preparation and Development, Piping and Valves, Paragraph 15, Plug Valves, Page DS 4-18:

Modify the paragraph as follows:

“Plug valves with manual operators are to be installed as shown on the Plans. Plug valves shall be of the non-lubricated eccentric type, with neoprene resilient plug faces, cast iron (ASTM 126, Grade B) bodies and shall be suitable for 50 psi working pressure. Valves shall have a welded-in nickel seat. The valve shall be constructed in such a manner that the packing and packing gland are accessible without disassembly of the valve. **Plug valves shall be full port for valves 12-inches or smaller and 100% port for valves 14-inches and larger.** All plug valves shall open counterclockwise. Plug valves shall be suitable for domestic wastewater service and shall provide drip tight shutoff up to the full valve rating.

Plug valves shall be suitable for direct bury and shall be equipped with 2-inch square operating nuts. Plug valves shall be DeZurik Series 100, **Pratt Ballcentric**, or pre-approved equal.”

6. Detailed Specifications, Section 4, Site Preparation and Development, Piping and Valves, Paragraph 20, Class “A” Concrete XYPEX Admixture, Page DS 4-20:

Modify the paragraph as follows:

“The Contractor shall incorporate XYPEX Admix C-1000 into all concrete **and grout** cast at the Duck River SPS. The admixture shall be introduced at the batch plant in the presence of the Engineer at the rate of sixteen (16) pounds per cubic yard (3% cement weight of 546 pounds), subject to approval by the Manufacturer. The admixture shall not alter the color of the cement. No concrete pours shall take place without the Engineer witnessing the XYPEX admixture being introduced at the batch plant. “

7. Detailed Specifications, Sub-Section 5A, Duck River Pumping Station and Appurtenances, Paragraph 2.b., Fiberglass Reinforced Plastic Enclosures and Ventilation, Page DS 5A-1:

Modify the paragraph as follows:

“The station enclosure shall provide sufficient inside area for maintenance personnel to perform normal operation and maintenance inside, sheltered, and free from foul weather. The enclosure shall consist of a base to support the pumps and a cover. Minimum dimensions of the enclosure shall be **twelve** feet by **eighteen** feet and nine feet in **sidewall** height.

The station enclosure shall be manufactured of molded fiberglass reinforced orthophthalic polyester resins with a minimum of 30% fiberglass, and a maximum of 70% resin. Glass fibers shall have a minimum average length of 1¼ inches. Resin fillers or extenders shall not be used. Major design considerations shall be given to structural stability, corrosion resistance, and water tight properties. The polyester laminates shall provide a balance of mechanical, chemical, and electrical properties to insure long maintenance free life. They must be impervious to micro organisms, mildew, mold, fungus, corrosive liquids, and gases which can reasonably be expected to be present in the environment surrounding the wet well. See manufacturer's requirements for enclosure warranty in these specifications.

All interior surfaces of the housing shall be gel coated with a polyester resin. It shall be of suitable thickness and formulated to provide:

- (1) Maintenance free service
- (2) Abrasion resistance
- (3) Protection from sewage, greases, oils, gasoline, and other common chemicals.
- (4) Color fastness
- (5) Gloss retention

Interior surfaces of the enclosure cover shall be white for maximum light reflectivity. The base shall be of a darker color to de emphasize the presence of dirt, grease, etc. Colors used for both portions shall result in a pleasing looking structure.

The pump station shall be furnished with 1 ½-inch thick foam insulation which shall be applied to the walls, door, and roof to achieve an R-10 insulation factor. A gasketed seal around the door shall also be included.

The outside of the enclosure shall be coated with a suitable pigmented resin compound to insure long, maintenance free life. The fiberglass enclosure shall be a regular product of the pump station manufacturer.

The enclosure cover shall be provided with hinged fiberglass reinforced access doors. Minimum dimensions of the door shall be 72 inches wide by 80 inches high for access by maintenance personnel to station interior. Door shall be a minimum 1 7/8-inch thick and shall be hinged with a minimum of two heavy duty stainless steel hinges to the enclosure cover. Door shall be furnished with a padlockable handle connected to a latching mechanism. Latch shall engage door casing or maximum security against vandalism. All mounting hardware for door casing and door must be concealed or of such type as to prevent vandalism with ordinary tools.

The station enclosure shall be furnished with an insulated overhead rolling hurricane style service door measuring 8'x8'. The door shall be sealed and gasketed to be weathertight and shall be capable of being internally padlocked. Flexible weather stripping shall be utilized at the bottom of the door. The door shall include overhead receiver and track hardware installed and shall be constructed with locking provisions. The door shall be capable of being opened manually.

A duplex ground fault indicating utility receptacle providing 115 volts, single phase, 60 hertz shall be mounted inside the pump station. Receptacle shall be NEMA 5 15r configuration, heavy duty, specification grade and fitted with a weatherproof cover. The receptacle shall be protected by normal duty circuit breaker.

There shall be two or more gasketed, fiberglass housing, fully enclosed, 6,000 lumen Lithonia or equal forty-eight (48) inch minimum length LED light fixtures installed within the equipment enclosure, as shown on the plan for this item. ***The light switch shall be located conveniently adjacent to the door.***

Fluorescent, open fluorescent or incandescent fixtures will not be accepted.

The station enclosure shall be manufactured of molded fiberglass reinforced orthophthalic polyester resins with minimum of 30 percent fiberglass and a maximum of 70 percent resin. Glass fibers shall have a minimum average length of 1 1/4 inches. The enclosure shall be resistant to corrosion, impervious to mold, mildew, fungus and sewer gases and shall be raintight. The enclosure shall have a K-factor of 1.5 so that the heating and ventilating provided will protect the equipment and allow it to operate between temperatures of minus 25°F and plus 105°F. The temperature in this area often remains in the plus 20°F to minus 15°F range for several days.

A shuttered exhaust fan with a minimum capacity to change the air in the enclosure once every ***six minutes***, shall be mounted in open end wall. In the wall approximately opposite to this shall be mounted an air intake. Both intake and exhaust openings shall be equipped with a bronze bird screen and cowl suitably designed to prevent the entrance of rain, snow, rocks, and foreign material. The fan circuit shall be fused and shall be provided with a disconnect switch. The fans shall operate on thermostats.

A wall mounted heater shall be supplied with a minimum rating of 10,329 BTU/HR – 3,000 watts, ***480*** volts. The heater shall be fan forced, UL listed, hard wired per US 400-1, and have enclosed resistance wire within steel finned elements. The heater shall operate on a thermostat.”

8. Detailed Specifications, Sub-Section 5A, Duck River Pumping Station and Appurtenances, Paragraph 2.f., Pump Characteristics and Requirements, Page DS 5A-8:

Modify this chart as follows:

Maximum **Flow** Condition (Duck River SPS only)

Maximum Allowable Speed	1,150 RPM
Maximum Allowable Flow	1,500 GPM
Design Total Dynamic Head	60 Feet

Maximum Speed Condition (Duck River, Carter's Creek and Bear Creek SPS)

Maximum Allowable Speed	1,400 RPM
Design Capacity	1,250 GPM
Design Total Dynamic Head	87 Feet

Minimum Speed Condition (Duck River SPS only)

Minimum Allowable Speed	1,000 RPM
Design Capacity	800 GPM
Design Total Dynamic Head	54 Feet

Other Requirements

Minimum Shutoff Head	115 Feet
Maximum Motor Horsepower	75 HP
Minimum Solids Size Passing	3-inch Sphere
Minimum Efficiency – Max. Speed	58 percent
Minimum Efficiency – Min. Speed	50 percent
Maximum Net Positive Suction Head Required @ Max. Speed	15 Feet

9. Detailed Specifications, Sub-Section 5A, Duck River Pumping Station and Appurtenances, Paragraph 2.i., Spare Parts Kit, Page DS 5A-10:

Modify the paragraph as follows:

“There shall be furnished with the pump station the following minimum spare parts:

- (1) *One spare pump mechanical seal (complete with shaft sleeve)*
- (2) *One cover plate O-Ring*
- (3) *One rotating assembly O-Ring*
- (4) *One set of rotating assembly spacers*
- (5) *One set of impeller clearance adjustment shims*
- (6) *One quart of seal lubricant (**Provided by the Contractor**)*

10. Detailed Specifications, Sub-Section 5A, Duck River Pumping Station and Appurtenances, Paragraph 3, Step-Down Transformer, Page DS 5A-11:

Delete Paragraph 3, Step-Down Transformer.

11. Detailed Specifications, Sub-Section 5A, Duck River Pumping Station and Appurtenances, Paragraph 4, Wiring, Page DS 5A-11:

Delete the first paragraph:

12. Detailed Specifications, Sub-Section 5A, Duck River Pumping Station and Appurtenances, Paragraph 18, Painting, Page DS 5A-17:

Modify the last sentence as follows:

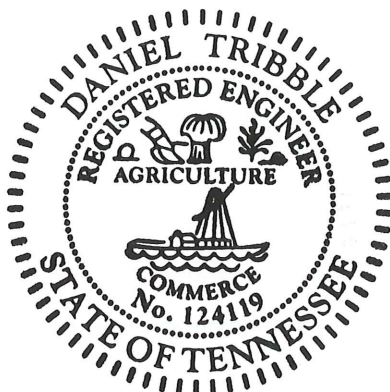
"All pumps, valves, piping and miscellaneous metals shall be ***painted white***."

13. Detailed Specifications, Sub-Section 5B, Pump Automatic Control System and Accessories:

Replace with attached updated Sub-Section 5B, Pump Automatic Control System and Accessories.

14. PLANS:

Replace Title Sheet, Sheets 1-5, and Sheets E1, E2, E3, and E5 with the attached sheets.



J. R. WAUFORD & COMPANY,
CONSULTING ENGINEERS, INC.

Daniel G. Tribble, P.E.
Tennessee License No. 124119

SECTION 3

CONCRETE AND REINFORCING STEEL

1. Scope

This Section covers the materials, mixing, transporting, and placing of all concrete and reinforcing steel including all labor, materials, and equipment.

The provisions of Section 2, Paragraph 2. Cost of Tests and Selection of Testing Agencies applies to this Section of these Detailed Specifications.

Where brand names or manufacturers are used in this Section, it is not intended that the use of products of equal quality and function by other manufacturers be prohibited. Concrete admixtures may be as furnished by Master Builders, Grace Construction Materials, Sika Chemical Corporation, or approved equal. Concrete forms and accessories may be furnished by Universal Form Company, Dayton Sure-Grip and Shore Company, Heckman Building Products, or equal.

2. Reference Codes and Standards

All work covered by this Section of these Detailed Specifications shall be performed in accordance with the applicable portions of the following American Concrete Institute (ACI) and Concrete Reinforcing Steel Institute Standards (CRSI), as modified in this Section.

<u>ACI 224.3R:</u>	"Joints in Concrete Construction"
<u>ACI 301:</u>	"Specifications for Structural Concrete"
<u>ACI 302.1R:</u>	"Guide for Concrete Floor and Slab Construction"
<u>ACI 305R:</u>	"Guide to Hot Weather Concreting"
<u>ACI 306R:</u>	"Guide to Cold Weather Concreting"
<u>ACI 315:</u>	"Manual of Standard Practice for Details and Guide to Presenting Reinforcing Steel Design Details"
<u>ACI 318:</u>	"Building Code Requirements for Structural Concrete"
<u>ACI 347R:</u>	"Guide to Formwork for Concrete"
<u>ACI 350:</u>	"Code Requirements for Environmental Engineering Concrete Structures"
<u>CRSI-MSP:</u>	"Manual of Standard Practice"

The most recent published version (as of the project bid date) of any standard listed in these Detailed Specifications shall apply.

3. Class of Concrete

Concrete shall be two (2) classifications as follows:

CLASS "A" - All concrete shall be Class "A" unless otherwise shown on the Plans. ALL reinforced concrete shall be Class "A". Class "A" concrete shall possess the following characteristics and/or proportions of materials.

Minimum Cement Content: 6.0 bags (564 pounds) per cubic yard.

NO FLY ASH WILL BE ALLOWED

Minimum 28-day compressive strength: 4,500 psi average of any three (3) cylinders selected by the Engineer.

Anticipated 28-day compressive strength: 5,000 psi plus.

Slump: Three and one-half (3½) to six (6) inches in walls and columns and piers. Two and one-half (2½) to five (5) inches in slabs, beams, and footings.

Admixtures: A retardant may be required where slow set is desired; where quick set is desired Portland Cement content of 6.2 bags may be required. Air entraining agents optional and subject to Engineer's approval. Additional special admixtures may be specified in subsequent sections of these Detailed Specifications.

CLASS "C" - Concrete used for anchors, kickers, and encasement for pipe lines, for subfoundations and mass footings, and for fill shall be Class "C". No concrete containing reinforcement shall be Class "C". Class "C" concrete shall possess the following characteristics and/or proportions of materials:

Minimum Cement Content: 5.0 bags (470 pounds) per cubic yard.

Minimum 28 day compressive strength 2,500 psi - average of any three (3) cylinders selected by the Engineer.

NO FLY ASH WILL BE ALLOWED

Slump: Five (5) to eight (8) inches for encasement. Two (2) to four (4) inches in subfoundations and sealing as per Paragraph 10.d. hereinafter.

Admixtures: None required.

4. Determination of Strength of Concrete

Compressive strength of concrete shall be determined by use of standard four (4) inch diameter by eight (8) inch test cylinders in accordance with ASTM C39 and C 31.

5. Concrete Design Mixes

An independent commercial testing laboratory, approved by the Engineer, shall prepare a design mix for each Class "A" and Class "C" concrete and submit five (5) copies to the Engineer for general approval of the proportions and materials. The design mix shall be accompanied by the quality tests of the materials which are proposed in accordance with Section 2. Testing and Control of Materials, Paragraphs 5, 8, 9, and 10 of these Detailed Specifications. The sources of supply and the producer of the concrete, if a ready-mix plant, shall be subject to all the requirements of Section 2. Testing and Control of Materials, and particularly to Paragraph 3. Sources of Supply, thereof. After general approval of the materials and proportions the tests required in Paragraph 10. Advance Tests of Concrete Design Mix(es) of Section 2 shall be submitted for approval. No concrete may be placed prior to submission and approval of the design mix and of the test results. The cost of obtaining an approvable concrete mix will be paid for by the Contractor.

6. Materials for Concrete

a. Portland Cement

Portland Cement shall be of American manufacture and shall conform to the "Standard Specifications for Portland Cement" (ASTM C150), of the American Society for Testing and Materials and shall be Type II with an equivalent alkali ($\text{Na}_2\text{O} + 0.658 \text{ K}_2\text{O}$) content of less than 0.60 percent and shall have been shipped from the mill not more than three (3) months prior to incorporating into the work unless specifically waived in writing by the Engineer. For job site mixing all cement shall be in sacks. FLY ASH IS NOT AN ACCEPTABLE SUBSTITUTE FOR PORTLAND CEMENT. PREMIXED BAG CONCRETE IS NOT AN ACCEPTABLE SUBSTITUTE FOR PORTLAND CEMENT.

b. Water

Water used in concrete shall be clear and free from objectionable substances such as oil, acid, alkali, vegetable matter, clay, or silt. Water of doubtful quality shall be tested in briquettes which shall reach a strength equal to that of similar briquettes made with water of known satisfactory quality.

c. Admixtures

An air entraining admixture equal to Master Builders AE200, Darex A.E.A. or Aermix, meeting the requirements of ASTM C260 for Air Entraining Admixtures may be used but is not required. Use of such admixtures is subject to the approval of the Engineer.

The amount of air-entraining admixture to be used will be determined by the percent of air entrained in the concrete. The limits of air will be five (5) percent plus or minus one (1) percent.

The concrete when an approved air entraining agent is used shall have a reduction in weight of not more than three (3) to six (6) pounds per cubic foot as compared with concrete of the same consistency and cement content made without the use of the agent. The specified cement factor shall be maintained by adjusting the quantity of aggregate and water used to the satisfaction of the Engineer. Reduction in the twenty-eight (28) day strength as specified will not be permitted. The use of any other admixture will not be permitted without the written consent of the Engineer as to the admixture to be used and its proportion in the mix.

d. Fine Aggregate

Sand for concrete shall consist of clean, hard, durable uncoated particles, free from lumps of clay, soft or flaky material, loam, and organic matter. In no case shall fine aggregate containing lumps of frozen material be used. Fine aggregate containing appreciable quantities of mica, shale, slate, or other soft grains shall not be used. It shall not contain more than two (2) percent by weight of material which may be removed by the elutriation test. Sands which do not pass the standard colormetric tests shall not be used unless it can be shown that the failure to pass is caused by particles of lignite or coal. Fine aggregate shall conform to ASTM C33 with gradation as follows:

<u>Screen</u>	<u>Percent Passing</u>
No. 4	95 -100
No. 16	45 - 95
No. 50	10 - 30
No. 100	2 - 10

ONLY NATURAL RIVER SAND OR SPECIALLY APPROVED
MANUFACTURED SAND SHALL BE USED.

e. Coarse Aggregate

Unless otherwise specified, coarse aggregate may be either crushed limestone, or crushed gravel. Coarse aggregate shall show no evidence of disintegration, and the weighted percentage of loss shall be not more than ten (10) percent by weight when subjected to five (5) alternations of the sodium sulphate test for soundness. It shall be composed of clean, hard, durable, uncoated particles free from deleterious matter. Except for gradation, coarse aggregate shall conform to the requirements of ASTM C33. The coarse aggregate shall meet the following grading requirements.

Passing 1 1/2" square laboratory sieve	-	100%
Passing 1" square laboratory sieve	-	90 -100%
Passing 3/4" square laboratory sieve	-	50 - 75%
Passing 3/8" square laboratory sieve	-	10 - 25%
Passing No. 4 square laboratory sieve	-	0 - 5%

7. Proportioning of Materials for Concrete

During formulation of the design mix the proportions of aggregate to cement for the grade of concrete specified shall be such as to produce concrete of proper workability. The proportion by dry weight of fine to combined aggregates shall be controlled between limits of thirty (30) to forty-five (45) percent as directed by the Engineer, but the mix shall be so controlled as to use the minimum fine and the maximum coarse aggregate which will give a satisfactory and workable mix.

Measurement of cement, fine and coarse aggregate for all classes of concrete shall be by direct weight upon an approved type of scales. Water shall be accurately measured in gallons by equipment accurate to plus or minus five (5) percent.

The weight of cement in unopened sacks as packed by the manufacturer will be considered to be ninety-four (94) pounds per sack. The method of measuring the water shall be accurate and readily adjustable so that the proper ratio of water and cement in each batch may be secured. It is the intention of the Engineer to control rigidly the quantity of water in each mix and to get the densest possible concrete. The Engineer may require calibration of weighing equipment. Equipment for measuring water shall be checked and adjusted daily.

8. Source of Supply of Concrete

a. General

Concrete to be placed in the work may be proportioned and mixed by the Contractor on the site of the work or may be proportioned and mixed in a "Ready-Mix" central plant. Either plant shall be subject to the Engineer's approval of equipment and adequacy prior to the commencement of concrete placement operations. Such approval may be withdrawn by the Engineer if the concrete becomes non-uniform or for other reasons. In the case of such withdrawal of approval the Contractor shall either cause corrections necessary to obtain another approved source.

b. Mixing on Job Site

When small quantities of concrete are required at remote sites or the travel time from a ready-mix plant is deemed excessive or an approvable ready-mix plant is unavailable, the Engineer may approve job site mixing. The Engineer will require what is deemed adequate mixing and quality control equipment.

c. Mixing at a Central Plant

The name and location of the proposed plant and its sources of materials shall be submitted to the Engineer for approval. The Engineer may inspect the plant facilities and proposed mixer trucks and make a determination as to whether they are adequate to meet the quality control required. The Engineer's determination in this case will be FINAL and BINDING. The concrete shall be mixed and handled in accordance with the requirements of ASTM C94 except as otherwise specified herein. During the period of placing concrete the Engineer shall be afforded free access to the plant for such examinations as the Engineer deem necessary including the stationing of a separate resident project representative at the plant during batching operations if deemed desirable.

(1) Loading Tickets

Loading tickets shall be initialed by the "weight man" stating (1) the Class of concrete, (2) the name of the project, (3) the time of the batching, and (4) the batch weights of each material including water. When the mixer truck arrives on the job site a copy of the ticket shall be given to the resident project representative BEFORE the concrete is placed. Any additional materials added shall be noted.

(2) Transporting

Concrete shall be transported only in approved mixer trucks which will mix the concrete enroute. In extreme hot weather, when approved by the Engineer, the required amount of water may be added upon arrival of the truck at the job site in order to avoid pre-set of the mix enroute. Such approval requires close cooperation of all concerned and will be given only if equipment to accurately measure the water is available and only if strength and slump tests are found to be uniform; approval may be withdrawn for any reason including lack of cooperation. Concrete which reaches the job in a pre-set condition or fails to meet slump requirements will be rejected and shall be removed from the job site. No retempering with water or any other admixture will be allowed except in special emergencies and under the conditions set in Paragraph 9. Alteration of Concrete Slump (Retempering).

9. Alteration of Concrete Slump (Retempering)

ANY ALTERATION OF CONCRETE IS TOTALLY THE CONTRACTOR'S RESPONSIBILITY.

The concrete shall be mixed only in such quantities as required for immediate use, and shall be used while fresh and before initial set has taken place. The addition of water or some other plasticizer (sometimes called retempering) to a ready-mix truck at the job-site or such addition at any place more than ten (10) minutes after the original water charge has been added and mixing commenced is strictly prohibited except as provided herein. Any concrete which arrives on the job in which initial set has begun shall be wasted and not used in the work.

At the request of the Contractor, the Resident Observer may permit water and Portland cement to be added at the rate of twelve (12) gallons of water per sack of cement. If Portland Cement is not available without too great a time delay the Contractor may add up to one (1) gallon of water per cubic yard at his own risk.

If concrete arrives on the job too wet the slump may be altered by adding Portland cement and thoroughly mixing.

Any concrete which is altered shall have double the specified number of cylinders taken after said alteration and no work shall be added onto the pour in question until the quality is assured.

10. Placing of Concrete

a. General

All concrete shall be placed in daylight or daylight conditions approved by the Engineer and ONLY AFTER the Engineer's representative has been notified and has inspected and approved the placement of reinforcing steel and the general condition of form work.

All water and accumulated debris shall be removed from forms and observation holes shall be left in wall forms near the bottom for such purpose. For footings and on-grade slabs water shall be diverted or otherwise removed. For walls, beams, columns, and supported slabs the forms shall be wetted with water so as to tighten joints. Runways, where used, shall be independently supported so as to prevent disturbance of the forms.

CONCRETE WITHIN ANY UNIT OF WORK BETWEEN CONSTRUCTION JOINTS SHALL BE PLACED CONTINUOUSLY TO PREVENT "COLD JOINTS". New concrete shall be placed AGAINST each succeeding batch so as to build up a continuous monolithic "pour".

b. Cold Weather Placing of Concrete

No concrete shall be placed when the air temperature in a shaded area away from artificial heat is 40°F and falling. Concrete may be mixed and placed under the conditions set forth herein if the air temperature in the shade is 35°F and rising provided the Contractor makes provisions for heating to maintain 45°F and there is a U. S. Weather Bureau forecast for 45°F or above. When the air in the shade falls below 50°F the mixing water shall be heated (Maximum 140°F) so that the temperature of the concrete when deposited is between 60°F and 75°F. Several thermometers shall be maintained by the Contractor at the site of the work and placed as directed by the Engineer.

The Contractor shall supply such heating equipment as vented stoves and/or salamanders as are necessary to keep the temperature of the air surrounding the concrete from falling below 45°F until test specimens indicate the concrete has attained a compressive strength of 2,500 psi or greater or for a period of five (5) days. The Engineer may require additional heating units to be placed in operation if in the Engineer's opinion the concrete might be endangered by an additional drop in air temperature. When the required heating period has expired the concrete shall not be allowed to cool at a rate faster than 1°F per hour.

c. Hot Weather Placing of Concrete

When the temperature of the air exceeds 90°F or the average temperature for the period of placement exceeds 85°F or is predicted by a U.S. Weather Bureau forecast to exceed said limits special precautions are required. The temperature of the concrete shall not be allowed to exceed 90°F. Ice shall be substituted for mixing water prior to the addition of the other materials to mixer in order to maintain temperature. The ice shall be accurately weighed (8.34 pounds = 1 gallon) prior to its being placed in the mixer and the remaining mixing water reduced correspondingly. The temperature shall not be reduced below 65°F.

The maximum time allowed in the mixer by ASTM C94 (either three hundred [300] revolutions or one and one-half [1½] hours whichever occurs first) shall be considered the acceptable maximum at air temperatures between +45°F and +70°F. The following maximum allowables shall apply at various temperatures:

<u>Average Air Temperature</u>	<u>Maximum Time or Revolutions</u>
45°F - 70°F	1½ hours or 300
70°F - 80°F	1 hour or 200
80°F - 90°F	45 min. or 150
90°F - 100°F	30 min. or 100
100°F	No placing allowed

Extreme care shall prevail in the pouring of thin slabs and other thin sections. All forms, reinforcing steel, and/or subgrades shall be wet with cool water as shall all mixers, chutes, etc. immediately prior to concrete placement. No puddles of water shall be present at the time of placement.

d. Placing Concrete in Foundations

Whenever possible all foundation excavations shall be pumped dry and concrete deposited in the open. If it is not possible to proceed in this manner, a seal of concrete of sufficient thickness to resist any possible uplift shall be deposited under water in accordance with special directions of the Engineer. After the seal has set sufficiently, the foundation shall be pumped out; and the balance of the concrete placed in the dry.

e. Placing Concrete in Forms

Concrete shall be conveyed as soon as possible after mixing to the place in which it is to be deposited. The method and manner of placing shall be such as to avoid the possibility of segregation or separation of the aggregates or the displacement of the reinforcement. The concrete shall

be deposited so as to bring the construction up level and during the process, it shall be vibrated, rammed, spaded, or agitated by satisfactory tools so as to produce a compact concrete of maximum density with all spaces or voids filled and presenting a smooth, unbroken surface, free from coarse aggregate to exposed honeycomb spaces when the forms are removed.

f. Pumping or Chuting Concrete

If concrete is conveyed by pumps or chutes, the equipment shall be of such size and design as to insure a practically continuous flow. The slope of the chute or the design of the conveyance tubes shall be such as to allow concrete of a satisfactorily dry consistency to flow without separation of the ingredients. The chute or tube shall be thoroughly flushed with water before and after each run, discharging outside of the forms. Should stoppage occur in the chute or tube during concreting and the use of water be required to clean it, the water and all material removed from the chute or tube shall be wasted outside the forms. If, in the opinion of the Engineer, the arrangements for placement are such as to preclude the securing of watertight, smooth, dense concrete in any portion of the work, other and satisfactory means of transporting concrete shall be employed by the Contractor.

g. Vibrating Concrete

All concrete shall be vibrated in the forms as it is placed with mechanical internal vibrators maintaining 5,000 impulses per minute and approved by the Engineer. At least one (1) extra vibrator in operating condition shall be maintained at the job site in case of emergency.

11. Curing of Concrete

a. General

All concrete shall be protected from too rapid drying or curing by the covering of surfaces with burlap, curing compound as per ASTM C309, Type 1, or other suitable means immediately after finishing, concrete shall be kept moist for a sufficient period of time to insure satisfactory curing as directed by the Engineer, normally three (3) consecutive days.

b. Cold Weather Curing

If concrete is placed in cold weather the Contractor shall provide the necessary heat to insure that the temperature of the air immediately surrounding the fresh concrete does not drop below 45°F at any time, at any place, and that the concrete is uniformly kept warm until the concrete

has obtained a compressive strength of 2,500 psi or greater for at least five (5) days. The variations in temperature shall not exceed 10°F and no hot air shall be allowed to blow directly upon the fresh or curing concrete. The surfaces shall be protected from frost by covering with suitable blankets at any time the temperature is forecast to drop below 50°F.

c. Hot Weather Curing

During the curing of concrete in hot weather all surfaces shall be kept covered with burlap sacks or polyethylene and kept moist for a period of five (5) days after placing, after which the protective covering shall be allowed to gradually dry out.

The most extreme care shall be exercised to maintain a moist surface on slabs during the first twenty-four (24) hours after placement, and the Engineer, during periods of low humidity compounded by surface winds, may require continual wetting of the surface for a period of twenty-four (24) hours. After the first twenty-four (24) hours the surface shall be wet down when work is begun in the mornings and also at intervals during the day if required by the Engineer and left wet in the evenings.

12. Joints in Concrete

a. General

The placement of concrete shall be as shown on the Plans and/or approved "concrete placing plans" between construction joints. In general a unit shall not exceed thirty (30) feet in each direction nor more than nine hundred (900) square feet although the Engineer may approved larger pours when same are submitted in five (5) copies under the same procedure outlined for shop drawings and are to be considered as a shop drawing.

Vertical construction joints shall be provided at intervals of thirty feet (30') or less from corners and between construction joints on walls enclosing water holding basins above grade and dry spaces below grade. Horizontal construction joints shall be provided at intervals of thirty feet (30') or less in walls enclosing dry spaces below grade. Structural slabs on grade reinforced with deformed bars may be placed in pours of any dimension desired between construction joints.

Where a construction joint is made, laitance, all weak concrete, and foreign matter shall be removed and the concrete roughened.

On all joints except "expansion joints" the reinforcing shall be set to extend into subsequent sections of construction so as to make the work a

monolith. JOINTS SHALL NOT BE MADE EXCEPT AS THE ENGINEER MAY INDICATE, APPROVE, OR DIRECT TO PRESERVE THE STRENGTH, FACILITY OF PLACEMENT, OR WATERTIGHTNESS OF THE STRUCTURES. In general, the locations of the joints are shown on the Plans; but these may be changed if the Contractor requests and the Engineer approves. A period of at least forty-eight (48) hours shall elapse between the placement of adjacent concrete units or pours.

b. Watertight Expansion Joints

An expansion joint is defined as a joint specially constructed to allow movement as shown on the Plans. Expansion joints shall be constructed in accordance with the details shown on the Plans utilizing PVC waterstop, asphalt expansion joint filler, and SIKAFLEX 2c NS sealant or equal, and shall be watertight in water holding structures or dry wells. The expansion joint filler shall be the asphalt type conforming to the requirements of ASTM D994, W. R. Meadows, Inc. or equal. The exterior sealant shall be a two (2) part polysulfide rubber joint sealant conforming to the requirements of ASTM C920 for Class 25 sealants. The filler shall be applied so as to prevent "tracking" if accidentally stepped on.

c. Joints in Footings and Walls

Construction joints in footings and walls shall be located across areas of low shearing stress and shall be provided with keyways. Keyway details shall be as shown on the Plans or in special cases as directed. Waterstops shall be provided where shown on the Plans.

Expansion joints shall be located where shown on the Plans using the details of construction shown on the Plans.

d. Joints in Slabs and Beams

Construction joints shall be located near the middle of spans of slabs, beams, or girders; unless a beam intersects a girder at this point, in which case the joints in the girders shall be off-set a distance equal to twice the width of the beam. In this case, provision shall be made for shear by use of inclined reinforcement. Keyways shall be provided as shown on the Plans.

Expansion joints shall be located where shown on the Plans using the details of construction shown on the Plans.

e. Waterstops and Watertightness

Dry wells and structures housing equipment shall be watertight with no visible leaks and no accumulation of water. Any visible leaks shall be repaired to the satisfaction of the Engineer. Waterstops shall be polyvinyl chloride (PVC) and shall be of the configuration/type shown on the Plans. Keyways with nine-inch (9") wide PVC waterstops for construction joints shall be used where such joints are shown. All PVC waterstops shall be installed as per the manufacturer's recommendations and shall be welded watertight.

Certain waterstops may be shown on the Plans or other material for special reasons.

f. Mastic Joints

Where joint sealer or mastic joint is noted on the Plans, the joints shall be sealed with the material designated on the Plans. All materials shall be installed in strict accordance with the manufacturer's instructions, and under the supervision of a qualified representative of the manufacturer. All surfaces and slots in concrete shall be provided as required by the manufacturer of the joint material.

g. Control Joints in Non-Reinforced, Non-Structural Slabs on Grade

Control joints in slabs on-grade which are reinforced with welded wire fabric only shall be saw cut and shall be a minimum of one-eighth inch (1/8") wide by one-fourth (1/4) the section in depth. Sawing of control joints shall be completed between twelve (12) and twenty-four (24) hours after finishing of the concrete surfaces. Timing of saw cutting shall be such that the slabs have sufficiently cured where no dislodging of aggregate occurs during the sawing operations.

The spacing of control joints and/or construction joints in slabs on grade shall generally not exceed fifteen feet (15').

Control joints in sidewalks shall be formed by tooling a groove downward from the surface with a one-fourth inch (1/4") edging tool. Spacing of control joints shall be equal to width of sidewalk.

h. Isolation Joints

Isolation joints to separate slabs from column footings, intersecting walls, etc. shall be provided where shown on the Plans. Isolation joint material shall be one-half inch (1/2") thick by the full depth of the slab, unless

otherwise noted on the Plans, and shall meet the requirements of ASTM D1994 for bituminous type performed joint filler.

Isolation joints, where shown on the Plans, separating concrete sidewalks from structures, concrete curbs, *etc.* shall be one-half inch ($\frac{1}{2}$ ") thick by the full depth of the sidewalk.

i. Joint Sealant

Where joint sealant is noted on the Plans and the joint sealant material is not designated, the joint sealant shall conform to the requirements of ASTM C1516 for cold application type concrete joint sealer.

13. Non-Shrink Grout

Non-shrink grout shall be used where called for on the Plans or required to insure watertightness. The proportions of the non-shrink grout mix shall be:

15 pounds Embecco or equal
100 pounds Portland Cement
100 pounds sand
150 pounds pea gravel (may be omitted)

14. Forms for Concrete Work

a. General

If required by the Engineer, forming plans shall be submitted by the Contractor and approved by the Engineer before the forms are on the work. The Contractor may submit a plan or schedule for forming for the Engineer's consideration. The Engineer's approval of the Contractor's method of forming will be for the benefit of the Contractor and will be based on the acceptability of the finished work; in no case will the Engineer pass on or be responsible for the structural adequacy of the Contractor's forms, false-work, or other construction procedures.

Forms shall be substantial and sufficiently tight to prevent leakage of mortar. They shall be properly placed or tied together so as to maintain position and shape and insure safety to workmen and passersby. Temporary openings shall be provided where necessary to facilitate cleaning and observation immediately before depositing concrete. CONCRETE SHALL NOT BE PLACED IN ANY FORM UNTIL THE FORM AND THE RESTEEL IS OBSERVED BY THE ENGINEER. Such Engineer comment or approval does not apply to the structural integrity of the framework which is the total responsibility of the Contractor. The Contractor shall be completely responsible for the strength and adequacy

of the form work and shall save the Owner and/or Engineer harmless from any claims arising therefrom for any reason.

b. False Work

All false work shall be solely the Contractor's responsibility as to strength, line, and grade, *etc.*; but the Engineer may disapprove work which is unworkmanlike, or in the opinion of the Engineer, will not yield the finished product required.

c. Material for Forms

The forms for the outside face of all exposed surfaces shall be of not less than one and one-half (1½) inch tongue and grooved lumber dressed on both edges and on the face next to the concrete or three-fourths (¾) inch plywood panels unless otherwise shown on the Plans or specifically permitted by the Engineer. Forms for all other concrete work may be constructed with one (1) inch by six (6) inch tongue and grooved sheathing or one (1) inch ship-lap. Where shown on the drawings or required in these Detailed Specifications, or by the Engineer, forms for all exposed walls (both inside and outside) shall be constructed of three-fourths (¾) inch plywood which, in all cases, must be approved by the Engineer.

Moldings and the ornamentation shown on the Plans shall be formed with wood or metal molds. The width of all boards used for such work shall be approved by the Engineer.

d. Unlined Forms

Unlined forms may be used on unexposed surfaces of walls, slabs, columns, and beams unless otherwise specified herein or as shown on the Plans. Form boards shall not be re-used in contact with exposed surfaces unless they are thoroughly cleaned and oiled and approved by the Engineer.

e. Lined Forms

Where specified herein or where shown on the Plans, plywood panel or lined forms will be used for certain portions of concrete masonry structures. Where lined forms are used, the lining shall be of fiber board or plywood which must, in all cases, be approved by the Engineer. All lining materials shall be used in as wide pieces as a single width of fiber board. The lining material shall be nailed to the backing beginning at the center of the board and working toward the edges to prevent buckling. Cigar box nails or similar nails with flat heads shall be used to attach lining material to forms. The edges of the linings shall be butted tight together,

and joints between the sheets shall be filled with a compound of litharge or Rutland Patching Plaster, or approved equal. Lining material may be re-used if it is satisfactorily cleaned and approved by the Engineer.

The smooth side of the lining materials shall be placed next to the concrete surface where smooth surfaces are specified; where granular surfaces are indicated or specified, the rough surfaces of the lining materials shall be placed next to the concrete.

f. Steel Forms

The use of steel forms may be used when approved in writing by the Engineer. Ties used with steel forms shall be of the type designed to remain permanently in place and conform to the requirements for form ties hereinafter. Steel forms, if used, shall be placed under the direction of a trained and competent representative of the supplier and the Contractor shall be totally responsible for their structural integrity.

g. Form Ties

Approved form ties shall be used for all wall construction. The ties shall be of the type that snap back in the wall, or permit removal of the tie ends. Ties shall be adjustable to permit tightening of forms, and of such type that will require a minimum amount of pointing with no metal closer than one-half (1/2) inch from face of wall. No ties will be permitted that require more than one and one-half (1½) inch for pointing. REMOVAL OR PULL-OUT TYPE TIES WILL NOT BE PERMITTED UNDER ANY CIRCUMSTANCES. Form ties with three-fourths (3/4) inch wood concrete snap ties shall be as manufactured by the Universal Form Company of Chicago, Illinois, or approved equal.

h. Form Release Agents

All forms that are not restricted by the form manufacturer from application of a form release agent shall receive a volatile organic compound (VOC) compliant, non-staining, reactive, architectural application form release agent. The form release agent shall be applied in accordance with the manufacturer's instructions. Form release agents shall be Duogard as manufactured by W. R. Meadows or equal.

i. Removal of Forms

Forms shall not be removed until the concrete has attained a strength sufficient to support itself and the superimposed loads. Under normal curing conditions (average temperature 50°F or above) the forms may be removed after following minimum time has elapsed.

Floor slabs, beams, and girders	- 10 days
Columns, pedestals, and sections less than 12 inches thick	- 4 days
Wall lifts (12 inches thick) under 10 feet	- 2 days (48 hrs. min.)
Wall lifts (12 inches thick) over 10 feet	- 3 days (72 hrs. min.)

In cold weather forms shall not be removed from any work when the danger exists of freezing the concrete or otherwise damaging the surface. Whenever a question exists as to removal of forms, the forms shall not be removed until a standard cylinder cured on the site in a manner similar to the work represented has attained a compressive strength of 3,000 psi.

The use of the foregoing table shall in no way relieve the Contractor of its responsibility for the safety and integrity of the structure.

15. Floor Drains, Sleeves, and Inserts

The Contractor shall be responsible for placing all sleeves, floor drains (which shall be placed one (1) inch low and the floor sloped thereto), wall castings, step nosing, and other inserts in the concrete walls and floors in their proper positions. If for any reason said sleeves, wall castings, and/or other inserts are not delivered prior to pouring, the Contractor shall box out for same in a manner acceptable to the Engineer. It shall then become the responsibility of the Contractor to place same and make a watertight closure of the openings in a manner satisfactory to the Engineer.

16. Slabs on Grade

a. Subgrade Preparation

Subgrade shall be prepared and constructed in accordance with "Guide for Concrete Floor and Slab Construction", ACI 302.1R and as hereinafter stipulated.

The subgrade shall be compacted in the presence of the Engineer immediately prior to the fine grading operation. All soft or unstable material detected during the final compacting shall be cut out and the area reworked to provide the specified density.

After final compacting, a six inch (6") crushed stone base shall be constructed as required to obtain the specified slab thickness within a tolerance of plus or minus one-fourth inch (1/4"). All ruts and depressions shall be filled to eliminate any abrupt changes in slab thickness.

A SIX (6) MIL POLYETHYLENE VAPOR BARRIER MEETING THE REQUIREMENTS OF ASTM D2103 SHALL BE PLACED OVER THE PREPARED CRUSHED STONE BASE PRIOR TO PLACING CONCRETE FOR THE SLAB.

b. Slab Placement

Materials and construction requirements relating to slabs on grade shall be in accordance with provisions outlined in this Section of the Specifications, in accordance with the "Guide for Concrete Floor and Slab Construction", ACI 302.1R and as hereinafter stipulated.

Slabs on grade which are not shown to pitch to drain shall be constructed to a uniform plane at the elevation shown on the Plans. Tolerance of dead-level slabs shall be plus or minus one-fourth inch ($\pm 1/4"$) in ten feet (10') (F_{F22} and F_{L22}). Slabs at floor drains shall be finished with a four foot (4') diameter dish with center of dish one inch (1") below floor level.

Reinforcing steel shall be cut at isolation joints and expansion joints. Wire mesh reinforcement and bar reinforcement shall be placed as shown on the Plans.

Slabs shall be constructed in a strip pattern. The width of each strip shall coincide with the distance between column lines. Construction joints shall occur at the column lines in buildings.

Concrete shall be discharged as close to its final position as possible. Concrete shall be screeded with hollow metal straightedges, vibrating screeds or roller screeds. After initial screeding, low spots shall be filled with additional concrete placed by shovel and these areas shall be rescreeded. Screeding must be completed before any excess water or bleeding water is present on the surface of the concrete.

Immediately after screeding and before any excess moisture or bleeding water is present on the surface of the concrete, surfaces shall be bull floated with wood floats to eliminate ridges and fill in voids left by straight-edging operations.

Concrete shall be floated after it has stiffened to the point where foot pressure can be sustained with a maximum of one-fourth inch ($1/4"$) indentation. Floating shall be performed, utilizing power floats or trowelling machines fitted with float shoes. Surfaces inaccessible to power driven machines shall be hand floated, utilizing wood, magnesium or aluminum hand floats.

c. Curing

(1) Interior Floor Slabs

Interior floor slabs shall be cured with a membrane curing compound designed to cure, seal, harden, and dustproof. This compound shall be applied within one-half ($\frac{1}{2}$) hour after completion of finishing operations and/or immediately after disappearance of the "sheen" of surface moisture. Slab surfaces shall be uniformly coated at the rate recommended by the manufacturer. Application of material shall be by means of a roller or spray gun. If the floor slab is constructed prior to completion of the building envelope, floor surfaces shall be covered with curing sheets meeting the requirements of ASTM C171. Sheets shall be securely anchored and maintained in place for a minimum of seven (7) days.

(2) Exterior Slabs and Water Holding Basin Floor Slabs

Exterior floor slabs, slabs on grade not requiring special coatings, and floor slabs of water holding basins shall be cured with a membrane curing compound designed to cure and seal. The curing and sealing compound shall be a hydrocarbon, resin-based compound meeting the requirements of ASTM C309, Type 1, 1D, Class A and Class B. This compound shall be applied within one-half ($\frac{1}{2}$) hour after completion of finishing operations in accordance with the manufacturer's instructions. Slab surfaces shall be uniformly coated at the rate recommended by the manufacturer. Curing and sealing compound shall be CS-309-30 OTC by W. R. Meadows or equal.

As an alternative to use of membrane curing compound, the exterior slab may be completely covered with burlap and continuously soaked for ninety-six (96) hours after placing with a potable water sprinkler system.

17. Aluminum Safety Treads

The Contractor shall furnish and install on the leading edge of stairs, steps and landings nosings which shall be eight (8) inches less than the width of the surface to which said the nosing is attached (four [4] inches each side). The nosings shall be three (3) inches wide of the non-skid type equal to Wooster Products Type 101 alumogrip abrasive cast aluminum. Attachment shall be with concealed anchors on new work (for renovations use stainless steel screws). The installations shall be such that the top of nosing is flush with the top of the slab to which it is attached.

18. Concrete Finish

a. Floor Slabs

The concrete floors of all structures shall be finished monolithically with an allowable variation of one-eighth (1/8) inch in ten (10) feet transversely and longitudinally.

Concrete floor slabs on grade shall be placed over a well tamped and compacted subgrade. Form all recesses for thickened slabs, as shown on the Plans and thoroughly compact stone. Lay vapor barrier of six (6) mil (0.006 in.) thickness polyethylene over fill. Vapor barrier shall follow the contour of the thickness of the slab.

All floor drains shall be set one (1) inch lower than grade and the slab pitched thereto.

Slabs to receive quarry tile shall be finished by tamping the concrete with special tools to force the aggregate away from the surface; then screeded with straight edges and floated to produce a reasonably true and uniform surface.

b. Walls, Beams, Ceilings and Columns

(1) General

All concrete walls, ceilings, and beams shall be pointed; those which are to be exposed permanently to view, including the interior of basins to a point twelve (12) inches below the water line, shall be pointed and rubbed. If the surface is to be painted it shall be left smooth and all loose concrete rubbed away by use of a rough burlap sack or other effective method; if the surface is not to be painted it shall be rubbed as hereinafter specified. Foundation walls shall be rubbed to a point one (1) foot below grade on the outside. All projecting fins shall be removed from the concrete and holes left by form ties shall be pointed up.

(2) Pointing

After the specified curing times have elapsed, forms and form ties shall be removed and all depressions or imperfections inspected by the Engineer. After the Engineer has approved the general integrity of the work, all imperfections shall be wetted and repaired with non-shrink sand-cement mortar.

(3) Rubbing

After pointing has set, all surfaces requiring rubbing shall be kept wetted with water with a brush and rubbed with a No. 20 carborundum stone. The rubbing shall be continued sufficiently long to remove all marks and projections, producing a smooth, even surface without marked irregularities. The final rubbing shall be done with a No. 40 carborundum stone and continued until the entire surface is of smooth texture. After the rubbing has been finished, all excess particles shall be removed by brushing the surface with burlap. The finished surface shall be uniform in color and otherwise satisfactory to the Engineer.

(4) Coating

IF APPROVED by the Engineer in lieu of rubbing concrete, all structural cast-in-place concrete foundations, walls, beams, columns, roofs, ceiling and equipment foundations exposed to view and not identified or depicted on the accompanying Plans to receive any other finish or treatment, including the interior of all water holding structures to an elevation twelve inches (12") below the minimum normal water level and exposed exterior concrete walls to an elevation twelve inches (12") below finished grade, shall be coated as described hereinafter.

The coating shall be MasterSeal 584 or equal combined with water and MasterEmaco A660 or equal, both manufactured by Master Builders Solutions, or approved equal, in the proportions recommended by the product manufacturer for a trowel finish coating approximately one-eighth inch (1/8") to one-fourth inch (1/4") thick. The coating shall be applied according to the manufacturer's printed instructions including a "key coat" cured five (5) to seven (7) days followed by a final coat applied with a steel trowel and finished with a sponge float. All concrete coating described in this Paragraph shall be applied with a trowel finish, except that the coating to the underside of overhanging walkways may be applied with a brush finish. Application by spraying will not be allowed. All products used shall be those manufactured by Harris Specialty Chemicals, Inc., or approved equal.

The color shall be selected by the Owner.

c. Exterior Slabs

All walks, platforms, and exterior floors or slabwork shall have a broomed finish. After screeding to the required grade while the concrete is still

green, but has hardened sufficiently to bear the finisher's weight the surface shall be floated with a wood float to a true and even plane with no coarse aggregate visible. The slab shall then be evenly broomed with all strokes parallel to leave a workmanlike skid resistant finish.

d. Chamfer

All exposed edges shall be chamfered three-fourths (3/4) inch unless otherwise noted.

19. Watertightness

a. General

The Contractor is required to make watertight concrete in all structures holding water or solutions or dry wells or basements. All cracks and imperfections developing at any point in the work shall be thoroughly repaired in a manner satisfactory to the Engineer. When the concrete work has attained sufficient strength, the Contractor shall fill each basin or tank, or each compartment, with water, and shall repair any imperfections which cause the water level to fall more than one-half inch ($\frac{1}{2}$ ") in twenty-four (24) hours. All noticeable leaks in any portion of the work shall be repaired in any case, even if the preceding requirements as to watertightness are satisfied. THE CONTRACTOR MAY CONDUCT THIS WATERTIGHTNESS TEST EITHER BEFORE OR AFTER BACKFILLING EXTERIOR WALLS.

It is expected that with the proper precautions, a dense watertight concrete will be obtained. If concrete which passes the above requirements for watertightness has not been obtained, the Contractor shall, under the direction of the Engineer, furnish all materials and do all work necessary to produce watertight concrete structures.

All treatment of concrete necessary to fulfill these requirements for watertightness shall be done at the Contractor's own expense.

b. Dampproofing

The outer surface of all exterior concrete walls enclosing dry spaces (e.g. pits or structures housing equipment, valves or instruments) that is to be covered by backfill or by brick or decorative block shall be coated with an emulsion type asphalt dampproofing prior to backfilling or laying of brick. The dampproofing shall conform to ASTM D1227, Type 4 for brush-on application to concrete surfaces. Concrete structures containing water or wastewater do not require dampproofing.

Surfaces to receive dampproofing shall be clean and dry before application of dampproofing. Surfaces shall be primed in accordance with the manufacturer's recommendation. The dampproofing shall be applied uniformly at a rate of not less than thirty (30) pounds per one hundred (100) square feet.

Dampproofing shall be protected from damage until brick or decorative block is laid or backfill is placed. Concrete walls exposed to view after completion of construction shall not be waterproofed.

20. Defective Concrete

Concrete shall be so placed, compacted, finished and cured so as to form a dense, compact, impervious artificial stone with smooth exposed faces. Any part of the work found to be honeycombed, porous, or otherwise defective in the opinion of the Engineer shall be removed or replaced in whole or in part at the expense of the Contractor.

21. Testing of Concrete

In general, Section 2. Testing and Control of Materials of these Detailed Specifications, governs all testing.

The following tests and/or samples shall be taken in the field as work progresses:

a. Standard Slump Tests

Field slump tests shall be made by the Contractor, using an accurately made sheet iron test cone, in accordance with the provision of ASTM C143. At least one (1) slump test shall be made for each truck; the Engineer may require additional tests if he deems it necessary to insure the desired consistency of the concrete.

b. Concrete Compression Samples

During the progress of the work and for each different mix of concrete, test cylinders shall be made from each day's pour with a minimum of one (1) for each twenty-five (25) cubic yards or a maximum of one (1) from each batch or readymix truck load. The maximum requirement will be imposed only when the Engineer deems necessary due to wide fluctuations in the concrete quality. A minimum of three (3) cylinders will be required for each day's pour if the concrete is used in structures or otherwise in a load carrying capacity. Sidewalks, manholes, etc., may require only one (1) cylinder if less than twenty-five (25) cubic yards per day is placed, and the quality remains sufficiently high in the opinion of the Engineer.

Each cylinder shall be numbered and logged so as to adequately identify the location of the representative concrete in the structure.

The following "break" schedule for cylinders from the same pour will be used:

Where only one (1) cylinder is made	- 28 days
Where two (2) cylinders are made	- one at 7 days - one at 28 days
Where three (3) cylinders are made	- one at 7 days - one at 14 days - one at 28 days
Where four (4) cylinders are made	- one at 7 days - one at 14 days - one at 28 days - one reserved
Where over four (4) cylinders are made	- Same as four plus reserve or as directed

ASTM C31 shall govern with curing as required. The testing shall be done per ASTM C39.

22. Reinforcing Steel

a. General

Bar reinforcement and wire mesh reinforcement shall be furnished and tested in accordance with Section 2. Testing and Control of Materials. CERTIFIED MILL TEST REPORTS SHALL ALSO BE FURNISHED TOGETHER WITH AN AFFIDAVIT INDICATING THE ORIGIN.

b. Bar Reinforcement

Reinforcing steel shall conform to the requirements of ASTM A615 new billet steel, Grade 60, with deformations conforming with ASTM A615. An affidavit showing the heat numbers and origin shall be furnished.

All bars shall be lapped a minimum of thirty (30) diameters at splices unless a greater lap is shown on the Plans.

All detailing, fabrication, and erection of reinforcing bars, unless otherwise noted, shall be in accordance with the ACI "Manual of Standard Practice for Details and Guide to Presenting Reinforcing Steel Design Details" (ACI 315).

The Contractor shall furnish the Engineer with five (5) copies of shop drawings of reinforcing bars, and schedules showing all bends and special bars. These shop drawings and schedules must have the approval of the Engineer before shipment is made. The bars shall bear a designation on the drawings and in the schedule and shall be tagged with metal tags for identification. The Engineer's representative shall be afforded free access to the fabricating shops.

c. Wire Mesh Reinforcement

Wire mesh reinforcement shall conform to the requirements of ASTM A1064.

d. Openings

Openings twelve (12) inches and larger through concrete walls and slabs shall have a minimum of four (4) extra diagonal bars in each face of the wall or slab of the same size as the largest bar in the wall or slab. The length of extra diagonal bars at openings shall engage a minimum of forty (40) bar diameters each side of the opening unless space requires full bond to be developed by means of hooks.

e. Minimum Reinforcing Steel

If through an omission Class "A" concrete walls, slabs, and other concrete work are shown on the Plans to have no reinforcing, a minimum area of steel reinforcing equal to 0.0018 times the cross-sectional area of the concrete work shall be provided.

f. Storage and Protection

Steel reinforcement, either bars or mesh, shall be new stock free from rust scale and shall be stored above the surface of the ground upon platforms, skids, or other supports and protected from the weather. When placed in the work it shall be free from rust, dirt, scale, paint, oil, or other foreign matter which may reduce or destroy bond. A thin coating of red rust resulting from short exposures will not be considered objectionable when bars are placed in the work; but any bars having rust scale or a thick rust coat shall be thoroughly cleaned to the satisfaction of the Engineer, or shall be rejected and removed from the premises if ordered by the Engineer.

g. Placing and Fastening of Reinforcement and Inspection Thereof

Steel reinforcement shall be placed in the exact position as shown on the Plans and held securely in place during the placing of the concrete. All

reinforcement shall be wired together at intersections or as directed by the Engineer. Sheet metal or welded wire bar spacers shall be used for bars in all steps, walls, and beams. Chairs, or approved equal, shall be provided for the support of reinforcement of slabs and flat surfaces. When the reinforcement is placed in the work, it shall have a clean, fresh surface, free from dirt, scaly rust, mill scale, paint, oil or other foreign substances.

BEFORE ANY CONCRETE IS PLACED, THE ENGINEER SHALL HAVE EXAMINED THE PLACING OF THE STEEL REINFORCEMENT AND GIVEN PERMISSION TO DEPOSIT THE CONCRETE. CONCRETE PLACED IN VIOLATION OF THIS PROVISION MAY BE REJECTED AND THEREUPON SHALL BE REMOVED.

23. Concrete Repair Material

Where the repair of existing Portland cement concrete is noted on the accompanying Plans, the following procedures and materials shall be utilized to perform the repair.

All surfaces to be repaired shall be prepared as necessary to make them clean and structurally sound. The surface shall be cleaned by chipping, acid-etching, sandblasting and/or shot-blast cleaning methods to remove all dust, grease, paint, sealers and other foreign materials from the Portland cement concrete surface to be repaired. If acid-etching is used, the surface to be repaired shall be neutralized using a caustic solution and brushed prior to performing the repair. The Portland cement concrete surface to be repaired shall be kept damp for thirty (30) minutes prior to beginning the repair work but standing water shall not be allowed on the surface to be repaired.

The repair material shall be a two (2) component acrylic polymer modified concrete repair material. The material shall be mixed and applied in strict accordance with the manufacturer's written instructions. The concrete repair material shall be Patchcrete® manufactured by Lyons Manufacturing, Inc. or equal.

SUB-SECTION 5B

PUMP AUTOMATIC CONTROL SYSTEM AND ACCESSORIES

1. Scope

The work described at this Sub-Section consists of furnishing and installing the control system to automatically start and stop each pump and vary the speed of the pumps driven by the variable frequency drive units in response to input signals relating to the wetwell level and time, the submersible pressure transducer and all accessories necessary for installation as depicted at the accompanying Plans.

Electrical work associated with equipment described at this Sub-Section, including all connecting signal and power wiring, is depicted in the accompanying Plans and described in these Detailed Specifications, and should be reviewed and taken into account by the Vendor of equipment described at this Sub-Section.

THE VENDOR OF EQUIPMENT DESCRIBED AT THIS SUB-SECTION IS DIRECTED TO READ ALL OF SECTION 5 – MECHANICAL AND CONTROL AND MONITORING EQUIPMENT – GENERAL BEFORE PROCEEDING WITH READING THIS SUB-SECTION

2. Vendors

The control system to automatically start and stop each pump and vary the speed of the pumps driven by the variable frequency drive units, the submersible pressure transducers, and appurtenances shall be provided as an integrated system by:

Southern Sales Company, Inc. of Nashville, Tennessee utilizing PRIMEX VPAC PLC Pumping Station Monitoring and Control System.

3. Performance Requirements

a. Pump Automatic Control System – Duck River Sewage Pumping Station

Hardware and software components shall be integrated into a system to automatically monitor and control the operation of the variable frequency drives and their driven pumps and monitor certain other conditions. The integrated system shall automatically control and monitor the following performance:

The wastewater level in the wetwell shall be continuously sensed via a submersible pressure transducer generating a 4 to 20 milliamp output signal proportional to wetwell level over a range of two feet (one foot above the submersible pressure transducer) to fifteen feet (fourteen feet above the submersible pressure transducer).

The pump operation protocols in response to wetwell levels and elevations are as follows:

<u>Operation</u>	<u>Wetwell Level (Transducer Level)</u>	<u>Wetwell Elevation</u>
Low Water Alarm	3.50' (1.50')	572.50
Stop Pump	4.00' (2.00')	573.00
Start Pump Minimum Speed	6.50' (5.50')	575.50
Pump Maximum Speed	7.50' (6.50')	576.50
High Water Alarm	8.00' (7.00')	577.00

Normal pump operation protocol shall consist of the station operating on either a Flow PID Loop as measured by the flow meter and adjusted by the variable frequency drives or by Wetwell Level as measured by the transducer in the wetwell and adjusted by the variable frequency drives. A toggle switch shall be provided that allows the Owner to select which desired condition the station shall operate from when the pump operation selector switches for both pumps are in the "Automatic" position.

(1) Wetwell Level Automatic Control

- (a) Start the pump motor, designated by the control system software as the "next pump motor to operate", at the Hertz value output from the associated variable frequency drive unit coinciding with the minimum motor speed setting in response to the 4 to 20 milliamp signal generated by the submersible pressure transducer or the float switch installed in the wetwell coinciding with the level of wastewater in the wetwell designated as the "Start Pump Minimum Speed" level. Maintain a 20 second "ramp-up" time from zero to the minimum motor speed setting.
- (b) Continually increase the motor speed of the pump if the wetwell level continues to rise until the pump is running at maximum speed at the "Pump Maximum Speed" setpoint.
- (c) Decrease motor speed in reverse order as the wetwell level decreases.

- (d) Stop the pump motor in reverse order of the Pump Start Sequence.
- (e) Designate the pump motor with the least total runtime as the “Next Pump Motor to Operate”.
- (f) Repeat this normal pump operational protocol until one or both of the pump operation selector switches are moved from the “Automatic” position.

(2) Flow Meter Automatic Control

- (a) Start the pump motor, designated by the control system software as the “next pump motor to operate”, at full speed. Maintain a 20 second “ramp-up” time from zero to the maximum motor speed setting.
- (b) Once check valve limit switch indicates pump is successfully primed, gradually decrease the motor speed of the pump to the Target Flow Rate level set by the Owner. The pump shall operate at the Hertz value output from the associated variable frequency drive unit coinciding with the motor speed setting in response to the 4 to 20 milliamp signal generated by the flow meter coinciding with the flow rate of wastewater designated as the “Target Flow Rate” level.
- (c) Stop the pump motor in reverse order of the Pump Start Sequence.
- (d) Designate the pump motor with the least total runtime as the “Next Pump Motor to Operate”.
- (e) Repeat this normal pump operational protocol until one or both of the pump operation selector switches are moved from the “Automatic” position.

In the event any pump operation selector switch is in the “Off” position, the control system software shall automatically designate the operating pump motor as the “next pump motor to operate” after that pump motor is started.

Only one pump motor shall operate at any time when the selected position of both pump control switches is at “Automatic” or at “On”.

No pump motor shall start and operation of all pumps shall be ceased at any time the 4 to 20 milliamp signal generated by the submersible

pressure transducer installed in the wetwell indicates the wastewater level is at or below the level designated as the “Low Wetwell Level” or when the float switch indicates “Low Wetwell Level” regardless of the position of the three-position pump operation selector switch for any pump.

No pump or motor shall start and operation of pump shall stop on check valve open/close failure alarm. The pump control system shall automatically call for the next available pump.

No pump motor shall be started automatically when the three- position operation selector switch for that pump is placed in the “Off” position.

4. Intent

It is the intention that this specification that the Contractor shall furnish, install, and place a 480 volt, 3 phase, 3 wire, 75 HP Duplex pump station electrical control system into successful operation. System shall be as hereinafter described and all necessary appurtenances that might normally be considered a part of the complete electrical system for this installation. All of the automatic control equipment is to be supplied by one manufacturer. It shall be factory assembled, wired, and tested and covered by complete electrical drawings and instructions.

The control panel will be powered from a protected power source. Metering equipment are existing or to be furnished by others.

5. References

The entire system shall be constructed in strict accordance with the latest published standards of NEMA, IEEE and ANSI. Wherever possible, control system components shall be Underwriters Laboratory listed. All control hardware and software shall be factory assembled, wired, and thoroughly tested prior to shipment.

6. 3rd Party Approval

The control panel(s) shall be constructed in compliance with Underwriter's Laboratories Category 698A - enclosed industrial control panel relating to hazardous locations with intrinsically safe circuit extensions listing and following-up service. The control panel(s) shall bear the Underwriter's Laboratories serialized “698A” label.

Prior to shipment from the manufacturer's facility to the jobsite for installation, the completed pump control panel(s) shall be inspected by an Underwriter's Laboratories (U.L.) representative. Upon successful completion of the inspection, the panel shall be assigned the required 698A serialized U.L. label, indicating the

equipment is built in accordance with the practices and requirements of this Underwriter's Laboratories category.

The control panel submittal shall contain a copy of the front page of the control panel builders UL698A standard that shows their UL file number. The name on the front page of the UL Standard shall match the name in the title block of the control panel submittal.

7. Experience

All of the equipment listed herein shall be furnished by a single supplier with at least ten (10) years experience in furnishing comparable systems and shall be of the latest and most modern design. The supplier shall be responsible for the correct operation of the equipment as specified.

8. Construction Standards

Wire Numbers – Each wire in the control panel shall be marked with a wire number that corresponds to the page and ladder rung of the schematic diagrams. A unique wire number shall be provided between component contacts and coils. Wire markers shall be Brady Thermal Transfer Self-Laminating Vinyl or equal by Grafoplast or Thomas & Betts.

Color Coding – Wires shall also be color-coded as follows: 120 VAC Line = black; Neutral = white; Ground = green; Switched 120 VAC = red; DC current carrying conductor = blue, DC non-current carrying conductor = white with blue stripe, Foreign voltage = yellow, Intrinsically safe = light blue.

Component Identification – Each component in the system shall be identified by a unique number that corresponds to its coil's page and ladder rung location on the schematic drawings.

Wire – AC control conductors shall be 600 volt and a minimum of 18 gauge. DC control conductors shall be a 300-volt and a minimum of 18 gauge. Control conductors shall be UL Type MTW rated for 105o C. Analog conductors shall be 22 gauge shielded twisted three conductor rated for 300 volts. Wire shall be Beldon 8771 or equal. Shields shall be grounded at the PLC or panel location. Power conductors shall be sized per UL and NEC standards and rated for 600 volts. Conductors shall be UL Type MTW, THHN or THWN rated for 90o C.

Control Terminals – All field control conductors shall be connected to terminal blocks. Terminals shall have machine marked wire numbers. Connection of field control conductors directly to control panel components will not be allowed. Terminal blocks shall be rated for 30 amps at 600 volts. They shall be screw terminal type capable of terminating 10 to 26 gauge wire. Terminal bridge bars shall be provided when it is necessary to bridge multiple like terminals together.

Terminals and accessories shall be Phoenix Contact “Clipline” or equal by Allen Bradley or Weidemueller.

9. Control Panel

a. Enclosure

All control and power equipment shall be mounted in a 14-gauge, NEMA 12 Stainless Steel enclosure. A gasket shall be provided for each outer door. All internal components shall be mounted on a painted steel back plate. Operators and indicators shall be mounting the front door to facilitate easy access. A padlock hasp shall be provided on the enclosure door.

Enclosure shall be sized sufficiently to allow for easy access to all internal equipment. Enclosure shall be not less than 72” High x 60” Wide x 16” Deep.

Enclosure shall include environmental controls to maintain internal panel temperature within operating temps of internal equipment. Thermostatically controlled heaters and cooling systems shall be provided as needed.

b. Enclosure Lighting

Enclosure shall be supplied with an interior light and switch. Interior light shall be a minimum of 18” in length and based on energy efficient LED technology with minimum life expectancy of 60,000 hours and have a luminous density not less than 213 lm/ft. LED beam angle shall not be less than 120 Deg.

The system shall have a temperature operating range of -22 Deg F to 140 Deg F or better.

The lighting system shall be controlled by a door switch that will activate when the enclosure door is opened. Light will remain active until the door is closed.

c. Power Entry

The control panel shall include a thermal magnetic main circuit breaker to provide an incoming power disconnect means and short circuit/overcurrent protection for the control panel equipment.

The circuit breaker must have a minimum ampere interrupting capacity of 18,000 @ 480 volt symmetrical RMS amps. The circuit breaker shall have lockable door operator and be operable through the operator’s door of the

enclosure. Unit shall have a trip rating to allow full voltage starting and continuous operation of the motors.

The commercial power input to the control panel/main breaker shall be UL service entrance rated and labeled.

d. Lightning Arrestor

The control panel shall be protected from electrical surges caused by lightning and high current/voltage surges. A surge Protector shall be installed and connected to each leg of incoming service. The surge arrestor shall meet the following requirements:

- (1) Designed to meet ANSI/IEEE C62.11-1987 requirements.
- (2) Rated for not less than 100,000 amp surge current.
- (3) Response Time — PTX: ≤ 1 nanosecond, PTE Active: < 1 nanosecond
- (4) Three LED Indicators for visual indication of the device's operational status
- (5) Built in fuses.
- (6) Protection Modes
 - (a) All Mode L-N, L-L (normal mode), L-G, N-G (common mode)
 - (b) Input Power Frequency 47 – 420 Hz;
 - (c) Maintenance free design.

e. Control Power Transformer

A control power transformer shall be provided, if required, to provide 120 VAC power to internal control system equipment. Transformer shall be sized to accommodate the control panel 120 VAC power requirements with at least 25% spare capacity. Minimum size shall be 2000 VA.

The control power transformer shall be rated for 230/460-120 VAC single phase at 2 KVA with Class 105 Deg. C insulation and shall be UL Listed. The control power transformer shall be supplied with primary and secondary fusing. Fuses shall be rated for load and 200,000 AIC.

The control power transformer shall be of single epoxy resin impregnated construction to eliminate the possibility of moisture, dust, dirt, and industrial contaminants from affecting operation and shortening transformer life. The unit shall have Integrally molded barriers between terminals and transformer to protect against electrical coupling.

f. Control Power Circuit Breaker

A 1P1T circuit breaker shall be provided to provide additional short circuit protection and to allow control power on/off. Unit shall be rated 10,000 AIR or higher.

g. Heater Condensation

A thermostatically controlled heater shall be provided to prevent condensation. The heater shall be minimum 100-watt with a long life heating element.

Heater shall in no event reach an external temperature of more than 428 Deg. F. The heater shall be mounted at the base of the enclosure in a fashion to allow for the maximum heat transfer to the interior and away from any equipment, wire way, or other materials that could lose their integrity or be adversely affected by the heat source.

A thermostat shall be provided to control the heater. In the event panel temperatures exceed 85 Deg F. the heater will not be allowed to operate.

Heater shall be protected by its own circuit breaker allowing for overcurrent protection and a means to switch the heater off.

h. GFCI Duplex Receptacle

A GFCI Duplex power receptacle shall be mounted inside the enclosure to provide a power source for use by an operator.

The GFCI duplex receptacle shall include a 10 amp circuit breaker to provide cutout on an overcurrent condition.

Unit shall incorporate GFCI fault test button and reset on the face of the unit.

Unit shall detect and indicate via face mounted LED if the line/load wiring is reversed.

Internal circuitry shall monitor the condition of the GFCI and will trip unit if a malfunction is present. Unit will not permit reset if the GFCI is not able to provide the necessary protection.

i. Power Supply Systems

The control panel shall be supplied with a DC power supply.

- (1) Power supply will be sized so that under normal conditions, no more than 60% of its rated wattage output is used.
- (2) The DC power outputs shall be protected by separately mounted replaceable fuses.

An Uninterruptable Power Supply (UPS) System shall be furnished. The UPS shall supply both regulated 24 VDC and 12 VDC power for powering control and sensor equipment.

Unit shall be sized to provide battery back-up operation for a minimum of 4 hours during an incoming service power interruption.

System will allow controller, sensors and telemetry equipment to remain operational under battery back-up

The UPS shall monitor battery life and provide indication via LED to replace battery. n indicator

The battery shall be no maintenance gel type cell and easily replaceable. UPS will not be damaged in the event the battery is connected in reverse polarity.

The DC power outputs shall be protected by separately mounted replaceable fuses.

j. Microprocessor Based Controller

The Lift Station Controller shall be preprogrammed and dedicated to the application, microprocessor based controller capable of monitoring process variable inputs and automatically control up to two variable speed pumps.

The operator interface shall display the current level in feet and represent the level in bar graph form, which dynamically updates based on the level in the wet well.

- (1) An active/dynamic graphical representation of each pump and its status shall be displayed on the same screen along with flow in gallons per minute. Pump graphic shall change state to indicate – “Off”, “Called”, “Running”, and “Failed/Out of Service”.
- (2) Touching an active pump on the home screen takes you to the respective pump status screen.
- (3) A trend screen showing, a minimum of, the last 2 hours of wet well level fluctuations shall also be available.

- (4) The operator interface shall have a display area not less than 5.7" with 640 x 480 pixel resolution, TFT Touch screen graphic display with backlit LED having not less than 30,000 life.
- (5) The controller shall incorporate advanced control capabilities including.
 - (a) floating point, multiple auto-tuning PID loops and string handling
 - (b) Full featured built-in I/O including advanced high-speed digital inputs (500kHz)
 - (c) Expansion I/O up to 2048 (DI/DO) and 512 (AI/AO)
 - (d) 32GB removable storage for programs, data logging and screen captures.
 - (e) USB 2.0 (mini-B) for programming and data access
 - (f) USB 2.0 (USB A) for flash drives up to two terabytes (2TB)
- (6) The operator interface shall be suitable for Type 12, 4 & 4X environment. Additionally, the display shall be manufactured from a UV resistant polyester substrate.

To prevent the loss of data during an extended power outage, longer than 4 hours, the controller shall have a built in replaceable battery system to keep volatile memory active for approximately 10 years.

The controller shall be programmed with herein specified inputs and outputs. The controller shall also have the ability to accommodate additional expansion I/O without the need to replace hardware or upgrade the controller.

- (7) The controller shall be configured to monitor the following discrete input status signals:
 - (a) Pump 1, 2 Running.
 - (b) Pump 1, 2 HOA In Auto
 - (c) Pump 1, 2 Overtemp
 - (d) Pump 1, 2 VFD/Pump Failure
 - (e) Backup Active
 - (f) High Level (Float)
 - (g) Intrusion Door Open
 - (h) Pump 1, 2 Check Valve Open
 - (i) Generator Running
- (8) The controller shall provide the following discrete output signals:
 - (a) Pump 1, 2 Call
 - (b) Pump 1, 2 Failure
 - (c) Common Alarm

- (9) The controller shall monitor the following (4-20 mA) process signals:
- (a) Wet Well Level
 - (b) Flow Rate

A three level security system shall be provided for authorized operators (OPER) and supervisors (SUPER). The security system code shall be field configurable using 1, 2, 3, 4, or 5 characters. A successful log on or log off shall be recorded as an event on the removable memory module.

1st Level – System will default to non-logged in mode operation. Without being logged in, screens are view only. No adjustments or alarm acknowledgments shall be possible.

2nd Level shall be an authorized OPER – Operator Access

- After successful OPER authorization code has been interceded the operator shall have rights to edit set points and acknowledge alarms

3rd Level shall be an authorized SUPER – Supervisor Access

- All privileges as the OPER
- Right to change the passwords of both SUPER and OPER users
- Right to set lifetime pump runtime and start totals.
- Right to toggle communication ports between telemetry communications or local programming modes
- Right to set the controller time and date
- Right to access removable media system screen

Shall be provided with factory default passwords.

To prevent unauthorized controller adjustments, an adjustable 0-999 second delay shall be provided to automatically logoff the current user after the adjustable time period, and no operator screen navigation has been detected.

The controller shall be capable of operating pumps in an automatic or fixed mode. In automatic mode, a built in alternator shall be available to equalize motor starts, stops, and run time. The alternator shall have the capability of being put into fixed sequence mode at any time. Alternation shall also have the capability to alternate cyclically or following an adjustable period of time. Alternator shall have pump fail replace logic allowing a failed pump to be detected and the lag pump to be called into service without level increasing to lag start setpoint.

Auto Alternation Mode

If the running signal input is not received within 60 seconds (adjustable) of the respective pump being called to start, a pump failure alarm shall be displayed in the alarm banner and the next pump in sequence shall be called to start.

Fixed Alternation Mode

If the running signal input is not received within 60 seconds (adjustable) of the respective pump being called the respective pump shall continue to be called until the level in the wet well reaches the next level setpoint at which point the next pump in the sequence shall be called to start.

The following system setpoints shall be provided: (* indicates an associated, user adjustable (0-999) seconds time delay shall also be provided to prevent momentary process fluctuations from impacting alarm or control.)

Wet Well Level High and Low Level Alarm *	xx.x ft.
Start Lead*, Lag 1*	xx.x ft.
Stop Lead*, Lag 1*,	xx.x ft.
Target Flow Rate	xxxx GPM
VFD Ramp Min/Max Lead, Lag stages	0-100 %
Pump 1, 2 Failure To Start Delay	xxx sec
Pump 1, 2 Over Temp Delay	xxx sec
Failure to Prime	xxx sec

The controller shall monitor, display and log the following alarms:

- High or Low Wet Well Level Alarm (Transducer)
- Failure to Prime
- Pump 1, 2 Over Temp
- Pump 1, 2 VFD
- Pump 1, 2 Failure (internal to controller, Call No Run)
- Backup Active
- High Level Alarm (Float)
- Intrusion/Vandal Entry Alarm
- Control Power Failure
- Generator Failure
- Generator Run

The controller shall have Pump Status screens that provide the following information and control options:

- Pump 1, 2 Status (Off, Called, Running, & Failed)
- Pump 1, 2 H-O-A Status
- Target Flow Rate xxxx GPM

- Actual Flow Rate xxxx GPM
- Pump 1, 2 Over Temp Status
- Pump 1, 2 Pump Fail/VFD Fault Status
- Today: Pump 1, 2 Runtime xx.x Hours
- Today: Pump 1, 2 Starts xxx
- Yesterday: Pump 1, 2 Runtime xx.x Hours
- Yesterday: Pump 1, 2 Starts xxx
- Current (CRNT) Month (MNTH): Pump 1, 2 Runtime xxx.x Hours
- Current (CRNT) Month (MNTH): Pump 1, 2 Starts xxx
- Last Month (MNTH): Pump 1, 2 Runtime xxx.x Hours
- Last Month (MNTH): Pump 1, 2 Starts xxx
- Total: Pump 1, 2 Runtime 999999.9 Hours
- Total: Pump 1, 2 Starts 999999

k. Navigation

A menu system shall be provided for the user with proper access to change setpoints, setup pump starts, stops, alarms, alarm delays and setup pump alternation. The following parameters shall be provided:

- (1) Level and Level Delay Setpoints
- (2) Alternation – Auto or Fixed mode; Timed or Cyclical
- (3) The operator shall have a choice of selecting automatic or a fixed sequence.
- (4) Pump Failure – call, no run
- (5) The user shall be able to enter pump failure time for each pump that is enabled. A failed pump will be replaced with the next available pump.
- (6) Over Temp
- (7) The user shall be able to enter seal failure and over temp time delays for each respective pump that is enabled.
- (8) Miscellaneous Alarms
- (9) The user shall be able to enter delays for communications failure, intrusion and high or low temperature.
- (10) Transducer Range (wet well level)
 - (a) A field shall be provided to scale the transducer in feet to setup the vertical scale on the Home screen and an adjustable offset in feet, shall be provided to compensate for the transducer to be raised off the bottom.
- (11) Flow
 - (a) The controller shall provide station flow information based on external flow transmitter.
 - (b) The controller shall provide the following flow related information as a minimum:
 - i. Station Effluent Todays flow total.

- ii. Station Effluent Yesterdays flow total
 - iii. Station Effluent Previous Month Flow Total
 - iv. Station Effluent Current Month Flow Total
- (12) Selector switch for Level or Flow control
- (13) Controller shall log the pump run time data, alarms and analog data to the removable memory card.

I. Alarms and Historical Events

When an alarm is activated it shall be logged with a time and date stamp and displayed in the alarms summary screen until the operator acknowledges it.

A historical screen shall provide a historical log for the most recent 64 events.

An additional screen shall be provided to indicate today's, yesterday's, previous month and current month flow through the pump station.

m. Removable Memory

A removable memory storage device shall be provided to store a backup of the program and historical data. Memory module can be used to copy and install configurations including graphics to like controllers in the system or inserted to like replacement controllers. Removable memory shall be sized to allow a minimum of 5 years of data storage or 78 million time and date stamped process data readings. Data storage rates shall provide sufficient resolution of monitored process signals to provide an accurate historical representation of the process. Data shall be formatted in .CSV format and easily read and importable to Windows based applications including Excel or Access for manipulation or longer term storage of historical data. The memory card shall be easily accessible, without having to remove or disconnect panels, wires or other equipment, allowing for quick removal and replacement.

n. Controller Communications

The controller shall be supplied as telemetry capable for LAN and WAN operations.

The controller shall include a minimum of two RS-232/RS-485 serial ports (Operating at up to 115 Kbs) and 1 CAN network port.

o. Configurable serial protocols

Built-in 100Mbps Ethernet ports support an integrated Web Server, FTP Host, Email, Modbus TCP Master/Slave and programming.

An Ethernet Connection using Modbus TCP/IP protocol shall be provided for connection to cellular modem by others allowing communications back to existing master station.

Communication capability shall allow the controller to communicate over optional telemetry equipment including: Phone Line, VHF/UHF/900/Spread Spectrum, Satellite Radio, Fiber Optic and Cellular communication mediums.

Dual CAN ports shall be provided to interface with optional CAN-based remote I/O.

p. Diagnostics

The controller shall have built-in diagnostics allowing for on-site troubleshooting of equipment without the need for a Laptop, special programs or specialized training. Diagnostics shall be viewable from the front of the display. The following minimum set of diagnostics shall be available via a self-test command:

- (1) Run and OK status
- (2) Network Status and Usage
- (3) Average Logic Scan rate
- (4) Application Memory Usage
- (5) Loaded Firmware Versions
- (6) Loaded Protocols
- (7) Removable media access

q. Certifications

The controller shall be compliant with CE, UL, UL-C and for use in applications requiring Class 1, Division 1 - A, B, C & D classifications.

The Lift Station Controller shall be VPAC LSC 6 Controller as provided by PRIMEX.

r. VFDs & Circuit Breakers

The new pumps shall be provided with combination VFDs.

A thermal magnetic circuit breaker shall be supplied as branch circuit protection for each pump motor. Each breaker shall be size to allow full voltage starting and continuous operation of its associated motor. The

circuit breaker must have a minimum ampere interrupting capacity of 18,000 symmetrical RMS amps. The circuit breakers shall be operable through the operator's door of the enclosure.

The VFD equipment shall be UL Listed according to UL 508C – Power Conversion Equipment. As verification, a UL label shall be attached on the enclosure.

The VFD shall be designed, constructed and tested in accordance with UL, CSA, NEMA, and NEC standards.

The VFD shall be ABB, Danfoss, Yaskawa, or pre-approved equal.

The VFD shall convert the input AC main power to an adjustable frequency and voltage as defined below:

- (1) The VFD shall be listed and labeled as a complete unit and shall include all accessories and requirements as described in this section.
- (2) Environmental Ratings
 - (a) Storage ambient temperature range: -40 to 85°C (-40 to 185°F).
 - (b) Ambient temperature operating range: -10 to 50°C (14 to 122°F).
 - (c) Relative humidity range: 5% to 95%, non-condensing.
 - (d) Operating elevation: 1000 Meters (3,300ft).
 - (e) Shock: 15G peak for 11ms duration.
 - (f) Vibration: 0.152 mm (0.006 inches) displacement, 1G peak.
 - (g) Seismic: The AC drive shall meet the seismic requirements of the 2003 International Building Code as specified by AC156.

The AC drive shall be sized to operate a variable torque load.

The speed range shall be from a minimum speed of 1.0 Hz to a maximum speed of 60 Hz.

The VFD shall be protected against short circuits, between output phases and to ground.

The VFD shall have under-voltage and over-voltage protection.

The VFD shall provide class 10 motor overload protection investigated by UL, to comply with N.E.C. Article 430.

The VFD shall be able to sense a loss of load and signal a fault.

If the input analog reference is lost, this shall cause a warning to be issued and the user shall have the option of pre-selecting either (1) stopping and displaying the fault, (2) running at programmable preset speed, or (3) running at min or max frequency.

Upon VFD fault, drive shall store the DC bus voltage, out current and output frequency in readable parameters.

The VFD shall have the capability to use an analog input or PID output as a start – stop command. This input can be a separate input or also used as the speed reference. Signal level below the “sleep” level acts as a Stop Command and a signal level above the “Wake” level acts as a Start Command.

The VFD shall have the capability to attempt (9) restarts following a fault condition before locking out and requiring manual intervention. The time between restarts shall be adjustable.

The VFD shall include an integral programming terminal.

- (1) The programming terminal shall have at minimum a 2 line by 16 character LCD display with LED backlight.
- (2) Digital speed control buttons shall be provided. Potentiometers are not acceptable.
- (3) Programmable Hand-Off-Auto buttons shall be provided to toggle both start and frequency control or only the frequency control to and from the programming terminal.

Internal Adjustments

- (1) Acceleration time shall be adjustable from 0.1 to 600 seconds.
- (2) Deceleration time shall be adjustable from 0.1 to 600 seconds.
- (3) (4) preset speeds shall be provided.
- (4) VFD shall have an adjustable PWM frequency to allow tuning the VFD to the motor.

<u>PUMP</u>	<u>HP</u>	<u>CB SIZE</u>	<u>CONTROLLED BY</u>
No. 1 and 2	75 HP	175 Amp	Level or Flow Rate

s. Transducer Failure or Primary Controller Failure

A backup level monitoring and motor control system shall be provided to perform pump operations in the event of primary controller or sensor

failure. System will be activated upon detection of high or low level alarms. They shall be set at elevations above and below the primary controller high and low level alarm setpoints. If either of the backup alarm levels becomes active the primary level sensor and controller shall be removed from service and the backup system shall control the pumps. A pilot light shall be provided to alert the operator that the backup control system is active.

The backup system will remain active until the primary system is restored to operation and a panel mounted reset push button is pushed allowing primary system operation.

t. Backup Control System

An independent/backup redundant level and alarm control capability with features hereinafter listed shall be provided in addition to the specified primary control system. It shall be powered by a 120 VAC circuit breaker (other than the one powering the primary controller system) and use one or more direct-acting level-responsive float switches as described.

Four float switches are used for back up control; the float switches will need to be arranged in the wet well; one float at a higher elevation than the normal operating range of the primary control high level alarm, and one float will need to be arranged a lower elevation than the normal operating low range of the primary control. The remain float will be arranged such that when the backup mode is activated, one float will be set at the start pump level. The float switches shall be mounted in the wet well in accordance with manufacturer's instructions or as shown on the plans.

When High Level Float closes, the lead pump call-to-run is to be activated, High Level Float relay contacts close, an adjustable Lag pump timer is triggered, if the High-Level Float does not open within adjustable timer the lag pump call-to-run is to be activated. If the High-Level Float does not open within adjustable timer the lag, lag pump call-to-run is to be activated. Pump or pumps turns off when Low-Level/Pump Off float opens. The Backup mode active is to be indicated with a door mounted indicator light.

The backup system shall stay in control until the primary control reset pushbutton is pushed by the operator. The primary controller control will be restored when the Reset input via door mounted pushbutton is triggered.

The redundant control/alarm capability shall be completely integrated in the specified control panel and system as described and in accordance with all applicable codes and job requirements.

u. Pilot Devices

Selector switches shall include removable 10 Amp, 600-volt double make double break contacts. All pilot lights, selector switches and pushbuttons shall be rated for NEMA/UL 4 applications. They shall be not less than 30.5mm diameter.

Pilot lights shall be Push To Test allowing for operator verification of indicator light operation.

Contact blocks/terminals shall be finger safe meeting IP20 standards.

Operators shall be rated for a minimum life of 500,000 operations with a MTBF of less than 1 fault per 10 million operations.

All Pilot devices shall be clearly identified by a phenolic nameplate with black surface and white letters not less than 3/16" in height placed over the associated pilot device.

The following Pilot Lights shall be mounted on the inner door:

- (1) Pump 1, 2 Required On
- (2) Pump 1,2, Run
- (3) Pump 1, 2, Fail
- (4) Pump 1, 2, Overtemp
- (5) Backup System Active
- (6) High Level Alarm
- (7) Low Level Alarm
- (8) Generator Run

The following Selector Switches shall be mounted on the inner door:

- (1) Pump 1, 2, Hand-Off-Auto
- (2) Automatic Control System – Wetwell Level, Flow Meter

The following Push Buttons shall be mounted on the control panel:

- (1) Pump 1, 2, Reset (Overtemp)
- (2) Reset Backup System

v. Running Timer Meters

An elapsed time meter shall be mounted on the inner enclosure door for each pump. It shall be 6 digit (99999.9 hours) non-reset types.

Unit shall have quartz accuracy. Accuracy shall be within +/- .02% over entire range.

w. Relays

Relays shall be provided as needed to provide the specified functionality of these specifications.

Relays shall be general-purpose plug-in type.

Each relay shall be a minimum of 4-pole with contacts rated for 6 amps at 240 VAC resistive load and 3 amps at 240 VAC inductive load.

Each relay shall have a built in LED indicator and illuminate when active.

Minimum mechanical life is 20,000,000 operations AC, 30,000,000 operations DC.

x. Timers shall be 4-pole solid-state plug-in type.

Timers shall be provided as necessary to provide the specified functionality of these specifications.

Each timer shall have contacts rated for 3 amps at 220 VAC resistive load and .8 amps inductive load.

All relay and timer sockets shall be of the same type and shall be 14-blade. Timers shall be adjustable from 0 – 6 hours. A "time cycle in progress" and "timed out" indicating LED shall be provided.

Minimum mechanical life is 500,000 operations.

y. Motor Over temperature

Motor Over-temperature indication shall be provided for each pump on the operator display. The alarm light shall remain on and the pump shall not be allowed to restart until the motor has cooled and the reset button has been pressed.

z. Backup Controller

An independent/backup redundant level and alarm control capability with features hereinafter listed shall be provided in addition to the specified primary control system.

The independent backup alarm/controller must be UL508 LISTED and the control panel equipment shall be designed to UL508 Industrial Control Panel standards and shall provide the backup controller a separate 120VAC circuit independent of the primary controller power. The backup controller shall incorporate transient circuit protection, and limit the power supplied to the level sensing float(s) to 12 VDC. The controller will also supply additional backup protection such that the high-level float relay is independent of the backup internal logic.

The front face of the backup controller shall incorporate: green LED Power status; green LED's Pump 1 call-to-run and Pump 2 call-to-run, red flashing LED when in backup control/alarm mode, amber LED's for Float 1 (low/stop level), Float 2 (start level), Float 3 (lag pump start), and Float 4 (high/start level); Adjustable dual purpose pump run or lag timer, pump run timer (0-600 seconds) Mode 1 only, and lag pump timer (0-60 seconds) Modes 2, 3, & 4; Pump selector switch (alternate, pump 1 lead always, pump 2 lead always); Four Mode selector switch.

The controller shall provide five relay outputs rated 5 amps @ 240VAC. The relays shall provide independent contact closures for the following indications: Backup Mode activated, High Float activated, Low Float activated, Pump 1 call-to-run, and Pump 2 call-to-run.

The controller shall incorporate an input to trigger the backup controller to reset and restore control back to the primary controller when conditions in the wet well have been restored.

The backup controller must be capable to operate with anywhere from one to four float switches depending on the project requirements. The backup controller will have a four mode selector switch to select the operational configuration and provide acknowledgement of the mode selection via LEDs flashing the number of the selected mode (select operational configuration):

Mode 1: One float backup controller operation, adjustable pump timer 1-600 seconds with built in 10 second delay for lag pump activation.

- (1) Mode 2: Two float backup controller operation, adjustable lag pump timer 0-60 seconds.
- (2) Mode 3: 3 or 4 float backup controller operation, adjustable lag pump timer 0-60 seconds.
- (3) Mode 4: 3 or 4 float primary duplex controller operation. Mode 4 is not used as a backup controller.

Mode 1 Single float backup: Single float switch is used for backup control; the float switch will need to be arranged in the wet well at a higher elevation than the normal operating range of the primary control alarm. The float switch shall be mounted in the wet well in accordance with manufacturer's instructions or as shown on the plans.

Mode 1 Single Float Backup Operation: When High-Level Float closes, the lead pump call-to-run is activated, High-Level Float relay contacts close, and an internal nonadjustable 10 second lag pump timer is triggered, if the High-Level Float does not open within the 10 seconds, the lag pump call-to-run is activated. Pump or pumps turns off when High-Level Float opens and the adjustable pump run timer expires. The Backup mode is active as indicated by the flashing red LED when the High-Level float changes state from closed to open and the adjustable pump run timer is triggered. The primary controller control will be restored when the Reset input is triggered while Float 4 is open. The High-Level relay contacts follow the High-Level Float open/close position, and would typical active an alarm circuit.

Mode 2 Two Float Backup: Two float switches are used for back up control; the float switches will need to be arranged in the wet well; one float at a higher elevation than the normal operating range of the primary control high level alarm, and one float will need to be arranged a lower elevation than the normal operating low range of the primary control. The float switches shall be mounted in the wet well in accordance with manufacturer's instructions or as shown on the plans.

Mode 2 Two Float Backup Operation: When High Level Float closes, the lead pump call-to-run is activated, High Level Float relay contacts close, the adjustable 0-60 second Lag pump timer is triggered, if the High-Level Float does not open within adjustable timer the lag pump call-to-run is activated. Pump or pumps turns off when Low-Level float opens. The Backup mode is active as indicated by a red flashing LED when the High-Level float changes stated from closed to open or Low-Level float changes stated from open to closed. The primary controller control will be restored when the Reset input is triggered while Low-Level float is closed, and High-Level Float is open. The Low-Level relay contacts follows the Low-Level float open/close position and would typical active an alarm circuit. The High-Level relay contacts follows the High-Level Float open/close position and would typical active an alarm circuit.

Mode 3 Three/Four Float Backup: Three/four float switches are used for back up control; the float switches will need to be arranged in the wet well; one float at a higher elevation than the normal operating range of the primary control high level alarm, and one float will need to be arranged a lower elevation than the normal operating low range of the primary control. The remain two floats will be arranged such that when the backup mode is activated, one float will be set at the start pump level, and one float will be arranged at the lag pump activation level. If only three floats are used, a jumper is added across lead float & lag float or lag float & alarm float per the manufacturers drawing. The float switches shall be mounted in the wet well in accordance with manufacturer's instructions or as shown on the plans.

Mode 3 Three/four Operation: When High Level Float closes, the lead pump call-to-run is activated, High Level Float relay contacts close, the adjustable 0-60 second Lag pump timer is triggered, if the High-Level Float does not open within adjustable timer the lag pump call-to-run is activated. Pump or pumps turns off when Low-Level float opens. The Backup mode is active as indicated by a red flashing LED when the High-Level float changes stated from closed to open or Low-Level float changes stated from open to closed. The primary controller control will be restored when the Reset input is triggered while Low-Level float is closed, and High-Level Float is open. The Low-Level relay contacts follows the Low-Level float open/close position and would typical active an alarm circuit. The High-Level relay contacts follows the High-Level Float open/close position and would typical active an alarm circuit. When in backup mode operations and the tank level has been restored to pump stop level the controller will operate as typical duplex pump controller Stop Float, Lead Pump Float, Lag Pump Float, and High Water Alarm Float

Mode 4 Three/Four Float Primary Controller Duplex Operation: This mode is not used as a backup controller.

The redundant control/alarm capability shall be completely integrated in the specified control panel and system as described and in accordance with all applicable codes and job requirements.

The controller shall provide a contact closure output for interface to the primary controller indicating high high level or low low level.

The float backup system shall be based on the use of Primex DPC-4F Duplex/Backup Controller set up for four float mode 3 operation.

aa. Intrinsically Safe Barriers

All float switches and transducers located in the wet well shall be provided with intrinsically safe barriers that meet UL 913 specification, 6th edition and are labeled as such. Each device shall be mounted in an intrinsically safe area that is mechanically protected from non-intrinsically safe wiring.

bb. Submersible Level Sensor

A loop powered submersible level transmitter shall be provided to sense the wet well level. The wet well level transducer shall sense wet well level by measuring the hydrostatic head pressure associated with water levels above the base of the diaphragm. A linear and proportional, to hydrostatic head pressure, 4-20 mA signal shall be produced and input to the pump controller.

Other technologies that can be affected by foaming, turbulence, grease, suspended solids build up, atmospheric changes, condensation, or false echoing shall not be acceptable. Submersible sensor systems that use protective caps or cages to protect the sensing diaphragm, are susceptible to solids build up, shall be considered high maintenance and unreliable, and shall not be acceptable.

The transducer shall be suitable for continuous submergence and operation and shall be installed in accordance with manufacturer's instructions. The bottom diaphragm face of the sensor shall be installed 6 inches above the floor at elevation 569.00. The sensor shall be mounted using a stainless steel cable system in a location and as shown on the job plans.

The transducer housing shall be fabricated of a Teflon™ coated 316 stainless steel with a bottom diaphragm 2-5/8" diameter of heavy-duty, limp, foul-free, molded Teflon™ bonded to a synthetic rubber back/seal. System design shall allow maintenance free operation in both water and wastewater environments (high solids). Housing construction shall resist and be unaffected by the buildup of solids on its surfaces or sensing diaphragm. The transducer electronics shall be encased within the protective housing and shall be electrically and mechanically isolated from the sensed media via non-conductive fluid filled pressure transference cavity and barometric compensated transducer electronics chamber. Metallic or ridged diaphragms shall not be acceptable in that they are subject to damage or distortion.

The submersible level transducer shall be a two-wire type and shall operate from a supply voltage of 9 to 30 VDC and produce a 4-20 mA signal in direct proportion to the measured level excursion over a precalibrated range of 0 to 15 PSI. The unit shall have ample instrument

loop load capacity and shall be able to drive a minimum load of 750 Ohms @ 24 VDC loop power. The sensor technology shall be based on the use of a highly reliable and stable piezo-resistive pressure element with a .25% full scale accuracy with compensation for non-linearity, hysteresis, and repeatability. The unit shall operate over a wide –40 to 185 Deg F. temperature range and shall have not more than a 3% full scale error over a –4 to 180 Deg F. range. The transducer element shall incorporate high over-pressure protection and be designed to withstand intermittent overpressures 2X times the full-scale range being sensed. Sensing principles employing less reliable technologies including LVDTs, capacitance or pneumatic elements shall not be acceptable.

The internal pressure of the transducer assembly shall be relieved to atmospheric pressure through a heavy-duty urethane jacketed hose/cable assembly with a dedicated breather tube. The tube shall be ridged to prevent compression that may result from mounting or folding of the cable through installation. The breather system shall be sealed through the use of a rugged maintenance free air bladder assembly connected to the breather tube and mounted within a junction box or monitoring panel. The sealed breather system shall compensate for variations in barometric pressure including expansion and contraction of air due to temperature changes and altitude as well as prevent fouling from moisture and other corrosive/atmospheric elements. Barometric compensation systems that are not closed or use desiccant air-drying devices requiring periodic maintenance shall not be accepted. Systems that do not use a dedicated breather tube or can be rendered inoperative due to pinching or folding of the cable shall not be acceptable.

The transducer shall be installed where directed by the Engineer and connected with other system elements and placed in successful operation. It shall be provided with input power and output signal transient protection, associated control elements as specified herein and in accordance with manufacturer's instructions. The submersible level transducer system shall be an A1000i.

The sensor shall be suspension-mounted using a cable suspension mounting kit or equivalent, consisting of a 2' long 1-inch NPT type 316 stainless steel pipe with coupling, bolt, cable clamps and hardware along with the required length of 1/8 inch diameter 7 x 19.

cc. Back Up Control Sensors

The liquid level of the wetwell shall be sensed by a PRIMEX KwikSwitch™ float switch connection system for installation directly above the measured liquid and above the high-water line in an easily accessible location. The float switch connection system will be provided with quick-release

connections to accommodate up to four (4) KwikSwitch direct-acting normally-open or normally-closed float switches. The KwikSwitch system shall be CSA-certified submergence rating of not less than 6 feet for 72 hours.

The system supplier shall furnish, install, and connect the float connection system(s), which shall consist of the following:

- (1) Four-port manifold complete with a single multi-conductor shielded cable length of not less than 50 feet.
- (2) Four (4) matching KwikSwitch quick-release float switches shall be supplied with a minimum cable length of 25 feet.
- (3) Stainless steel manifold mounting bracket
- (4) Stainless steel six-hook float cable bracket
- (5) KwikSwitch sealing plugs for any unused float connection ports as shown on the drawings.

The four-port manifold shall be designed to insure long life and reliable operation in water and wastewater applications. The manifold will be provided with mating KwikSwitch quick-release normally-open or normally-closed float switches as required. Each of the four manifold connection points shall be color coded via a one-inch color-coded disk that corresponds to the connected float switch and multi-conductor shielded cable allowing easy tracing, connection and identification of each float switch in the system. The manifold shall connect to the control panel via an integral shielded eight-conductor cable with each conductor not less than 18 AWG wire suitable for direct burial. The cable shall be PVC TPE TC-ER TFFN/600V UL rated. The multi-conductor cable shall have matching color wire pairs that correspond to the one-inch color ID disks on the manifold connections: Red, Blue, Yellow and White. The color harmonization will provide easy float identification in the wet well. The manifold shall be provided with a 316 stainless steel mounting bracket designed for secure mounting and easy removal of the manifold. The manifold shall be CSA Certified and be provided with a two-year warranty.

The float switches shall be designed to ensure long life and reliable operation in water and wastewater applications. The float mating connector shall be a pinch-and-pull style dual sealing mechanism to prevent water intrusion, provide protection from corrosive gases associated with sewage wet wells, and keep debris from the electrical connection. The float internal switching mechanism shall be designated as either normally-open or normally-closed, each provided with a different colored boot for easy identification. The switching mechanism shall employ low resistance, non-fouling gold cross-point contacts rated for not less than 1 Amp at 125 VAC. The float switch body shall be constructed of high impact, twin wall, corrosion-resistant polypropylene housing

measuring not less than 4.0" in diameter and 6.5" long with an activation/deactivation differential of not more than 20 degrees. The float shall be tear drop shaped to minimize solids build-up. The float shall have a two-color housing allowing for easy visual indication of float position. The float switches shall be internally weighted and suitable for independent suspension mounting. The float shall use a multi-stranded, two conductor, 18 AWG gauge, CPE jacketed SJOW cable suitable for heavy flexing service. Floats shall be provided with a one-inch color-coded disc (red, blue, yellow, and white) to match the manifold and colored wire pairs. The float switch assembly shall be rated for use in liquids up to 140 degrees Fahrenheit (60 degrees Celsius). KwikSwitch floats shall be CSA rated and have a 2-year warranty.

Float switches shall be provided to sense the following conditions:

- (1) High Level Alarm/Backup Control Activated/Pumps Start
- (2) Lag Pump Required On
- (3) Lead Pump Required On
- (4) Pump Off

dd. Master Telemetry and SCADA

Control panel supplier shall provide necessary programming of existing LC3000 master station telemetry unit and existing SCADA system.

Programming modifications shall allow for monitoring and remote control operations consistent with existing stations.

SCADA HMI shall be updated to show the new station.

10. Field Supervision

The services of a factory trained, qualified representative shall be provided to inspect the completed installation, make all adjustments necessary to place the system in trouble-free operation and instruct the operating personnel in the proper care and operation of the equipment.

After the system has been installed, the Supplier shall demonstrate with simulated I/O the performance of each unit, and document that the system operates properly as specified. Monitoring signals shall register at all required locations and loop checks on all loops shall have been completed and tested. Each station must be tested and accepted by the city prior to proceeding to the next installation.

Guarantee

All equipment shall be guaranteed against defects in material and workmanship for a period of one year from the date of Owner's final inspection and acceptance to the effect that any defective equipment shall be repaired or replaced without cost or obligation to the Owner.

SEWER SYSTEM IMPROVEMENTS

FOR THE CITY OF

COLUMBIA, TENNESSEE

CONTRACT 22-01

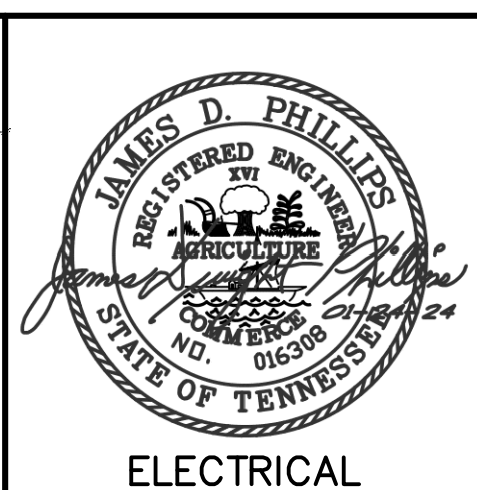
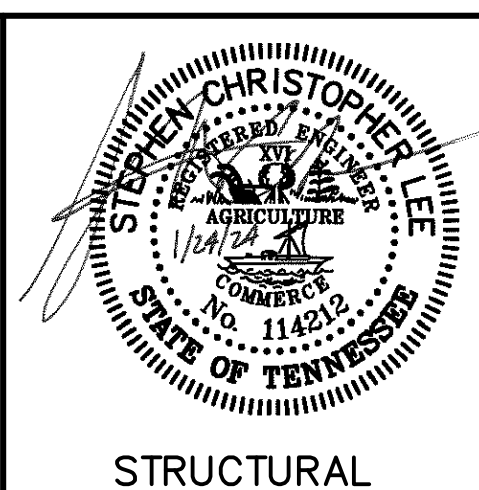
DUCK RIVER SEWAGE PUMPING
STATION REPLACEMENT

PROJECT NO. 2162

JANUARY, 2024

WAUFORD

Nashville, Tennessee
(615) 883-3243
www.jrwauford.com



INDEX OF DRAWINGS

<u>SHEET</u>	<u>DESCRIPTION</u>
1.	LOCATION MAP, LEGEND, GENERAL NOTES, AND SITE DEMOLITION PLAN
2.	SITE PLAN, PIPING PROFILE, AND NOTES
3.	SEWAGE PUMPING STATION PLAN VIEW AND SECTIONS
4.	DETAIL SHEET AND STRUCTURAL NOTES
 5.	EXISTING DUCK RIVER SEWAGE PUMPING STATION DEMOLITION
E1.	SITE ELECTRICAL PLAN
E2.	SITE ELECTRICAL PLAN AND PUMP STATION ELECTRICAL LAYOUT
E3.	ELECTRICAL PANEL SCHEDULES AND RISER DIAGRAM
E4.	CONDUIT INSTALLATION DETAILS
E5.	ELECTRICAL SCHEDULES, DETAILS AND LEGEND

CITY OFFICIALS

MAYOR

CHAZ MOLDER

VICE MAYOR

RANDY MCBROOM

COUNCIL MEMBERS

DAVENA HARDISON - WARD 1

DEBBIE WILES - WARD 2

TONY GREENE - WARD 3

KENNY MARSHALL - WARD 4

DANNY COLEMAN - WARD 5

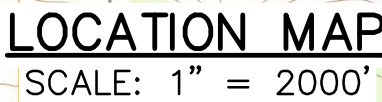
CITY MANAGER

TONY MASSEY

WASTEWATER DIRECTOR

DONALD J. BOSHERS

APPROVED: 
DONALD J. BOSHERS, DIRECTOR



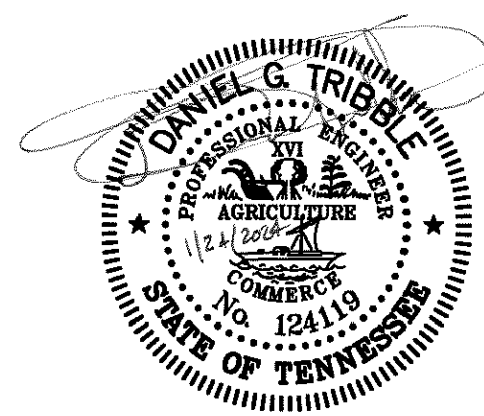
	EXISTING PAVEMENT
	EXISTING SIDEWALK
	EXISTING CULVERT
	EXISTING DITCH
	EXISTING OVERHEAD ELECTRIC
	EXISTING WATER LINE
	EXISTING GAS LINE
	EXISTING FENCE
	EXISTING CONTOURS
	BENCH MARK
	EXISTING PIPING
	EXISTING VALVE
	EXISTING TREE
	EXISTING POWER POLE
	EXISTING MANHOLE
	EXISTING TO REMAIN
	EXISTING TO BE REMOVED

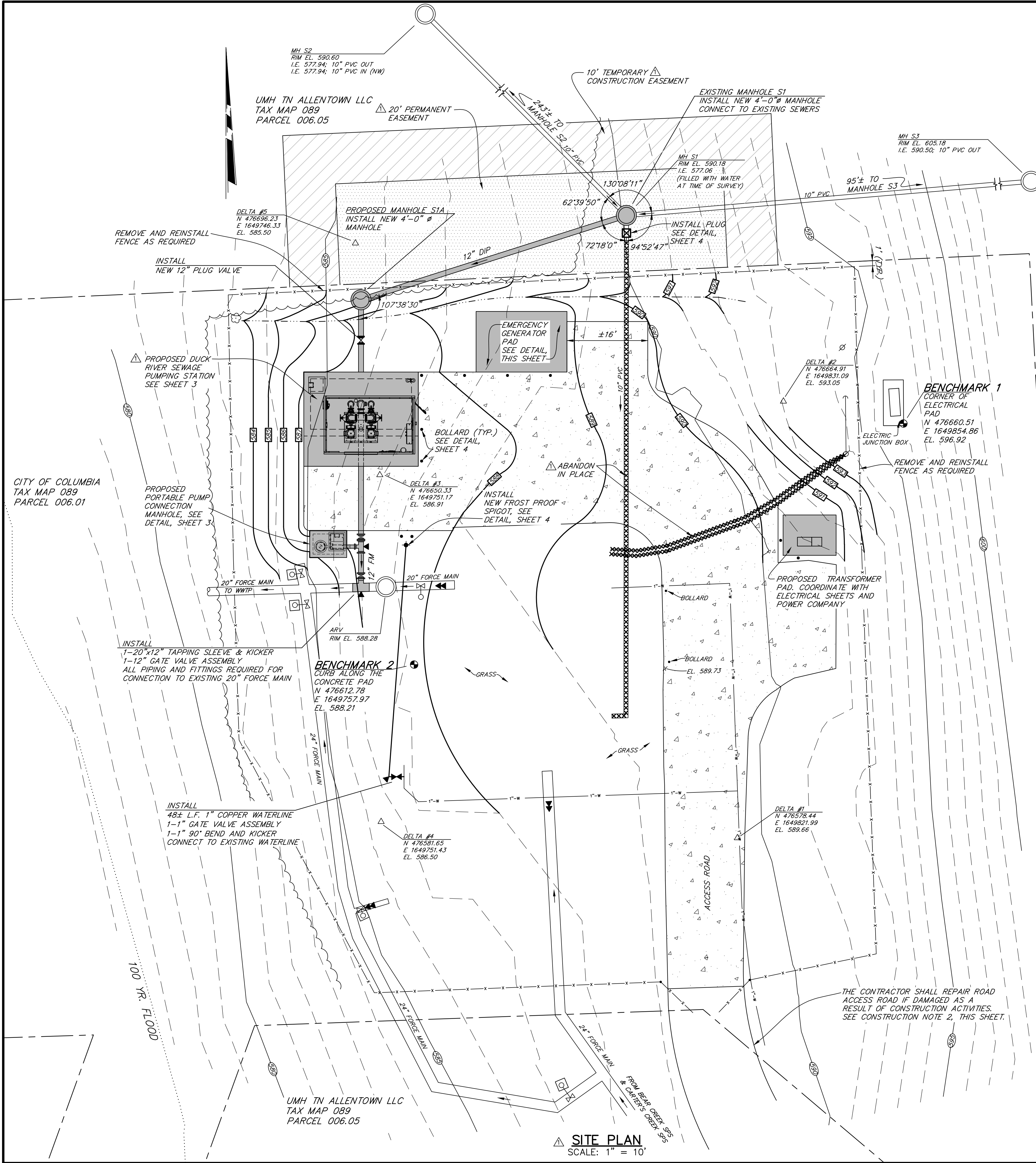
1. BASED ON INFORMATION CONTAINED IN FLOOD INSURANCE MAP NUMBER 4719C0165E DATED APRIL 16, 2007, THE ELEVATION OF THE 100-YEAR FLOOD AT THE PROJECT SITE IS APPROXIMATELY 576.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND/OR REPLACEMENT IN KIND OF ALL EXISTING DRAINAGE CULVERTS, ASPHALT PAVEMENT, AND OTHER STRUCTURES DISTURBED DURING CONSTRUCTION. NO ADDITIONAL PAYMENT WILL BE MADE FOR THIS WORK.
3. CONTRACTOR SHALL USE ALL NECESSARY TEMPORARY WATER POLLUTION CONTROL MEASURES AS SHOWN ON THE PLANS, AS DIRECTED BY THE ENGINEER AND/OR AS SPECIFIED TO PREVENT THE TRANSPORT OF SEDIMENT FROM THE PROJECT SITE.
4. THE CONTRACTOR SHALL COORDINATE FINAL LOCATION AND DEPTH OF PORTABLE PUMP CONNECTION MANHOLE WITH THE ENGINEER AFTER EXISTING PIPING AND FITTINGS CONFIGURATION HAVE BEEN DETERMINED FOR CONNECTION TO THE EXISTING FORCE MAIN.
5. ALL MECHANICAL JOINT FITTINGS SHALL UTILIZE SERIES 1100 MEGALUG RESTRAINT BY EBAA IRON IN ADDITION TO CONCRETE KICKERS.
6. * INDICATES INFORMATION TAKEN FROM EXISTING PLANS. CONTRACTOR SHALL VERIFY.
7. ALL DUCTILE IRON PIPE SHALL BE SPECIALLY LINED AS SPECIFIED.

THE CONTRACTOR SHALL REMOVE EXISTING FUEL IN GENERATOR FUEL TANK AND DISPOSE AS REQUIRED. THE TANK FILL AND VENT PIPES SHALL BE CUT AND CAPPED 6" BELOW FINAL GRADE.

1. THE TOTAL ACREAGE TO BE DISTURBED DURING THE COURSE OF THE PROJECT IS LESS THAN ONE ACRE; THEREFORE, COVERAGE UNDER THE "TENNESSEE GENERAL NPDES PERMIT NO. TNR10-0000, STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITY" IS NOT REQUIRED.
2. CONTRACTOR SHALL USE ALL NECESSARY TEMPORARY WATER POLLUTION CONTROL MEASURES AS SHOWN ON THE PLANS, AS DIRECTED BY THE ENGINEER AND/OR AS SPECIFIED TO PREVENT THE TRANSPORT OF SEDIMENT FROM THE PROJECT SITE.
3. THE LOCATIONS AND DEPTHS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLANS HAVE NOT BEEN VERIFIED. THE LOCATIONS AND DEPTHS OF ALL EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE CONTRACTOR COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY APPARENT DISCREPANCIES OR CONFLICTS IMMEDIATELY UPON DISCOVERY.
4. FOR EXISTING UTILITY LOCATIONS, THE CONTRACTOR SHALL CONTACT TENNESSEE "ONE-CALL" AT 1-800-351-1111, AS WELL AS ALL UTILITY OWNERS NOT MEMBERS OF THE TENNESSEE "ONE-CALL" SYSTEM, AT LEAST 72 BUSINESS HOURS IN ADVANCE OF BEGINNING EXCAVATION. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF TENNESSEE CODE ANNOTATED (TCA) 65-31-101 CONCERNING THE RESPONSIBILITIES ASSOCIATED WITH EXCAVATION PROCEDURES TO PREVENT DAMAGE OF UNDERGROUND UTILITIES.
5. THE NAMES OF PROPERTY OWNERS, LOCATIONS OF PROPERTY LINES AND LOCATIONS OF STREET AND ROAD RIGHTS-OF-WAY SHOWN ON THESE PLANS WERE OBTAINED FROM THE TAX MAPS, THE MAURY COUNTY TAX ASSESSOR AND PROPERTY SURVEYS PROVIDED BY THE OWNER. THIS INFORMATION IS GIVEN IN GOOD FAITH IN NATURE AND THE ENGINEER MAKES NO CLAIM TO THE ACCURACY OF THIS INFORMATION.
6. THE CONTRACTOR SHALL STAY WITHIN THE LIMITS OF CONSTRUCTION AS DESCRIBED IN SECTION 1 OF THE DETAILED SPECIFICATIONS.
7. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE DISPOSAL OF WASTE MATERIALS GENERATED DURING CONSTRUCTION. THE OWNER SHALL HAVE RIGHTS TO ALL SALVAGEABLE MATERIALS. REFER TO SECTION 1 OF THE DETAILED SPECIFICATIONS.
8. BYPASS PUMPING IS THE RESPONSIBILITY OF THE CONTRACTOR AND IS NOT A SEPARATE PAY ITEM.

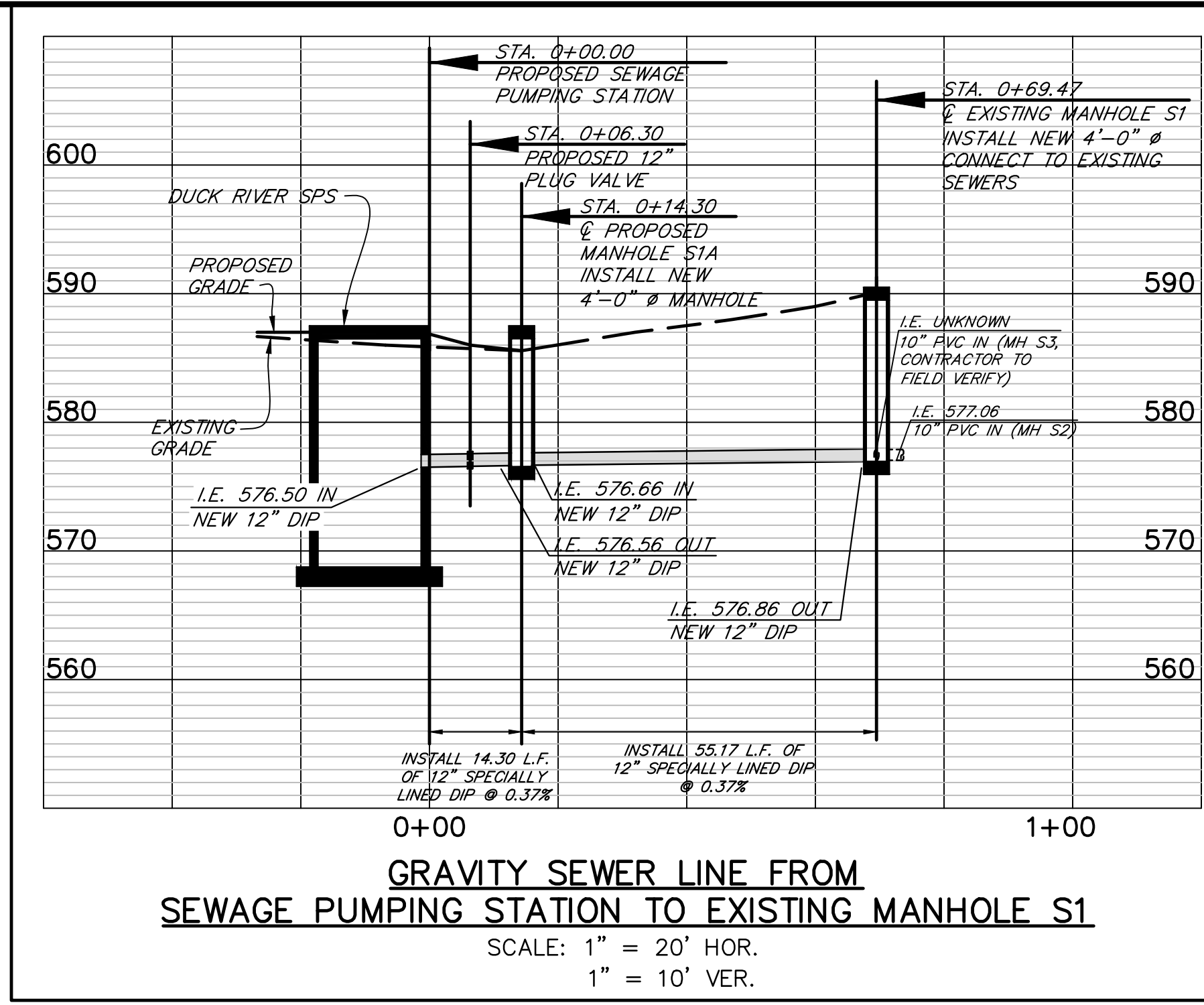
SHEET 1 OF 5		SEWER SYSTEM IMPROVEMENTS CONTRACT 22-01	
REVISION OR ISSUE		DUCK RIVER SEWAGE PUMPING STATION REPLACEMENT	
	ADD. NO. 1 – 12/10/24	LOCATION MAP, LEGEND, GENERAL NOTES, AND SITE DEMOLITION PLAN FOR COLUMBIA, TENNESSEE	
PROJECT NUMBER		SCALE AS SHOWN	<u>WAUFORD</u> Nashville, Tennessee (615)883-3243 www.jrwauford.com
2162		DATE JAN. 2024	DESIGNED DGT DRAWN JMY CHECKED JGD



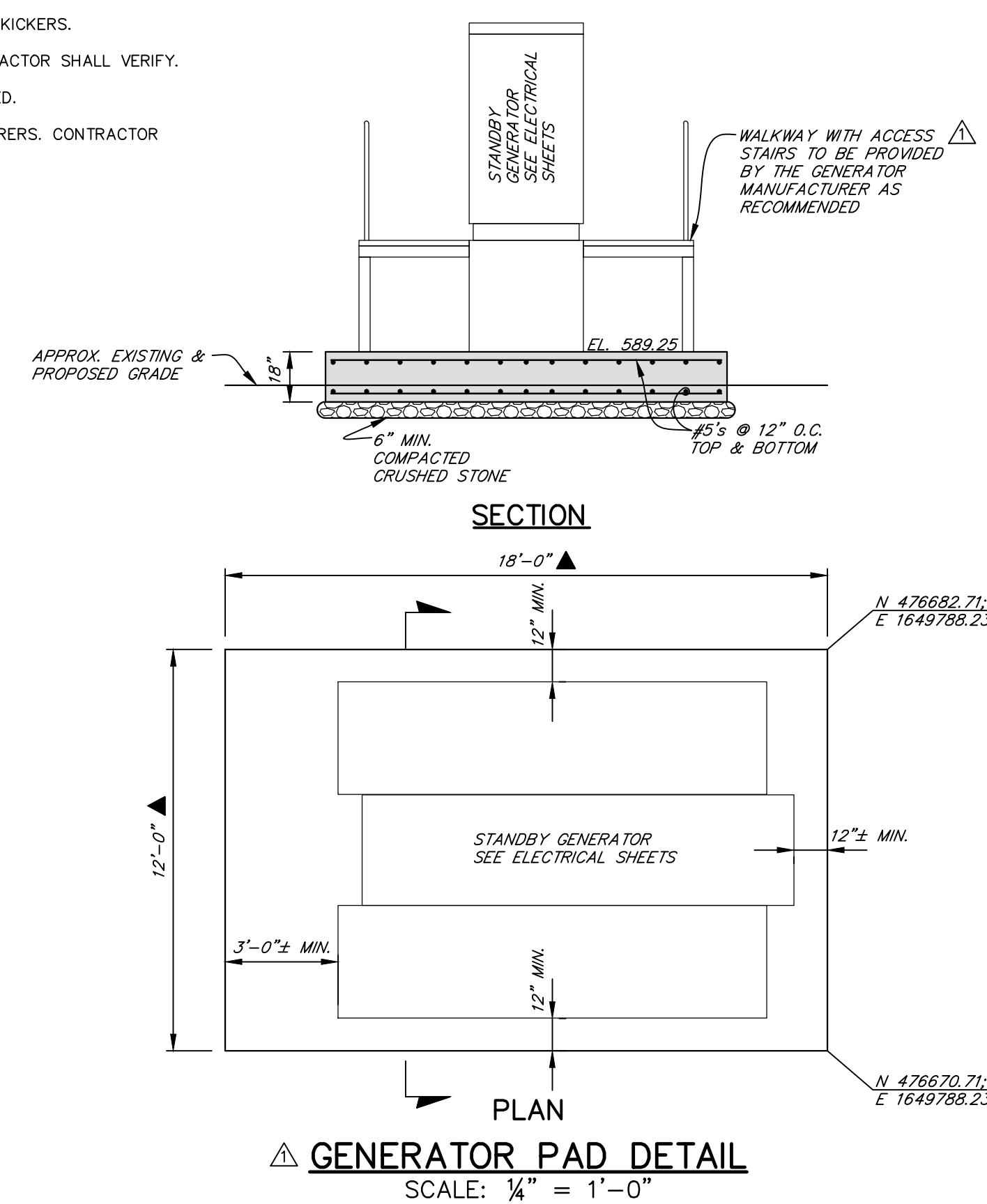


SITE LEGEND

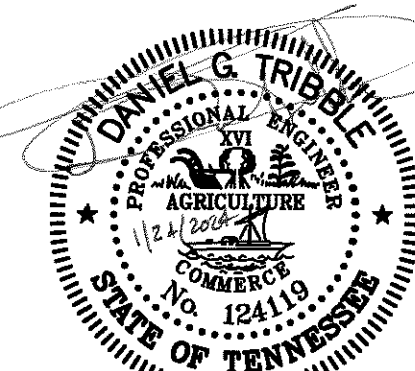
---	EXISTING PAVEMENT
---	EXISTING SIDEWALK
---	EXISTING CULVERT
---	EXISTING DITCH
---	EXISTING UNDERGROUND ELECTRIC
---	EXISTING OVERHEAD ELECTRIC
---	EXISTING WATER LINE
---	EXISTING GAS LINE
---	EXISTING FENCE
---	EXISTING CONTOURS
---	BENCH MARK
---	EXISTING PIPING
---	EXISTING VALVE
---	EXISTING TREE
---	EXISTING POWER POLE
---	EXISTING MANHOLE
---	EXISTING TO REMAIN
---	PROPOSED WORK
---	PROPOSED ASPHALT
---	PERMANENT EASEMENT
---	TEMPORARY CONSTRUCTION EASEMENT
---	PROPOSED CONTOURS



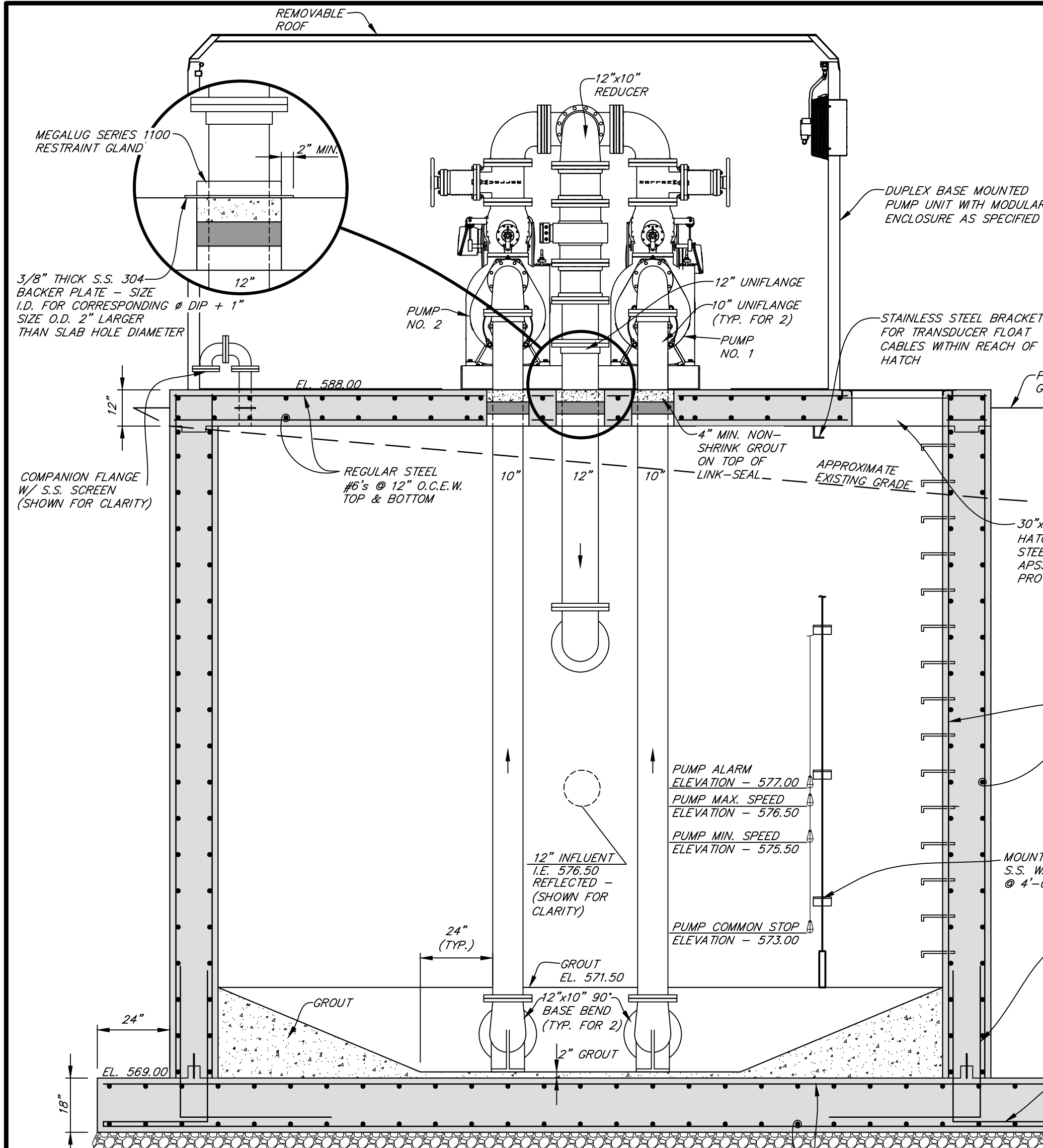
- CONSTRUCTION NOTES:**
- SEE GENERAL NOTES, SHEET 1
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND/OR REPLACEMENT IN KIND OF ALL EXISTING DRAINAGE CULVERTS, ASPHALT PAVING, AND OTHER STRUCTURES DISTURBED DURING CONSTRUCTION. NO ADDITIONAL PAYMENT WILL BE MADE FOR THIS WORK.
 - CONTRACTOR SHALL USE ALL NECESSARY TEMPORARY WATER POLLUTION CONTROL MEASURES AS SHOWN ON THE PLANS, AS DIRECTED BY THE ENGINEER AND/OR AS SPECIFIED TO PREVENT THE TRANSPORT OF SEDIMENT FROM THE PROJECT SITE.
 - THE CONTRACTOR SHALL COORDINATE FINAL LOCATION AND DEPTH OF PORTABLE PUMP CONNECTION MANHOLE WITH THE ENGINEER AFTER EXISTING PIPING AND FITTINGS CONFIGURATION HAVE BEEN DETERMINED FOR CONNECTION TO THE EXISTING FORCE MAIN.
 - ALL MECHANICAL JOINT FITTINGS SHALL UTILIZE SERIES 1100 MEGALUG RESTRAINT BY EBAA IRON IN ADDITION TO CONCRETE KICKERS.
 - * INDICATES INFORMATION TAKEN FROM EXISTING PLANS. CONTRACTOR SHALL VERIFY.
 - ALL DUCTILE IRON PIPE SHALL BE SPECIALLY LINED AS SPECIFIED.
 - ▲ INDICATES DIMENSIONS WHICH MAY VARY WITH MANUFACTURERS. CONTRACTOR SHALL COORDINATE.



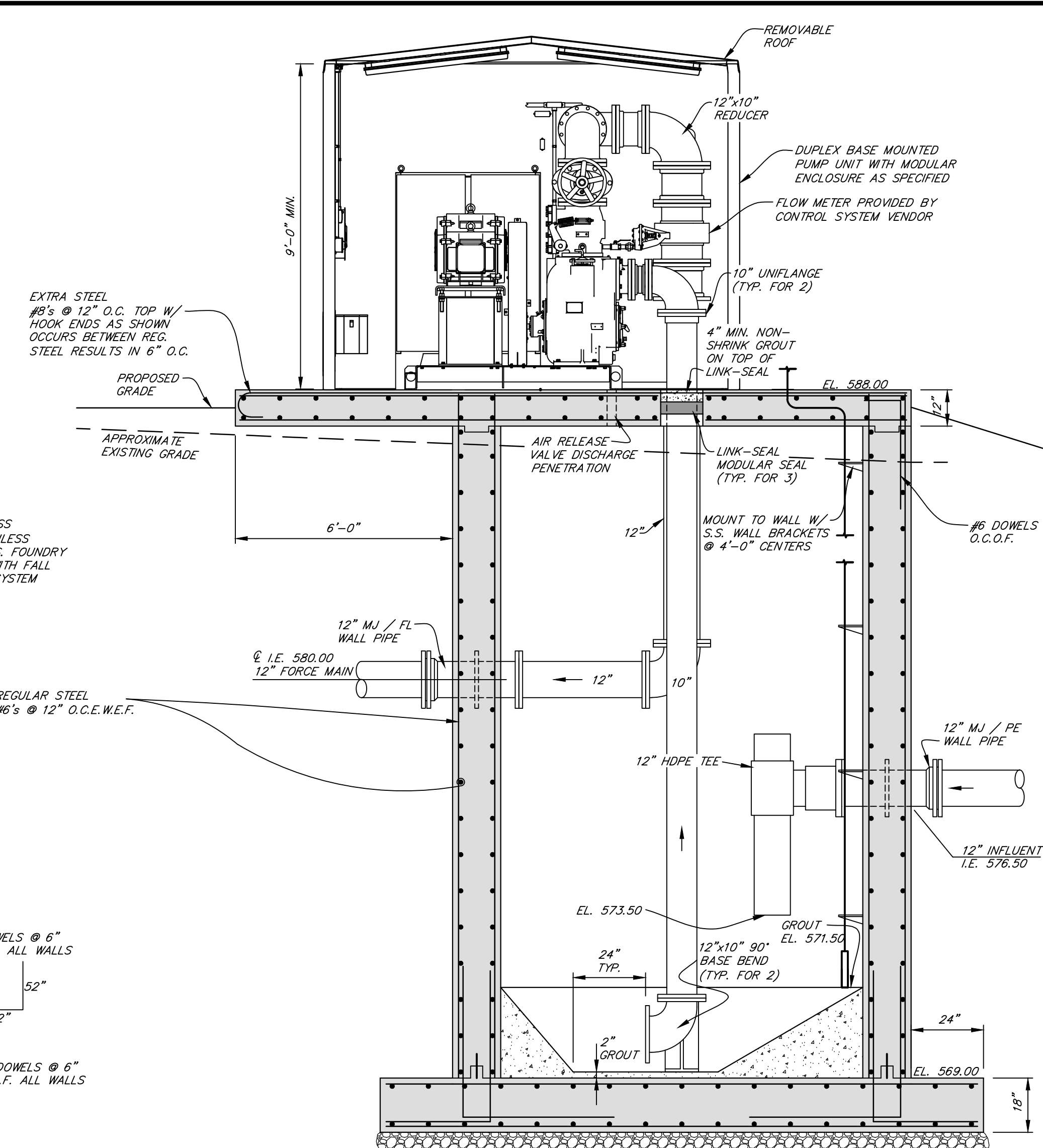
UMH TN ALLETTOWN LLC
TAX MAP 089
PARCEL 006.05



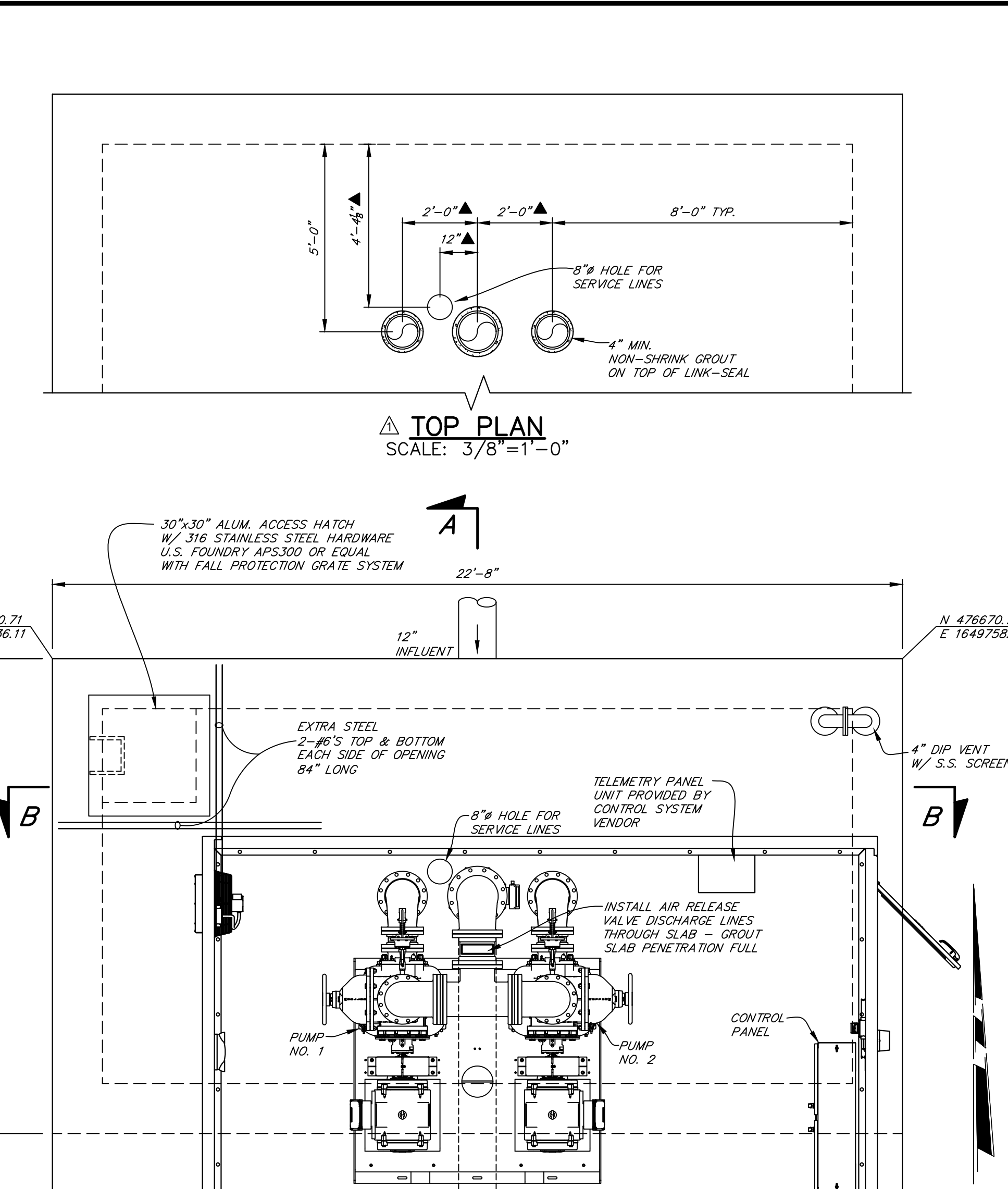
SHEET 2 OF 5		SEWER SYSTEM IMPROVEMENTS CONTRACT 22-01 DUCK RIVER SEWAGE PUMPING STATION REPLACEMENT	
REVISION OR ISSUE		SITE PLAN, PIPING PROFILE, AND NOTES	
ADD. NO. 1 - 12/10/2024		FOR COLUMBIA, TENNESSEE	
PROJECT NUMBER		SCALE AS SHOWN	DESIGNED DGT
2162		DATE JAN. 2024	DRAWN JMY
		WAUFORD Nashville, Tennessee (615)883-3243 www.jrwauford.com	CHECKED JGD



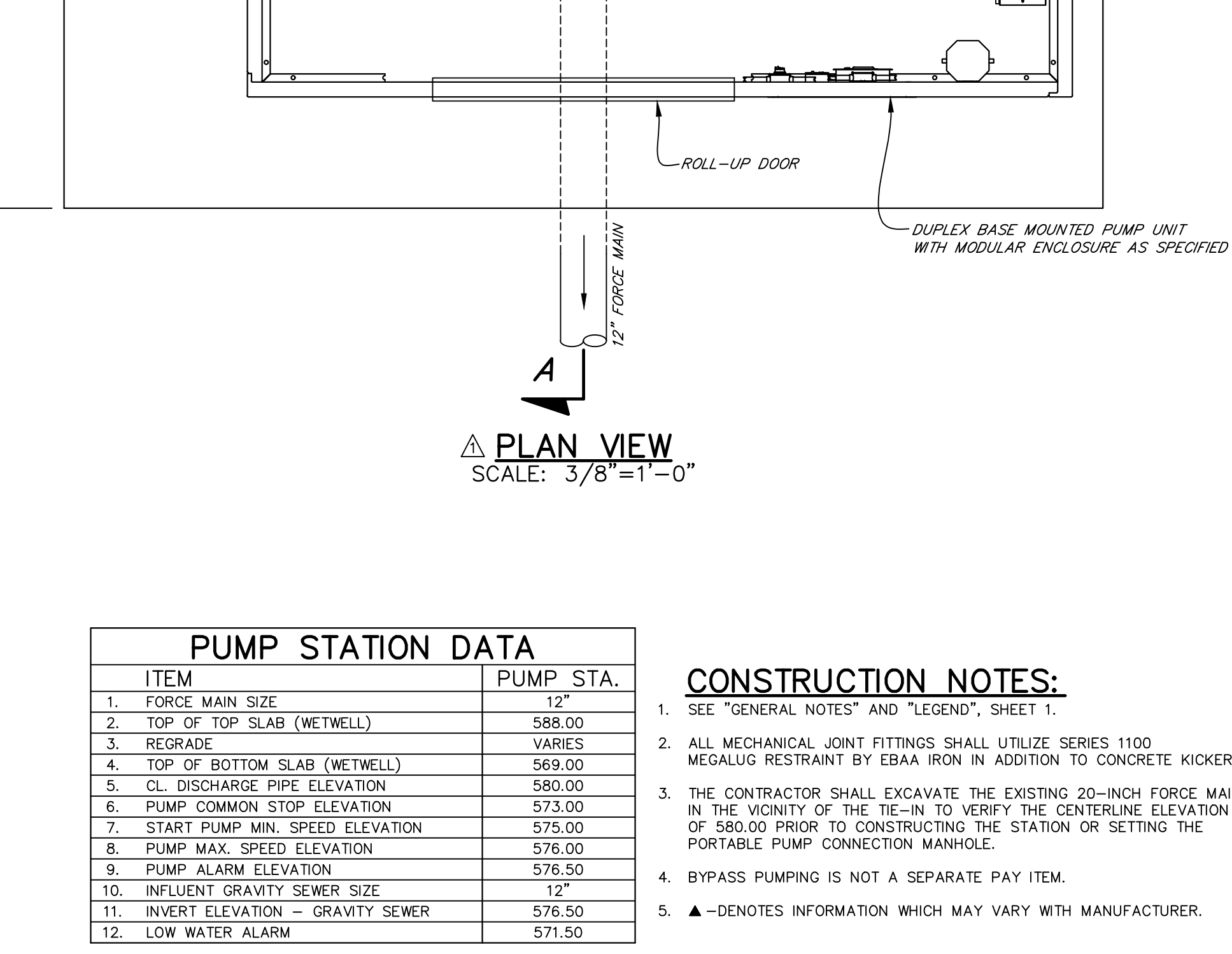
SECTION B
SCALE: 3/8"=1'-0"



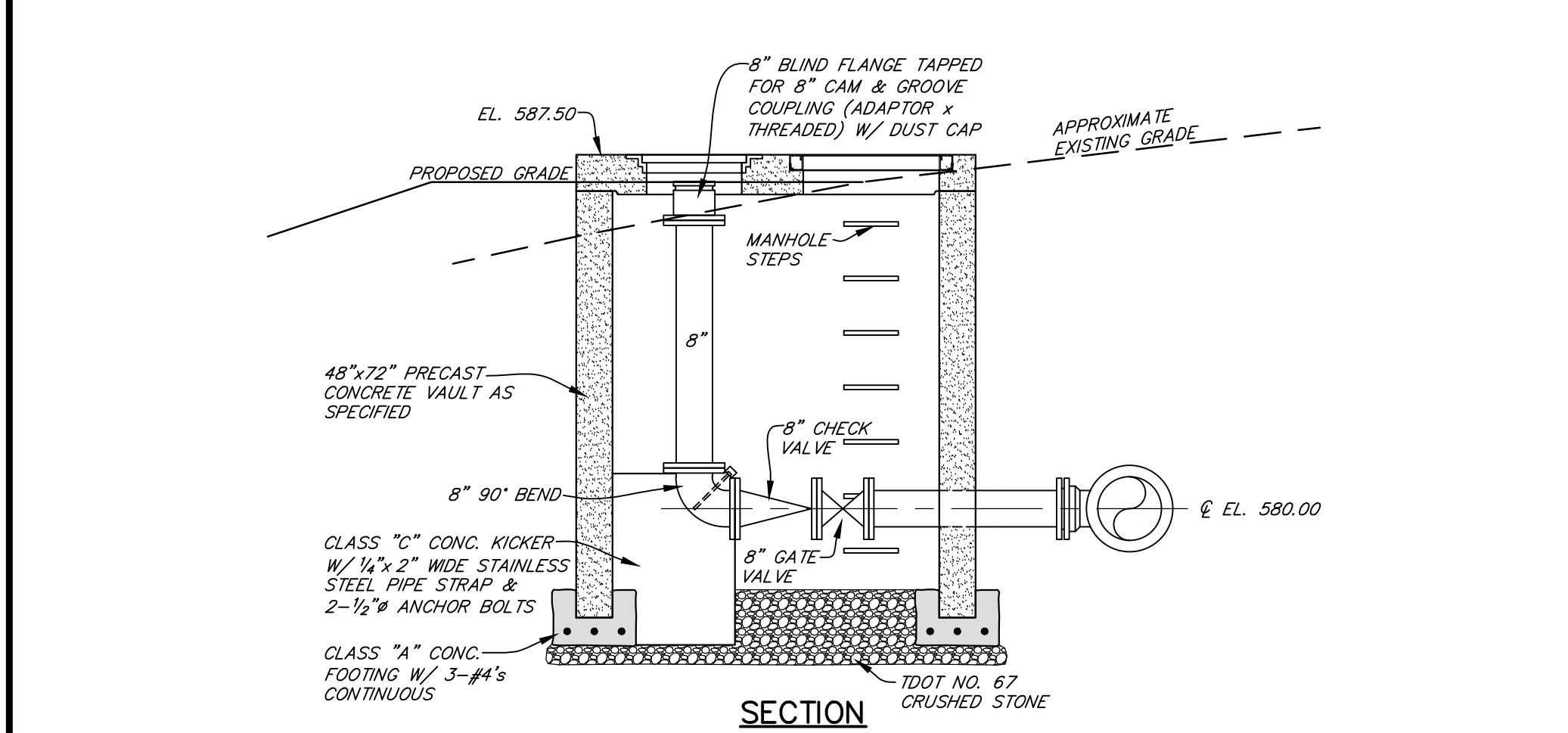
SECTION A
SCALE: 3/8"=1'-0"



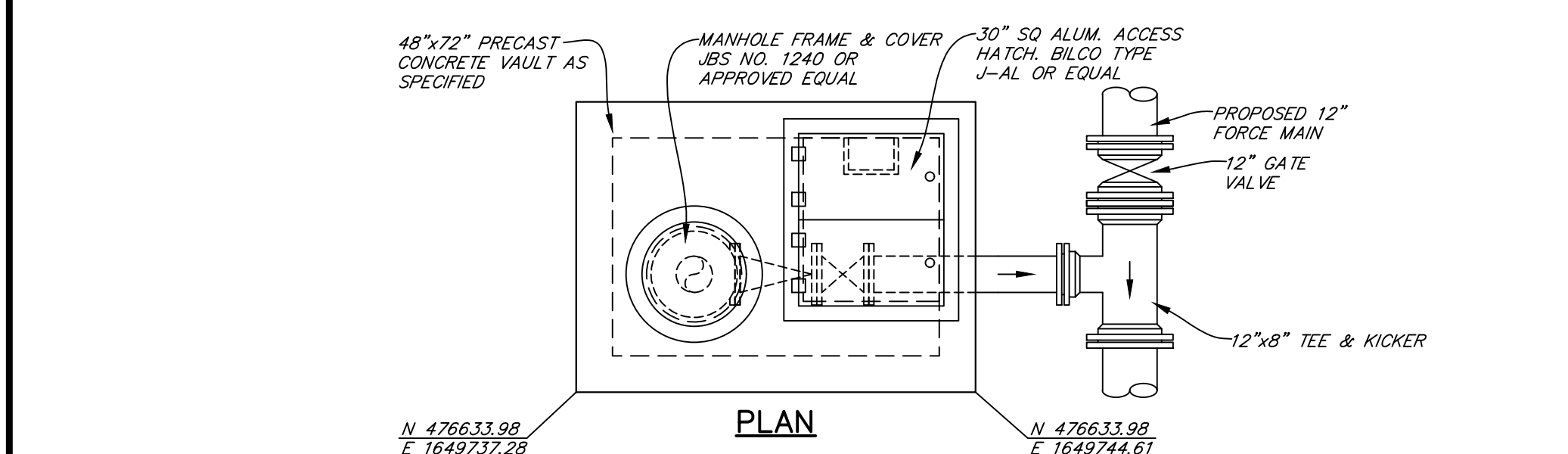
TOP PLAN
SCALE: 3/8"=1'-0"



PLAN VIEW
SCALE: 3/8"=1'-0"

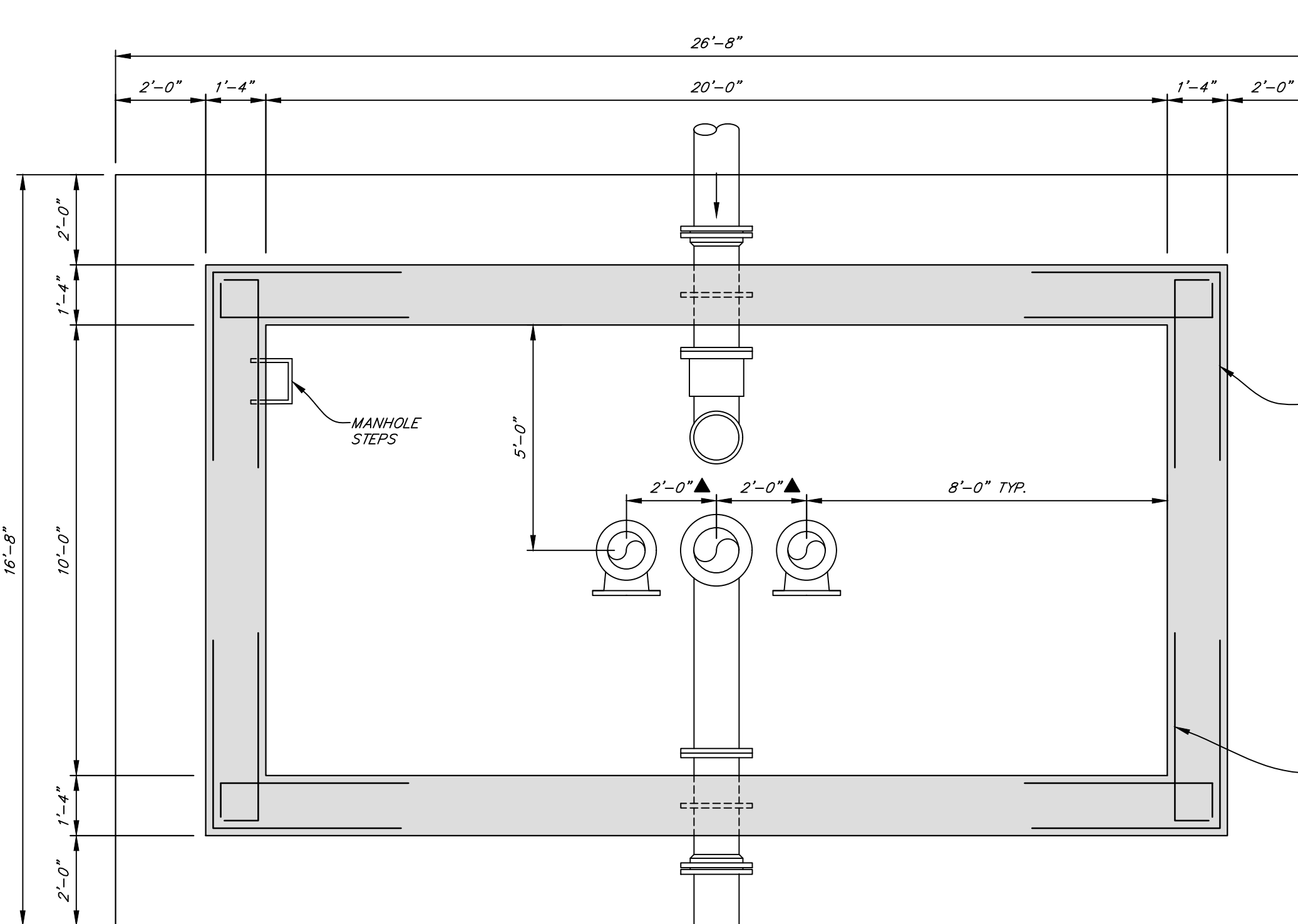


SECTION



PLAN

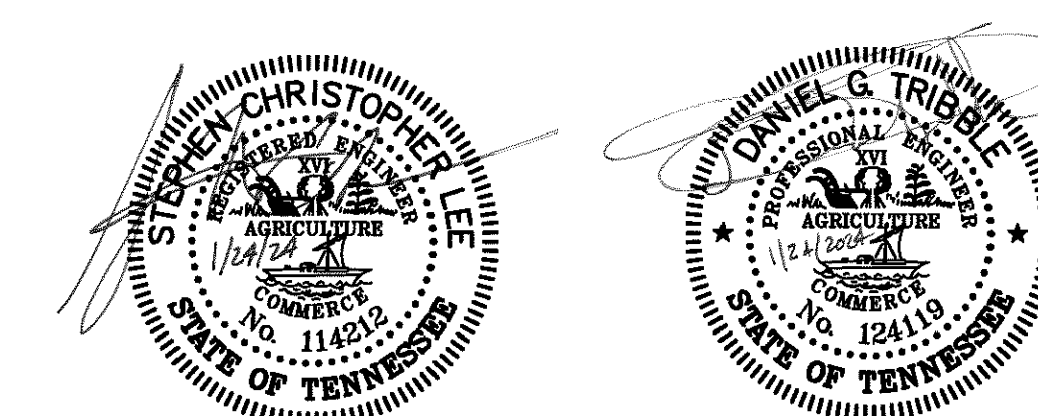
PORTABLE PUMP CONNECTION MANHOLE
SCALE: 3/8"=1'-0"



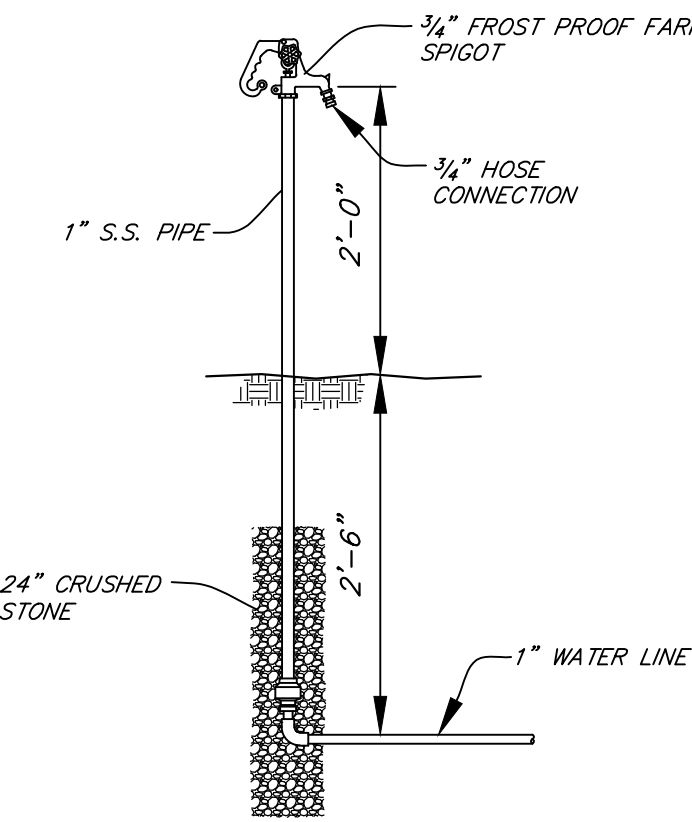
WALL PLAN
SCALE: 3/8"=1'-0"

PUMP STATION DATA	
ITEM	PUMP STA.
1. FORCE MAIN SIZE	12"
2. TOP OF TOP SLAB (WETWELL)	588.00
3. REGRADE	VARIES
4. TOP OF BOTTOM SLAB (WETWELL)	569.00
5. CL. DISCHARGE PIPE ELEVATION	580.00
6. PUMP COMMON STOP ELEVATION	573.00
7. START PUMP MIN. SPEED ELEVATION	575.00
8. PUMP MAX. SPEED ELEVATION	576.00
9. PUMP ALARM ELEVATION	576.50
10. INFLUENT GRAVITY SEWER SIZE	12"
11. INVERT ELEVATION - GRAVITY SEWER	576.50
12. LOW WATER ALARM	571.50

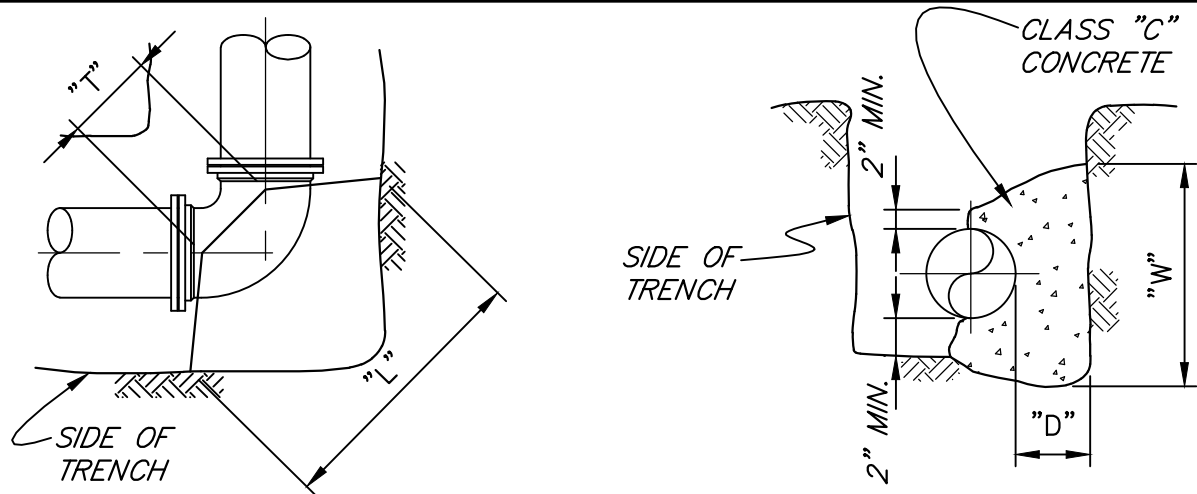
- CONSTRUCTION NOTES:**
- SEE "GENERAL NOTES" AND "LEGEND", SHEET 1.
 - ALL MECHANICAL JOINT FITTINGS SHALL UTILIZE SERIES 1100 MEGALUG RESTRAINT BY EBAA IRON IN ADDITION TO CONCRETE KICKERS.
 - THE CONTRACTOR SHALL EXCAVATE THE EXISTING 20-INCH FORCE MAIN IN THE VICINITY OF THE TIE-IN TO VERIFY THE CENTERLINE ELEVATION OF 580.00 PRIOR TO CONSTRUCTING THE STATION OR SETTING THE PORTABLE PUMP CONNECTION MANHOLE.
 - BYPASS PUMPING IS NOT A SEPARATE PAY ITEM.
 - ▲-DENOTES INFORMATION WHICH MAY VARY WITH MANUFACTURER.



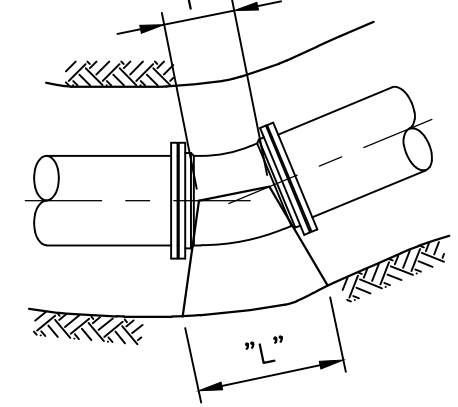
SHEET 3 OF 5		SEWER SYSTEM IMPROVEMENTS	
REVISION OR ISSUE		CONTRACT 22-01	
ADD. NO. 1 - 12/10/2024		DUCK RIVER SEWAGE PUMPING STATION REPLACEMENT	
SEWAGE PUMPING STATION			
PLAN VIEW AND SECTIONS			
FOR			
COLUMBIA, TENNESSEE			
SCALE	AS SHOWN	WAUFORD Nashville, Tennessee (615)883-3243 www.jrwauford.com	DESIGNED DGT
DATE	JAN. 2024		DRAWN JMY
PROJECT NUMBER	2162		CHECKED JGD



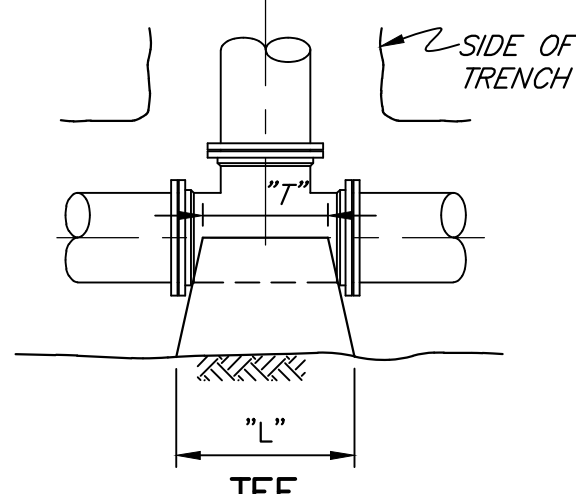
FARM SPIGOT DETAIL



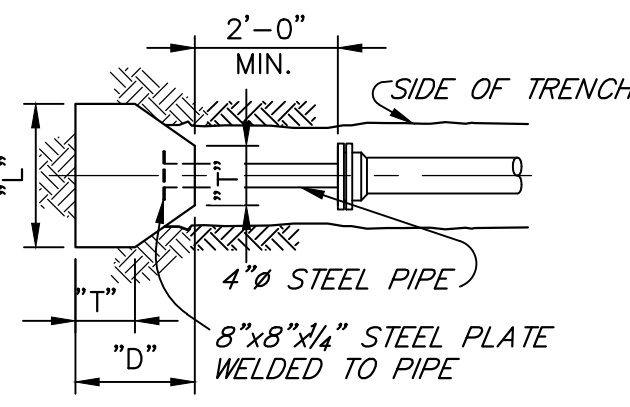
90° BEND



45°, 22½° & 11¼° BENDS



TEE



PLUG

SPECIAL NOTES

- MEGALUG RETAINER GLANDS REQUIRED AT ALL FITTINGS. THERE SHALL BE A MINIMUM OF 10 L.F. OF PIPE BETWEEN ANY MEGALUG AND ANY UNRESTRAINED JOINT. KICKERS ARE REQUIRED WHERE DEPICTED ON THE PLANS.
- ALL IRON SURFACES SHALL BE PROTECTED WITH 6 MIL POLYETHYLENE PRIOR TO PLACING CONCRETE.

NOTES

- FOR TEE WITH BRANCH UNEQUAL TO RUN, USE TEE TYPE KICKER WITH D, L & W DIMENSIONS THE SAME AS THOSE FOR PLUG WITH SAME DIMENSIONS AS BRANCH OF TEE, SELECT T DIMENSION FROM TEE TABLE UNDER COLUMN HEADED BY THE SIZE OF THE BRANCH.
- IF EXACT SIZE OF PIPE BLOCKING IS NOT SHOWN, USE NEXT LARGER SIZE.
- DIMENSION D MAY BE GREATER THAN SPECIFIED TO ALLOW WORKING SPACE. CONCRETE BLOCKING MUST BE POURED AGAINST UNDISTURBED EARTH.

CONCRETE BLOCKING FOR FITTINGS (KICKERS)
THRUST RESTRAINT DETAILS

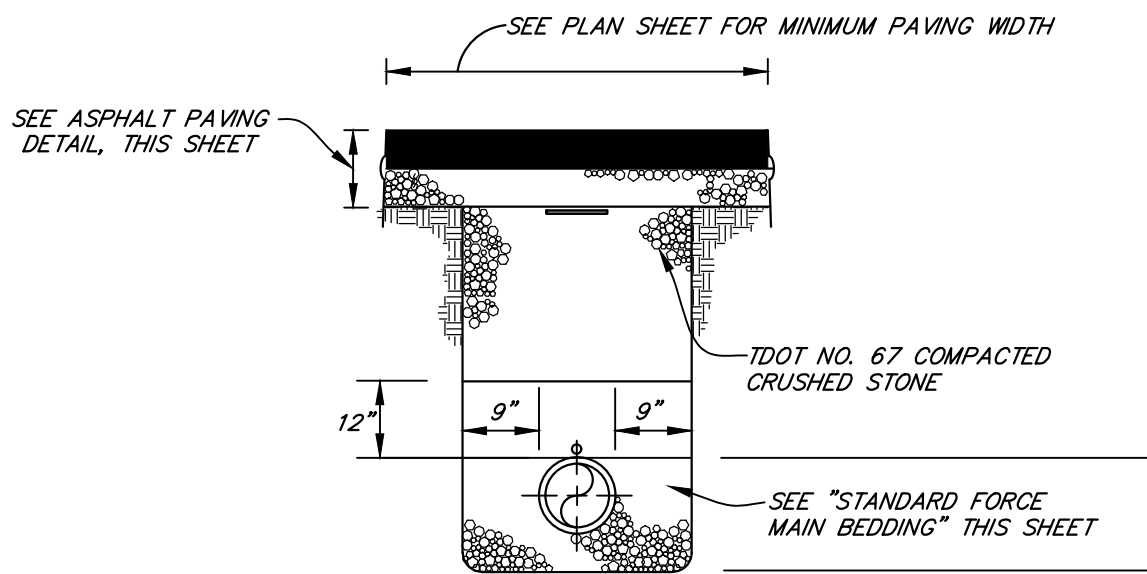
BEARING PRESSURE = 2500 PSF									
PSI = 100									
90° BEND									
SIZE	8"	12"							
D	14	16							
L	35	60							
W	35	40							
T	12	12							
45° BEND									
SIZE	8"	12"							
D	12	16							
L	26	38							
W	26	38							
T	12	14							
22½° BEND									
SIZE	8"	12"							
D	10	16							
L	18	26							
W	18	26							
T	10	12							
11¼° BEND									
SIZE	8"	12"							
D	10	16							
L	18	26							
W	18	26							
T	10	12							
TEE									
SIZE	8"	12"	20"						
D	14	16	20						
L	29	42	56						
W	29	42	56						
T	14	12	36						
PLUG									
SIZE	8"	12"							
D	14	16							
L	29	42							
W	29	42							
T	14	12							

DIMENSIONS ARE IN INCHES

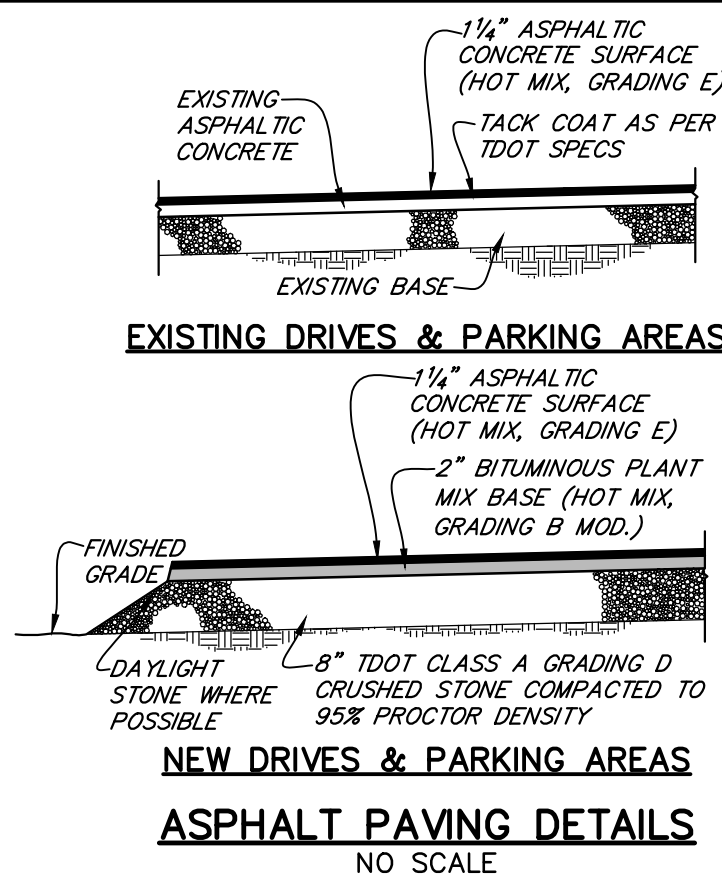
GENERAL STRUCTURAL NOTES

- REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.
- CODES:
2018 INTERNATIONAL BUILDING CODE
- LOADS:
A. FLOOR AND ROOF LIVE LOADS
SUPPORTED FLOORS:
SPS TOP SLAB: 200 PSF
SLABS ON GRADE: 100 PSF
B. SEISMIC:
RISK CATEGORY: III
IMPORTANCE FACTOR: 1.25
S_s: 0.303
S_i: 0.146
S_{m1}: 0.471
S_{m2}: 0.337
S_{ds}: 0.314
S_{o1}: 0.225
SITE CLASS: D
SEISMIC DESIGN CATEGORY: D
C. SNOW LOAD:
GROUND SNOW LOAD: 10 PSF
D. WIND LOAD:
BASIC WIND SPEED V: 113 MPH
RISK CATEGORY: III
WIND EXPOSURE CATEGORY: C

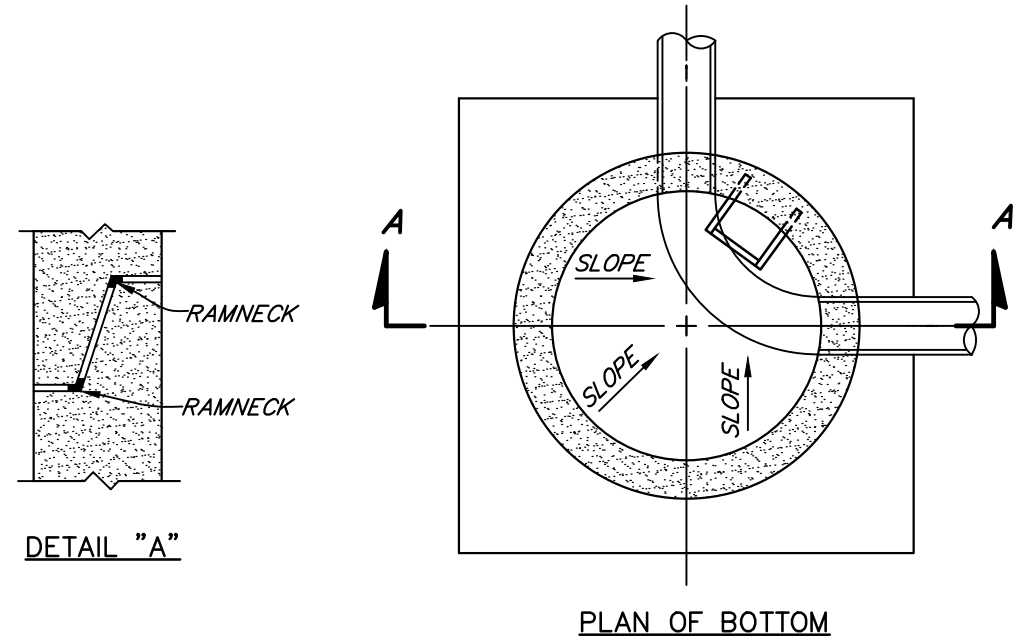
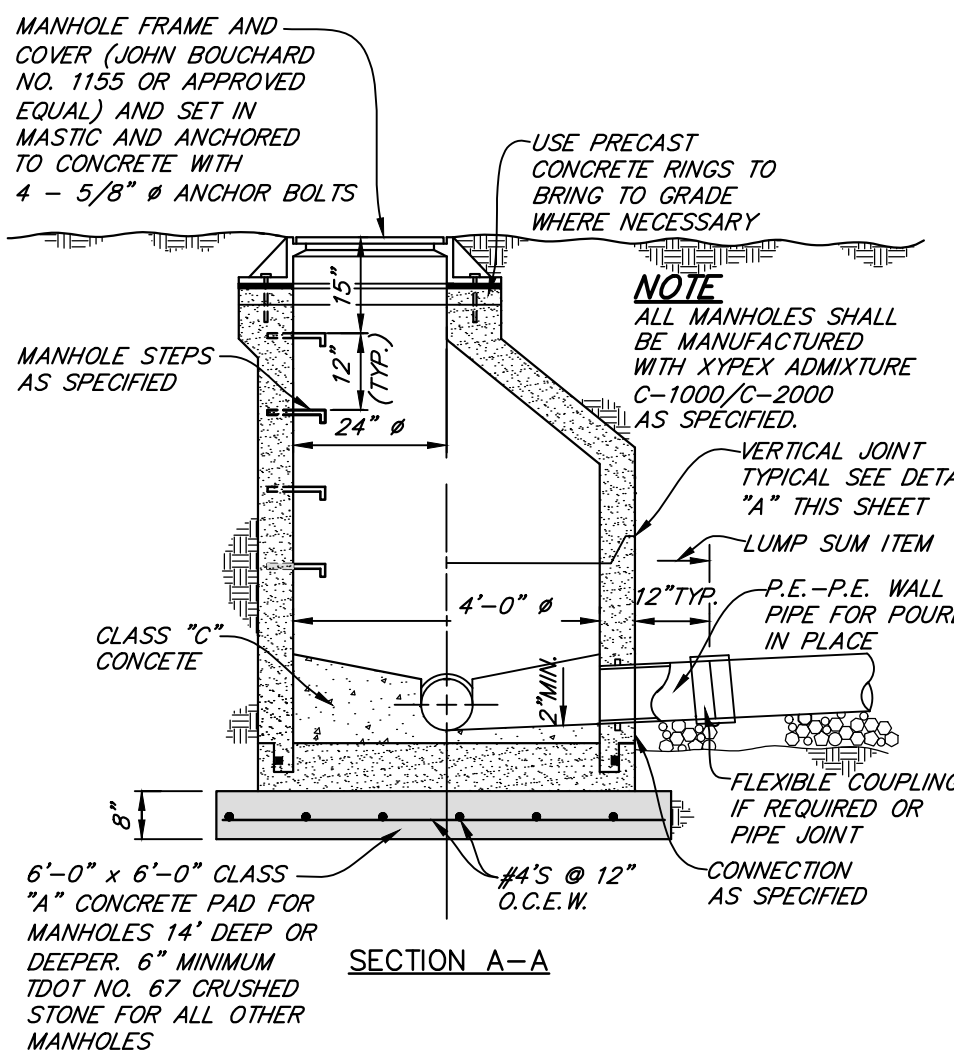
- REINFORCING STEEL:
A. LAP ALL BARS AND DOWELS AS SHOWN ON "LAP SPICE TABLE" UNLESS OTHERWISE SHOWN.
B. CLEARANCES BETWEEN EDGES OF CONCRETE AND EDGE OF REINFORCING BARS SHALL BE AS FOLLOWS (UNLESS OTHERWISE SHOWN):
(i) CONCRETE CAST DIRECTLY AGAINST EARTH - 3"
(ii) CONCRETE SLABS CAST ON CRUSHED STONE BASE - 2" FROM BOTTOM
(iii) CONCRETE SLABS EXPOSED TO LIQUID OR WEATHER - 2" FROM TOP
(iv) FORMED CONCRETE WALLS, SLABS AND FOOTINGS EXPOSED TO EARTH BACKFILL, LIQUID OR WEATHER - 2"
(v) BEAMS AND COLUMNS EXPOSED TO EARTH BACKFILL, LIQUID OR WEATHER - 2"
(vi) INTERIOR CONCRETE SLABS, SUPPORTED FLOORS AND WALLS - 2"
(vii) INTERIOR BEAMS AND COLUMNS - 2"
C. SEE STRUCTURAL DETAILS ON THIS SHEET.
D. REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION A 615 NEW BILLET STEEL, GRADE 60, WITH DEFORMATIONS CONFORMING WITH ASTM DESIGNATION A 615.
E. ALL DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS, UNLESS OTHERWISE NOTED, SHALL BE IN ACCORDANCE WITH THE ACI "MANUAL OF STANDARD PRACTICE FOR DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" (ACI 315).
F. SEE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- CONCRETE:
A. CLASS "A" - ALL CONCRETE SHALL BE CLASS "A" UNLESS OTHERWISE SHOWN ON THE PLANS. ALL REINFORCED CONCRETE SHALL BE CLASS "A". CLASS "A" CONCRETE SHALL POSSESS THE FOLLOWING CHARACTERISTICS AND/OR PROPORTIONS OF MATERIALS:
• MINIMUM 6.0 BAGS (264 POUNDS) OF CEMENT PER CUBIC YARD
• MINIMUM 4,500 PSI 28-DAY COMPRESSIVE STRENGTH
SLUMP SHALL BE:
• THREE AND ONE-HALF (3½) TO SIX (6) INCHES IN WALLS, COLUMNS AND PIERS
• TWO AND ONE-HALF (2½) TO FIVE (5) INCHES IN SLABS, BEAMS AND FOOTINGS
B. CLASS "C" - CONCRETE USED FOR ANCHORS, KICKERS, AND ENCASEMENT FOR PIPE LINES, FOR SUBFOUNDATIONS AND MASS FOOTINGS, AND FOR FILL SHALL BE CLASS "C". NO CONCRETE CONTAINING REINFORCEMENT SHALL BE CLASS "C". CLASS "C" CONCRETE SHALL POSSESS THE FOLLOWING CHARACTERISTICS AND/OR PROPORTIONS OF MATERIALS:
• MINIMUM 5.0 BAGS (470 POUNDS) OF CEMENT PER CUBIC YARD
• MINIMUM 2,500 PSI 28-DAY COMPRESSIVE STRENGTH
SLUMP SHALL BE:
• FIVE (5) TO EIGHT (8) INCHES FOR ENCASEMENT
• TWO (2) TO FOUR (4) INCHES FOR SUBFOUNDATIONS AND SEALING
C. SEE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.



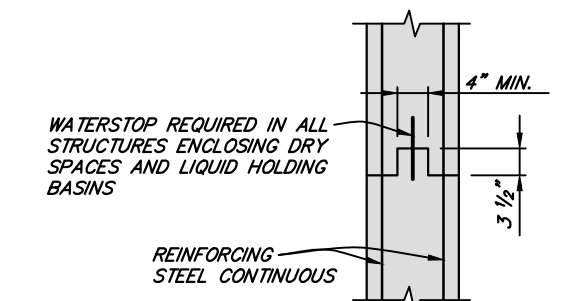
BACKFILL UNDER ASPHALT OR BITUMINOUS SURFACE



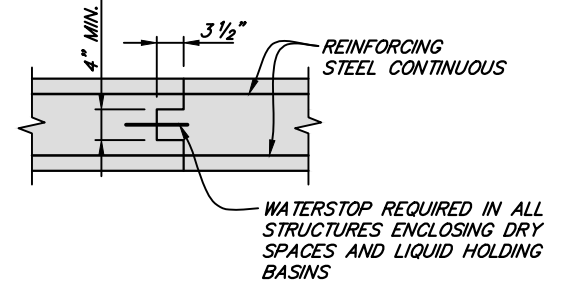
NEW DRIVES & PARKING AREAS
ASPHALT PAVING DETAILS
NO SCALE



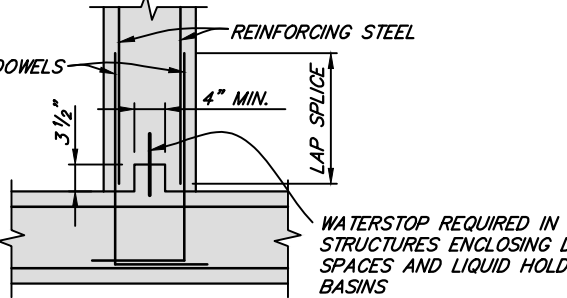
CITY OF COLUMBIA PRECAST MANHOLE DETAIL



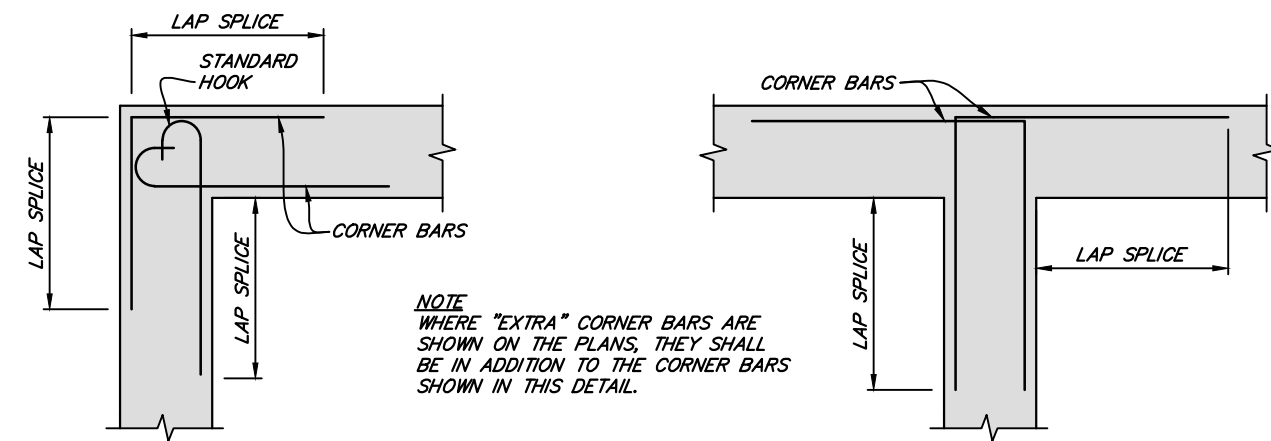
CONSTRUCTION JOINT IN WALL (TOP VIEW)



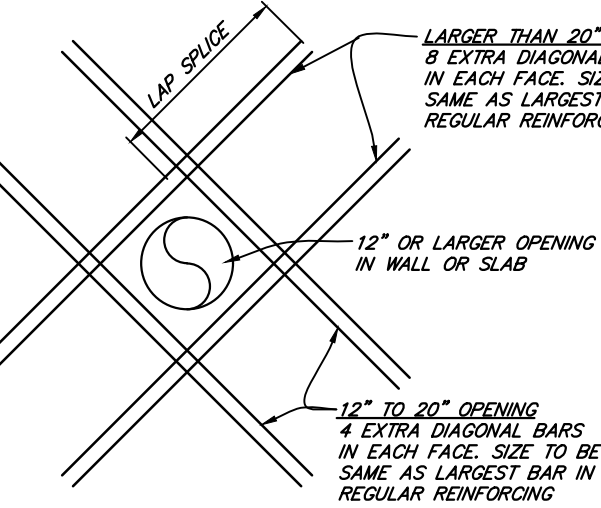
CONSTRUCTION JOINT IN SLAB



CONSTRUCTION JOINT AT SLAB/WALL

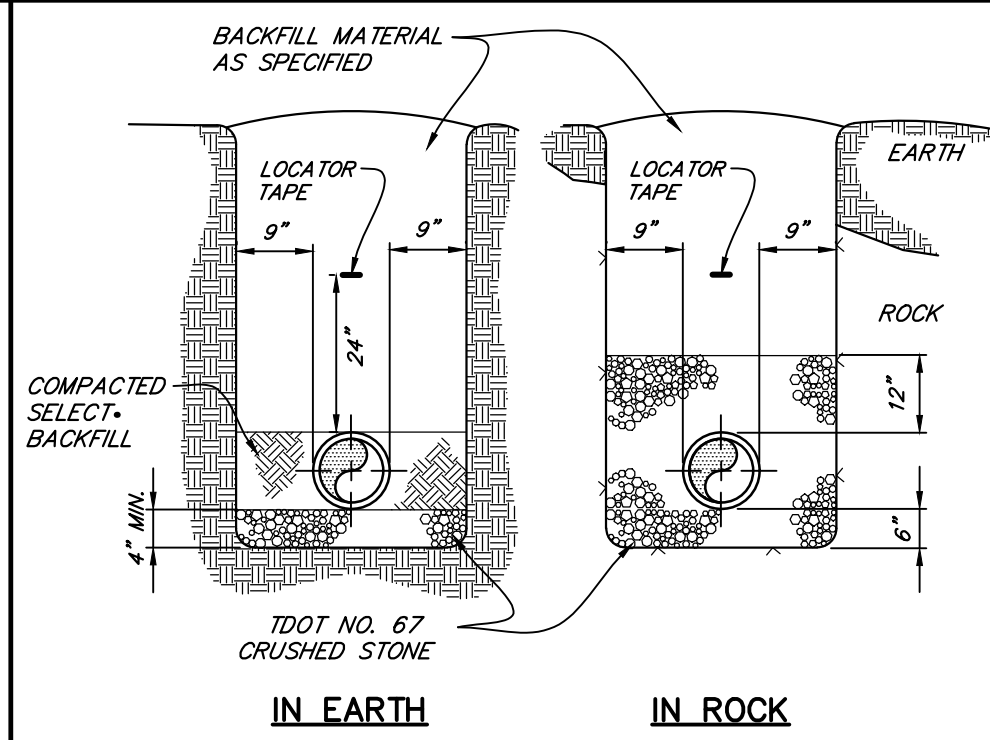


TYPICAL CORNER REINFORCING DETAILS

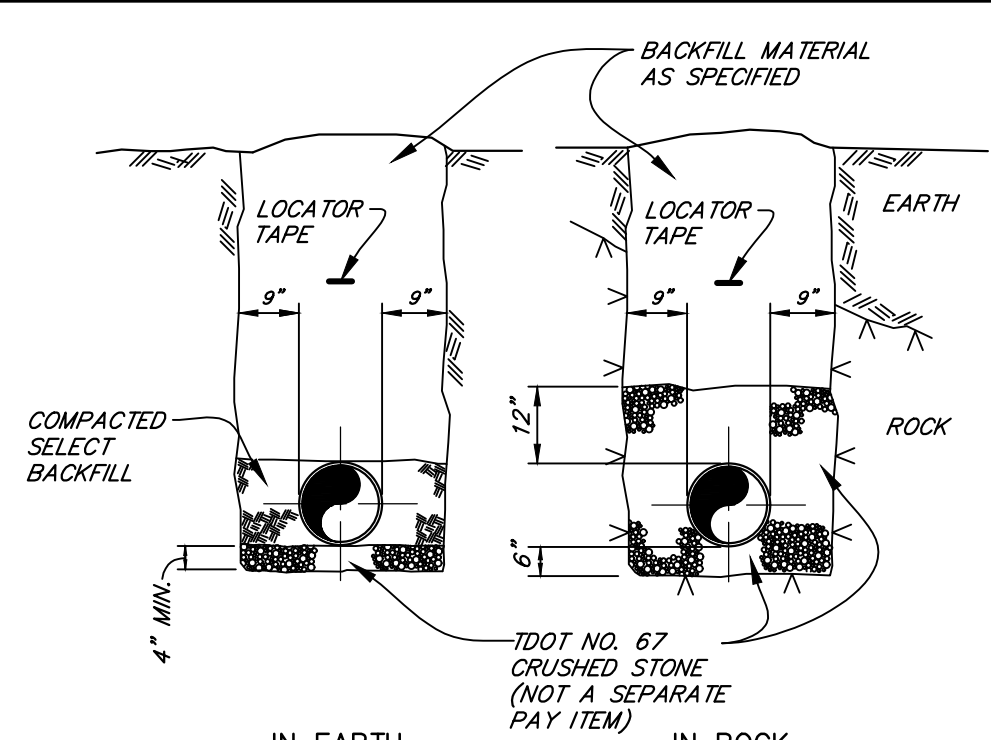


EXTRA REINFORCING DETAIL FOR WALL OR SLAB OPENINGS 12" AND LARGER

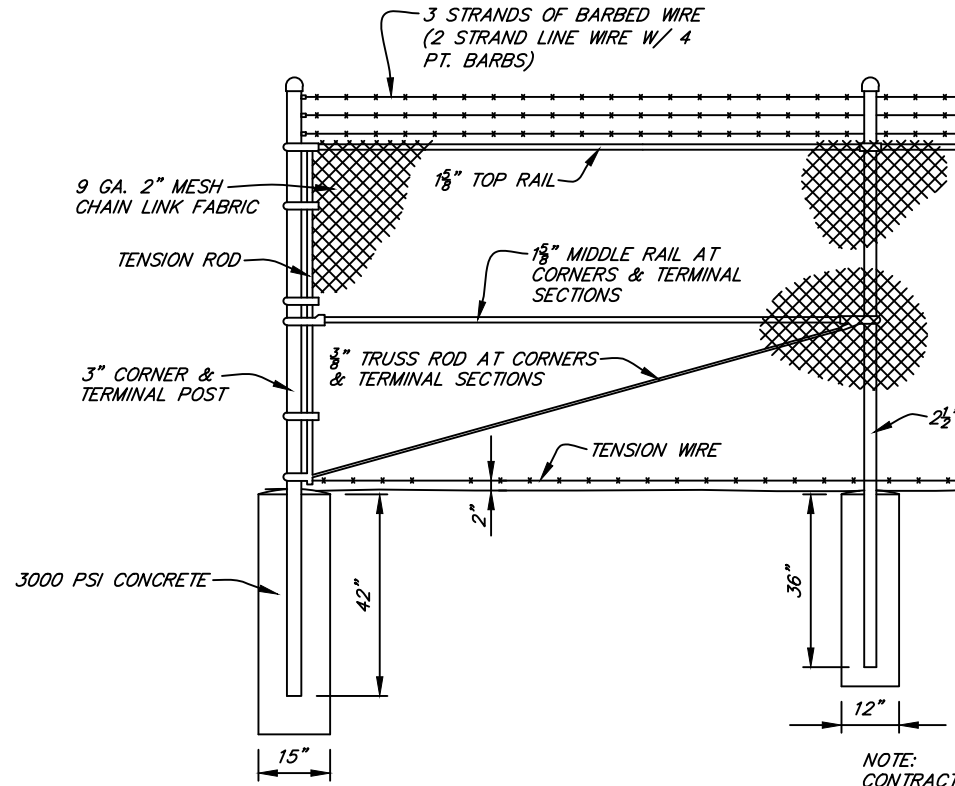
GENERAL STRUCTURAL DETAILS
NO SCALE



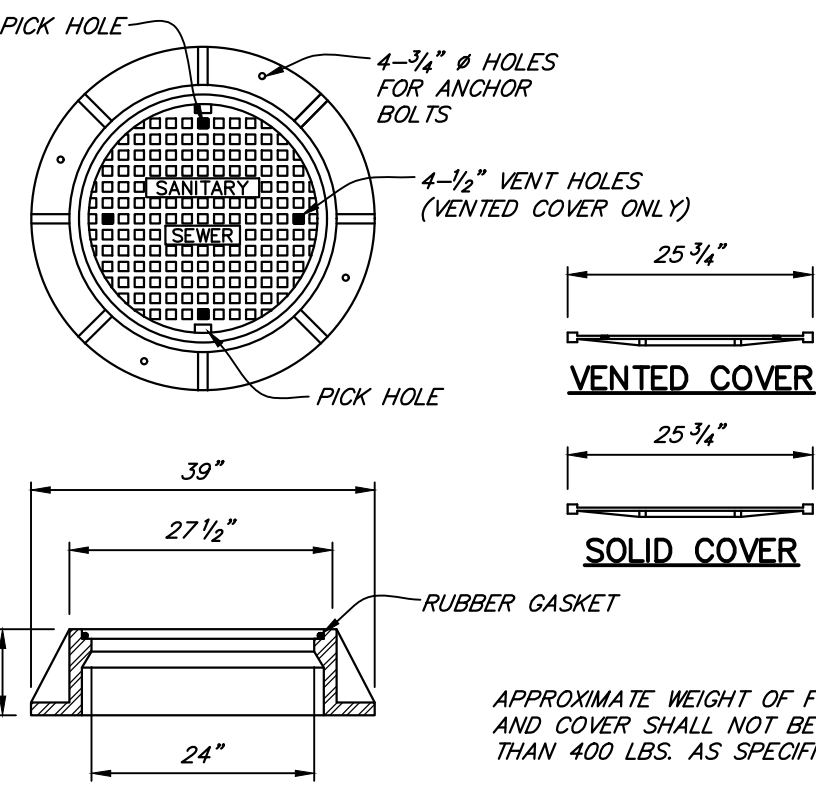
IN EARTH IN ROCK
STANDARD SEWER LINE BEDDING



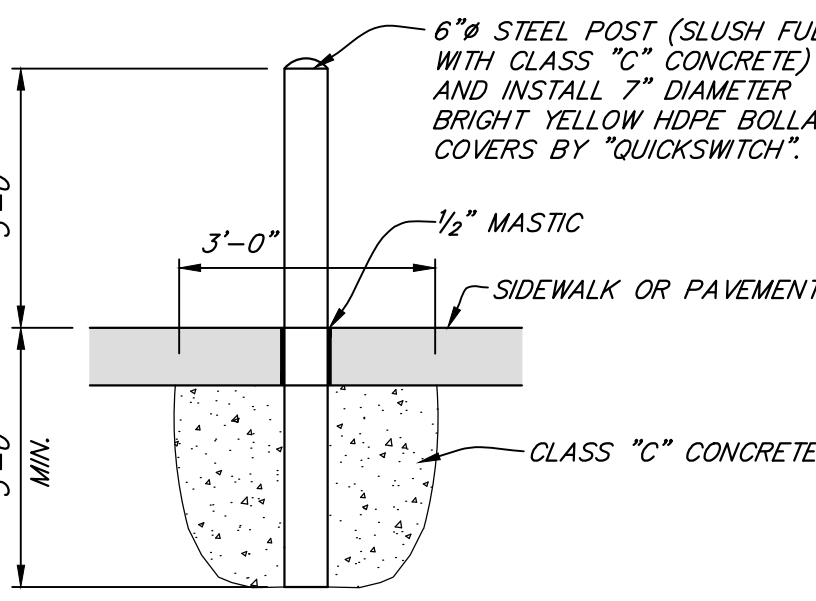
STANDARD FORCE MAIN BEDDING



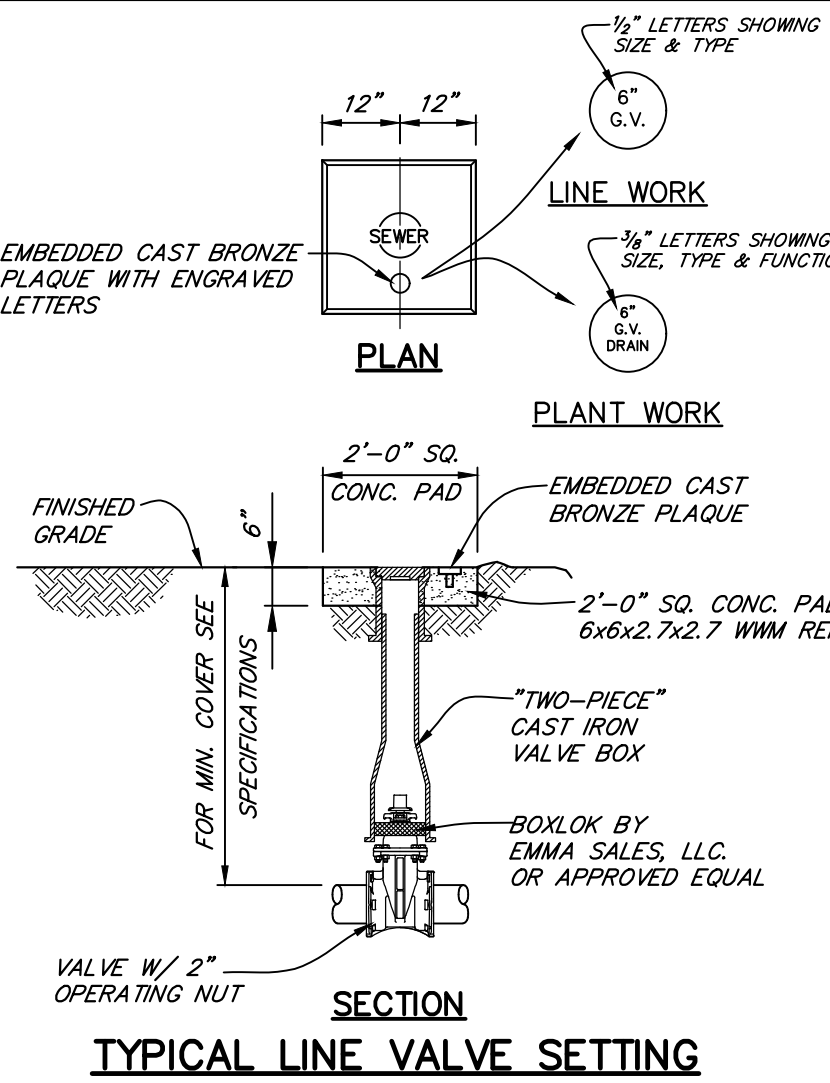
TYPICAL FENCE DETAIL



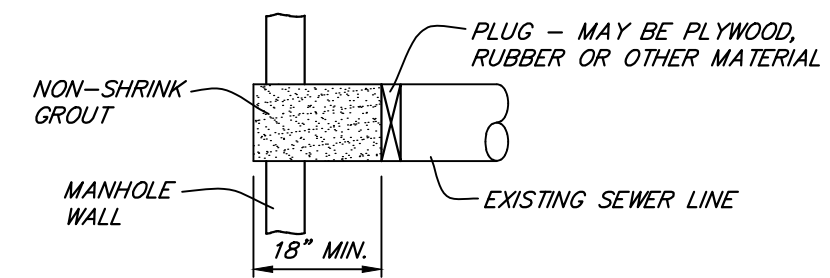
STANDARD MANHOLE FRAME & COVER
(SELF SEALING)



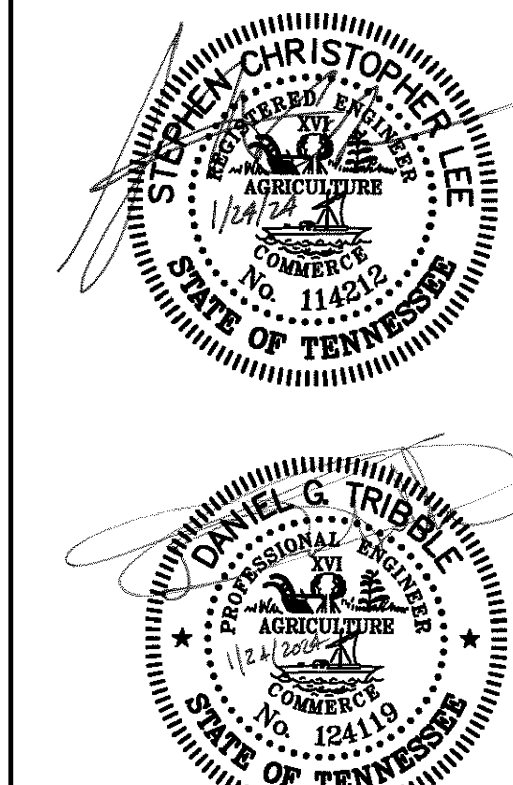
BOLLARD DETAIL



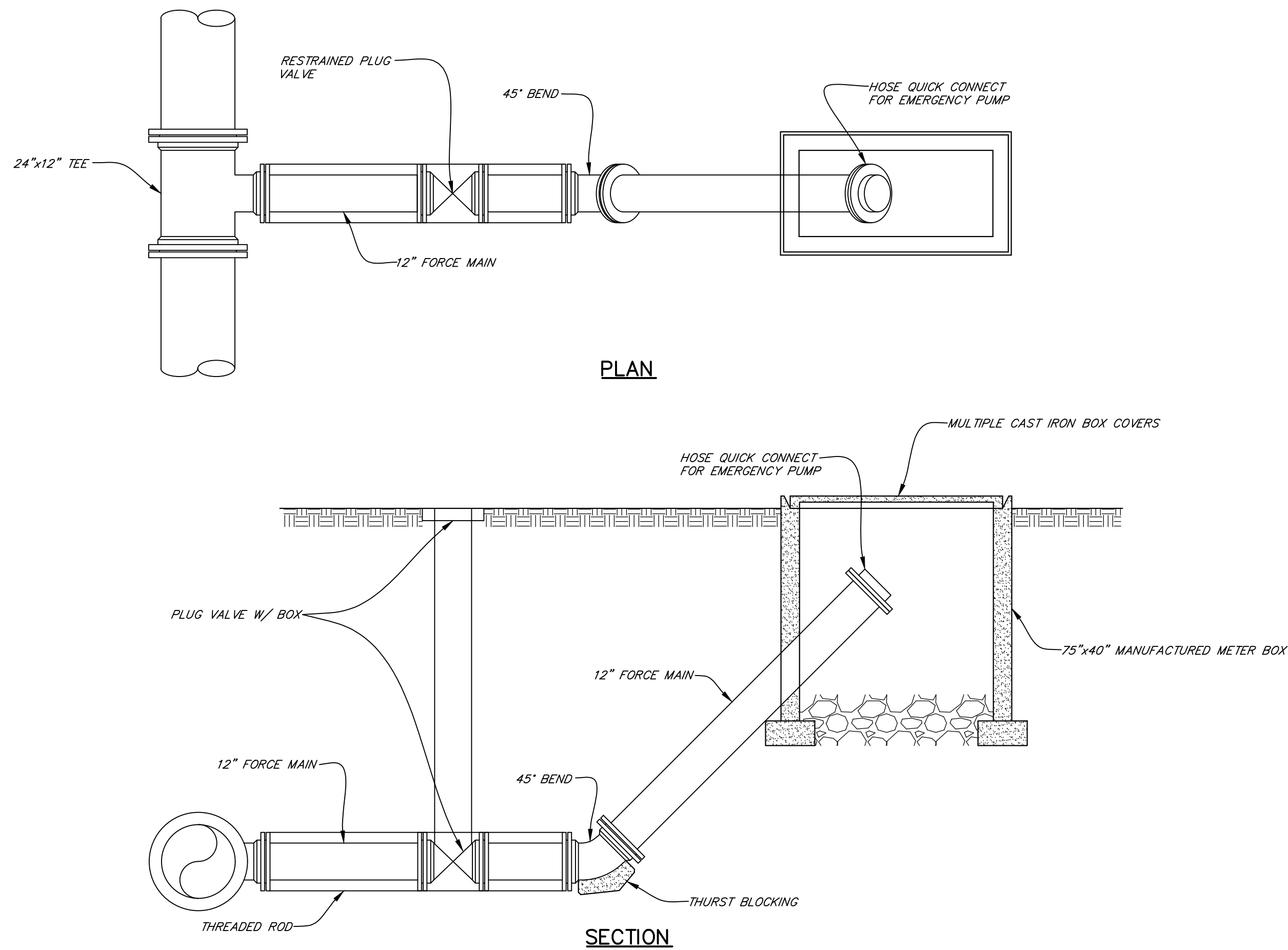
TYPICAL LINE VALVE SETTING



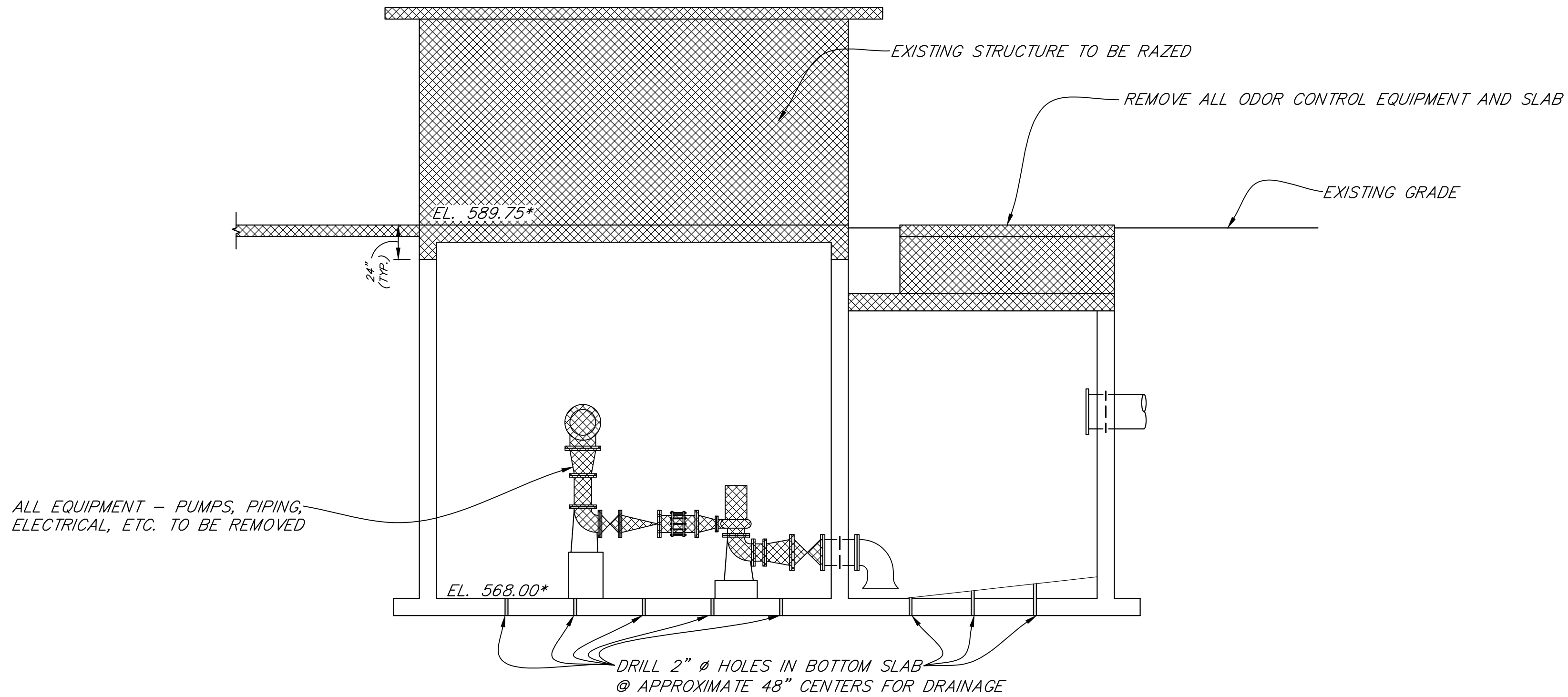
TYPICAL PLUG DETAIL



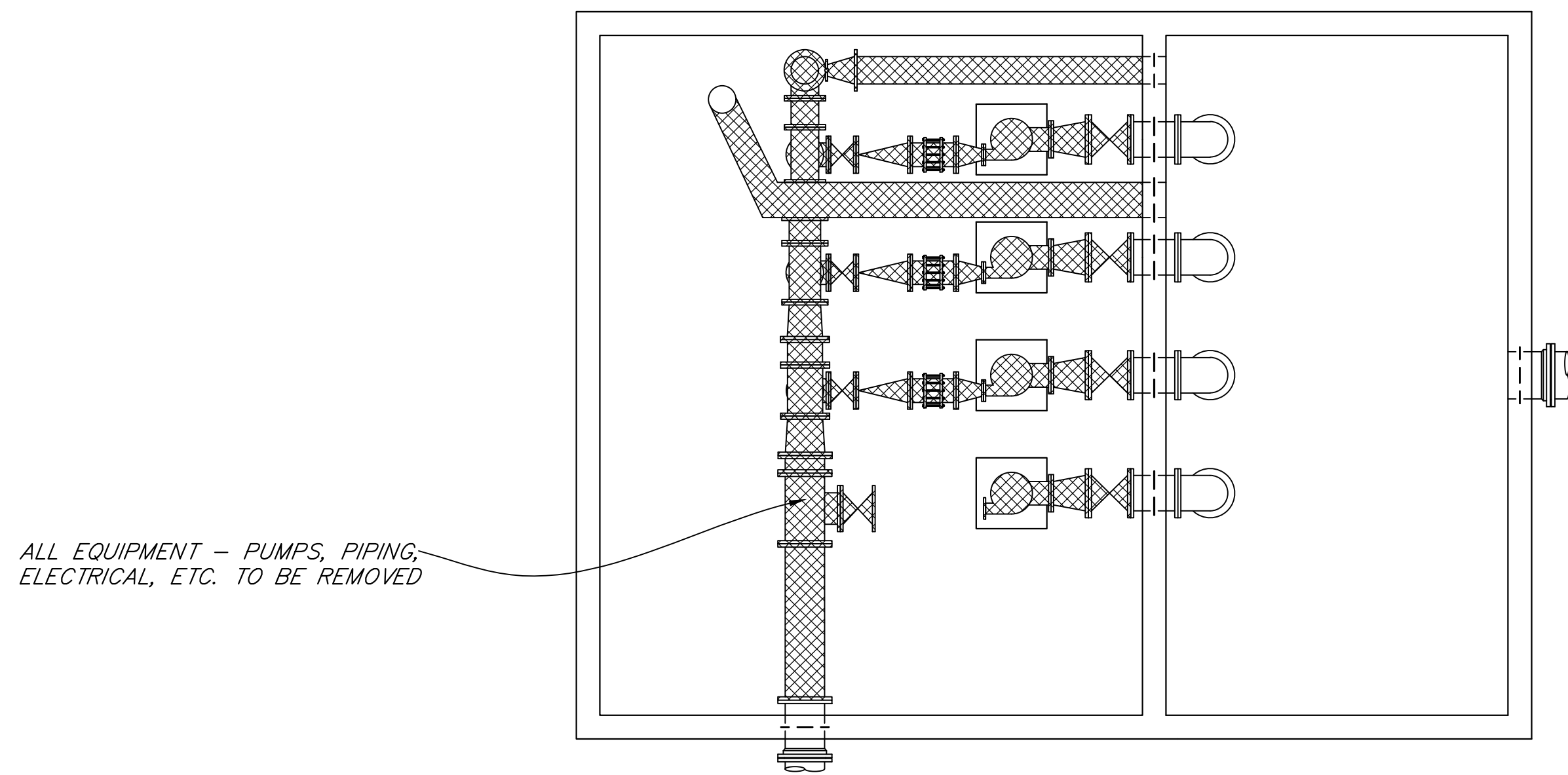
SHEET	4	OF	5	SEWER SYSTEM IMPROVEMENTS CONTRACT 22-01 DUCK RIVER SEWAGE PUMPING STATION REPLACEMENT
REVISION OR ISSUE	ADD. NO. 1 - 12/10/2024	DETAIL SHEET AND STRUCTURAL NOTES		
FOR	COLUMBIA, TENNESSEE	SCALE		
AS SHOWN	DATE	JAN. 2024	DESIGNED DCT	
PROJECT NUMBER	2162		DRAWN JMY	
			CHECKED JGD	



△ EXISTING DUCK RIVER SPS BYPASS PUMP CONNECTION DETAIL*
SCALE: 3/8"=1'-0"



△ SECTION THROUGH EXISTING DUCK RIVER SEWAGE PUMPING STATION
SCALE: 3/16"=1'-0"



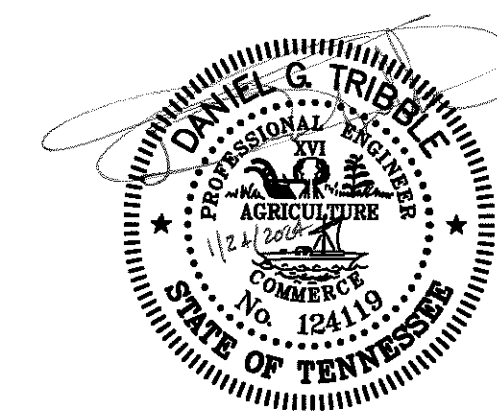
△ PLAN VIEW THROUGH EXISTING DUCK RIVER SEWAGE PUMPING STATION
SCALE: 3/16"=1'-0"

△ **LEGEND**

	EXISTING TO BE RAZED
	EXISTING TO REMAIN

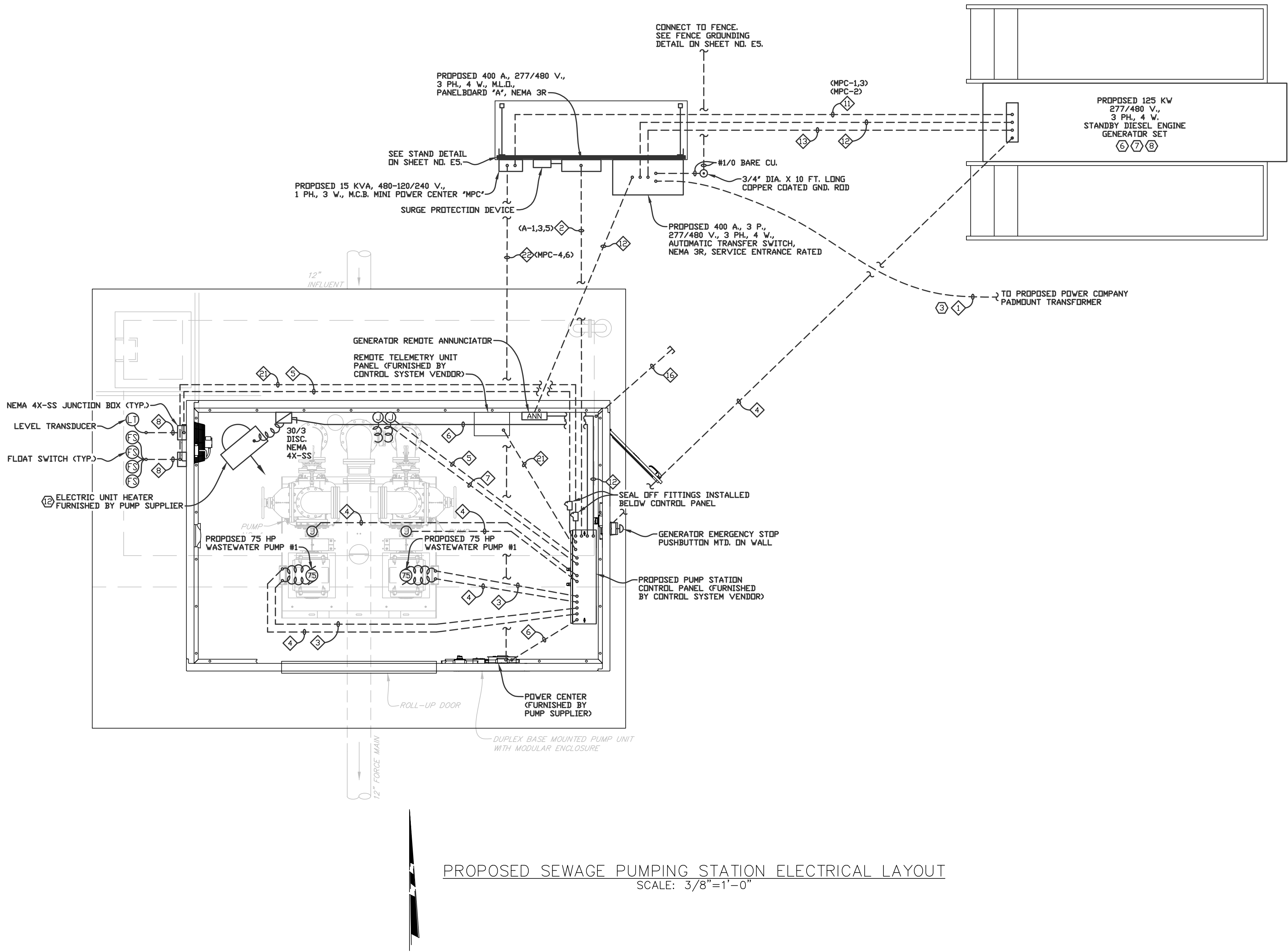
CONSTRUCTION NOTES

- SEE "GENERAL NOTES" ON SHEET 1.
- * INDICATES INFORMATION TAKEN FROM EXISTING PLANS OR FIELD SURVEY WHICH SHALL BE VERIFIED BY THE CONTRACTOR.
- THE OWNER HAS 14 CALENDAR DAYS FROM THE DATE THE EXISTING SEWAGE PUMPING STATION IS DECLARED OUT OF SERVICE BY THE ENGINEER TO REMOVE ANY DESIRED EQUIPMENT AND/OR MATERIALS. AFTER SAID 14 DAYS HAS EXPIRED, ALL REMAINING EQUIPMENT AND MATERIALS SHALL BECOME PROPERTY OF THE CONTRACTOR WHO SHALL BE RESPONSIBLE FOR PROPER DISPOSAL.
- ALL ROOFING MATERIAL, WOOD, CONDUIT, MACHINERY, EXCEPT FOR REINFORCED CONCRETE AND MASONRY UNITS, SHALL BE DISPOSED OF IN AN APPROVED CONSTRUCTION DEMOLITION LANDFILL. EXISTING CONCRETE MASONRY UNITS AND REINFORCED CONCRETE MAY BE DISPOSED OF IN EXISTING WETWELL, PROVIDED ADEQUATE SPACE EXISTS. THE CONTRACTOR SHALL FILL THE DRYWELL, WETWELL AND OTHER BELOW GRADE STRUCTURES WITH CRUSHED STONE OR OTHER COMPACTABLE NATIVE MATERIAL AND REGRADE THE AREA AS REQUIRED.

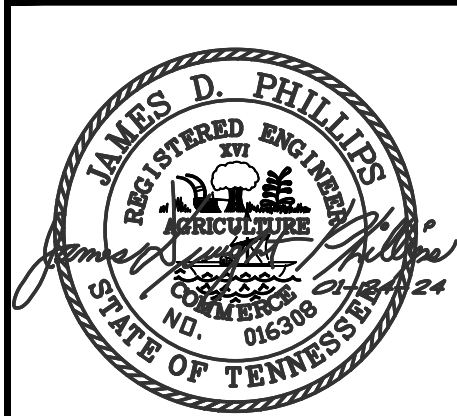


SHEET 5 OF 5		SEWER SYSTEM IMPROVEMENTS CONTRACT 22-01 DUCK RIVER SEWAGE PUMPING STATION REPLACEMENT	
REVISION OR ISSUE		EXISTING DUCK RIVER SEWAGE PUMPING STATION DEMOLITION	
△ ADD. NO. 1 - 12/10/2024		FOR COLUMBIA, TENNESSEE	
PROJECT NUMBER 2162		SCALE AS SHOWN	DESIGNED DGT
DATE JAN. 2024		WAUFORD Nashville, Tennessee (615)883-3243 www.jrwauford.com	DRAWN JMY
			CHECKED JGD

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- NOTES:**
- 1 THE CONTRACTOR SHALL REFER TO THE CIVIL, STRUCTURAL AND PIPING PLANS FOR ALL DIMENSIONS, SECTIONS, DETAILS, ELEVATIONS, VOLTAGE REQUIREMENTS AND PHYSICAL SIZE OF ALL EQUIPMENT FURNISHED BY OTHER TRADES. COORDINATE AND ADJUST ALL ELECTRICAL INSTALLATIONS ACCORDINGLY.
 - 2 ALL CONDUIT ROUTING SHOWN IS DIAGRAMMATIC. THE CONTRACTOR SHALL COORDINATE ALL OF THE RACEWAY INSTALLATIONS WITH OTHER TRADES TO AVOID INTERFERENCES WITH STRUCTURES AND PIPING.
 - 3 THE CONTRACTOR IS TO CONFIRM ALL SERVICE ENTRANCE INSTALLATIONS WITH THE LOCAL POWER COMPANY AND COMPLY WITH ALL NECESSARY REQUIREMENTS.
 - 4 THE CONTRACTOR TO COORDINATE INSTALLATION OF PACKAGED PUMPING STATION AND PUMPING STATION CONTROL PANEL WITH SHOP DRAWINGS. PROVIDE FEEDER CIRCUIT AND INTERCONNECTIONS AS REQUIRED.
 - 5 ALL ELECTRICAL INSTALLATIONS SHALL CONFORM TO THE 2017 NATIONAL ELECTRICAL CODE, 2018 INTERNATIONAL BUILDING CODE AND ALL STATE AND LOCAL CODES.
 - 6 BOND EQUIPMENT GROUNDING CONDUCTORS AND GENERATOR GROUND CONDUCTORS TO GENERATOR FRAME PER NEC ARTICLE 250. THE SERVICE ENTRANCE AND EMERGENCY GENERATOR SYSTEM SHALL BE GROUNDED IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
 - 7 VERIFY STUBUP LOCATIONS, NUMBER AND SIZE OF INTER-CONNECTION CONDUCTORS, EXACT TERMINATION POINTS, ETC. AND ADJUST CONDUIT RACEWAYS ACCORDINGLY PER GENERATOR AND TRANSFER SWITCH MANUFACTURER'S SHOP DRAWINGS.
 - 8 COORDINATE POWER REQUIREMENTS FOR GENERATOR BLOCK HEATER AND BATTERY CHARGER WITH GENERATOR MANUFACTURER AND ADJUST OVERCURRENT PROTECTION AND BRANCH CIRCUITS AS REQUIRED.
 - 9 THE EXACT AIC RATING OF THE SERVICE DISCONNECT SWITCH, AUTOMATIC TRANSFER SWITCH AND PANELBOARD 'M' SHALL BE COORDINATED WITH THE POWER COMPANY'S AVAILABLE FAULT CURRENT AND ADJUSTED ACCORDINGLY.
 - 10 ALL CONDUIT NOT SHOWN FOR CLARITY.
 - 11 ALL FASTENERS USED TO SECURE ELECTRICAL DEVICES SHALL BE 316 STAINLESS.
 - 12 THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION AND ELECTRICAL REQUIREMENTS FOR ALL EQUIPMENT FURNISHED BY PUMP SUPPLIER AND PUMP CONTROL PANEL SUPPLIER.



**PHILLIPS
ENGINEERING, INC.**

ELECTRICAL DESIGN
P.O. BOX 585
617 S. FIRST ST.
UNION CITY, TN 38261
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23019-E2

SHEET E2 OF 5		SEWER SYSTEM IMPROVEMENTS CONTRACT 22-01 DUCK RIVER SEWAGE PUMPING STATION REPLACEMENT	
REVISION OR ISSUE		SITE ELECTRICAL PLAN AND PUMP STATION ELECTRICAL LAYOUT	
ADD. NO. 1 - 12/10/2024		FOR COLUMBIA, TENNESSEE	
SCALE AS SHOWN		DESIGNED JDP	
DATE JAN. 2024		DRAWN TWR	
PROJECT NUMBER 2162		CHECKED JDP	

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TYPE: _____										BUS AMPACITY: 400 A.																									
SERVICE: 277/480 V., 3 PH., 4 W.										PANEL "A"										MAINS: _____ M.L.D.															
POLES: 3																				NEUTRAL: FULL															
LOCATION: EQUIPMENT STAND										* UNLESS OTHERWISE NOTED, SIZE										SHORT CIRCUIT RATING: 22,000 ⑨															
☒ SURFACE ☐ FLUSH										CONDUITS PER NEC. BASE ON TYPE THHN.										☐ NEMA 1 ☒ NEMA 3R															
CKT. KVA			CB TRIP		CONDUIT		WIRE		LOAD NAME						LOAD NAME				WIRE		CONDUIT		CB TRIP		CKT. KVA										
ΦA		ΦB		ΦC																						ΦA		ΦB		ΦC					
62.4		—		—		300/3		3"		#350		PUMPING STATION CONTROL PANEL				1		2		MINI POWER CENTER "MPC"				#8		3/4		40/2		2.0		—		—	
—		62.4		—		—		—		#350		PUMPING STATION CONTROL PANEL				3		4		MINI POWER CENTER "MPC"				#8		—		—		—		1.5		—	
—		—		62.4		—		—		#350		PUMPING STATION CONTROL PANEL				5		6		AREA LIGHT				#10		1"		20/1		—		—		0.7	
—		—		—		—		—				SPACE				7		8		SPARE						20/1		—		—		—		—	
—		—		—		—		—				SPACE				9		10		SPARE						20/1		—		—		—		—	
—		—		—		—		—				SPACE				11		12		SPACE						—		—		—		—		—	
—		—		—		—		—				SPACE				13		14		SPACE						—		—		—		—		—	
—		—		—		—		—				SPACE				15		16		SURGE PROTECTION DEVICE						60/3		—		—		—		—	
—		—		—		—		—				SPACE				17		18		SURGE PROTECTION DEVICE						—		—		—		—		—	
—		—		—		—		—				SPACE				19		20		SURGE PROTECTION DEVICE						—		—		—		—		—	
62.4		62.4		62.4								TOTAL CONNECTED KVA:								191.4								2.0		1.5		0.7			

NOTE: (1) PROVIDE CIRCUIT BREAKER LOCKING MECHANISMS AS REQUIRED.

TYPE: _____

SERVICE: 120/240 V., 1 PH., 3 W.

POLES: 2

LOCATION: MINI POWER CENTER

* UNLESS OTHERWISE NOTED, SIZE _____

☒ SURFACE ☐ FLUSH

CONDUITS PER NEC. BASE ON TYPE THHN.

PANEL "MPC"

BUS AMPACITY: 100 A.

MAINS: 70 A.

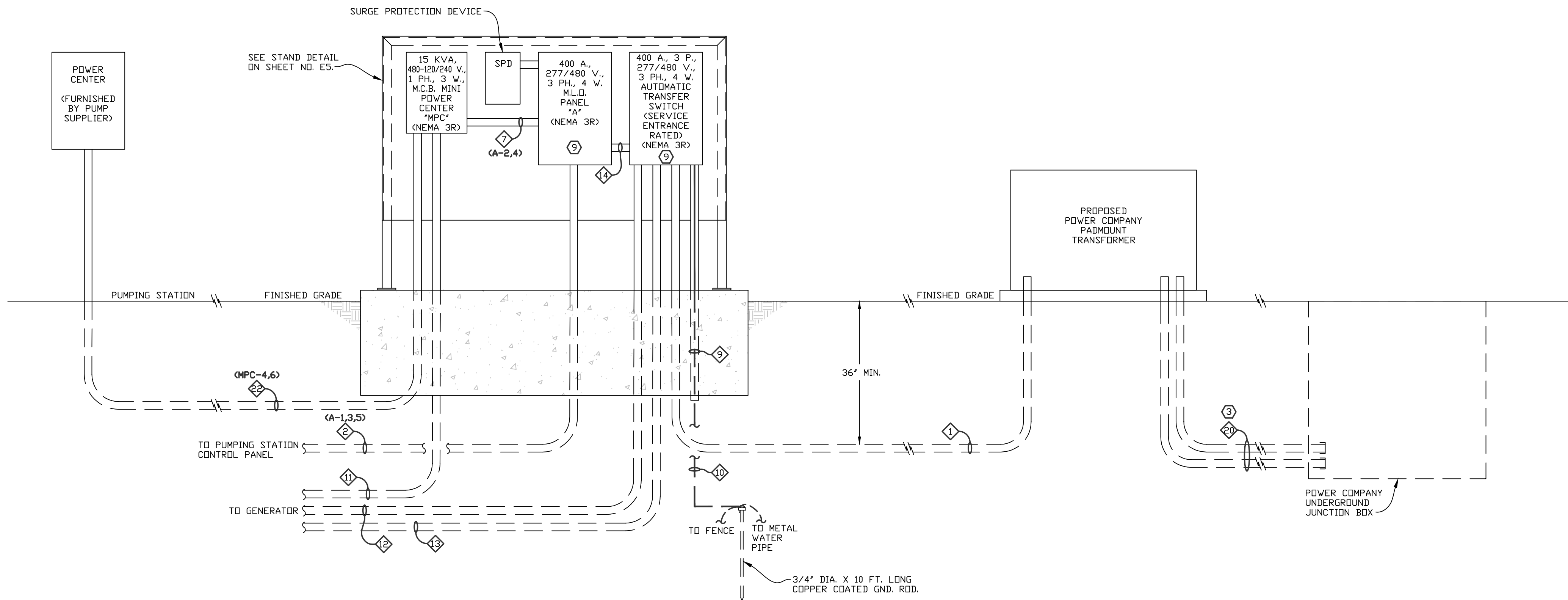
NEUTRAL: FULL

SHORT CIRCUIT RATING: 10,000

☐ NEMA 1 ☒ NEMA 3R

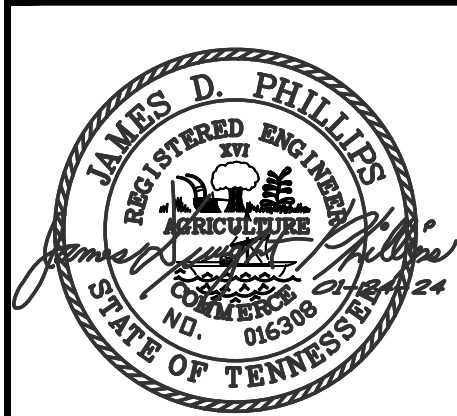
CKT. KVA	CB TRIP	CONDUIT	WIRE	LOAD NAME		LOAD NAME	WIRE	CONDUIT	CB TRIP	CKT. KVA
ΦA	ΦB								ΦA	ΦB
1.5	—	30/2	1" #10	GENERATOR HEATER	1	2	GENERATOR BATTERY CHARGER	#10 1"	20/1	0.5
—	1.5	—	— #10	GENERATOR HEATER	3	4	POWER CENTER	—	40/2	— 3.6
—	—	20/1	—	SPARE	5	6	POWER CENTER	—	—	3.6
—	—	20/1	—	SPARE	7	8	SPARE	—	20/1	—
—	—	—	—	SPARE	9	10	SPARE	—	20/1	—
—	—	—	—	SPARE	11	12	SPARE	—	20/1	—
1.5	1.5	TOTAL CONNECTED KVA: 10.7							4.1	3.6

NOTE: (1) PROVIDE CIRCUIT BREAKER LOCKING MECHANISMS AS REQUIRED.



RISER DIAGRAM
Scale: NONE

- NOTES:
- THE CONTRACTOR SHALL REFER TO THE CIVIL, STRUCTURAL AND PIPING PLANS FOR ALL DIMENSIONS, SECTIONS, DETAILS, ELEVATIONS, VOLTAGE REQUIREMENTS AND PHYSICAL SIZE OF ALL EQUIPMENT FURNISHED BY OTHER TRADES. COORDINATE AND ADJUST ALL ELECTRICAL INSTALLATIONS ACCORDINGLY.
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 - ALL ELECTRICAL INSTALLATIONS SHALL CONFORM TO THE 2017 NATIONAL ELECTRICAL CODE, 2018 INTERNATIONAL BUILDING CODE AND ALL STATE AND LOCAL CODES.
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 - VERIFY STUBUP LOCATIONS, NUMBER AND SIZE OF INTER-CONNECTION CONDUCTORS, EXACT TERMINATION POINTS, ETC. AND ADJUST CONDUIT RACEWAYS ACCORDINGLY PER GENERATOR AND TRANSFER SWITCH MANUFACTURER'S SHOP DRAWINGS.
 - COORDINATE POWER REQUIREMENTS FOR GENERATOR BLOCK HEATER AND BATTERY CHARGER WITH GENERATOR MANUFACTURER AND ADJUST OVERCURRENT PROTECTION AND BRANCH CIRCUITS AS REQUIRED.
 - THE EXACT AIC RATING OF THE SERVICE DISCONNECT SWITCH, AUTOMATIC TRANSFER SWITCH AND PANELBOARD "A" SHALL BE COORDINATED WITH THE POWER COMPANY'S AVAILABLE FAULT CURRENT AND ADJUSTED ACCORDINGLY.
 - ALL CONDUIT NOT SHOWN FOR CLARITY.
 - ALL FASTENERS USED TO SECURE ELECTRICAL DEVICES SHALL BE 316 STAINLESS.



PHILLIPS
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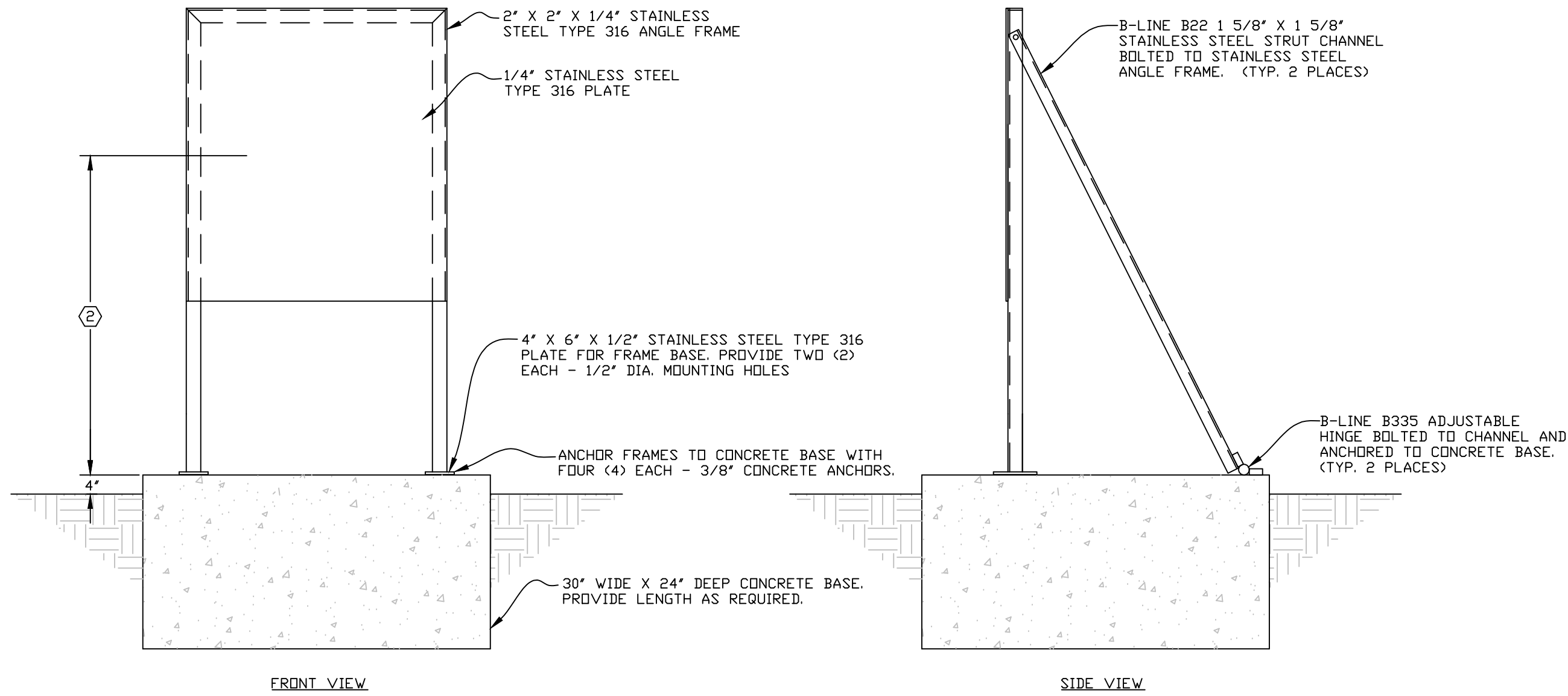
23019-E3

SHEET E3 OF 5		SEWER SYSTEM IMPROVEMENTS CONTRACT 22-01 DUCK RIVER SEWAGE PUMPING STATION REPLACEMENT	
REVISION OR ISSUE		ELECTRICAL PANEL SCHEDULES AND RISER DIAGRAM	
ADD. NO. 1 - 12/10/2024		FOR COLUMBIA, TENNESSEE	
PROJECT NUMBER		2162	DESIGNED JDP
DATE		JAN. 2024	DRAWN TWR
			CHECKED JDP

WAUFORD

Nashville, Tennessee
(615) 883-3243
www.jrwauford.com

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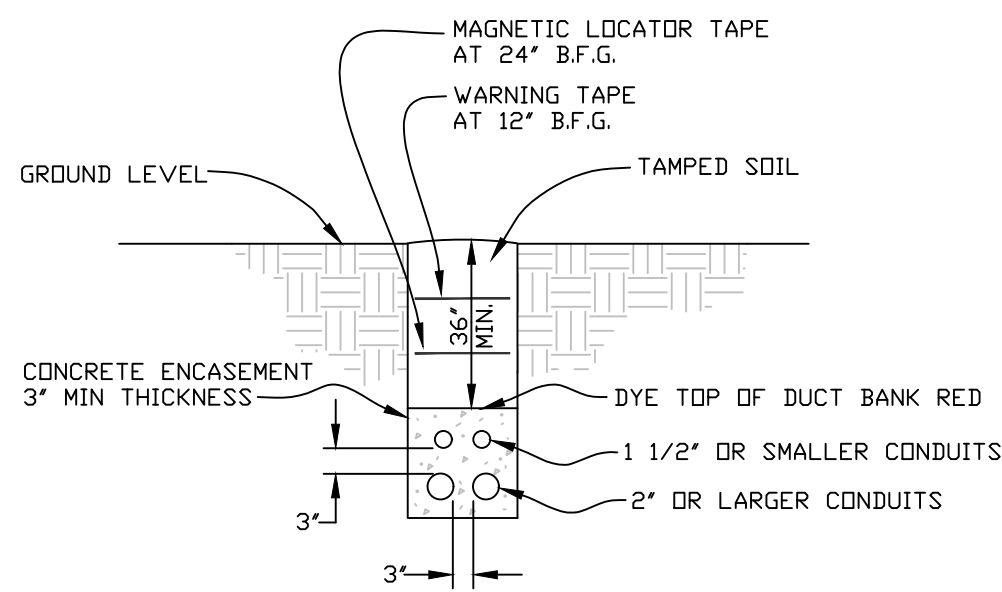


STAND DETAIL

Scale: NONE

NOTE:

- ALL FASTENERS USED TO SECURE ELECTRICAL DEVICES TO FRAMES AND ANCHOR BOLTS SHALL BE 316 STAINLESS.
- PANELBOARD SHALL BE MOUNTED 4'-0" MINIMUM TO CENTERLINE OF PANELBOARD.

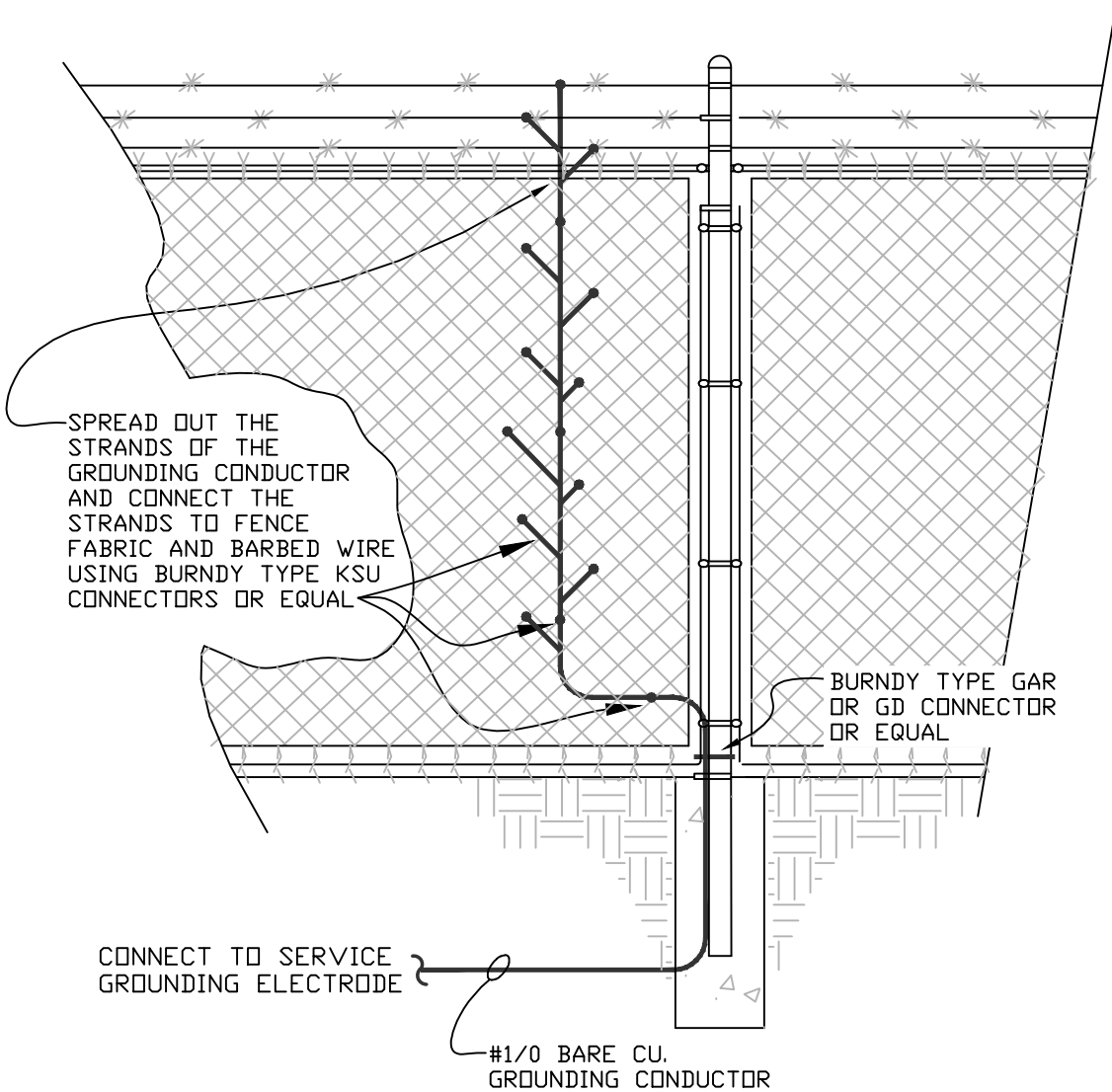


UNDERGROUND CONDUIT INSTALLATION DETAIL

Scale: NONE

NOTE:

- CONTACT ENGINEER FOR INSTALLATION DEPTH VARIATION IN AREAS CONTAINING BURIED PIPING AND OTHER STRUCTURES.
- CONDUIT SEPARATION SHALL BE MAINTAINED BY USE OF PVC CONDUIT SPACERS.

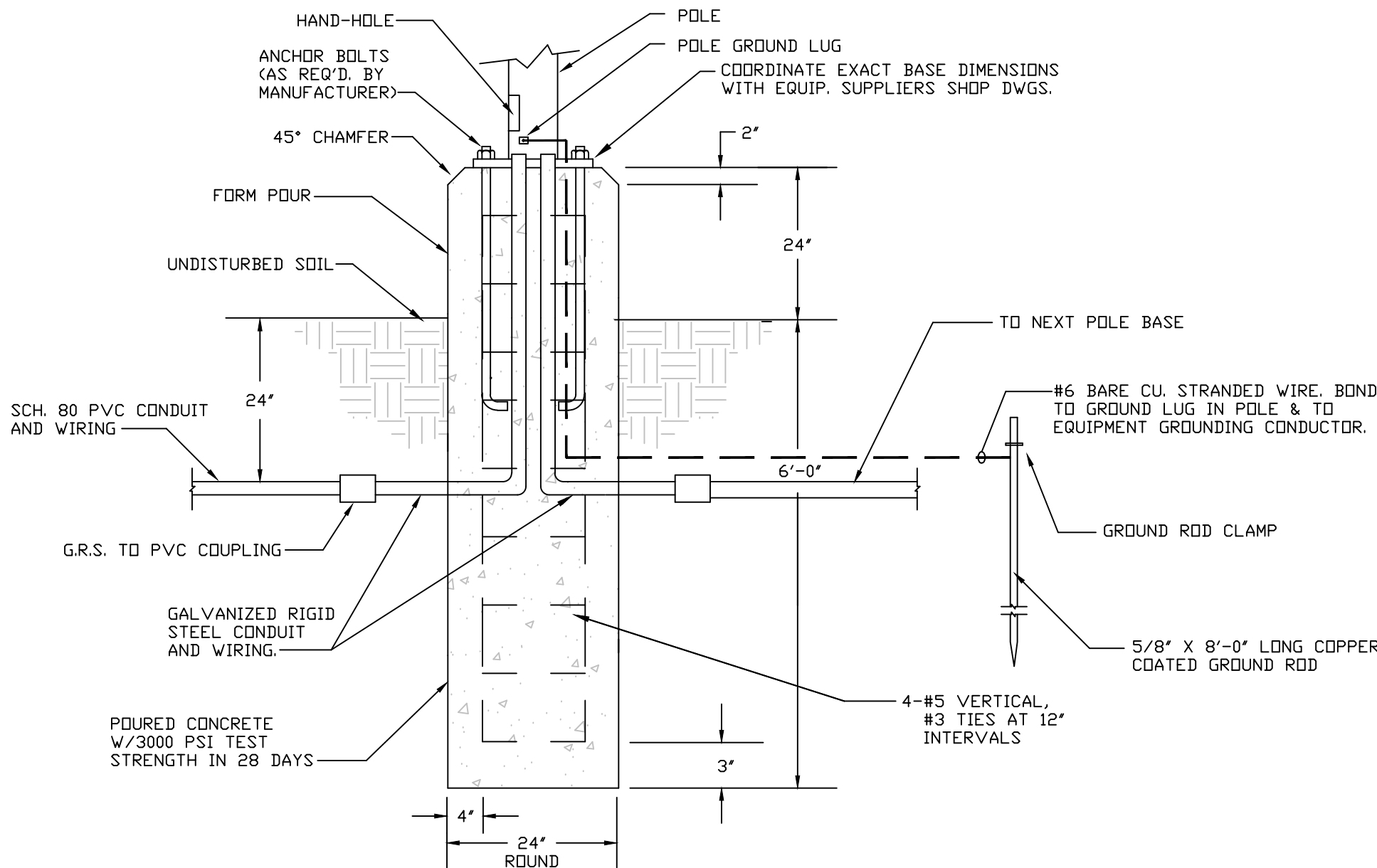


NOTES:

- FENCE GROUNDING CONDUCTOR MUST BE ROUTED UP FENCE AT POST LOCATION ONLY.
- WEAVE GROUNDING CONDUCTORS IN FENCE BEFORE ATTACHING CONNECTORS.

FENCE GROUNDING DETAIL

Scale: NONE



POLE BASE DETAIL

Scale: NONE

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION & SPECIFICATIONS	LAMPS		SUGGESTED MANUFACTURER & CATALOG NO.
		NO.	TYPE	
P1	LED AREA LIGHTING FIXTURE, ARM MOUNTED, TYPE III MEDIUM DISTRIBUTION, DIE CAST ALUMINUM HOUSING, 30 FT. ALUMINUM POLE, NATURAL ALUMINUM FINISH, W/PHOTOELECTRIC CELL, 120/277 VOLT A.C.		LED (INCLUDED) 4000K 22,200 LUMENS 184 WATTS	LITHONIA LIGHTING CAT. NO. FIXTURE: ISXLED-P7-40K-800R-13M-MVOLT-SPA-PERS-IMXD PHOTOCELL: DLL127F1.5JU POLE: SSA-30-6G-DM19-FBC-DNAXD

CONDUIT & WIRE DESIGNATION SCHEDULE

DESIG.	DESCRIPTION
1	3 1/2" C., 4-#500 MCM THHN/THWN CU.
2	3 1/2" C., 4-#350 MCM THHN/THWN CU. & 1-#4 THHN/THWN CU. GND.
3	1 1/2" C., 3-#1 THHN/THWN CU. & 1-#6 THHN/THWN CU. GND.
4	1" C., 4-#14 THHN/THWN CU. & 1-#12 THHN/THWN CU. GND.
5	1" C., 2 EA. - 2/C-#16 AWG TWISTED PAIR, SHIELDED CABLES
6	3/4" C., 3-#10 THHN/THWN CU. & 1-#10 THHN/THWN CU. GND.
7	3/4" C., 2-#10 THHN/THWN CU. & 1-#10 THHN/THWN CU. GND.
8	1" C., EMPTY W/PULLWIRE
9	1" C., (SCH. 80 PVC) 1-#1/0 BARE CU GND.
10	#1/0 BARE CU GND.
11	1" C., 4-#10 THHN/THWN CU. & 2-#10 THHN/THWN CU. GND.
12	1" C., 8-#14 THHN/THWN CU. & 2 EA. - 2/C-#16 AWG TWISTED PAIR, SHIELDED CABLES & 1-#12 THHN/THWN CU. GND.
13	2 1/2" C., 4-#3/0 THHN/THWN CU. & 1-#6 THHN/THWN CU. GND.
14	3 1/2" C., 4-#500 MCM THHN/THWN CU. & 1-#3 THHN/THWN CU. GND.
15	1" C., 2-#10 THHN/THWN CU. & 1-#10 THHN/THWN CU. GND.
16	2" C., EMPTY W/PULLWIRE
17	1 1/4" C., 24-#14 THHN/THWN CU. & 1-#12 THHN/THWN CU. GND.
18	1 1/2" C., 4-#2 THHN/THWN CU.
19	1 1/2" C., 4-#2 THHN/THWN CU. & 1-#8 THHN/THWN CU. GND.
20	2 EA. - 4" C., EMPTY W/PULLWIRE (PER POWER COMPANY REQUIREMENTS)
21	1" C., 10-#14 THHN/THWN CU. & 1-#12 THHN/THWN CU. GND.
22	1" C., 3-#8 THHN/THWN CU. & 1-#10 THHN/THWN CU. GND.

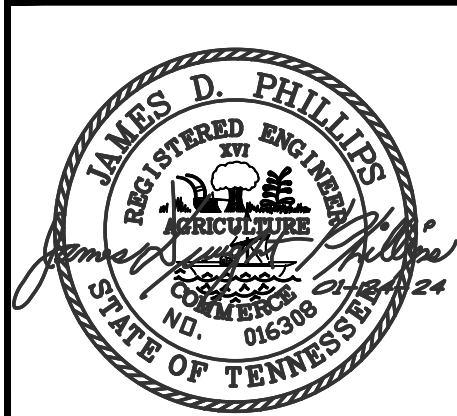
DIESEL ENGINE--GENERATOR SET SCHEDULE

CONTINUOUS STANDBY RATING:	125 KW AT 0.80 PF, 150 KVA.
VOLTAGE & FREQUENCY:	277/480 VOLT, 3 PH, 4 WIRE, 60 HERTZ.
VOLTAGE REGULATION:	±0.5%
FREQUENCY VARIATION:	±0.25%
SKID MOUNTED FUEL TANK & SIZE:	DOUBLE WALL, 48 HOUR FULL LOAD CAPACITY, SUB BASE, WITH LEAK DETECTOR
FUEL GRADE & TYPE:	NO. 2 DIESEL
ENGINE COOLING:	UNIT MOUNTED RADIATOR, HIGH AMBIENT -- 122 DEGREES F.(50C.)
ENGINE DISPLACEMENT & DESIGN:	272 C.I., 4 CYCLE, 4 CYLINDER, DIESEL
MANUFACTURER:	CUMMINS OR CATERPILLAR W/WEATHERPROOF SOUND ATTENUATED ENCLOSURE AND ACCESS PLATFORM

NOTE: 1. SEE DETAILED SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND ACCESSORIES.
2. PROVIDE 1 EA. - 200 A., 3 P., CIRCUIT BREAKER

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	CONDUIT CONCEALED IN WALL OR CEILING
	CONDUIT CONCEALED IN FLOOR SLAB OR UNDERGROUND
	CONDUIT EXPOSED ON WALL OR CEILING
	CAPPED CONDUIT
	FLEXIBLE CONDUIT
	WEATHERPROOF CABLE
	JUNCTION BOX
	PULL BOX
	SINGLE POLE SWITCH, 20 AMP, MTD. HT. PER SPECS.
	SWITCH - 3 WAY, 20 AMP, MTD. HT. PER SPECS.
	SWITCH - 4 WAY, 20 AMP, MTD. HT. PER SPECS.
	DOUBLE POLE, SINGLE THROW SWITCH, 20 AMP, MTD. HT. PER SPECS.
	WEATHERPROOF SWITCH, MTD. HT. PER SPECS.
	MANUAL MOTOR SWITCH W/ THERMAL PROTECTION
	CEILING MTD. OCCUPANCY SENSOR
	CEILING MTD. DAYLIGHT HARVESTER
	PHOTOELECTRIC CELL
	HAND - OFF - AUTO SELECTOR SWITCH
	START - STOP PUSHBUTTON STATIONS
	THERMOSTAT
	SINGLE RECEPTACLE - 20 AMP.
	DUPLEX RECEPTACLE - MTD. HT. PER SPECS.
	DOUBLE DUPLEX RECEPTACLE - MTD. HT. PER SPECS.
	WEATHERPROOF DUPLEX RECEPTACLE
	DUPLEX RECEPTACLE, GROUND FAULT INTERRUPTER TYPE
	DUPLEX RECEPTACLE, MTD. ABOVE COUNTER
	DOUBLE DUPLEX RECEPTACLE, MTD. ABOVE COUNTER
	208/230 VOLT RECEPTACLE, VOLTAGE, POLES AS INDICATED
	DUPLEX RECEPTACLE - HALF HOT, HALF SWITCHED
	DUPLEX RECEPTACLE - ISOLATED GROUND
	WELDING RECEPTACLE. - 60 AMP, VOLTAGE, POLES AS INDICATED
	FLOOR RECEPTACLE
	FLOOR TYPE TELEPHONE OUTLET
	FLOOR TYPE DATA/COMM. OUTLET
	TELEPHONE OUTLET - MTG. HT. & CONDUIT SIZE PER SPECS.
	TELEPHONE OUTLET - MTD. ABOVE COUNTER, COND. SIZE PER SPECS.
	TELEPHONE OUTLET - WALL MOUNTED, CONDUIT SIZE PER SPECS.
	TELEVISION SYSTEM ANTENNA OUTLET, 3/4" C. TO ACCESSIBLE CEILING SPACE
	TELEVISION ANTENNA JACK
	COMPUTER TERMINAL OUTLET, 3/4" C. TO ACCESSIBLE CEILING SPACE
	DATA/COMM. OUTLET, 2 GANG BOX, SINGLE PLASTER RING, 3/4" C.
	SURFACE MOUNTED FIXTURE W/IDENTIFICATION, INCAND, PL FLUOR., OR H.I.D.
	WALL BRACKET FIXTURE, INCANDESCENT OR PL FLUOR.
	RECESSED FIXTURE, INCANDESCENT, PL TYPE FLUOR., OR H.I.D.
	FLUORESCENT FIXTURE, SURFACE OR RECESSED, 2X2, 1X4, 2X4
	FLUORESCENT FIXTURE, OPEN TUBE STRIP, SURFACE MTD.
	DISCONNECT SWITCH, FUSIBLE, 30 AMP / 3 POLE
	DISCONNECT SWITCH, NON-FUSIBLE, 30 AMP / 3 POLE
	DISCONNECT SWITCH, NON-FUSIBLE, RAINIGHT, 30 AMP / 3 POLE
	EXHAUST FAN
	DISTRIBUTION PANEL
	LIGHTING OR BRANCH CIRCUIT PANELBOARD
	EMERGENCY LIGHT
	EMERGENCY LIGHT / EXIT LIGHT COMBINATION
	EXIT LIGHT
	OUTSIDE LIGHTING FIXTURE, POLE TYPE
	MOTOR CONTROLLER OR STARTER, MAGNETIC
	MOTOR CONTROLLER OR STARTER, MANUAL
	COMBINATION STARTER AND DISCONNECT
	MOTOR W/ APPROXIMATE HORSEPOWER
	METAL, ALUMINUM, OR STEEL POLE
	WOOD POLE
	DESIGNATES HEATER TYPE
	DESIGNATES NOTE NUMBER
	DESIGNATES CONDUIT & WIRE DESCRIPTION PER SCHEDULE
	GROUNDING ELECTRODE AND CONDUCTOR SYSTEM
	GROUNDING ELECTRODE SYSTEM
	PRESSURE SWITCH
	FLOW TRANSMITTER
	SOLENOID VALVE
	ELECTRICALLY ACTUATED BALL VALVE W/POSITION INDICATION
	FLOAT SWITCH
	PRESSURE TRANSMITTER
	LIMIT SWITCH
	RATE OF FLOW CONTROLLER
	MOTOR OPERATED VALVE
	LOSS OF HEAD TRANSMITTER
	LEVEL TRANSMITTER



PHILLIPS
ENGINEERING, INC.

ELECTRICAL DESIGN
P.O. BOX 585
617 S. FIRST ST.
UNION CITY, TN 38261
(731) 885-9532

23019-E5

SHEET E5 OF 5		SEWER SYSTEM IMPROVEMENTS CONTRACT 22-01 DUCK RIVER SEWAGE PUMPING STATION REPLACEMENT	
REVISION OR ISSUE		ELECTRICAL SCHEDULES, DETAILS AND LEGEND	
ADD. NO. 1 - 12/10/2024		FOR COLUMBIA, TENNESSEE	
PROJECT NUMBER 2162		SCALE AS SHOWN	DESIGNED JDP
DATE JAN. 2024		WAUFORD Nashville, Tennessee (615) 883-3243 www.jrwauford.com	DRAWN TWR
			CHECKED JDP

PROJECT MANUAL

SPECIFICATIONS AND CONTRACT DOCUMENTS

SEWER SYSTEM IMPROVEMENTS

FOR THE

CITY OF COLUMBIA, TENNESSEE

CONTRACT 22-01

DUCK RIVER SEWAGE PUMPING STATION REPLACEMENT

PROJECT NUMBER 2162

JANUARY 2024

WAUFORD

2835 Lebanon Pike
Nashville, Tennessee 37214
www.jrwauford.com

PROJECT MANUAL

SPECIFICATIONS AND CONTRACT DOCUMENTS

SEWER SYSTEM IMPROVEMENTS

FOR THE

CITY OF COLUMBIA, TENNESSEE

CONTRACT 22-01

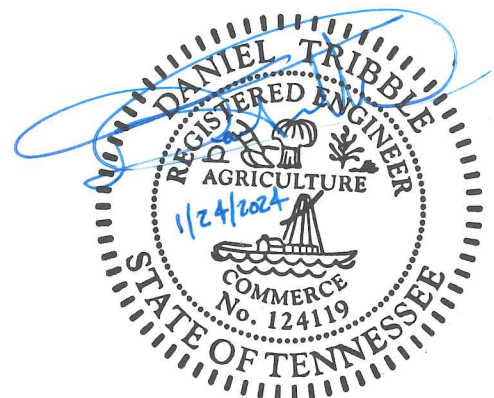
DUCK RIVER SEWAGE PUMPING STATION REPLACEMENT

PROJECT NUMBER 2162

JANUARY 2024

WAUFORD

2835 Lebanon Pike
Nashville, Tennessee 37214
www.jrwauford.com



OFFICIALS
FOR THE
CITY OF COLUMBIA, TENNESSEE

MAYOR

Charles (Chaz) M. Molder

VICE-MAYOR

Randy McBroom

COUNCIL MEMBERS

Davena Hardison
Debbie Wiles
Tony Greene
Kenny Marshall
Danny Coleman

CITY MANAGER

Tony Massey

WASTEWATER DEPARTMENT DIRECTOR

Donnie Boshers

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ADVERTISEMENT FOR BIDS
SEWER SYSTEM IMPROVEMENTS
CITY OF COLUMBIA, TENNESSEE

Separate sealed BIDS for the construction of Sewer System Improvements for the City of Columbia, Tennessee will be received by Columbia Wastewater Department, 1244 Treatment Plant Road, Columbia, Tennessee 38401 until Tuesday, December 17, 2024, 2:00 p.m. Central Time, and then at said time and place will be publicly opened and read aloud. Mailed bids should be addressed Donnie Bosher, Director, Columbia Wastewater Department, 1244 Treatment Plant Road, Columbia, Tennessee 38401, and each bidder shall be responsible for timely delivery.

The work involved is in one (1) contract and consists of the following generally described work:

CONTRACT 22-01
DUCK RIVER SEWAGE PUMPING STATION REPLACEMENT

- Cast in Place Wetwell with Prefabricated Duplex Base Mounted Pump Unit
- Miscellaneous Site Development including earthwork and paving
- Installation of site piping and manholes

The allotted time for constructing for this contract is two hundred forty (240) calendar days. The Engineer will consider a delayed work order to accommodate equipment lead times.

Liquidated damages for non-completion are \$1,000 per calendar day.

The CONTRACT DOCUMENTS may be examined at the following location:

J. R. Wauford & Company, 2835 Lebanon Pike, Nashville, TN 37214

Complete digital project bidding documents are available at www.questcdn.com and/or www.jrwauford.com. Bidders may download the digital plan documents for \$30.00 by inputting Quest project # 9401993 on the QuestCDN project search page. Please contact QuestCDN at 952-233-1632 or info@questcdn.com for assistance in free membership registration, downloading, and working with the digital project information. Inquiries should be directed to Daniel G. Tribble, P.E., Project Manager (615) 883-3243, danielt@jrwauford.com.

All bidders must be licensed general contractors as required by the Contractor's Licensing Act of 1976 of the General Assembly of the State of Tennessee and qualified for the type of construction being bid upon. EACH BIDDER SHALL WRITE ON THE OUTSIDE OF THE ENVELOPE CONTAINING THE BID THE CONTRACTOR'S LICENSE NUMBER, THE EXPIRATION DATE, AND THAT PART OF THE CLASSIFICATION APPLYING TO THIS BID. If this is not done, the bid will not be opened.

Each bidder shall be properly licensed and abide by the provisions of TCA 62-6-119 including part (b) which states in part:

“(b) The person or entity involved in the preparation of the invitation to bid or comparable bid documents, including any electronic bid documents, shall direct that the following information be written upon the bid envelope or provided within the electronic bid document: (1) The name,

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license number, expiration date thereof, and license classification of the contractor applying to bid for the prime contract; (2) The name, license number, expiration date thereof, and license classification of the contractor applying to bid for the masonry contract where the total cost of the materials and labor for the masonry portion of the construction project exceeds one hundred thousand dollars (\$100,000); (3) The name, license number, expiration date thereof, and license classification of the contractor applying to bid for the electrical, plumbing, heating, ventilation, or air conditioning contracts except when such contractor's portion of the construction project is less than twenty-five thousand dollars (\$25,000); (4) For each vertical closed loop geothermal heating and cooling project, the company name, Tennessee Department of Environment and Conservation license number, classification (G, L or G,L) and the expiration date, except when the geothermal portion of the construction project is in an amount less than twenty-five thousand dollars (\$25,000); (5) Prime contractor bidders who are to perform the masonry portion of the construction project which exceeds one hundred thousand dollars (\$100,000), materials and labor, the electrical, plumbing, heating, ventilation or air conditioning or the geothermal heating and cooling must be so designated; and (6) Only one (1) contractor in each of the classifications listed above shall be written on the bid envelope or provided within the electronic bid document."

The Owner reserves the right to waive any informalities or to reject any or all bids and to negotiate with the apparent qualified best bidder or bidders to such extent as may be necessary.

The successful bidder shall be required to furnish both an acceptable performance bond and payment bond each in the amount of one hundred percent (100%) of the contract price.

No bidder may withdraw his bid within 90 days after the actual date of the opening thereof.

In compliance with TCA 12-4-126(a) and (b), the ENGINEER will not issue addenda less than forty-eight (48) hours before the bid opening date and time. Any questions concerning the bid documents shall be received by the ENGINEER before ninety-six (96) hours prior to the bid opening date and time.

CITY OF COLUMBIA, TENNESSEE
COLUMBIA WASTEWATER DEPARTMENT
/s/

Donnie Boshers
Director

INSTRUCTIONS TO BIDDERS

October 2019

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INSTRUCTIONS TO BIDDERS
STATE OF TENNESSEE

1. Preparation and Submission of BID FORM

Bidders shall inform themselves fully of all conditions relating to the proposed work. Bids shall be submitted on the separate copy of the BID FORM supplied for that purpose. The BID FORM contained in the Specifications and Contract Documents is for the convenience of the Bidders and is not to be detached from the bound set of documents or filled out or executed unless a separate BID FORM is not furnished to the Bidder.

The BID FORM shall be enclosed in a sealed envelope which shall be clearly labeled with the name of the project, contract number, name, address, and contractor's license number of the Bidder, the expiration date of the Contractor's license, that part of the classification applying to this Bid, and the date and time of opening (so as to guard against premature opening of any Bid).

BID FORMS that contain any omission, conditions, or limitations, or that show any other irregularity of any kind, may be rejected as informal.

Should the Bidder in preparing his Bid find anything necessary for the construction of the project that is not mentioned in the Specifications or shown on the Plans, or any discrepancy, he shall notify the Engineer so that such items may be included or corrected. Should the Bidder fail to notify the Engineer of such items, it will be assumed that his Bid included everything necessary for the complete construction of an operating facility in the true spirit and intent of the designs shown.

The "Bidder" shall mean all those Contractors submitting BID FORMS. After the acceptance of the BID FORM of the successful Bidder, the said term "Bidder" shall be interchangeable with the term "Contractor" as defined in the General Conditions and all things required of Bidders shall likewise apply to the Contractor.

2. Supplementary Conditions

The Supplementary Conditions contain the special requirements of the Agency which is funding the subject project or clarifications to the General Conditions.

The Supplementary Conditions shall also be considered an extension of the Instructions to Bidders. Executive Orders, Wage Determination, and any and all other items set out in the Supplementary Conditions shall be used in the preparation of the Bid.

INSTRUCTIONS TO BIDDERS

October 2019

3. Discrepancy - Bid Price

In some instances, there will be space in the BID FORM for the bid price to be written in both words and figures. In such cases, the price written in words shall include both dollars and cents and will be considered the correct price in case of a discrepancy between it and the price written in figures. In case of a discrepancy, the correct total bid price will be considered to be the sum total of amounts bid for all items in the BID FORM. The correct product of the quantity listed in the BID FORM for the said item multiplied by the unit price bid shall be used in the total bid.

4. Qualifications of Bidders

The Contractors bidding on the work shall give evidence of their experience in the class of work involved, including at least one job of comparable size and type performed by them as general contractors.

BID FORMS submitted by Contractors who have not, in the opinion of the Engineer and/or Owner, had sufficient experience in the size and type work involved may not be considered.

5. Bid Guaranty

The Bidder shall accompany his BID FORM with the BID BOND in the amount not less than five (5%) percent of the amount of his bid executed on the form furnished as a part of the Contract Documents or with a certified check in the amount not less than five (5%) percent of the amount of his bid. A Power of Attorney of the person signing the Bid Bond shall be included. All such documents are subject to approval by the Owner's attorney and the Agency providing funding, if such funding is involved. It is assumed that the Surety Company executing the Bid Bond will also execute the Contract Bond if the Bid is accepted. If this is not to be the case, the approval of the Owner's attorney will be prerequisite to award of the contract. If a certified check is used as Bid Guaranty, the Bidder shall submit the name of his proposed surety with his BID FORM or in writing within five (5) days after being requested to do so.

6. Contract Surety; Performance and Payment Bonds

The successful Bidder will be required to furnish both a Performance Bond and a Payment Bond executed by a Surety Company duly authorized to do business in the state in which the work is to be performed and acceptable to the Owner's attorney and the Agency providing funds, if such funding is involved, and each in an amount not less than 100% of the Contract price as security for the faithful performance of this Contract and as security for the payment of all persons performing labor and furnishing materials in connection with this Contract.

THESE BONDS MUST BE EXECUTED IN THE FORM PROVIDED AS PART OF THE CONTRACT DOCUMENTS.

7. Interpretation of Contract Documents

The Project Manual contains the provisions required for the construction of the project. No information obtained from any officer, agent or employee of the Owner on any such matters shall in any way affect the risk or obligation assumed by the Contractor or relieve him from fulfilling any of the conditions of the Contract.

If any Contractor contemplating the submission of a bid for the proposed contract is in doubt as to the true meaning of any part of the Plans, Specifications, or other proposed Contract Documents, he should submit a written request for an interpretation thereof to the office of the ENGINEER advertising the work for bid. The person making the request will be responsible for its prompt delivery. Any interpretation of the Contract Documents will be made only by written communication and in accordance with the time constraints of State Law. The Owner and/or the Engineer will not be responsible for explanation or interpretations of the proposed documents except as issued in accordance herewith.

8. Modifications of Bids

Bidders will not be allowed to modify their bids after submission. A bidder may withdraw a mailed bid prior to the bid opening by contacting the Owner; however, neither the Owner nor the Engineer will be responsible for processing this request.

9. Second Hand and Salvaged Materials

The use of second hand and/or salvaged materials will not be permitted unless specifically provided for in the Specifications.

10. Award of Contract

The Owner reserves the right to reject all bids and to waive informalities. In the event that the lowest Bidder's price overruns the Owner's budget, the Owner reserves the right to negotiate with some of or all Bidders. In the event that the low bid is within the Owner's budget, the Contract will be awarded to the lowest responsive and responsible Bidder.

In determining the lowest responsive and responsible bidder, the following elements will be considered: (1) if the Bidder has a satisfactory performance record, (2) if the Bidder has a suitable financial status to meet obligations

INSTRUCTIONS TO BIDDERS

October 2019

incidental to the work, (3) if the Bidder involved maintains a permanent place of business, (4) if the Bidder has adequate plant and equipment to perform the work properly within the time allotted, (5) number of and acceptability by the Owner of any and all proposed Subcontractors, (6) if a unit price bid is unbalanced, and (7) the completeness and regularity of the BID FORM. In addition, the Owner may consider in making his determination, (1) the selection of equipment (or materials), (2) alternate equipment (or materials), and (3) deductions or other modifications listed in the BID FORM.

11. Execution of Contracts

The construction Contract and Performance and Payment Bond(s) shall be executed by the successful Bidder within the time specified in BID FORM. The number of copies to be executed will be specified in the BID FORM.

12. Liquidated Damages for Failure to Enter into Contract

The successful Bidder, upon his failure or refusal to execute and deliver the Contract and Bonds required within ten (10) days after said Bidder has been given written notice of the acceptance of his Bid, shall forfeit to the Owner, as liquidated damages for such failure or refusal, the security deposited with his Bid.

13. Insurance, Contractor's Coverage and Cancellation Provision (Also see General Conditions Article 6)

The Contractor will not be permitted to commence work until he has obtained all insurance required by the Contract Documents and such insurance has been approved by the Engineer and/or Owner, nor shall the Contractor allow any Subcontractor to commence work until all similar insurance required of the Subcontractor has been so obtained.

If a Subcontractor does not take out insurance in his own name and his principal Contractor wishes to provide insurance protection for such Subcontractor and such Subcontractor's employees, an endorsement must be attached to the principal Contractor's policy which endorsement must identify the persons thereby covered, or else the principal Contractor must take out appropriate policies in the name of the Subcontractor.

Each policy of insurance covering the Contractor's or Subcontractor's operations under the Contract shall provide, either in the body of the policy, or by appropriate endorsement to the policy, that such policy cannot be altered or canceled in less than thirty (30) days after the receipt of written notice of such alteration or cancellation to the assured (insured) and the Owner and Engineer.

INSTRUCTIONS TO BIDDERS

October 2019

Certificates of insurance coverages shall include a statement of the alteration or cancellation provision of the policy, sufficient to show definitely that such provisions comply with the requirements stated herein.

THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR MAINTAINING THE INSURANCE HEREIN REQUIRED AND SHALL SAVE HARMLESS THE OWNER AND/OR ENGINEER IN THE EVENT HE NEGLECTS OR FAILS TO DO SO FOR ANY REASON. IN THE EVENT THAT THE APPROVED INSURER DOES NOT RENEW THE REQUIRED POLICY AT ANY TIME DURING THE TERM OF THIS CONTRACT, THE CONTRACTOR SHALL CEASE ALL WORK ON THE CONTRACT UNTIL NEW INSURANCE IS ACQUIRED AND APPROVED BY THE OWNER.

14. Insurance: Commercial General Liability, Automobile Liability and Excess Liability (Also see General Conditions Article 6)

The Contractor shall take out and maintain during the life of this contract Commercial General Liability, Automobile Liability, and Excess Liability insurance as shall protect himself and any subcontractor performing work covered under this Contract from claims for damages because of bodily injury, including accidental death, and from claims for property damages that may arise from operations under this Contract, whether such operations be by him or by any subcontractor, or by anyone directly or indirectly employed by either of them.

The Contractor's Commercial or Comprehensive General Liability insurance coverage shall provide coverage on an "occurrence" basis and aggregate limits of insurance on a "per project" basis; and shall specifically include premises and operations; underground, explosion and collapse; products and completed operations maintained two years after completion of the contract; broad form contractual; independent contractors; broad form property damage; and personal injury coverage. If the Comprehensive General Liability Form is used, the policy must include the Broad Form Comprehensive General Liability Endorsement.

Automobile liability insurance must be provided by a Comprehensive Automobile Liability policy covering all owned, hired and non-owned vehicles.

Excess liability insurance must be provided by an Umbrella form on an "occurrence" basis.

The Contractor's Commercial General Liability, Automobile Liability and Excess Liability insurance shall insure the Owner and the Engineer. The insurance coverage of the Owner and the Engineer shall be provided by endorsement that the Owner and the Engineer are additional insureds on the Contractor's General Liability Policy, Automobile Liability Policy and Excess Liability Policy; or by a separate "Owners Protection Policy." If the Owner and the Engineer are listed as

INSTRUCTIONS TO BIDDERS

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additional insureds on the General Liability Policy, this shall be accomplished using the CG 20-10-11-85 or its equivalent. The Owner and the Engineer shall be listed on the endorsement or separate policy using their respective full legal names.

Minimum limits of coverage shall be as follows:

General Liability

(1)	General Aggregate per Project.....	\$2,000,000
(2)	Each Occurrence	\$1,000,000
(3)	Products/Completed Operations Aggregate	\$2,000,000
(4)	Medical Expense (any one person)	\$10,000

Automobile Liability

Combined Single Limit Bodily Injury and Property Damage..... \$1,000,000

Umbrella

Combined Single Limit Bodily Injury and Property Damage \$2,000,000
(Each Occurrence)

The above does not include special insurance requirements of entities whose property or personnel or other interests are involved; these requirements where applicable will be set forth in the Detailed Specifications.

15. Insurance: Workmen's Compensation and Employer's Liability (Also see General Conditions Article 6)

The Contractor shall take out and maintain, during the life of this contract, Workmen's Compensation and Employer's Liability Insurance, including occupational disease provisions, for all of his employees employed at the site of the project, and in case any work is sublet, the Contractor shall require the subcontractor similarly to provide Workmen's Compensation Insurance and Employer's Liability Insurance, including occupational disease provisions, for all the latter's employees unless such employees are covered by the protection afforded by the Contractor.

In case any class of employees engaged in hazardous work under this contract at the site of the project is not protected under the Tennessee Workmen's Compensation statute, the Contractor shall provide, and shall cause each subcontractor to provide, adequate coverage for the protection of his employees not otherwise protected.

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The Workmen's Compensation and Employer's Liability policy shall include the statutory coverage required by the State of Tennessee, United States Longshoreman and Harborworkers Act Endorsement and Voluntary Compensation Endorsement.

Minimum limits of coverage shall be as follows:

Worker's Compensation

Statutory limits required by the State of Tennessee

Employer's Liability

Each Accident	\$ 100,000
Disease (policy limit)	\$ 500,000
Disease (each employee)	\$ 100,000

16. Insurance: Builders Risk (Also see General Conditions Article 6)

The Contractor shall provide Builders Risk Insurance (fire and extended coverage) for 100 percent of the insurable portion of all work in place and/or materials stored at the site. Such insurance shall provide coverage at all times for the full cash value of all completed construction and/or materials stored and shall remain in effect until the covered facilities are accepted by the Owner. Unless otherwise noted, all portions of the construction shall be covered on a 100 percent complete value basis. The Builders Risk Insurance provided by the Contractor shall cover damage to materials and equipment occurring during offloading and/or installation, regardless of the entity performing the offloading and/or installation.

The Contractor will be responsible for any losses covered by the Builder's Risk insurance policy up to the per occurrence deductible amount.

17. Certificate of Insurance (Also see General Conditions Article 6)

As a minimum, the Certificate of Insurance shall contain the following information: (1) name of insurance company, (2) policy number and liability limits on all policies, (3) date of expiration of all policies, (4) statement that ten days' notice of cancellation will be given to the Owner and the Engineer, and (5) statement that coverage that will hold the Owner and Engineer harmless for acts of the Contractor is included.

18. Sanitary Facilities

The Contractor shall furnish, install and maintain ample sanitary facilities for the workmen. As the needs arise, enclosed temporary toilets in sufficient number shall be placed as directed by the Engineer. Permanent toilets installed under this Contract shall not be used during construction. Drinking water shall be provided from a proved safe source, so piped or transported as to be kept clean and fresh and served from single service containers of satisfactory types. The inclusion of this article in no way obligates the Owner or the Engineer to make verification of or to inspect the sanitary facilities and the Contractor shall save the Owner and/or Engineer harmless from any claims arising therefrom.

19. Lands and Rights-of-Way

It is anticipated that all easements and land required for the construction of this project will be acquired before the issuance of a Work Order or within the period stipulated in the Advertisement for Bids during which Contractors are not allowed to withdraw their bids. Unless the land(s) and/or easements are obtained or the Contractor agrees to either an extension or a work order stipulating the limitations of work or he may withdraw his bid at the end of such period stipulated in the Advertisement for Bids.

20. Commencement and Completion of Work

See General Conditions Article 4.

21. Funds for Partial Payment Estimates

See General Conditions Article 15.

22. Construction Records and Reports

The Contractor shall, upon request, furnish the Owner with proof that all payrolls for services rendered and invoices for materials supplied have been duly paid as herein required and such other pertinent data as the Owner may require.

The Owner or his authorized representatives and agents shall be permitted to inspect all payrolls, records of personnel, invoices of materials, and other relevant data and records.

On projects involving Federal or State Funds, the Federal or State Agency or Agencies participating in the project shall be considered representatives of the Owner.

INSTRUCTIONS TO BIDDERS

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23. Payment of Employees

The Contractor and each of his Subcontractors shall pay each of his employees engaged in work on the project in full (less deductions made mandatory by law), in cash (or check), and not less often than once each week.

24. Laws and Regulations

The Bidder's attention is directed to the fact that all applicable State laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the Contract throughout, and they will be deemed to be included in the Contract the same as though herein written out in full.

25. Subcontracts

See General Conditions Article 7.

26. Ownership of Contractor's License

In addition to the requirements of the laws of the State in which the project is located, no Bid will be accepted from any Contractor who does not propose to accomplish the major portion of the work with his own forces and under his own supervision. No Bids shall be submitted with the intent that an unlicensed Subcontractor will be utilized to construct the major portion of the work. No Bidder shall prepare and submit a Bid under the license of another Contractor. Any misrepresentation which involves submittal of a Bid by one Contractor with the intent that another Contractor will accomplish the work shall be considered grounds for rejection of the BID FORM.

27. Wages and Hours and Non-Discrimination

The Contractor shall conform in every respect to applicable rules, regulations and statutes pertaining to wages, hours of work, and non-discrimination. If Federal funding is involved, a section entitled "Supplementary Conditions" together with various attachments and possibly a Wage Determination Decision will be included in these bound documents or may be added by Addendum.

28. Drug-Free Workplace Program Requirements

The Contractor shall comply with the requirements of Tennessee Code Annotated, Section 50-9-113 and Title 50, Chapter 9 of the Tennessee Code while performing this contract.

INSTRUCTIONS TO BIDDERS

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A written affidavit by the principal officer of the Bidder at the time the Bid is submitted to the Owner shall be submitted by each Bidder with his Bid. The affidavit shall be prepared utilizing the "Drug-Free Workplace Affidavit of Prime Bidder" form provided with the BID FORM.

29. Statement of Compliance Certificate Illegal Immigrants

The Contractor shall comply with the requirements of Tennessee Code Annotated Title 12, Chapter 4, Part 1 of the Tennessee Code while performing this contract.

A written affidavit by the principal officer of the Bidder at the time the Bid is submitted to the Owner shall be submitted by each Bidder with his Bid. The affidavit shall be prepared utilizing the "Statement of Compliance Certificate Illegal Immigrants" form provided with the BID FORM.

30. Compliance with Iran Divestment Act

The Contractor shall comply with the requirements of Tennessee Code Annotated Title 12, Paragraph 12-12-106 of the Tennessee Code while performing this contract.

A written affidavit by the principal officer of the Bidder at the time the Bid is submitted to the Owner shall be submitted by each Bidder with his Bid. The affidavit shall be prepared utilizing the "Statement of Compliance Iran Divestment Act" form provided with the BID FORM.

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared By



Endorsed By



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**This document has been altered by
J. R. Wauford & Company, Consulting Engineers, Inc.**

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ARTICLE 1—DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 2. *Agreement*—The written instrument, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.
 3. *Application for Payment*—The document prepared by Contractor, in a form acceptable to Engineer, to request progress or final payments, and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 5. *Bidder*—An individual or entity that submits a Bid to Owner.
 6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.
 7. *Bidding Requirements*—The Advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.
 8. *Change Order*—A document which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, or other revision to the Contract, issued on or after the Effective Date of the Contract.
 9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.
 10. *Claim*
 - a. A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment of Contract Price or Contract Times; contesting an initial decision by Engineer concerning the

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- requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract.
- b. A demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal, or seeking resolution of a contractual issue that Engineer has declined to address.
 - c. A demand or assertion by Owner or Contractor, duly submitted in compliance with the procedural requirements set forth herein, made pursuant to Paragraph 12.01.A.4, concerning disputes arising after Engineer has issued a recommendation of final payment.
 - d. A demand for money or services by a third party is not a Claim.
11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), lead-based paint (as defined by the HUD/EPA standard), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to Laws and Regulations regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.
12. *Contract*—The entire and integrated written contract between Owner and Contractor concerning the Work.
13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.
14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents.
15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.
16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.
17. *Cost of the Work*—See Paragraph 13.01 for definition.
18. *Drawings or Plans*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.
19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.
20. *Electronic Document*—Any Project-related correspondence, attachments to correspondence, data, documents, drawings, information, or graphics, including but not limited to Shop Drawings and other Submittals, that are in an electronic or digital Portable Document Format (PDF).
21. *Electronic Means*—Electronic mail (email), upload/download from a secure Project website, or other communications methods that allow: (a) the transmission or communication of Electronic Documents; (b) the documentation of transmissions,

including sending and receipt; (c) printing of the transmitted Electronic Document by the recipient; (d) the storage and archiving of the Electronic Document by sender and recipient; and (e) the use by recipient of the Electronic Document for purposes permitted by this Contract. Electronic Means does not include the use of text messaging, or of Facebook, Twitter, Instagram, or similar social media services for transmission of Electronic Documents.

22. *Engineer*—The individual or entity named as such in the Agreement.
23. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.
24. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto.
 - a. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated into the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, is not a Hazardous Environmental Condition.
 - b. The presence of Constituents of Concern that are to be removed or remediated as part of the Work is not a Hazardous Environmental Condition.
 - c. The presence of Constituents of Concern as part of the routine, anticipated, and obvious working conditions at the Site, is not a Hazardous Environmental Condition.
25. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and binding decrees, resolutions, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
26. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.
27. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date, or by a time prior to Substantial Completion of all the Work.
28. *Notice of Award*—The written notice by Owner or the Engineer to a Bidder of Owner's acceptance of the Bid.
29. *Notice to Proceed*—A written notice by Owner or the Engineer at the Owner's discretion to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work.
30. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.
31. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising Contractor's plan to accomplish the Work within the Contract Times.

32. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.
- 32a. *Project Manual* - The written documents prepared for, or made available for, procuring and constructing the Work, including but not limited to the Bidding Documents or other construction procurement documents, geotechnical and existing conditions information, the Agreement, bond forms, General Conditions, Supplementary Conditions, and Specifications. The contents of the Project Manual may be bound in one or more volumes.
33. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative (RPR) includes any assistants or field staff of Resident Project Representative.
34. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.
35. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer’s review of the submittals.
36. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor’s Applications for Payment.
37. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.
38. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements, and such other lands or areas furnished by Owner which are designated for the use of Contractor.
39. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.
40. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work.
41. *Submittal*—A written or graphic document, prepared by or for Contractor, which the Contract Documents require Contractor to submit to Engineer, or that is indicated as a Submittal in the Schedule of Submittals accepted by Engineer. Submittals may include Shop Drawings and Samples; schedules; product data; Owner-delegated designs; sustainable design information; information on special procedures; testing plans; results of tests and evaluations, source quality-control testing and inspections, and field or Site quality-control testing and inspections; warranties and certifications; Suppliers’ instructions and reports; records of delivery of spare parts and tools; operations and maintenance data; Project photographic documentation; record documents; and other such documents required by the Contract Documents. Submittals, whether or not approved or accepted by Engineer, are not Contract Documents. Change Proposals,

Change Orders, Claims, notices, Applications for Payment, and requests for interpretation or clarification are not Submittals.

42. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion of such Work.
43. *Successful Bidder*—The Bidder to which the Owner makes an award of contract.
44. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.
45. *Supplier*—A manufacturer, fabricator, supplier, distributor, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or a Subcontractor.
46. *Technical Data*
- a. Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (1) existing subsurface conditions at or adjacent to the Site, or existing physical conditions at or adjacent to the Site including existing surface or subsurface structures (except Underground Facilities) or (2) Hazardous Environmental Conditions at the Site.
 - b. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then Technical Data is defined, with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06, as the data contained in boring logs, recorded measurements of subsurface water levels, assessments of the condition of subsurface facilities, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical, environmental, or other Site or facilities conditions report prepared for the Project and made available to Contractor.
47. *Underground Facilities*—All active underground lines, pipelines, conduits, ducts, encasements, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or systems at the Site, including but not limited to those facilities or systems that produce, transmit, distribute, or convey telephone or other communications, cable television, fiber optic transmissions, power, electricity, light, heat, gases, oil, crude oil products, liquid petroleum products, water, steam, waste, wastewater, storm water, other liquids or chemicals, or traffic or other control systems. An abandoned facility or system is not an Underground Facility.
48. *Unit Price Work*—Work to be paid for on the basis of unit prices.
49. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.

50. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 Terminology

- A. The words and terms discussed in Paragraphs 1.02.B, C, D, and E are not defined terms that require initial capital letters, but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.
- B. *Intent of Certain Terms or Adjectives*: The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Article 10 or any other provision of the Contract Documents.
- C. *Day*: The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.
- D. *Defective*: The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - 1. does not conform to the Contract Documents;
 - 2. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 - 3. has been damaged prior to Engineer’s recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 15.03 or Paragraph 15.04).
- E. *Furnish, Install, Perform, Provide*
 - 1. The word “furnish,” when used in connection with services, materials, or equipment, means to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
 - 2. The word “install,” when used in connection with services, materials, or equipment, means to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
 - 3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, means to furnish and install said services, materials, or equipment complete and ready for intended use.
 - 4. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words

“furnish,” “install,” “perform,” or “provide,” then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.

- F. *Contract Price or Contract Times*: References to a change in “Contract Price or Contract Times” or “Contract Times or Contract Price” or similar, indicate that such change applies to (1) Contract Price, (2) Contract Times, or (3) both Contract Price and Contract Times, as warranted, even if the term “or both” is not expressed.
- G. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2—PRELIMINARY MATTERS

2.01 *Delivery of Performance and Payment Bonds; Evidence of Insurance*

- A. *Performance and Payment Bonds*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner the performance bond and payment bond (if the Contract requires Contractor to furnish such bonds).
- B. *Evidence of Contractor’s Insurance*: When Contractor delivers the signed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each additional insured (as identified in the Contract), the certificates, endorsements, and other evidence of insurance required to be provided by Contractor in accordance with Article 6, except to the extent the Supplementary Conditions expressly establish other dates for delivery of specific insurance policies.
- C. *Evidence of Owner’s Insurance*: After receipt of the signed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each additional insured (as identified in the Contract), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

2.02 *Copies of Documents*

- A. Owner shall furnish to Contractor two copies of the executed Contract Documents, one of which Contractor shall furnish to Contractor's Surety.
- B. Owner shall furnish to Contractor up to ten printed or hard copies of the Drawings and Project Manual. Additional copies will be furnished upon request at the cost of reproduction.

2.03 *Before Starting Construction*

- A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise required by the Contract Documents), Contractor shall submit to Engineer for timely review:
 - 1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract;
 - 2. a preliminary Schedule of Submittals; and
 - 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments

during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.04 *Preconstruction Conference; Designation of Authorized Representatives*

- A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work, and to discuss the schedules referred to in Paragraph 2.03.A, procedures for handling Shop Drawings, Samples, and other Submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.
- B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.05 *Acceptance of Schedules*

- A. At least 10 days before submission of the first Application for Payment a conference, attended by Contractor, Engineer, and others as appropriate, will be held to review the schedules submitted in accordance with Paragraph 2.03.A. It is the Contractor's responsibility to request and schedule said meeting or waive right thereto. No progress payment will be made to Contractor until acceptable schedules are submitted to Engineer.
 - 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
 - 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
 - 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to the component parts of the Work.
 - 4. If a schedule is not acceptable, Contractor will have an additional 10 days to revise and resubmit the schedule.

2.06 *Electronic Transmittals*

- A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may send, and shall accept, Electronic Documents transmitted by Electronic Means.
- B. If the Contract does not establish protocols for Electronic Means, then Owner, Engineer, and Contractor shall jointly develop such protocols.
- C. Subject to any governing protocols for Electronic Means, when transmitting Electronic Documents by Electronic Means, the transmitting party makes no representations as to long-term compatibility, usability, or readability of the Electronic Documents resulting from the recipient's use of software application packages, operating systems, or computer hardware differing from those used in the drafting or transmittal of the Electronic Documents.

- D. Project Manuals and Drawings issued by the Engineer for bidding purposes may be Electronic Documents or printed copies (also known as hard copies) as determined by the Engineer.
- E. Project Manuals and Drawings issued by the Engineer for construction purposes shall be printed copies (also known as hard copies). At the request of the Contractor, the Engineer may provide Electronic Documents of Project Manuals and Drawings issued by the Engineer for construction purposes; however, said Electronic Documents are provided for the convenience of the receiving party. Any conclusion or information obtained or derived from the Electronic Documents will be at the user's sole risk. If there is a discrepancy between the Electronic Documents and the hard copies, the hard copies shall govern.

ARTICLE 3—CONTRACT DOCUMENTS: INTENT, REQUIREMENTS, REUSE

3.01 *Intent*

- A. The Contract Documents are complementary; what is required by one Contract Document is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents.
- C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic versions of the Contract Documents (including any printed copies derived from such electronic versions) and the printed record version, the printed record version will govern.
- D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.
- E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.
- F. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation will be deemed stricken, and all remaining provisions will continue to be valid and binding upon Owner and Contractor, which agree that the Contract Documents will be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.
- G. Nothing in the Contract Documents creates:
 - 1. any contractual relationship between Owner or Engineer and any Subcontractor, Supplier, or other individual or entity performing or furnishing any of the Work, for the benefit of such Subcontractor, Supplier, or other individual or entity; or
 - 2. any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity, except as may otherwise be required by Laws and Regulations.

3.02 *Reference Standards*

- A. *Standards Specifications, Codes, Laws and Regulations*
 - 1. Reference in the Contract Documents to standard specifications, manuals, reference standards, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, means the standard

specification, manual, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard specification, manual, reference standard, or code, and no instruction of a Supplier, will be effective to change the duties or responsibilities of Owner, Contractor, or Engineer from those set forth in the part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner or Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility inconsistent with the provisions of the part of the Contract Documents prepared by or for Engineer.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies*

1. *Contractor's Verification of Figures and Field Measurements:* Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict, error, ambiguity, or discrepancy is resolved by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.
2. *Contractor's Review of Contract Documents:* If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract issued pursuant to Paragraph 11.01.
3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. *Resolving Discrepancies*

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:
 - a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); or

- b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 *Requirements of the Contract Documents*

- A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer in writing all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs) or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work.
- B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.
- C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly notify Owner and Contractor in writing that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

3.05 *Reuse of Documents*

- A. Contractor and its Subcontractors and Suppliers shall not:
 - 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or its consultants, including electronic media versions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer; or
 - 2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein precludes Contractor from retaining copies of the Contract Documents for record purposes.

ARTICLE 4—COMMENCEMENT AND PROGRESS OF THE WORK

4.01 *Commencement of Contract Times; Notice to Proceed*

- A. The Contract Times will commence to run on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 90 days after the Effective Date of the

Contract. The Contractor shall advise the Owner and Engineer related to scheduling and equipment/material delivery dates related to a delayed Notice to Proceed.

4.02 *Starting the Work*

- A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work may be done at the Site prior to such date unless agreed to in writing by the Owner.

4.03 *Reference Points*

- A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 as it may be adjusted from time to time as provided below.
 - 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.
 - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times must be submitted in accordance with the requirements of Article 11.
- B. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work will be delayed or postponed pending resolution of any disputes or disagreements, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 *Delays in Contractor's Progress*

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. Such an adjustment will be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption,

or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:

1. Severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;
 2. Abnormal weather conditions;
 3. Acts or failures to act of third-party utility owners or other third-party entities (other than those third-party utility owners or other third-party entities performing other work at or adjacent to the Site as arranged by or under contract with Owner, as contemplated in Article 8); and
 4. Acts of war or terrorism.
- D. Contractor's entitlement to an adjustment of Contract Times or Contract Price is limited as follows:
1. Contractor's entitlement to an adjustment of the Contract Times is conditioned on the delay, disruption, or interference adversely affecting an activity on the critical path to completion of the Work, as of the time of the delay, disruption, or interference.
 2. Contractor shall not be entitled to an adjustment in Contract Price for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor. Such a concurrent delay by Contractor shall not preclude an adjustment of Contract Times to which Contractor is otherwise entitled.
 3. Adjustments of Contract Times or Contract Price are subject to the provisions of Article 11.
- E. Each Contractor request or Change Proposal seeking an increase in Contract Times or Contract Price must be supplemented by supporting data that sets forth in detail the following:
1. The circumstances that form the basis for the requested adjustment;
 2. The date upon which each cause of delay, disruption, or interference began to affect the progress of the Work;
 3. The date upon which each cause of delay, disruption, or interference ceased to affect the progress of the Work;
 4. The number of days' increase in Contract Times claimed as a consequence of each such cause of delay, disruption, or interference; and
 5. The impact on Contract Price, in accordance with the provisions of Paragraph 11.07.

Contractor shall also furnish such additional supporting documentation as Owner or Engineer may require including, where appropriate, a revised progress schedule indicating all the activities affected by the delay, disruption, or interference, and an explanation of the effect of the delay, disruption, or interference on the critical path to completion of the Work.

- F. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with

reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5, together with the provisions of Paragraphs 4.05.D and 4.05.E.

- G. Paragraph 8.03 addresses delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.
- H. Contractor shall submit any Change Proposal seeking adjustment in the Contract Price or Contract Times within 30 days of the commencement of the delaying, disrupting, or interfering event.

ARTICLE 5—SITE; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 *Availability of Lands*

- A. Owner shall furnish the Site. Owner shall notify Contractor in writing of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work.
- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which permanent improvements are to be made and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

5.02 *Use of Site and Other Areas*

A. *Limitation on Use of Site and Other Areas*

- 1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas, or to improvements, structures, utilities, or similar facilities located at such adjacent lands or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.
- 2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.13, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or in a court of competent jurisdiction; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and

subcontractors of each and any of them, from and against any such claim, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused directly or indirectly, in whole or in part by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.

- B. *Removal of Debris During Performance of the Work:* During the progress of the Work the Contractor shall keep the Site and other adjacent areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris will conform to applicable Laws and Regulations.
- C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site and adjacent areas all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.
- D. *Loading of Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent structures or land to stresses or pressures that will endanger them.

5.03 *Subsurface and Physical Conditions*

- A. *Reports and Drawings:* The Supplementary Conditions identify:
 - 1. Those reports provided by Owner of explorations and tests of subsurface conditions at or adjacent to the Site that contain Technical Data;
 - 2. Those drawings provided by Owner of existing physical conditions at or adjacent to the Site, including those drawings depicting existing surface or subsurface structures at or adjacent to the Site (except Underground Facilities), that contain Technical Data; and
 - 3. Technical Data contained in such reports and drawings.
- B. *Underground Facilities:* Underground Facilities are shown or indicated on the Drawings, pursuant to Paragraph 5.05, and not in the drawings referred to in Paragraph 5.03.A. Information and data regarding the presence or location of Underground Facilities are not intended to be categorized, identified, or defined as Technical Data.
- C. *Reliance by Contractor on Technical Data:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b.
- D. *Limitations of Other Data and Documents:* Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their

officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto;
2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings;
3. the contents of other Site-related documents made available to Contractor, such as record drawings from other projects at or adjacent to the Site, or Owner's archival documents concerning the Site; or
4. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions, or information.

5.04 *Differing Subsurface or Physical Conditions*

A. *Notice by Contractor:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site:

1. is of such a nature as to establish that any Technical Data on which Contractor is entitled to rely as provided in Paragraph 5.03 is materially inaccurate;
2. is of such a nature as to require a change in the Drawings or Specifications;
3. differs materially from that shown or indicated in the Contract Documents; or
4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

B. *Engineer's Review:* After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine whether it is necessary for Owner to obtain additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.

C. *Owner's Statement to Contractor Regarding Site Condition:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating

whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.

- D. *Early Resumption of Work*: If at any time Engineer determines that Work in connection with the subsurface or physical condition in question may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the condition in question has been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.

E. *Possible Price and Times Adjustments*

1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. Such condition must fall within any one or more of the categories described in Paragraph 5.04.A;
 - b. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03; and,
 - c. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D, 4.05.E, and 4.05.H.
2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:
 - a. Contractor knew of the existence of such condition at the time Contractor made a commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract, or otherwise;
 - b. The existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or
 - c. Contractor failed to give the written notice required by Paragraph 5.04.A.
3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.

- F. *Underground Facilities; Hazardous Environmental Conditions*: Paragraph 5.05 governs rights and responsibilities regarding the presence or location of Underground Facilities. Paragraph 5.06 governs rights and responsibilities regarding Hazardous Environmental Conditions. The provisions of Paragraphs 5.03 and 5.04 are not applicable to the presence or location of Underground Facilities, or to Hazardous Environmental Conditions.

5.05 *Underground Facilities*

- A. *Contractor's Responsibilities:* Owner and Engineer do not warrant or guarantee the accuracy or completeness of any such information or data provided by others. Unless it is otherwise expressly provided in the Supplementary Conditions, the cost of all of the following are included in the Contract Price, and Contractor shall have full responsibility for:
1. reviewing and checking all information and data regarding existing Underground Facilities at the Site;
 2. complying with applicable state and local utility damage prevention Laws and Regulations;
 3. verifying the actual location of those Underground Facilities shown or indicated in the Contract Documents as being within the area affected by the Work, by exposing such Underground Facilities during the course of construction;
 4. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and
 5. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.
- B. *Notice by Contractor:* If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated on the Drawings, or was not shown or indicated on the Drawings with reasonable accuracy, then Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 7.15), notify Owner and Engineer in writing regarding such Underground Facility.
- C. *Engineer's Review:* Engineer will:
1. promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated on the Drawings, or was not shown or indicated with reasonable accuracy;
 2. prepare recommendations to Owner (and if necessary issue any preliminary instructions to Contractor) regarding the Contractor's resumption of Work in connection with the Underground Facility in question;
 3. obtain any pertinent cost or schedule information from Contractor; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and
 4. advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
- D. *Owner's Statement to Contractor Regarding Underground Facility:* After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.

- E. *Early Resumption of Work*: If at any time Engineer determines that Work in connection with the Underground Facility may resume prior to completion of Engineer's review or Owner's issuance of its statement to Contractor, because the Underground Facility in question and conditions affected by its presence have been adequately documented, and analyzed on a preliminary basis, then the Engineer may at its discretion instruct Contractor to resume such Work.
- F. *Possible Price and Times Adjustments*
1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, to the extent that any existing Underground Facility at the Site that was not shown or indicated on the Drawings, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. With respect to Work that is paid for on a unit price basis, any adjustment in Contract Price will be subject to the provisions of Paragraph 13.03;
 - b. Contractor's entitlement to an adjustment of the Contract Times is subject to the provisions of Paragraphs 4.05.D and 4.05.E;
 - c. Contractor gave the notice required in Paragraph 5.05.B; and
 - d. Contractor did not know and could not reasonably have been expected to be aware of or to have anticipated the existence or actual location of the Underground Facility in question.
 2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, then any such adjustment will be set forth in a Change Order.
 3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.
 4. The information and data shown or indicated on the Drawings with respect to existing Underground Facilities at the Site is based on information and data (a) furnished by the owners of such Underground Facilities, or by others, (b) obtained from available records, or (c) gathered in an investigation conducted in accordance with the current edition of ASCE 38, Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data, by the American Society of Civil Engineers. If such information or data is incorrect or incomplete, Contractor's remedies are limited to those set forth in this Paragraph 5.05.F.

5.06 *Hazardous Environmental Conditions at Site*

- A. *Reports and Drawings*: The Supplementary Conditions identify:
1. those reports known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site;
 2. drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and

3. Technical Data contained in such reports and drawings.
- B. *Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data as defined in Paragraph 1.01.A.46.b. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto;
 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
 3. any Contractor interpretation of or conclusion drawn from any Technical Data or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.
- D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.
- E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition and impose a set-off against payments to account for the associated costs.
- F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition

and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.

- G. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, as a result of such Work stoppage, such special conditions under which Work is agreed to be resumed by Contractor, or any costs or expenses incurred in response to the Hazardous Environmental Condition, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off. Entitlement to any such adjustment is subject to the provisions of Paragraphs 4.05.D, 4.05.E, 11.07, and 11.08.
- H. If, after receipt of such written notice, Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.
- I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court, arbitration, or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.I obligates Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J obligates Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 6—BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

- A. Contractor shall furnish a performance bond and a payment bond, each in an amount at least equal to the Contract Price, as security for the faithful performance and payment of all of Contractor's obligations under the Contract. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the Supplementary Conditions, or other specific provisions of the Contract. Contractor shall also furnish such other bonds as are required by the Supplementary Conditions or other specific provisions of the Contract.
- B. All bonds shall be in the form prescribed by the Contract except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (as amended and supplemented) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.
- C. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds in the required amounts.
- D. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or its right to do business is terminated in any state or jurisdiction where any part of the Project is located, or the surety ceases to meet the requirements above, then Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the bond and surety requirements above.
- E. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.
- F. Upon request, Owner shall provide a copy of the payment bond to any Subcontractor, Supplier, or other person or entity claiming to have furnished labor or materials used in the performance of the Work.

6.02 *Insurance—General Provisions*

- A. Owner and Contractor shall obtain and maintain insurance as required in this Article and in the Supplementary Conditions.
- B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.

- C. Contractor shall deliver to Owner, with copies to each named insured and additional insured (as identified in this Article, in the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Contractor has obtained and is maintaining the policies, coverages, and endorsements required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.
- D. Owner shall deliver to Contractor, with copies to each named insured and additional insured (as identified in this Article, the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Owner has obtained and is maintaining the policies, coverages, and endorsements required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Owner may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.
- E. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, shall not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.
- F. If either party does not purchase or maintain all of the insurance required of such party by the Contract, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage.
- G. If Contractor has failed to obtain and maintain required insurance, Owner may exclude the Contractor from the Site, impose an appropriate set-off against payment, and exercise Owner's termination rights under Article 16.
- H. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price shall be adjusted accordingly.
- I. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests.
- J. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner and other individuals and entities in the Contract.

6.03 *Contractor's Insurance*

- A. *Workers' Compensation:* Contractor shall purchase and maintain workers' compensation and employer's liability insurance for:
 - 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts.

2. United States Longshoreman and Harbor Workers' Compensation Act and Jones Act coverage (if applicable).
 3. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees.
 4. Foreign voluntary worker compensation (if applicable).
- B. *Commercial General Liability—Claims Covered:* Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against:
1. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees.
 2. claims for damages insured by reasonably available personal injury liability coverage.
 3. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom.
- C. *Commercial General Liability—Form and Content:* Contractor's commercial liability policy shall be written on a 1996 (or later) ISO commercial general liability form (occurrence form) and include the following coverages and endorsements:
1. Products and completed operations coverage:
 - a. Such insurance shall be maintained until the end of the warranty (guarantee) period.
 - b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance until the end of the warranty (guarantee) period.
 2. Blanket contractual liability coverage, to the extent permitted by law, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.
 3. Broad form property damage coverage.
 4. Severability of interest.
 5. Underground, explosion, and collapse coverage.
 6. Personal injury coverage.
 7. Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together); or CG 20 10 07 04 and CG 20 37 07 04 (together); or their equivalent.
 8. For design professional additional insureds, ISO Endorsement CG 20 32 07 04, "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent.
- D. *Automobile liability:* Contractor shall purchase and maintain automobile liability insurance against claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle. The automobile liability policy shall be written on an occurrence basis.
- E. *Umbrella or excess liability:* Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer's liability, commercial general liability, and

automobile liability insurance described in the paragraphs above. Subject to industry-standard exclusions, the coverage afforded shall follow form as to each and every one of the underlying policies.

- F. *Contractor's pollution liability insurance:* Contractor shall purchase and maintain a policy covering third-party injury and property damage claims, including clean-up costs, as a result of pollution conditions arising from Contractor's operations and completed operations. This insurance shall be maintained for no less than three years after final completion.
- G. *Additional insureds:* The Contractor's commercial general liability, automobile liability, umbrella or excess, and pollution liability policies shall include and list as additional insureds Owner and Engineer, and any individuals or entities identified in the Supplementary Conditions; include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all such additional insureds; and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby (including as applicable those arising from both ongoing and completed operations) on a non-contributory basis. Contractor shall obtain all necessary endorsements to support these requirements.
- H. *Contractor's professional liability insurance:* If Contractor will provide or furnish professional services under this Contract, through a delegation of professional design services or otherwise, then Contractor shall be responsible for purchasing and maintaining applicable professional liability insurance. This insurance shall provide protection against claims arising out of performance of professional design or related services, and caused by a negligent error, omission, or act for which the insured party is legally liable. It shall be maintained throughout the duration of the Contract and for a minimum of the end of the warranty (guarantee) period. If such professional design services are performed by a Subcontractor, and not by Contractor itself, then the requirements of this paragraph may be satisfied through the purchasing and maintenance of such insurance by such Subcontractor.
- I. *General provisions:* The policies of insurance required by this Paragraph 6.03 shall:
 - 1. include at least the specific coverages provided in this Article.
 - 2. be written for not less than the limits of liability provided in this Article and in the Supplementary Conditions, or required by Laws or Regulations, whichever is greater.
 - 3. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed, or renewal refused until at least 10 days prior written notice has been given to Contractor. Within three days of receipt of any such written notice, Contractor shall provide a copy of the notice to Owner, Engineer, and each other insured under the policy.
 - 4. remain in effect at least until the end of the warranty (guarantee) period and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract Documents.
 - 5. be appropriate for the Work being performed and provide protection from claims that may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed

by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable.

- J. *The coverage requirements for specific policies of insurance must be met by such policies, and not by reference to excess or umbrella insurance provided in other policies.*

6.04 *Owner's Liability Insurance*

- A. In addition to the insurance required to be provided by Contractor under Paragraph 6.03, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.
- B. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.

6.05 *Property Insurance*

- A. *Builder's Risk:* Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the full insurable replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:
 - 1. include the Owner and Contractor as named insureds, and all Subcontractors, and any individuals or entities required by the Supplementary Conditions to be insured under such builder's risk policy, as insureds or named insureds. For purposes of the remainder of this Paragraph 6.05, Paragraphs 6.06 and 6.07, and any corresponding Supplementary Conditions, the parties required to be insured shall collectively be referred to as "insureds."
 - 2. be written on a builder's risk "all risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire; lightning; windstorm; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; flood; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; water damage (other than that caused by flood); and such other perils or causes of loss as may be specifically required by the Supplementary Conditions. If insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; or flood, are not commercially available under builder's risk policies, by endorsement or otherwise, such insurance may be provided through other insurance policies acceptable to Owner and Contractor.
 - 3. cover, as insured property, at least the following: (a) the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner-furnished or assigned property; (b) spare parts inventory required within the scope of the Contract; and (c) temporary works which are not intended to form part of the permanent constructed Work but which are intended

to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, falsework, and temporary structures.

4. cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects).
 5. extend to cover damage or loss to insured property while in temporary storage at the Site or in a storage location outside the Site (but not including property stored at the premises of a manufacturer or Supplier).
 6. extend to cover damage or loss to insured property while in transit.
 7. allow for partial occupation or use of the Work by Owner, such that those portions of the Work that are not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
 8. allow for the waiver of the insurer's subrogation rights, as set forth below.
 9. provide primary coverage for all losses and damages caused by the perils or causes of loss covered.
 10. not include a co-insurance clause.
 11. include an exception for ensuing losses from physical damage or loss with respect to any defective workmanship, design, or materials exclusions.
 12. include performance/hot testing and start-up.
 13. be maintained in effect, subject to the provisions herein regarding Substantial Completion and partial occupancy or use of the Work by Owner, until the Work is complete.
- B. *Notice of Cancellation or Change:* All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 6.05 shall contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured.
- C. *Deductibles:* The purchaser of any required builder's risk or property insurance shall pay for costs not covered because of the application of a policy deductible.
- D. *Partial Occupancy or Use by Owner:* If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide notice of such occupancy or use to the builder's risk insurer. The builder's risk insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy; rather, those portions of the Work that are occupied or used by Owner may come off the builder's risk policy, while those portions of the Work not yet occupied or used by Owner shall remain covered by the builder's risk insurance.
- E. *Additional Insurance:* If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.05, it may do so at Contractor's expense.

- F. *Insurance of Other Property*: If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, such as tools, construction equipment, or other personal property owned by Contractor, a Subcontractor, or an employee of Contractor or a Subcontractor, then the entity or individual owning such property item shall be responsible for deciding whether to insure it, and if so in what amount.

6.06 *Waiver of Rights*

- A. All policies purchased in accordance with Paragraph 6.05, expressly including the builder's risk policy, shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any insureds thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors. Owner and Contractor waive all rights against each other and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Engineer, its consultants, all Subcontractors, all individuals or entities identified in the Supplementary Conditions as insureds, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.
- B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, for:
1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and
 2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06.
- C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 6.06.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them.
- D. Contractor shall be responsible for assuring that the agreement under which a Subcontractor performs a portion of the Work contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils

or causes of loss covered by builder's risk insurance and any other property insurance applicable to the Work.

6.07 *Receipt and Application of Property Insurance Proceeds*

- A. Any insured loss under the builder's risk and other policies of insurance required by Paragraph 6.05 will be adjusted and settled with the named insured that purchased the policy. Such named insured shall act as fiduciary for the other insureds and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.
- B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.05 shall distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.
- C. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the money so received applied on account thereof, and the Work and the cost thereof covered by Change Order, if needed.

ARTICLE 7—CONTRACTOR'S RESPONSIBILITIES

7.01 *Contractor's Means and Methods of Construction*

- A. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction.
- B. If the Contract Documents note, or Contractor determines, that professional engineering or other design services are needed to carry out Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures, or for Site safety, then Contractor shall cause such services to be provided by a properly licensed design professional, at Contractor's expense. Such services are not Owner-delegated professional design services under this Contract, and neither Owner nor Engineer has any responsibility with respect to (1) Contractor's determination of the need for such services, (2) the qualifications or licensing of the design professionals retained or employed by Contractor, (3) the performance of such services, or (4) any errors, omissions, or defects in such services.

7.02 *Supervision and Superintendence*

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents.
- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who will not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

7.03 *Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall maintain good discipline and order at the Site.
- B. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of Contractor's employees; of Suppliers and Subcontractors, and their employees; and of any other individuals or entities performing or furnishing any of the Work, just as Contractor is responsible for Contractor's own acts and omissions.
- C. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site will be performed during regular working hours, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent.

7.04 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
- B. All materials and equipment incorporated into the Work must be new and of good quality, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications will expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment must be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

7.05 *"Or Equals"*

- A. *Contractor's Request; Governing Criteria:* Whenever an item of equipment or material is specified or described in the Contract Documents by using the names of one or more proprietary items or specific Suppliers, the Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or equal" item is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material, or items from other proposed Suppliers, under the circumstances described below.
 - 1. If Engineer in its sole discretion determines that an item of equipment or material proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, Engineer will deem it an "or equal" item. For

the purposes of this paragraph, a proposed item of equipment or material will be considered functionally equal to an item so named if:

- a. in the exercise of reasonable judgment Engineer determines that the proposed item:
 - 1) is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
 - 2) will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole;
 - 3) has a proven record of performance and availability of responsive service; and
 - 4) is not objectionable to Owner.
 - b. Contractor certifies that, if the proposed item is approved and incorporated into the Work:
 - 1) there will be no increase in cost to the Owner or increase in Contract Times; and
 - 2) the item will conform substantially to the detailed requirements of the item named in the Contract Documents.
- B. *Contractor's Expense:* Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.
- C. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal," which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.
- D. *Effect of Engineer's Determination:* Neither approval nor denial of an "or-equal" request will result in any change in Contract Price. The Engineer's denial of an "or-equal" request will be final and binding and may not be reversed through an appeal under any provision of the Contract.
- E. *Treatment as a Substitution Request:* If Engineer determines that an item of equipment or material proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer consider the item a proposed substitute pursuant to Paragraph 7.06.

7.06 Substitutes

- A. *Contractor's Request; Governing Criteria:* Unless the specification or description of an item of equipment or material required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of equipment or material under the circumstances described below. To the extent possible such requests must be made before commencement of related construction at the Site.
1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for

review of proposed substitute items of equipment or material from anyone other than Contractor.

2. The requirements for review by Engineer will be as set forth in Paragraph 7.06.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.
3. Contractor shall make written application to Engineer for review of a proposed substitute item of equipment or material that Contractor seeks to furnish or use. The application:
 - a. will certify that the proposed substitute item will:
 - 1) perform adequately the functions and achieve the results called for by the general design;
 - 2) be similar in substance to the item specified; and
 - 3) be suited to the same use as the item specified.
 - b. will state:
 - 1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times;
 - 2) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and
 - 3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.
 - c. will identify:
 - 1) all variations of the proposed substitute item from the item specified; and
 - 2) available engineering, sales, maintenance, repair, and replacement services.
 - d. will contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.
- B. *Engineer's Evaluation and Determination:* Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.
- C. *Special Guarantee:* Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.

- D. *Reimbursement of Engineer's Cost:* Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.
- E. *Contractor's Expense:* Contractor shall provide all data in support of any proposed substitute at Contractor's expense.
- F. *Effect of Engineer's Determination:* If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request will be final and binding and may not be reversed through an appeal under any provision of the Contract. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.06.D, by timely submittal of a Change Proposal.

7.07 *Concerning Subcontractors and Suppliers*

- A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner. The Contractor's retention of a Subcontractor or Supplier for the performance of parts of the Work will not relieve Contractor's obligation to Owner to perform and complete the Work in accordance with the Contract Documents.
- B. Contractor shall retain specific Subcontractors and Suppliers for the performance of designated parts of the Work if required by the Contract to do so.
- C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor or Supplier to furnish or perform any of the Work against which Contractor has reasonable objection.
- D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within 10 days.
- E. Owner may require the replacement of any Subcontractor or Supplier. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors or Suppliers for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor or Supplier so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor or Supplier.
- F. If Owner requires the replacement of any Subcontractor or Supplier retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, with respect to the replacement; and Contractor shall

initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.

- G. No acceptance by Owner of any such Subcontractor or Supplier, whether initially or as a replacement, will constitute a waiver of the right of Owner to the completion of the Work in accordance with the Contract Documents.
- H. On a monthly basis, Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.
- I. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors and Suppliers.
- J. The divisions and sections of the Specifications and the identifications of any Drawings do not control Contractor in dividing the Work among Subcontractors or Suppliers, or in delineating the Work to be performed by any specific trade.
- K. All Work performed for Contractor by a Subcontractor or Supplier must be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract for the benefit of Owner and Engineer.
- L. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor for Work performed for Contractor by the Subcontractor or Supplier.
- M. Contractor shall restrict all Subcontractors and Suppliers from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed in this Contract.
- N. Nothing in the Contract Documents:
 - shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier, or other individual or entity; nor
 - shall create any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

7.08 *Patent Fees and Royalties*

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If an invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights will be disclosed in the Contract Documents.
- B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising out of or

relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.

- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

7.09 *Permits*

- A. Unless otherwise provided in the Contract Documents, Contractor shall obtain and pay for all construction permits, licenses, and certificates of occupancy. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

7.10 *Taxes*

- A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

7.11 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work or other action. It is not Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this does not relieve Contractor of its obligations under Paragraph 3.03.
- C. Owner or Contractor may give written notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having

an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such written notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

7.12 *Record Documents*

- A. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

7.13 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations.
- B. Contractor shall designate a qualified and experienced safety representative whose duties and responsibilities are the prevention of Work-related accidents and the maintenance and supervision of safety precautions and programs.
- C. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
 - 1. all persons on the Site or who may be affected by the Work;
 - 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 - 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- D. All damage, injury, or loss to any property referred to in Paragraph 7.13.C.2 or 7.13.C.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
- E. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection.

- F. Contractor shall notify Owner; the owners of adjacent property; the owners of Underground Facilities and other utilities (if the identity of such owners is known to Contractor); and other contractors and utility owners performing work at or adjacent to the Site, in writing, when Contractor knows that prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.
- G. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. Any Owner's safety programs that are applicable to the Work are identified or included in the Supplementary Conditions or Specifications.
- H. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
- I. Contractor's duties and responsibilities for safety and protection will continue until all the Work is completed, Engineer has issued a written notice to Owner and Contractor in accordance with Paragraph 15.06.C that the Work is acceptable, and Contractor has left the Site (except as otherwise expressly provided in connection with Substantial Completion).
- J. Contractor's duties and responsibilities for safety and protection will resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.14 *Hazard Communication Programs*

- A. Contractor shall be responsible for coordinating any exchange of safety data sheets (formerly known as material safety data sheets) or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 *Emergencies*

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused by an emergency or are required as a result of Contractor's response to an emergency. If Engineer determines that a change in the Contract Documents is required because of an emergency or Contractor's response, a Work Change Directive or Change Order will be issued.

7.16 *Submittals*

A. *Shop Drawing and Sample Requirements*

- 1. Before submitting a Shop Drawing or Sample, Contractor shall:
 - a. review and coordinate the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
 - b. determine and verify:
 - 1) all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect to the Submittal;

- 2) the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - 3) all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto;
- c. confirm that the Submittal is complete with respect to all related data included in the Submittal.
2. Each Shop Drawing or Sample must bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that Submittal, and that Contractor approves the Submittal.
 3. With each Shop Drawing or Sample, Contractor shall give Engineer specific written notice of any variations that the Submittal may have from the requirements of the Contract Documents. This notice must be set forth in a written communication separate from the Submittal; and, in addition, in the case of a Shop Drawing by a specific notation made on the Shop Drawing itself.
- B. *Submittal Procedures for Shop Drawings and Samples:* Contractor shall label and submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals.
1. *Shop Drawings*
 - a. Contractor shall submit the number of copies required in the Specifications.
 - b. Data shown on the Shop Drawings must be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide, and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.C.
 2. *Samples*
 - a. Contractor shall submit the number of Samples required in the Specifications.
 - b. Contractor shall clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the Submittal for the limited purposes required by Paragraph 7.16.C.
 3. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.
- C. *Engineer's Review of Shop Drawings and Samples*
1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the accepted Schedule of Submittals. Engineer's review and approval will be only to determine if the items covered by the Submittals will, after installation or incorporation in the Work, comply with the requirements of the Contract Documents, and be

compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction, or to safety precautions or programs incident thereto.
3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
4. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 7.16.A.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer will document any such approved variation from the requirements of the Contract Documents in a Field Order or other appropriate Contract modification.
5. Engineer's review and approval of a Shop Drawing or Sample will not relieve Contractor from responsibility for complying with the requirements of Paragraphs 7.16.A and B.
6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, will not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.
7. Neither Engineer's receipt, review, acceptance, or approval of a Shop Drawing or Sample will result in such item becoming a Contract Document.
8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.C.4.

D. Resubmittal Procedures for Shop Drawings and Samples

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous Submittals.
2. Contractor shall furnish required Shop Drawing and Sample submittals with sufficient information and accuracy to obtain required approval of an item with no more than two resubmittals. Engineer will record Engineer's time for reviewing a third or subsequent resubmittal of a Shop Drawing or Sample, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges.
3. If Contractor requests a change of a previously approved Shop Drawing or Sample, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

E. *Submittals Other than Shop Drawings, Samples, and Owner-Delegated Designs*

1. The following provisions apply to all Submittals other than Shop Drawings, Samples, and Owner-delegated designs:
 - a. Contractor shall submit all such Submittals to the Engineer in accordance with the Schedule of Submittals and pursuant to the applicable terms of the Contract Documents.
 - b. Engineer will provide timely review of all such Submittals in accordance with the Schedule of Submittals and return such Submittals with a notation of either Accepted or Not Accepted. Any such Submittal that is not returned within the time established in the Schedule of Submittals will be deemed accepted.
 - c. Engineer's review will be only to determine if the Submittal is acceptable under the requirements of the Contract Documents as to general form and content of the Submittal.
 - d. If any such Submittal is not accepted, Contractor shall confer with Engineer regarding the reason for the non-acceptance and resubmit an acceptable document.
 2. Procedures for the submittal and acceptance of the Progress Schedule, the Schedule of Submittals, and the Schedule of Values are set forth in Paragraphs 2.03, 2.04, and 2.05.
- F. Owner-delegated Designs: Submittals pursuant to Owner-delegated designs are governed by the provisions of Paragraph 7.19.

7.17 *Contractor's General Warranty and Guarantee*

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer is entitled to rely on Contractor's warranty and guarantee.
- B. Owner's rights under this warranty and guarantee are in addition to, and are not limited by, Owner's rights under the correction period provisions of Paragraph 15.08. The time in which Owner may enforce its warranty and guarantee rights under this Paragraph 7.17 is limited only by applicable Laws and Regulations restricting actions to enforce such rights; provided, however, that after the end of the correction period under Paragraph 15.08:
 1. Owner shall give Contractor written notice of any defective Work within 60 days of the discovery that such Work is defective; and
 2. Such notice will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the notice.
- C. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
 1. abuse, or improper modification, maintenance, or operation, by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 2. normal wear and tear under normal usage.
- D. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents is absolute. None of the following will constitute an acceptance of Work that is

not in accordance with the Contract Documents, a release of Contractor's obligation to perform the Work in accordance with the Contract Documents, or a release of Owner's warranty and guarantee rights under this Paragraph 7.17:

1. Observations by Engineer;
 2. Recommendation by Engineer or payment by Owner of any progress or final payment;
 3. The issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
 4. Use or occupancy of the Work or any part thereof by Owner;
 5. Any review and approval of a Shop Drawing or Sample submittal;
 6. The issuance of a notice of acceptability by Engineer;
 7. The end of the correction period established in Paragraph 15.08;
 8. Any inspection, test, or approval by others; or
 9. Any correction of defective Work by Owner.
- E. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract will govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 Indemnification

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, from losses, damages, costs, and judgments (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) arising from third-party claims or actions relating to or resulting from the performance or furnishing of the Work, provided that any such claim, action, loss, cost, judgment or damage is attributable to bodily injury, sickness, disease, or death, or to damage to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable.
- B. In any and all claims against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 7.18.A will not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

7.19 *Delegation of Professional Design Services*

- A. Owner may require Contractor to provide professional design services for a portion of the Work by express delegation in the Contract Documents. Such delegation will specify the performance and design criteria that such services must satisfy, and the Submittals that Contractor must furnish to Engineer with respect to the Owner-delegated design.
- B. Contractor shall cause such Owner-delegated professional design services to be provided pursuant to the professional standard of care by a properly licensed design professional, whose signature and seal must appear on all drawings, calculations, specifications, certifications, and Submittals prepared by such design professional. Such design professional must issue all certifications of design required by Laws and Regulations.
- C. If a Shop Drawing or other Submittal related to the Owner-delegated design is prepared by Contractor, a Subcontractor, or others for submittal to Engineer, then such Shop Drawing or other Submittal must bear the written approval of Contractor's design professional when submitted by Contractor to Engineer.
- D. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy, and completeness of the services, certifications, and approvals performed or provided by the design professionals retained or employed by Contractor under an Owner-delegated design, subject to the professional standard of care and the performance and design criteria stated in the Contract Documents.
- E. Pursuant to this Paragraph 7.19, Engineer's review, approval, and other determinations regarding design drawings, calculations, specifications, certifications, and other Submittals furnished by Contractor pursuant to an Owner-delegated design will be only for the following limited purposes:
 - 1. Checking for conformance with the requirements of this Paragraph 7.19;
 - 2. Confirming that Contractor (through its design professionals) has used the performance and design criteria specified in the Contract Documents; and
 - 3. Establishing that the design furnished by Contractor is consistent with the design concept expressed in the Contract Documents.
- F. Contractor shall not be responsible for the adequacy of performance or design criteria specified by Owner or Engineer.
- G. Contractor is not required to provide professional services in violation of applicable Laws and Regulations.

ARTICLE 8—OTHER WORK AT THE SITE

8.01 *Other Work*

- A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.

- B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any third-party utility work that Owner has arranged to take place at or adjacent to the Site, Owner shall provide such information to Contractor.
- C. Contractor shall afford proper and safe access to the Site to each contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work.
- D. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.
- E. If the proper execution or results of any part of Contractor's Work depends upon work performed by others, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.
- F. The provisions of this article are not applicable to work that is performed by third-party utilities or other third-party entities without a contract with Owner, or that is performed without having been arranged by Owner. If such work occurs, then any related delay, disruption, or interference incurred by Contractor is governed by the provisions of Paragraph 4.05.C.3.

8.02 *Coordination*

- A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions, Section 1 of the Project Manual, or provided to Contractor prior to the start of any such other work:
 - 1. The identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;
 - 2. An itemization of the specific matters to be covered by such authority and responsibility; and
 - 3. The extent of such authority and responsibilities.
- B. Unless otherwise provided in Section 1 of the Project Manual, Owner shall have sole authority and responsibility for such coordination.

8.03 *Legal Relationships*

- A. If, in the course of performing other work for Owner at or adjacent to the Site, the Owner's employees, any other contractor working for Owner, or any utility owner that Owner has arranged to perform work, causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment will take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract, and any remedies available to Contractor under Laws or Regulations concerning utility action or inaction. When applicable, any such equitable adjustment in Contract Price will be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. Contractor's entitlement to an adjustment of the Contract Times or Contract Price is subject to the provisions of Paragraphs 4.05.D and 4.05.E.
- B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site.
 - 1. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this Paragraph 8.03.B.
 - 2. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due Contractor.
- C. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or

arbitration or other dispute resolution costs) arising out of or relating to such damage, delay, disruption, or interference.

ARTICLE 9—OWNER’S RESPONSIBILITIES

9.01 *Communications to Contractor*

- A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

9.02 *Replacement of Engineer*

- A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer’s status under the Contract Documents will be that of the former Engineer.

9.03 *Furnish Data*

- A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

9.04 *Pay When Due*

- A. Owner shall make payments to Contractor in accordance with Paragraph 15.01 D.

9.05 *Lands and Easements; Reports, Tests, and Drawings*

- A. Owner’s duties with respect to providing lands and easements are set forth in Paragraph 5.01.
- B. Owner’s duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.
- C. Article 5 refers to Owner’s identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

9.06 *Insurance*

- A. Owner’s responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.

9.07 *Change Orders*

- A. Owner’s responsibilities with respect to Change Orders are set forth in Article 11.

9.08 *Inspections, Tests, and Approvals*

- A. Owner’s responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

9.09 *Limitations on Owner’s Responsibilities*

- A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor’s means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor’s failure to perform the Work in accordance with the Contract Documents.

9.10 *Undisclosed Hazardous Environmental Condition*

- A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.11 *Evidence of Financial Arrangements*

- A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract (including obligations under proposed changes in the Work).

9.12 *Safety Programs*

- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
- B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 10—ENGINEER'S STATUS DURING CONSTRUCTION

10.01 *Owner's Representative*

- A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract.

10.02 *Visits to Site*

- A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe, as an experienced and qualified design professional, the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 10.07. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work, Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

10.03 *Resident Project Representative*

- A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the

responsibilities thereof will be as provided in the Supplementary Conditions and in Paragraph 10.07.

- B. If Owner designates an individual or entity who is not Engineer's consultant, agent, or employee to represent Owner at the Site, then the responsibilities and authority of such individual or entity will be as provided in the Supplementary Conditions.

10.04 *Engineer's Authority*

- A. Engineer has the authority to reject Work in accordance with Article 14.
- B. Engineer's authority as to Submittals is set forth in Paragraph 7.16.
- C. Engineer's authority as to design drawings, calculations, specifications, certifications and other Submittals from Contractor in response to Owner's delegation (if any) to Contractor of professional design services, is set forth in Paragraph 7.19.
- D. Engineer's authority as to changes in the Work is set forth in Article 11.
- E. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.05 *Determinations for Unit Price Work*

- A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

10.06 *Decisions on Requirements of Contract Documents and Acceptability of Work*

- A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.07 *Limitations on Engineer's Authority and Responsibilities*

- A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, will create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation, and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of

inspection, tests and approvals, and other documentation required to be delivered by Contractor under Paragraph 15.06.A, will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals, that the results certified indicate compliance with the Contract Documents.

- E. The limitations upon authority and responsibility set forth in this Paragraph 10.07 also apply to the Resident Project Representative, if any.

10.08 *Compliance with Safety Program*

- A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs of which Engineer has been informed.

ARTICLE 11—CHANGES TO THE CONTRACT

11.01 *Amending and Supplementing the Contract*

- A. The Contract may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.
- B. If an amendment or supplement to the Contract includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order.
- C. All changes to the Contract that involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, must be supported by Engineer's recommendation. Owner and Contractor may amend other terms and conditions of the Contract without the recommendation of the Engineer.

11.02 *Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders covering:
 - 1. Changes in Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
 - 2. Changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;
 - 3. Changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.05, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters; and
 - 4. Changes that embody the substance of any final and binding results under: Paragraph 11.03.B, resolving the impact of a Work Change Directive; Paragraph 11.09, concerning Change Proposals; Article 12, Claims; Paragraph 13.02.D, final adjustments resulting from allowances; Paragraph 13.03.D, final adjustments relating to determination of quantities for Unit Price Work; and similar provisions.

- B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of Paragraph 11.02.A, it will be deemed to be of full force and effect, as if fully executed.

11.03 *Work Change Directives*

- A. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.07 regarding change of Contract Price.
- B. If Owner has issued a Work Change Directive and:
 - 1. Contractor believes that an adjustment in Contract Times or Contract Price is necessary, then Contractor shall submit any Change Proposal seeking such an adjustment no later than 30 days after the completion of the Work set out in the Work Change Directive.
 - 2. Owner believes that an adjustment in Contract Times or Contract Price is necessary, then Owner shall submit any Claim seeking such an adjustment no later than 60 days after issuance of the Work Change Directive.

11.04 *Field Orders*

- A. Engineer may authorize minor changes in the Work if the changes do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly.
- B. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.05 *Owner-Authorized Changes in the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work. Changes involving the design (as set forth in the Drawings, Specifications, or otherwise) or other engineering or technical matters will be supported by Engineer's recommendation.
- B. Such changes in the Work may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work must be performed under the applicable conditions of the Contract Documents.
- C. Nothing in this Paragraph 11.05 obligates Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.06 *Unauthorized Changes in the Work*

- A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents, as amended, modified, or supplemented, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.C.2.

11.07 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment of Contract Price must comply with the provisions of Article 12.
- B. An adjustment in the Contract Price will be determined as follows:
 - 1. Where the Work involved is covered by unit prices contained in the Contract Documents, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03);
 - 2. Where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.07.C.2); or
 - 3. Where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.07.C).
- C. *Contractor's Fee:* When applicable, the Contractor's fee for overhead and profit will be determined as follows:
 - 1. A mutually acceptable fixed fee; or
 - 2. If a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. For costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2, the Contractor's fee will be 15 percent;
 - b. For costs incurred under Paragraph 13.01.B.3, the Contractor's fee will be 5 percent;
 - c. Where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 11.07.C.2.a and 11.07.C.2.b is that the Contractor's fee will be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.B.1 and 13.01.B.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of 5 percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted Work the maximum total fee to be paid by Owner will be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the Work;

- d. No fee will be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;
- e. The amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in Cost of the Work will be the amount of the actual net decrease in Cost of the Work and a deduction of an additional amount equal to 5 percent of such actual net decrease in Cost of the Work; and
- f. When both additions and credits are involved in any one change or Change Proposal, the adjustment in Contractor's fee will be computed by determining the sum of the costs in each of the cost categories in Paragraph 13.01.B (specifically, payroll costs, Paragraph 13.01.B.1; incorporated materials and equipment costs, Paragraph 13.01.B.2; Subcontract costs, Paragraph 13.01.B.3; special consultants costs, Paragraph 13.01.B.4; and other costs, Paragraph 13.01.B.5) and applying to each such cost category sum the appropriate fee from Paragraphs 11.07.C.2.a through 11.07.C.2.e, inclusive.

11.08 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times must comply with the provisions of Paragraph 11.09. Any Claim for an adjustment in the Contract Times must comply with the provisions of Article 12.
- B. Delay, disruption, and interference in the Work, and any related changes in Contract Times, are addressed in and governed by Paragraph 4.05.

11.09 *Change Proposals*

- A. *Purpose and Content:* Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; contest an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; challenge a set-off against payment due; or seek other relief under the Contract. The Change Proposal will specify any proposed change in Contract Times or Contract Price, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents. Each Change Proposal will address only one issue, or a set of closely related issues.
- B. *Change Proposal Procedures*
 - 1. *Submittal:* Contractor shall submit each Change Proposal to Engineer within 30 days after the start of the event giving rise thereto, or after such initial decision.
 - 2. *Supporting Data:* The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal.
 - a. Change Proposals based on or related to delay, interruption, or interference must comply with the provisions of Paragraphs 4.05.D and 4.05.E.
 - b. Change proposals related to a change of Contract Price must include full and detailed accounts of materials incorporated into the Work and labor and equipment used for the subject Work.

The supporting data must be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event.

3. *Engineer's Initial Review:* Engineer will advise Owner regarding the Change Proposal and consider any comments or response from Owner regarding the Change Proposal. If in its discretion Engineer concludes that additional supporting data is needed before conducting a full review and making a decision regarding the Change Proposal, then Engineer may request that Contractor submit such additional supporting data by a date specified by Engineer, prior to Engineer beginning its full review of the Change Proposal.
 4. *Engineer's Full Review and Action on the Change Proposal:* Upon receipt of Contractor's supporting data (including any additional data requested by Engineer), Engineer will conduct a full review of each Change Proposal and, within 30 days after such receipt of the Contractor's supporting data, either approve the Change Proposal in whole, deny it in whole, or approve it in part and deny it in part. Such actions must be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.
 5. *Binding Decision:* Engineer's decision is final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.
- C. *Resolution of Certain Change Proposals:* If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties in writing that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice will be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.
- D. *Post-Completion:* Contractor shall not submit any Change Proposals after Engineer issues a written recommendation of final payment pursuant to Paragraph 15.06.B.

11.10 *Notification to Surety*

- A. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

ARTICLE 12—CLAIMS

12.01 *Claims*

- A. *Claims Process:* The following disputes between Owner and Contractor are subject to the Claims process set forth in this article:
1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;

2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents;
 3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters; and
 4. Subject to the waiver provisions of Paragraph 15.07, any dispute arising after Engineer has issued a written recommendation of final payment pursuant to Paragraph 15.06.B.
- B. *Submittal of Claim:* The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim rests with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.
- C. *Review and Resolution:* The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim will be stated in writing and submitted to the other party, with a copy to Engineer.
- D. *Mediation*
1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate will stay the Claim submittal and response process.
 2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process will resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim submittal and decision process will resume as of the date of the conclusion of the mediation, as determined by the mediator.
 3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.
- E. *Partial Approval:* If the party receiving a Claim approves the Claim in part and denies it in part, such action will be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.
- F. *Denial of Claim:* If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim will be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.

- G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim will be incorporated in a Change Order or other written document to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13—COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 Cost of the Work

- A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:
1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or
 2. When needed to determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.
- B. *Costs Included*: Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work will be in amounts no higher than those commonly incurred in the locality of the Project, will not include any of the costs itemized in Paragraph 13.01.C, and will include only the following items:
1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor in advance of the subject Work. Such employees include, without limitation, superintendents, foremen, safety managers, safety representatives, and other personnel employed full time on the Work. Payroll costs for employees not employed full time on the Work will be apportioned on the basis of their time spent on the Work. Payroll costs include, but are not limited to, salaries and wages plus the cost of fringe benefits, which include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, sick leave, and vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, will be included in the above to the extent authorized by Owner.
 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts will accrue to Owner. All trade discounts, rebates, and refunds and returns from sale of surplus materials and equipment will accrue to Owner, and Contractor shall make provisions so that they may be obtained.
 3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors

acceptable to Owner and Contractor and shall deliver such bids to Owner, which will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee will be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 13.01.

4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed or retained for services specifically related to the Work.
5. Other costs consisting of the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
 - 1) In establishing included costs for materials such as scaffolding, plating, or sheeting, consideration will be given to the actual or the estimated life of the material for use on other projects; or rental rates may be established on the basis of purchase or salvage value of such items, whichever is less. Contractor will not be eligible for compensation for such items in an amount that exceeds the purchase cost of such item.
 - c. *Construction Equipment Rental*

Rentals of all construction equipment and machinery, and the parts thereof, whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
 - d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
 - e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
 - f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of builder's risk or other property insurance established in accordance with Paragraph 6.04), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses include settlements made with the written consent and approval of Owner. No such

losses, damages, and expenses will be included in the Cost of the Work for the purpose of determining Contractor's fee.

- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.
- i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.

C. *Costs Excluded*: The term Cost of the Work does not include any of the following items:

- 1. Payroll costs and other compensation of Contractor's officers, executives, principals, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here are to be considered administrative costs covered by the Contractor's fee.
- 2. The cost of purchasing, renting, or furnishing small tools and hand tools.
- 3. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
- 4. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
- 5. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
- 6. Expenses incurred in preparing and advancing Claims.
- 7. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 13.01.B.

D. *Contractor's Fee*

- 1. When the Work as a whole is performed on the basis of cost-plus-a-fee, then:
 - a. Contractor's fee for the Work set forth in the Contract Documents as of the Effective Date of the Contract will be determined as set forth in the Agreement.
 - b. for any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work, Contractor's fee will be determined as follows:
 - 1) When the fee for the Work as a whole is a percentage of the Cost of the Work, the fee will automatically adjust as the Cost of the Work changes.
 - 2) When the fee for the Work as a whole is a fixed fee, the fee for any additions or deletions will be determined in accordance with Paragraph 11.07.C.2.

2. When the Work as a whole is performed on the basis of a stipulated sum, or any other basis other than cost-plus-a-fee, then Contractor's fee for any Work covered by a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price on the basis of Cost of the Work will be determined in accordance with Paragraph 11.07.C.2.
- E. *Documentation and Audit*: Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, Contractor and pertinent Subcontractors shall establish and maintain records of the costs in accordance with generally accepted accounting practices. Subject to prior written notice, Owner will be afforded reasonable access, during normal business hours, to all Contractor's accounts, records, books, correspondence, instructions, drawings, receipts, vouchers, memoranda, and similar data relating to the Cost of the Work and Contractor's fee. Contractor shall preserve all such documents for a period of three years after the final payment by Owner. Pertinent Subcontractors will afford such access to Owner, and preserve such documents, to the same extent required of Contractor.

13.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.
- B. *Cash Allowances*: Contractor agrees that:
 1. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 2. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment for any of the foregoing will be valid.
- C. *Owner's Contingency Allowance*: Contractor agrees that an Owner's contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor for Work covered by allowances, and the Contract Price will be correspondingly adjusted.

13.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Payments to Contractor for Unit Price Work will be based on actual quantities.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary

determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, and the final adjustment of Contract Price will be set forth in a Change Order, subject to the provisions of the following paragraph.

E. *Adjustments in Unit Price*

Within 30 days of Engineer's written decision under the preceding paragraph, Contractor may submit a Change Proposal, or Owner may file a Claim, seeking an adjustment in the Contract Price if:

the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement;

there is no corresponding adjustment with respect to any other item of Work; and

Contractor believes that it is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price, and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 14—TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK

14.01 *Access to Work*

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and authorities having jurisdiction have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's safety procedures and programs so that they may comply with such procedures and programs as applicable.

14.02 *Tests, Inspections, and Approvals*

- A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.
- B. This item intentionally deleted from these General Conditions. Section 2 – Testing and Control of Materials in the Specifications covers this subject.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.
- D. Contractor shall be responsible for arranging, obtaining, and paying for all inspections and tests required:
 - 1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;

2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;
3. by manufacturers of equipment furnished under the Contract Documents;
4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and
5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests will be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

- E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.
- F. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering will be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 *Defective Work*

- A. *Contractor's Obligation:* It is Contractor's obligation to assure that the Work is not defective.
- B. *Engineer's Authority:* Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. *Notice of Defects:* Prompt written notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. *Correction, or Removal and Replacement:* Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.
- E. *Preservation of Warranties:* When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. *Costs and Damages:* In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work will be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 *Uncovering Work*

- A. Engineer has the authority to require additional inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.
- B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.
- C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, and provide all necessary labor, material, and equipment.
 - 1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.
 - 2. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 *Owner May Stop the Work*

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work will not give rise to any duty on the part of Owner to exercise this

right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

14.07 Owner May Correct Defective Work

- A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace defective Work as required by Engineer, then Owner may, after 7 days' written notice to Contractor, correct or remedy any such deficiency.
- B. In exercising the rights and remedies under this Paragraph 14.07, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this paragraph.
- C. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.
- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 14.07.

ARTICLE 15—PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 Progress Payments

- A. *Basis for Progress Payments:* The Schedule of Values established as provided in Article 2 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments for Unit Price Work will be based on the number of units completed during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.
- B. *Applications for Payments*
 - 1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents.
 - 2. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment must also be accompanied by: (a) a bill of sale, invoice, copies of subcontract or purchase order payments, or other documentation establishing full payment by Contractor for the materials and equipment; (b) at Owner's request, documentation warranting that Owner has received the materials and

equipment free and clear of all Liens; and (c) evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

3. Beginning with the second Application for Payment, each Application must include an affidavit of Contractor stating that all previous progress payments received by Contractor have been applied to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
4. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

C. Review of Applications

1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
 - a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and any other qualifications stated in the recommendation); and
 - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract; or
 - b. there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
 - a. to supervise, direct, or control the Work;
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto;
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work;
 - d. to make any examination to ascertain how or for what purposes Contractor has used the money paid by Owner; or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 15.01.C.2.
6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:
 - a. the Work is defective, requiring correction or replacement;
 - b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or
 - e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.

D. *Payment Becomes Due*

1. The Owner will make payments promptly as funds for such payments become available from funding agencies or as otherwise agreed.

E. *Reductions in Payment by Owner*

1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:
 - a. Claims have been made against Owner based on Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages resulting from Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;
 - b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;

- c. Contractor has failed to provide and maintain required bonds or insurance;
 - d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;
 - e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;
 - f. The Work is defective, requiring correction or replacement;
 - g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;
 - h. The Contract Price has been reduced by Change Orders;
 - i. An event has occurred that would constitute a default by Contractor and therefore justify a termination for cause;
 - j. Liquidated or other damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;
 - k. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens; or
 - l. Other items entitle Owner to a set-off against the amount recommended.
2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, if Contractor remedies the reasons for such action. The reduction imposed will be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.
 3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld will be treated as an amount due as determined by Paragraph 15.01.D.1 and subject to interest as provided in the Agreement.

15.02 *Contractor's Warranty of Title*

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than 7 days after the time of payment by Owner.

15.03 *Substantial Completion*

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete and request that Engineer issue a notice of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.

- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner and Contractor a preliminary notice of Substantial Completion which will fix the date of Substantial Completion. Engineer shall attach to the notice a punch list of items to be completed or corrected before final payment. Owner shall have 7 days after receipt of the preliminary notice during which to make written objection to Engineer as to any provisions of the notice or attached punch list. If, after considering the objections to the provisions of the preliminary notice, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary notice to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the notice, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final notice of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary notice as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of receipt of the preliminary notice of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.
- E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.
- F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 *Partial Use or Occupancy*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any part of the Work which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work.

15.05 *Final Inspection*

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or

agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 *Final Payment*

A. Application for Payment

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents (as provided in Paragraph 7.12), and other documents, Contractor may make application for final payment.
 2. The final Application for Payment must be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents;
 - b. consent of the surety, if any, to final payment;
 - c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects or will so pass upon final payment.
 - d. a list of all duly pending Change Proposals and Claims; and
 - e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.
 3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.
- B. Engineer's Review of Final Application and Recommendation of Payment:* If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract have been fulfilled, Engineer will, within 10 days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the final Application for Payment to Owner for payment. Such recommendation will account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

- C. *Notice of Acceptability*: In support of its recommendation of payment of the final Application for Payment, Engineer will also give written notice to Owner and Contractor that the Work is acceptable, subject to stated limitations in the notice and to the provisions of Paragraph 15.07.
- D. *Completion of Work*: The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment.
- E. *Final Payment Becomes Due*: Upon receipt from Engineer of the final Application for Payment and accompanying documentation, Owner shall set off against the amount recommended by Engineer for final payment any further sum to which Owner is entitled, including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions of this Contract with respect to progress payments. Owner shall pay the resulting balance due to Contractor.

15.07 *Waiver of Claims*

- A. The making of final payment will not constitute a waiver by Owner of claims or rights against Contractor. Owner expressly reserves claims and rights arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 15.05, from Contractor's failure to comply with the Contract Documents or the terms of any special guarantees specified therein, from outstanding Claims by Owner, or from Contractor's continuing obligations under the Contract Documents.
- B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted as a Claim or appealed under the provisions of Article 17.

15.08 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the Supplementary Conditions or the terms of any applicable special guarantee required by the Contract Documents), Owner gives Contractor written notice that any Work has been found to be defective, or that Contractor's repair of any damages to the Site or adjacent areas has been found to be defective, then after receipt of such notice of defect Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 1. correct the defective repairs to the Site or such adjacent areas;
 2. correct such defective Work;
 3. remove the defective Work from the Project and replace it with Work that is not defective, if the defective Work has been rejected by Owner, and
 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others, or to other land or areas resulting from the corrective measures.
- B. Owner shall give written notice that such Work or repairs is defective. If such notice is given within such 60 days but after the end of the correction period, the notice will be deemed a notice of defective Work under Paragraph 7.17.B.
- C. If, after receipt of a notice of defect within 60 days and within the correction period, Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the

- defective Work corrected or repaired or may have the rejected Work removed and replaced. Contractor shall pay all costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others). Contractor's failure to pay such costs, losses, and damages within 10 days of invoice from Owner will be deemed the start of an event giving rise to a Claim under Paragraph 12.01.B, such that any related Claim must be brought within 30 days of the failure to pay.
- D. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
 - E. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this paragraph, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.
 - F. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph are not to be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16—SUSPENSION OF WORK AND TERMINATION

16.01 *Owner May Suspend Work*

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times directly attributable to any such suspension. Any Change Proposal seeking such adjustments must be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 *Owner May Terminate for Cause*

- A. The occurrence of any one or more of the following events will constitute a default by Contractor and justify termination for cause:
 - 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment, or failure to adhere to the Progress Schedule);
 - 2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;
 - 3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or
 - 4. Contractor's repeated disregard of the authority of Owner or Engineer.

- B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) 10 days' written notice that Owner is considering a declaration that Contractor is in default and termination of the Contract, Owner may proceed to:
 - 1. declare Contractor to be in default, and give Contractor (and any surety) written notice that the Contract is terminated; and
 - 2. enforce the rights available to Owner under any applicable performance bond.
- C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.
- D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within 7 days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- E. If Owner proceeds as provided in Paragraph 16.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses, and damages exceeds such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this paragraph, Owner shall not be required to obtain the lowest price for the Work performed.
- F. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.
- G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond will govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 *Owner May Terminate for Convenience*

- A. Upon 7 days' written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 - 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
 - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in

connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and

3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid for any loss of anticipated profits or revenue, post-termination overhead costs, or other economic loss arising out of or resulting from such termination.

16.04 Contractor May Stop Work or Terminate

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) Owner fails to pay the Contractor as provided by Paragraph 15.01.D, then Contractor may, upon 7 days' written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the contract and recover from Owner payment on the same terms as provided in Paragraph 16.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed to pay the Contractor as provided by Paragraph 15.01.D, Contractor may, 7 days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this paragraph are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17—FINAL RESOLUTION OF DISPUTES

17.01 Methods and Procedures

- A. *Disputes Subject to Final Resolution:* The following disputed matters are subject to final resolution under the provisions of this article:
1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full, pursuant to Article 12; and
 2. Disputes between Owner and Contractor concerning the Work, or obligations under the Contract Documents, that arise after final payment has been made.
- B. *Final Resolution of Disputes:* For any dispute subject to resolution under this article, Owner or Contractor may:
1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions;
 2. agree with the other party to submit the dispute to another dispute resolution process; or
 3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

ARTICLE 18—MISCELLANEOUS

18.01 *Giving Notice*

- A. Whenever any provision of the Contract requires the giving of written notice to Owner, Engineer, or Contractor, it will be deemed to have been validly given only if delivered:
 - 1. in person, by a commercial courier service or otherwise, to the recipient's place of business;
 - 2. by registered or certified mail, postage prepaid, to the recipient's place of business; or
 - 3. by e-mail to the recipient.

18.02 *Computation of Times*

- A. When any period of time is referred to in the Contract by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

18.03 *Cumulative Remedies*

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

18.04 *Limitation of Damages*

- A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 *No Waiver*

- A. A party's non-enforcement of any provision will not constitute a waiver of that provision, nor will it affect the enforceability of that provision or of the remainder of this Contract.

18.06 *Survival of Obligations*

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination of the Contract or of the services of Contractor.

18.07 *Controlling Law*

- A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 *Assignment of Contract*

- A. Unless expressly agreed to elsewhere in the Contract, no assignment by a party to this Contract of any rights under or interests in the Contract will be binding on the other party without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract.

18.09 *Successors and Assigns*

- A. Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

18.10 *Headings*

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

SUPPLEMENTARY CONDITIONS
STATE OF TENNESSEE

1. Subsurface and Physical Conditions (Article 5.03)

As provided by Article 5.03 (page 15) of the General Conditions, subsurface conditions are unknown unless a Geotechnical Report is included at the end of Section 1 of the Detailed Specifications.

2. Hazardous Environmental Condition at Site (Article 5.06)

Neither the Owner nor the Engineer is aware of any hazardous environmental conditions on this project, however no specific examinations have been performed unless a report of such conditions is included in Section 1 of the Detailed Specifications.

3. Safety and Protection (Article 7.13)

Article 7.13 G refers to an Owner Safety Program, if any. If such program is known to exist to the Engineer, it will be identified in Section 1 of the Detailed Specifications.

4. Coordination (Article 8.02)

Section 1 of the Detailed Specifications and/or the Plans will show any other contracts or contractors which will interface with this work.

5. Progress Payments (Article 15.01)

Article 15.01 (page 61) is hereby amended to allow the Owner 30 days after receipt of the Engineer's approved Application for Payment (also known as Pay Request) in order to make payment to the Contractor.

Add the following as Article 15.01 B.5:

The Contractor affirms by the submission of the second Application for Payment (Pay Request) that the Contractor is discharging all financial obligations pertaining to this Contract in the customary business manner. Before final payment, as per Article 15.06, is made, the Contractor will be required to furnish an affidavit that all financial and other obligations related to this project have been satisfied listing any exceptions.

6. Investment of Retainage

As provided by TCA 66-11-144, the Owner will establish an interest-bearing escrow account for all contracts whose initial value exceeds \$500,000. All interest earned on the funds deposited in said account together with the principal thereof shall be paid to the Contractor upon acceptance of the work by written approval of the Engineer.

7. Listing of the Duties, Responsibilities and Limitations of Authority of the Resident Project Representative

A copy of this document as it appears in the Owner-Engineer Agreement is attached to these Supplementary Conditions.

8. Insurance Requirements

See Instructions to Bidders, Paragraphs 13, 14, 15, 16, and 17.

A LISTING OF THE DUTIES, RESPONSIBILITIES AND
LIMITATIONS OF AUTHORITY OF THE RESIDENT PROJECT REPRESENTATIVE

ENGINEER shall furnish a Resident Project Representative (RPR) to assist ENGINEER in observing performance of the Work of the Contractor.

Through more extensive on-site observations of the Work in progress and field checks of material and equipment by the RPR and assistants, ENGINEER shall endeavor to provide further protection for OWNER against defects and deficiencies in the Work but the furnishing of such services will not make ENGINEER responsible for or give ENGINEER control over construction means, methods, techniques, sequences or procedures, or for safety precautions or programs or responsibility for CONTRACTOR's failure to perform the Work in accordance with the Contract Documents.

The duties and responsibilities of the RPR are limited to those of ENGINEER in ENGINEER's agreement with the OWNER and in the construction Contract Documents, and are further limited and described as follows:

A. General

RPR is ENGINEER's agent at the site, will act as directed by and under the supervision of ENGINEER, and will confer with ENGINEER regarding RPR's actions. RPR's dealings in matters pertaining to the on-site work shall in general be with ENGINEER and CONTRACTOR keeping OWNER advised as necessary. RPR's dealings with subcontractors shall only be through or with the full knowledge and approval of CONTRACTOR. RPR shall generally communicate with OWNER with the knowledge of and under the direction of ENGINEER.

B. Duties and Responsibilities of RPR

1. Schedule: Review the progress schedule, schedule of Shop Drawings submittals and schedule of values prepared by CONTRACTOR and consult with ENGINEER concerning acceptability.
2. Conferences and Meetings: Attend meetings with CONTRACTOR, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings.
3. Liaison:
 - a. Serve as ENGINEER's liaison with CONTRACTOR, working principally through CONTRACTOR's superintendent and assist in understanding the intent of the Contract Documents; and assist ENGINEER in serving as OWNER's liaison with CONTRACTOR when CONTRACTOR's operations affect OWNER's on-site operations.

- b. Assist in obtaining from OWNER additional details or information, when required for proper execution of the Work.
- 4. Shop Drawings and Samples:
 - a. Record date of receipt of Shop Drawings and samples.
 - b. Advise ENGINEER and CONTRACTOR of the commencement of any Work requiring a Shop Drawing or sample if the submittal has not been approved by ENGINEER.
- 5. Review of Work, Rejection of Defective Work, Visiting Inspectors and Tests:
 - a. Conduct on-site observations of the Work in progress to assist ENGINEER in determining if the Work is in general proceeding in accordance with the Contract Documents.
 - b. Report to ENGINEER whenever RPR believes that any Work is unsatisfactory, faulty or defective or does not conform to the Contract documents, or has been damaged, or does not meet the requirements of any test or approval required to be made; and advise ENGINEER of Work that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing or approval.
 - c. Verify that tests, equipment and system startups and operating and maintenance training are conducted in the presence of appropriate personnel, and that CONTRACTOR maintains adequate records thereof; and observe, record and report to ENGINEER appropriate details relative to the test procedures and startups.
 - d. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of these inspections and report to ENGINEER.
- 6. Interpretation of Contract Documents: Report to ENGINEER when clarifications and interpretations of the Contract Documents are needed and transmit to CONTRACTOR clarifications and interpretations as issued by ENGINEER.
- 7. Modifications: Consider and evaluate CONTRACTOR's suggestions for modifications in Drawings or Specifications and report with RPR's recommendations to ENGINEER. Transmit to CONTRACTOR decisions as issued by ENGINEER.

8. Records:

- a. Maintain orderly files for correspondence, reports of job conferences, Shop Drawings and samples, reproductions of original Contract Documents including all Work Directive Changes, Addenda, Change Orders, Field Orders, additional Drawings issued subsequent to the execution of the Contract, ENGINEER's clarifications and interpretations of the Contract Documents, progress reports, and other Project related documents.
- b. Keep a diary or log book, recording CONTRACTOR hours on the job site, weather conditions, data relative to questions of Work Directive Changes, Change Orders or changed conditions, list of job site visitors, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and send copies to ENGINEER.
- c. Record names, addresses and telephone numbers of all CONTRACTORS, subcontractors and major suppliers of materials and equipment.

9. Reports:

- a. Furnish ENGINEER periodic reports as required of progress of the Work and of CONTRACTOR's compliance with the progress schedule and schedule of Shop Drawing and sample submittals.
- b. Consult with ENGINEER in advance of scheduled major tests, inspections or start of important phases of Work.
- c. Report immediately to ENGINEER and OWNER upon the occurrence of any accident.

10. Payment Requests: Review applications for payment with CONTRACTOR for compliance with the established procedure for their submission and forward with recommendations to ENGINEER, noting particularly the relationship of the payment requested to the schedule of values, work completed and materials and equipment delivered at the site but not incorporated in the Work.

11. Certificates, Maintenance and Operation Materials: During the course of the Work, verify that certificates, maintenance and operation manuals and other data required to be assembled and furnished by CONTRACTOR are applicable to the items actually installed and in accordance with the Contract Documents, and have this material delivered to ENGINEER for review and forwarding to OWNER prior to final payment for the work.

12. Completion:

- a. Before ENGINEER issues a Notice of Substantial Completion, submit to CONTRACTOR a list of observed items requiring completion or correction.
- b. Conduct final observation in the company of ENGINEER, OWNER and CONTRACTOR and prepare a final list of items to be completed or corrected.
- c. Observe that all items on final list have been completed or corrected and make recommendations to ENGINEER concerning acceptance.

C. Limitations of Authority

Resident Project Representative:

1. Shall not authorize any deviation from the Contract Documents or substitution of materials or equipment, unless authorized by ENGINEER.
2. Shall not exceed limitations of ENGINEER's authority as set forth in the Contract Documents.
3. Shall not undertake any of the responsibilities of CONTRACTOR, subcontractors or CONTRACTOR's superintendent.
4. Shall not advise on, issue directions relative to or assume control over any aspect of the means, methods, techniques, sequences or procedures of construction unless such advice or directions are specifically required by the Contract Documents.
5. Shall not advise on, issue directions regarding or assume control over safety precautions and programs in connection with the Work.
6. Shall not accept Shop Drawing or sample submittals from anyone other than CONTRACTOR.
7. Shall not authorize OWNER to occupy the Project in whole or in part.
8. Shall not participate in specialized field or laboratory tests or inspections conducted by others except as specifically authorized by ENGINEER.

SECTION 1

GENERAL SCOPE AND SPECIAL PROVISIONS

1. Scope

The work to be accomplished under these Detailed Specifications consists of furnishing all labor, materials, equipment and services necessary for the construction of Sewer System Improvements, Contract 22-01 – Duck River Sewage Pumping Station Replacement for the City of Columbia, Tennessee, hereinafter called Owner. The work involved is in one (1) contract and consists of the following generally described work:

CONTRACT 22-01

DUCK RIVER SEWAGE PUMPING STATION REPLACEMENT

- Cast in Place Wetwell with Prefabricated Duplex Base Mounted Pump Unit
- Miscellaneous Site Development including earthwork and paving
- Installation of site piping and manholes

and appurtenances as described in these Detailed Specifications.

All of the work is described more fully in these Detailed Specifications.

2. Execution and Coordination of the Work

It is intended that the work covered by this Contract be done so as to cause the minimum interference with the normal operation of the existing facilities of the Owner.

The Contractor shall be required to organize and schedule his work so as to keep the existing facilities in full operation during the construction period insofar as is consistent with the nature of the construction work to be performed.

The manner in which shutdowns will be made and the Contractor's work schedule are subject to the approval of the Owner and the Engineer. Although every effort will be made to cause the minimum amount of interference with the Contractor's work, the interest of the Owner in regard to the existing facilities must always take precedence over the construction work.

THEREFORE, THE RIGHT IS RESERVED BY THE OWNER TO PUT ANY LINES OR OTHER FACILITIES THAT MAY BE SHUT DOWN FOR THE CONSTRUCTION WORK BACK INTO SERVICE WHEN AN EMERGENCY ARISES.

The importance of maintaining the flow in the existing sanitary sewer lines is paramount. If the Contractor does plug or interrupt the flow through any sanitary sewer line that will cause sewage to backup and cause flooding or damage to any public or private property, he must at his own expense provide pumps, bypass pipes, operators or any other necessary equipment and personnel to reroute the sewage flow into another acceptable portion of the sewer system unless provided for hereinafter. The cost of rerouting sewage flow during construction is NOT a separate pay item and shall be included in the cost for other items. NO BYPASSING OF UNTREATED SEWAGE TO THE SURFACE OF THE GROUND OR TO WATERCOURSES WILL BE PERMITTED unless the Contractor secures written permission from the Tennessee Department of Environment and Conservation and/or the U.S. Environmental Protection Agency.

The Contractor must have sufficient materials, equipment, labor, and supervision available to accomplish the work required in the time allocated for any shutdown of the existing sanitary sewer system.

3. Temporary Traffic Control Plan

When work is conducted within the right-of-way of transportation agencies or city or county roadways, the Contractor shall provide temporary traffic control (TTC) in accordance with the Manual on Uniform Traffic Control Devices (MUTCD). TTC devices shall include but shall not be limited to signs, barricades, flagmen and channelization devices. The Contractor shall provide TTC for all roadway users including motorists, bicyclists and pedestrians. All TTC shall be in accordance with the Americans with Disabilities Act of 1990, Title II, Paragraph 35.130.

4. Temporary Site Security

The Contractor shall maintain temporary security measures throughout the duration of the construction to prevent access to the construction area, equipment, open trenches, and materials. The Contractor shall use measures such as but not limited to: heavy duty mesh fence, wire mesh netting, and plastic portable barriers.

5. Time of Completion and Liquidated Damages (See **Article 4** of the General Conditions)

Time is of the essence on this contract and work on this contract shall be prosecuted in a timely manner.

Time of completion after notice to proceed will be as follows:

Contract 22-01: Two Hundred Forty (240) consecutive calendar days

If the work is not completed within the time specified, liquidated damages in the amount of One Thousand Dollars (\$1,000) per calendar day will be deducted from the compensation otherwise due to the Contractor(s) in accordance with the Contract Documents for each calendar day thereafter, Sundays and holidays included, that the work remains uncompleted.

6. Bypass Pumping

The Contractor shall bypass the sewage flow in the existing sewer around the section where construction is taking place by plugging an existing manhole and pumping the sewage into an existing downstream manhole. The pumps and bypass lines shall be of adequate capacity and size to handle any flow encountered. The Contractor shall make provisions to bypass pump wastewater flow from individual sanitary sewer service lines when sanitary sewer service lines are disconnected from the collector or interceptor sewer and must remain disconnected overnight. The Contractor shall submit a bypass pumping plan that includes the following items at a minimum:

- 24 hour human operator (mechanic) during rain events
- 4 hour human checks (mechanic) during periods of no rain
- Auto dialer for failure alarms
- Redundant capacities

UNDER NO CIRCUMSTANCES WILL THE PUMPING OF RAW SEWAGE ON PRIVATE PROPERTY, OR INTO STREAMS STORM SEWERS OR IN STREETS BE ALLOWED.

Except as may be approved by the Engineer at the end of each working day, temporary connections shall be made so that overnight pumping is not required. BYPASS PUMPING OF SEWAGE SHALL BE CONSIDERED A SUBSIDIARY OBLIGATION OF THIS CONTRACT AND NO SEPARATE PAYMENT SHALL BE MADE FOR THIS WORK.

7. Guarantee – One Year Warranty

The Contractor(s) shall guarantee all work performed under this contract for a period of one year after the date of Substantial Completion in accordance with requirements of **Paragraph 15.08** of the General Conditions.

8. Engineer's Authority

See **Article 10** of the General Conditions.

9. Shop Drawings (See **Paragraph 7.16** of the General Conditions)

The Contractor(s) shall submit shop drawings for all preconstruction submittals, materials, equipment, and services used on this project.

For submittals containing less than 25 pages, the Contractor shall email one (1) digital copy of the submittal to ntoshopdrawings@jrwauford.com. For submittals containing 25 pages or more, the Contractor shall submit one (1) digital copy and three (3) hard copies to the Engineer for review. Note that all sheets shall be printed at 100% of original size.

THE ENGINEER WILL HOLD ALL SUBMITTED OR REVIEWED SHOP DRAWINGS UNTIL THE CONTRACTOR HAS PROVIDED ACCEPTABLE SUBMITTALS FOR THE CONTRACTOR'S PLANNED ORDER OF WORK, PROGRESS SCHEDULE, PRE-CONSTRUCTION VIDEOS/PICTURES AND SHOP DRAWING LOG. IF REQUESTED BY THE CONTRACTOR, AN ACCEPTABLE TEMPLATE OF THE SHOP DRAWING LOG WILL BE PROVIDED BY THE ENGINEER

REJECTION OF THE SAME SHOP DRAWING ON THREE (3) SEPARATE OCCASIONS WILL CONSTITUTE GROUNDS FOR TOTAL REJECTION OF THE PROPOSED EQUIPMENT MANUFACTURER OR SUPPLIER AS BEING UNABLE OR UNWILLING TO MEET THESE DETAILED SPECIFICATIONS.

Shop drawings submittals shall include a transmittal letter listing the submittal description, project name, project contract number, and project location. Shop drawings shall be checked by the Contractor(s) and evidence of such checking shall be indicated on the transmittal letter. The Contractor(s) shall be completely responsible for accuracy, completeness, compliance with Plans and Detailed Specifications, and compatibility, the Engineer's approval notwithstanding. WORK SHALL BE PERFORMED ONLY BY USE OF APPROVED SHOP DRAWINGS. THE CONTRACTOR(S) SHALL PLAINLY MARK ON HIS SUBMITTAL THE ITEM OR ITEMS IN WHICH HE IS REQUESTING APPROVAL. FAILURE TO DO SO WILL GIVE THE ENGINEER THE RIGHT TO EITHER REJECT THE SUBMITTAL OR SELECT THE ITEM OF HIS CHOICE AT NO ADDITIONAL COST TO THE OWNER.

THE ENGINEER RESERVES THE RIGHT TO TAKE UP TO TWENTY (20) WORKING DAYS FOR ACTION ON ANY GIVEN SHOP DRAWING. THE CONTRACTOR(S) SHALL BE SOLELY RESPONSIBLE FOR TIMELY SUBMISSION OF SHOP DRAWINGS BASED ON THE ABOVE AND NO EXTRA FOR TIME OR COSTS WILL BE ACCEPTABLE.

After approval, the Engineer will make the following distribution: one (1) set to the Owner, one (1) set to Engineer's central files, one (1) set to the Engineer's Resident Project Representative, and one (1) digital set to the Contractor. The

Contractor shall keep one (1) hard copy of the approved shop drawing at the project site and shall be responsible for providing the document to suppliers and/or manufacturers.

10. Initial Videos, Pictures and Progress Pictures

Before beginning the job, the Contractor shall make videos and pictures showing the status before any construction has begun. The videos and pictures shall be made, submitted and approved prior to the beginning of work. The Contractor shall submit the videos and pictures in an electronic format suitable to the Engineer.

The Contractor shall furnish digital progress pictures to the Engineer at the end of each month at the time the partial pay estimate is submitted. Pictures shall be of highest quality clearly showing the work and preferably not showing workmen or passersby. The name of the project, the item or scene pictured, Contractor's name, and the date shall be incorporated into the file name for each picture. Five (5) pictures shall be required with each partial pay estimate. Each electronic file should be date and time stamped. REQUESTS BY THE CONTRACTOR FOR PARTIAL PAYMENTS WILL NOT BE CONSIDERED WITHOUT THE REQUIRED PROGRESS PICTURES.

After construction and clean-up are completed, the Contractor shall submit video and pictures showing the cleaned up work and all of the progress pictures for the project in an electronic format suitable to the Engineer.

11. Progress Schedule and Progress Meetings

The Contractor(s) shall furnish for approval one (1) electronic copy of a suitable progress chart or schedule in graphical form showing the estimated schedule for the project as required in **Paragraphs 2.03 and 4.04** of the General Conditions. After approval, the Contractor(s) shall keep the chart current showing the actual progress on the project in relation to the estimated schedule. FAILURE TO SUBMIT SAID PROGRESS SCHEDULE AND KEEP IT CURRENT MONTHLY SHALL BE GROUNDS FOR NONPAYMENT OF PARTIAL PAYMENT REQUESTS. The first Progress Schedule should be submitted at the preconstruction meeting.

THE CONTRACTOR SHALL KEEP CURRENT RECORD DOCUMENTS AS REQUIRED BY **PARAGRAPH 7.12** OF THE GENERAL CONDITIONS. FAILURE TO KEEP RECORD DOCUMENTS CURRENT SHALL BE GROUNDS FOR NONPAYMENT OF PARTIAL PAYMENT REQUESTS.

The Contractor's Superintendent(s) shall be required to attend weekly coordination meetings with the Owner and Engineer's Resident Project Representative. In addition, monthly progress meetings may be circulated with

the Contractor's Project Manager, Engineer's Project Manager, and the Owner if required.

12. Utilities Required by Contractor

All electric current and/or any utility service required by the Contractor shall be furnished at his own expense.

13. Project Sign

A project sign is not required.

14. Field Office and Supervision

A field office is not required. The Contractor shall maintain Record Documents on-site and readily available. The Contractor shall provide a responsible field superintendent at the project site at all times that work is being performed who can be contacted during work hours by cell phone.

15. Existing Utilities

Special precautions shall be taken by the Contractor to avoid damage to existing overhead and underground utilities owned and operated by the Owner or by public or private utility companies.

Before proceeding with the work under this Contract, the Contractor shall confer with all public or private utilities in the vicinity of the construction work and call Tennessee One-Call at 811. The purpose of the conference or conferences shall be to notify said companies, agencies or departments of the proposed construction schedule, verify the location of, and possible interference with, the existing utilities and arrange for necessary suspension of service where possible and approved by the utility. The Contractor shall bear the entire responsibility for locating and avoiding or repairing damage to said existing utilities. NO WORK SHALL PROCEED WITHOUT ALL UNDERGROUND UTILITIES BEING LOCATED AND MARKED.

The Contractor shall locate all unknown metallic hazards, namely buried pipe, metals, *etc.*, by using a pipe locator or whatever better methods the Contractor may elect to use. The pipe locator should immediately precede the trench ditching and all hazards located and marked with a pointed stake in such manner as to notify the ditch operator of such hazard.

Where existing utilities or other underground structures are encountered, they shall not be displaced or molested unless necessary and approved by the Owner of the facility, and in such case they shall be replaced in as good or better condition than found as quickly as practical. ALL SUCH UTILITIES THAT ARE

DAMAGED OR MOLESTED SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE, UNLESS IN THE OPINION OF THE ENGINEER SUCH DAMAGE WAS CAUSED THROUGH NO FAULT OF THE CONTRACTOR.

It is expected that the Contractor will be diligent in his efforts and use every possible means to locate existing utilities. Any claims for unavoidable damage, based on improper or unknown locations, will be thoroughly examined in light of the Contractor's efforts to locate the said utilities or obstructions prior to beginning construction.

16. Permits, Codes, Agreements and/or Contracts with Private Utilities

The Contractor shall make application for, obtain, and pay for all licenses, permits, agreements, bond fees and/or contracts with private utility companies and shall pay all fees and charges in connection therewith at no cost to the Owner.

17. Protection of Roadways On and Off-Site

In the hauling of materials and/or equipment to and from the site of the work, the Contractor shall take care to protect county roads, highways, parking areas and/or city streets. The Contractor shall be responsible for repair of highways, roads, parking areas or streets damaged by his operations (or operations of his subcontractors) and shall repair said damage to the original condition. If repair to the original condition is not practical or possible, the Contractor shall be responsible for obtaining proper release from the owner of the damaged roadway.

18. Lands, Rights-of-Way and Limits of Work (see **Article 5** of the General Conditions)

a. Lands and Easements

In general, the water line installation will be constructed on easements held by the Owner or on street rights-of-way owned by the Owner.

The Contractor shall be responsible for obtaining necessary work permits from the City of Columbia.

b. Limits of Work

The Contractor shall limit his work area and storage to the Owner's property and/or permanent utility easements. The Contractor shall not encroach or dump excess or waste materials on property adjacent to the work sites unless written permission is first received from the affected property owner and a copy submitted to the Engineer. Where excess

materials are to be dumped off-site, the Contractor shall furnish the Owner written evidence of the property owner's permission.

In connection with work performed on easements or adjacent to private property, the Contractor shall take all reasonable care to avoid damage to the property owners' buildings, grounds and facilities and shall be completely responsible for the repair of damage to same. It is intended that when construction is complete, the easements and the private property owners' facilities and grounds shall be restored to as good or better than original condition as possible.

Large trees or other facilities within the actual construction limits that cannot be preserved and replaced shall be removed by the Contractor. THE OWNER WILL ASSUME THE RESPONSIBILITY FOR SETTLING WITH THE PROPERTY OWNER FOR THE LOSS OF SAID TREES OR FACILITIES WITHIN THE CONSTRUCTION AREA. THE CONTRACTOR IS RESPONSIBLE FOR ALL OTHER DAMAGES.

Reasonable care shall be taken during construction to avoid damage to vegetation. Ornamental shrubbery and tree branches shall be temporarily tied back, where appropriate, to minimize damage. Trees which receive damage to branches shall be trimmed of those branches to improve the appearance of the tree. Tree trunks receiving damage from equipment shall be treated with a tree dressing.

19. Undesirable Workmen

The Engineer reserves the right, but in so doing does not assume responsibility to make a judgment (the primary responsibility rests upon the Contractor), to remove inept or uncooperative servicemen as "Undesirable Workmen".

20. Work Hours

Except as otherwise required for the safety or protection of persons or the Work or property at the site or adjacent thereto, and except as otherwise indicated in the Contract Documents, all Work at the site shall be performed during regular working hours and Contractor will not permit overtime work or the performance of work on Saturday, Sunday or any legal holiday without Owner's written consent given after prior written notice to Engineer.

21. Materials or Equipment to be Furnished (see **Paragraphs 7.04 and 7.05** of the General Conditions)

Where the specifications state "or equal" followed by a brand name or model, a standard of quality is being set. The naming of a brand or model is a matter of convenience to avoid writing a volume. Other brands or equipment under this

category may be submitted at the shop drawing stage of construction. The Engineer will consider other products on the basis of materials of construction, weight, function, size (it must fit the space provided), service history and electrical and mechanical characteristics.

Where the specifications state one or more model numbers and manufacturers followed by the words "or approved equal" the meaning is that the product(s) specified is acceptable and that, while there may be other products that are acceptable, the only way to be assured that another product will be acceptable is to submit the desired substitution during the BID PROCESS and receive an affirmative answer in the form of a letter or an addendum. The Engineer will consider the factors previously described in making the determination.

Unless otherwise specified, all materials shall be the best of their respective kinds and shall be in all cases fully equal to approved samples. The Engineer shall have the right to require the use of such specifically designated material, article, or process. The Engineer, where practical, may require submission of actual samples of materials or products.

22. Occupational Safety and Health Act

The Contractor's attention is called to **Paragraph 7.13** of the General Conditions.

23. Noise and Odor Control

The work hereunder is to be performed within rural and urban areas of Columbia. The Contractor shall be responsible for noise and odor abatement procedures and shall not commence work before 7:00 a.m. local prevailing time.

24. Chemical Requirements

All chemicals used during project construction or furnished for project operation, whether herbicide, pesticide, disinfectant, polymer, reactant or of other classifications, must show approval of either EPA or USDA. Use of all such chemicals and disposal of residues shall be in strict conformance with instructions.

25. Confined Spaces

During the construction of the facilities to be built under the terms of this contract, it may be necessary for the OWNER'S or the ENGINEER'S representative(s) to enter "confined space(s)", as defined by OSHA Regulations, in order to observe the work of the Contractor and/or in order to determine compliance with the terms of the contract. The Contractor shall provide the proper "Permit", the "Attendant", and/or the "Entry-Supervisor", the testing safety and emergency equipment and all other means of compliance with OSHA regulations. The

OWNER or the ENGINEER will provide general training to their respective proposed "authorized Entrant(s)" who are employees of the OWNER or the ENGINEER, however the Contractor shall provide any specialized training required for the equipment furnished, the Contractor's Permit System or any other condition special to the work to be performed. The Contractor shall submit a copy of its written Permit System prior to the commencement of construction and shall be fully responsible for compliance with the appropriate regulations.

26. Lines and Grades

The Engineer has established survey baselines for the work. Benchmarks were set at the time of the original survey, the locations and elevations of which are shown on the Plans. These benchmark elevations were checked and verified at the time of the original survey.

Where tie-ons to existing lines or structures are to be made, the actual inverts of the existing lines or elevations of existing structures shall be field checked for verification before construction begins.

Any apparent discrepancy or error discovered in these benchmark elevations shall be reported to the Engineer immediately at telephone number 615-883-3243. Written approval from the Engineer shall be obtained before any changes are made.

27. Restoration of Disturbed Areas/Work on or Adjacent to Private Property

In connection with work performed on or adjacent to private property, the Contractor(s) shall take all reasonable care to avoid damage to the property owners' buildings, grounds and facilities and shall be completely responsible for the repair of damage to same. Fences, hedges, shrubs, etc., within the construction limits shall be carefully removed, preserved and replaced when the construction is completed. Grassed areas shall be graded, fertilized, and seeded when construction is completed in accordance with the requirements set out in Section 4, Paragraph 22. Finish Grading, Topsoiling and Seeding of these Detailed Specifications. It is intended that when construction is completed the private property owner's facilities and grounds shall be restored to as near their original condition as possible.

Foundations adjacent to an excavation which is to be carried below the bottom of the foundation shall be supported by shoring, bracing, or underpinning, and the Contractor(s) shall be held strictly responsible for any damage to said foundation.

Work on the rights-of-way of the Tennessee Department of Transportation and/or the City Street Department and/or the County Road Department shall be

considered work on Private Property. It shall be the Contractor's responsibility to obtain any necessary work permits.

28. Reference to Tennessee Department of Transportation Specifications and Standard Roadway and Structure Drawings

Where items are referred as being in conformance with Tennessee Department of Transportation Specifications and/or Standard Drawings, certain materials, equipment and construction methods required under this Section of the Detailed Specifications for Road and Bridge Construction and subsequent special provisions and revisions issued by the Tennessee Department of Transportation; and the Standard Roadway and Structure Drawings (current revision) adopted by the Tennessee Department of Transportation (TDOT), Bureau of Highways, on January 1, 2021 as amended and/or modified herein.

29. References to Standard General Conditions of the Construction Contract

Where references are provided within this Project Manual to the Standard General Conditions of the Construction Contract, they are provided for the benefit of the Contractor. Where conditions may be repeated or expanded in this Section, they shall be in addition to those requirements stated in the Standard General Conditions of the Construction Contract. Where any conflicts may exist with the Standard General Conditions of the Construction Contract and text found elsewhere in the Project Manual, the Standard General Conditions of the Construction Contract shall prevail.

30. Applicability of Governing Standards

The latest version of any standard listed in these Detailed Specifications as of the bid date shall apply. In cases that an incorrect revision year is listed, it shall not apply - the latest version as of the bid date shall apply.

31. Connecting to Existing Lines

The Contractor shall make the required connections to existing sewer lines as specified in these Detailed Specifications. The work of connecting new lines to existing lines is the responsibility of the Contractor and is NOT a separate pay item unless indicated otherwise in the BID FORM; it being the intent of these Detailed Specifications to provide a complete operable facility.

32. Water and Uplift

The Contractor(s) shall, by the use of well points, pumps or other approved methods, prevent the accumulation of water in excavated areas. Should water accumulate, it shall be promptly removed. The Contractor(s) shall also provide for dewatering areas adjacent to structures or lines to prevent uplift during

construction operations. The Contractor(s) will be held responsible for any damage due to uplift of such structures or lines and to existing structures during construction operations.

33. Subsurface Conditions/Site Conditions

As provided by **Paragraphs 5.03 and 5.04** of the General Conditions, subsurface conditions are unknown unless a Geotechnical Report is included at the end of Section 1.

34. Blasting

Blasting will be permitted.

A pre-blast survey shall be completed of all existing structures and provided to the Engineer and Owner before the commencement of blasting operations. Any damage to the structures shall be repaired at the direction of the Engineer at the Contractor's expense.

All blasting operations including storage of explosives shall be in accordance with the municipal ordinances and state and Federal laws and regulations, and all explosives shall be stored in conformity with said ordinances and laws. Pre-blast surveys of all existing structures are required. No blasting shall be done within five feet (5') of any water mains or structures, except with light charges of explosives. Any damage done by blasting is the responsibility of the Contractor and shall be promptly and satisfactorily repaired by him.

To implement these requirements and unless otherwise required by ordinance or law, each excavating crew shall be provided with two (2) metal boxes with suitable locks. One of these boxes shall be for storing explosives and one for caps. The boxes shall be painted a bright color and stenciled with appropriate warning signs. At night, all explosives and caps shall be removed from the boxes and stored in a central magazine. Compliance with laws, ordinances and regulations shall be the Contractor's responsibility, and he shall save the Owner and/or Engineer harmless from any and all claims of any type or nature arising from blasting or storage of explosives.

35. Flooding

Some of the work is to be conducted near or will cross ditches and drainage canals which may flood. Obstructions to flow which would cause flooding in the event of heavy rainfall shall be avoided by the Contractor.

36. Temporary Project Water Pollution Control (Soil Erosion)

Temporary pollution control provisions shall be taken to avoid damage to embankments and cut slopes and to avoid transport of sediment to adjacent property owners and/or streams.

Pollution and erosion control methods shall include but are not limited to the following:

a. Temporary Berms

Temporary berms shall be constructed of compacted soil with or without a shallow ditch at the top of all excavation and embankment slopes to prevent excessive erosion until the slopes are stabilized.

b. Temporary Slope Drains

Temporary slope drains shall be stone gutters, fiber mats, plastic sheets, concrete or asphalt gutters, half-round pipe, metal pipe, plastic pipe, sod or other material acceptable to the Engineer that may be used to carry water down slopes to reduce erosion.

c. Temporary Silt Fences

Temporary silt fences with baled hay or straw shall be placed on the natural ground, at the bottom of fill slopes, in ditches or other areas where siltation is a problem or where shown on the Plans.

Silt fences are constructed of wire mesh fence with a covering of filter cloth composed of burlap, plastic filter fabric or some other suitable material on the upper grade side of the fence and anchored into the soil.

Bales shall be either hay or straw containing five (5) cubic feet or more of material.

The above listed pollution and erosion control methods shall be used at the discretion of the Contractor or where directed by the Engineer. Temporary pollution control is NOT a separate pay item.

The Contractor shall be solely and strictly liable for any violations of State or Federal water pollution laws, regulations, or standards caused during construction by the Contractor's forces or subcontractors and shall pay any penalties levied by any party due to said violations.

The Contractor shall maintain all areas where excavation and backfill construction operations are being performed or have been performed in order

that siltation, erosion and other forms of storm water pollution caused by construction activities will be kept to a minimum during construction.

37. Substantial Completion/Delays in Final Completion (See **Paragraph 15.03** of the General Conditions)

In order to allow all outstanding incomplete items to be completed during the initial start-up and operating period, a semi-final inspection will be made upon request by the Contractor after the beginning of the initial start-up period. In no event will the date of substantial completion of the Contract for purposes of determining payment of the liquidated damages be set before the beginning of the initial start-up period.

38. Final Clean-Up

Before the work is considered as complete, all rubbish and unused material due to or connected with the construction shall be removed and the premises left in a condition satisfactory to the Engineer. Streets, curbs, crosswalks, pavements, sidewalks, fences and other public and private property disturbed or damaged shall be restored to their former condition at the Contractor's expense. Final acceptance will be withheld until such work is completed.

39. Disposal of Excess Materials and Debris

The Contractor shall dispose of excess materials and debris. The Contractor shall furnish the Owner written evidence of the property owner's permission for disposal of excess materials.

40. Basis of Payment

a. General

The Contractor(s) shall furnish all necessary tools, labor, machinery, apparatus, materials, equipment, service and other necessary supplies and do all work including all excavation and backfilling at the lump sum prices for the items listed in the BID FORM.

ROCK EXCAVATION, SHEETING, SHORING AND BRACING OF EXCAVATIONS AS SHOWN ON THE PLANS ARE NOT SEPARATE PAY ITEMS.

These items refer to and are the same items listed in the BID FORM and constitute all of the pay items. Any other items of work listed in these Detailed Specifications or shown on the Plans shall be considered incidental to the following items.

b. Duck River Sewage Pumping Station Replacement

The Contractor shall furnish all necessary labor, machinery, tools, apparatus, materials, equipment, service, and other necessary supplies and perform all work including all excavation, pipeline installation and backfilling (without additional compensation except where specifically set out in these Detailed Specifications) at the lump sum prices listed in the BID FORM. The lump sum prices shall include payment for all items at the new Duck River Sewage Pumping Station.

SECTION 2

TESTING AND CONTROL OF MATERIALS

1. Scope

This Section together with such additions, deletions, or modifications, if any, as may appear in any other particular Section of these Detailed Specifications shall govern the furnishing and testing of materials to be used in the work.

Materials of construction, particularly those upon which the strength and durability of the structure or the integrity of a pipeline may depend, shall be subject to inspection and testing to establish conformance with specifications and suitability for uses intended.

2. Cost of Tests and Selection of Testing Agencies

All materials and equipment used in the construction of the project shall be subject to adequate review and testing in accordance with accepted standards. The laboratory or inspection agency will be selected by the Contractor subject to the approval of the Engineer and the Owner. THE CONTRACTOR SHALL PAY FOR ALL DULY AUTHORIZED LABORATORY INSPECTION AND/OR TESTING SERVICE.

3. Sources of Supply

The Contractor shall submit a list indicating their proposed sources of supply of all materials including manufactured items and receive the Engineer's approval prior to the placing of orders. The Engineer may require representative samples of any materials prior to approval of the source. The Engineer's approval of the source of any sample shall not be construed to relieve the Contractor of furnishing materials which fully meet all provisions of these Detailed Specifications.

If it is found that sources which have been approved do not furnish uniformly acceptable products, the approval may be withdrawn. The Contractor and his supplier shall afford the Engineer's representative opportunities for inspecting products and materials at any time during their preparation. The Contractor and/or supplier shall furnish shipment thereof, without charge.

These requirements are not intended to stifle or hinder completion but are intended to assure quality and/or performance.

4. Approval of Testing Agencies and Reports

Whenever in these Detailed Specifications review and testing of materials are required, bureaus, laboratories, and/or agencies selected by the Contractor for such inspection and testing service shall be subject to approval by the Engineer.

Documentary evidence, satisfactory to the Engineer, that the material has passed the required inspection and testing must be furnished prior to the incorporation of such materials in the work, and rejected materials must be promptly removed from the premise.

Six (6) copies of all test reports shall be sent to the Engineer's office for checking and distribution.

Test reports shall contain as a minimum (1) the name and location of the supplier's plant, (2) the name of the person gathering the sample, (3) the date of the sampling, and (4) such other like data as may be required by the Engineer.

5. Governing Specifications

It is the intention of the Engineer in the preparation of these General and Detailed Specifications to define properly the kind and quality of materials to be furnished. The standards and tentative standards of the American Society of Testing Materials (ASTM); standards of the American Waterworks Association (AWWA); standards of the American National Standards Institute (ANSI); standards promulgated by the Federal Specification Board (Fed. Spec.); American Association of State Highway and Transportation Officials (AASHTO); the Federal Aviation Agency (FAA); or other such agencies may be referred to in the Detailed Specifications. Where such standards are referred to, said references shall be construed to mean the latest amended and/or revised versions of the said standard or tentative specifications. In the selection of samples and the routine testing of materials, the testing laboratory shall follow the standard procedure as outlined by the ASTM, unless otherwise set out.

6. Extent of Inspection and Testing Service

It is intended that materials of construction, particularly those upon which the strength and durability of structures may depend, shall be inspected and tested to establish conformance with specifications and suitability for uses intended. The following is a schedule showing the extent of testing and requirements and methods of reporting. If it is found that this list does not cover all items that will require testing, then such materials shall be tested as directed by the Engineer.

7. Cement

Cement shall have been shipped from the mill not more than three (3) months prior to receipt on the work. Testing and certification of ASTM C 150 shall apply and shall be supplied by the manufacturer.

8. Fine Aggregate (For Use in Cement Concrete)

Fine aggregate shall consist of natural river sand except that upon request the Engineer may approve manufactured sand. SAND MINED FROM HIGHLAND DEPOSITS WILL NOT BE APPROVED.

Standard tests shall be made in advance of concreting by an approved independent laboratory per ASTM C 33 and ASTM C 40 on each fine aggregate proposed to be used. Other tests being satisfactory, the aggregate may be used pending results of 28-day strength tests.

9. Coarse Aggregate (For Use in Cement Concrete)

Standard tests shall be made in advance of concreting by an approved laboratory on each grading of each coarse aggregate proposed to be used per ASTM C 33.

10. Advance Tests of Concrete Design Mix(es)

Before commencement of concrete placing and after approval of cement and aggregates, an independent laboratory shall make from a single batch for each proposed mix a set of six (6) standard four (4) inch cylinders per ASTM C 31 and test in accordance therewith: Test two (2) cylinders at seven (7) days, two (2) cylinders at fourteen (14) days, and two (2) cylinders at twenty-eight (28) days per ASTM C 39. Two (2) beam flexure tests as per ASTM C 78 shall likewise be made and tested from the design batch if the total requirement exceeds 1,000 cubic yards.

The requirements for tests may be modified at the Engineer's discretion without prejudice to the Engineer later requiring same (if he becomes in doubt about the quality of the concrete) if less than fifty (50) cubic yards are required.

11. Reinforcing Steel

A certificate of origin and affidavit will be required for all reinforcing steel. All reinforcing steel shall be manufactured in the United States unless specifically approved by the Engineer. Reinforcing steel shall be inspected for section, rust, shape and dimension. The manufacturer shall supply test reports depicting inspection results plus heat numbers.

12. Structural Steel

Structural steel shall be evaluated at the mill and shop for each heat number to determine compliance with specification designated in these Detailed Specifications.

13. Steel Bar Joists

The manufacturer shall supply test data proving the efficiency of the design of the proposed joists for the purpose intended and certificates that the joists, as furnished, are in accordance with project requirements and with the Standard Specifications for Steel Joists as given in the current handbook "Steel Joist Construction" published by the Steel Joist Institute or other specifications designated in these Detailed Specifications.

14. Brick

Visual examination for shape, color, soundness, cracks, and other imperfections.

15. Building Stone

Visual examination for shape and color.

16. Concrete Pipe

Visual examination at the site, as practicable, per ASTM or other designated specification together with certified test reports from the supplier.

17. Polyvinyl Chloride (PVC) Pressure Pipe

Examination at the site, as practicable, per AWWA, ASTM or other designated specification plus certified test reports from the supplier as performed by the manufacturer.

The following test results shall be supplied by the manufacturer:

Long-Term Pressure Test (Min.)	1,000 hours at 400 psi
Burst Pressure Short Term (Min.)	630 psi
Impact (Min.)	60 ft/lbs at 72°F. 16 ft/lbs at 0°F.
Acetone	20 minutes no flaking
Crush (Ring Section)	100% crush no cracking
Vacuum Test (Min.)	22 in/HG for 1 hr.

18. Polyvinyl Chloride (PVC) Sewer Pipe

Examination at the site, as practicable, per ASTM or other designated specification plus certified test reports from the supplier. Testing shall be in accordance with the requirements of ASTM D 2412. Minimum "pipe stiffness" (F/Y) at five (5) percent deflection shall be forty-six (46) psi or greater for all pipe sizes. The result of all tests shall be reported to the Engineer.

19. Ductile Iron Pipe and Special Castings

Each piece of pipe shall bear the manufacturer's name or trademark and the date cast. Each piece of pipe should also be certified by the manufacturer to have met the requirements of the governing ASTM or other designated specification. Also, each piece shall be visually inspected in the field for specification conformance.

20. Grey Iron Castings

- a. Field Examination: For dimensions, coating, holes hammer test.
- b. Laboratory Tests: Certified test reports by foundry.

21. Polyethylene Pipe

Examination at the site, as practicable, per ASTM or other designated specification plus certified test reports from the supplier. Testing shall be performed in accordance with the procedure outlined in ASTM D 2513.

SECTION 3

CONCRETE AND REINFORCING STEEL

1. Scope

This Section covers the materials, mixing, transporting, and placing of all concrete and reinforcing steel including all labor, materials, and equipment.

The provisions of Section 2, Paragraph 2. Cost of Tests and Selection of Testing Agencies applies to this Section of these Detailed Specifications.

Where brand names or manufacturers are used in this Section, it is not intended that the use of products of equal quality and function by other manufacturers be prohibited. Concrete admixtures may be as furnished by Master Builders, Grace Construction Materials, Sika Chemical Corporation, or approved equal. Concrete forms and accessories may be furnished by Universal Form Company, Dayton Sure-Grip and Shore Company, Heckman Building Products, or equal.

2. Reference Codes and Standards

All work covered by this Section of these Detailed Specifications shall be performed in accordance with the applicable portions of the following American Concrete Institute (ACI) and Concrete Reinforcing Steel Institute Standards (CRSI), as modified in this Section.

<u>ACI 224.3R:</u>	"Joints in Concrete Construction"
<u>ACI 301:</u>	"Specifications for Structural Concrete"
<u>ACI 302.1R:</u>	"Guide for Concrete Floor and Slab Construction"
<u>ACI 305R:</u>	"Guide to Hot Weather Concreting"
<u>ACI 306R:</u>	"Guide to Cold Weather Concreting"
<u>ACI 315:</u>	"Manual of Standard Practice for Details and Guide to Presenting Reinforcing Steel Design Details"
<u>ACI 318:</u>	"Building Code Requirements for Structural Concrete"
<u>ACI 347R:</u>	"Guide to Formwork for Concrete"
<u>ACI 350:</u>	"Code Requirements for Environmental Engineering Concrete Structures"
<u>CRSI-MSP:</u>	"Manual of Standard Practice"

The most recent published version (as of the project bid date) of any standard listed in these Detailed Specifications shall apply.

3. Class of Concrete

Concrete shall be two (2) classifications as follows:

CLASS "A" - All concrete shall be Class "A" unless otherwise shown on the Plans. ALL reinforced concrete shall be Class "A". Class "A" concrete shall possess the following characteristics and/or proportions of materials.

Minimum Cement Content: 6.0 bags (564 pounds) per cubic yard.

NO FLY ASH WILL BE ALLOWED

Minimum 28-day compressive strength: 4,500 psi average of any three (3) cylinders selected by the Engineer.

Anticipated 28-day compressive strength: 5,000 psi plus.

Slump: Three and one-half (3½) to six (6) inches in walls and columns and piers. Two and one-half (2½) to five (5) inches in slabs, beams, and footings.

Admixtures: A retardant may be required where slow set is desired; where quick set is desired Portland Cement content of 6.2 bags may be required. Air entraining agents optional and subject to Engineer's approval. Additional special admixtures may be specified in subsequent sections of these Detailed Specifications.

CLASS "C" - Concrete used for anchors, kickers, and encasement for pipe lines, for subfoundations and mass footings, and for fill shall be Class "C". No concrete containing reinforcement shall be Class "C". Class "C" concrete shall possess the following characteristics and/or proportions of materials:

Minimum Cement Content: 5.0 bags (470 pounds) per cubic yard.

Minimum 28 day compressive strength 2,500 psi - average of any three (3) cylinders selected by the Engineer.

NO FLY ASH WILL BE ALLOWED

Slump: Five (5) to eight (8) inches for encasement. Two (2) to four (4) inches in subfoundations and sealing as per Paragraph 10.d. hereinafter.

Admixtures: None required.

4. Determination of Strength of Concrete

Compressive strength of concrete shall be determined by use of standard four (4) inch diameter by eight (8) inch test cylinders in accordance with ASTM C39 and C 31.

5. Concrete Design Mixes

An independent commercial testing laboratory, approved by the Engineer, shall prepare a design mix for each Class "A" and Class "C" concrete and submit five (5) copies to the Engineer for general approval of the proportions and materials. The design mix shall be accompanied by the quality tests of the materials which are proposed in accordance with Section 2. Testing and Control of Materials, Paragraphs 5, 8, 9, and 10 of these Detailed Specifications. The sources of supply and the producer of the concrete, if a ready-mix plant, shall be subject to all the requirements of Section 2. Testing and Control of Materials, and particularly to Paragraph 3. Sources of Supply, thereof. After general approval of the materials and proportions the tests required in Paragraph 10. Advance Tests of Concrete Design Mix(es) of Section 2 shall be submitted for approval. No concrete may be placed prior to submission and approval of the design mix and of the test results. The cost of obtaining an approvable concrete mix will be paid for by the Contractor.

6. Materials for Concrete

a. Portland Cement

Portland Cement shall be of American manufacture and shall conform to the "Standard Specifications for Portland Cement" (ASTM C150), of the American Society for Testing and Materials and shall be Type II with an equivalent alkali ($\text{Na}_2\text{O} + 0.658 \text{ K}_2\text{O}$) content of less than 0.60 percent and shall have been shipped from the mill not more than three (3) months prior to incorporating into the work unless specifically waived in writing by the Engineer. For job site mixing all cement shall be in sacks. FLY ASH IS NOT AN ACCEPTABLE SUBSTITUTE FOR PORTLAND CEMENT. PREMIXED BAG CONCRETE IS NOT AN ACCEPTABLE SUBSTITUTE FOR PORTLAND CEMENT.

b. Water

Water used in concrete shall be clear and free from objectionable substances such as oil, acid, alkali, vegetable matter, clay, or silt. Water of doubtful quality shall be tested in briquettes which shall reach a strength equal to that of similar briquettes made with water of known satisfactory quality.

c. Admixtures

An air entraining admixture equal to Master Builders AE200, Darex A.E.A. or Aermix, meeting the requirements of ASTM C260 for Air Entraining Admixtures may be used but is not required. Use of such admixtures is subject to the approval of the Engineer.

The amount of air-entraining admixture to be used will be determined by the percent of air entrained in the concrete. The limits of air will be five (5) percent plus or minus one (1) percent.

The concrete when an approved air entraining agent is used shall have a reduction in weight of not more than three (3) to six (6) pounds per cubic foot as compared with concrete of the same consistency and cement content made without the use of the agent. The specified cement factor shall be maintained by adjusting the quantity of aggregate and water used to the satisfaction of the Engineer. Reduction in the twenty-eight (28) day strength as specified will not be permitted. The use of any other admixture will not be permitted without the written consent of the Engineer as to the admixture to be used and its proportion in the mix.

d. Fine Aggregate

Sand for concrete shall consist of clean, hard, durable uncoated particles, free from lumps of clay, soft or flaky material, loam, and organic matter. In no case shall fine aggregate containing lumps of frozen material be used. Fine aggregate containing appreciable quantities of mica, shale, slate, or other soft grains shall not be used. It shall not contain more than two (2) percent by weight of material which may be removed by the elutriation test. Sands which do not pass the standard colormetric tests shall not be used unless it can be shown that the failure to pass is caused by particles of lignite or coal. Fine aggregate shall conform to ASTM C33 with gradation as follows:

<u>Screen</u>	<u>Percent Passing</u>
No. 4	95 -100
No. 16	45 - 95
No. 50	10 - 30
No. 100	2 - 10

ONLY NATURAL RIVER SAND OR SPECIALLY APPROVED
MANUFACTURED SAND SHALL BE USED.

e. Coarse Aggregate

Unless otherwise specified, coarse aggregate may be either crushed limestone, or crushed gravel. Coarse aggregate shall show no evidence of disintegration, and the weighted percentage of loss shall be not more than ten (10) percent by weight when subjected to five (5) alternations of the sodium sulphate test for soundness. It shall be composed of clean, hard, durable, uncoated particles free from deleterious matter. Except for gradation, coarse aggregate shall conform to the requirements of ASTM C33. The coarse aggregate shall meet the following grading requirements.

Passing 1 1/2" square laboratory sieve	-	100%
Passing 1" square laboratory sieve	-	90 -100%
Passing 3/4" square laboratory sieve	-	50 - 75%
Passing 3/8" square laboratory sieve	-	10 - 25%
Passing No. 4 square laboratory sieve	-	0 - 5%

7. Proportioning of Materials for Concrete

During formulation of the design mix the proportions of aggregate to cement for the grade of concrete specified shall be such as to produce concrete of proper workability. The proportion by dry weight of fine to combined aggregates shall be controlled between limits of thirty (30) to forty-five (45) percent as directed by the Engineer, but the mix shall be so controlled as to use the minimum fine and the maximum coarse aggregate which will give a satisfactory and workable mix.

Measurement of cement, fine and coarse aggregate for all classes of concrete shall be by direct weight upon an approved type of scales. Water shall be accurately measured in gallons by equipment accurate to plus or minus five (5) percent.

The weight of cement in unopened sacks as packed by the manufacturer will be considered to be ninety-four (94) pounds per sack. The method of measuring the water shall be accurate and readily adjustable so that the proper ratio of water and cement in each batch may be secured. It is the intention of the Engineer to control rigidly the quantity of water in each mix and to get the densest possible concrete. The Engineer may require calibration of weighing equipment. Equipment for measuring water shall be checked and adjusted daily.

8. Source of Supply of Concrete

a. General

Concrete to be placed in the work may be proportioned and mixed by the Contractor on the site of the work or may be proportioned and mixed in a "Ready-Mix" central plant. Either plant shall be subject to the Engineer's approval of equipment and adequacy prior to the commencement of concrete placement operations. Such approval may be withdrawn by the Engineer if the concrete becomes non-uniform or for other reasons. In the case of such withdrawal of approval the Contractor shall either cause corrections necessary to obtain another approved source.

b. Mixing on Job Site

When small quantities of concrete are required at remote sites or the travel time from a ready-mix plant is deemed excessive or an approvable ready-mix plant is unavailable, the Engineer may approve job site mixing. The Engineer will require what is deemed adequate mixing and quality control equipment.

c. Mixing at a Central Plant

The name and location of the proposed plant and its sources of materials shall be submitted to the Engineer for approval. The Engineer may inspect the plant facilities and proposed mixer trucks and make a determination as to whether they are adequate to meet the quality control required. The Engineer's determination in this case will be FINAL and BINDING. The concrete shall be mixed and handled in accordance with the requirements of ASTM C94 except as otherwise specified herein. During the period of placing concrete the Engineer shall be afforded free access to the plant for such examinations as the Engineer deem necessary including the stationing of a separate resident project representative at the plant during batching operations if deemed desirable.

(1) Loading Tickets

Loading tickets shall be initialed by the "weight man" stating (1) the Class of concrete, (2) the name of the project, (3) the time of the batching, and (4) the batch weights of each material including water. When the mixer truck arrives on the job site a copy of the ticket shall be given to the resident project representative BEFORE the concrete is placed. Any additional materials added shall be noted.

(2) Transporting

Concrete shall be transported only in approved mixer trucks which will mix the concrete enroute. In extreme hot weather, when approved by the Engineer, the required amount of water may be added upon arrival of the truck at the job site in order to avoid pre-set of the mix enroute. Such approval requires close cooperation of all concerned and will be given only if equipment to accurately measure the water is available and only if strength and slump tests are found to be uniform; approval may be withdrawn for any reason including lack of cooperation. Concrete which reaches the job in a pre-set condition or fails to meet slump requirements will be rejected and shall be removed from the job site. No retempering with water or any other admixture will be allowed except in special emergencies and under the conditions set in Paragraph 9. Alteration of Concrete Slump (Retempering).

9. Alteration of Concrete Slump (Retempering)

ANY ALTERATION OF CONCRETE IS TOTALLY THE CONTRACTOR'S RESPONSIBILITY.

The concrete shall be mixed only in such quantities as required for immediate use, and shall be used while fresh and before initial set has taken place. The addition of water or some other plasticizer (sometimes called retempering) to a ready-mix truck at the job-site or such addition at any place more than ten (10) minutes after the original water charge has been added and mixing commenced is strictly prohibited except as provided herein. Any concrete which arrives on the job in which initial set has begun shall be wasted and not used in the work.

At the request of the Contractor, the Resident Observer may permit water and Portland cement to be added at the rate of twelve (12) gallons of water per sack of cement. If Portland Cement is not available without too great a time delay the Contractor may add up to one (1) gallon of water per cubic yard at his own risk.

If concrete arrives on the job too wet the slump may be altered by adding Portland cement and thoroughly mixing.

Any concrete which is altered shall have double the specified number of cylinders taken after said alteration and no work shall be added onto the pour in question until the quality is assured.

10. Placing of Concrete

a. General

All concrete shall be placed in daylight or daylight conditions approved by the Engineer and ONLY AFTER the Engineer's representative has been notified and has inspected and approved the placement of reinforcing steel and the general condition of form work.

All water and accumulated debris shall be removed from forms and observation holes shall be left in wall forms near the bottom for such purpose. For footings and on-grade slabs water shall be diverted or otherwise removed. For walls, beams, columns, and supported slabs the forms shall be wetted with water so as to tighten joints. Runways, where used, shall be independently supported so as to prevent disturbance of the forms.

CONCRETE WITHIN ANY UNIT OF WORK BETWEEN CONSTRUCTION JOINTS SHALL BE PLACED CONTINUOUSLY TO PREVENT "COLD JOINTS". New concrete shall be placed AGAINST each succeeding batch so as to build up a continuous monolithic "pour".

b. Cold Weather Placing of Concrete

No concrete shall be placed when the air temperature in a shaded area away from artificial heat is 40°F and falling. Concrete may be mixed and placed under the conditions set forth herein if the air temperature in the shade is 35°F and rising provided the Contractor makes provisions for heating to maintain 45°F and there is a U. S. Weather Bureau forecast for 45°F or above. When the air in the shade falls below 50°F the mixing water shall be heated (Maximum 140°F) so that the temperature of the concrete when deposited is between 60°F and 75°F. Several thermometers shall be maintained by the Contractor at the site of the work and placed as directed by the Engineer.

The Contractor shall supply such heating equipment as vented stoves and/or salamanders as are necessary to keep the temperature of the air surrounding the concrete from falling below 45°F until test specimens indicate the concrete has attained a compressive strength of 2,500 psi or greater or for a period of five (5) days. The Engineer may require additional heating units to be placed in operation if in the Engineer's opinion the concrete might be endangered by an additional drop in air temperature. When the required heating period has expired the concrete shall not be allowed to cool at a rate faster than 1°F per hour.

c. Hot Weather Placing of Concrete

When the temperature of the air exceeds 90°F or the average temperature for the period of placement exceeds 85°F or is predicted by a U.S. Weather Bureau forecast to exceed said limits special precautions are required. The temperature of the concrete shall not be allowed to exceed 90°F. Ice shall be substituted for mixing water prior to the addition of the other materials to mixer in order to maintain temperature. The ice shall be accurately weighed (8.34 pounds = 1 gallon) prior to its being placed in the mixer and the remaining mixing water reduced correspondingly. The temperature shall not be reduced below 65°F.

The maximum time allowed in the mixer by ASTM C94 (either three hundred [300] revolutions or one and one-half [1½] hours whichever occurs first) shall be considered the acceptable maximum at air temperatures between +45°F and +70°F. The following maximum allowables shall apply at various temperatures:

<u>Average Air Temperature</u>	<u>Maximum Time or Revolutions</u>
45°F - 70°F	1½ hours or 300
70°F - 80°F	1 hour or 200
80°F - 90°F	45 min. or 150
90°F - 100°F	30 min. or 100
100°F	No placing allowed

Extreme care shall prevail in the pouring of thin slabs and other thin sections. All forms, reinforcing steel, and/or subgrades shall be wet with cool water as shall all mixers, chutes, etc. immediately prior to concrete placement. No puddles of water shall be present at the time of placement.

d. Placing Concrete in Foundations

Whenever possible all foundation excavations shall be pumped dry and concrete deposited in the open. If it is not possible to proceed in this manner, a seal of concrete of sufficient thickness to resist any possible uplift shall be deposited under water in accordance with special directions of the Engineer. After the seal has set sufficiently, the foundation shall be pumped out; and the balance of the concrete placed in the dry.

e. Placing Concrete in Forms

Concrete shall be conveyed as soon as possible after mixing to the place in which it is to be deposited. The method and manner of placing shall be such as to avoid the possibility of segregation or separation of the aggregates or the displacement of the reinforcement. The concrete shall

be deposited so as to bring the construction up level and during the process, it shall be vibrated, rammed, spaded, or agitated by satisfactory tools so as to produce a compact concrete of maximum density with all spaces or voids filled and presenting a smooth, unbroken surface, free from coarse aggregate to exposed honeycomb spaces when the forms are removed.

f. Pumping or Chuting Concrete

If concrete is conveyed by pumps or chutes, the equipment shall be of such size and design as to insure a practically continuous flow. The slope of the chute or the design of the conveyance tubes shall be such as to allow concrete of a satisfactorily dry consistency to flow without separation of the ingredients. The chute or tube shall be thoroughly flushed with water before and after each run, discharging outside of the forms. Should stoppage occur in the chute or tube during concreting and the use of water be required to clean it, the water and all material removed from the chute or tube shall be wasted outside the forms. If, in the opinion of the Engineer, the arrangements for placement are such as to preclude the securing of watertight, smooth, dense concrete in any portion of the work, other and satisfactory means of transporting concrete shall be employed by the Contractor.

g. Vibrating Concrete

All concrete shall be vibrated in the forms as it is placed with mechanical internal vibrators maintaining 5,000 impulses per minute and approved by the Engineer. At least one (1) extra vibrator in operating condition shall be maintained at the job site in case of emergency.

11. Curing of Concrete

a. General

All concrete shall be protected from too rapid drying or curing by the covering of surfaces with burlap, curing compound as per ASTM C309, Type 1, or other suitable means immediately after finishing, concrete shall be kept moist for a sufficient period of time to insure satisfactory curing as directed by the Engineer, normally three (3) consecutive days.

b. Cold Weather Curing

If concrete is placed in cold weather the Contractor shall provide the necessary heat to insure that the temperature of the air immediately surrounding the fresh concrete does not drop below 45°F at any time, at any place, and that the concrete is uniformly kept warm until the concrete

has obtained a compressive strength of 2,500 psi or greater for at least five (5) days. The variations in temperature shall not exceed 10°F and no hot air shall be allowed to blow directly upon the fresh or curing concrete. The surfaces shall be protected from frost by covering with suitable blankets at any time the temperature is forecast to drop below 50°F.

c. Hot Weather Curing

During the curing of concrete in hot weather all surfaces shall be kept covered with burlap sacks or polyethylene and kept moist for a period of five (5) days after placing, after which the protective covering shall be allowed to gradually dry out.

The most extreme care shall be exercised to maintain a moist surface on slabs during the first twenty-four (24) hours after placement, and the Engineer, during periods of low humidity compounded by surface winds, may require continual wetting of the surface for a period of twenty-four (24) hours. After the first twenty-four (24) hours the surface shall be wet down when work is begun in the mornings and also at intervals during the day if required by the Engineer and left wet in the evenings.

12. Joints in Concrete

a. General

The placement of concrete shall be as shown on the Plans and/or approved "concrete placing plans" between construction joints. In general a unit shall not exceed thirty (30) feet in each direction nor more than nine hundred (900) square feet although the Engineer may approved larger pours when same are submitted in five (5) copies under the same procedure outlined for shop drawings and are to be considered as a shop drawing.

Vertical construction joints shall be provided at intervals of thirty feet (30') or less from corners and between construction joints on walls enclosing water holding basins above grade and dry spaces below grade. Horizontal construction joints shall be provided at intervals of thirty feet (30') or less in walls enclosing dry spaces below grade. Structural slabs on grade reinforced with deformed bars may be placed in pours of any dimension desired between construction joints.

Where a construction joint is made, laitance, all weak concrete, and foreign matter shall be removed and the concrete roughened.

On all joints except "expansion joints" the reinforcing shall be set to extend into subsequent sections of construction so as to make the work a

monolith. JOINTS SHALL NOT BE MADE EXCEPT AS THE ENGINEER MAY INDICATE, APPROVE, OR DIRECT TO PRESERVE THE STRENGTH, FACILITY OF PLACEMENT, OR WATERTIGHTNESS OF THE STRUCTURES. In general, the locations of the joints are shown on the Plans; but these may be changed if the Contractor requests and the Engineer approves. A period of at least forty-eight (48) hours shall elapse between the placement of adjacent concrete units or pours.

b. Watertight Expansion Joints

An expansion joint is defined as a joint specially constructed to allow movement as shown on the Plans. Expansion joints shall be constructed in accordance with the details shown on the Plans utilizing PVC waterstop, asphalt expansion joint filler, and SIKAFLEX 2c NS sealant or equal, and shall be watertight in water holding structures or dry wells. The expansion joint filler shall be the asphalt type conforming to the requirements of ASTM D994, W. R. Meadows, Inc. or equal. The exterior sealant shall be a two (2) part polysulfide rubber joint sealant conforming to the requirements of ASTM C920 for Class 25 sealants. The filler shall be applied so as to prevent "tracking" if accidentally stepped on.

c. Joints in Footings and Walls

Construction joints in footings and walls shall be located across areas of low shearing stress and shall be provided with keyways. Keyway details shall be as shown on the Plans or in special cases as directed. Waterstops shall be provided where shown on the Plans.

Expansion joints shall be located where shown on the Plans using the details of construction shown on the Plans.

d. Joints in Slabs and Beams

Construction joints shall be located near the middle of spans of slabs, beams, or girders; unless a beam intersects a girder at this point, in which case the joints in the girders shall be off-set a distance equal to twice the width of the beam. In this case, provision shall be made for shear by use of inclined reinforcement. Keyways shall be provided as shown on the Plans.

Expansion joints shall be located where shown on the Plans using the details of construction shown on the Plans.

e. Waterstops and Watertightness

Dry wells and structures housing equipment shall be watertight with no visible leaks and no accumulation of water. Any visible leaks shall be repaired to the satisfaction of the Engineer. Waterstops shall be polyvinyl chloride (PVC) and shall be of the configuration/type shown on the Plans. Keyways with eight (8) inch wide PVC waterstops for construction joints shall be used where such joints are shown. All PVC waterstops shall be installed as per the manufacturer's recommendations and shall be welded watertight.

Certain waterstops may be shown on the Plans or other material for special reasons.

f. Mastic Joints

Where joint sealer or mastic joint is noted on the Plans, the joints shall be sealed with the material designated on the Plans. All materials shall be installed in strict accordance with the manufacturer's instructions, and under the supervision of a qualified representative of the manufacturer. All surfaces and slots in concrete shall be provided as required by the manufacturer of the joint material.

g. Control Joints in Non-Reinforced, Non-Structural Slabs on Grade

Control joints in slabs on-grade which are reinforced with welded wire fabric only shall be saw cut and shall be a minimum of one-eighth inch (1/8") wide by one-fourth (1/4) the section in depth. Sawing of control joints shall be completed between twelve (12) and twenty-four (24) hours after finishing of the concrete surfaces. Timing of saw cutting shall be such that the slabs have sufficiently cured where no dislodging of aggregate occurs during the sawing operations.

The spacing of control joints and/or construction joints in slabs on grade shall generally not exceed fifteen feet (15').

Control joints in sidewalks shall be formed by tooling a groove downward from the surface with a one-fourth inch (1/4") edging tool. Spacing of control joints shall be equal to width of sidewalk.

h. Isolation Joints

Isolation joints to separate slabs from column footings, intersecting walls, etc. shall be provided where shown on the Plans. Isolation joint material shall be one-half inch (1/2") thick by the full depth of the slab, unless

otherwise noted on the Plans, and shall meet the requirements of ASTM D1994 for bituminous type performed joint filler.

Isolation joints, where shown on the Plans, separating concrete sidewalks from structures, concrete curbs, *etc.* shall be one-half inch ($\frac{1}{2}$ ") thick by the full depth of the sidewalk.

i. Joint Sealant

Where joint sealant is noted on the Plans and the joint sealant material is not designated, the joint sealant shall conform to the requirements of ASTM C1516 for cold application type concrete joint sealer.

13. Non-Shrink Grout

Non-shrink grout shall be used where called for on the Plans or required to insure watertightness. The proportions of the non-shrink grout mix shall be:

15 pounds Embecco or equal
100 pounds Portland Cement
100 pounds sand
150 pounds pea gravel (may be omitted)

14. Forms for Concrete Work

a. General

If required by the Engineer, forming plans shall be submitted by the Contractor and approved by the Engineer before the forms are on the work. The Contractor may submit a plan or schedule for forming for the Engineer's consideration. The Engineer's approval of the Contractor's method of forming will be for the benefit of the Contractor and will be based on the acceptability of the finished work; in no case will the Engineer pass on or be responsible for the structural adequacy of the Contractor's forms, false-work, or other construction procedures.

Forms shall be substantial and sufficiently tight to prevent leakage of mortar. They shall be properly placed or tied together so as to maintain position and shape and insure safety to workmen and passersby. Temporary openings shall be provided where necessary to facilitate cleaning and observation immediately before depositing concrete. CONCRETE SHALL NOT BE PLACED IN ANY FORM UNTIL THE FORM AND THE RESTEEL IS OBSERVED BY THE ENGINEER. Such Engineer comment or approval does not apply to the structural integrity of the framework which is the total responsibility of the Contractor. The Contractor shall be completely responsible for the strength and adequacy

of the form work and shall save the Owner and/or Engineer harmless from any claims arising therefrom for any reason.

b. False Work

All false work shall be solely the Contractor's responsibility as to strength, line, and grade, *etc.*; but the Engineer may disapprove work which is unworkmanlike, or in the opinion of the Engineer, will not yield the finished product required.

c. Material for Forms

The forms for the outside face of all exposed surfaces shall be of not less than one and one-half (1½) inch tongue and grooved lumber dressed on both edges and on the face next to the concrete or three-fourths (¾) inch plywood panels unless otherwise shown on the Plans or specifically permitted by the Engineer. Forms for all other concrete work may be constructed with one (1) inch by six (6) inch tongue and grooved sheathing or one (1) inch ship-lap. Where shown on the drawings or required in these Detailed Specifications, or by the Engineer, forms for all exposed walls (both inside and outside) shall be constructed of three-fourths (¾) inch plywood which, in all cases, must be approved by the Engineer.

Moldings and the ornamentation shown on the Plans shall be formed with wood or metal molds. The width of all boards used for such work shall be approved by the Engineer.

d. Unlined Forms

Unlined forms may be used on unexposed surfaces of walls, slabs, columns, and beams unless otherwise specified herein or as shown on the Plans. Form boards shall not be re-used in contact with exposed surfaces unless they are thoroughly cleaned and oiled and approved by the Engineer.

e. Lined Forms

Where specified herein or where shown on the Plans, plywood panel or lined forms will be used for certain portions of concrete masonry structures. Where lined forms are used, the lining shall be of fiber board or plywood which must, in all cases, be approved by the Engineer. All lining materials shall be used in as wide pieces as a single width of fiber board. The lining material shall be nailed to the backing beginning at the center of the board and working toward the edges to prevent buckling. Cigar box nails or similar nails with flat heads shall be used to attach lining material to forms. The edges of the linings shall be butted tight together,

and joints between the sheets shall be filled with a compound of litharge or Rutland Patching Plaster, or approved equal. Lining material may be re-used if it is satisfactorily cleaned and approved by the Engineer.

The smooth side of the lining materials shall be placed next to the concrete surface where smooth surfaces are specified; where granular surfaces are indicated or specified, the rough surfaces of the lining materials shall be placed next to the concrete.

f. Steel Forms

The use of steel forms may be used when approved in writing by the Engineer. Ties used with steel forms shall be of the type designed to remain permanently in place and conform to the requirements for form ties hereinafter. Steel forms, if used, shall be placed under the direction of a trained and competent representative of the supplier and the Contractor shall be totally responsible for their structural integrity.

g. Form Ties

Approved form ties shall be used for all wall construction. The ties shall be of the type that snap back in the wall, or permit removal of the tie ends. Ties shall be adjustable to permit tightening of forms, and of such type that will require a minimum amount of pointing with no metal closer than one-half (1/2) inch from face of wall. No ties will be permitted that require more than one and one-half (1½) inch for pointing. REMOVAL OR PULL-OUT TYPE TIES WILL NOT BE PERMITTED UNDER ANY CIRCUMSTANCES. Form ties with three-fourths (3/4) inch wood concrete snap ties shall be as manufactured by the Universal Form Company of Chicago, Illinois, or approved equal.

h. Form Release Agents

All forms that are not restricted by the form manufacturer from application of a form release agent shall receive a volatile organic compound (VOC) compliant, non-staining, reactive, architectural application form release agent. The form release agent shall be applied in accordance with the manufacturer's instructions. Form release agents shall be Duogard as manufactured by W. R. Meadows or equal.

i. Removal of Forms

Forms shall not be removed until the concrete has attained a strength sufficient to support itself and the superimposed loads. Under normal curing conditions (average temperature 50°F or above) the forms may be removed after following minimum time has elapsed.

Floor slabs, beams, and girders	- 10 days
Columns, pedestals, and sections less than 12 inches thick	- 4 days
Wall lifts (12 inches thick) under 10 feet	- 2 days (48 hrs. min.)
Wall lifts (12 inches thick) over 10 feet	- 3 days (72 hrs. min.)

In cold weather forms shall not be removed from any work when the danger exists of freezing the concrete or otherwise damaging the surface. Whenever a question exists as to removal of forms, the forms shall not be removed until a standard cylinder cured on the site in a manner similar to the work represented has attained a compressive strength of 3,000 psi.

The use of the foregoing table shall in no way relieve the Contractor of its responsibility for the safety and integrity of the structure.

15. Floor Drains, Sleeves, and Inserts

The Contractor shall be responsible for placing all sleeves, floor drains (which shall be placed one (1) inch low and the floor sloped thereto), wall castings, step nosing, and other inserts in the concrete walls and floors in their proper positions. If for any reason said sleeves, wall castings, and/or other inserts are not delivered prior to pouring, the Contractor shall box out for same in a manner acceptable to the Engineer. It shall then become the responsibility of the Contractor to place same and make a watertight closure of the openings in a manner satisfactory to the Engineer.

16. Slabs on Grade

a. Subgrade Preparation

Subgrade shall be prepared and constructed in accordance with "Guide for Concrete Floor and Slab Construction", ACI 302.1R and as hereinafter stipulated.

The subgrade shall be compacted in the presence of the Engineer immediately prior to the fine grading operation. All soft or unstable material detected during the final compacting shall be cut out and the area reworked to provide the specified density.

After final compacting, a six inch (6") crushed stone base shall be constructed as required to obtain the specified slab thickness within a tolerance of plus or minus one-fourth inch (1/4"). All ruts and depressions shall be filled to eliminate any abrupt changes in slab thickness.

A SIX (6) MIL POLYETHYLENE VAPOR BARRIER MEETING THE REQUIREMENTS OF ASTM D2103 SHALL BE PLACED OVER THE PREPARED CRUSHED STONE BASE PRIOR TO PLACING CONCRETE FOR THE SLAB.

b. Slab Placement

Materials and construction requirements relating to slabs on grade shall be in accordance with provisions outlined in this Section of the Specifications, in accordance with the "Guide for Concrete Floor and Slab Construction", ACI 302.1R and as hereinafter stipulated.

Slabs on grade which are not shown to pitch to drain shall be constructed to a uniform plane at the elevation shown on the Plans. Tolerance of dead-level slabs shall be plus or minus one-fourth inch ($\pm 1/4"$) in ten feet (10') (F_F22 and F_L22). Slabs at floor drains shall be finished with a four foot (4') diameter dish with center of dish one inch (1") below floor level.

Reinforcing steel shall be cut at isolation joints and expansion joints. Wire mesh reinforcement and bar reinforcement shall be placed as shown on the Plans.

Slabs shall be constructed in a strip pattern. The width of each strip shall coincide with the distance between column lines. Construction joints shall occur at the column lines in buildings.

Concrete shall be discharged as close to its final position as possible. Concrete shall be screeded with hollow metal straightedges, vibrating screeds or roller screeds. After initial screeding, low spots shall be filled with additional concrete placed by shovel and these areas shall be rescreeded. Screeding must be completed before any excess water or bleeding water is present on the surface of the concrete.

Immediately after screeding and before any excess moisture or bleeding water is present on the surface of the concrete, surfaces shall be bull floated with wood floats to eliminate ridges and fill in voids left by straight-edging operations.

Concrete shall be floated after it has stiffened to the point where foot pressure can be sustained with a maximum of one-fourth inch ($1/4"$) indentation. Floating shall be performed, utilizing power floats or trowelling machines fitted with float shoes. Surfaces inaccessible to power driven machines shall be hand floated, utilizing wood, magnesium or aluminum hand floats.

c. Curing

(1) Interior Floor Slabs

Interior floor slabs shall be cured with a membrane curing compound designed to cure, seal, harden, and dustproof. This compound shall be applied within one-half ($\frac{1}{2}$) hour after completion of finishing operations and/or immediately after disappearance of the "sheen" of surface moisture. Slab surfaces shall be uniformly coated at the rate recommended by the manufacturer. Application of material shall be by means of a roller or spray gun. If the floor slab is constructed prior to completion of the building envelope, floor surfaces shall be covered with curing sheets meeting the requirements of ASTM C171. Sheets shall be securely anchored and maintained in place for a minimum of seven (7) days.

(2) Exterior Slabs and Water Holding Basin Floor Slabs

Exterior floor slabs, slabs on grade not requiring special coatings, and floor slabs of water holding basins shall be cured with a membrane curing compound designed to cure and seal. The curing and sealing compound shall be a hydrocarbon, resin-based compound meeting the requirements of ASTM C309, Type 1, 1D, Class A and Class B. This compound shall be applied within one-half ($\frac{1}{2}$) hour after completion of finishing operations in accordance with the manufacturer's instructions. Slab surfaces shall be uniformly coated at the rate recommended by the manufacturer. Curing and sealing compound shall be CS-309-30 OTC by W. R. Meadows or equal.

As an alternative to use of membrane curing compound, the exterior slab may be completely covered with burlap and continuously soaked for ninety-six (96) hours after placing with a potable water sprinkler system.

17. Aluminum Safety Treads

The Contractor shall furnish and install on the leading edge of stairs, steps and landings nosings which shall be eight (8) inches less than the width of the surface to which said the nosing is attached (four [4] inches each side). The nosings shall be three (3) inches wide of the non-skid type equal to Wooster Products Type 101 alumogrip abrasive cast aluminum. Attachment shall be with concealed anchors on new work (for renovations use stainless steel screws). The installations shall be such that the top of nosing is flush with the top of the slab to which it is attached.

18. Concrete Finish

a. Floor Slabs

The concrete floors of all structures shall be finished monolithically with an allowable variation of one-eighth (1/8) inch in ten (10) feet transversely and longitudinally.

Concrete floor slabs on grade shall be placed over a well tamped and compacted subgrade. Form all recesses for thickened slabs, as shown on the Plans and thoroughly compact stone. Lay vapor barrier of six (6) mil (0.006 in.) thickness polyethylene over fill. Vapor barrier shall follow the contour of the thickness of the slab.

All floor drains shall be set one (1) inch lower than grade and the slab pitched thereto.

Slabs to receive quarry tile shall be finished by tamping the concrete with special tools to force the aggregate away from the surface; then screeded with straight edges and floated to produce a reasonably true and uniform surface.

b. Walls, Beams, Ceilings and Columns

(1) General

All concrete walls, ceilings, and beams shall be pointed; those which are to be exposed permanently to view, including the interior of basins to a point twelve (12) inches below the water line, shall be pointed and rubbed. If the surface is to be painted it shall be left smooth and all loose concrete rubbed away by use of a rough burlap sack or other effective method; if the surface is not to be painted it shall be rubbed as hereinafter specified. Foundation walls shall be rubbed to a point one (1) foot below grade on the outside. All projecting fins shall be removed from the concrete and holes left by form ties shall be pointed up.

(2) Pointing

After the specified curing times have elapsed, forms and form ties shall be removed and all depressions or imperfections inspected by the Engineer. After the Engineer has approved the general integrity of the work, all imperfections shall be wetted and repaired with non-shrink sand-cement mortar.

(3) Rubbing

After pointing has set, all surfaces requiring rubbing shall be kept wetted with water with a brush and rubbed with a No. 20 carborundum stone. The rubbing shall be continued sufficiently long to remove all marks and projections, producing a smooth, even surface without marked irregularities. The final rubbing shall be done with a No. 40 carborundum stone and continued until the entire surface is of smooth texture. After the rubbing has been finished, all excess particles shall be removed by brushing the surface with burlap. The finished surface shall be uniform in color and otherwise satisfactory to the Engineer.

(4) Coating

IF APPROVED by the Engineer in lieu of rubbing concrete, all structural cast-in-place concrete foundations, walls, beams, columns, roofs, ceiling and equipment foundations exposed to view and not identified or depicted on the accompanying Plans to receive any other finish or treatment, including the interior of all water holding structures to an elevation twelve inches (12") below the minimum normal water level and exposed exterior concrete walls to an elevation twelve inches (12") below finished grade, shall be coated as described hereinafter.

The coating shall be MasterSeal 584 or equal combined with water and MasterEmaco A660 or equal, both manufactured by Master Builders Solutions, or approved equal, in the proportions recommended by the product manufacturer for a trowel finish coating approximately one-eighth inch (1/8") to one-fourth inch (1/4") thick. The coating shall be applied according to the manufacturer's printed instructions including a "key coat" cured five (5) to seven (7) days followed by a final coat applied with a steel trowel and finished with a sponge float. All concrete coating described in this Paragraph shall be applied with a trowel finish, except that the coating to the underside of overhanging walkways may be applied with a brush finish. Application by spraying will not be allowed. All products used shall be those manufactured by Harris Specialty Chemicals, Inc., or approved equal.

The color shall be selected by the Owner.

c. Exterior Slabs

All walks, platforms, and exterior floors or slabwork shall have a broomed finish. After screeding to the required grade while the concrete is still

green, but has hardened sufficiently to bear the finisher's weight the surface shall be floated with a wood float to a true and even plane with no coarse aggregate visible. The slab shall then be evenly broomed with all strokes parallel to leave a workmanlike skid resistant finish.

d. Chamfer

All exposed edges shall be chamfered three-fourths (3/4) inch unless otherwise noted.

19. Watertightness

a. General

The Contractor is required to make watertight concrete in all structures holding water or solutions or dry wells or basements. All cracks and imperfections developing at any point in the work shall be thoroughly repaired in a manner satisfactory to the Engineer. When the concrete work has attained sufficient strength, the Contractor shall fill each basin or tank, or each compartment, with water, and shall repair any imperfections which cause the water level to fall more than one-half inch (1/2") in twenty-four (24) hours. All noticeable leaks in any portion of the work shall be repaired in any case, even if the preceding requirements as to watertightness are satisfied. THE CONTRACTOR MAY CONDUCT THIS WATERTIGHTNESS TEST EITHER BEFORE OR AFTER BACKFILLING EXTERIOR WALLS.

It is expected that with the proper precautions, a dense watertight concrete will be obtained. If concrete which passes the above requirements for watertightness has not been obtained, the Contractor shall, under the direction of the Engineer, furnish all materials and do all work necessary to produce watertight concrete structures.

All treatment of concrete necessary to fulfill these requirements for watertightness shall be done at the Contractor's own expense.

b. Dampproofing

The outer surface of all exterior concrete walls enclosing dry spaces (e.g. pits or structures housing equipment, valves or instruments) that is to be covered by backfill or by brick or decorative block shall be coated with an emulsion type asphalt dampproofing prior to backfilling or laying of brick. The dampproofing shall conform to ASTM D1227, Type 4 for brush-on application to concrete surfaces. Concrete structures containing water or wastewater do not require dampproofing.

Surfaces to receive dampproofing shall be clean and dry before application of dampproofing. Surfaces shall be primed in accordance with the manufacturer's recommendation. The dampproofing shall be applied uniformly at a rate of not less than thirty (30) pounds per one hundred (100) square feet.

Dampproofing shall be protected from damage until brick or decorative block is laid or backfill is placed. Concrete walls exposed to view after completion of construction shall not be waterproofed.

20. Defective Concrete

Concrete shall be so placed, compacted, finished and cured so as to form a dense, compact, impervious artificial stone with smooth exposed faces. Any part of the work found to be honeycombed, porous, or otherwise defective in the opinion of the Engineer shall be removed or replaced in whole or in part at the expense of the Contractor.

21. Testing of Concrete

In general, Section 2. Testing and Control of Materials of these Detailed Specifications, governs all testing.

The following tests and/or samples shall be taken in the field as work progresses:

a. Standard Slump Tests

Field slump tests shall be made by the Contractor, using an accurately made sheet iron test cone, in accordance with the provision of ASTM C143. At least one (1) slump test shall be made for each truck; the Engineer may require additional tests if he deems it necessary to insure the desired consistency of the concrete.

b. Concrete Compression Samples

During the progress of the work and for each different mix of concrete, test cylinders shall be made from each day's pour with a minimum of one (1) for each twenty-five (25) cubic yards or a maximum of one (1) from each batch or readymix truck load. The maximum requirement will be imposed only when the Engineer deems necessary due to wide fluctuations in the concrete quality. A minimum of three (3) cylinders will be required for each day's pour if the concrete is used in structures or otherwise in a load carrying capacity. Sidewalks, manholes, etc., may require only one (1) cylinder if less than twenty-five (25) cubic yards per day is placed, and the quality remains sufficiently high in the opinion of the Engineer.

Each cylinder shall be numbered and logged so as to adequately identify the location of the representative concrete in the structure.

The following "break" schedule for cylinders from the same pour will be used:

Where only one (1) cylinder is made	- 28 days
Where two (2) cylinders are made	- one at 7 days - one at 28 days
Where three (3) cylinders are made	- one at 7 days - one at 14 days - one at 28 days
Where four (4) cylinders are made	- one at 7 days - one at 14 days - one at 28 days - one reserved
Where over four (4) cylinders are made	- Same as four plus reserve or as directed

ASTM C31 shall govern with curing as required. The testing shall be done per ASTM C39.

22. Reinforcing Steel

a. General

Bar reinforcement and wire mesh reinforcement shall be furnished and tested in accordance with Section 2. Testing and Control of Materials. CERTIFIED MILL TEST REPORTS SHALL ALSO BE FURNISHED TOGETHER WITH AN AFFIDAVIT INDICATING THE ORIGIN.

b. Bar Reinforcement

Reinforcing steel shall conform to the requirements of ASTM A615 new billet steel, Grade 60, with deformations conforming with ASTM A615. An affidavit showing the heat numbers and origin shall be furnished.

All bars shall be lapped a minimum of thirty (30) diameters at splices unless a greater lap is shown on the Plans.

All detailing, fabrication, and erection of reinforcing bars, unless otherwise noted, shall be in accordance with the ACI "Manual of Standard Practice for Details and Guide to Presenting Reinforcing Steel Design Details" (ACI 315).

The Contractor shall furnish the Engineer with five (5) copies of shop drawings of reinforcing bars, and schedules showing all bends and special bars. These shop drawings and schedules must have the approval of the Engineer before shipment is made. The bars shall bear a designation on the drawings and in the schedule and shall be tagged with metal tags for identification. The Engineer's representative shall be afforded free access to the fabricating shops.

c. Wire Mesh Reinforcement

Wire mesh reinforcement shall conform to the requirements of ASTM A1064.

d. Openings

Openings twelve (12) inches and larger through concrete walls and slabs shall have a minimum of four (4) extra diagonal bars in each face of the wall or slab of the same size as the largest bar in the wall or slab. The length of extra diagonal bars at openings shall engage a minimum of forty (40) bar diameters each side of the opening unless space requires full bond to be developed by means of hooks.

e. Minimum Reinforcing Steel

If through an omission Class "A" concrete walls, slabs, and other concrete work are shown on the Plans to have no reinforcing, a minimum area of steel reinforcing equal to 0.0018 times the cross-sectional area of the concrete work shall be provided.

f. Storage and Protection

Steel reinforcement, either bars or mesh, shall be new stock free from rust scale and shall be stored above the surface of the ground upon platforms, skids, or other supports and protected from the weather. When placed in the work it shall be free from rust, dirt, scale, paint, oil, or other foreign matter which may reduce or destroy bond. A thin coating of red rust resulting from short exposures will not be considered objectionable when bars are placed in the work; but any bars having rust scale or a thick rust coat shall be thoroughly cleaned to the satisfaction of the Engineer, or shall be rejected and removed from the premises if ordered by the Engineer.

g. Placing and Fastening of Reinforcement and Inspection Thereof

Steel reinforcement shall be placed in the exact position as shown on the Plans and held securely in place during the placing of the concrete. All

reinforcement shall be wired together at intersections or as directed by the Engineer. Sheet metal or welded wire bar spacers shall be used for bars in all steps, walls, and beams. Hychairs, or approved equal, shall be provided for the support of reinforcement of slabs and flat surfaces. When the reinforcement is placed in the work, it shall have a clean, fresh surface, free from dirt, scaly rust, mill scale, paint, oil or other foreign substances.

BEFORE ANY CONCRETE IS PLACED, THE ENGINEER SHALL HAVE EXAMINED THE PLACING OF THE STEEL REINFORCEMENT AND GIVEN PERMISSION TO DEPOSIT THE CONCRETE. CONCRETE PLACED IN VIOLATION OF THIS PROVISION MAY BE REJECTED AND THEREUPON SHALL BE REMOVED.

23. Concrete Repair Material

Where the repair of existing Portland cement concrete is noted on the accompanying Plans, the following procedures and materials shall be utilized to perform the repair.

All surfaces to be repaired shall be prepared as necessary to make them clean and structurally sound. The surface shall be cleaned by chipping, acid-etching, sandblasting and/or shot-blast cleaning methods to remove all dust, grease, paint, sealers and other foreign materials from the Portland cement concrete surface to be repaired. If acid-etching is used, the surface to be repaired shall be neutralized using a caustic solution and brushed prior to performing the repair. The Portland cement concrete surface to be repaired shall be kept damp for thirty (30) minutes prior to beginning the repair work but standing water shall not be allowed on the surface to be repaired.

The repair material shall be a two (2) component acrylic polymer modified concrete repair material. The material shall be mixed and applied in strict accordance with the manufacturer's written instructions. The concrete repair material shall be Patchcrete® manufactured by Lyons Manufacturing, Inc. or equal.

SECTION 4

SITE PREPARATION AND DEVELOPMENT, PIPING AND VALVES

1. Scope

The work described in this Section includes furnishing all materials and equipment and performing all labor necessary for Site Preparation and Development, which includes but is not limited to temporary stormwater pollution control; excavation; installation of precast structures and manholes; piping installation; construction of embankments; backfilling around structures; site grading; driveway and parking areas; seeding; sodding; and all incidentals as shown on the Plans.

2. Excavation

a. General

Excavation shall consist of excavating and grading the site in reasonable close conformity with the contour lines shown on the Plans.

Site excavation shall be classified as follows:

(1) Common Excavation (Unclassified)

Common excavation shall include all excavation required for site grading, ditching, and construction of structures other than Undercutting.

(2) Undercutting

Undercutting shall consist of removing and disposing of unsatisfactory materials below grade in excavated sections where structures are to be founded and from areas upon which embankments are to be placed. Undercutting does not include the stripping of topsoil. The Contractor shall be paid for undercutting and filling the undercut volume at the unit prices provided in the BID FORM for excavation in earth for structures and pipelines and for TDOT No. 67 crushed stone for bedding and backfill unless noted otherwise on the Plans.

b. Limits

Excavations shall be made for a sufficient distance outside foundations, piers or walls to allow for inspection and to permit the various trades to install their work.

Unless otherwise specified or shown on the Plans, excavations for piers or walls shall be carried a minimum of six feet outside the piers or walls. Excavation for footings shall be to the footing dimensions.

c. Depth

Care shall be taken that excavation does not extend below the exact lines of the sub-foundations, footings and floor slabs on earth or rock. Should the excavation, through carelessness or negligence on the part of the Contractor be carried below such lines, the Contractor shall fill in the resulting excess excavation with Class "C" concrete, and/or TDOT No. 67 crushed stone, or compacted soil material as directed by the Engineer. This work shall be done at the Contractor's expense.

d. Removal of Water (Dewatering)

The Contractor shall by the use of well points, pumps or other approved methods, prevent the accumulation of water in excavated areas at no additional cost. Should water accumulate, it shall be promptly removed.

e. Shoring, Sheet piling and Bracing

Where unstable materials are encountered or as required by law or government regulations, such as OSHA, the sides of trenches or excavation shall be supported by substantial sheet piling, bracing and/or shoring. The design and installation of all sheet piling, sheet piling, bracing and shoring shall be based on computations of pressure exerted by the materials to be retained. The design and construction of adequate and proper shoring of all excavations shall be the entire responsibility of the Contractor.

Trench sheet piling shall not be removed until sufficient backfill has been placed to protect the pipe.

All sheet piling, planking, timbering, bracing and bridging shall be placed, renewed and maintained as long as is necessary to protect adjacent property, existing foundations, and/or utilities.

3. Embankments

Embankment work shall consist of construction of embankments in reasonably close conformity with the contour lines shown on the Plans.

The original ground surface, or the surface of any embankment layer in place, shall not be in frozen condition, and shall be free from quantities of snow, ice and mud when a subsequent layer is placed thereon.

All depressions or holes below the natural ground surface, whether caused by grubbing or otherwise, shall be filled with suitable material and compacted to ground surface before embankment construction is started.

Perishable materials, such as brush, hedge, roots, stumps, parts of trees, *etc.*, shall not be incorporated or buried in the embankments.

Embankments shall be so constructed that adequate surface drainage will be provided at all times. Embankment materials that will not support the foundation for a building or structure shall be placed in horizontal layers not to exceed 10 inches in depth before compaction, and each layer shall be compacted to a density not less than 95 percent of maximum density. Requirements for the construction of embankments that will support the foundation for a building or structure are described in Paragraph 5. Backfilling Around Structures of this Section.

Maximum density and optimum moisture will be determined in accordance with ASTM D698, Method A. Each layer of embankment shall be compacted to required density and approved before material for the next succeeding layer is placed. Placing and compacting areas shall be kept separate.

Where an embankment is to be constructed across low swampy ground that will not support the earth moving equipment, the lower part of the fill shall be constructed in a uniformly distributed layer of a thickness not greater than necessary to support the hauling equipment while placing subsequent layers. In the construction of such a lift the density requirement will be waived but the moisture content of the material used shall not exceed the optimum moisture content for that material. Maximum thickness and minimum density requirements will apply to all succeeding layers of the embankment.

The moisture content of the material being compacted shall meet both the following conditions: (1) the moisture content shall be within the range of values at which 98 percent of the maximum density can be obtained as indicated by the moisture-density relationship curve and (2) the moisture content shall not exceed the optimum moisture content by more than three percent.

The Contractor shall aerate the soil material used to construct embankments or distribute and incorporate water uniformly therein, as necessary, to control the moisture content within the applicable limits set out above.

Compaction of each layer of embankment shall be accomplished by the use of any type of compacting equipment that will produce the required results. The Contractor shall be responsible for the stability of all embankments and cut slopes until final acceptance and shall replace at his own expense any portions which, in the opinion of the Engineer, have become displaced or damaged due to his carelessness or negligence.

4. Crushed Stone (TDOT No. 67)

The Contractor shall place crushed stone where shown on the Plans or otherwise required under structures and as pipe bedding. Crushed stone shall meet the quality requirements of ASTM D692 and the gradation requirements for TDOT No. 67 which is as follows and shall be approved by the Engineer:

<u>Screen Opening Size</u>	<u>Percent Passing</u>
1-1 ½ inch	100
1-inch	95-100
½ inch	25-60
No. 4	0-10

5. Backfilling Around Structures

All backfill around structures shall be of select materials placed in horizontal layers not to exceed 10 inches in depth before compaction. Select material is native soil excavated from the site, free from rocks, foreign materials and frozen earth. The layers shall be thoroughly compacted to a solid homogeneous mass having at least 95 percent of maximum theoretical density as determined by ASTM D698, Method A.

Compaction around structures shall be by use of hand manipulated power tamping equipment. Care shall be taken not to disturb pipelines or damage the structures by reason of unsymmetrical loadings.

The Contractor's attention is called to Paragraph 9.b. Backfill Under Paved or Graveled Roads in this Section.

6. Disposition of Excavated or Waste Material

Topsoil shall be stripped from the area and stockpiled first. All excess excavated material shall be disposed of off-site by the Contractor at his own expense.

7. General Piping and Valve Applications

a. General

Buried gravity sewer and force main pipe shall be specially lined Class 350 ductile iron pipe as shown on the Plans. Exposed pipe shall be Class 53 flanged ductile iron pipe. All ductile iron pipe shall be specially lined as specified hereinafter.

b. Ductile Iron Pipe (DIP) and Fittings

(1) General

Ductile iron pipe shall be centrifugally cast meeting the requirements of ANSI/AWWA Standard C151/A21.51 as modified in this Paragraph. Pressure Classes shall be used unless indicated otherwise on the Plans.

THE MANUFACTURER OF THE DIP SHALL FURNISH A SWORN, NOTARIZED STATEMENT THAT THE INSPECTION AND SPECIFIED TESTS REQUIRED UNDER SECTION 5.1.1.2 OF ANSI/AWWA STANDARD C151/A21.51 HAVE BEEN MADE AND THAT ALL RESULTS THEREOF COMPLY WITH THIS STANDARD.

One copy of written transcripts of the results of the acceptance tests and low temperature impact tests on pipe manufactured for use in this Contract shall be furnished to the Engineer.

The weight, class, or nominal thickness, and casting period for each length of ductile iron pipe shall be shown on each length of DIP. The manufacturer's mark, country where cast, year in which the pipe was produced, and the letters "DI" or "DUCTILE" shall be cast or metal stamped on the pipe, and letters and numerals on pipe sizes 14 inches and larger shall be not less than ½ inch in height. All required markings shall be clear and legible, and all cast or metal-stamped marks shall be on or near the bell.

(2) Buried DIP Piping

Unless otherwise noted, all buried ductile iron pipe shall conform to the wall thickness requirements of Pressure Class 350 and shall have mechanical joints or push-on joints in accordance with ANSI/AWWA Standard C111/A21.11.

The inside of all buried DIP for wastewater service shall be specially lined as specified hereinafter.

Where called for on the Plans, buried DIP shall have restrained joints. The restrained joints shall be Flex-Ring Joint^R Pipe or Fastite Joint Pipe with Fast-GripTM gaskets manufactured by American Cast Iron Pipe Company; or TR Flex Joint Pipe or Ductile Iron Tyton Joint Pipe with Field LokTM gaskets manufactured by U.S. Pipe and Foundry Company.

(3) DIP Fittings

All ductile iron fittings shall be designed for a working pressure of 200 psi and shall conform to the requirements of ANSI/AWWA Standard C110/A21.10 or C153/A21.53.

The manufacturer of the ductile iron fittings shall furnish a notarized statement that the inspection and specified tests required in Section 10.5 of ANSI/AWWA Standard C110/A21.10 have been made and that all results thereof comply with this Standard.

Inspection of the fittings will not be made at the manufacturer's plant.

The inside of all DIP fittings for wastewater service shall be specially lined as specified hereinafter.

Fittings for all DIP installed outside above-ground or inside buildings and structures shall be flanged and shall conform to the applicable requirements of ANSI/AWWA Standard C110/A21.10. Fittings for all buried DIP shall be mechanical joint or push-on joint and shall conform to the applicable requirements of ANSI/AWWA Standard C110/A21.10.

Where denoted on the Plans, fittings for DIP pipelines shall be ductile iron and furnished with ductile iron mechanical joint retainer glands suitable for a working pressure of 100 psi plus a surge allowance of 100 psi. Ductile iron mechanical joint retainer glands shall be manufactured by American Cast Iron Pipe Company, EBAA Iron Sales, Inc., or approved equal. All set screws on the retainer glands shall be tightened, in the presence of the Engineer's Resident Observer, using a torque wrench to the manufacturer's recommended torsion.

Ductile iron fittings shall have distinctly cast on them the pressure rating, nominal diameters of openings, manufacturer's

identification, the country where cast, and the number of degrees or fraction of the circle on all bends. Ductile iron fittings shall have the letters “DI” or “DUCTILE” cast on them. Cast letters and figures shall be on the outside body of the fitting and shall have dimensions no smaller than the following:

Size (Inches)	Height of Letters (Inches)	Relief (Inches)
Less than 8	As large as practical	As large as practical
8-10	$\frac{3}{4}$	3/32
12-48	1 $\frac{1}{4}$	3/32

(4) Ductile Iron Pipe and Fittings with Special Lining

All ductile iron piping shall be lined with a special corrosion resistant lining as specified herein.

All specially lined pipe requires special handling from the outside of the pipe with straps or chains. No forks or hooks shall be used inside the pipe after the lining is applied. Field unloading shall be carefully performed, likewise, stenciled notations (at least 4 per pipe joint and 2 per fitting) shall note these handling limitations.

This specification allows U.S. Pipe Class 350 or American Class 350 pipe with Induron Protecto 401™ ceramic epoxy lining.

Induron Protecto 401™ ceramic epoxy shall be an amine cured Novalec epoxy containing at least 20 percent by volume ceramic quartz pigment. Coupons from factory lined DIP shall undergo the following tests:

- ASTM B 117 Salt spray (scribed panel)
- ASTM G 95 Cathodic Disbondment (1.5 volts @ 77 F) maximum 0.5 mm undercutting after 30 days.
- ASTM D714 Inversion Testing
 - 20 percent sulphuric acid - no effect two years
 - 140°F - 25 percent sodium hydroxide - no effect two years.
 - 160°F - distilled water - no effect two years.
 - 120°F - tap water - no effect two years

- Abrasion resistance - less than 4 mils loss after one million cycles on a +22.5 sliding aggregate slurry tester using sharp natural siliceous aggregate 2 mm to 10 mm.

Surfaces to be lined with Protecto 401™ shall be cleaned of oil and grease with a solvent using the guidelines for DIPRA-1 solvent cleaning and then abrasive blasted to remove rust and loose oxides and the lining applied within 8 hours. If rust reappears, reblast the rusted area.

All surfaces to be lined shall be cleaned to a minimum near-white metal finish as applied to ductile iron pipe and fittings. All surfaces to be lined shall be completely free of moisture, dust, grease, or any other deleterious substances, at the time the lining is applied.

The lining shall cover the inside surface of the pipe and fittings from the spigot end to the gasket socket. The coating in pipe and in fittings shall be 40 mils nominal thickness. Minimum lining thickness shall be 30 mils. Coating thickness on sealing areas in the bell socket and on the spigot may be decreased to 10 mils.

Thickness determinations using a TYPE 1 magnetic thickness gauge shall be conducted in accordance with Steel Structures Painting Council SSPC-PA2 Specification as applied to ductile iron pipe and fittings.

Holiday inspection as per ASTM G-62 Method B shall be conducted using a 2000 volt spark test. In accordance with the coating manufacturer's recommendation, holiday testing may be conducted any time after the coating has reached sufficient cure.

(5) Procedures for Sealing Cut Ends and Preparing Field-damaged Areas of Specially Lined Pipe and Fittings

- (a) Remove burrs caused by field cutting of ends or handling damage and smooth out edge of the lining if it is rough and remove loose liner.
- (b) Remove all traces of oil, grease, dust, dirt, etc.
- (c) With the area to be repaired absolutely clean and suitably roughened, apply a coat of Protecto Joint Compound using the following procedure:

Protecto Joint Compound is a 7 to 1 (7:1) mix ratio. When mixed, it should contain seven parts of the black activator

and one part of the translucent blending resin. This can be accomplished by using the same container to dip out seven containers from the large can and pouring one contained from the small can which contains the resin. This is the simplest and most accurate means for field mixing less than the kit provided. After the blending resin is added to the activator, the mixture should be thoroughly agitated. All activated material must be used within 45 minutes of mixing.

After the material has been thoroughly mixed in a 7 to 1 (7:1) ratio, it can be applied to the prepared surface by brush. Brushing is best due to the fact that the areas to be repaired are usually small. Practices conducive to a good coating are contained in the technical data sheet for Protecto Joint Compound.

8. Piping System Installation

a. Buried Piping

All buried piping shall be installed in accordance with the details as shown on the Plans.

The bed for each piece of pipe shall be carefully prepared so that each individual piece of pipe shall have a uniform bearing. Pipes shall be laid in a straight line and grade without kinks or sags, and in a workmanlike manner.

Before each piece of pipe is lowered into the trench, it shall be thoroughly swabbed out to insure its cleanliness. Each piece of pipe shall be lowered separately unless special permission is given otherwise by the Engineer.

Care shall be taken to prevent injury to the pipe coating both inside and out. If any defective pipe or fittings are discovered after the pipeline is laid, they shall be removed and replaced with a satisfactory pipe or fitting at no additional cost. Where a length of pipe is cut to fit in a line, it shall be so cut as to leave a smooth end at right angles to the longitudinal axis of the pipe.

All angles or bends in the pipelines, either vertical or horizontal, shall be satisfactorily braced or anchored against the tendency of movement with joint harnesses or concrete anchors as shown on the Plans or to the satisfaction of the Engineer.

Open ends of unfinished pipelines shall be securely plugged or closed at the end of each day's work or when the line is left unfinished at any other time.

b. Interior and Above-Ground Piping

(1) General

Unless shown otherwise on the Plans, all pipe runs shall be parallel with or at right angles to walls, ceilings, equipment, *etc.*; 45° fittings or angle runs shall be avoided where possible. Piping shall be neatly arranged and installed so that it both meets the intended service requirements and leaves the machine or equipment it is supplying accessible. Insofar as possible, all valves shall be accessible for operation by a person standing on the floor. ALL VALVES MORE THAN SIX FEET ABOVE FLOORS SHALL BE PROVIDED WITH OPERATORS THAT ARE ACCESSIBLE FROM THE FLOOR.

(2) Pipe Drainage

All piping installed for the purpose of gravity drainage shall be installed with the required slope in the proper alignment.

(3) Parallel Runs

All parallel runs of piping shall be installed with equidistant spaces between the piping and shall be neatly grouped. Grouping shall be such that cross-overs, except at branches, are avoided.

c. Testing

(1) General

When a section of pipe is complete, the pipe shall be flushed clean with water (except for chemical lines which shall be blown clean with dry, oil-free compressed air) and a leakage test conducted. The Contractor shall furnish all labor, materials and equipment for completing these tests. Joints of pipe that leak shall be repaired or replaced and re-tested under the same conditions and for the same period of operation until the line passes the required test. Whenever possible, testing of buried piping will be completed before the trench is backfilled.

(2) Testing of Pressure Lines

Pressure piping shall be tested at 100 psi. The allowable leakage shall not exceed the following values for the given pipe sizes.

<u>Line Size (Inches)</u>	<u>Allowable Leakage per 1000 Feet (gal./hour)</u>
1/2	0.04
3/4	0.06
1	0.08
1 1/2	0.11
2	0.15
3	0.23
4	0.30
6	0.45
8	0.60
10	0.75
12	0.90
14	1.05
16	1.20
18	1.35
20	1.50
24	1.80
30	2.25
36	2.70
42	3.15
48	3.60

The Contractor shall furnish all gauges, meters, pumps and other equipment required and shall maintain said equipment in condition for accurate testing as determined by the Engineer.

Each section of pipe shall be slowly filled with water to the specified test pressure, based on the elevation of the highest point on the section under test. Pressure shall be applied by means of a pump connected to the pipe in a manner satisfactory to the Engineer.

Before applying the specified test pressure, air shall be expelled completely from the pipe. If permanent air vents are not located at all high points, the Contractor shall install corporation cocks at such points so that the air can be expelled as the line is filled with water. After all the air has been expelled, the corporation cocks shall be closed and the test pressure applied. At the conclusion of the pressure test, the corporation cocks shall be removed and plugged or left in place at the discretion of the Owner.

Any exposed piping, fittings and/or joints shall be examined carefully during the test. Any damaged or defective piping, fittings or joints that are discovered following the pressure test shall be repaired or replaced with sound material, and the test shall be repeated until it is satisfactory to the Owner. Where leaks are visible at exposed joints and/or evident on the surface when joints are covered, the pipe shall be rejoined, and leakage minimized regardless of total leakage as shown by test.

LEAKAGE SHALL BE DEFINED AS THE QUANTITY OF WATER THAT MUST BE SUPPLIED INTO THE NEWLY LAID PIPE OR ANY VALVED SECTION THEREOF TO MAINTAIN PRESSURE WITHIN FIVE PSI OF THE SPECIFIED TEST PRESSURE AFTER THE PIPE HAS BEEN FILLED WITH WATER AND THE AIR HAS BEEN EXPELLED. LEAKAGE SHALL NOT BE MEASURED BY A DROP IN PRESSURE IN A TEST SECTION OVER A PERIOD OF TIME.

Duration of the pressure test shall be not less than two hours where joints are exposed and not less than eight hours where joints are covered.

Lines that fail to meet the leakage requirements shall be repaired and retested until test requirements are met. All pipe, fittings and other materials found to be defective under test shall be removed and replaced at the Contractor's expense.

9. Backfilling Pipeline Trenches

a. General

In the backfilling of the trench above the pipe or pipe envelope, material reasonably free from rock and acceptable to the Engineer shall be used; the backfill material shall be carefully and solidly tamped around the pipe up to the point where the pipe is thoroughly covered with at least one foot of material.

In the backfilling of the trench outside of roadway rights-of-way, material reasonably free from rock and acceptable to the Engineer shall be used.

Walking or working on the completed pipeline, except as may be necessary in tamping or backfilling, shall not be permitted until the trench has been backfilled to a height of at least one foot above the top of the pipe. The filling of the trench shall be carried on simultaneously on both sides of the pipe in such a manner that the completed pipeline will not be disturbed and injurious side pressures do not occur.

In filling the remainder of the trench, the backfill material may be shoveled into the trench without compacting, and heaped over whenever, in the opinion of the Engineer, this method of backfilling may be used without inconvenience to the public. Where street paving or shoulders are to be replaced, the Contractor(s) will be required to tamp or puddle all backfill as described hereinafter.

In areas where the line is laid in the right-of-way of a State Highway or when required by the Engineer, backfill shall be of select material of the same type as the existing natural material or fill in which the trench is dug. When so required by the Owner of the roadway, the backfill shall be placed in loose layers not exceeding six (6) inches and firmly tamped into place by tampers or rammers. The Engineer may also require puddling wherein, in his opinion, it is also necessary for proper compaction.

Whenever, in the opinion of the Engineer, it is necessary, he may require the Contractor(s) to use a combination of any or all of the above outlined methods for proper compaction of the backfill in the trenches.

Before final acceptance, the Contractor(s) will be required to level off all trenches where backfill material has been piled up, or to bring the trench up to the level of the surrounding street, roadway, or terrain. The Contractor(s) will be required to remove from the streets, roadways, and private property all excess earth or other materials.

b. Backfill Under Paved or Graveled Roads

Where lines are to be installed under paved or graveled roads, the backfill shall be TDOT No. 67 crushed stone above the pipe envelope as shown on the Plans.

A 6-inch minimum to 10-inch maximum layer of TDOT Dense Grade Aggregate, compacted in 5-inch lifts shall be installed prior to the surface course.

c. Backfilling Operations Conducted on Easements

Backfilling of trenches or excavations on easements shall be performed in such a manner that the private property owner's facilities and grounds shall be restored to as near as possible their original condition immediately after pipe laying.

After the pipe bedding, pipe, and backfill along the sides of the pipe and over the pipe (if required) as specified hereinbefore has been placed, the excavated rock next to the ditch shall be placed in the ditch. Excavated rock shall not be placed any closer than eighteen (18) inches from the

finished grade and any excess rock shall be removed by the Contractor(s) and disposed of as directed.

The residue of the stockpiled bedding material shall be cleaned up and placed into the trench, leaving no bedding stone scattered over the area. The previously excavated materials suitable for backfill shall be placed into the ditch only upon clean-up and backfill of the bedding material. The top portion of the trench or excavation shall be filled using the stockpiled topsoil. The ditch shall be left high to allow for settling unless in the opinion of the Engineer this method of backfilling will cause inconvenience to the private property owner. Seeding or sodding shall proceed immediately following backfill.

If the backfilling operation is performed during extremely dry weather the Contractor(s) should leave some stockpiled topsoil to use later as additional fill after settlement has occurred.

THE CONTRACTOR(S) WILL BE HELD RESPONSIBLE FOR THE CONDITION OF GRASS COVER AND THE CONDITION OF THE GROUND SURFACE AT THE TIME OF FINAL INSPECTION UNLESS THE PRIVATE OWNER HAS PLOWED OR EXCAVATED THE GROUND.

10. Inspection of Lines - During Construction

The Contractor(s) shall notify the Engineer when pipe will be received on the job so that proper arrangements may be made for inspecting the unloading and stringing, as well as inspecting the pipe proper and examining for the stamp of the independent laboratory, if applicable.

BEFORE THE CONTRACTOR(S) BACKFILLS ANY OF THE LINES, THEY SHALL BE FIRST INSPECTED BY THE ENGINEER; AND THE ENGINEER SHALL GIVE THE CONTRACTOR(S) PERMISSION TO PROCEED WITH THE BACKFILLING. If any joints, pipes, or other workmanship or materials are found to be defective, they shall be removed and replaced by the Contractor(s) without any extra compensation.

After storm sewer pipeline installation is complete, but prior to final inspection, the Contractor shall clean out the entire system of pipelines and manholes by pushing through each individual pipeline in the system, from manhole to manhole, appropriate tools for the removal from the pipelines of any and all debris and obstructions or, if possible, by flushing with water. Provisions shall be made to capture and remove from the storm pipeline system trash and debris collected during cleaning operations.

All storm sewer pipelines or sections of pipelines that are found to be constructed improperly with respect to alignment or grade, that are found to contain broken sections of pipe, or are obstructed in such a manner that they cannot be satisfactorily corrected otherwise, shall be removed and replaced at the Contractor's expense.

11. Manholes and Precast Structures

a. General

Only precast manholes and structures will be allowed unless shown otherwise on the Plans.

For pipe 21-inch in diameter and smaller, manholes shall have an inside diameter of 4 feet. For pipe larger than 21 inches in diameter, manholes shall have an inside diameter of 5 feet in the bottom section and eccentrically transition to 4-foot diameter as shown on the Plans.

b. Precast Concrete Manholes and Structures

Precast manholes and structures shall be constructed on a reinforced concrete foundation and shall be wet or dry cast as modified herein. The bottom section of the manhole shall be precast integrally with the precast ring and shall be the diameter shown on the Plans. All concrete used in connection with the construction of manholes shall be Class "A" concrete as specified in Section 3 of these detailed Specifications. Wet cast precast manholes shall be Sherman Dixie or equal.

Precast concrete rings shall be constructed using standard forms and shall conform to ASTM C478 except that:

- (1) The concrete mixture shall contain no less than 846 pounds per cubic yard (9.0 bag mix) of Portland Cement.
- (2) An eccentric top core will be allowed provided it meets these Detailed Specifications.
- (3) All joints shall conform to Section 8 of ASTM C361; except the Contractor(s) shall utilize a double seal of Ram-Neck as shown on the Plans.
- (4) XYPEX Admix C-1000 shall be incorporated into all precast manholes and structures.

The precast sections shall be manufactured and installed in a manner so that there is no visible leakage in the manholes. The manhole sections

shall be manufactured in lengths such that a finished manhole will have the least possible number of joints. One section less than four feet in length will be allowed per manhole and that being the section required to bring the manhole to grade. NO HOLES FOR LIFTING WILL BE ALLOWED. The precast rings shall be of the tongue and groove design sealed watertight, and the joint shall be grouted smooth on the inside and outside of the manhole so that no crack is visible. A-Lok gaskets or Kor-N-Seal connector assemblies shall be utilized in the sewer line to manhole connections.

The outside surface of all precast manholes and structures shall be coated with two layers of bitumastic coating applied at right angles to each other.

c. Connection of Sewer Line to Manhole

The connection of the manhole to the pipeline(s) shall be accomplished as follows:

<u>Type of Pipe</u>	<u>Type of Manhole</u> <u>Precast</u>
DIP	A-lok, Kor-N-Seal
PVC	A-lok, Kor-N-Seal

The A-lok gasket for use with precast manholes shall be a neoprene gasket cast into the manhole wall and providing the manufacturer's recommended pipe deflection while maintaining a watertight seal. The Kor-N-Seal connection shall consist of a neoprene boot with an internal expanding opening and stainless steel band and clamp.

Where main lines enter the manhole two (2) feet or more above the invert a drop shall be installed. Drop connections shall be made of flanged or mechanical joint cast iron or ductile iron pipe as specified herein.

An actual sample of the proposed pipe section with the waterstop welded thereon shall be submitted for the Engineer's consideration. The same installation procedures described for the cast iron wall pipe above shall be used except that no adaptor will be required to connect the similar pipeline material.

d. Standard Manhole Frames and Covers

Manhole frames shall be furnished and set in a bed of mastic and BOLTED to the concrete as shown on the Plans. The standard frame and cover shall be traffic type of grey cast iron ASTM A48 latest revision with a 24-inch diameter opening weighing not less than 400 pounds as shown on the Plans. The covers shall be the solid self-sealing type with no holes

except watertight pick notches or a heavy lifting ring. The surface between the cover and frame shall fit smoothly without rocking and shall be thoroughly cleaned. Special attention shall be given to insure the proper installation of the rubber gasket in the self-sealing cover. The gasket shall have at least 1/4-inch diameter cross-section. The frame shall be attached to the manhole barrel by means of four 5/8-inch anchor bolts and shall be set in a bed of mastic so as to constitute a watertight seal between the barrel and the frame.

An actual sample manhole frame and cover may be required shipped prepaid to the Engineer at his Nashville office for testing on the Engineer's testing apparatus along with shop drawings. The frame and cover shall leak at a rate of 2 gpm or less when submerged by 2 inches of water. The Engineer may make one or more random on job selections of further manhole frames and covers to be tested, all of which will be returned to the Contractor(s).

e. Manhole Steps

Manhole steps shall be made of copolymer polypropylene plastic meeting the latest revision of ASTM D2146, Type II Grade 16906 and shall have a 1/2-inch diameter Grade 60 reinforcing rod meeting the latest revision of ASTM A615 through its center. Each step shall be 12 inches in width and capable of carrying a load of 1,000 pounds in the center of the step when projected 6 inches from the wall. Each step shall be equipped with non-skid grooves.

f. Manhole Inverts

Manhole inverts shall be formed from Class "C" concrete as shown on the Plans. Inverts for "Straight-through" manholes may be formed by laying the pipe straight through the manhole, pouring the concrete invert and then breaking out the top half of the pipe. Curved inverts shall be constructed of concrete and shall form a smooth, even, half-pipe section as shown on the Plans. The inverts shall be constructed when the manhole is being built.

12. Wall Sleeves or Wall Pipe

Where ductile iron piping passes through reinforced concrete walls or floors, the Contractor shall furnish and install ductile iron wall pipe with an integral waterstop as shown on the Plans.

Where PVC or other non-ductile iron pipe passes through reinforced concrete walls or floors, the Contractor shall furnish and install a heavy walled hot-dip

galvanized steel wall sleeve with an integral waterstop and create a watertight seal around the pipe using an appropriate caulking or mechanical seal.

Where any pipe passes through a masonry wall, the Contractor shall furnish and install a hot dip galvanized steel wall sleeve for use with masonry and create a watertight seal around the pipe using an appropriate caulking or mechanical seal.

13. Gate Valves

Gate valves of the sizes, classes, and types required shall be furnished as shown on the Plans. Gate valves shall be iron body of the resilient seated type with resilient seals on both sides of the gate. Gate valves shall conform to the latest revision of AWWA C509 as extended and modified herein. Gate valves shall be suitable for minimum 150 psi working pressure unless otherwise noted and shall be tested at double their working pressure for two (2) hours. Gate valves shall be equipped with handwheel operators and shall open by turning to the left (counterclockwise).

14. Pump Discharge Check Valves

Check valves on pump discharges shall be of the flexible disc type and shall have cast iron body ASTM A126 Class B and shall be suitable for operation in horizontal lines. The valve shall achieve a tight closure and a non-slam characteristic by means of short disc stroke – not more than 35 degrees.

Check valves shall have a ductile iron body and Buna N disc. Check valves shall be Val-Matic Bulletin 500 or approved equal. Check valves shall be flanged with flanges dimensioned and drilled ANSI Class 125.

15. Plug Valves

Plug valves with manual operators are to be installed as shown on the Plans. Plug valves shall be of the non-lubricated eccentric type, with neoprene resilient plug faces, cast iron (ASTM 126, Grade B) bodies and shall be suitable for 50 psi working pressure. Valves shall have a welded-in nickel seat. The valve shall be constructed in such a manner that the packing and packing gland are accessible without disassembly of the valve. Port areas of valves shall be 100 percent of all pipe area. All plug valves shall open counterclockwise. Plug valves shall be suitable for domestic wastewater service and shall provide drip tight shutoff up to the full valve rating.

Plug valves shall be suitable for direct bury and shall be equipped with 2-inch square operating nuts. Plug valves shall be DeZurik Series 100 or pre-approved equal.

16. Buried Valve Installation

Buried valves shall be specially designed for buried service and shall be furnished with a solid shaft stainless steel extension stem where required to place the operating nut within three feet of the finished grade. Unless otherwise specified on the Plans, nuts shall be two-inch AWWA Standard for all types of buried valves. A three-piece valve box with concrete pad and labeling plaque as shown on the Plans is required. Where extension of the valve box is required, six-inch SDR-21 PVC pipe may be used, secured with a flexible coupling to the three-piece valve box.

17. Valve Boxes

Valve boxes shall be cast iron, THREE-PIECE, screw type with drop cover. They shall be set vertically and properly adjusted so that the cover shall be in the same plane as the finished surface of the ground or street. For ease of location and identification a two-foot square by six-inch thick concrete pad with a cast aluminum plaque imbedded therein shall be furnished as shown on the Plans.

18. Valve Stem Extension, Supports and Accessories

Valve stem extensions shall be provided where shown on the Plans. Stem extensions shall be stainless steel meeting the requirements of ASTM A276, Type 304 with operators as shown on the Plans and shall be securely fastened to the valve stem at the bottom. Stem extensions shall be of the diameter recommended by the manufacturer of the valve and must be of sufficient section to withstand any torsional or other load which will be imposed.

Stem extension guides shall be bronze bushed of the split type construction, machine bored 1/16 inch larger than the stem diameter, held to the wall by stainless steel anchor bolts and adjustable in two directions. Stem guides shall be provided as recommended by the valve and stem manufacturer.

19. Roadways, Drive and Parking Areas

The roadway and parking area at the site shall be constructed in accordance with the details and to the limits shown on the Plans and shall be properly crowned or sloped to drain.

Dense grade aggregate and TDOT No. 67 crushed stone in accordance with the requirements of TDOT shall be placed in layers. The last 3-inch layer shall be placed after construction is complete. The compacted thickness shall not be less than 6 inches. The Contractor shall surface the roadway and parking area as shown on the Plans and specified herein.

The density requirements for Type A Base shall apply.

20. Class “A” Concrete XYPEX Admixture

The Contractor shall incorporate XYPEX Admix C-1000 into all concrete cast at the Duck River SPS. The admixture shall be introduced at the batch plant in the presence of the Engineer at the rate of sixteen (16) pounds per cubic yard (3% cement weight of 546 pounds), subject to approval by the Manufacturer. The admixture shall not alter the color of the cement. No concrete pours shall take place without the Engineer witnessing the XYPEX admixture being introduced at the batch plant.

21. Fencing (Chain Link Type)

- Fencing and Swing-type Gates

The Contractor shall provide complete hot dip galvanized chain link fencing with entrance gate as shown.

The fabric shall be chain link type meeting AASHTO Specification M 181, Type 1, Class B using No. 9 gauge wire pickets forming a 2-inch mesh with a height of 6 feet. Fabric shall receive a Hot-Dip Zinc Coating per ASTM B6 with a minimum weight of 1.2 ounces per square foot. Three strands of barbed wire meeting TDOT Specification shall be placed on top of the fabric at an angle of 45 degrees to the outside, thereby making a total fence height of 7 feet. Privacy slats shall be installed in the fabric chain with the color to be determined by the Owner.

Line posts shall be either: (1) 1 ½-inch (1.90 O.D.) Galvanized steel pipe weighing 2.72 pounds per foot meeting ASTM A120; (2) 1.876 x 1.625-inch galvanized steel C-section weighing 2.34 pounds per foot meeting ASTM A570 Grade E; (3) 1.875 x 1.625 galvanized H-section weighing 3.26 pounds per foot; or (4) 1 ½-inch (1.90 O.D.) Triple coated steel pipe weighing 2.281 pounds per foot, with a 0.12-inch minimum wall thickness meeting the following specification:

Piping shall be manufactured by cold rolling and electric resistance welding conforming to ASTM A569 or ASTM A607 and shall be given corrosion protection by in-line application of hot-dip galvanizing followed by chromate conversion coating and electrostatically thermoplastic acrylic on the outside surface.

Hot-Dipped Zinc Coating per ASTM B6 with a minimum weight of 0.80 ounce per square foot shall be applied to all steel posts, braces, caps, fittings or other ferrous hardware. Pipe shall receive a minimum 3.0 mil thick internal zinc base protective coating capable of providing galvanic protection.

Corner and end posts shall be 2 ½-inch (2.875 O.D.) galvanized standard steel pipe weighing 5.79 pounds per foot or 2 ½-inch triple coated steel pipe, weighing 3.117 pounds per foot. Top rail and braces for end and corner posts shall be 1 ¼-inch (1.660 O.D.) galvanized steel pipe or triple coated steel pipe. Galvanized steel end posts, braces and top rail shall meet ASTM A120. Triple coated steel posts, braces and top rail shall be as specified hereinbefore.

Water crossings, water gates or special barbed wire configurations shall be used where fences cross streams, short depressions or ditches to make the enclosure secure.

Gates shall be of the types and sizes shown on the Plans complete with latches, stops, keepers, hinges and ball caps and rail ends. The Owner will furnish locks.

Line posts shall be set not more than 10 feet apart in post holes 12-inch diameter x 3.0 feet deep poured full with concrete against the native soil or rock. Corner posts and end posts shall be set in post holes 15-inch diameter x 3.5 feet deep poured full with concrete against the native soil or rock.

22. Finish Grading, Topsoiling and Seeding

Finish grading of disturbed areas shall be performed in accordance with the finished elevations and grades shown on the Plans and shall be made to blend into conformation with remaining natural ground surfaces. All finished grading surfaces shall be left smooth and free to drain. The tops of all cuts shall have berm ditches. Selected materials, which have been obtained from stripping the site, shall be spread upon the slopes of fills and other areas around the tank to a uniform depth and compacted suitable for planting. Excess materials shall be spread and compacted as directed. The top four (4) to six (6) inches of material in areas to be grassed shall be topsoil.

Soil tests shall be performed to determine the seed and fertilizer requirements. For the purposes of bidding, the following grass and fertilizer requirements shall be used:

Annual Rye Grass	application rate	28 lb/acre
Kentucky Fescue #31	application rate	28 lb/acre
Inoculated Clover	application rate	7 lb/acre
Ammonium Nitrate	application rate	200 lb/acre
Commercial Fertilizer	application rate	400 lb/acre
Lime, if required	application rate	200 lb/acre
Straw	application rate	3,000 lb/acre

Seed shall be certified to contain not more than 3 percent weeds.

All graded areas shall be topsoiled with materials stripped from the site. If the Contractor fails to stockpile the topsoil then material shall be brought in. The topsoil shall be left smooth and, after the fertilizer and/or lime has been distributed, it shall be disced or harrowed into the soil.

The seed shall then be sowed in a uniform manner. After sowing, the seed shall then be lightly covered by use of a drag or other approved device.

All seeding, grassing and sodding shall be watered thoroughly as soon as completed and shall be watered to provide continuous growth without setback until all growth is thoroughly established.

Any necessary reseeding, resodding or repairing shall be accomplished by the Contractor without further compensation prior to final acceptance. Final acceptance will occur when an acceptable stand of grass is obtained.

SECTION 5

MECHANICAL AND CONTROL EQUIPMENT

GENERAL

1. General

The work described at this Section of the Detailed Specifications, and the alphabetized Sub-Section(s) following, includes furnishing all materials and equipment and performing all labor necessary for complete operable installation of all mechanical and control equipment described at the following Sub-Section(s) and/or depicted on the accompanying Plans.

BIDDERS SHALL TAKE NOTICE THAT "TYING" OF EQUIPMENT INTO PACKAGES FOR THE PURPOSE OF THWARTING COMPETITION IS CONSIDERED TO BE IN NON-COMPLIANCE WITH THESE DETAILED SPECIFICATIONS. VENDORS SHALL PROVIDE PRICING FOR ITEMS UNDER DIFFERENT SUB-SECTIONS SEPARATELY.

2. Requirements for Equipment Vendors

a. General

The Contractor is required to list the price to furnish and install the items of equipment described at the following Sub-Sections proposed by the various vendors in the spaces provided in the BID FORM. Failure to list prices for the named vendors will constitute grounds for declaring the bid irregular, or if the Owner chooses, gives the prerogative of selection of equipment vendor solely to the Owner at no change in the contract Lump Sum Price listed at the BID FORM.

b. Pre-Submittal of Approval Data for Equipment Vendors

It shall be the responsibility of the Contractor to ascertain that each vendor listed in his BID FORM has submitted to the Engineer, at least 10 days prior to the bid date, complete information regarding the equipment proposed by that vendor. In the case of vendors listed at the following Sub-Section(s), this may be a statement to the effect that the equipment being offered complies with the stipulations of these Detailed Specifications and conforms with the requirements depicted at the accompanying Plans in every detail. Any and all exceptions to the requirements described at these Detailed Specifications and/or depicted at the accompanying Plans shall be listed in the vendor's pre-submittal so that a decision as to compliance with the requirements described at these

Detailed Specifications and/or depicted at the accompanying Plans may be made prior to bid date, otherwise it will be assumed the equipment conforms to the stipulations of these Detailed Specifications and with the requirements depicted at the accompanying Plans in every respect.

3. Shop Drawings

Shop drawings shall be provided in accordance with the requirements described at Section 1, Paragraph 9. Shop Drawings of these Detailed Specifications.

Shop drawings for the equipment, controls and materials described at the following Sub-Section(s) shall provide as a minimum the following information:

- a. General and detailed equipment and control layouts.
- b. Anchor bolt setting and erection plans.
- c. Weight and load values at each equipment foundation support.
- d. Capacity-head-efficiency-horsepower-net positive suction head required curves for all pumps.
- e. Manufacturer's rated efficiency, service factor, horsepower, normal full load amperes, and maximum load ampere ratings for all motors for all devices powered electric motors.
- f. Detailed dimensional drawings of panel fronts depicting all devices mounted on the panel front and the exact text to be used on identification nameplates, wiring diagrams, lists of control system components including manufacturer's name and catalog number, and detailed descriptive information such as copies of the manufacturer's catalog data for each control system component for control panels.
- g. List of spare parts and special tools to be furnished. Special tools shall be furnished as required by the nature of the equipment or as specifically stipulated in the Detailed Specifications.

WORK SHALL BE PERFORMED IN ACCORDANCE WITH REQUIREMENTS DESCRIBED IN THE APPROVED SHOP DRAWINGS.

4. Operation and Maintenance Manual Requirements

After approval of shop drawings but prior to installation and start-up of equipment, three copies of installation, operating and maintenance instructions shall be furnished to the Engineer. These materials shall include complete manufacturer's certified drawings of ALL major equipment, depicting ALL major

dimensions and views of important details; COMPLETE and COMPREHENSIVE instructions for operation and maintenance, including detailed piping arrangements, lubrication schedules, name and address of the manufacturer's representative, parts lists, wiring diagrams, capacity-head-efficiency-horsepower curves, design data, guides for "troubleshooting", and ALL other pertinent texts, diagrams, and illustrations. These materials shall be suitable for placing in a standard 8-1/2-inch x 11-inch three-ring binder. Oversized drawings shall be folded as necessary and supplied in pouches suitable for inclusion in a three-ring binder.

5. Supervision, Installation, Certification and Guarantee

a. General

The Contractor shall include in his price and furnish the services of competent factory representatives for the purpose of supervising the installation, start-up, and adjustment of the equipment described at the following Sub-Section(s). Sales representatives do not meet the definition of "factory representative".

The Contractor shall furnish sufficient service for proper installation of the equipment and to ensure operation as intended. Such service shall be furnished until final acceptance by the Engineer and throughout the guarantee period. The Contractor shall have on site upon date of start-up representatives from the Contractor, electrical sub-contractor and equipment providers listed hereinafter. The Engineer shall be notified of the desired date of start-up a minimum of seven (7) days in advance.

The following table lists the minimum number of man-days of on-site factory service required during supervising the installation, startup and operational adjustment for each equipment item and/or control system. This list serves only as minimum requirements for supervising the installation and startup of each equipment item and/or control system and does not include travel time to and from the job site.

<u>Equipment</u>	<u>Minimum Man-Days On Site</u>
Suction Lift Sewage Pumps	2 days during 2 trips
Control Panel / Telemetry Unit	2 days during 2 trips

b. Mechanical Tests

After installation, each unit of mechanical equipment shall be operated for a period of 24 hours by the Contractor in the presence of the Engineer's Resident Project Representative. During this period, the equipment shall be inspected for defects or weaknesses. Any part of the unit showing a

defect or weakness shall at once be replaced by the Contractor or shall be made good by the Contractor in a satisfactory manner at no expense to the Owner. After any part of the equipment showing defects or weaknesses has been replaced or made good, additional mechanical tests will be made with the equipment operating for a 24-hour period until no further defects or weaknesses are observed in the unit.

c. Certification

After installation and final testing of equipment, each manufacturer's factory representative shall make written certification to the Engineer that the equipment and associated controls have been properly installed in accordance with the approved shop drawings, that this equipment or control installation will be warranted by the manufacturer and that the Operation and Maintenance Manuals have been furnished to the Engineer.

6. Material to be Obtained from the Manufacturer or Supplier

The Contractor shall obtain all items described at the following Sub-Section(s) of the Detailed Specifications from the equipment manufacturer or supplier of the equipment described, and such incidental items as may be required for the proper installation and operation of the equipment furnished for the purpose(s) intended. Unless otherwise stipulated in these Detailed Specifications and/or noted or described on the accompanying Plans, connecting piping and valves, handrails, motor starters, and power and control wiring are excluded from this requirement.

ALL METALLIC FASTENERS USED TO ASSEMBLE THE EQUIPMENT DESCRIBED IN THE FOLLOWING SUB-SECTION(S) OF THESE DETAILED SPECIFICATIONS SHALL BE STAINLESS STEEL MEETING THE REQUIREMENTS AT ASTM STANDARDS F593 AND F594, GROUP 1 OR 2. EXCEPTIONS WILL NOT BE ALLOWED.

The vendor shall provide all lubricants, anchor bolts, expansion anchors, assembly fasteners and other miscellaneous items necessary to install and start-up the equipment described at the following Sub-Section(s) of these Detailed Specifications.

All mounting and/or anchoring hardware shall be fabricated from stainless steel forms meeting the requirements at ASTM A276 and/or ASTM A312 for Type 304 or 316 and shall be of a size determined by the equipment vendor to be necessary to anchor and install their specific equipment and accessories, unless otherwise specified. All assembly fasteners utilized with the mounting hardware shall be STAINLESS STEEL meeting the requirements of ASTM F593 and F594, Group 1 or 2.

Shop drawings will not be approved until all materials are listed.

Equipment offered contrary to the provisions of this Paragraph will be subject to rejection.

7. Patents

a. General

The Contractor shall guarantee to the Owner that all equipment described at the following Sub-Section(s) of these Detailed Specifications, and/or any process resulting from the use of such equipment in the manner stated, is not the subject of patent litigation and that he is not knowingly offering equipment the installation or use of which is likely to result in a patent controversy, in which the Owner as user is likely to be made the defendant.

b. License

Where patent infringements are likely to occur, each Contractor shall submit, as a part of his bid, license arrangements between himself or the manufacturer of the equipment offered, and the patent owner or the controller of the patent which will permit the use in the specified manner of such mechanical equipment or process as he may be bidding upon.

c. Liability

The Contractor, by submitting his bid, agrees to hold and save the Owner or its officers, agents, servants, and employees, including the Engineer, harmless from liability of any nature or kind, including cost and expenses, for, or on account of, any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the scope of work described at these Detailed Specifications, including the use of same by the Owner.

8. Piping and Electrical Connections

Completely dimensioned layouts shall be furnished by the Contractor for all piping, fittings, valves, and specialties related to the proper installation and operation of equipment described at the following Sub-Section(s). Deviations from dimensions depicted on the accompanying Plans caused by equipment dimensions related to equipment supplied by the different vendors shall be taken into consideration by the Contractor and changes in piping, electrical conduit, and other similar items shall be made at no additional cost to Owner.

Unless otherwise noted, all piping or equipment furnished with flanged connections shall include flanges dimensioned for facing and drilling in accordance with ASME/ANSI Standard B16.1 Class 125 and meeting the dimensional and bolting requirements at AWWA/ANSI Standard C110-98/A21.10-98, Table 14.

Electrical connections shall be performed as described at Section 6 of these Detailed Specifications, and as depicted on the accompanying Plans.

9. Sub-Sections

The requirements included in Section 5. Mechanical and Control Equipment – General apply to each of the following alphabetized Sub-Section(s) as though fully repeated therein. Each Sub-Section describing a particular piece or group of equipment items is intended to be an integral part of this Section 5.

SUB-SECTION 5A

DUCK RIVER SEWAGE PUMPING STATION
AND APPURTENANCES

1. Scope

The work under this Sub-Section of these Detailed Specifications consists of furnishing all labor, equipment and materials necessary to construct a new suction lift Duck River Sewage Pumping Station together with all appurtenances as shown on the Plans or specified.

Electrical work associated with equipment described at this Sub-section, including all connecting signal and power wiring, is depicted at the accompanying Drawings and should be reviewed and taken into account by the Vendor of equipment described at this Sub-Section.

THE VENDOR OF EQUIPMENT DESCRIBED AT THIS SUB-SECTION IS DIRECTED TO READ ALL OF SECTION 5 – MECHANICAL AND CONTROL EQUIPMENT – GENERAL BEFORE PROCEEDING WITH READING THIS SUB-SECTION.

2. Pumps, Pumping Station Construction and Controls

a. General

The Duck River Sewage Pumping Station shall be equipped with complete dual pumping units including two (2) pumps, each having the design capacity as set forth in this section.

The principal items of equipment shall include two horizontal, self-priming, centrifugal sewage pumps, V-belt drives, motors, internal piping, valves, motor control panel, automatic liquid level control system, and internal wiring.

Each single pump unit shall have a fiberglass reinforced plastic enclosure cover which shall house the pumps, valves, ventilating fan, control system and electrical panel(s).

b. Fiberglass Reinforced Plastic Enclosures and Ventilation

The station enclosure shall provide sufficient inside area for maintenance personnel to perform normal operation and maintenance inside, sheltered, and free from foul weather. The enclosure shall consist of a base to

support the pumps and a cover. Minimum dimensions of the enclosure shall be eight feet by twelve feet and nine feet in height.

The station enclosure shall be manufactured of molded fiberglass reinforced orthophthalic polyester resins with a minimum of 30% fiberglass, and a maximum of 70% resin. Glass fibers shall have a minimum average length of 1¼ inches. Resin fillers or extenders shall not be used. Major design considerations shall be given to structural stability, corrosion resistance, and water-tight properties. The polyester laminates shall provide a balance of mechanical, chemical, and electrical properties to insure long maintenance free life. They must be impervious to micro-organisms, mildew, mold, fungus, corrosive liquids, and gases which can reasonably be expected to be present in the environment surrounding the wet well. See manufacturer's requirements for enclosure warranty in these specifications.

All interior surfaces of the housing shall be gel coated with a polyester resin. It shall be of suitable thickness and formulated to provide:

- (1) Maintenance-free service
- (2) Abrasion resistance
- (3) Protection from sewage, greases, oils, gasoline, and other common chemicals.
- (4) Color fastness
- (5) Gloss retention

Interior surfaces of the enclosure cover shall be white for maximum light reflectivity. The base shall be of a darker color to de-emphasize the presence of dirt, grease, *etc.* Colors used for both portions shall result in a pleasing looking structure.

The pump station shall be furnished with 1 ½-inch thick foam insulation which shall be applied to the walls, door, and roof to achieve an R-10 insulation factor. A gasketed seal around the door shall also be included.

The outside of the enclosure shall be coated with a suitable pigmented resin compound to insure long, maintenance-free life. The fiberglass enclosure shall be a regular product of the pump station manufacturer.

The enclosure cover shall be provided with hinged fiberglass reinforced access doors. Minimum dimensions of the door shall be 72 inches wide by 80 inches high for access by maintenance personnel to station interior. Door shall be a minimum 1 7/8-inch thick and shall be hinged with a minimum of two heavy duty stainless steel hinges to the enclosure cover. Door shall be furnished with a padlockable handle connected to a latching mechanism. Latch shall engage door casing or maximum security against

vandalism. All mounting hardware for door casing and door must be concealed or of such type as to prevent vandalism with ordinary tools.

The station enclosure shall be furnished with an insulated overhead rolling hurricane style service door measuring 8'x8'. The door shall be sealed and gasketed to be weathertight and shall be capable of being internally padlocked. Flexible weather stripping shall be utilized at the bottom of the door. The door shall include overhead receiver and track hardware installed and shall be constructed with locking provisions. The door shall be capable of being opened manually.

A duplex ground fault indicating utility receptacle providing 115 volts, single phase, 60 hertz shall be mounted inside the pump station. Receptacle shall be NEMA 5-15r configuration, heavy duty, specification grade and fitted with a weatherproof cover. The receptacle shall be protected by normal duty circuit breaker.

There shall be two or more gasketed, fiberglass housing, fully enclosed, 6,000 lumen Lithonia or equal forty-eight (48) inch minimum length LED light fixtures installed within the equipment enclosure, as shown on the plan for this item. The light switch shall be of the night glow type and be located conveniently adjacent to the door.

Fluorescent, open fluorescent or incandescent fixtures **will not** be accepted.

The station enclosure shall be manufactured of molded fiberglass reinforced orthophthalic polyester resins with minimum of 30 percent fiberglass and a maximum of 70 percent resin. Glass fibers shall have a minimum average length of 1 1/4 inches. The enclosure shall be resistant to corrosion, impervious to mold, mildew, fungus and sewer gases and shall be raintight. The enclosure shall have a K-factor of 1.5 so that the heating and ventilating provided will protect the equipment and allow it to operate between temperatures of minus 25°F and plus 105°F. The temperature in this area often remains in the plus 20°F to minus 15°F range for several days.

A shuttered exhaust fan with a minimum capacity to change the air in the enclosure once every minute, shall be mounted in open end wall. In the wall approximately opposite to this shall be mounted an air intake. Both intake and exhaust openings shall be equipped with a bronze bird screen and cowl suitably designed to prevent the entrance of rain, snow, rocks, and foreign material. The fan circuit shall be fused and shall be provided with a disconnect switch. The fans shall operate on thermostats.

A wall mounted heater shall be supplied with a minimum rating of 10,329 BTU/HR – 3,000 watts, 240 volts. The heater shall be fan forced, UL listed, hard wired per US 400-1, and have enclosed resistance wire within steel finned elements. The heater shall operate on a thermostat.

c. General Pump Requirements

Pump shall be horizontal, self-priming centrifugal type, designed specifically for handling raw unscreened domestic sanitary sewage or industrial waste.

The discharge port of the upper casing shall be capable of being rotated to allow for multiple pipe connection orientations.

The pumps shall be horizontal, belt driven, self-priming sewage pumps, specifically designed for pumping raw, unscreened, domestic sanitary sewage. The pump shall retain sufficient liquid in its casing to accomplish unattended automatic re-priming.

Openings and passages of the pump shall be large enough to permit passage of a sphere 3 inches in diameter and similar grease, trash, or stringy material. Each pump shall be equipped with a removable inspection cover plate allowing complete access to pump interior to permit removal of stoppages and to provide simple access for service and repairs without disturbing suction or discharge piping.

d. Pump Materials and Construction

Pump casings shall be cast iron Class 30 with integral volute scroll. Casing shall incorporate following features:

- (1) Mounting feet sized to prevent tipping or binding when pump is completely disassembled for maintenance.
- (2) Fill port cover plate, 3 ½-inch diameter, shall be opened after loosening a positive lock clamp bar assembly. In consideration for safety, capscrew threads must provide slow release of pressure, and the clamp bar shall be retained by detente lugs. A non-metallic gasket shall prevent adhesion of the fill port cover to the casing while assuring a reliable seal.
- (3) Lower casing drain plug shall be at least 1 ¼-inch NPT to ensure complete and rapid draining.

- (4) Liquid volume and recirculation port design shall be consistent with performance criteria listed hereinafter at Paragraph 2.f. Pump Characteristics and Requirements.

e. Coverplate Assembly

Coverplate assembly shall be cast iron Class 30. Design must incorporate following maintenance features:

- (1) A lightweight inspection cover plate, retained by acorn nuts, for access to pump interior for removal of stoppages. Designs that require removal of complete cover plate assembly for access to the impeller will not be accepted.
- (2) Retained by acorn nuts for complete access to pump interior. Back coverplate removal must allow service to the impeller, seal, wear plate or check valve without removing suction or discharge piping. Back coverplate shall incorporate an obstruction free flow path by combining four support posts into a two-point “webbed” plate design for increased durability, reduced clogging, and increased operational efficiency.
- (3) Aggressive Self-Cleaning Wear Plate
 - A replaceable wear plate secured to the back cover plate by studs and nuts. Wear plate shall be self-cleaning design ensuring that debris is cleared away and does not collect on the impeller vanes.
 - The nature of the conveyed medium poses significant challenges to the continuous operation of the pump. Of particular concern is the clogging of the impeller by debris in the pumped medium including but not limited to long rags, fibers, and like debris which are able to wrap around the impeller vanes, stick to the center of the vanes or hub, or lodge within the spaces between the impeller and the housing.
 - The aggressive self-cleaning wear plate shall have integral laser cut notches and grooves in combination with a “tooth” designed to disturb and dislodge any solids which might otherwise remain on the impeller in dynamic operation. Wear plate is designed to constantly and effectively clear the eye of the impeller without the use of blades or cutters.

- (4) In consideration for safety, a pressure relief valve shall be supplied in the inspection coverplate. Relief valve shall open at 75-200 PSI.
- (5) One O-ring of Buna-N material shall seal inspection coverplate to back coverplate.
- (6) Two O-rings of Buna-N material shall seal back coverplate to pump casing.
- (7) Pusher bolt capability to assist in removal of inspection coverplate or back coverplate. Pusher bolt threaded holes shall be sized to accept same retaining capscrews as used in rotating assembly.
- (8) Easy-grip handle shall be mounted to face of inspection coverplate.

Each rotating assembly, which includes impeller, shaft, mechanical shaft seal, lip seals, bearings, seal plate and bearing housing, must be removable as a single unit without disturbing the pump casing or piping. Design shall incorporate the following features:

- (1) Seal plates and bearing housings shall be cast iron Class 30. Anti-rotation ribs shall be cast into the seal plates to reduce internal wear and maximize component life. Separate oil filled cavities, vented to atmosphere, shall be provided for shaft seal and bearings. Cavities must be cooled by the liquid pumped. Three lip seals will prevent leakage of oil.
 - (a) Each bearing cavity shall have an oil level sight gauge and fill plug check valve. The clear sight gauge shall provide easy monitoring of the bearing cavity oil level and condition of oil without removal of the fill plug check valve. The check valve shall vent the cavity but prevent introduction of moist air to the bearings.
 - (b) Each seal cavity shall have an oil level sight gauge and fill/vent plug. The clear sight gauge shall provide easy monitoring of the seal cavity oil level and condition of oil without removal of the fill/vent plug.
 - (c) Double lip seals shall provide an atmospheric path providing positive protection of bearings, with capability for external drainage monitoring.
- (2) Impellers shall be ductile iron, two vane, semi-open, non-clog, with integral pump out vanes on the back shroud. Impellers shall be

statically or dynamically balanced. Impeller shall thread onto the pump shaft and be secured with a lockscrew and conical washer.

- (3) Shafts shall be AISI 4140 alloy steel unless otherwise specified by the Engineer, in which case AISI 17-4 pH stainless steel shall be supplied.
- (4) Bearings shall be anti-friction ball type of proper size and design to withstand all radial and thrust loads expected during normal operation. Bearings shall be oil lubricated from a dedicated reservoir. Pump designs which use the same oil to lubricate the bearings and shaft seal shall not be acceptable.
- (5) Each shaft seal shall be oil lubricated mechanical type. The stationary and rotating seal faces shall be silicon carbide alloy. Each mating surface shall be lapped to within three light bands flatness (35 millionths of an inch), as measured by an optical flat under monochromatic light. The stationary seal seat shall be double floating by virtue of a dual O-ring design. An external O-ring secures the stationary seat to the seal plate, and an internal O-ring holds the faces in alignment during periods of mechanical or hydraulic shock (loads which cause shaft deflection, vibration, and axial/radial movement). Elastomers shall be viton; cage and spring to be stainless steel. Seal shall be oil lubricated from a dedicated reservoir. The same oil shall not lubricate both shaft seal and shaft bearings. Seals shall be warranted in accordance with requirements listed under Paragraph 16. Guarantee of this section.
- (6) Pusher bolt capability to assist in removal of rotating assemblies. Pusher bolt threaded holes shall be sized to accept same capscrews as used for retaining rotating assemblies.

Adjustment of the impeller face clearances (distance between impeller and wear plate) shall be accomplished by external means.

- (1) Clearances shall be maintained by a four point external shimless coverplate adjustment system, utilizing a four collar and four adjusting screw design allowing for incremental adjustment of clearances by hand as required. Each of the four points shall be lockable to prevent inadvertent clearance increases or decreases due to equipment vibration or accidental operator contact. The four point system also allows for equal clearance gaps at all points between the impeller and wear plate. Requirement of realignment of belts, couplings, etc., shall not be acceptable. Cover plates shall be capable of being removed without disturbing clearance settings.

Clearance adjustment systems that utilize less than four points will not be considered.

- (2) There shall be provisions for additional clearance adjustments in the event that adjustment tolerances have been depleted from the cover plate side of the pump. The removal of stainless steel tabbed spacers from the rotating assembly side of the pump shall allow for further adjustment as described above.
- (3) Clearance adjustments which requires movement of the shaft only, thereby adversely affecting seal working length or impeller back clearance, shall not be acceptable.

Removal or installation of the check valve must be accomplished through the cover plate opening without disturbing the suction piping or completely draining the casing. A blow-out center shall protect pump casings from hydraulic shock or excessive pressure. Removal or installation of the check valve must be accomplished from the top of the lower pump casing without disturbing the suction piping or completely draining both casings. Sole function of check valve shall be to save energy by eliminating need to reprime after each pumping cycle. Pumps requiring a suction check valve to assist reprime will not be acceptable.

Pump shall include flange kit consisting of two ASA spool flanges that shall be one-piece cast iron class 30 suitable for attachment to suction and discharge ports. Each spool shall have one 1 ¼-inch NPT and one ¾-inch NPT tapped hole with pipe plugs for mounting gauges or other equipment.

Pumps to be supplied with a drain kit for ease of maintenance. The kit to contain 10' length of reinforced plastic hose with a female quick connect fitting at one end, and factory installed drain fittings in each pump. Fittings include a stainless steel pipe nipple, stainless steel bushing, stainless steel ball valve and aluminum male quick connect fitting.

f. Pump Characteristics and Requirements

The Duck River Sewage Pumping Station shall be furnished with two (2) suction lift sewage pumps meeting the following criteria:

Maximum Speed Condition (Duck River SPS only)

Maximum Allowable Speed	1,400 RPM
Minimum Shutoff Head	115 Feet
Design Capacity	2,050 GPM
Design Total Dynamic Head	64 Feet

Maximum Speed Condition (Duck River, Carter's Creek and Bear Creek SPS)

Maximum Allowable Speed	1,400 RPM
Design Capacity	1,250 GPM
Design Total Dynamic Head	87 Feet

Minimum Speed Condition (Duck River SPS only)

Minimum Allowable Speed	1,000 RPM
Design Capacity	1,500 GPM
Design Total Dynamic Head	60 Feet

Other Requirements

Maximum Motor Horsepower	75 HP
Minimum Solids Size Passing	3-inch Sphere
Minimum Efficiency – Max. Speed	58 percent
Minimum Efficiency – Min. Speed	50 percent
Maximum Net Positive Suction Head Required @ Max. Speed	15 Feet

A Gorman Rupp Model T8A-B-3 with a 14¾ Ø" impeller at 1,300 RPM appears to meet the above design requirements.

g. Air Release Valves

An automatic air release valve shall be furnished for each pump designed to permit the escape of air to the atmosphere during initial priming or unattended repriming cycles. Upon completion of the priming cycle or repriming cycle, the valve shall close to prevent recirculation. Valves shall provide visual indication of valve closure and shall operate solely on discharge pressure. Valves which require connection to the suction line shall not be acceptable.

All valve parts exposed to sewage shall be constructed of cast iron, stainless steel, or similar corrosion resistant materials. Diaphragms, if used, shall be of fabric reinforced neoprene or similar inert material.

A cleanout port, three inches in diameter, shall be provided for ease of inspection, cleanout, and service.

Valves shall be field adjustable for varying discharge heads.

Connection of the air release valves to the station piping shall include stainless steel fittings.

h. Pressure Gauges

Each pump shall be equipped with a glycerin-filled compound gauge to monitor suction pressures, and a glycerine-filled pressure gauge to monitor discharge pressures. Gauges shall be a minimum of 4 inches in diameter and shall be graduated in feet water column. Compound gauges shall be graduated -34 to 34 feet water column minimum. Discharge pressure gauges shall be graduated 0 to 250 feet water column and shall be equipped with red lag hands.

Gauges shall be mounted on a resilient panel and frame assembly which shall be firmly secured to pumps or piping. Gauge installations shall be complete with all hoses and fittings and shall include a shutoff valve installed in each gauge line at the point of connection to suction and discharge pipes. All gauge piping to be SST.

i. Spare Parts Kit

There shall be furnished with the pump station the following minimum spare parts:

- (1) One spare pump mechanical seal (complete with shaft sleeve)
- (2) One cover plate O-Ring
- (3) One rotating assembly O-Ring
- (4) One set of rotating assembly spacers
- (5) One set of impeller clearance adjustment shims
- (6) One quart of seal lubricant

j. Electrical Control Components

(1) Panel Enclosure

Electrical control equipment shall be mounted within a common NEMA 1 stainless steel, dead front type control enclosures. Doors shall be hinged and sealed with a neoprene gasket and equipped with captive closing hardware. Control components shall be mounted on removable steel back panels secured to enclosure with collar studs.

All control devices and instruments shall be secured to the sub-plate with machine screws and lockwashers. Mounting holes shall be drilled and tapped; self-tapping screws shall not be used to

mount any component. All control devices shall be clearly labeled to indicate function.

(2) Branch Components

All Motor branch and power circuit components shall be of highest industrial quality. The short circuit current rating of all power circuit devices shall be a tested combination or evaluated per the National Electric Code Article 409. The lowest rated power circuit component shall be the overall control panel short circuit rating and shall not be less than the fault current available. The minimum control panel rating shall not be less than 10 kA, rms symmetrical. Control assemblies operating at 120 volts nominal or less may be provided with transformers which limit the fault current and may be rated less than the minimum required short circuit rating.

A properly sized heavy duty circuit breaker shall be furnished for each pump motor. The circuit breakers must be sealed by the manufacturer after calibration to prevent tampering.

An operating mechanism installed on each motor circuit breaker shall penetrate the control panel door. A padlockable operator handle shall be secured on the exterior surface. Interlocks must prevent opening the door until circuit breakers are in "OFF" position. An additional mechanism(s) shall be provided on the circuit breaker permitting the breaker to be operated and/or locked with the control panel door in the open position.

3. Step-Down Transformer

The lift station shall be equipped with a 5 KVA step-down transformer to supply 115 volt, AC, single phase for the control and auxiliary equipment. The primary and secondary side of the transformer shall be protected by a thermal magnetic circuit breakers, sized to meet the power requirements of the transformer. An operating mechanism shall penetrate the control panel door and a padlockable operator handle shall be secured on the exterior surface. Interlocks must prevent opening the door until primary circuit breaker is in "OFF" position. An additional mechanism(s) shall be provided on the circuit breaker permitting the breaker to be operated and/or locked with the control panel door in the open position.

4. Wiring

The pump station, as furnished by the manufacturer, shall be completely wired, except for power feed lines to the main entrance terminal blocks and final connections to remote alarm devices and control panel.

All wiring, workmanship, and schematic wiring diagrams shall comply with applicable standards and specifications of the National Electric Code (NEC).

All user serviceable wiring shall be type MTW or THW, 600 volts, color coded as follows:

- | | | |
|----|---|--------|
| a. | Line and Load Circuits, AC or DC power | Black |
| b. | AC Control Circuit Less Than Line Voltage | Red |
| c. | DC Control Circuit | Blue |
| d. | Interlock Control Circuit, from External Source | Yellow |
| e. | Equipment Grounding Conductor | Green |
| f. | Current Carrying Ground | White |
| g. | Hot With Circuit Breaker Open | Orange |

Control circuit wiring inside the panel, with exception of internal wiring of individual components, shall be 16 gauge minimum, type MTW or THW, 600 volts. Power wiring to be 14 gauge minimum. Motor branch wiring shall be 10 gauge minimum.

Motor branch and other power conductors shall not be loaded above the temperature of the connected termination. Wires must be clearly numbered at each end in conformance with applicable standards. All wire connectors in the control panel shall be ring tongue type with nylon insulated shanks. All wires on the sub-plate shall be bundled and tied. All wires extending from components mounted on door shall terminate at a terminal block mounted on the back panel. All wiring outside the panel shall be routed through conduit.

Control wires connected to door mounted components must be tied and bundled in accordance with good commercial practice. Bundles shall be made flexible at the hinged side of the enclosure. Adequate length and flex shall allow the door to swing full open without undue stress or abrasion. Bundles shall be held on each side of hinge by mechanical fastening devices.

5. Factory Installed Conduit

All conduit and fittings to be UL listed.

Liquid tight flexible metal conduit to be constructed of smooth, flexible galvanized steel core with smooth abrasion resistant, liquid tight polyvinyl chloride cover.

Conduit to be supported in accordance with articles 346, 347, and 350 of the National Electric Code.

Conduit shall be sized according to the National Electric Code.

6. Grounding

The station manufacturer shall provide ground connections for all electrical equipment inside the pump station for the Contractor to ground to the control panel back plate. All paint must be removed from the grounding mounting surface before making final connection.

The Contractor shall provide an earth driven ground connection to the pump station at the main grounding lug in accordance with the National Electric Code (NEC).

7. Equipment Marking

Permanent corrosion resistant name plate(s) shall be attached to the control and include following information:

- a. Equipment serial number
- b. Control panel short circuit rating
- c. Supply voltage, phase and frequency
- d. Current rating of the minimum main conductor
- e. Electrical wiring diagram number
- f. Motor horsepower and full load current
- g. Motor overload heater element
- h. Motor circuit breaker trip current rating
- i. Name and location of equipment manufacturer

Control components shall be permanently marked using the same identification keys shown on the electrical diagram. Labels shall be mounted adjacent to device being identified.

Switches, indicators, and instruments mounted through the control panel door shall be labeled to indicate function, position, etc. Labels shall be mounted adjacent to, or above the device.

8. Installation

Contractor shall off-load equipment at installation site using equipment of sufficient size and design to prevent injury or damage. Station manufacturer shall provide written instruction for proper handling. Immediately after off-loading, contractor shall inspect complete pump station and appurtenances for shipping damage or missing parts. Any damage or discrepancy shall be noted in written claim with shipper prior to accepting delivery. Validate all station serial numbers and parts lists with shipping documentation. Notify the manufacturer's representative of any unacceptable conditions noted with shipper.

Install, level, align, and lubricate pump station as indicated on project drawings. Installation must be in accordance with written instructions supplied by the manufacturer at time of delivery.

Suction pipe connections must be vacuum tight. Fasteners at all pipe connections must be tight. Install pipe with supports and thrust blocks to prevent strain and vibration on pump station piping. Install and secure all service lines (level control, air release valve or pump drain lines) as required in wetwell.

Check motor and control data plates for compatibility to site voltage. Install and test the station ground prior to connecting line voltage to station control panel.

Prior to applying electrical power to any motors or control equipment, check all wiring for tight connection. Verify that protective devices (fuses and circuit breakers) conform to project design documents. Manually operate circuit breakers and switches to ensure operation without binding. Open all circuit breakers and disconnects before connecting utility power. Verify line voltage, phase sequence and ground before actual start-up.

After all anchor bolts, piping and control connections are installed, completely fill the grout dam in the pump station base with non-shrink grout.

9. Shop Drawings

Shop drawings for the Duck River Sewage Pumping Station and enclosure shall be submitted according to Section 1, Paragraph 9. Shop Drawings.

10. Wrenches and Tools

The Contractor shall furnish one complete set of standard and special wrenches, spanners and other tools required for the disassembly of each pumping unit. In addition to all special tools, the standard tools shall include opened-boxed wrenches of suitable sizes, a ball peen hammer, any necessary feeler gauges, two electricians' screwdrivers (Phillips Head and Plain), a pair of electrician's pliers, and a set of Allen wrenches. These tools shall be forged steel, case hardened and fully finished. They shall be supplied in an appropriately sized steel toolbox.

11. Quietness of Operation

The pumps and motors shall operate at the specified capacities in the range of heads specified without undue noise and vibration. Any undue noise in the pumps or motors which is objectionable in the opinion of the Engineer, will be sufficient cause for rejection of the units.

12. Shop Tests

The pumps shall be fully tested at the manufacturer's works before shipment, at their rated speed, capacity and head and at such other conditions of head and capacity to establish properly that they have met all guarantees on the characteristic curves submitted as pre-bid data. A certified copy of the results of these tests shall be sent to the Engineer as a Shop Drawing. A witnessed pump test is not required.

13. Acceptance Tests

The pumping units will be accepted on the basis of the certified copies of the Shop Tests, subject to a four hour field test of each unit. The field test will be for the purpose of determining if the pumping units will operate under installed conditions within a reasonable degree of correlation with the Shop Tests. If, in the opinion of the Engineer, the four hour test does not indicate a close correlation with the Shop Tests, then the Engineer will direct that a complete field test be made under the standards of the Hydraulic Institute. If the pumps are accepted, this test will be paid for by the Owner. It will be witnessed by representatives of the Contractor and the Owner. The results of this complete field test will then be the final basis of acceptance or non-acceptance of the pumping units. If the pumps are not accepted, the test will be paid for by the Contractor. The Contractor shall furnish all necessary tools, materials, equipment, and superintendence for the tests; however, the Owner will furnish the electrical energy.

Any defects in the equipment or failure to meet the guaranteed requirements of these specifications shall be promptly corrected by the Contractor by replacement or otherwise. The decision of the Engineer as to whether the Contractor has fulfilled his obligation shall be final and binding on all parties.

14. Installation and Operating Instructions

Installation of the pumps and related appurtenances shall be done in accordance with written instructions provided by the manufacturer. These instructions shall be securely attached to and readily visible on the inside of the sewage pumping station control panel.

A conspicuous Maintenance and Operating Instructions Chart and Daily Maintenance and Inspection Records Chart with ample room for recording daily inspections of the pump station shall be securely mounted on the interior of the control panel.

In addition to the Maintenance and Operating Chart, the manufacturer shall further provide five (5) hard copies and one (1) electronic copy of a complete and detailed Operating and Maintenance Manual. This Manual shall cover, in addition

to general operating procedures, the operation, maintenance and servicing procedures of the major individual components provided with each sewage pumping station.

15. Final Acceptance Tests

After the sewage pumping station has been completely installed, with all appurtenances and is ready for operation, it shall first be checked by a factory trained representative of the manufacturer. At this time, if found necessary, any adjustments shall be made to insure proper operation in all respects. Final adjustment and testing of the equipment shall be carried out by or under the supervision of the manufacturer's representative.

The Contractor shall furnish all necessary tools, materials, equipment and supervision for the test.

Any defects in the equipment or failure to meet the guaranteed requirements of these Detailed Specifications shall be promptly corrected by the Contractor by replacement or otherwise. The decision of the Engineer as to whether or not the Contractor has fulfilled his obligations shall be final and binding on all parties.

16. Guarantee

The manufacturer of the sewage pumping equipment shall guarantee for one year from date of acceptance that the system and all equipment will be free from defects in design, material and workmanship.

Warranties and guarantees by the suppliers of various components in lieu of a single source responsibility by the manufacturer will not be accepted. The manufacturer shall be solely responsible for the guarantee of all components.

In the event a component fails to perform as specified or is proven defective in service during the guarantee period, the manufacturer shall provide replacement parts without cost to the Owner. He shall further provide, without cost, such labor as may be required to replace, repair or modify pumps, motors, controls, *etc.*

The replacement or repair (including cost of parts and labor) of those items normally consumed in service, such as light bulbs, oil, grease, *etc.*, shall be considered as part of routine maintenance and station upkeep and will be the responsibility of the Owner.

17. Electric Motors

a. General

All electrical equipment shall conform to the latest regulations and standards of the American Institute of Electrical Engineers, the American Standards Association, and the National Electrical Manufacturers Association and these Specifications.

The Contractor shall not avail himself of any discrepancy or conflict but shall report same to the Engineer immediately for a determination.

All pump motors shall have routine tests and the efficiency and power factor at 100%, 75% and 50% loading shall be reported with the pump shop drawings.

Motor windings shall have a special Class F insulation system with a tough moisture resistant flexible varnish on each conductor, reliable slot insulation and the ends of coils shall be securely braced. Pump motors shall have a 1.15 service factor. Automatic reset thermal overloads shall be provided. Each motor shall have an accurate nameplate firmly attached, which shall give as a minimum: manufacturer, HP, phase, Hz, frame, voltage and amps, rpm, continuous rating, design and S.F. and serial number.

All pump motors shall be designed for continuous operation and shall be of a high efficiency (87% minimum) and high power factor (85% minimum at the normal operating point or furnish capacitors) design. All pump motors shall be rated for inverter duty.

b. Motors for Suction Lift Pumps

Motors shall be NEMA Standard horizontal solid shaft open, drip-proof, 60°C rise (by resistance) over 40°C ambient at 1.15 service factor. All motors shall have ball bearings with sealed-in lubricant or be lubricated by readily accessible fittings provided. The motors shall be capable of bringing the equipment up to speed without exceeding the specified service factor.

18. Painting

All piping, valves, pumps and miscellaneous metals shall be painted as per the following specification. This specification applies to both interior and exterior surfaces. The painting system specified employs the products of the Tnemec Company. Other systems, such as Devoe, Sherwin-Williams or approved equal are also acceptable.

All surfaces shall be thoroughly cleaned. Immediately following surface preparation all surfaces shall be primed with one coat of Chem-Prime 37-77 applied to yield a dry coat thickness of 2.5 - 3.5 mils. The finish paint shall be one (1) coat of Hi-Build Epoxyline Series 66 applied to yield a dry coat thickness of 4.0 - 6.0 mils.

All pumps, valves, piping and miscellaneous metals shall be Desert Sands (AH52).

19. Electrical Work

All electrical work shall be performed in strict accordance with the latest edition of the National Electric Code, any local requirements, and as shown on the Plans. Services shall be grounded in accordance with the N.E.C. Article 250 State of Tennessee code requirements (see Chapter 0786--2-1 Code, latest edition) and the local utility company requirements. Service available at the pumping station is 480 volt, 3 phase, 4 wire.

Color code conductors as follows:

	480 Volt
Phase A	Brown
Phase B	Orange
Phase C	Yellow
Neutral	Gray
Ground	Green

Use factory color coded conductors where commercially available. If not, use black wire and band with color tape.

Provide heavy-duty, horsepower rated, quick-make, quick-break, circuit breakers with the number of poles as required.

All breakers to be capable of interrupting locked rotor current of motor which it serves.

The Contractor shall notify the Columbia Power & Water Systems a minimum of sixty (60) days before power is required at the pumping station.

20. Miscellaneous Metals for Pumping Stations

a. Fabricated Steel

Generally, all connections in fabricated steel miscellaneous metal work shall be welded. All welding shall be performed in accordance with Code I, Part A, of the "Code for Fusion Welding and Gas Cutting in Building

Codes of the American Welding Society". In assembling and during welding, the component parts of built-up members shall be supported and held by sufficient clamps and other adequate means to hold the parts in proper relation for welding. All exposed welds shall be ground smooth. Shop drawings of all items are required.

Angles, plates, frames, lintels, and miscellaneous structural and bar shapes shall conform to the Standard Specifications of the American Institute of Steel Construction and ASTM A36, latest revision.

b. Stainless Steel

All bolts, nuts, turnbuckles, and fabricated work, as shown on the Plans or specified herein, shall be Alloy 316 stainless steel conforming to the requirements of ASTM A276.

SUB-SECTION 5B

PUMP AUTOMATIC CONTROL SYSTEM AND ACCESSORIES

1. Scope

The work described at this Sub-Section consists of furnishing and installing the control system to automatically start and stop each pump and vary the speed of the pumps driven by the variable frequency drive units in response to input signals relating to the wetwell level and time, the submersible pressure transducer and all accessories necessary for installation as depicted at the accompanying Plans.

Electrical work associated with equipment described at this Sub-Section, including all connecting signal and power wiring, is depicted in the accompanying Plans and described in Section 6 of these Detailed Specifications, and should be reviewed and taken into account by the Vendor of equipment described at this Sub-Section.

THE VENDOR OF EQUIPMENT DESCRIBED AT THIS SUB-SECTION IS DIRECTED TO READ ALL OF SECTION 5 – MECHANICAL AND CONTROL AND MONITORING EQUIPMENT – GENERAL BEFORE PROCEEDING WITH READING THIS SUB-SECTION.

2. Vendors

The control system to automatically start and stop each pump and vary the speed of the pumps driven by the variable frequency drive units, the submersible pressure transducers, and appurtenances shall be provided as an integrated system by:

- Southern Sales Company, Inc. of Nashville, Tennessee utilizing Siemens Water Technologies OI3000 operator interface and LC3000 Pumping Station Monitoring and Control System.

3. Performance Requirements

a. Pump Automatic Control System – Duck River Sewage Pumping Station

Hardware and software components shall be integrated into a system to automatically monitor and control the operation of the variable frequency drives and their driven pumps and monitor certain other conditions. The integrated system shall automatically control and monitor the following performance:

- (1) The wastewater level in the wetwell shall be continuously sensed via a submersible pressure transducer generating a 4 to 20 milliamp output signal proportional to wetwell level over a range of two feet (one foot above the submersible pressure transducer) to fifteen feet (fourteen feet above the submersible pressure transducer).

The pump operation protocols in response to wetwell levels and elevations are as follows:

<u>Operation</u>	<u>Wetwell Level (Transducer Level)</u>	<u>Wetwell Elevation</u>
Low Water Alarm	2.50' (1.50')	571.50
Stop Pump	3.00' (2.00')	572.00
Start Pump Minimum Speed	6.00' (5.00')	575.00
Pump Maximum Speed	7.00' (6.00')	576.00
High Water Alarm	7.50' (6.50')	576.50

- (2) The normal pump operational protocol shall consist of the following when the pump operation selector switches for both pumps are in the "Automatic" position:
- Start the pump motor, designated by the control system software as the "next pump motor to operate", at the Hertz value output from the associated variable frequency drive unit coinciding with the minimum motor speed setting in response to the 4 to 20 millamp signal generated by the submersible pressure transducer or the float switch installed in the wetwell coinciding with the level of wastewater in the wetwell designated as the "Start Pump Minimum Speed" level. Maintain a 20 second "ramp-up" time from zero to the minimum motor speed setting.
 - Continually increase the motor speed of the pump if the wetwell level continues to rise until the pump is running at maximum speed at the "Pump Maximum Speed" setpoint.
 - Decrease motor speed in reverse order as the wetwell level decreases.
 - Stop the pump motor in reverse order of the Pump Start Sequence.

- Designate the pump motor with the least total runtime as the “Next Pump Motor to Operate”.
 - Repeat this normal pump operational protocol until one or both of the pump operation selector switches are moved from the “Automatic” position.
- (3) In the event any pump operation selector switch is in the “Off” position, the control system software shall automatically designate the operating pump motor as the “next pump motor to operate” after that pump motor is started.
- (4) Only one pump motor shall operate at any time when the selected position of both pump control switches is at “Automatic” or at “On”.
- (5) No pump motor shall start and operation of all pumps shall be ceased at any time the 4 to 20 milliamp signal generated by the submersible pressure transducer installed in the wetwell indicates the wastewater level is at or below the level designated as the “Low Wetwell Level” or when the float switch indicates “Low Wetwell Level” regardless of the position of the three-position pump operation selector switch for any pump.
- (6) No pump or motor shall start and operation of pump shall stop on check valve open/close failure alarm. The pump control system shall automatically call for the next available pump.
- (7) No pump motor shall be started automatically when the three-position operation selector switch for that pump is placed in the “Off” position.

4. General Equipment Requirements

a. U. L. Approval

The control panel(s) shall be constructed in compliance with Underwriter's Laboratories Category 913 - enclosed industrial control panel relating to hazardous locations with intrinsically safe circuit extensions listing and following-up service. The control panel(s) shall bear the Underwriter's Laboratories serialized “913” label.

Prior to shipment from the manufacturer's facility to the jobsite for installation, the completed pump control panel(s) shall be inspected by an Underwriter's Laboratories (U.L.) representative. Upon successful completion of the inspection, the panel shall be assigned the required 913 serialized U.L. label, indicating the equipment is built in accordance with

the practices and requirements of this Underwriter's Laboratories category.

b. Wiring

See Sub-Section 5A, Paragraph 4. Wiring.

c. Incoming Service and Lightning Arrestor

The incoming service for the control system panel and telemetry unit shall be 120 volt, 1 phase, 60 Hertz. A single phase lightning arrestor shall be supplied in the control system panel and connected to each line of the incoming side of the power input terminals. The arrestor shall protect the control system against damage as the result of transient voltage surges caused by lightning interference, switching loads and power line interferences.

The incoming service for the variable frequency drives shall be 480 volt, 3 phase, 60 Hertz. A three phase lightning arrestor shall be supplied for the variable frequency drives and connected to each line of the incoming side of the power input terminals. The arrestor shall protect the equipment against damage as the result of transient voltage surges caused by lightning interference, switching loads and power line interferences.

d. Nameplates

All major components and sub-assemblies shall be identified as to function with laminated, engraved nameplates.

e. Signal Transient Protection

Transient protection shall be provided with all equipment to protect all instrumentation and telemetry devices and other equipment either receiving or sending signals. The transient protectors shall be a three stage surge suppression device which shall effectively arrest transients encountered in an instrumentation environment. The first stage of the transient protector shall consist of a gas tube arrestor connected across the signal wires and to ground. This stage shall be designed to suppress transients greater than 150 to 300 volts. The second stage of the transient protector shall consist of two varistors each connected between a signal line and ground. This stage shall suppress any transients less than 150 to 300 volts and clamp them to 56 volts. The third stage of the transient protector shall consist of two special purpose, high speed zener diodes which suppress any remaining transients to 51 volts. 50 ohm, 5 watt resistors shall be connected between the stages to dissipate the potential

energy of the transients. Transient protectors shall be series TP as manufactured by Siemens Water Technologies.

f. Transient Voltage Surge Suppressor

The control panel shall be equipped with a transient voltage surge suppressor to minimize damage to the pump motor and control from transient voltage surges. The suppressor shall utilize thermally protected silicon oxide varistors encapsulated in a non-conductive housing. Mechanical indicators shall be provided on each phase to indicate protection has been lost. The suppressor shall have a surge current rating of 100,000 Amps per phase and a 100 kA interrupting rating.

g. Phase Monitor

The control panel shall be equipped to monitor the incoming power and shut down the pump motors when required to protect the motor(s) from damage caused by phase reversal, phase loss, high voltage, low voltage, and voltage unbalance. An adjustable time delay shall be provided to minimize nuisance trips. The motor(s) shall automatically restart, following an adjustable time delay, when power conditions return to normal.

h. Control Circuit

A normal duty thermal magnetic circuit breaker shall protect all control circuits by interrupting control power.

Pump mode selector switches shall permit manual start or stop of each pump individually or permit automatic operation under control of the liquid level control system. Manual operation shall override all shutdown systems, except the motor overload relays. Selector switches to be oil tight design with contacts rated NEMA A300 minimum.

Pump alternation shall be integral to the liquid level controller. Provisions for automatic alternation or manual selection shall also be integral to the liquid level controller.

A high pump temperature protection circuit shall override the level control and shut down the pump motor(s) when required to protect the pump from excessive temperature. A thermostat shall be mounted on each pump casing. If casing temperature rises to a level sufficient to cause pump damage, the high pump temperature protection circuit shall interrupt power to the pump motor. A visible indicator, mounted through the control panel door shall indicate motor stopped due to high pump temperature. The motor shall remain locked out until the pump has cooled and circuit has been manually reset. Automatic reset of this circuit is not acceptable.

The control circuit for pump #2 shall be equipped with a time delay to prevent simultaneous motor starts.

The control panel shall be equipped with a panel heater to minimize the effects of humidity and condensation. The heater shall include a thermostat.

i. Equipment Marking

See Sub-Section 5A, Paragraph 7. Equipment Marking.

5. System Specifications

a. General

The control system shall consist of the following:

- Lift Station Controller/Telemetry Unit

The Controller/Telemetry Unit shall monitor wet well level via submersible level transducer or back-up float switches and provide automatic variable frequency control for motors via VFDs in a pump down mode of control. The controller shall indicate wet well level, provide alarm and control setpoints, annunciate station alarms and indicate station status as herein specified. All parameters shall be viewable and configurable from the front of the panel. The unit shall include a microprocessor-based controller/telemetry unit for pump control and sequencing as herein described.

The controller/telemetry unit shall also provide digital communications with the existing master telemetry unit via antenna sized and located for continuous communication with the existing master telemetry unit. A modem shall be supplied for communication with the existing master telemetry unit.

The control panel will interface with the necessary motor control equipment and VFDs as described in Sub-Section 5A and hereinafter.

b. Lift Station Controller, Telemetry Unit, and Variable Frequency Drives

(1) Power Supply

The electrical service shall be furnished and installed by the Contractor. The panel service will be 480 volts, 3 phase, 60 Hertz for the variable frequency drives and 120 volts, 1 phase, 60 Hertz for the Controller/Telemetry Unit.

(2) Enclosure

The described equipment shall be housed in a U.L. listed NEMA 1 enclosure properly sized to accommodate all control elements. The enclosure shall be constructed of not less than 14 gauge cold rolled steel. The enclosure shall have a gray exterior. The enclosure shall have a white interior and shall include the following features:

- (a) All of the seams shall be continuously welded and ground smooth with no holes or knockouts
- (b) Door and body stiffeners shall be provided for extra rigidity
- (c) Heavy gauge continuous hinge
- (d) Oil resistant gasket and adhesive
- (e) Removable and reversible print pocket
- (f) Inner panel shall be painted white enamel

The enclosure unit shall be provided with ventilation as required for displacement of heat generated during normal operation of the specified equipment.

(3) Circuit Breaker

A single pole circuit breaker shall be supplied for the controller / telemetry unit. The circuit breaker must have a minimum ampere interrupting capacity of 10,000 symmetrical RMS amps.

(4) 12 VDC Power Supply

The Controller/RTU control panel shall include necessary DC power supply(s) for internally mounted panel components. Unit shall also include battery and battery charger for continued operation during power interruptions for up to 4 hours.

A regulated 12 VDC power supply shall be provided for the microprocessor based digital controller and other control system components as required. The power supply shall include a terminal block for incoming AC, output DC and ground connections.

Power supply circuits shall include AC line electrical noise filtering capable of reducing induced transient voltages that may damage sensitive microprocessor circuits.

The unit shall be supplied with battery back up. Battery shall be sized to provide 4 hours of back up power to controller, alarm and transducer systems.

(5) Microprocessor Controller/Telemetry Unit

(a) Duck River Sewage Pumping Station

The new microprocessor-based controller remote telemetry unit (RTU) shall control, monitor and transmit the pump station status and alarm conditions to the existing CTU for remote monitoring. All status signals, alarm and process variable data shall be transmitted by antenna to existing SCADA system.

Logic controller telemetry units shall be furnished completely configured and tested providing the specified communication, monitoring, display, input/output, annunciation, computations and other requirements for operation of the telemetry system.

Each logic controller telemetry unit shall be a modular hardware form factor style consisting of a CPU with adequate memory and instructions, power supply, on-board and remote input/output signal conditioning, communications ports, and all other components required to make the telemetry unit perform all of the functions required in this specification.

The logic controller telemetry unit shall include a real time of day time clock w/battery backup for time stamping of data log records and scheduling of periodic time of day-based events. Clock shall not require reset after a site power failure has occurred.

The logic controller telemetry unit shall store system parameters including logic configuration, setpoints, time delays, alarm and event data, counters and totalizers, etc., in field programmable (FLASH) non-volatile memory.

Sufficient non-volatile memory must be provided to protect the required system wide variables. This data shall be unaffected by power interruptions through the use of the battery backup system previously specified.

The logic controller telemetry unit shall be furnished with a minimum of four (4) communication ports with true multitasking and allow simultaneous support of all ports. Communication can be configured for RS485 Input/Output

Ethernet module expansion, Operator Interface Terminal (OIT) display support, LAN/WAN, etc.

The logic controller telemetry unit shall meet the following design capabilities as a minimum:

- i. CPU - True 32 Bit running at 50 MHz.
- ii. 16 MB – 32 bit Dynamic RAM w/ 16 MB FLASH
- iii. 512 K bytes Non-volatile RAM (battery backed)
- iv. Real time clock accurate to ± 15 seconds per month
- v. One- (1) Ethernet 10/100 BaseT port (RJ45)
- vi. One- (1) RS-232 Serial Communications (115 KB PS) (RJ45)
- vii. One- (1) RS485 Serial Multi-Drop Communications
- viii. One- (1) RS232 Operator Interface Terminal Display Communications Port
- ix. On-Board Input/Output support of twelve (12) discrete inputs (DI), eight (8) discrete outputs (DO) and six (6) analog inputs (AI)

Logic controller telemetry unit shall have input/outputs for the following points.

- i. Pump 1 Run
- ii. Pump 1 VFD Fail
- iii. Pump 2 Run
- iv. Pump 2 VFD Fail
- v. Pump 1 Overtemp
- vi. Pump 2 Overtemp
- vii. Pump 1 in Auto
- viii. Pump 2 in Auto
- ix. High Building Temperature
- x. Low Building Temperature
- xi. Vandal Entry Alarm
- xii. Generator Alarm
- xiii. RTU Panel Power Failure
- xiv. Transducer Wetwell Level, 0-XX.X ft.
- xv. VFD 1 Speed, 0-100%
- xvi. VFD 2 Speed, 0-100%
- xvii. Pump 1 Required
- xviii. Pump 2 Required
- xix. Pump 1 Speed Signal, 4-20ma
- xx. Pump 2 Speed Signal, 4-20ma

The logic controller telemetry unit shall operate from a 10-30 VDC power source. A battery and charger as specified

elsewhere shall be supplied to power the remote telemetry unit during 120-Volt service power outage conditions.

The level signal received from the submersible transducers shall be converted to a "feet and tenths" digital display. Keyboard-configurable digital setpoints shall be provided for differential level-type automatic pump operation as well as automatic alternation and manual sequence selection or timing, variable speed pump/drive ramp control logic and alarm performance as herein described.

The Controller/RTU shall provide ON/OFF operation of the pumps based on the wet well level as sensed by the submersible level transducer.

The Controller/RTU shall monitor analog and digital information. Analog variable setpoints shall be provided for the wet well level analog signal. Each analog shall be presented in engineering units. Setpoints based on the wet well level signal shall be provided for the following:

Wet Well Level (Display)

- i. High Alarm On/Off
- ii. One Pump Max. Speed
- iii. Pump On/Off
- iv. Low Alarm On/Off

The digital Controller/RTU shall be furnished with a multiple-ramp output capability implemented in hardware and software for the variable speed pumps. The ramp shall be programmed to be re-configurable with the operation of each of the control stages and the other independent ramp configurable with respect to the full-range conditioned signal of the controller without reference to control stage operations.

Each ramp shall have the following five parameters configurable from the controller keyboard:

- i. Positive or negative-going ramp.
- ii. The analog signal input at which the maximum ramp signal is to be produced.
- iii. The analog signal input at which the minimum ramp signal is to be produced.

- iv. The percentage of full-scale ramp signal output desired at the selected analog signal input.
- v. The percentage of full-scale ramp signal output desired at the selected lower analog signal input.

Each control stage shall be capable of re-defining the ramp that is common to all (for purposes of load-sharing under differing conditions). The other ramp shall be independent of the first and configurable as described without reference to the operation of the control stages. In addition to keypad configurability of each ramp, they shall also be review-able by the operator by use of a convenient keypad sequence.

The Controller/RTU shall include keypad adjustable on-delay timing logic to provide staggered pump starting following a power failure condition. Keypad adjustable off delay timing for each pump control stage shall provide smooth transition between control stages.

In addition to the pump and alarm control capability, the controller shall provide alarm annunciation. The Controller/RTU shall, upon the occurrence of an alarm, sound an audible device and flash the alpha-numeric display. The display will indicate the alarm description, complete with the time and date of the alarm occurrence. An acknowledge push-button shall be provided to allow silencing of the audible device while the digital display will continue to show the alarm function, complete with time and date information, until the condition has cleared. The following alarms shall be provided for the pump station:

- i. High Wetwell Level Alarm
- ii. Low Wetwell Level Alarm
- iii. Wetwell Level Transducer Signal Failure
- iv. Pump No. 1 Failure/Overtemp
- v. Pump No. 2 Failure/Overtemp
- vi. Pump No. VFD 1 Failure
- vii. Pump No. VFD 2 Failure
- viii. Power Failure
- ix. Telemetry Fail

The Controller/RTU shall have built in alarm and event historical log permitting operator review of time stamped historical events.

An analog simulation software module shall be supplied to provide a wet well normal/simulated signal to test the control system. The controller shall employ an operator interface mounted on the door of the enclosure.

Logic controller telemetry units shall be capable of performing diagnostic functions. The CPU shall continuously monitor the functionality of the system and record errors and specific system events. A diagnostic buffer shall retain fault and interrupt events.

Each logic controller telemetry unit shall have memory protected built in historical archiving/data logging of system alarms & events and process variables.

- i. Data logger shall be able to log data base point on time or an event. The logic controller telemetry unit shall have enough memory allocated to allow the time and date stamping of the required discrete and analog values to be archived. Process point time stamping frequency shall be selectable within the configuration software.
- ii. The historical archive shall allow the oldest data to roll off the system as memory is used keeping the most current data points available.
- iii. It shall be possible for the archived data to be exported in Comma Separated Variable (CSV) format allowing use with standard spreadsheet and data base software applications.

The microprocessor logic controller for the telemetry unit shall be IntraLink LC3000 Logic Controller with the required standard system components as manufactured by Siemens Water Technologies.

An Operator Interface/Keyboard Display (OIT) shall be supplied for the new remote telemetry unit panel. The OIT unit shall be mounted on the inner door of the enclosure for easy Operator access. The OIT shall perform the following functions:

- i. Keypad/Display shall allow the Operator to view and modify system variables within the logic controller telemetry unit.

- ii. Keypad/Display shall be NEMA 4 rated, with backlit LCD display so that it is unaffected by a wide range of ambient light conditions.

The displays shall be configured with graphical and text-based data for the specific application to meet system monitoring needs. Historical alarm and event information shall be viewable from the display including date and time of alarm being available.

The Operator Interface Terminal for the remote telemetry unit shall be IntraLink OI3000 OIT as manufactured by Siemens Water Technologies.

(6) Indicator/Pilot Lights

The control panel shall include indicator lights mounted on the door for pump run, pump overtemp, and VFD fail indication.

Indicator Lights shall be full size 1 1/8-inch diameter NEMA 4X, Heavy Duty, Full Voltage push to test type. Connection shall be made by screw type compression terminals.

Pilot lights shall be push to test type.

Switches shall be as manufactured by Allen-Bradley, Square D, Siemens or equal.

(7) Pump Run Verification

A positive pump running (flow) condition shall be sensed by an auxiliary contact from the VFD.

(8) Running Time Meter

A running time meter measuring hours and tenths of hours of operation up to 99,999.9 hours shall be furnished for each VFD. This shall be a 120 volt AC device operating from the control voltage by an auxiliary contact of the running signal.

(9) Analog Input Isolator w/Loop Power Supply

The Controller shall provide isolated 24 VDC loop power to each of the wet well level transmitters and the station flow rate transmitter. The analog signals shall be isolated from the Controller via in line transducer input isolation amplifier module. The unit shall provide

a minimum of 750 volts isolation between the voltage input of the Controller and the transducer and include three stage surge suppression for reliable operations during possible electrical transients. The isolation amplifier module shall include adjustable signal scaling potentiometers to achieve full scale signal output for better signal differentiation. The isolation amplifier shall be powered by 12 VDC to permit operation from batteries during incoming power interruptions.

(10) Submersible Level Transducer

The liquid level of the wet well shall be sensed by Siemens Water Technology Bulletin A1000, Model 157GSCD Submersible Level Transducer. The transducer shall be a 4-20 mA DC, 2-wire, 15 to 40 VDC loop-powered type with its output signal directly proportional to the measured level excursion over a factory-calibrated range of zero to 15 feet of water.

The transducer shall be of the solid-state head-pressure sensing type, suitable for continuous submergence and operation and shall be installed in accordance with manufacturer's instructions. The bottom diaphragm face of the sensor shall be installed 12 inches above the floor at elevation 569.00. The sensor shall be mounted using a stainless steel cable system in a location and as shown on the Plans.

The transducer housing shall be fabricated of type 316 stainless steel with a bottom diaphragm 2-5/8-inch diameter of heavy-duty, limp, foul-free, molded Teflon (TM) bonded to a synthetic rubber back/seal.

A hydraulic fill liquid behind the diaphragm shall transmit the sensed pressure to a solid-state variable-capacitance transducer element to convert the sensed pressure to a corresponding electrical value. The sensed media shall exert its pressure against the diaphragm which flexes minutely so as to vary the proximity between an internal ceramic diaphragm and a ceramic substrate to vary the capacitance of an electrical field created between the two surfaces. A stable, hybrid, operational amplifier assembly shall be incorporated in the transducer to excite and demodulate the sensing mechanism. The transducer shall incorporate laser-trimmed, temperature compensated, high quality components and construction to provide a precise, reliable, stable output signal directly proportional to the sensed pressure over a factory-calibrated range.

The transducer element shall incorporate high over-pressure protection and be designed to withstand intermittent over-pressures five times the full-scale range being sensed.

The transducer/transmitter shall include easily accessible offset and span adjustments in the upper assembly. Span shall be adjustable from 100% down to 15% of the sensor range. Fine and coarse adjustments for both span and offset shall be provided, using 25-turn potentiometers. Offset and span adjustments shall be non- interactive, for ease of calibration.

The internal pressure of the lower transducer assembly shall be relieved to atmospheric pressure through a heavy-duty urethane jacketed hose/cable assembly and a slack PVC bellows mounted in the weatherproof fiberglass upper assembly. The sealed breather system shall compensate for variations in barometric pressure and expansion and contraction of air due to temperature changes and altitude as well as prevent fouling from moisture and other corrosive elements.

The transducer assembly shall be installed where directed by the Engineer and connected with other system elements and placed in successful operation. It shall be provided with input power and output signal transient protection, associated control elements as specified herein and in accordance with manufacturer's instructions.

(11) Mechanical Tilt Float Switch (Back-up Level Control System)

A back-up level control system shall start and stop pump motors in response to changes in wetwell level. It shall be a mercury free float switch type with floats to be secured to a vertical pipe in the wetwell. Rising and falling liquid level in the wetwell causes switches within the floats to open and close, providing start and stop signals to the remainder of the level control system. The back-up level control system shall start and stop the pumps in accordance with the wetwell level. The floats will operate the pumps based off the wetwell levels depicted in Paragraph 3. Performance Requirements hereinbefore.

Float switches shall be supplied for installation by the Contractor. Each float shall contain a mercury free switch sealed in a polypropylene housing, with 30 feet of power cord, and polypropylene mounting hardware. The float switches shall be secured to a weighted PVC chain. A junction box shall be supplied for installation in the wet well by the Contractor. Junction box shall

be NEMA 4X, non-corrosive type incorporating terminal blocks match-marked to terminals in the control panel.

Separate float switches shall be used to alert maintenance personnel to a high water or low water level in the wetwell. Should the water level rise to the "high water alarm" level, the float switch shall trigger the "High Wet Well Level Alarm" in the Control Panel. Should the water level decrease to the "low water alarm" level, the float switch shall trigger the "Low Wet Well Level Alarm" in the Control Panel.

(12) Cable Suspension Mounting Kit

The sensor shall be suspension-mounted using a Consolidated Electric Company Cable Suspension Mounting Kit or equivalent, consisting of a 2' long 1-inch NPT type 316 SS pipe with coupling, bolt, cable clamps and hardware along with the required length of 1/8 inch diameter 7 x 19 SS cable.

(13) Intrinsically Safe Wiring Barrier

An intrinsically safe barrier ahead of each transducer assembly shall be supplied. The barrier shall render the level sensing system suitable for use in Class 1, Division 1 Groups A, B, C and D, Class 2, Division 1, Groups E, F and G, and Class 3, Division 1 hazardous locations.

(14) Condensation Protection

A 100 watt condensation protective heater with a high temp cutout thermost switch shall be supplied in the control panel. The heater shall maintain internal panel temperature higher than outside ambient air temperature to prevent condensation on electronic components.

(15) Duplex Receptacle

The control panel shall include an internally mounted duplex convenience receptacle. The duplex receptacle shall be used for RTU service personnel only and not for use with drills, etc.

(16) Variable Frequency Drives (Two Required)

The two variable frequency drive units shall be manufactured by ABB, Danfoss, Siemens, Yaskawa, or pre-approved equal. The drives shall be suitable for continuous operation of the inverter duty

electric drive motors furnished with each submersible pump and shall infinitely vary output speed between the limits of maximum speed and minimum speed to produce the pump performance described at Sub-Section 5A, Paragraph 2.f. Pump Characteristics and Requirements of these Detailed Specifications. Speed adjustments between the limits of maximum and minimum speed shall be controlled in response to the 4 to 20 milliamp signal proportional to the wastewater level in the wetwell to be transmitted by the control system. The drives shall come with a Human Interface Module (HIM) rated NEMA/UL Type 1 with an integral LCD display and operating and programming keys. The HIM shall have a backlit LCD display with graphics capability, and indicate drive operating conditions, adjustments, and fault indications.

The manufacturer of the variable frequency drives shall furnish a warranty for repair including materials and labor for a two (2) year period beginning at startup.

6. Field Supervision

The services of a factory trained, qualified representative shall be provided to inspect the completed installation, make all adjustments necessary to place the system in trouble-free operation and instruct the operating personnel in the proper care and operation of the equipment.

After the system has been installed, the Supplier shall demonstrate the performance of each unit, and document that the system operates properly as specified. Monitoring signals shall register at all required locations and loop checks on all loops shall have been completed and tested. The station must be tested and accepted by the city.

SECTION 6
ELECTRICAL WORK



1. General Provisions

a. General

(1) Work Included

Provide all materials, labor and equipment required to furnish and install a complete electrical system as indicated on plans and as specified herein. Electrical work includes but is not limited to the following:

- (a) Complete distribution system for lighting and power including necessary standby generator system, service entrance rated automatic transfer switch, distribution panelboard, mini power center, feeders, branch circuits and lighting fixtures.
- (b) Excavation, trenching and backfilling for conduit and/or cable.
- (c) Grounding.
- (d) Installation of standby diesel engine generator system including service entrance rated automatic transfer switch. The contractor shall be responsible for the complete installation and start up of standby generator system for proper operation under standby power. This includes the proper setup of all connected load control devices including main circuit breakers and solid state starters, etc.
- (e) Surge protection device.
- (f) Conduit rough-in and wiring for main control panel feeder.

It shall be the responsibility of the contractor to review all of the final installation instructions and shop drawings from the equipment suppliers and adjust all installations accordingly. Provide a

complete and fully functional installation and system.

- (g) Supply and installation of temporary wiring for construction power and lighting for the project, in compliance with Article 590 of the National Electrical Code.

(2) Related Work

The following work shall be furnished under other Sections of these Specifications.

- (a) Flashing of conduits into roofing and outside walls.
- (b) Concrete foundations, curbs and pads
- (c) Painting.
- (d) Cutting and patching.

(3) Definitions

Provide: As used shall mean "furnish, install and connect, and put in good working order."

Wiring: As used shall mean "wire and cable, installed in raceway with all required boxes, fittings, connectors, etc. complete.

Engineer: As used in various sections shall mean "Engineer of record whose seal is affixed to the Contract Specifications and/or Plans."

(4) Requirements of Regulatory Agencies

Equipment furnished shall be UL listed where such label is available. Installation shall conform to UL Standards where applicable.

Electrical work shall be installed in accordance with Plans and Specifications, edition of NEC in effect at project location, recommendations of NFPA, state and local electrical and building codes and special codes having jurisdiction over specific portions within complete installation. This includes, but is not limited to the following:

- (a) 2017 National Electrical Code (NEC).
- (b) 2018 International Building Code (IBC).

In event of conflict between Plans, Specifications and such codes, Engineer shall be notified in writing prior to bid. A ruling shall then be made by Engineer in writing.

Obtain permits and certificates of approval from all authorities having jurisdiction over installation and pay all fees required.

b. Products

(No products specified under this Section.)

c. Execution

(1) Submittals

Refer to Section 1, Submittals (Shop Drawings) for general requirements of shop drawing submittals. **There shall be a separate submittal section or brochure for each product listed below with all sections or brochures submitted at the same time in one package.** In the event scheduling or other special circumstances requires the review of submittals for only a portion of the products listed hereinafter, the Engineer will review these independently submitted submittals; however, the independently reviewed submittal shall also be incorporated into the single package submittal described in this paragraph. First sheet in each product section or brochure shall summarize and list all components, manufacturer's name and catalog number. Submittals shall include but not be limited to the following:

- 1. Panelboard.
- 2. Mini power center.
- 3. Service entrance rated automatic transfer switch.
- 4. Standby diesel engine generator system including sizing report.
- 5. Rigid aluminum conduit and fittings.
- 6. PVC conduit and fittings.
- 7. Conduit and device mounting support channels, fittings, and fasteners.
- 8. Pullboxes and junction boxes

9. Wire and cable.
10. Safety switches.
11. Hazardous location wiring devices and fittings.
12. Grounding components.
13. Cable connectors and lugs.
14. Insulating materials.
15. Surge protection device.
16. Lighting fixtures.

- (2) Submittals shall be checked by the contractor and evidence of such checking shall be indicated thereon. **SUBMITTALS NOT BEARING THE CONTRACTOR'S MARK OF ACCEPTANCE AND APPROVAL WILL NOT BE REVIEWED BY THE ENGINEER.** The contractor shall be completely responsible for the accuracy, completeness, compliance with Plans and Detailed Specifications, and compatibility of all submittals, the Engineer's approval notwithstanding.

- (3) Site Visit

Visit job site prior to bid date to determine actual conditions under which work shall be done, to familiarize oneself with project and to verify total scope of work required. Failure to do so shall not constitute reason for extra charge.

2. Basic Materials and Methods

a. General

(1) Quality Assurance

Qualifications of Manufacturer: Products used in work of this Section shall be produced by manufacturers regularly engaged in successful manufacture of similar items and with history acceptable to Engineer.

Qualifications of Installers: Use adequate numbers of skilled workmen who are thoroughly trained and experienced in necessary crafts and who are completely familiar with specified requirements and methods needed for proper performance of work of this Section.

b. Products

(1) Substitutions

Where "or approved equal" is included, contractor may substitute equal products by another manufacturer subject to approval by the Engineer.

Substitution must be approved by Engineer before purchase and/or installation. If unapproved materials are installed, work required to remove and replace unapproved items shall be done at contractor's expense.

c. Execution

(1) Installation

Electrical plans are diagrammatic and shall not be scaled for exact sizes or locations. They are not intended to disclose absolute or unconditional knowledge of actual field conditions. This Section covers installation or relocation of outlets and miscellaneous devices shown on the Plans. Any outlet or device may be installed or relocated a maximum of 10 feet in any direction from locations shown on the Plans without additional charge to the Owner.

All electrical equipment supports and conduit supports, anchors, bolts, locknuts, screws, washers, and mounting hardware including unistrut, angle iron, and structural members shall be Type 316 stainless steel.

Equipment shall be installed in accordance with manufacturer's recommendations.

Protect work and materials from damage by weather, entrance of water and dirt. Cap conduit during installation. Avoid damage to materials and equipment in place. Satisfactorily repair or remove and replace damaged work with new materials. Deliver equipment and materials to job site in original, unopened, labeled containers. Store ferrous materials to prevent rusting and finished materials and equipment to prevent staining and discoloring.

Failure to route conduit through building without interfering with other equipment and construction shall not constitute a reason for an extra charge. Equipment, conduit and fixtures shall fit into available spaces in building and shall not be introduced into building at such times and manner as to cause

damage to structure. Equipment requiring service shall be readily accessible.

(2) Testing and Equipment Servicing

Entire installation shall be free from improper grounds and short and open circuits. Perform test on conductors as required before energizing circuit. Perform test to ensure that entire system is in proper operating condition, and that adjustments and apparatus setting of circuit breakers, fuses, control equipment and apparatus have been made. Correct defects discovered during tests.

Equipment shall be turned over to Owner in lubricated condition. Instruction on further lubrication shall be included in operating instructions.

At termination of work under this Section, furnish Engineer with three complete bound sets of equipment catalog sheets, manufacturer's specifications and service and operating instructions on equipment furnished under this Section. Instruct Owner on proper usage, care and maintenance of entire electrical system including all special systems or apparatus.

(3) Removal of Debris

Remove surplus materials and debris caused by, or incidental to, electrical work. Remove such debris at frequent intervals. Keep job clean during construction.

(4) Salvageable Materials

The contractor shall be solely responsible for the disposition of waste material. The Owner shall have rights to all salvageable material.

(5) Cutting and Patching

The contractor shall so organize and execute his work so as to avoid all unnecessary cutting and patching of building surfaces. Preparatory work, including accurate installation of sleeves, wall and floor openings and construction of equipment foundations and supports shall be coordinated with the building progress. Cutting, patching and repairs to

damaged building surfaces, as a result of the installation, shall be provided without additional cost to the Owner.

Certain work of a general construction nature related to the work under this section of the specifications will be provided by the contractor and will include preparation of building surfaces at points of raceway and duct penetrations, necessary masonry and concrete work, etc. The contractor shall be completely responsible for the correct dimensions and general scope of all general construction requirements related to his work. All corrections to such related work, determined to be improperly executed due to the negligence of the contractor shall be made at the contractor's expense.

(6) Identification of Wire and Cable

All abandoned power, control, and signal wire and cable shall be properly insulated, terminated and tagged as "spare" with identification as to source and destination at all locations.

All proposed power, control, and signal wire and cable shall be properly terminated and consistently numbered in all junction and pullboxes, panels, devices, and all locations where wire and cable leave raceways.

(7) Identification of Equipment

Identify the following electrical equipment with laminated plastic nameplates, engraved with 1/4" high letters.

All nameplates shall be black and white letters except nameplates for emergency panelboards and transfer switches; which shall be red with white letters. Nameplates shall be attached to metal enclosure with two screws. Nameplates attached with adhesive are not acceptable.

- (a) Automatic transfer switch.
- (b) Distribution panelboard.
- (c) Mini power center.
- (d) Safety switches and disconnects.
- (e) Magnetic motor starters.

- (f) Dry type transformers.
- (g) Control panels furnished under other Sections of these specifications.

(8) Record Drawings

THE CONTRACTOR SHALL MAINTAIN ONE SET OF ELECTRICAL PRINTS ON SITE, MARKED TO SHOW ACTUAL AS CONSTRUCTED CONDITIONS AND INSTALLATIONS, PRINTS TO BE TURNED OVER TO ENGINEER AFTER JOB IS COMPLETE. Installed location of all exterior buried conduit shall be accurately shown and referenced to above ground structures.

(9) Temporary Lighting and Power

Provide, maintain and remove after construction is completed, temporary lighting adequate for workman safety and temporary power for all trades including any 3 phase power required with a minimum as shown on the plans.

Provide and maintain barricade lighting where required to adequately protect Owner against liability for damage to public or personnel. All lamps used in barricade shall be 70 watt red installed in weatherproof socket with wire guard. All wiring shall be approved for weatherproof installation.

(10) Power Outages

Coordinate all power outages with Owner and submit for approval proposed schedule of work indicating extent, number and length of outages required to perform work. Include in bid cost of overtime labor required for power outage to occur after contractor's normal working hours.

(11) Other Materials

Work of this Section shall also include those items not specifically mentioned or described, but which are obviously necessary to conform to the design intent, applicable codes and to produce complete electrical system that functions properly. These materials shall be as selected by contractor but subject to approval of Engineer.

(12) Guarantee-Warranty

Guarantee work to be free from defects of materials and workmanship for a period of one year from date of final acceptance of all work. Repair and replace defective work and other work damaged thereby which becomes defective during term of Guarantee-Warranty. Furnish Owner with three written copies of Guarantee-Warranty.

3. Conduit

a. General

(1) Work Included

- (a) Conduit
- (b) Fittings

b. Products

(1) Conduit

- (a) Rigid Aluminum Conduit: Allied, Wheatland, Republic or equal.
- (b) Flexible Aluminum Conduit (Greenfield): Triangle, Anaconda, International Metal Hose or equal.
- (c) Liquidtight flexible aluminum conduit (Sealtite): Triangle, Anaconda, International Metal Hose or equal.
- (d) Rigid Non-Metallic (PVC) Conduit: Carlon, Schedule 40, extra heavy wall or equal.

(2) Conduit Fittings

- (a) Rigid Aluminum Couplings and Connectors: Raco, Thomas & Betts or equal.
- (b) Bushings: Raco, Thomas & Betts or equal.
- (c) Malleable Iron Straps and Hangers: Crouse Hinds, Appleton, Steel City or equal.

- (d) Group Pipe Supports: Unistrut, Kindorf or equal. **Refer to paragraph 2.C.(1) for material type.**
- (e) Expansion Fittings: O.Z. Type AX, Crouse-Hinds, Carlon or equal.
- (f) Exposed Aluminum Conduit Fittings: Crouse-Hinds, Efcor, condulets or equal.
- (g) Liquid-tight flexible metallic conduit fittings: Raco, Thomas & Betts or equal.
- (h) Underground wall penetration seals into below grade rooms or accessible spaces. The pipe to wall penetration closures shall be "Link-Seal" as manufactured by Thunderline Corporation – Belleville, Mich. Seals shall be modular mechanical type, consisting of interlocking synthetic rubber links shaped to continuously fill the annular space between the pipe and wall opening. Links shall be loosely assembled with bolts to form a continuous rubber belt around the pipe with a pressure plate under each bolt head and nut. After the seal assembly is positioned in the sleeve, tightening of the bolts shall cause the rubber sealing elements to expand and provide an absolutely water-tight seal between the pipe and wall opening. The seal shall be constructed so as to provide electrical insulation between the pipe and wall, reducing chances of cathodic reaction between these two members.

c. Execution

(1) Conduit

In general, conduit installation shall follow layout shown on Plans. However, this layout is diagrammatic only and where changes are necessary due to structural conditions, other apparatus or other causes, such changes shall be made without cost to Owner. Offsets in conduits are not indicated and must be furnished as required.

Use rigid aluminum conduit throughout except as noted herein. All straps and hangers shall be aluminum or stainless steel.

Aluminum which comes in direct contact with stainless steel or other dissimilar metals shall be protected by neoprene rubber insulations to prevent galvanic corrosion of the aluminum.

For underground installations or under concrete slabs resting on earth, use Schedule 40 PVC conduit. For exposed indoor conduit including turn-ups through slabs and entering all electrical devices, use rigid aluminum conduit.

For all conduit installed in concrete slabs and walls use galvanized rigid steel conduit. For all conduit penetrating through concrete slabs or walls, use galvanized rigid steel conduit.

All aluminum conduit installed in or penetrating through concrete slabs or walls shall be coated with two heavy coats of asphaltum.

When PVC conduit is used, turn up with galvanized rigid steel elbows and provide equipment grounding conductor in accordance with NEC Article 250. **Where PVC conduit is used outside of building line or structures, the first ten (10) feet of conduit shall be galvanized rigid steel and the entire ductbank shall be installed in minimum three (3) inch concrete encasement. The transition shall begin two (2) feet inside the building or structure.**

Underground conduit separation shall be maintained by use of PVC conduit spacers with horizontal and vertical locking at intervals of seven (7) feet maximum.

Use galvanized rigid steel factory elbows for bends in plastic conduit runs longer than 100 feet, or in plastic conduit runs, which have more than two bends regardless of length.

Coat metallic conduit placed in fill below concrete or underground with two heavy coats of asphaltum. Recoat any damage to asphaltum coating prior to backfilling.

Support conduit and secure to forms when cast in concrete so that conduit will not be displaced during pouring of concrete. Stuff boxes and cork fittings to prevent entrance of water during concrete pouring and at other times during construction, prior to completion of conduit installation.

Route exposed conduit at right angles or parallel to walls of building.

Use proper sized tools for bending. Do not heat conduit.

Dents and flat spots will be rejected. Cut and thread conduit so ends will butt in couplings. Make threads no longer than necessary and ream pipe free of burrs.

Minimum conduit size 3/4" unless otherwise required by system.

Leave one #10 or equivalent nylon pull wire in empty conduits.

Use short pieces, approximately 2 feet of liquid-tight flexible metallic conduit to connect motors and other devices subject to motion and vibration. Use liquid-tight flexible metallic conduit where subject to water spray and installed outdoors. All liquid-tight flexible conduit fittings shall be metal type for rigid aluminum conduit installations.

(2) Conduit Fittings

Support conduit vertically and horizontally by straps or hangers. Do not exceed these intervals as described in NEC Section 344.30 for rigid metal conduit and in NEC Section 352.30 for PVC.

Use factory expansion fittings, properly bonded to assure ground continuity, across expansion joints in floors and ceilings. Use hubs at conduit entrance into all pullboxes, junction boxes, devices in exposed areas where knockout installations occur.

When connections are made to motors or other equipment, not near walls or columns, provide vertical conduit, minimum 3/4", attached to floor with floor flange bring wiring out of conduit by means of conduit and flexible conduit extending to equipment junction box.

4. Outlet and Junction Boxes

a. General

(1) Work Included

(a) Outlet Boxes

(b) Junction Boxes

b. Products

(1) Outlet Boxes, Junction Boxes, and Wireways

Outlet and junction boxes concealed in ceilings and walls shall be galvanized steel by National, Appleton, General Electric, Racor, Steel City or equal 1-1/2" deep minimum.

Outlet boxes for lighting, switches and receptacles in areas with exposed aluminum steel conduit shall be cast metal condulets and unilets with threaded hubs, Type FS or FD.

Except as noted otherwise all junction boxes, pull boxes, and wireways shall be NEMA 4X corrosion resistant 316 stainless steel.

c. Execution

(1) Outlet Boxes

Use galvanized steel for concealed boxes. All boxes shall be concealed wherever possible. Use cast aluminum conduit fittings similar to "Condulets" and "Unilets" with threaded hubs, Type FS or FD for exposed boxes.

Outlet boxes shall be securely anchored, set true and plumb and no part of box or cover shall extend beyond finished wall or ceiling.

Select boxes according to intended use and type of outlet. Use minimum 4" diameter boxes for ceiling or wall mounted lighting fixtures. Use 4" square boxes to contain flush mounted outlets. Provide plaster or masonry rings for flush mounted outlets to conceal joint between box and wall finish material. Nongangable switch boxes may be used only for single gang switches.

Mount outlet boxes worked to nearest block course.

(2) Junction Boxes

Junction boxes shall be sized according to number of conductors in box or type of service to be provided. Minimum junction box size 4-11/16" square and 2-1/8" deep. Provide screw covers for junction boxes.

Use corrosion resistant NEMA 4X 316 stainless steel with clamp covers for pull boxes. Size pull boxes according to the NEC.

All junction boxes shall be corrosion resistant, NEMA 4X 316 stainless steel.

Provide pull box every 100' of conduit run or where excessive number of bends necessitates a box for ease of wire installation.

(3) Wireways

All wireways and wiring troughs shall be NEMA 4X corrosion resistant 316 stainless steel.

5. Wire and Cable

a. General

(1) Work Included

(a) Wire and Cable

b. Products

(1) Materials

Wire and cable shall be 600 volt by Anaconda, General Cable, Habirshaw, Okonite, Rome, Triangle, Southwire or equal unless otherwise noted on Plans.

Use stranded copper, type THHN/THWN for feeder and power circuits #8 and larger.

Fixture wire shall be in accordance with Article 402 of the National Electrical Code.

Provide color coded wire and with a different color for each phase and neutral and ground as follows: 120/208 volts circuits-phases A, B and C: black, red and blue respectively; neutral: white; ground: green; 120/240 volts circuits – phases A, B and C: black, orange and blue respectively; neutral: white; ground: green, 277/480 volt circuits - phases A, B and C: brown, orange and yellow respectively; neutral: gray; ground: green. Approved color tape is acceptable for feeders. Also, provide color coded wire for control circuits.

Use Scotchlok, Ideal or equal wire connectors for #14 through #18 conductors. Use Burndy, T&B or equal, compression connectors with crimpit cover, type CC, for #6-600 MCM conductors.

Where branch circuits homeruns exceed 70' in length for 120 volt and 150' in length for 208 volt, No. 10 wire shall be used to first outlet.

c. Execution

(1) Installation

Complete conduit system before pulling any wire or cable. Only approved cable lubricants (such as soaptone) shall be used as necessary.

Conductors shall be continuous from outlet to outlet or to branch circuit overcurrent devices. Make splices only in junction boxes. Splices shall not be made in panelboards. Sufficient slack shall be left at terminations to make proper connections.

Connect No. 10 wire and smaller with Type R, 3M Scotchlock, Ideal 400 Series tapeless connectors or equal.

Connect No. 8 wire and larger with Lock-Tite type silicon bronze type connectors, T&B Series 35000 or 54000, or equal. Insulate connections of No. 8 wire and larger with 3M #33, Scotch 33+ or equal tape.

6. Seismic Restraint Systems

a. General

(1) Work Included

Provide all labor, materials, tools, equipment and supplies required to complete installation of seismic restraint systems as indicated on the drawings and described herein.

- (a) All electrical equipment shall be seismically protected per 2018 International Building Code (IBC). Seismic isolation shall be provided utilizing snubbers and/or neoprene mounting brackets with captive steel inserts.
- (b) All isolators and isolation materials, where required by seismic study shall be of the same manufacture and shall be selected and certified using published or factory certified data. Any variance or non-compliance with these specification requirements shall be corrected by the contractor in an approved manner.
- (c) All equipment whether isolated or non-isolated must include verifying calculations and analysis.
- (d) The contractor shall install all isolators and restraints per written installation instructions submitted by isolation/seismic restraint manufacturer.

(2) Related Work Specified In Other Sections

- (a) General provisions of the contract, including General and Supplementary Conditions and General Requirements apply to the work specified in this section.
- (b) Applicable requirements of the Technical Specifications apply to the work specified in this section.

(3) Contractor Responsibilities

- (a) Seismic study to determine vibration isolation and seismic restraint sizes and locations including restraint anchorage to structure and equipment.
- (b) Provide electrical equipment isolation systems and seismic restraints on equipment as specified.

- (c) Provide installation instructions and drawings where required.
- (d) Provide calculations performed by a licensed professional engineer to determine restraint loads resulting from seismic forces presented in 2018 International Building Code (IBC), governing codes, project seismic requirements.

b. Products

(1) Protective Devices

- (a) Non-isolated equipment to be field bolted to resist seismic forces. Calculations showing anchor bolt type, size, embedment and number shall be provided by contractor.
- (b) Furnish and install a flexible conduit connector section on all conduits 2-1/2 inches in diameter and larger where conduit terminates to fixed mounted panelboard or piece of switchgear.

c. Execution

(1) Electrical Equipment Requiring Seismic Protection

- (a) Furnish and install seismic isolation on all electrical equipment, conduit and lighting fixtures as required in 2018 International Building Code (IBC).
- (b) Furnish seismic protection for the following equipment.
 - 1. Conduit systems.
 - 2. Automatic transfer switch.
 - 3. Generator.
 - 4. Panelboard.
 - 5. Dry type transformers.
 - 6. Control panels.

(2) Installation

- (a) Except otherwise indicated, seismic protection shall comply with manufacturer's instructions for the

installation and load application to vibration isolation materials and units.

7. Automatic Load Transfer Switch

a. General

Amperage rating and NEMA enclosure type of automatic load transfer switch shall be as indicated on plans.

b. Products

- (1) Automatic transfer switch shall be service entrance rated (65,000 AIC) with overcurrent protection on normal source. Lugs shall be suitable for wire size specified.
- (2) Automatic transfer switch shall be 100% rated.
- (3) Automatic transfer switches shall be mechanically held on both standby and normal side and rated for continuous duty in an unventilated enclosure. Switch shall be double throw with main contacts rigidly and mechanically interlocked to insure only two possible positions: Normal or Standby. Manual operator must be provided to enable manual operation.
- (4) Transfer switches shall be listed under UL 1008. Switches utilizing reversing contactor mechanism as means to transfer load are disallowed and will not be considered.
- (5) Accessories for Transfer Switches: The automatic load transfer switch shall include the following accessories:
 - (a) Engine starting contacts to provide for generator starting.
 - (b) Full phase protection: Three phase relays shall be field adjustable, close differential type with 95-95% pickup and 82-85% drop out. Relays are to be connected across live lines.
 - (c) Test switch, to simulate power outage.
 - (d) Adjustable time delay (1-300 seconds) on transfer switch so designated on Plans only for delayed automatic transfer of load to generator.

- (e) Adjustable time delay on retransfer to load to normal with five-minute cooldown timer wherein generator set runs unloaded after transfer to line.
- (f) Programmed transition controls for transfer and retransfer of load connection.
- (g) Plant exerciser to start and run generator set each 168 hours for a 30-minute interval.
- (h) One auxiliary contact closed and one auxiliary contact open on emergency.
- (i) Pilot lights to indicate normal and standby position of transfer switch.
- (j) Isolated (ungrounded) neutral bar.
- (k) Disconnect plug.
- (l) Automatic transfer switch shall be Eaton type ATV Series, Square D or approved equal.

c. Execution

(1) Factory Testing

- (a) Each switch shall be factory tested in accordance with UL and NEMA standards. In addition, the manufacturer shall perform the following tests:
 - 1. Insulation check to ensure the integrity of insulation and continuity of the entire system.
 - 2. Visual inspection to ensure that the switch matches the specification requirements and to verify that the fit and finish meet quality standards.
 - 3. Mechanical tests to confirm compatibility of the switch's logic and power sections and to verify that they are free of mechanical hindrances. Switches shall be cycled through a minimum of 50 operations by alternately removing normal and emergency power sources.

4. Electrical tests to verify the complete electrical operation of the switch and to set up the time delays and voltage sensing settings of the logic.

(2) Installation

- (a) Installation of all switches shall be in accordance with all applicable codes, standards, and practices as well as in accordance with the recommendations of the manufacturer.
- (b) The contractor's field wiring terminating within the enclosure shall comply with NFPA 70. If wiring is not color coded, wires shall be permanently marked near the terminal at each end with the wire number shown on the approved shop drawings.
- (c) The contractor shall supply grounding lugs as required to meet with the local inspection and applicable codes.

(3) Start-up and Field Service

- (a) ALL OPERATIONAL DATA AND SETTINGS FOR THE AUTOMATIC TRANSFER SWITCH AND ASSOCIATED PROTECTION DEVICES SHALL BE CALCULATED AND PROVIDED BY THE MANUFACTURER'S APPLICATION ENGINEER. THESE SETTINGS ARE TO BE PROGRAMMED, SET AND CHECKED BY THE MANUFACTURER'S FIELD ENGINEER PRIOR TO STARTUP. ALL STARTUP AND ADJUSTMENTS ARE TO BE PERFORMED BY THE MANUFACTURER'S FIELD ENGINEER.
- (b) The Contractor shall take care in the installation of all equipment specified under this Sub-Section of these Detailed Specifications.
- (c) The manufacturer's field engineer or representative shall inspect and check the installation after erection and provide instruction and start-up service including but not limited to adjustment of any and all control functions and setting of all equipment to provide a complete and operable system. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH COPIES OF THE MANUFACTURER'S REPRESENTATIVE FIELD

SERVICE AND START-UP REPORT. FAILURE TO SUBMIT THIS INFORMATION WILL PREVENT PAYMENT FOR EQUIPMENT BEYOND NINETY (90) PERCENT OF THE EQUIPMENT COST.

- (d) The contractor shall field adjust all timing and voltage settings of the transfer switch as necessary for proper operation of the unit.

(4) Warranty

Equipment furnished under this Section shall be guaranteed against defective parts and workmanship under terms of manufacturer's and dealer's standard five (5) year comprehensive warranty.

Five (5) year comprehensive warranty terms shall not include any exclusions for number of trips required to perform warranty work or travel time and mileage limitations to job site.

Manufacturer authorized service must be within 200 miles of job site.

8. Standby Diesel Engine Generator System

a. General

(1) Scope

Under this section of Specifications, Contractor shall furnish and install a diesel engine driven generator set designed for outdoor installation. System shall consist of:

- (a) Diesel engine driven electric generating set to provide standby power.
- (b) Automatic load transfer control to provide automatic starting and stopping.
- (c) Mounted accessories as specified.

(2) Rating

The standby diesel engine generating set shall be rated for 125 kW at 0.80 power factor, 150 KVA standby service. Set

output shall be at voltage, phase and frequency shown on Plans.

Power plant shall be standard product of Caterpillar, Cummins or approved equal conforming to these Specifications and rated not less than specified. Generator set shall be factory assembled.

(3) Submittals

Shop plans for standby power plant shall contain not less than the information listed as follows:

- (a) Certification that power plant furnished will serve electrical loads indicated including motor starting loads with type of starting indicated.
- (b) Continuous and standby rating of plant including voltage and phase.
- (c) Frequency and voltage regulation with maximum instantaneous voltage dip and time of recovery to stable operation.
- (d) Output voltage adjustment range in percentage of rated plant voltage.
- (e) Alternator type and method of connection to prime mover.
- (f) Components contained in alternator instrument panel.
- (g) Rating of engine at operating speed, engine cycle and number of cylinders.
- (h) Type of engine lubrication system and verification of components.
- (i) Type of engine governor.
- (j) Fuel consumption at rated load.
- (k) Verification that all equipment specified is to be provided. This includes fuel tank with capacity indicated, cold weather starting aid with rating and voltage indicated, exhaust system with muffler type

indicated, outdoor housing with verification of space available within housing for batteries and all specified equipment.

(l) Starting batteries including ampere hour rating.

(m) EPA certificate of conformity.

(n) Exhaust emissions data.

(4) Regulatory Requirements

Conform to latest edition of NEC and applicable inspection authority.

Generator manufactured to NEMA standards.

b. Products

(1) Engine

Engine shall be diesel-fueled, turbocharged, water cooled with unit mounted 122 degrees Fahrenheit radiator, fan and water pump. At 1800 RPM, engine shall develop not less than horsepower indicated on schedule on drawings. Engine displacement shall not be less than indicated on schedule on drawings.

Full pressure lubrication shall be provided by lube oil pump. Engine shall have an air cleaner and oil filter with replaceable elements, fuel filters and lube oil cooler. Radiator shall be 122 degrees Fahrenheit high ambient rated.

Engine speed shall be governed by electronic governor to maintain alternator frequency within 0.25 Hertz from no load to full load alternator output. Engine shall have a 24 volt D.C. battery charging alternator and voltage regulator. Remote starting shall be 24 volt electric starter.

Power plant shall contain engine start-stop controls and cranking limiter to cycle engine starting circuit for 15 second intervals with 5 seconds between starts and shall open engine starting circuit in 90 seconds if engine is not started within that time. Engine control panel shall contain solid state engine monitor with individual fault pilot lamps and shut down for

overcrank, over speed, high engine temperature and low oil pressure per NFPA 110.

(2) Alternator

Alternator shall be 125 degrees C. rise four pole revolving field design, three phase with temperature compensated solid state voltage regulator and brushless rectifier exciter system.

Stator shall be directly connected to engine flywheel housing. Rotor shall be driven through a semi-flexible driving flange. Alternator insulation shall be Class H.

Frequency regulation shall not exceed 0.25 Hz. Voltage regulation shall be within plus or minus 0.5% of rated voltage. Following application of full load via transfer switch to generator set, RMS voltage determined on symmetrical basis for each complete cycle starting at first zero crossing after load application through 6th cycle must not drop below 65% of RMS voltage prior to application of load. RMS voltage starting at seventh cycle from first zero crossing after load application shall be sustained at no less than 90% of RMS voltage before load application. This voltage must be maintainable for a period of at least 30 seconds without tripping overcurrent devices in generator or causing overheating of any component beyond its design limits. Recovery to stable operation shall be within two seconds. Rheostat shall be provided to allow adjustment of rated voltage through +5%.

(3) Engine-Generator Set Control

The generator set shall be provided with a microprocessor-based control system, which is designed to provide automatic starting, monitoring, and control functions for the generator set. The control system shall also be designed to allow local monitoring and control of the generator set, and remote monitoring and control as described in this specification. The control shall be mounted at the location shown on the project drawings for medium voltage applications, and on the generator set for 600 volt and lower applications. When mounted on the generator set the control shall be vibration isolated and prototype tested to verify the durability of all components in the system under the vibration conditions encountered. The control shall be mounted at a maximum height of 5 feet 6 inches above concrete pad or access

platform/walkway for operator viewing per NFPA 110. The control shall be UL508 labeled, CSA282-M1989 certified, and meets IEC8528 part 4. All switches, lamps, and meters shall be oil-tight and dust-tight, and the enclosure door shall be gasketed. There shall be no exposed points in the control (with the door open) that operate in excess of 50 volts. The controls shall meet or exceed the requirements of Mil-Std 461C part 9, and IEC Std 801.2, 801.3, and 801.5 for susceptibility, conducted, and radiated electromagnetic emissions. The entire control shall be tested and meet the requirements of IEEE587 for voltage surge resistance. The generator set mounted control shall include the following features and functions:

- (a) Three position control switch labeled RUN/OFF/AUTO.

In the RUN position the generator set shall automatically start, and accelerate to rated speed and voltage.

In the OFF position the generator set shall immediately stop, bypassing all time delays. In the AUTO position the generator set shall be ready to accept a signal from a remote device to start and accelerate to rated speed and voltage.

- (b) Red "mushroom-head" push-button EMERGENCY STOP switch.

Depressing the emergency stop switch shall cause the generator set to immediately shut down, and be locked out from automatic restarting.

- (c) Push-button RESET switch.

The RESET switch shall be used to clear a fault and allow restarting the generator set after it has shut down for any fault condition.

- (d) Push-button PANEL LAMP switch.

Depressing the panel lamp switch shall cause the entire panel to be lighted with DC control power. The panel lamps shall automatically be switched off 10 minutes after the switch is depressed, or after the switch is depressed a second time.

(e) Generator Set Metering:

The generator set shall be provided with a metering set with the following features and functions:

2.5 inch, 90 degree scale analog voltmeter, ammeter, frequency meter, and kilowatt (kW) meters. These meters shall be provided with a phase select switch and an indicating lamp for upper and lower scale on the meters. Ammeter and kW meter scales shall be color coded in the following fashion: readings from 0-90% of generator set standby rating: green; readings from 90-100% of standby rating: amber; readings in excess of 100%: red.

Digital metering set, 0.5% accuracy, RMS type, to indicate generator voltage, frequency, output current, output kW, KW-hours, and power factor. Generator output voltage shall be available in line-to-line and line-to-neutral voltages, and shall display all three phase voltages (line to neutral or line to line) simultaneously.

(f) Generator Set Alarm and Status Indication:

The generator set shall be provided with alarm and status indicating lamps to indicate non-automatic generator status, and existing alarm and shutdown conditions. The lamps shall be high-intensity LED type. The lamp condition shall be clearly apparent under bright room lighting conditions. The generator set control shall indicate the existence of the following alarm and shutdown conditions on a digital display panel:

- low oil pressure (alarm)
- low oil pressure (shutdown)
- oil pressure sender failure (alarm)
- low engine temperature (alarm)
- high engine temperature (alarm)
- high engine temperature (shutdown)
- engine temperature sender failure (alarm)
- low coolant level (alarm or shutdown-selectable)
- fail to crank (shutdown)
- overcrank (shutdown)
- overspeed (shutdown)

- low DC voltage (alarm)
- high DC voltage (alarm)
- weak battery (alarm)
- low fuel-daytank (alarm)
- high AC voltage (shutdown)
- low AC voltage (shutdown)
- under frequency (shutdown)
- over current (warning)
- over current (shutdown)
- short circuit (shutdown)
- ground fault (alarm)(optional-when required by code or specified)
- over load (alarm)
- under frequency (alarm)

In addition, provisions shall be made for indication of two customer-specified alarm or shutdown conditions. The non-automatic indicating lamp shall be red, and shall flash to indicate that the generator set is not able to automatically respond to a command to start from a remote location.

(g) Engine Status Information:

The following information shall be available from a digital status panel on the generator set control:

- engine oil pressure (psi or kPA)
- engine coolant temperature (degrees F or C; Both left and right bank temperature shall be indicated on V-block engines.)
- engine oil temperature (degrees F or C)
- engine speed (rpm)
- number of hours of operation (hours)
- number of start attempts
- battery voltage (DC volts)

(h) Control Functions

The control system provided shall include a cycle cranking system, which allows for user selected crank time, rest time, and # of cycles. Initial settings shall be for 3 cranking periods of 5 seconds each, with 15 second rest period between cranking periods.

The control system shall include an idle mode control, which allows the engine to run in idle mode in the RUN

position only. In this mode, the alternator excitation system shall be disabled.

The control system shall include an engine governor control, which functions to provide steady state frequency regulation as noted elsewhere in this specification. The governor control shall include adjustments for gain, damping, and a ramping function to control engine speed and limit exhaust smoke while the unit is starting. The governor control shall be suitable for use in paralleling applications without component changes.

The control system shall include time delay start (adjustable 0-300 seconds) and time delay stop (adjustable 0-600 seconds) functions.

The control system shall include sender failure monitoring logic, which is capable of discriminating between failed sender or wiring components and an actual failure condition.

(i) Alternator Control Functions:

The generator set shall include an automatic voltage regulator. The voltage regulator shall be immune from misoperation due to load-induced voltage waveform distortion. The voltage regulator shall be equipped with three-phase RMS sensing. The regulator shall control buildup of AC generator voltage to provide a linear rise and limit overshoot. The regulator shall include a torque-matching characteristic, which shall reduce output voltage in proportion to frequency below a threshold of [58-59] HZ. The voltage regulator shall include adjustments for gain, damping, and frequency roll-off. The regulator shall include provisions reactive load sharing and electronic voltage matching for paralleling applications. Motorized voltage adjust pot is not acceptable for voltage matching.

Controls shall be provided to monitor the output current of the generator set and initiate an alarm when load current exceeds 110% of the rated current of the generator set on any phase for more than 5 seconds. The controls shall shut down and lock out the generator

set when output current level approaches the thermal damage point of the alternator.

Controls shall be provided to monitor the kW load on the generator set, and initiate an alarm condition when total load on the generator set exceeds the generator set rating for in excess of 5 seconds.

Controls shall include a load shed control, to operate a set of dry contacts (for use in shedding customer load devices) when the generator set is overloaded.

An AC over/under voltage monitoring system shall be provided which initiates shutdown of the generator set when alternator output voltage exceeds 110% of the operator-set voltage level for more than 10 seconds, or instantaneously when voltage exceeds 130%. Under voltage shall be indicated when the output voltage of the alternator is less than 85% for more than 10 seconds.

A battery monitoring system shall be provided which initiates alarms when the DC control and starting voltage is less than 25 VDC or more than 32 VDC. During engine starting, the low voltage limit shall be disabled, and if DC voltage drops to less than 14.4 volts for more than two seconds a "weak battery" alarm shall be initiated.

When required by National Electrical Code or indicated on project drawings, the control system shall include a ground fault monitoring relay. The relay shall be adjustable from 100-1200 amps, and include adjustable time delay of 0-1.0 seconds. The relay shall be for indication only and not trip or shut down the generator set. Note bonding and grounding requirements for the generator set, and provide relay, which will function correctly in system as installed.

(j) Control Interfaces for Remote Monitoring:

All control and interconnection points from the generator set to remote components shall be brought to a separate connection box. No field connections shall be made in the control enclosure or in the AC power

output enclosure. Provide the following features in the control system:

A Discrete Input/Output Module shall be provided to translate alarm, fault, and status conditions to a set of relay contacts. Contacts shall represent conditions of:

- EMCP diagnostic fault system not in automatic alarm
- High coolant temperature alarm
- Low coolant temperature alarm
- Low oil pressure alarm
- Low oil pressure fault
- High coolant temperature fault
- Overcrank fault
- Overspeed fault

Form "C: dry common alarm contact set to indicate existence of any alarm or shutdown condition on the generator set.

A fused 10 amp switched 24VDC power supply circuit shall be provided for customer use. DC power shall be available from this circuit whenever the generator set is running.

The control shall be provided with provisions for connection of remote monitoring equipment as described herein or shown on the drawings.

(4) Main Line Circuit Breaker

Type: A main-line, molded case circuit breaker mounted upon and sized to the output of the generator shall be installed as load circuit interrupting and protection device. It shall operate both manually for normal switching functions and automatically during overload and short circuit conditions.

The circuit breaker shall be mounted at a height not exceeding 6 feet 7 inches above the concrete pad or working platform per NEC Article 240.24(A). This height is to include sub-base fuel tank if applicable. Provide access steps and working platform as required for accessibility.

(5) Coolant Heater

Provide 240 volts, A.C., 1 phase heater, thermostatically controlled in engine coolant system as cold weather starting aid.

Electric heater shall be permanently connected to circuit extended from building electrical system.

(6) Antifreeze

Provide antifreeze to protect coolant to -35 degrees F.

(7) Starting Battery

Wet cell batteries, lead-acid type shall be provided with stand-by power plant. Batteries shall be selected for starting requirements of stand-by power plant and shall be rack mounted within plant housing. Batteries shall be permanently connected to two step battery charger.

(8) Muffler

Provide residential rated muffler complete with raincap and supports, installed inside weatherproof housing.

(9) Battery Charger

Provide a ten (10) amp voltage regulated battery charger for engine starting battery. Charger shall be equipped with float, taper, and equalize charge settings. Charger shall automatically taper amps to zero when battery approaches full charge.

(10) Housing

Stand-by power plant shall be provided in outdoor, weatherproof, sound attenuated housing with removable panels for access to equipment. Starting batteries shall be rack mounted within housing.

(11) Fuel Tank

Fuel tank shall be a skid base mounted double wall tank with minimum capacity to provide 48 hours operation at full diesel

engine-generator set capacity. Fuel tank shall be equipped with a fuel leak detector.

The fuel tank shall be designed and constructed to prevent the collection and standing of water on top of the tank.

Provide single pole, double throw low level alarm switch that senses the fuel level by pressure changes. When activated, circuit shall sound alarm at remote annunciator. Provide fuel level gauge on skid base mounted tank.

At completion and final acceptance of installation, Contractor shall fill fuel tank to full capacity with No. 2 diesel fuel.

(12) Venting and Piping

Venting for fuel tank and piping between engine, fuel tank, levelometer, fuel pumps, etc. shall be furnished and installed in accordance with NFPA Standard 37.

c. Execution

(1) Stand-by Electric Power System

Performance of plant shall be certified in writing, with respect to full power rating, voltage and frequency regulation and motor starting capability. Certifications shall be submitted with submittal.

Plant shall be provided with spring type, vibration isolators and mounted on a welded steel base. Plant shall be anchored to concrete base per manufacturer's recommendations.

Install standby generator in accordance with manufacturer's recommendations.

(2) Testing

The actual performance of each unit shall be certified in writing, with respect to full power rating, voltage and frequency regulation and motor starting capability.

On completion of installation, start-up shall be performed by the engine manufacturer's trained service representative.

Prior to acceptance of installation, equipment shall be tested for any defects and will start automatically and be subjected to full load test through the use of portable dry type load banks supplied for this purpose at job site by generator set supplied.

Load bank test shall be witnessed by project Engineer, Project Inspector or designated representative and generator set installation approved prior to acceptance. Load bank test shall be scheduled two (2) weeks in advance to confirm day and time of test.

Operating and maintenance instruction manuals shall be supplied and procedures explained to operating personnel.

The Contractor shall be responsible for the complete installation and start-up of standby generator system for proper operation under standby power. This includes the proper setup of all connected load control devices including automatic transfer switch, circuit breakers, solid state reduced voltage starters, adjustable frequency drives, etc.

(3) Warranty

Equipment furnished under this Section shall be guaranteed against defective parts and workmanship under terms of manufacturer's and dealer's standard five (5) year comprehensive warranty.

Five (5) year comprehensive warranty terms shall not include any exclusions for number of trips required to perform warranty work or travel time and mileage limitations to job site.

Manufacturer authorized service must be within 200 miles of job site.

9. Panelboard

a. General

(1) Work Included

(a) Panelboard.

b. Products

(1) Panelboard

277/480 volts, 3 phase, 4 wire as indicated on Plans: Eaton or pre-approved equal.

Panelboard shall be factory assembled, dead front type with plated copper bus bars, lugs, finish trim and thermal-magnetic molded case circuit breakers of frame and trip ratings shown on the Plans.

Provide single door with spring latch lock. Key panel locks alike.

Circuit breakers shall be HACR rated as required.

Branch Circuit Panelboard shall be Eaton, Type POW-R-LINE, or pre-approved equal, equipped with bolt on thermal-magnetic circuit breakers. Breakers shall be 1, 2 or 3 pole with integral crossbar to assure simultaneous opening of all poles in multipole circuit breakers. Bolt on circuit breakers shall be able to be installed in the same panelboard without requiring additional hardware. Circuit breakers shall be provided with continuous current ratings as noted on the plans. Interrupting rating shall be 35,000 RMS symmetrical amperes. Single pole 15 and 20 ampere circuit breakers shall carry the SWD marking and H.I.D rating. Panelboard shall be equipped with a bare uninsulated equipment grounding bar for use in terminating separate equipment grounding conductors. Panelboard shall be equipped with full or 200 percent neutral bars as scheduled.

c. Execution

(1) Panelboard

Provide typewritten directory cards listing location of circuit controlled. Insert with plastic cover into directory frame on door.

Provide arc flash marking for all panelboards and control panels per NEC Article 110.16.

Provide identification indicating voltage, phase, device designation, source fed from and other required marking per NEC Article 110.21.

10. Mini Power Center

a. General

(1) Work Included

Provide all materials, labor and equipment required to furnish and install a complete electrical system as indicated on Plans and as specified herein.

b. Products

(1) Mini Power Center

Mini power center shall be manufactured by Eaton or pre-approved equal.

Unit shall be single-phase or three-phase, individually mounted, mini power center of the two-winding type, self-cooled, with ratings and voltages as indicated on the drawings.

Unit shall be factory assembled, dead front type with plated copper phase, neutral and ground bus bars, lugs, finish trim and thermal-magnetic molded case circuit breakers of frame and trip ratings shown on the Plans.

Each mini power center shall include a main primary breaker with an interrupting rating of 25 kA at 277/480 volts; an encapsulated dry-type transformer and a secondary panelboard with main breaker rated 14 kA interrupting rating at 120/240 volts.

(a) All interconnecting wiring between the primary breaker and transformer, secondary main breaker and transformer and distribution section shall be factory installed. Main primary, secondary and feeder breakers shall be enclosed with a padlockable hinged door.

(b) The secondary distribution section shall accommodate one inch, bolt-on breakers with 10 kA interrupting capacity.

c. Execution

Install mini power center to provide working clearances required in NEC 110.26(A) and 450.

11. Service and Distribution System and Grounding

a. General

(1) Work Included

- (a) Service system
- (b) Distribution system
- (c) Grounding

b. Products

(1) Materials

Furnish service entrance conduit and cable and miscellaneous hardware required.

c. Execution

(1) Service and Distribution System

- (a) System secondary shall commence at the power company padmount transformer and then underground to service entrance rated automatic transfer switch, panelboard and feeder circuits.

Service shall be 277/480 volts, three phase, four wire, from power company padmount transformer. CT metering provided by power company.

(2) Grounding

Ground electrical system in accordance with Article 250, National Electrical Code local authorities having jurisdiction, and as indicated on the Plans.

Do not use flexible metal conduit and fittings as a grounding means. Pull a green wire in each piece of flexible and conduit and screw to conduit system with lugs at both ends.

Install green bonding jumpers in flush mounted receptacle ground terminal. Install green bonding jumpers between outlet box and wall bracket mounted lighting fixtures. Screw jumpers to fixture chassis with lugs.

Install code size green grounding conductors in all branch circuits feeding receptacles, motors or other permanently wired fixed equipment and all feeder circuits. Bond conductors to chassis of fixed equipment. All grounding conductors shall be bonded to multi-terminal ground bus at panelboard. Grouping of grounding conductors under a single lug is not acceptable.

Install a #2 bare copper conductor grounded to main metal water piping and concrete reinforcing steel.

All separate grounding electrodes shall be bonded together to limit potential differences between them and between their associated wiring systems. This includes the power system and lightning protection system grounding electrodes.

12. Surge Protection Devices (SPD)

Competitive products submitting against this specification must provide a single impulse surge current test report issued by a nationally recognized testing facility. The test report should demonstrate that the competitive surge protection device (SPD) can withstand, in its installed configuration, the specified value surge current without failure of any internal component (MOV's, wiring, printed circuit board and disconnect).

- a. Furnish and install surge protection device (SPD) at panelboard "A". The unit shall be suitable for installation on a three phase 277/480 VAC, four wire plus ground type service. The surge protection device (SPD) shall be of a passive parallel, thermal stress reducing design with a response time of less than or equal to one nanosecond. Each unit shall be UL 1449 Third Edition and CSA listed, and it shall have a full fifteen (15) year non-limited warranty. Each SPD shall have a peak surge current rating of no less than 100,000 amps per phase (L-N + L-G). The UL 1449 Third Edition let through voltage, line-to-neutral, shall not exceed 1,000 volts peak when the unit hit with an ANSI/IEEE 62.41 Category B (6,000 volt, 4,000 amp) impulse hit.

Surge protection device shall be equal to Current Technology Cat.
No. TG3-100-480-3Y-PNB.

FILE/23019-SE6

BID FORM

An Individual	☐
A Partnership	☐
A Corporation	☒
A Limited Liability Company	☐

Date December 17, 2024

1. BID for Duck River Sewage Pumping Station Replacement for the City of Columbia, Tennessee.

I / WE

Cumberland Valley Constructors, Inc.

Name of Bidder

2518 Plum Street, Nashville, Tennessee 37207

Address of Bidder

the undersigned, as Bidder, propose to furnish all necessary labor, machinery, tools, apparatus, materials, equipment, service and other necessary supplies, in strict accordance with the terms and conditions of the Detailed Specifications and Contract Documents hereto attached and referred to herein for the construction of Sewer System Improvements, Contract 22-01 – Duck River Sewage Pumping Station Replacement for the City of Columbia, Tennessee, and do such other work incidental thereto as may be ordered by the Owner, through the Engineer, at the unit or lump sum prices listed herein.

2. The Bidder declares that he has examined the sites of the work and informed himself fully in regard to all conditions pertaining to the places where the work is to be performed; that he has examined these Detailed Specifications and Contract Documents for the work and has read all special provisions furnished prior to the opening of bids; and that he has satisfied himself relative to the scope and details of the work to be performed. The Bidder further declares that he understands the Total Amount Bid or “sum” in the Agreement is subject to increase or decrease, and that should the scope of any of the items of work be changed materially, the undersigned proposes to perform the additional work or decrease the Total Amount Bid or “sum” in the Agreement based on the unit and lump sum prices set out herein. Should the quantities be decreased, the undersigned will make no claim for anticipated profits.

BID FORM
2162 – January 2024

3. BIDS shall include applicable sales tax and all other applicable taxes and fees.
4. Where alternate materials or methods of construction are indicated in the BID FORM, the Bidder shall check the type of material or method of construction where indicated in the BID FORM. Failure to do so will allow the Owner to make the choice with no adjustment in price due the Bidder.
5. Unit and lump sum price amounts shall be shown in both words and numerals. In case of discrepancy, the amount shown in words will govern.
6. The unit and lump sum prices shall include all labor, materials, dewatering, shoring, overhead, profit, insurance, *etc.*, to cover the finished work of the several kinds called for.
7. Bidder understands that the Owner reserves the right to reject any or all bids and to waive any informalities in the bidding.
8. The Bidder agrees that his bid shall be good and may not be withdrawn for a period of 90 calendar days after the scheduled closing time for receiving bids.

9. CONTRACT 22-01 – DUCK RIVER SEWAGE PUMPING STATION
REPLACEMENT

9.a. Lump Sum Price

For performing all labor and furnishing all materials and equipment necessary for the new Duck River Sewage Pumping Station using suction-lift pumps, complete in place, including all equipment, electrical work, all site development, fiberglass enclosure, piping, emergency pump connection, ductile iron force main segments, and appurtenances as shown on the Plans and/or specified for the lump sum amount of:

TOTAL BID: (\$1,713,000.00)

One Million Seven Hundred Thirteen Thousand Dollars

Zero Cents

9. CONTRACT 22-01 – DUCK RIVER SEWAGE PUMPING STATION REPLACEMENT (cont'd)

9.b. Equipment to be Furnished

The prices for equipment listed below for work to be constructed under Sub-Sections 5A and 5B are included in the lump sum price shown previously as Item 9.a. Lump Sum Price. The BIDDER shall use the lowest priced item listed as an acceptable Base Bid item as the basis for arriving at his overall price. The BIDDER is required to fill in the items below in order to indicate the relative prices of the equipment of various manufacturers which may be considered by the Owner for various reasons. The prices shown below shall include the cost of furnishing the various equipment items.

The prices listed hereinafter are not to be in addition to the Lump Sum Price in Paragraph 9.a., but are to be included in it.

Sub-Section	Description	Price	Equipment Used in Base Bid (Show only one per Sub-Section)
5A	<u>Suction Lift Pumps, and Accessories</u>		
	Gorman Rupp	<u>\$342,000.00</u>	<u>\$342,000.00</u>
	Pre-approved equal	<u>\$</u>	<u>\$</u>
5B	<u>Variable Frequency Drives</u>		
	ABB	<u>\$</u>	<u>\$</u>
	Danfoss	<u>\$</u>	<u>\$</u>
	Siemens	<u>\$</u>	<u>\$</u>
	Yaskawa	<u>\$</u>	<u>\$</u>
	Pre-approved equal	<u>\$30,000.00</u>	<u>\$30,000.00</u>

9. CONTRACT 22-01 – DUCK RIVER SEWAGE PUMPING STATION
REPLACEMENT (cont'd)

9.b. Equipment to be Furnished (cont'd)

Sub- Section	Description	Price	Equipment Used in Base Bid (Show only one per Sub-Section)
5B	<u>Pump Automatic Control System and Accessories</u>		
	Southern Sales Company, Inc.	<u>\$180,000.00</u>	<u>\$180,000.00</u>
	Pre-approved equal	<u>\$</u>	<u>\$</u>

10. Time of Commencement and Completion

The Bidder further proposes and agrees hereby to commence the work with adequate force and equipment on a date to be specified in a written order of the Engineer, and complete all work within the calendar days shown:

Contract 22-01: Two Hundred Forty (240) consecutive calendar days

11. Liquidated Damages

The Bidder further agrees that if the work is not completed within the time stipulated, liquidated damages in the amount of One Thousand Dollars (\$1,000) per calendar day will be deducted from the compensation otherwise due him in accordance with the terms and conditions of the Contract Documents for each day thereafter, Sundays and holidays included, that the work remains uncompleted.

12. Time Limit for Execution of Documents

The undersigned further agrees that, in case of failure on his part to execute the Agreement and the Bonds in the eight counterparts and furnish the required certificate of insurance within ten consecutive calendar days after written notice being given of the award of the Contract, the check or Bid Bond accompanying this Bid and the monies payable thereon shall be paid into the funds of the City of Columbia, Tennessee as liquidated damages for such failure; otherwise the check or bid bond accompanying this BID FORM shall be returned to the undersigned.

13. Bid Guaranty

Attached hereto is a certified check on the _____ Bank of _____ or a Bid Bond on the form provided for the sum of 5% of Bid Dollars (\$_____) made payable to the City of Columbia, Tennessee to insure that the Contractor will enter into the Construction Contract and Contract Bond.

14. Interested Parties

The undersigned, as Bidder, hereby declares that the only person or persons interested in the BID FORM as principal or principals is or are named herein, and that no other person herein mentioned has any interest in this BID FORM or in the Agreement to be entered into; that this BID FORM is made without connection with any other person, company, or parties making a bid or proposal and that it is in all respects fair and in good faith without collusion or fraud.

BID FORM
2162 – January 2024

NAME

ADDRESS

Jarrod Imler, President

2518 Plum Street, Nashville, Tennessee 37207

Greg Schiefer, Vice President

2518 Plum Street, Nashville, Tennessee 37207

Ryan Gutridge, Treasurer/Secretary

2518 Plum Street, Nashville, Tennessee 37207

15. Addenda

I hereby certify that I have received, read and examined the following numbered Addenda: 1, _____, _____, _____, _____, _____, _____.

16. BID FORM Certifications

The following BID FORM certifications must be satisfactorily completed for the bid to be considered: (1) Drug-Free Workplace Affidavit; (2) Statement of Compliance Certificate – Illegal Immigrants; (3) Statement of Compliance – Iran Divestment Act; and (4) Non-Boycott of Israel Certification.

BY: Cumberland Valley Constructors, Inc.

Name of Bidder

2518 Plum Street, Nashville, Tennessee 37207

Address of Bidder

Signature of Authorized Representative

Jarrod Imler, President

Title

ATTEST (For Corporations)

(Name)

Ryan Gutridge, Treasurer / Secretary

Title

**DRUG-FREE WORKPLACE AFFIDAVIT OF PRIME BIDDER
(TENNESSEE)**

STATE OF _____

COUNTY OF _____

Comes the affiant after having first been duly sworn and testifies as follows:

1. My name is _____. I hold the principal office of _____ for _____.
2. _____ has submitted a bid to the
(Name of Bidder)
City of Columbia, Tennessee for the construction of Contract 22-01 – Duck River Sewage Pumping Station Replacement.
3. _____ employs more than five people.
(Name of Bidder)
4. In accordance with T.C.A. § 50-9-113, this is to certify that _____
(Name of Bidder) has in effect, at the time of submission of its bid to perform the construction of Contract 22-01 – Duck River Sewage Pumping Station Replacement, a drug-free workplace program.
5. This affidavit is made on personal knowledge.

Further the affiant saith not this _____ day of _____, 20____.

Title:

Subscribed and sworn to before me this _____ day of _____, 20____.

My Commission Expires: _____

Notary Public

Name (printed)

- NOTES:
1. This affidavit to be attached to the Bid Form at the time of submission of the Bid.
 2. **A copy of proof of state approval shall be attached hereto.**

STATEMENT OF COMPLIANCE
IRAN DIVESTMENT ACT

In compliance with the Iran Divestment Act (State of Tennessee 2016, Public Chapter No. 817), which became effective on July 1, 2016, certification is required of all bidders on contracts over \$1,000.

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party hereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to T.C.A. § 12-12-106.

I affirm, under the penalties of perjury, this statement to be true and correct.

Date

Signature of Bidder

Company

A bid shall not be considered for award nor shall any award be made where the foregoing certification has not been complied with; provided, however, that if in any case the bidder cannot make the foregoing certification, the bidder shall so state and shall furnish with the bid a signed statement which sets forth in detail the reasons therefor. The City of Columbia, Tennessee may award a bid to a bidder who cannot make the certification, on a case-by-case basis, if:

- (1) The investment activities in Iran were made before July 1, 2016, the investment activities in Iran have not been expanded or renewed on or after July 1, 2016, and the person has adopted, publicized, and is implementing a formal plan to cease the investment activities in Iran and to refrain from engaging in any new investments in Iran; or
- (2) The City of Columbia, Tennessee makes a determination that the goods or services are necessary for the City of Columbia, Tennessee to perform its functions and that, absent such an exemption, the political subdivision will be unable to obtain the goods or services for which the contract is offered. Such determination shall be made in writing and shall be a public document.



STATE OF TENNESSEE
NON-BOYCOTT OF ISRAEL CERTIFICATION

The Bidder certifies that it is not currently engaged in, and will not for the duration of the contract engage in, a boycott of Israel as defined by Tenn. Code Ann. § 12-4-119. This provision shall not apply to contracts with a total value of less than two hundred fifty thousand dollars (\$250,000) or to contractors with less than ten (10) employees.

According to the law, a boycott of Israel means engaging in refusals to deal, terminating business activities, or other commercial actions that are intended to limit commercial relations with Israel, or companies doing business in or with Israel or authorized by, licensed by, or organized under the laws of the State of Israel to do business, or persons or entities doing business in Israel, when such actions are taken:

- 1) In compliance with, or adherence to, calls for a boycott of Israel, or
- 2) In a manner that discriminates on the basis of nationality, national origin, religion, or other unreasonable basis, and is not based on a valid business reason. Tenn. Code Ann. § 12-4-119.

Signature of Authorized Representative	Date
Printed Name	Phone Number / Email Address

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned,
_____ as
Principal, and _____ as
Surety, are hereby held and firmly bound unto the City of Columbia, Tennessee, as
Owner, in the penal sum of:

_____ for the payment of which, well and truly to be made, we hereby jointly and severally bind
ourselves, our heirs, executors, administrators, successors and assigns.

Signed this _____ day of _____, 20____.

The condition of the above obligation is such that whereas the Principal has
submitted to the City of Columbia, Tennessee, a certain BID, attached hereto and made
a part hereof to enter into Contract in writing for the construction of Sewer System
Improvements, Contract 22-01 – Duck River Sewage Pumping Station Replacement, for
the City of Columbia, Tennessee.

NOW THEREFORE,

- (a) If said Bid shall be rejected, or in the alternate,
- (b) If said Bid shall be accepted and the Principal shall execute and deliver a
Contract in the Form of Contract attached hereto (properly completed in
accordance with said Bid) and shall furnish a bond for his faithful
performance of said Contract, and for the payment of all persons
performing labor or furnishing materials in connection therewith, and shall
in all other respects perform the agreement created by the acceptance of
said BID, then this obligation shall be void, otherwise the same shall
remain in force and effect, it being expressly understood and agreed that
the liability of the Surety for any and all claims hereunder shall, in no event,
exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations
of said Surety and its bond shall be in no way impaired or affected by any extension of
the time within which the Owner may accept such BID; and said Surety does hereby
waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

Principal

Firm Name

BY: _____

Signature

Printed Name

ADDRESS: _____

Seal

Surety

Firm Name

BY: _____

Signature

Printed Name

ADDRESS: _____

Seal

BID BOND
2162 – January 2024

NOTE: A copy of the Power of Attorney of the Surety's Principal is required and the amount of the bond must not be less than five percent (5%) of the amount of bid.

Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the project is located.

AGREEMENT

THIS AGREEMENT made and entered into this the ____ day of _____, 2025, by and between Cumberland Valley Constructors, Inc. doing business as Corporation hereinafter called the Contractor, and the City of Columbia, Tennessee hereinafter called the Owner:

WITNESSETH:

That the Contractor, for the consideration hereinafter fully set out, hereby agrees with the Owner as follows:

1. Scope of the Work

That the Contractor shall furnish all labor, materials, tools, machinery and service, to complete the construction of Sewer System Improvements, Contract 22-01 – Duck River Sewage Pumping Station Replacement for the Owner, in the manner and form as provided by the Plans, Detailed Specifications and Contract Documents attached hereto and enumerated as follows:

a. Plans

Sewer System Improvements for the City of Columbia, Tennessee, Contract 22-01 – Duck River Sewage Pumping Station Replacement, Project Number 2162, Sheets 1 through 5 and E1 through E5 dated January 2024.

b. Specifications and Contract Documents

	<u>Pages</u>
(1) Advertisement for Bids	AB, 1 – 3
(2) Instructions to Bidders	IB, 1 – 10
(3) General Conditions	GC, 1 – 72
(4) Supplementary Conditions	SC, 1 – 2
(5) A Listing of the Duties, Responsibilities and Limitations of Authority of the Resident Project Representative	Pages 1 – 4
(6) Detailed Specifications	
Section 1 – General Scope and Special Provisions	DS 1, 1 – 15
Section 2 – Testing & Control of Materials	DS 2, 1 – 5
Section 3 – Concrete and Reinforcing Steel	DS 3, 1 – 26
Section 4 – Site Preparation and Development, Piping and Valves	DS 4, 1 – 22
Section 5 – Mechanical and Control Equipment – General	DS 5, 1 – 6
Sub-Section 5A – Duck River Sewage Pumping Station and Appurtenances	DS 5A, 1 – 19
Sub-Section 5B – Pump Automatic Control System and Accessories	DS 5B, 1 – 17
Section 6 – Electrical Work	DS 6, 1 – 38
(7) BID FORM	BF, 1 – 7
(8) Drug-Free Workplace Affidavit of Prime Bidder	DF-1
(9) Statement of Compliance Illegal Immigrants	Page 1
(10) Statement of Compliance Iran Divestment Act	Page 1
(11) Non-Boycott of Israel Certification	Page 1
(12) Bid Bond	BB, 1 – 3
(13) Agreement	A, 1 – 6
(14) Performance Bond	PEB, 1 – 2
(15) Payment Bond	PAB, 1 – 2
(16) Addenda <u>1</u> , _____, _____, _____, _____, _____	

all identified as Sewer System Improvements, for the City of Columbia, Tennessee, Contract 22-01 – Duck River Sewage Pumping Station Replacement, Project Number 2162, January 2024, as prepared by J. R. Wauford & Company, Consulting Engineers, Inc., Nashville, Tennessee, and shall do everything required by this Agreement, Advertisement for Bids, Instructions to Bidders, General Conditions, Supplementary

Conditions, Detailed Specifications, Bid Form, Payment Bond,
Performance Bond, and Addenda.

2. Time for Commencement and Completion

That the Contractor shall commence the work to be performed under this Agreement on written order of the Engineer, and shall fully complete all work hereunder within the following number of consecutive calendar days from and including said date.

Contract 22-01 – Two Hundred Forty (240) calendar days

3. Payments

The Owner hereby agrees to pay to the Contractor for the faithful performance of this Agreement, subject to additions and deductions as provided in the Detailed Specifications and Contract Documents, in lawful money of the United States, as follows:

the full sum of One Million Seven Hundred Thirteen Thousand Dollars and 00/100 Cents (\$1,713,000.00).

4. Current Estimates

The Owner shall make partial payments to the Contractor on the basis of a duly certified and approved estimate of work performed during the preceding calendar month by the Contractor, less ten (10) percent of the amount of such estimate which is to be retained by the Owner until all work has been performed strictly in accordance with this Agreement and until such work has been accepted by the Owner. Upon request by the Contractor, total retainage shall be reduced to five

(5) percent of the total revised Contract Amount after the Contract is at least 50 percent complete.

5. Final Estimates

Upon submission by the Contractor of evidence satisfactory to the Owner that all payrolls, material bills, and other costs incurred by the Contractor in connection with the construction of the work have been paid in full, final payment on account of this Agreement shall be made within sixty (60) days after the completion by the Contractor of all work covered by this Agreement, and the acceptance of such work by the Owner.

6. Liquidated Damages

It is mutually agreed between the parties hereto that time is the essence on each and every portion of this Contract. If the said Contractor shall neglect, fail or refuse to complete the work within the time specified within the Contract, or within any proper extension thereof granted by the Owner, then the Contractor does hereby agree to pay, either by means of deduction from the compensation due the Contractor under this Contract or by direct payment by the Contractor to the Owner, not as a penalty, but as liquidated damages, the sum of One Thousand (\$1,000.00) Dollars, per calendar day for each day thereafter, Sundays and Holidays included, that the work remains incomplete. In addition, any fines paid as a result of the Contractor's failure to complete the project on time or neglect shall be borne by the Contractor.

7. Additional Bond

It is further mutually agreed between the parties hereto that if, at any time after the execution of this Agreement and the Performance Bond and the Payment Bond hereto attached for its faithful performance, the Owner shall, for cause, deem the surety or sureties upon such bond to be unsatisfactory, or if for any reason such bonds ceases to be adequate to cover the performance of the work, the Contractor shall, at his expense, within ten days after the receipt of notice from the Owner so to do, furnish an additional bond or bonds in such form and amount, and with such surety or sureties as shall be satisfactory to the Owner. In such event, no further payment to the Contractor shall be deemed to be due under this Agreement until such new or additional security for the faithful performance of the work shall be furnished in manner and form satisfactory to the Owner.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and date first above written in six (6) counterparts, each of which shall, without proof or accounting for the other counterparts, be deemed an original contract.

AGREEMENT
2162 – January 2024

CONTRACTOR: Cumberland Valley Constructors, Inc.

BY: _____

NAME: Jarrold Imler
(PLEASE TYPE)

TITLE: President

(SEAL)

ATTEST OR WITNESS:

NAME: Ryan Gutridge, Treasurer / Secretary
(PLEASE TYPE)

OWNER: THE CITY OF COLUMBIA, TENNESSEE

BY: _____

NAME: Charles M. Molder
(PLEASE TYPE)

TITLE: Mayor

(SEAL)

ATTEST:

NAME: Thad H. Jablonski
(PLEASE TYPE)

APPROVED AS TO LEGAL FORM

BY: _____
Jake Hubbell, City Attorney

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that

Cumberland Valley Constructors, Inc.

(Name of Contractor)

2518 Plum Street, Nashville, Tennessee 37207

(Address of Contractor)

a _____ Corporation hereinafter called
(Corporation, Partnership or Individual)

Principal, and _____
(Name of Surety)

(Address of Surety)

hereinafter called "Surety", are held and firmly bound unto

City of Columbia, Tennessee

(Name of Owner)

700 North Garden Street, Columbia, Tennessee 38401

(Address of Owner)

hereinafter called "Owner", in the penal sum of One Million Seven Hundred Thirteen Thousand Dollars 00/100 Cents (\$1,713,000.00) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the Owner dated _____ day of _____, 2025, a copy of which is hereto attached and made a part hereof for the construction of:

Sewer System Improvements

Contract 22-01 – Duck River Sewage Pumping Station Replacement

Wauford Project No. 2162

NOW, THEREFORE, if the Principal shall well, truly and faithfully performs its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the Owner, with or without notice to the Surety, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the Owner from all cost and damages which it may suffer by reason of failure to do, and shall reimburse and repay the Owner all outlay and expense which the Owner may incur in making good any default, then this obligation shall be void; otherwise to

PERFORMANCE BOND

2162 – January 2024

remain in full force and effect.

PROVIDED, FURTHER, that the said surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

PROVIDED, FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in 6 counterparts, each one of which shall be deemed an original, this the _____ day of _____, 2025.

WITNESSES:

Cumberland Valley Constructors, Inc.
Principal

BY: _____

Jarrold Imler, President

2518 Plum Street, Nashville, Tennessee 37207
Address

(SEAL)

WITNESSES:

Surety

BY: _____

Attorney-in-Fact

NOTE: Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that

Cumberland Valley Constructors, Inc.

(Name of Contractor)

2518 Plum Street, Nashville, Tennessee 37207

(Address of Contractor)

a _____ Corporation hereinafter called
(Corporation, Partnership or Individual)

Principal, and _____
(Name of Surety)

(Address of Surety)

hereinafter called "Surety", are held and firmly bound unto

City of Columbia, Tennessee

(Name of Owner)

700 North Garden Street, Columbia, Tennessee 38401

(Address of Owner)

hereinafter called "Owner", in the penal sum of One Million Seven Hundred Thirteen Thousand Dollars 00/100 Cents (\$1,713,000.00) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the Owner dated _____ day of _____, 2025, a copy of which is hereto attached and made a part hereof for the construction of:

Sewer System Improvements

Contract 22-01 – Duck River Sewage Pumping Station Replacement

Wauford Project No. 2162

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, subcontractors, and corporations furnishing materials for or performing labor in the prosecution of the work provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools consumed or used in connection with the construction of such work, and all insurance premiums on said work, and for all labor, performed in such work whether by subcontractor or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PAYMENT BOND
2162 – January 2024

PROVIDED, FURTHER, that the said surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

PROVIDED, FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in 6 counterparts, each one of which shall be deemed an original, this the _____ day of _____, 2025.

WITNESSES:

Cumberland Valley Constructors, Inc.
Principal

BY:

Jarrod Imler, President

2518 Plum Street, Nashville, Tennessee 37207
Address

(SEAL)

WITNESSES:

Surety

BY:

Attorney-in-Fact

NOTE: Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.

SEWER SYSTEM IMPROVEMENTS

FOR THE CITY OF

COLUMBIA, TENNESSEE

CONTRACT 22-01

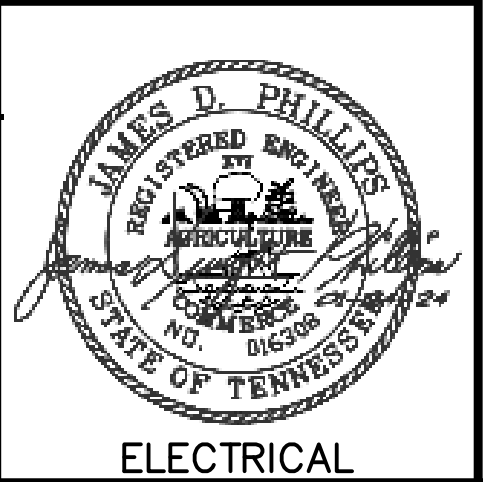
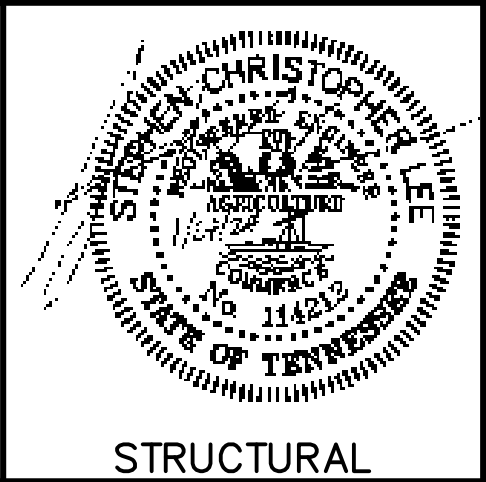
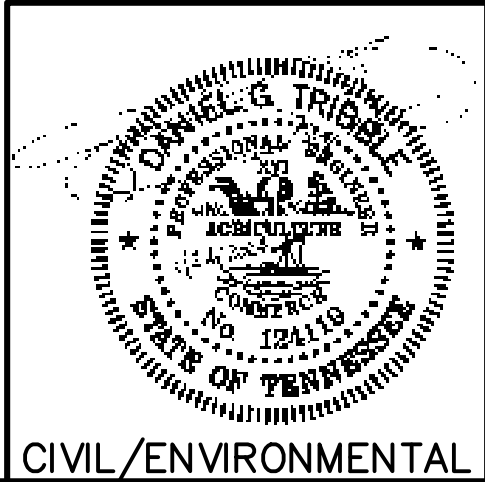
DUCK RIVER SEWAGE PUMPING
STATION REPLACEMENT

PROJECT NO. 2162

JANUARY, 2024

WAUFORD

Nashville, Tennessee
(615) 883-3243
www.jrwauford.com



INDEX OF DRAWINGS

<u>SHEET</u>	<u>DESCRIPTION</u>
1.	LOCATION MAP, LEGEND, GENERAL NOTES, AND SITE DEMOLITION PLAN
2.	SITE PLAN, PIPING PROFILE, AND NOTES
3.	SEWAGE PUMPING STATION PLAN VIEW AND SECTIONS
4.	DETAIL SHEET AND STRUCTURAL NOTES
5.	EXISTING DUCK RIVER SEWAGE PUMPING STATION MODIFICATIONS
E1.	SITE ELECTRICAL PLAN
E2.	SITE ELECTRICAL PLAN AND PUMP STATION ELECTRICAL LAYOUT
E3.	ELECTRICAL PANEL SCHEDULES AND RISER DIAGRAM
E4.	CONDUIT INSTALLATION DETAILS
E5.	ELECTRICAL SCHEDULES, DETAILS AND LEGEND

CITY OFFICIALS

MAYOR

CHAZ MOLDER

VICE MAYOR

RANDY MCBROOM

COUNCIL MEMBERS

DAVENA HARDISON - WARD 1

DEBBIE WILES - WARD 2

TONY GREENE - WARD 3

KENNY MARSHALL - WARD 4

DANNY COLEMAN - WARD 5

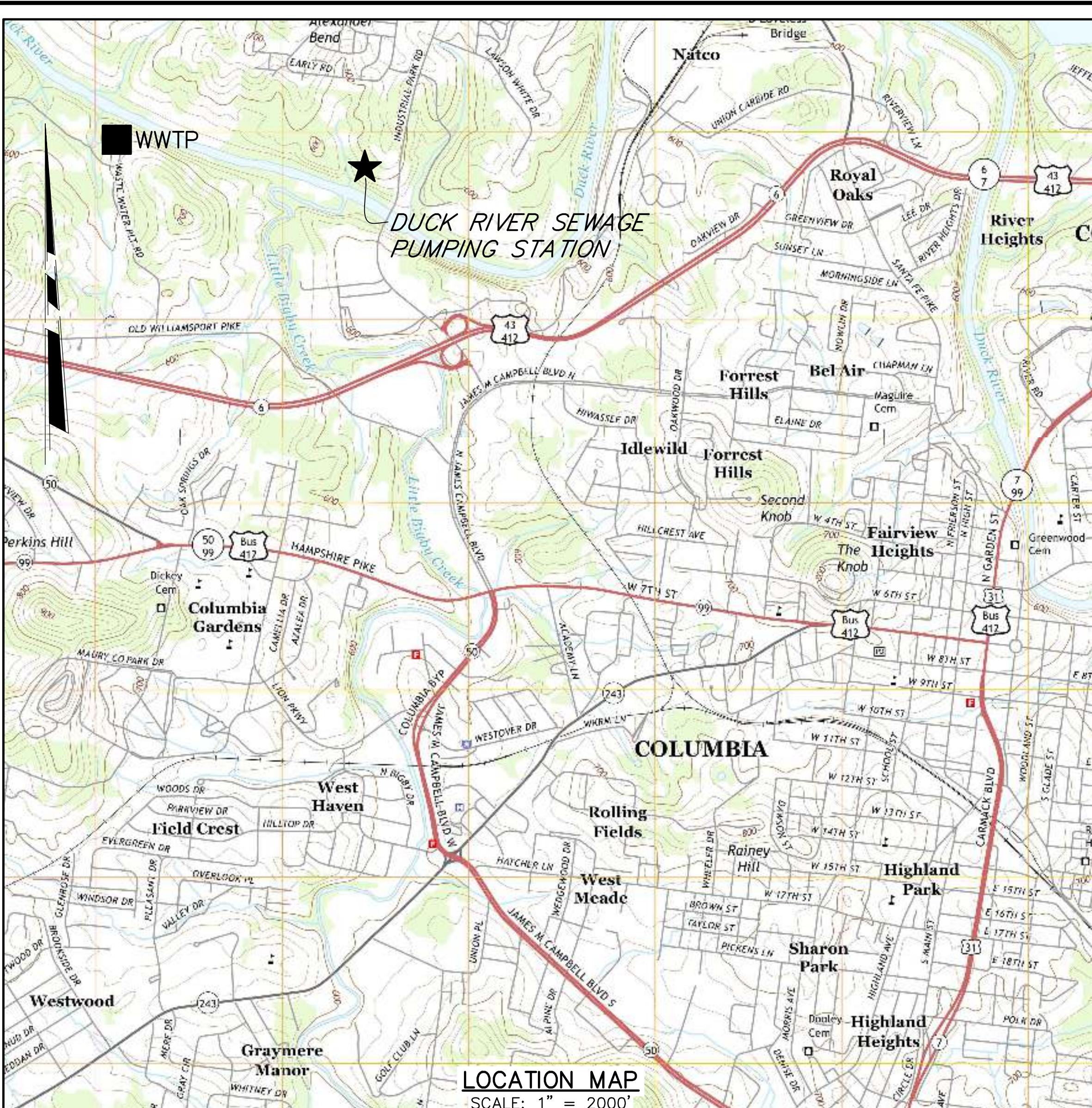
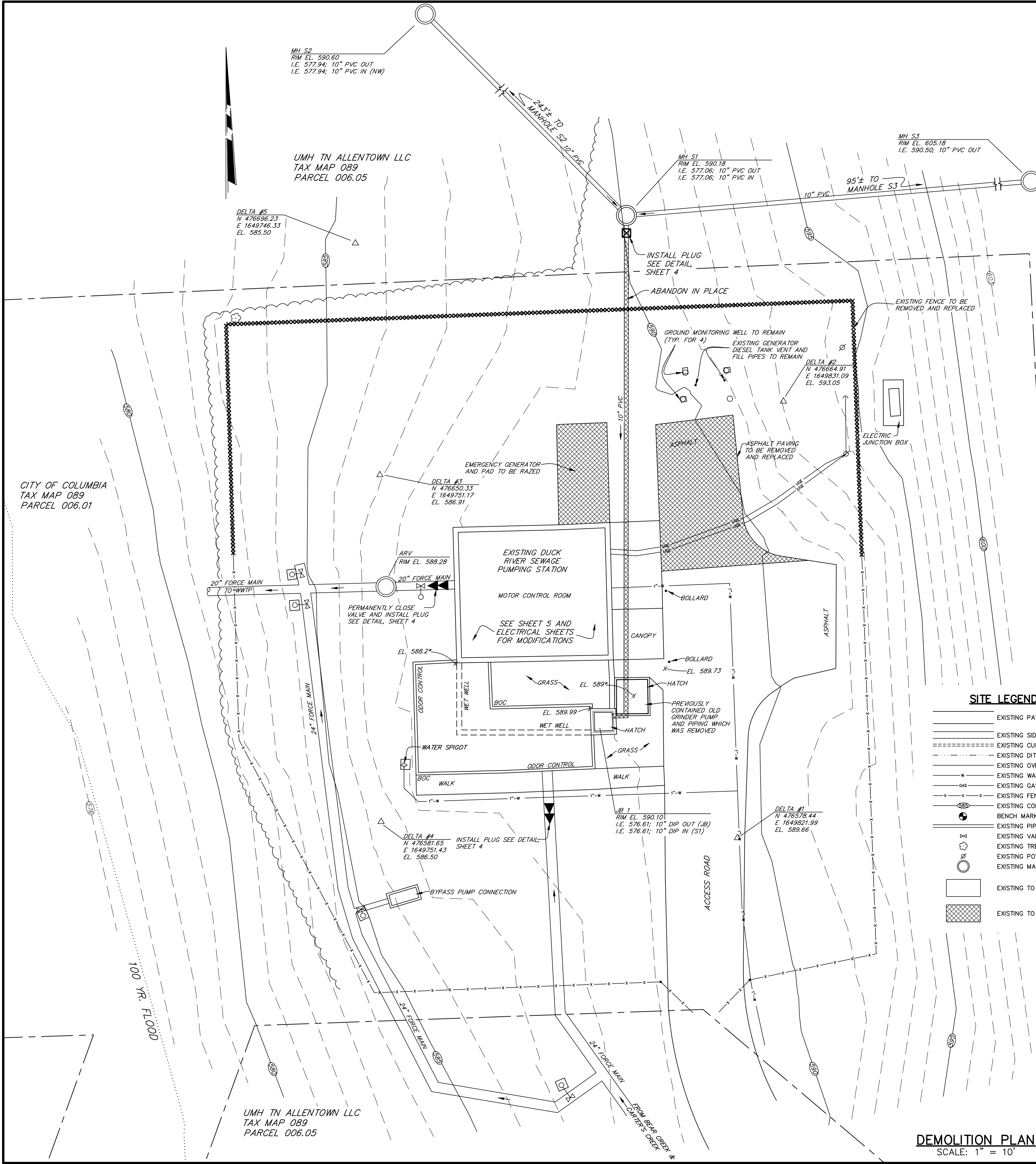
CITY MANAGER

TONY MASSEY

WASTEWATER DIRECTOR

DONALD J. BOSHERS

APPROVED: 
DONALD J. BOSHERS, DIRECTOR

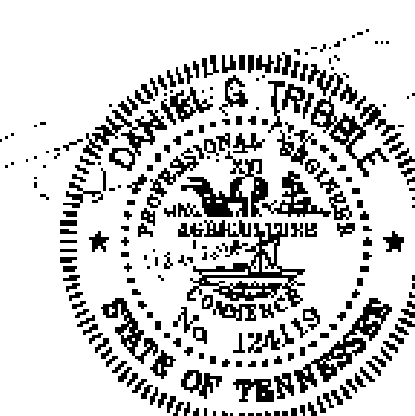


- SITE LEGEND**
- EXISTING PAVEMENT
 - EXISTING SIDEWALK
 - EXISTING CULVERT
 - EXISTING DITCH
 - EXISTING OVERHEAD ELECTRIC
 - EXISTING WATER LINE
 - EXISTING GAS LINE
 - EXISTING FENCE
 - EXISTING CONTOURS
 - EXISTING PIPING
 - EXISTING VALVE
 - EXISTING POWER POLE
 - EXISTING MANHOLE
 - EXISTING TO REMAIN
 - EXISTING TO BE REMOVED

- CONSTRUCTION NOTES:**
1. BASED ON INFORMATION CONTAINED IN FLOOD INSURANCE MAP NUMBER 47119C0165E DATED APRIL 16, 2007, THE ELEVATION OF THE 100-YEAR FLOOD AT THE PROJECT SITE IS APPROXIMATELY 576.
 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND/OR REPLACEMENT IN KIND OF ALL EXISTING DRAINAGE CULVERTS, ASPHALT PAVEMENT, AND OTHER STRUCTURES DISTURBED DURING CONSTRUCTION. NO ADDITIONAL PAYMENT WILL BE MADE FOR THIS WORK.
 3. CONTRACTOR SHALL USE ALL NECESSARY TEMPORARY WATER POLLUTION CONTROL MEASURES AS SHOWN ON THE PLANS, AS DIRECTED BY THE ENGINEER AND/OR AS SPECIFIED TO PREVENT THE TRANSPORT OF SEDIMENT FROM THE PROJECT SITE.
 4. THE CONTRACTOR SHALL COORDINATE FINAL LOCATION AND DEPTH OF PORTABLE PUMP CONNECTION MANHOLE WITH THE ENGINEER AFTER EXISTING PIPING AND FITTINGS CONFIGURATION HAVE BEEN DETERMINED FOR CONNECTION TO THE EXISTING FORCE MAIN.
 5. ALL MECHANICAL JOINT FITTINGS SHALL UTILIZE SERIES 1100 MEGALUG RESTRAINT BY EBAA IRON IN ADDITION TO CONCRETE KICKERS.
 6. * INDICATES INFORMATION TAKEN FROM EXISTING PLANS. CONTRACTOR SHALL VERIFY.
 7. ALL DUCTILE IRON PIPE SHALL BE SPECIALLY LINED AS SPECIFIED.

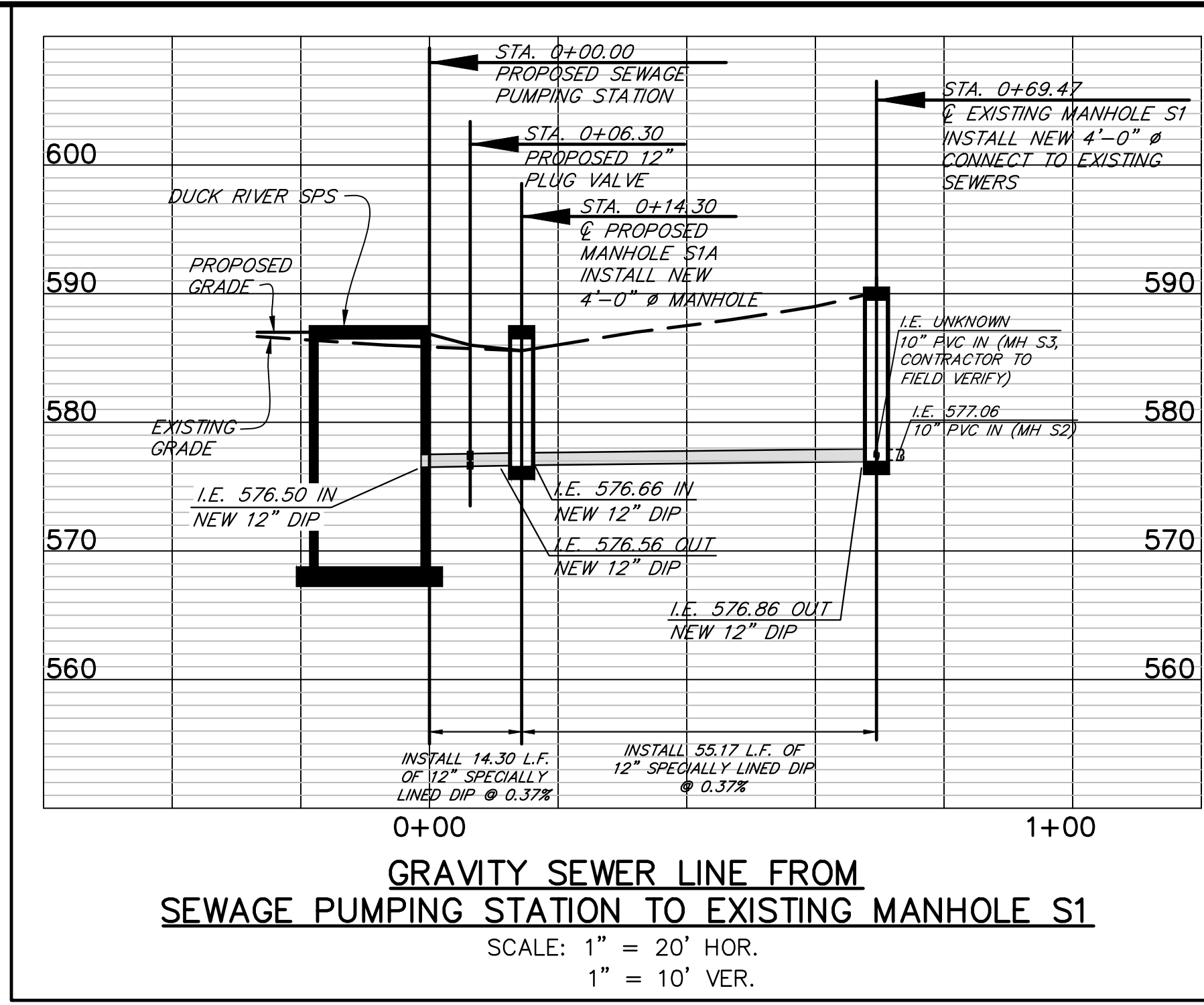
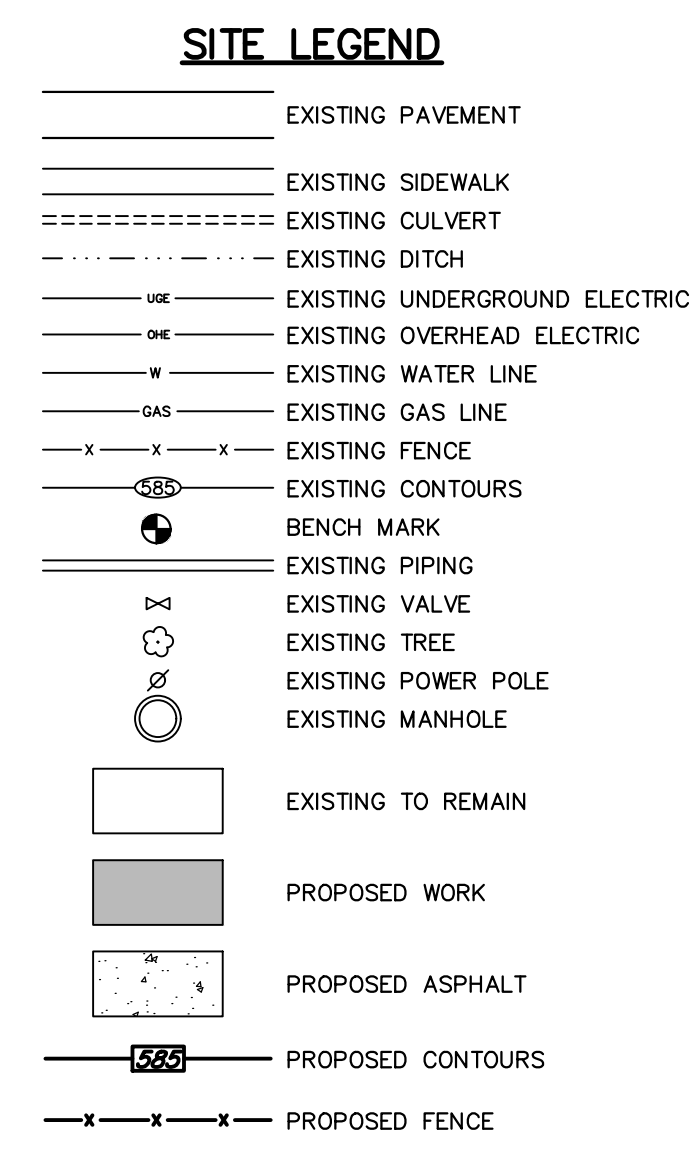
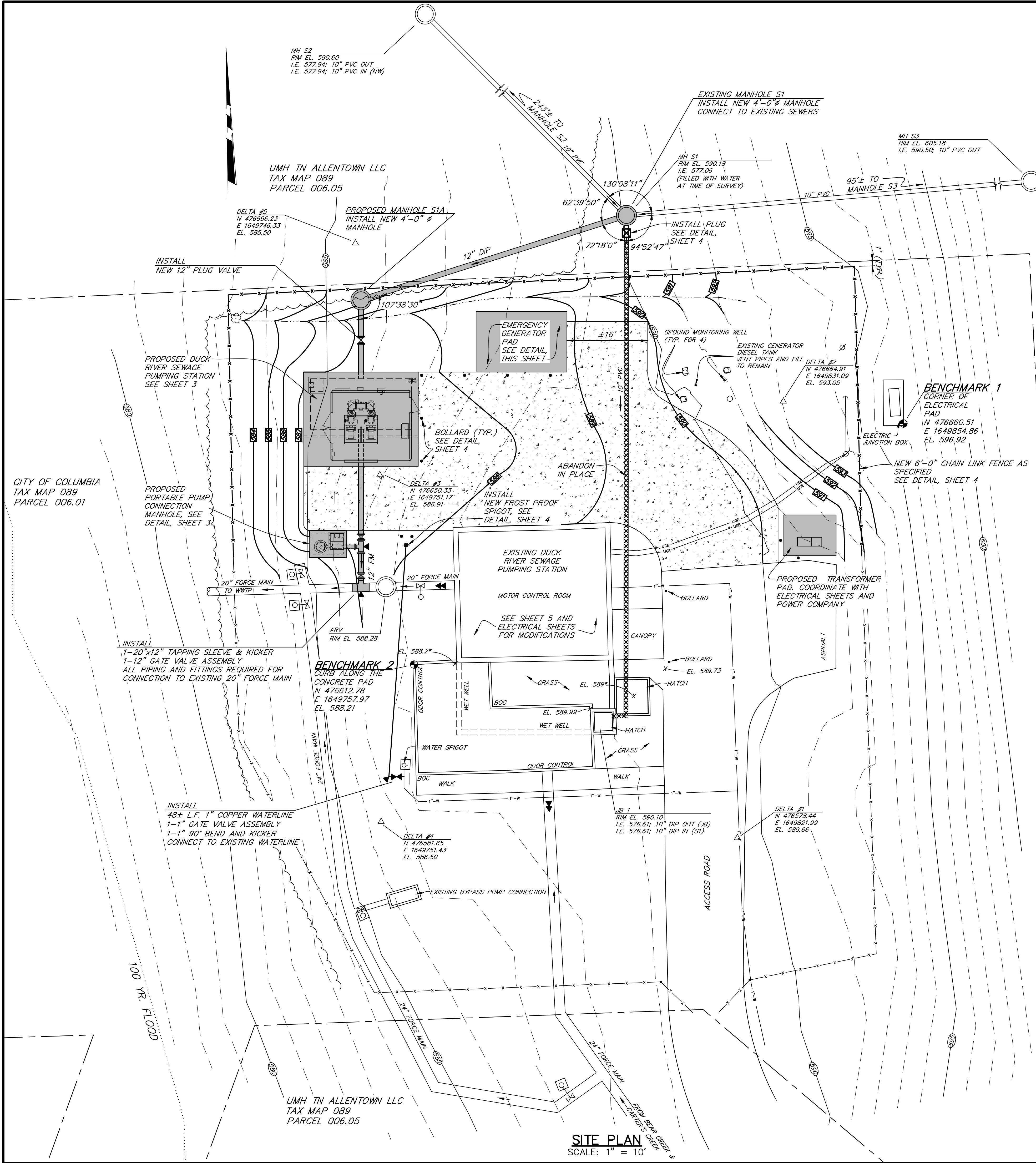
SITE DEMOLITION NOTE:
ONLY THE GENERATOR AND GENERATOR PAD OF THE EXISTING SEWAGE PUMPING STATION SHALL BE REMOVED. THE CONTRACTOR SHALL TAKE CARE TO NOT DAMAGE OTHER EXISTING FACILITIES DURING CONSTRUCTION. DAMAGE INCURRED TO EXISTING FACILITIES AS A RESULT OF ACTIONS BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER. SEE SHEET 5 AND THE ELECTRICAL SHEETS FOR DEMOLITION AND MODIFICATION INSIDE THE EXISTING SEWAGE PUMPING STATION.

- GENERAL NOTES:**
1. THE TOTAL ACREAGE TO BE DISTURBED DURING THE COURSE OF THE PROJECT IS LESS THAN ONE ACRE; THEREFORE, COVERAGE UNDER THE "TENNESSEE GENERAL NPDES PERMIT NO. TNR10-0000, STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITY" IS NOT REQUIRED.
 2. CONTRACTOR SHALL USE ALL NECESSARY TEMPORARY WATER POLLUTION CONTROL MEASURES AS SHOWN ON THE PLANS, AS DIRECTED BY THE ENGINEER AND/OR AS SPECIFIED TO PREVENT THE TRANSPORT OF SEDIMENT FROM THE PROJECT SITE.
 3. THE LOCATIONS AND DEPTHS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLANS HAVE NOT BEEN VERIFIED. THE LOCATIONS AND DEPTHS OF ALL EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE CONTRACTOR COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY APPARENT DISCREPANCIES OR CONFLICTS IMMEDIATELY UPON DISCOVERY.
 4. FOR EXISTING UTILITY LOCATIONS, THE CONTRACTOR SHALL CONTACT TENNESSEE "ONE-CALL" AT 1-800-351-1111, AS WELL AS ALL UTILITY OWNERS NOT MEMBERS OF THE TENNESSEE "ONE-CALL" SYSTEM, AT LEAST 72 BUSINESS HOURS IN ADVANCE OF BEGINNING EXCAVATION. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF TENNESSEE CODE ANNOTATED (TCA) 65-31-101 CONCERNING THE RESPONSIBILITIES ASSOCIATED WITH EXCAVATION PROCEDURES TO PREVENT DAMAGE OF UNDERGROUND UTILITIES.
 5. THE NAMES OF PROPERTY OWNERS, LOCATIONS OF PROPERTY LINES AND LOCATIONS OF STREET AND ROAD RIGHTS-OF-WAY SHOWN ON THESE PLANS WERE OBTAINED FROM THE TAX MAPS, THE MAURY COUNTY TAX ASSESSOR AND PROPERTY SURVEYS PROVIDED BY THE OWNER. THIS INFORMATION IS GENERAL IN NATURE AND THE ENGINEER MAKES NO CLAIM TO THE ACCURACY OF THIS INFORMATION.
 6. THE CONTRACTOR SHALL STAY WITHIN THE LIMITS OF CONSTRUCTION AS DESCRIBED IN SECTION 1 OF THE DETAILED SPECIFICATIONS.
 7. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE DISPOSAL OF WASTE MATERIALS GENERATED DURING CONSTRUCTION. THE OWNER SHALL HAVE RIGHTS TO ALL SALVAGEABLE MATERIALS. REFER TO SECTION 1 OF THE DETAILED SPECIFICATIONS.
 8. BYPASS PUMPING IS THE RESPONSIBILITY OF THE CONTRACTOR AND IS NOT A SEPERATE PAY ITEM.

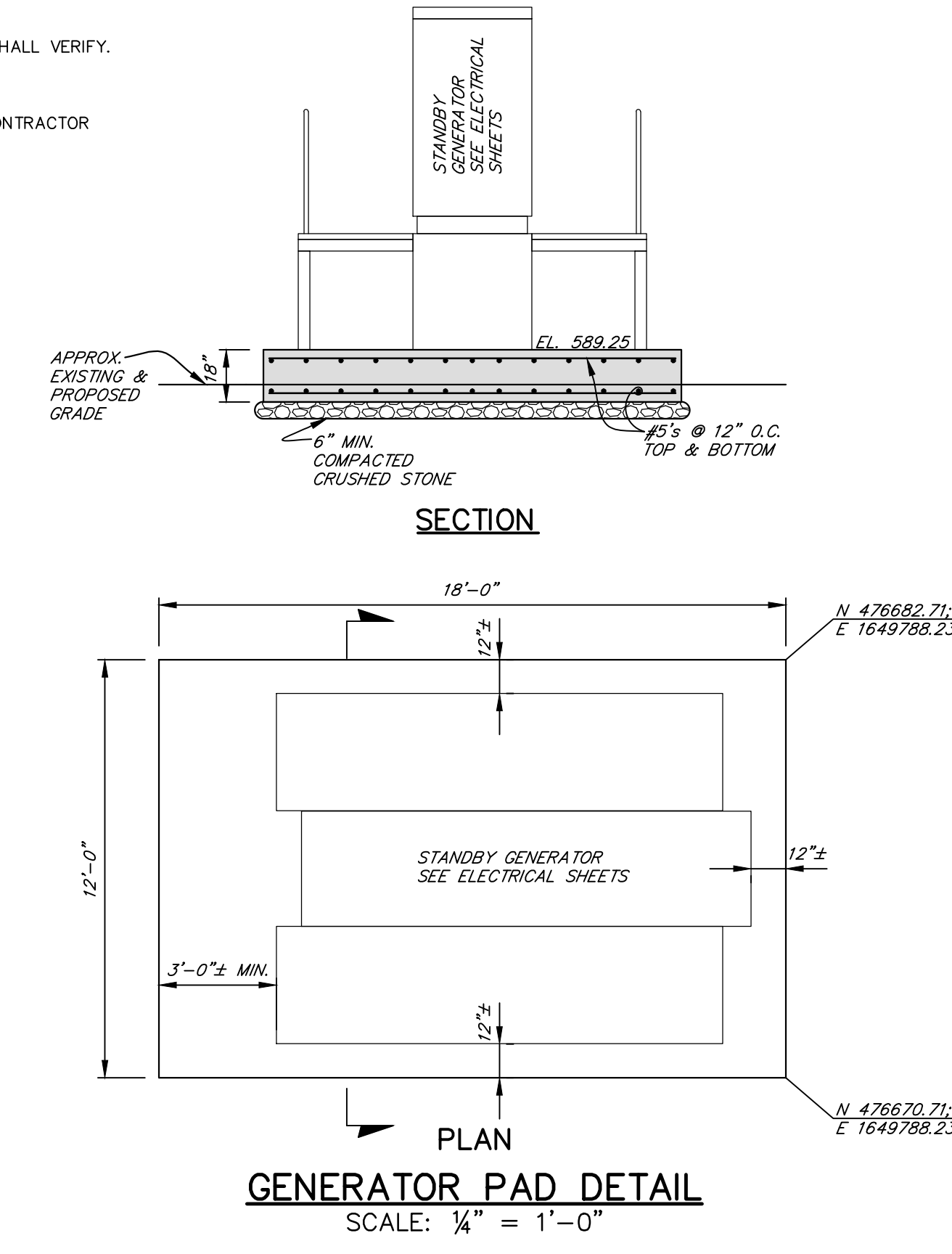


DEMOLITION PLAN
SCALE: 1" = 10'

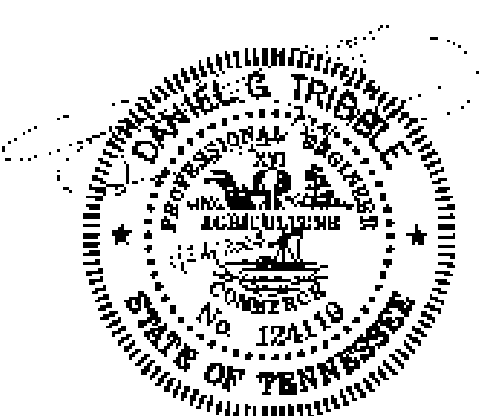
SHEET 1 OF 5		SEWER SYSTEM IMPROVEMENTS CONTRACT 22-01 DUCK RIVER SEWAGE PUMPING STATION REPLACEMENT	
REVISION OR ISSUE		LOCATION MAP, LEGEND, GENERAL NOTES, AND SITE DEMOLITION PLAN	
		FOR COLUMBIA, TENNESSEE	
PROJECT NUMBER		SCALE AS SHOWN	DESIGNED DGT
2162		DATE JAN. 2024	DRAWN JMY
		WAUFORD Nashville, Tennessee (615)883-3243 www.jrwauford.com	CHECKED JGD



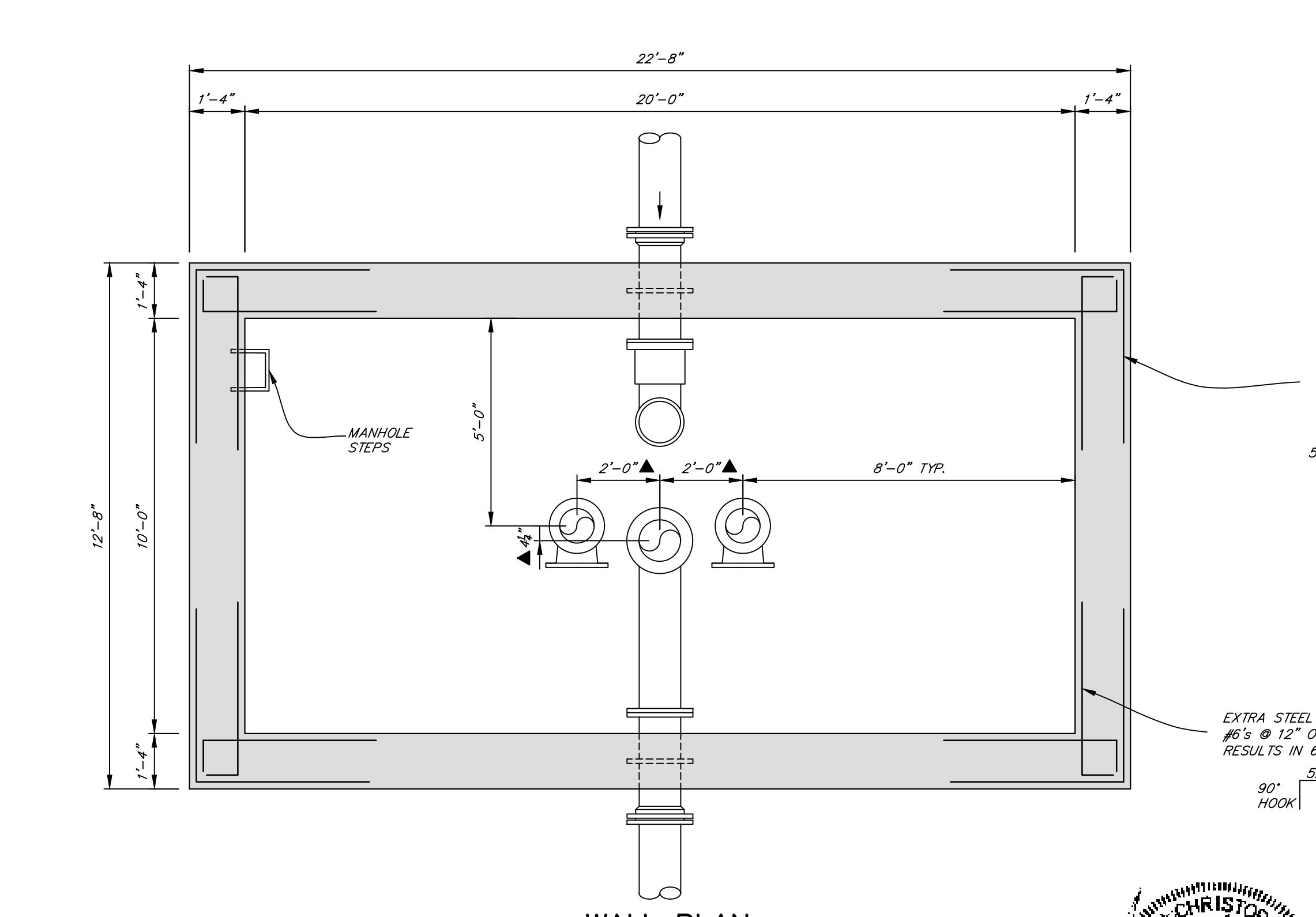
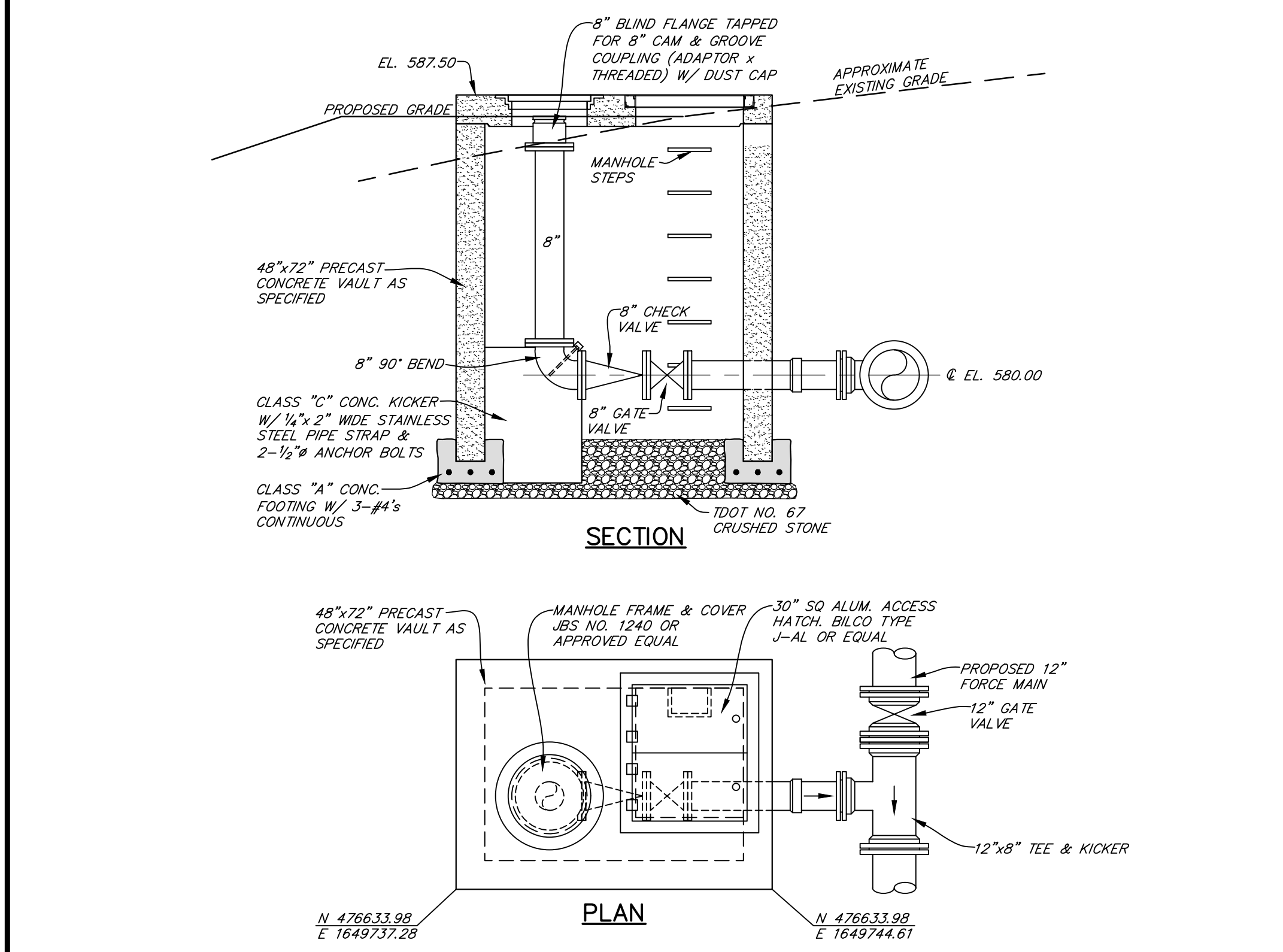
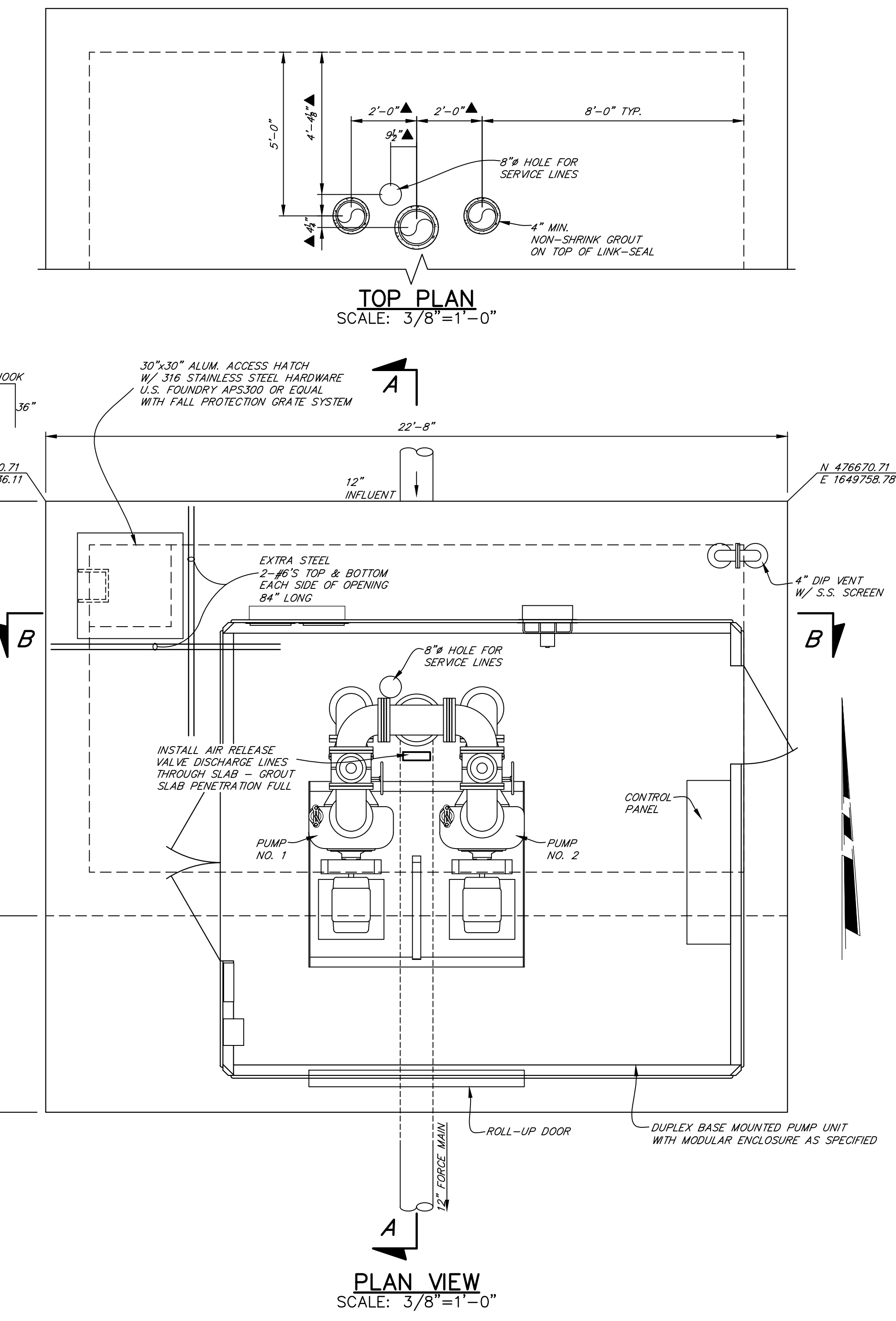
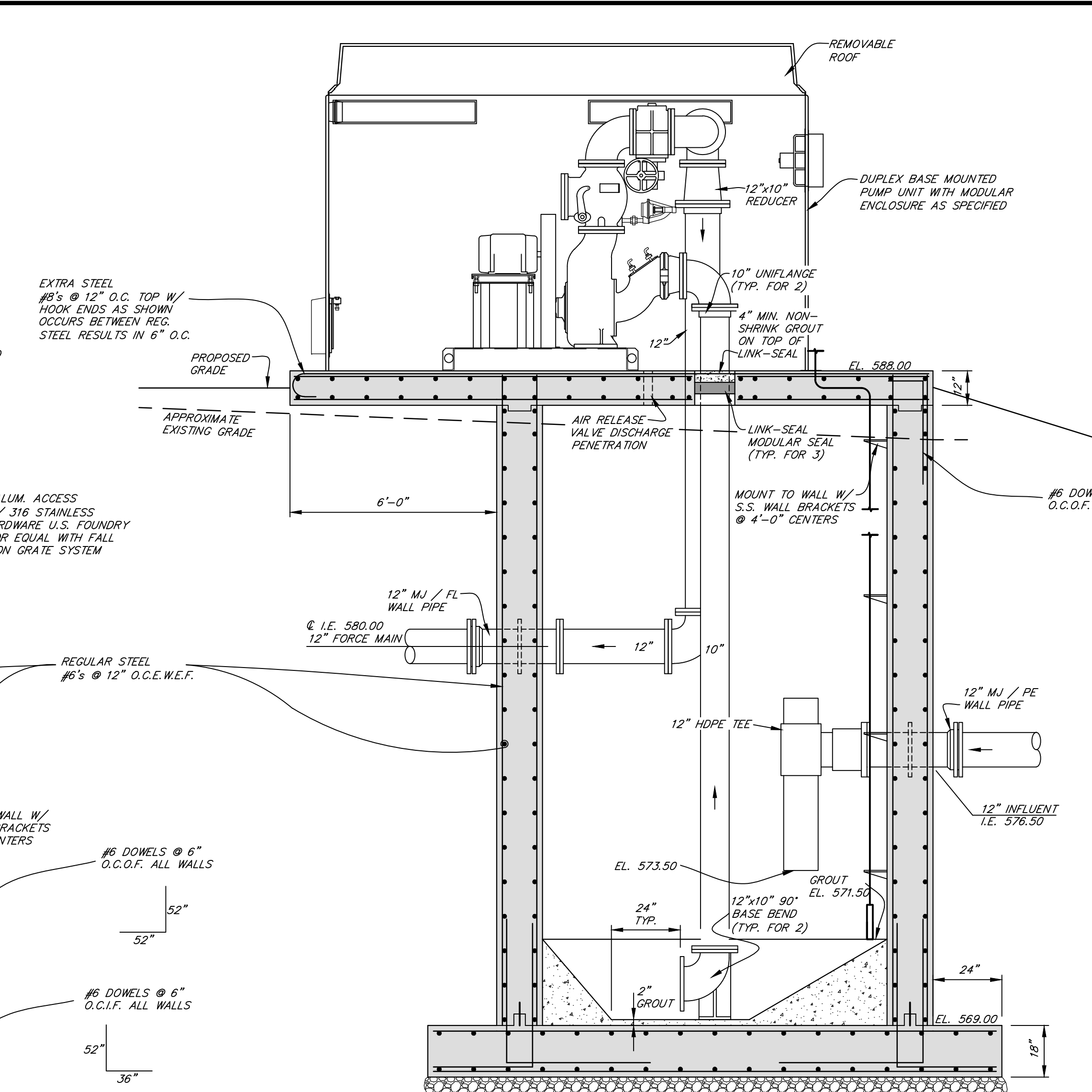
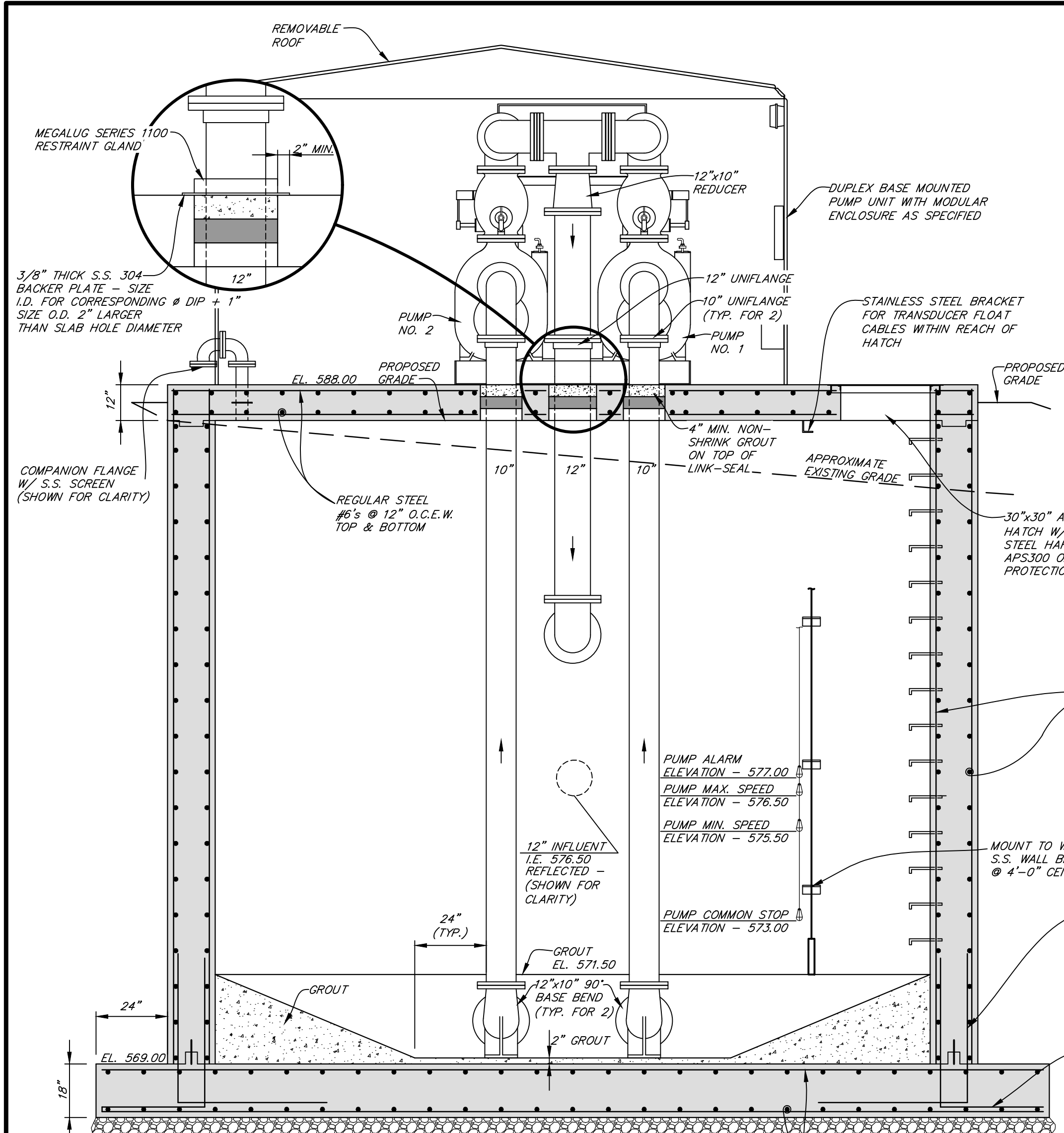
- CONSTRUCTION NOTES:**
- SEE GENERAL NOTES, SHEET 1
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND/OR REPLACEMENT IN KIND OF ALL EXISTING DRAINAGE CULVERTS, ASPHALT PAVING, AND OTHER STRUCTURES DISTURBED DURING CONSTRUCTION. NO ADDITIONAL PAYMENT WILL BE MADE FOR THIS WORK.
 - CONTRACTOR SHALL USE ALL NECESSARY TEMPORARY WATER POLLUTION CONTROL MEASURES AS SHOWN ON THE PLANS, AS DIRECTED BY THE ENGINEER AND/OR AS SPECIFIED TO PREVENT THE TRANSPORT OF SEDIMENT FROM THE PROJECT SITE.
 - THE CONTRACTOR SHALL COORDINATE FINAL LOCATION AND DEPTH OF PORTABLE PUMP CONNECTION MANHOLE WITH THE ENGINEER AFTER EXISTING PIPING AND FITTINGS CONFIGURATION HAVE BEEN DETERMINED FOR CONNECTION TO THE EXISTING FORCE MAIN.
 - ALL MECHANICAL JOINT FITTINGS SHALL UTILIZE SERIES 1100 MEGALUG RESTRAINT BY EBAA IRON IN ADDITION TO CONCRETE KICKERS.
 - * INDICATES INFORMATION TAKEN FROM EXISTING PLANS. CONTRACTOR SHALL VERIFY.
 - ALL DUCTILE IRON PIPE SHALL BE SPECIALLY LINED AS SPECIFIED.
 - ▲ INDICATES DIMENSIONS WHICH MAY VARY WITH MANUFACTURERS. CONTRACTOR SHALL COORDINATE.



UMH TN ALLENTOWN LLC
TAX MAP 089
PARCEL 006.05



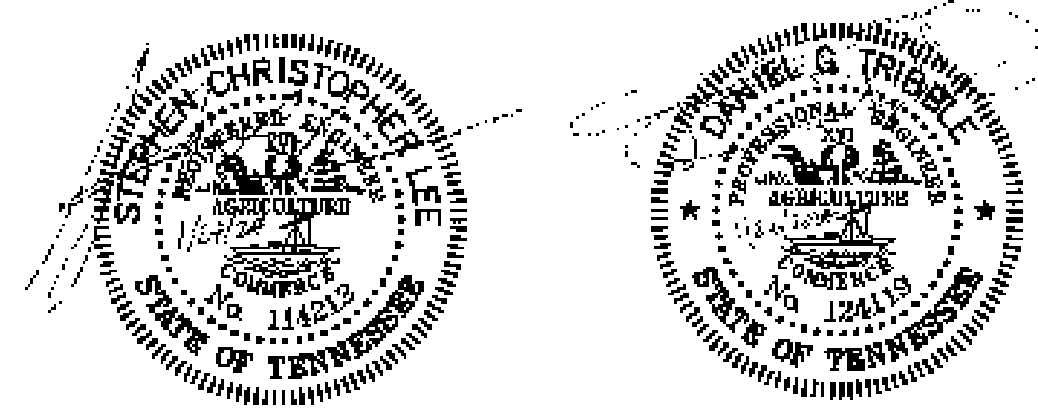
SHEET 2 OF 5		SEWER SYSTEM IMPROVEMENTS	
REVISION OR ISSUE		CONTRACT 22-01	
		DUCK RIVER SEWAGE PUMPING STATION REPLACEMENT	
		SITE PLAN, PIPING PROFILE, AND NOTES	
		FOR	
		COLUMBIA, TENNESSEE	
		SCALE	DESIGNED
		AS SHOWN	DGT
		DATE	DRAWN
		JAN. 2024	JMY
		PROJECT NUMBER	CHECKED
		2162	JGD
		WAUFORD	
		Nashville, Tennessee	
		(615)883-3243	
		www.jrwauford.com	



PUMP STATION DATA	
ITEM	PUMP STA.
1. FORCE MAIN SIZE	12"
2. TOP OF TOP SLAB (WETWELL)	588.00
3. REGRADE	VARIES
4. TOP OF BOTTOM SLAB (WETWELL)	569.00
5. CL. DISCHARGE PIPE ELEVATION	580.00
6. PUMP COMMON STOP ELEVATION	572.00
7. START PUMP MIN. SPEED ELEVATION	575.00
8. PUMP MAX. SPEED ELEVATION	576.00
9. PUMP ALARM ELEVATION	576.50
10. INFLUENT GRAVITY SEWER SIZE	12"
11. INVERT ELEVATION - GRAVITY SEWER	576.50
12. LOW WATER ALARM	571.50

- CONSTRUCTION NOTES:**
- SEE "GENERAL NOTES" AND "LEGEND", SHEET 1.
 - ALL MECHANICAL JOINT FITTINGS SHALL UTILIZE SERIES 1100 MEGALUG RESTRAINT BY EBAA IRON IN ADDITION TO CONCRETE KICKERS.
 - THE CONTRACTOR SHALL EXCAVATE THE EXISTING 20-INCH FORCE MAIN IN THE VICINITY OF THE TIE-IN TO VERIFY THE CENTERLINE ELEVATION OF 580.00 PRIOR TO CONSTRUCTING THE STATION OR SETTING THE PORTABLE PUMP CONNECTION MANHOLE.
 - BYPASS PUMPING IS NOT A SEPARATE PAY ITEM.
 - ▲-DENOTES INFORMATION WHICH MAY VARY WITH MANUFACTURER.

PORTABLE PUMP CONNECTION MANHOLE
SCALE: 3/8"=1'-0"



SHEET 3 OF 5		SEWER SYSTEM IMPROVEMENTS	
REVISION OR ISSUE		CONTRACT 22-01	
		DUCK RIVER SEWAGE PUMPING STATION REPLACEMENT	
		SEWAGE PUMPING STATION	
		PLAN VIEW AND SECTIONS	
		FOR	
		COLUMBIA, TENNESSEE	
SCALE	AS SHOWN	WAUFORD	DESIGNED DGT
DATE	JAN. 2024		DRAWN JMY
PROJECT NUMBER	2162		CHECKED JGD

Nashville, Tennessee
(615) 883-3243
www.jrwauford.com



1. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.

2. CODES:
2018 INTERNATIONAL BUILDING CODE

3. LOADS:
 A. FLOOR AND ROOF LIVE LOADS
 SUPPORTED FLOORS:
 SPS TOP SLAB: _____ 200 PSF
 SLABS ON GRADE: _____ 100 PSF

- | | | |
|--------------------------|-------|-------|
| B. SEISMIC: | | |
| RISK CATEGORY: | _____ | III |
| IMPORTANCE FACTOR: | _____ | 1.25 |
| S _s : | _____ | 0.303 |
| S ₁ : | _____ | 0.146 |
| S _{MS} : | _____ | 0.471 |
| S _{M1} : | _____ | 0.337 |
| S _{DS} : | _____ | 0.314 |
| S _R : | _____ | 0.225 |
| SITE CLASS: | _____ | D |
| SEISMIC DESIGN CATEGORY: | _____ | D |

- C. SNOW LOAD:
GROUND SNOW LOAD: _____ 10 PSF

- D. WIND LOAD:
 BASIC WIND SPEED V: _____ 113 MPH
 RISK CATEGORY: _____ III
 WIND EXPOSURE CATEGORY: _____ C

4. REINFORCING STEEL:
A. LAP ALL BARS AND DOWELS AS SHOWN ON "LAP SPLICE TABLE" UNLESS OTHERWISE SHOWN.

- B. CLEARANCES BETWEEN EDGES OF CONCRETE AND EDGE OF REINFORCING BARS SHALL BE AS FOLLOWS (UNLESS OTHERWISE SHOWN):
- (i) CONCRETE CAST DIRECTLY AGAINST EARTH - 3"
 - (ii) CONCRETE SLABS CAST ON CRUSHED STONE BASE - 2" FROM BOTTOM
 - (iii) CONCRETE SLABS EXPOSED TO LIQUID OR WEATHER - 2" FROM TOP
 - (iv) FORMED CONCRETE WALLS, SLABS AND FOOTINGS EXPOSED TO EARTH BACKFILL, LIQUID OR WEATHER - 2"
 - (v) CONCRETE BEAMS AND COLUMNS EXPOSED TO EARTH BACKFILL, LIQUID OR WEATHER - 2"
 - (vi) INTERIOR CONCRETE SLABS, SUPPORTED FLOORS AND WALLS - 2"
 - (vii) INTERIOR BEAMS AND COLUMNS - 2"

- C. SEE STRUCTURAL DETAILS ON THIS SHEET.

- D. REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION A 615 NEW BILLET STEEL GRADE 60, WITH DEFORMATIONS CONFORMING WITH ASTM DESIGNATION A 615.

- E. ALL DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS, UNLESS OTHERWISE NOTED, SHALL BE IN ACCORDANCE WITH THE ACI "MANUAL OF STANDARD PRACTICE FOR DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" (ACI 315).

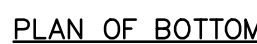
- F. SEE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

5. CONCRETE:

- ALL CONCRETE SHALL BE CLASS "A" UNLESS OTHERWISE SHOWN ON THE PLANS. ALL REINFORCED CONCRETE SHALL BE CLASS "A". CLASS "A" CONCRETE SHALL POSSESS THE FOLLOWING CHARACTERISTICS AND/OR PROPORTIONS OF MATERIALS:
- MINIMUM 6.0 BAGS (564 POUNDS) OF CEMENT PER CUBIC YARD
 - MINIMUM 4,000 PSI 28-DAY COMPRESSIVE STRENGTH
- SUMP SHALL BE:
- THREE AND ONE-HALF (3 1/2) TO SIX (6) INCHES IN WALLS, COLUMNS AND PIERS
 - TWO AND ONE-HALF (2 1/2) TO FIVE (5) INCHES IN SLABS, BEAMS, AND FOOTINGS

- B. CLASS "C" - CONCRETE USED FOR ANCHORS, KICKERS, AND ENCASEMENT FOR PIPE LINES, FOR SUBFOUNDATIONS AND MASS FOOTINGS, AND FOR ALL SLAB, CURB, AND BENCH CONSTRUCTION. NO CONCRETE CONTAINING REINFORCEMENT SHALL BE CLASS "C" CONCRETE. CLASS "C" CONCRETE SHALL POSSESS THE FOLLOWING CHARACTERISTICS AND/OR PROPORTIONS OF MATERIALS:
- MINIMUM 5.0 BAGS (470 POUNDS) OF CEMENT PER CUBIC YARD
 - MINIMUM 2,500 PSI 28-DAY COMPRESSIVE STRENGTH
- SUMP SHALL BE:
- FIVE (5) TO EIGHT (8) INCHES FOR ENCASEMENT
 - TWO (2) TO FOUR (4) INCHES FOR SUBFOUNDATIONS AND SEALING

- C. SEE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

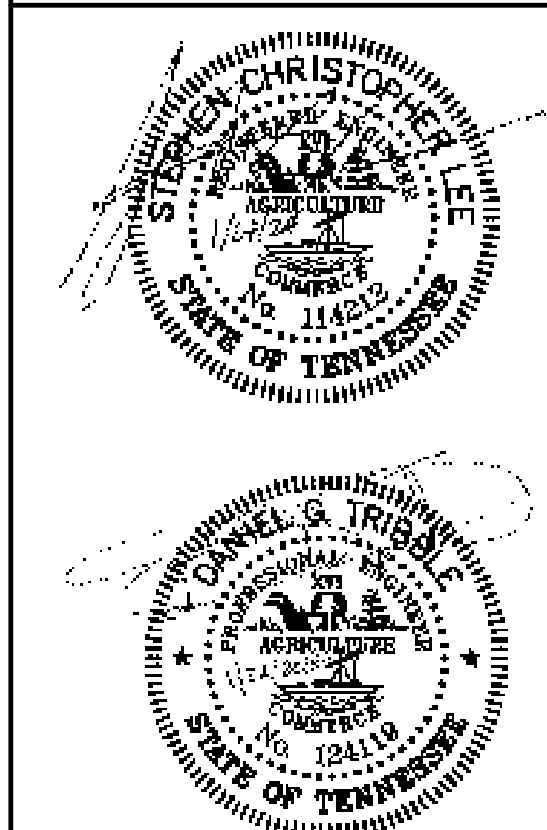


CITY OF COLUMBIA PRECAST MANHOLE DETAIL

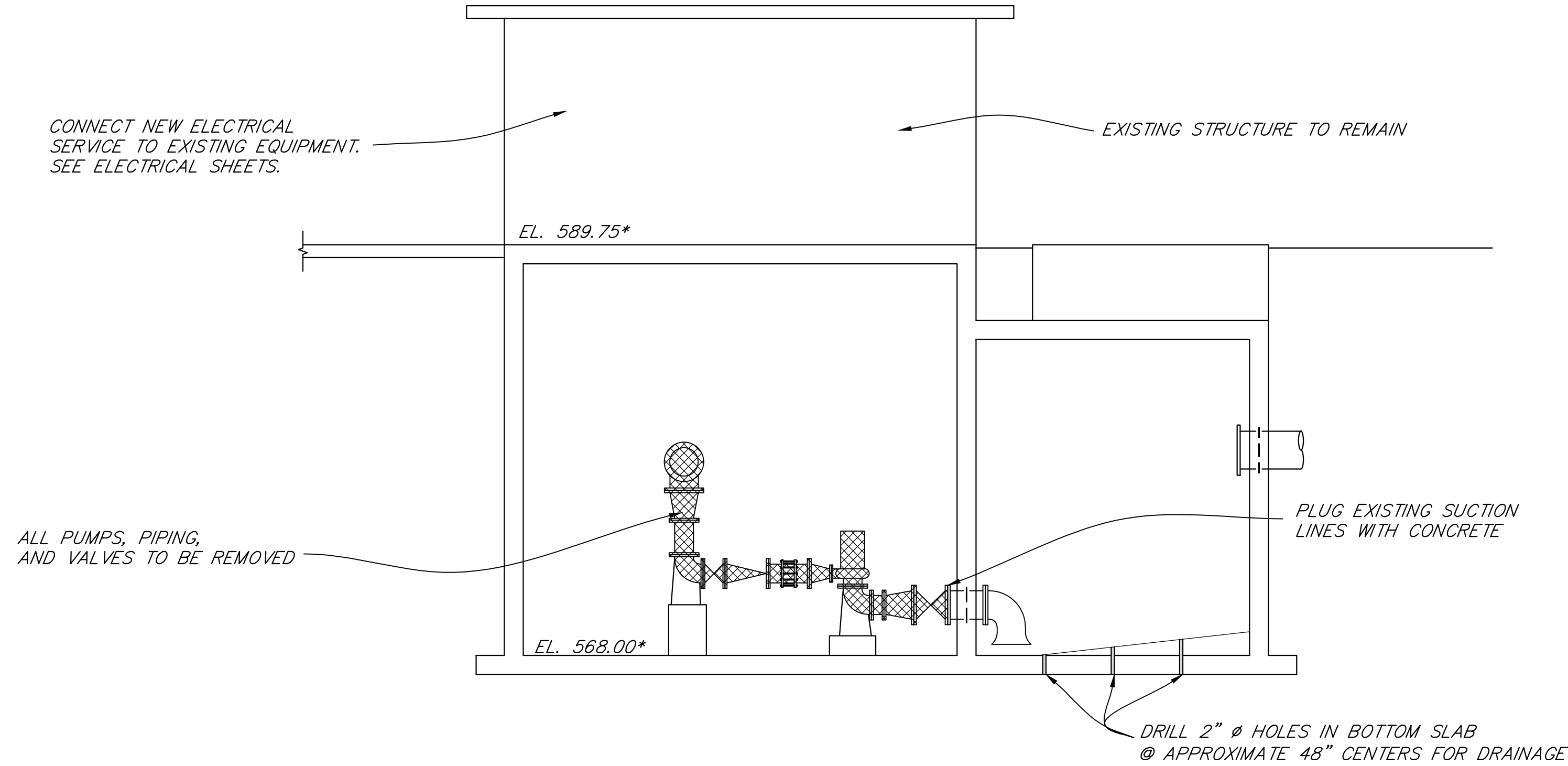


GENERAL STRUCTURAL DETAILS

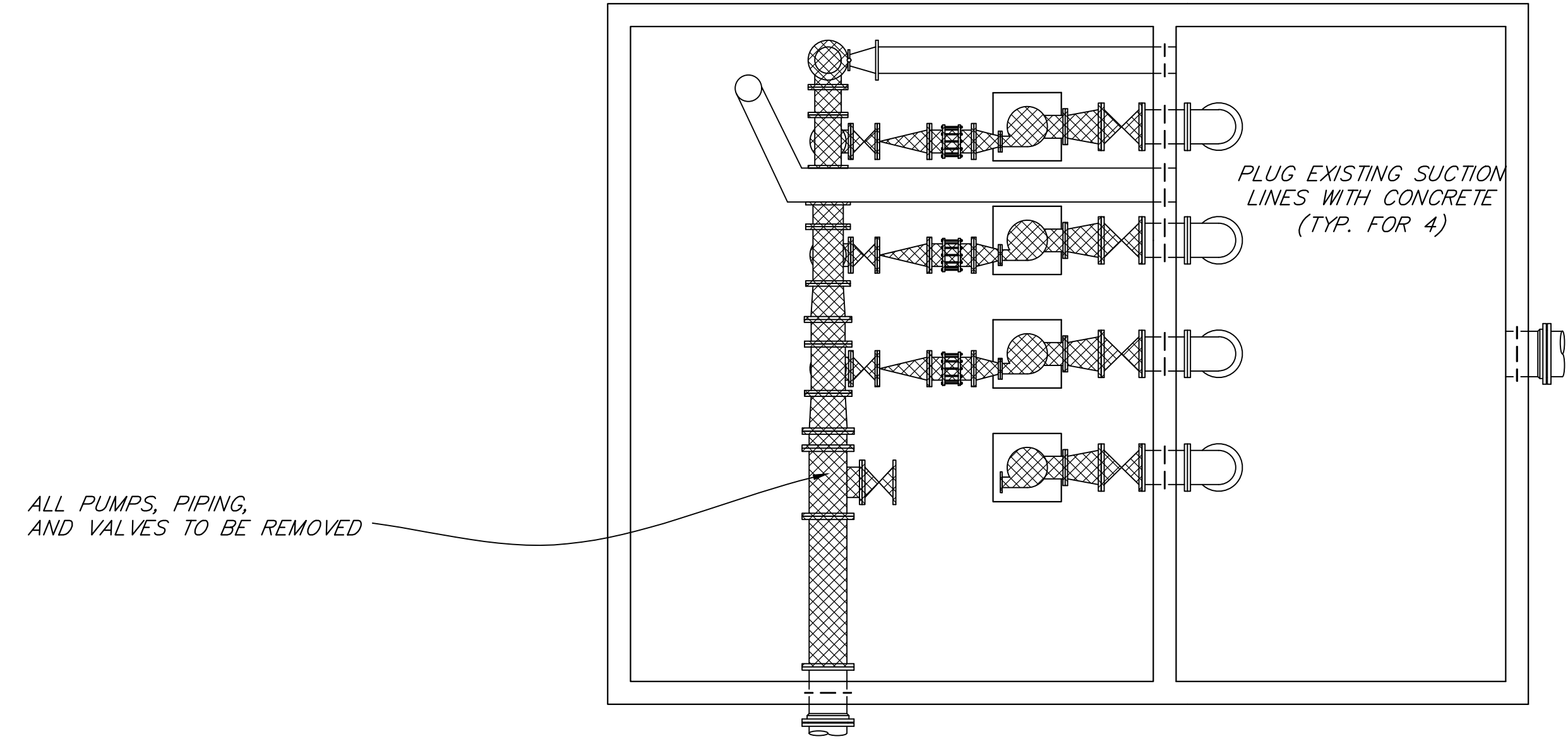
LAP SPLICE TABLE	
BAR SIZE	LAP SPLICE
#4	2'-0"
#5	2'-6"
#6	3'-0"
#7	4'-0"
#8	5'-0"
#9	5'-0"



SHEET 4 OF 5		SEWER SYSTEM IMPROVEMENTS CONTRACT 22--01 DUCK RIVER SEWAGE PUMPING STATION REPLACEMENT	
REVISION OR ISSUE		DETAIL SHEET AND STRUCTURAL NOTES FOR COLUMBIA, TENNESSEE	
—	—		
PROJECT NUMBER		SCALE	<u>WAUFORD</u> Nashville, Tennessee (615)883-3243 www.jwawford.com
2162	AS SHOWN	DESIGNED DGT	
JAN. 2024	DATE	DRAWN JMY	
			CHECKED JGD



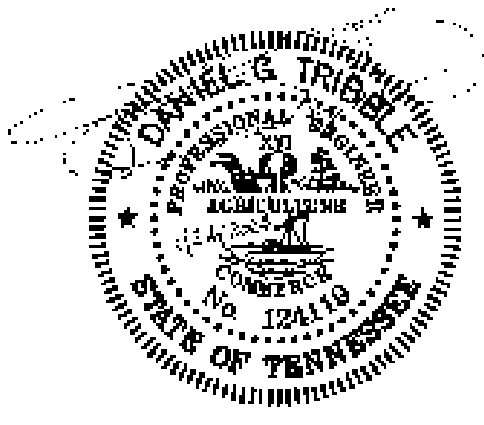
SECTION THROUGH EXISTING DUCK RIVER SEWAGE PUMPING STATION
SCALE: 3/16"=1'-0"



PLAN VIEW THROUGH EXISTING DUCK RIVER SEWAGE PUMPING STATION
SCALE: 3/16"=1'-0"

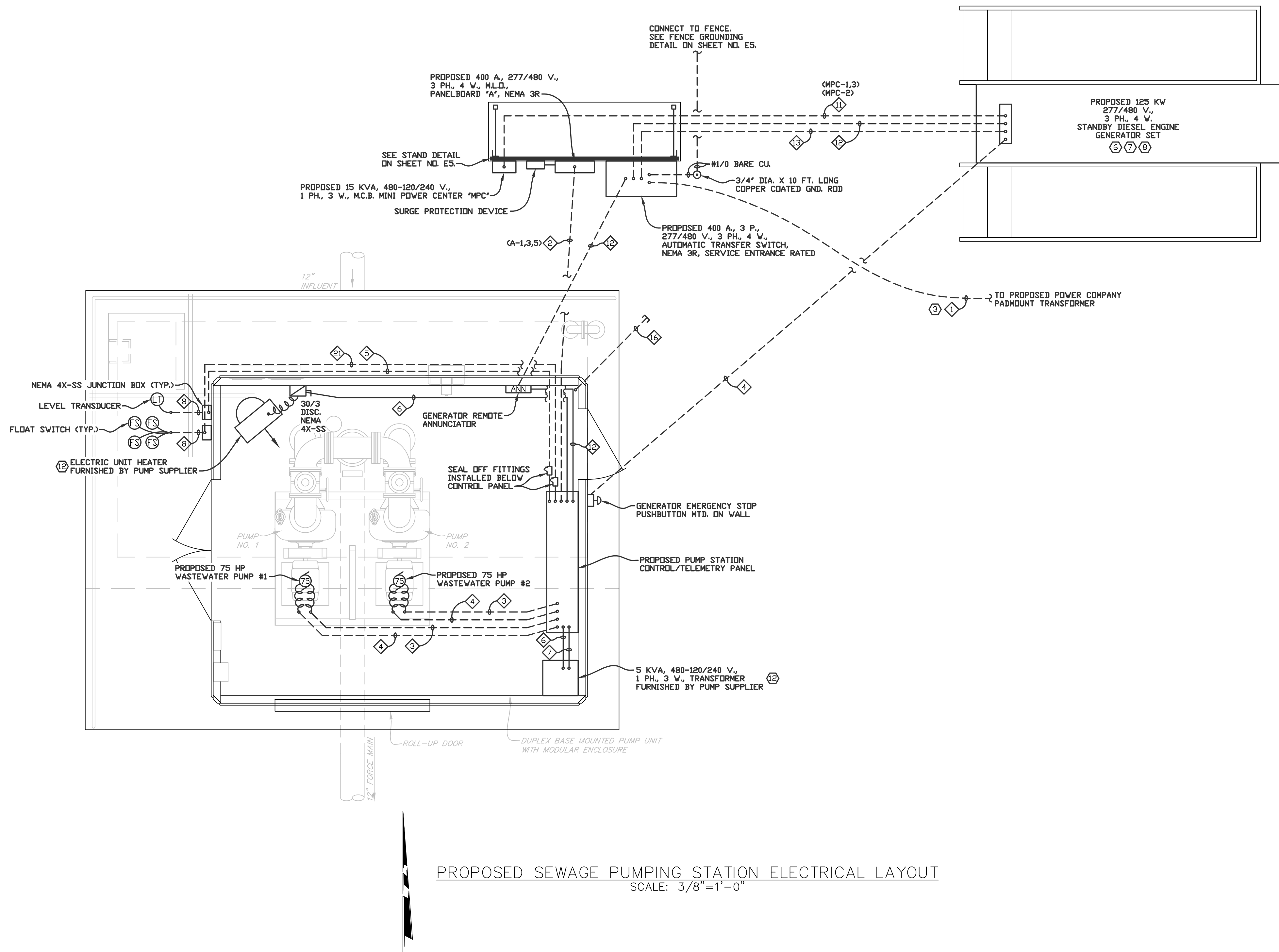
CONSTRUCTION NOTES

1. SEE "GENERAL NOTES" ON SHEET 1.
2. * INDICATES INFORMATION TAKEN FROM EXISTING PLANS OR FIELD SURVEY WHICH SHALL BE VERIFIED BY THE CONTRACTOR.
3. THE OWNER HAS 14 CALENDAR DAYS FROM THE DATE THE EXISTING SEWAGE PUMPING STATION IS DECLARED OUT OF SERVICE BY THE ENGINEER TO REMOVE ANY DESIRED EQUIPMENT AND/OR MATERIALS. AFTER SAID 14 DAYS HAS EXPIRED, ALL REMAINING EQUIPMENT AND MATERIALS SHALL BECOME PROPERTY OF THE CONTRACTOR WHO SHALL BE RESPONSIBLE FOR PROPER DISPOSAL.

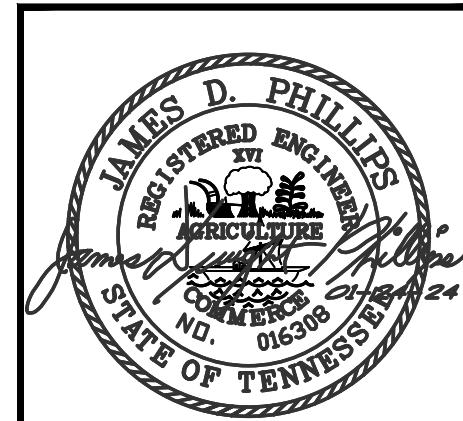


SHEET 5 OF 5		SEWER SYSTEM IMPROVEMENTS CONTRACT 22-01 DUCK RIVER SEWAGE PUMPING STATION REPLACEMENT	
REVISION OR ISSUE		EXISTING DUCK RIVER SEWAGE PUMPING STATION MODIFICATIONS	
-		FOR	
		COLUMBIA, TENNESSEE	
		SCALE	DESIGNED DGT
		AS SHOWN	
		DATE	DRAWN JMY
PROJECT NUMBER			
2162		JAN. 2024	CHECKED JGD
		WAUFORD Nashville, Tennessee (615)883-3243 www.jrwauford.com	

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- NOTES:**
- THE CONTRACTOR SHALL REFER TO THE CIVIL, STRUCTURAL AND PIPING PLANS FOR ALL DIMENSIONS, SECTIONS, DETAILS, ELEVATIONS, VOLTAGE REQUIREMENTS AND PHYSICAL SIZE OF ALL EQUIPMENT FURNISHED BY OTHER TRADES. COORDINATE AND ADJUST ALL ELECTRICAL INSTALLATIONS ACCORDINGLY.
 - ALL CONDUIT ROUTING SHOWN IS DIAGRAMMATIC. THE CONTRACTOR SHALL COORDINATE ALL OF THE RACEWAY INSTALLATIONS WITH OTHER TRADES TO AVOID INTERFERENCES WITH STRUCTURES AND PIPING.
 - THE CONTRACTOR IS TO CONFIRM ALL SERVICE ENTRANCE INSTALLATIONS WITH THE LOCAL POWER COMPANY AND COMPLY WITH ALL NECESSARY REQUIREMENTS.
 - THE CONTRACTOR TO COORDINATE INSTALLATION OF PACKAGED PUMPING STATION AND PUMPING STATION CONTROL PANEL WITH SHOP DRAWINGS. PROVIDE FEEDER CIRCUIT AND INTERCONNECTIONS AS REQUIRED.
 - ALL ELECTRICAL INSTALLATIONS SHALL CONFORM TO THE 2017 NATIONAL ELECTRICAL CODE, 2018 INTERNATIONAL BUILDING CODE AND ALL STATE AND LOCAL CODES.
 - BOND EQUIPMENT GROUNDING CONDUCTORS AND GENERATOR GROUND CONDUCTORS TO GENERATOR FRAME PER NEC ARTICLE 250. THE SERVICE ENTRANCE AND EMERGENCY GENERATOR SYSTEM SHALL BE GROUNDED IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
 - VERIFY STUBUP LOCATIONS, NUMBER AND SIZE OF INTER-CONNECTION CONDUCTORS, EXACT TERMINATION POINTS, ETC. AND ADJUST CONDUIT RACEWAYS ACCORDINGLY PER GENERATOR AND TRANSFER SWITCH MANUFACTURER'S SHOP DRAWINGS.
 - COORDINATE POWER REQUIREMENTS FOR GENERATOR BLOCK HEATER AND BATTERY CHARGER WITH GENERATOR MANUFACTURER AND ADJUST OVERCURRENT PROTECTION AND BRANCH CIRCUITS AS REQUIRED.
 - THE EXACT AIC RATING OF THE SERVICE DISCONNECT SWITCH, AUTOMATIC TRANSFER SWITCH AND PANELBOARD 'M' SHALL BE COORDINATED WITH THE POWER COMPANY'S AVAILABLE FAULT CURRENT AND ADJUSTED ACCORDINGLY.
 - ALL CONDUIT NOT SHOWN FOR CLARITY.
 - ALL FASTENERS USED TO SECURE ELECTRICAL DEVICES SHALL BE 316 STAINLESS.
 - THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION AND ELECTRICAL REQUIREMENTS FOR ALL EQUIPMENT FURNISHED BY PUMP SUPPLIER AND PUMP CONTROL/TELEMETRY PANEL SUPPLIER.



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ENGINEERING, INC.

ELECTRICAL DESIGN
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23019-E2

SHEET E2 OF 5		SEWER SYSTEM IMPROVEMENTS CONTRACT 22-01 DUCK RIVER SEWAGE PUMPING STATION REPLACEMENT	
REVISION OR ISSUE		SITE ELECTRICAL PLAN AND PUMP STATION ELECTRICAL LAYOUT	
-		FOR COLUMBIA, TENNESSEE	
-		SCALE	DESIGNED JDP
-		AS SHOWN	DRAWN TWR
-		DATE	CHECKED JDP
PROJECT NUMBER		JAN. 2024	
2162			

WAUFORD

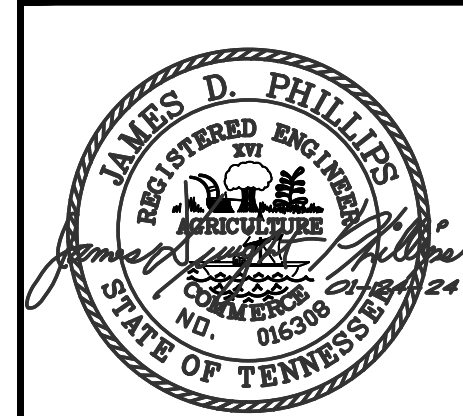
Nashville, Tennessee
(615) 883-3243
www.jrwauford.com

NOTE: (1) PROVIDE CIRCUIT BREAKER LOCKING MECHANISMS AS REQUIRED

NOTE: (1) PROVIDE CIRCUIT BREAKER LOCKING MECHANISMS AS REQUIRED



- NOTES:**
- (1) THE CONTRACTOR SHALL REFER TO THE CIVIL, STRUCTURAL AND PIPING PLANS FOR ALL DIMENSIONS, SECTIONS, DETAILS, ELEVATIONS, VOLTAGE REQUIREMENTS, AND ALL OTHERS. ALL EQUIPMENT FURNISHED BY OTHER TRADES. COORDINATE AND ADJUST ALL ELECTRICAL INSTALLATIONS ACCORDINGLY.
 - (2) ALL CONDUIT ROUTING SHOWN IS DIAGRAMMATIC. THE CONTRACTOR SHALL PROVIDE ALL CONDUIT PER RACEWAY INSTALLATIONS WITH OTHER TRADES TO AVOID INTERFERENCES WITH STRUCTURES AND PIPING.
 - (3) THE CONTRACTOR IS TO CONFIRM ALL SERVICE ENTRANCE INSTALLATIONS WITH THE LOCAL POWER COMPANY AND OBTAIN ALL NECESSARY PERMITS.
 - (4) THE CONTRACTOR TO COORDINATE INSTALLATION OF PACKAGED PUMPING STATION AND PUMPING STATION CONTROL PANEL WITH SHOP DRAWINGS. PROVIDE FEEDER CIRCUITS AND INTERCONNECTIONS AS REQUIRED.
 - (5) ALL ELECTRICAL INSTALLATIONS SHALL CONFORM TO THE 2017 NATIONAL ELECTRICAL CODE, 2018 INTERNATIONAL BUILDING CODE AND ALL STATE AND LOCAL CODES.
 - (6) BOND EQUIPMENT GROUNDING CONDUCTORS AND GENERATOR GROUNDING CONDUCTORS SHALL BE INSTALLED PER ARTICLE 250. THE SERVICE ENTRANCE AND EMERGENCY GENERATOR SYSTEM SHALL BE GROUNDING IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
 - (7) VERIFY STUBUP LOCATIONS, NUMBER AND SIZE OF INTER-CONNECTION CONDUCTORS, EXACT TERMINATION POINTS, ETC. AND ADJUST CONDUIT RACEWAYS ACCORDINGLY PER GENERATOR AND TRANSFER SWITCH MANUFACTURER'S REQUIREMENTS.
 - (8) COORDINATE POWER REQUIREMENTS FOR GENERATOR BATTERY HEATER AND BATTERY CHARGER WITH GENERATOR MANUFACTURER AND ADJUST OVERCURRENT PROTECTION AND WIRING CIRCUITS ACCORDINGLY.
 - (9) THE EXACT AIC RATING OF THE SERVICE DISCONNECT SWITCH, AUTOMATIC TRANSFER SWITCH AND PANELBOARD "A" SHALL BE COORDINATED WITH THE POWER COMPANY'S AVAILABLE FAULT CURRENT AND ADJUST ACCORDINGLY.
 - (10) ALL CONDUIT NOT SHOWN FOR CLARITY.
 - (11) ALL FASTENERS USED TO SECURE ELECTRICAL DEVICES SHALL BE 316 STAINLESS.

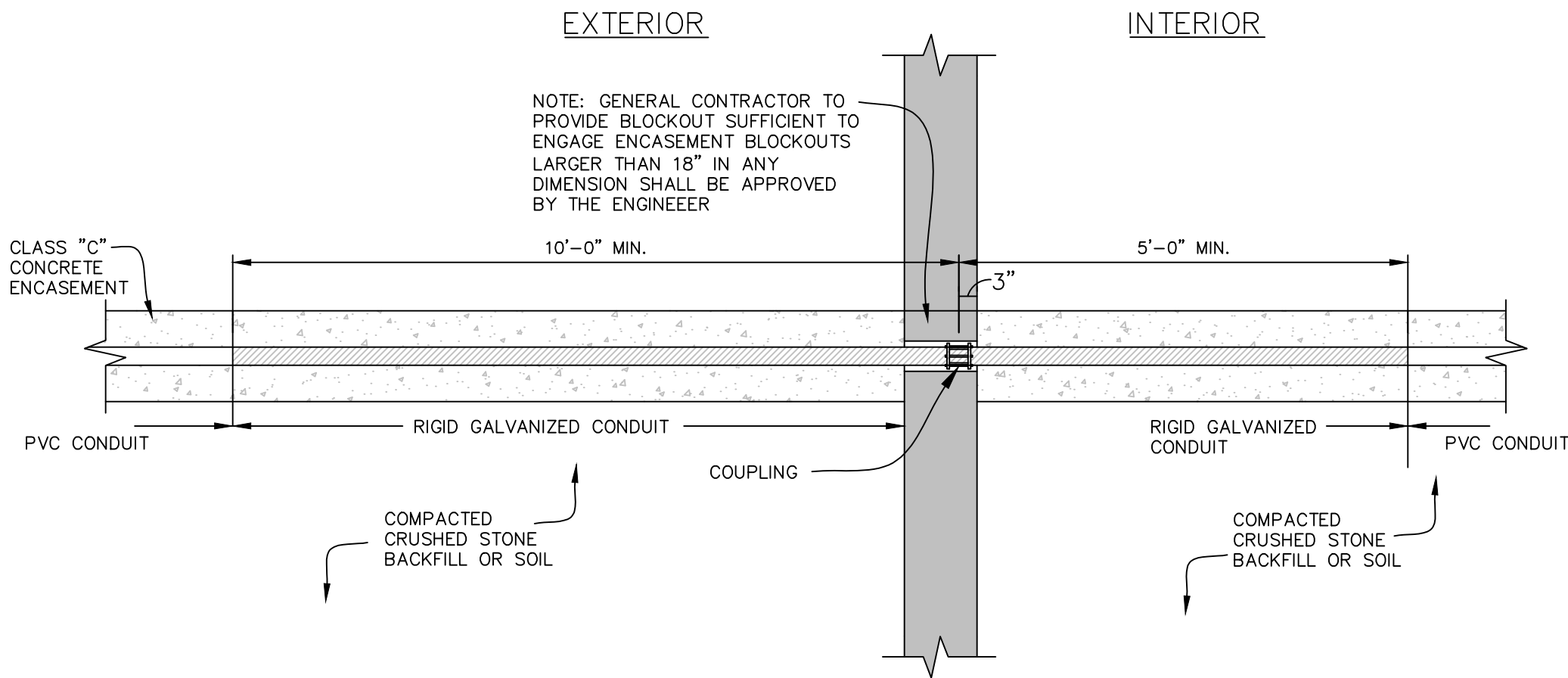


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23019-E3

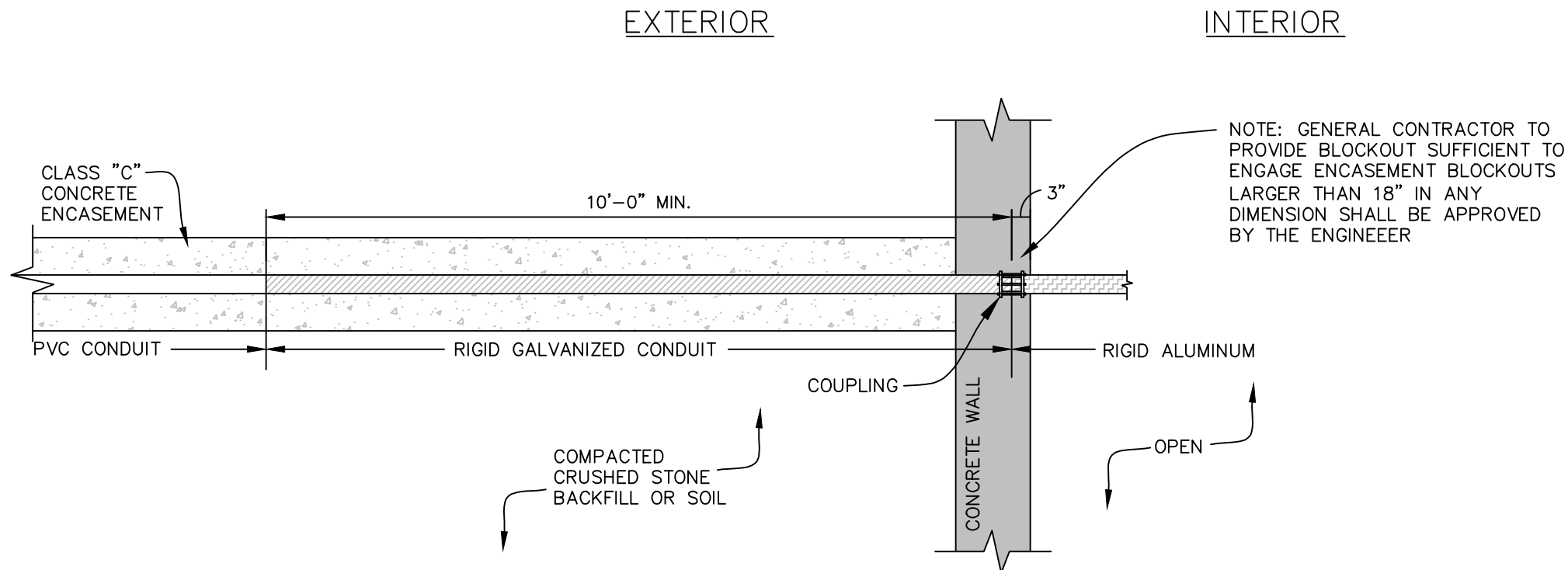
SHEET E3 OF 5		SEWER SYSTEM IMPROVEMENTS CONTRACT 22-01	
REVISION OR ISSUE		DUCK RIVER SEWAGE PUMPING STATION REPLACEMENT	
-		ELECTRICAL PANEL SCHEDULES AND RISER DIAGRAM	
-			
		FOR	
		COLUMBIA, TENNESSEE	
		SCALE	 Nashville, Tennessee (615) 883-3243 www.jrwauford.com
PROJECT NUMBER		AS SHOWN	
2162		DATE	
		JAN. 2024	DESIGNED JDP DRAWN TWR CHECKED JDP

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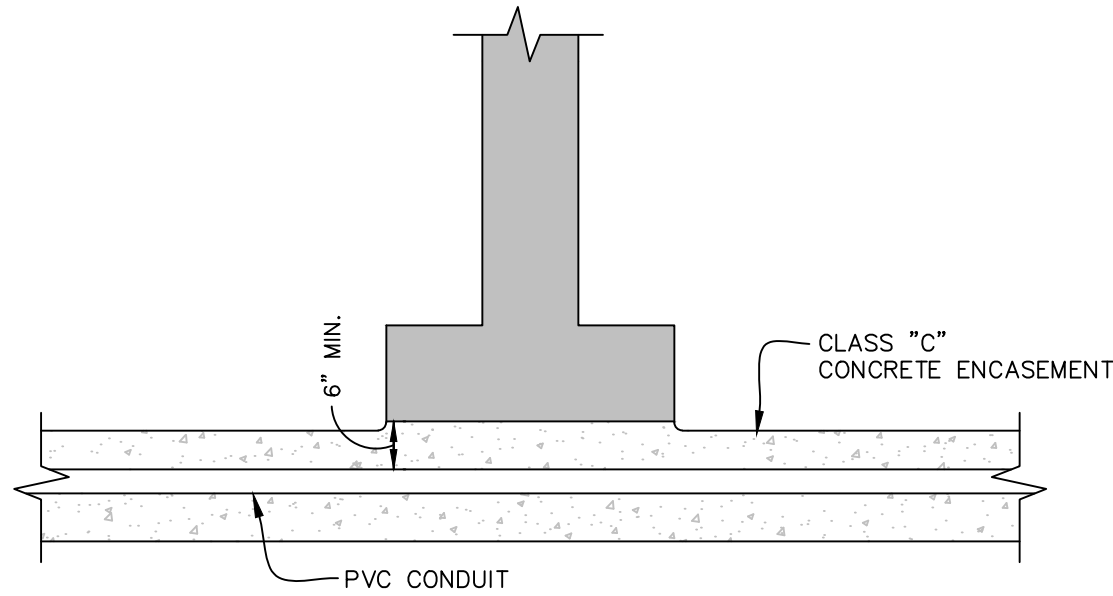


WALL PENETRATION ABOVE FOOTING BACKFILLED INTERIOR

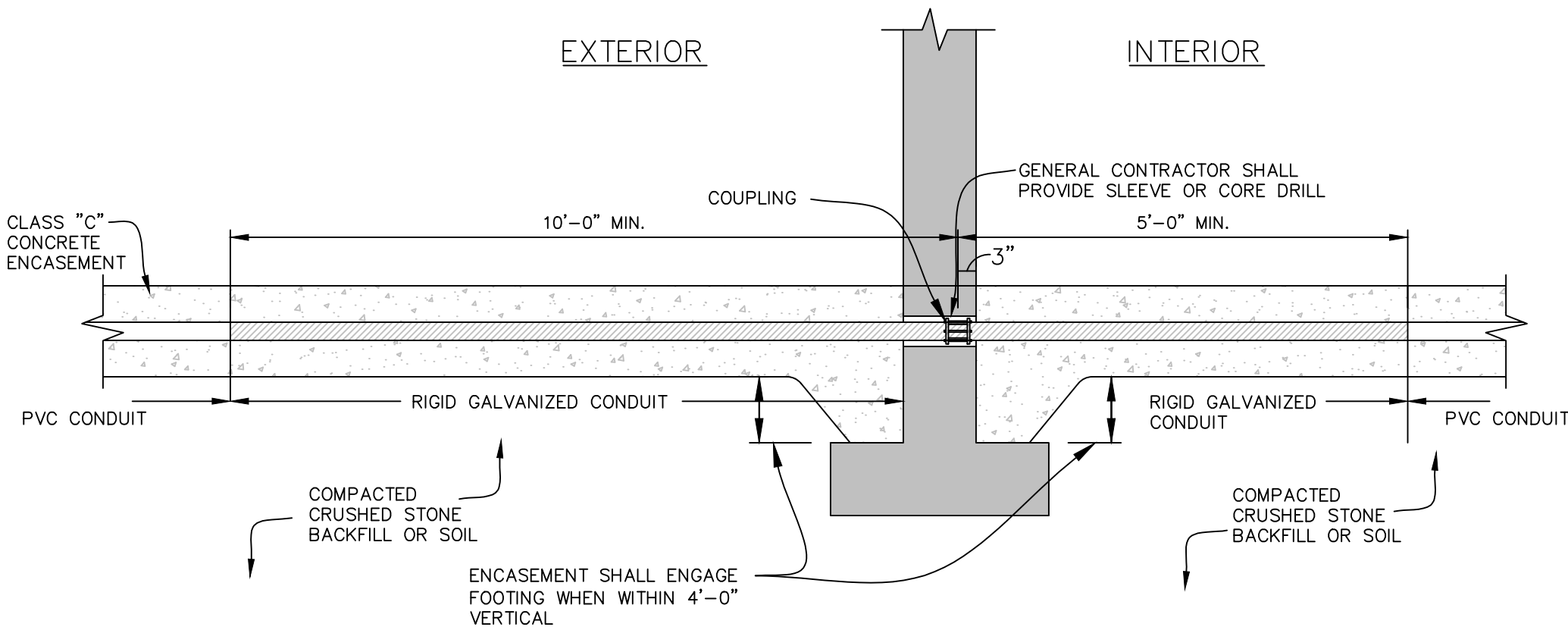
CONDUIT SCHEDULE	
LOCATION	MATERIAL TYPE
CONCEALED IN WALLS, CEILINGS OR FLOOR SLABS	RIGID GALVANIZED
BURIED AND ENCASED IN CLASS "C" CONCRETE	SCHEDULE 40 PVC WITH RIGID GALVANIZED BENDS AND AT TURN UPS
PENETRATIONS OF BUILDING FOUNDATION WALLS BELOW GRADE (SEE DETAILS)	RIGID GALVANIZED
INDOOR CHEMICAL ROOMS	PVC COATED RIGID GALVANIZED
OTHER LOCATIONS	RIGID ALUMINUM



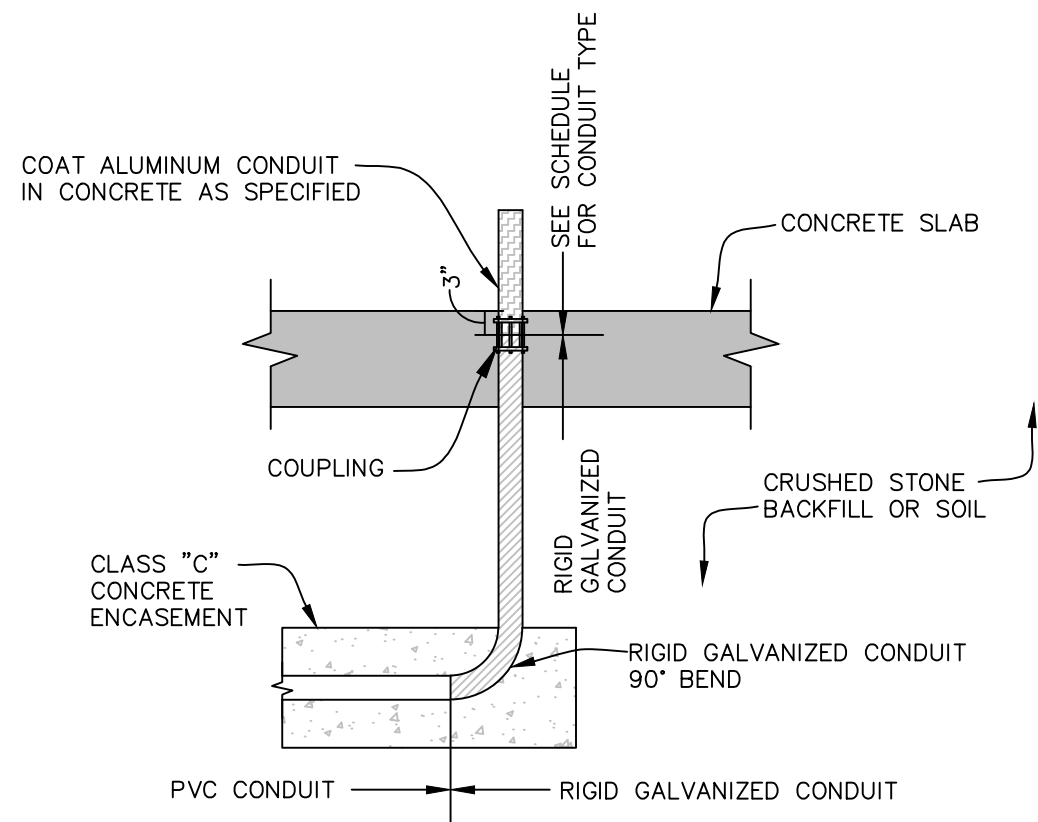
WALL PENETRATION ABOVE FOOTING OPEN INTERIOR



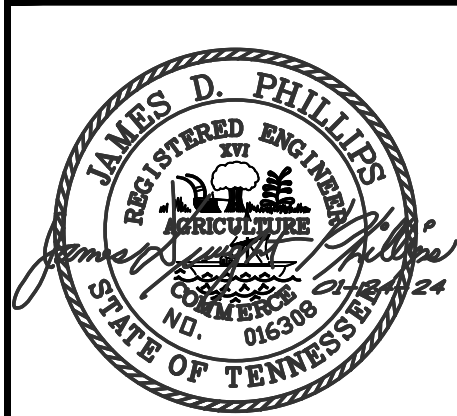
BELOW FOUNDATION CROSSING



WALL PENETRATION NEAR FOOTING



TURN-UP DETAIL



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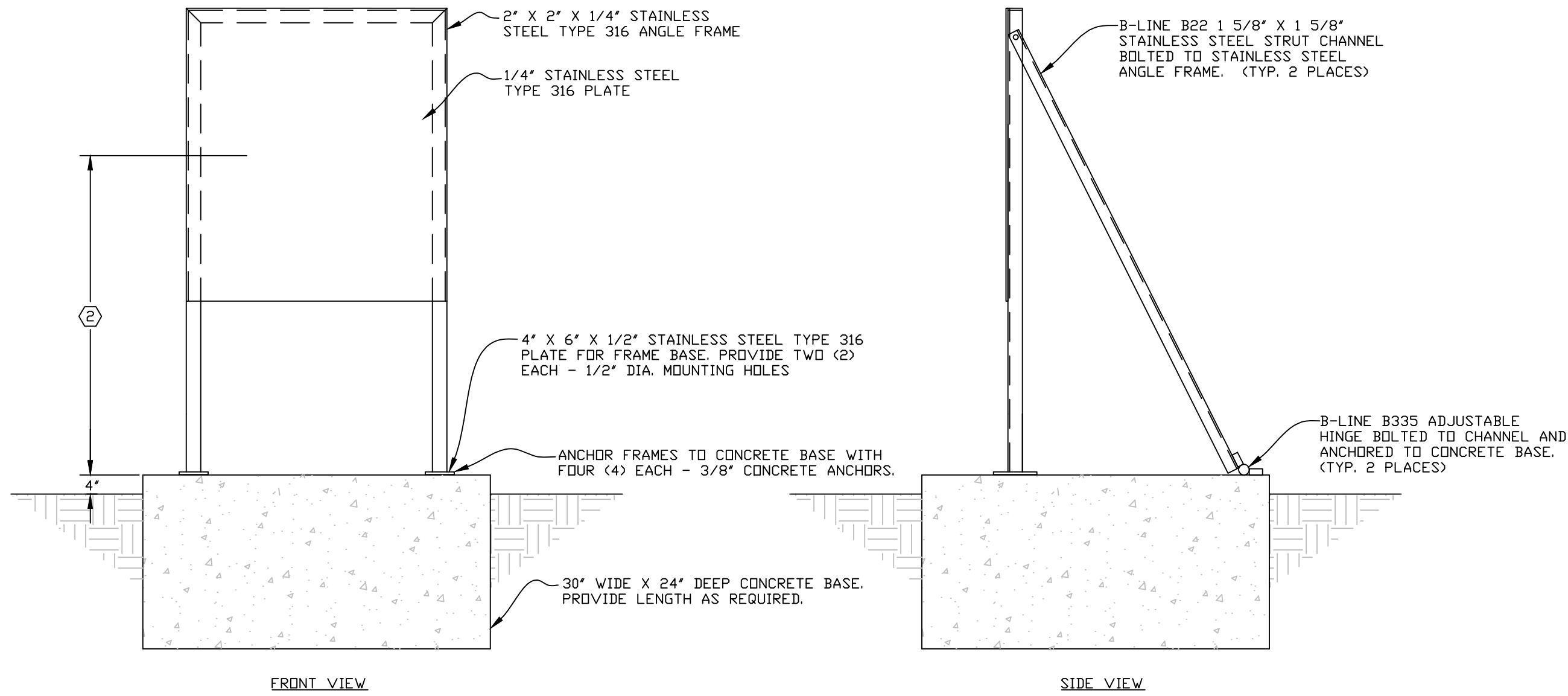
ELECTRICAL DESIGN
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UNION CITY, TN 38261
(731) 885-9532

23019-E4

SHEET E4 OF 5		SEWER SYSTEM IMPROVEMENTS CONTRACT 22-01 DUCK RIVER SEWAGE PUMPING STATION REPLACEMENT	
REVISION OR ISSUE		CONDUIT INSTALLATION DETAILS	
-		FOR COLUMBIA, TENNESSEE	
PROJECT NUMBER		SCALE AS SHOWN	DESIGNED JDP
2162		DATE JAN. 2024	DRAWN TWR
			CHECKED JDP

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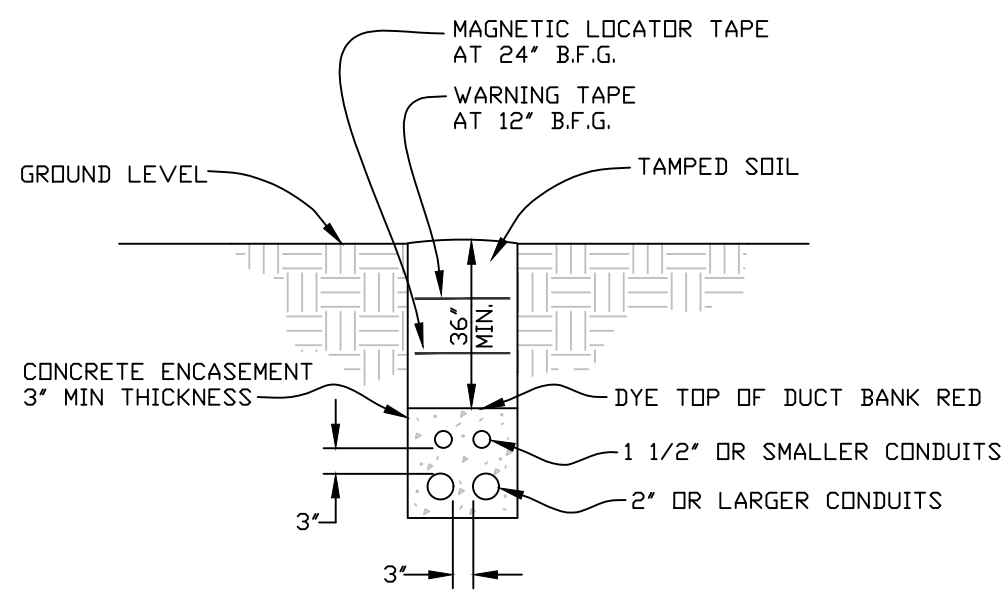


STAND DETAIL

Scale: NONE

NOTE:

- ALL FASTENERS USED TO SECURE ELECTRICAL DEVICES TO FRAMES AND ANCHOR BOLTS SHALL BE 316 STAINLESS.
- PANELBOARD SHALL BE MOUNTED 4'-0" MINIMUM TO CENTERLINE OF PANELBOARD.

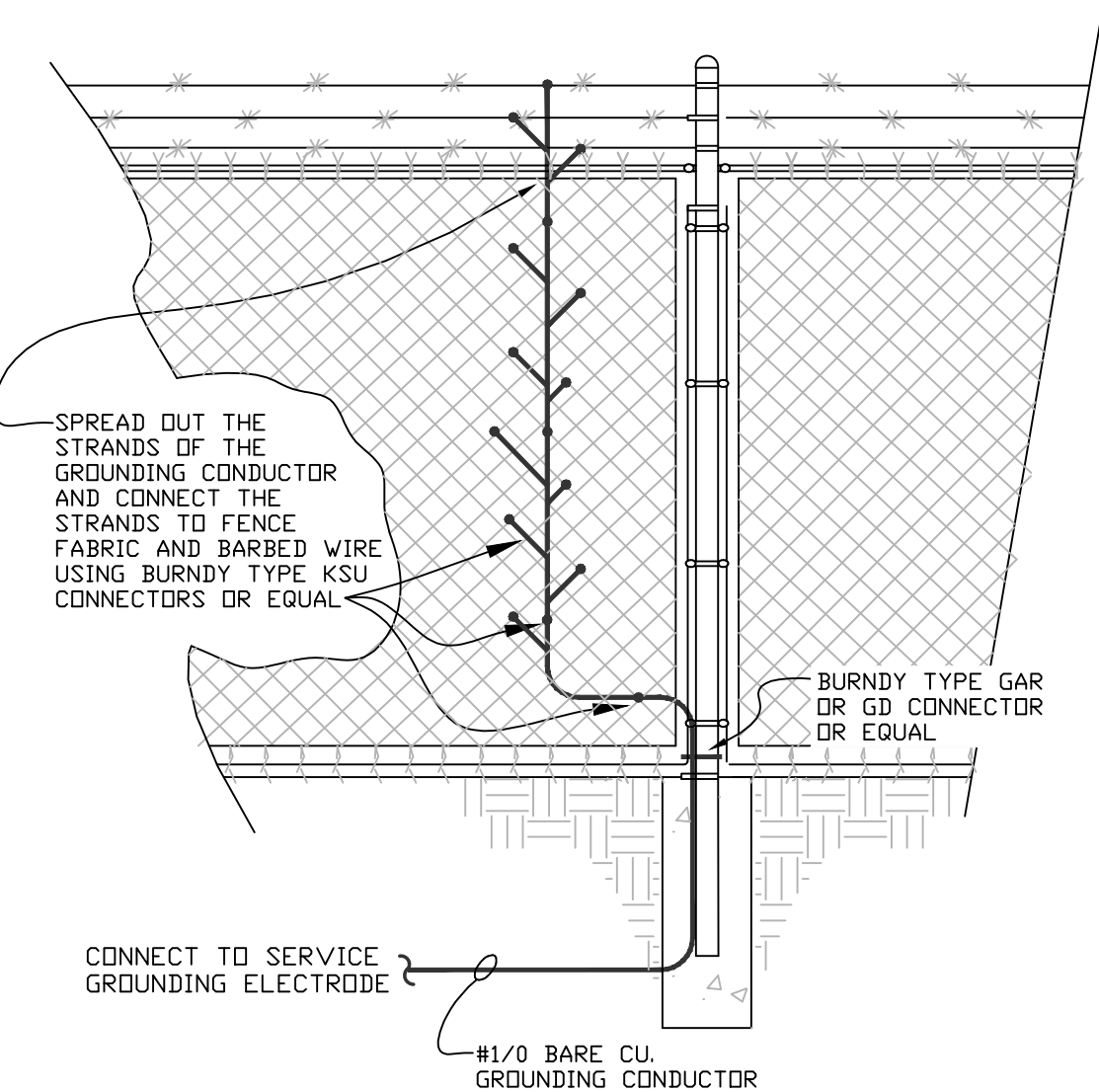


UNDERGROUND CONDUIT INSTALLATION DETAIL

Scale: NONE

NOTE:

- CONTACT ENGINEER FOR INSTALLATION DEPTH VARIATION IN AREAS CONTAINING BURIED PIPING AND OTHER STRUCTURES.
- CONDUIT SEPARATION SHALL BE MAINTAINED BY USE OF PVC CONDUIT SPACERS.

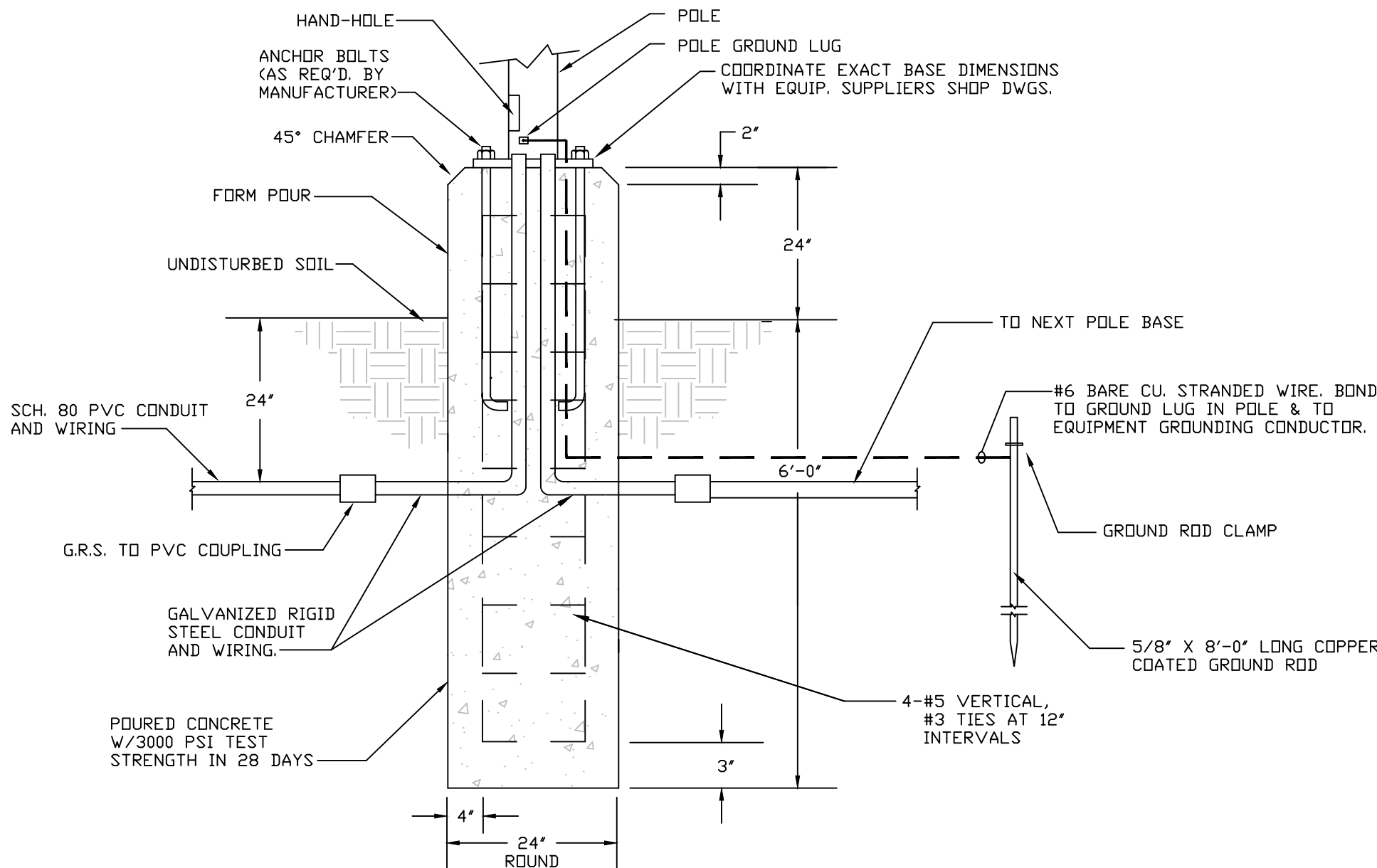


NOTES:

- FENCE GROUNDING CONDUCTOR MUST BE ROUTED UP FENCE AT POST LOCATION ONLY.
- WEAVE GROUNDING CONDUCTORS IN FENCE BEFORE ATTACHING CONNECTORS.

FENCE GROUNDING DETAIL

Scale: NONE



POLE BASE DETAIL

Scale: NONE

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION & SPECIFICATIONS	LAMPS		SUGGESTED MANUFACTURER & CATALOG NO.
		NO.	TYPE	
P1	LED AREA LIGHTING FIXTURE, ARM MOUNTED, TYPE III MEDIUM DISTRIBUTION, DIE CAST ALUMINUM HOUSING, 30 FT. ALUMINUM POLE, NATURAL ALUMINUM FINISH, W/PHOTOELECTRIC CELL, 120/277 VOLT A.C.		LED (INCLUDED) 4000K 22,200 LUMENS 184 WATTS	LITHONIA LIGHTING CAT. NO. FIXTURE: ISXLED-P7-40K-800R-T3M-MVOLT-SPA-PERS-IMV0 PHOTOCELL: DLL127F1.5JU POLE: SSA-30-6G-DM19-FBC-DNAXD

CONDUIT & WIRE DESIGNATION SCHEDULE

DESIG.	DESCRIPTION
1	3 1/2" C., 4-#500 MCM THHN/THWN CU.
2	3 1/2" C., 4-#350 MCM THHN/THWN CU. & 1-#4 THHN/THWN CU. GND.
3	1 1/2" C., 3-#1 THHN/THWN CU. & 1-#6 THHN/THWN CU. GND.
4	1" C., 4-#14 THHN/THWN CU. & 1-#12 THHN/THWN CU. GND.
5	1" C., 2 EA. - 2/C-#16 AWG TWISTED PAIR, SHIELDED CABLES
6	3/4" C., 3-#10 THHN/THWN CU. & 1-#10 THHN/THWN CU. GND.
7	3/4" C., 2-#10 THHN/THWN CU. & 1-#10 THHN/THWN CU. GND.
8	1" C., EMPTY W/PULLWIRE
9	1" C., (SCH. 80 PVC) 1-#1/0 BARE CU GND.
10	#1/0 BARE CU GND.
11	1" C., 4-#10 THHN/THWN CU. & 2-#10 THHN/THWN CU. GND.
12	1" C., 8-#14 THHN/THWN CU. & 2 EA. - 2/C-#16 AWG TWISTED PAIR, SHIELDED CABLES & 1-#12 THHN/THWN CU. GND.
13	2 1/2" C., 4-#3/0 THHN/THWN CU. & 1-#6 THHN/THWN CU. GND.
14	3 1/2" C., 4-#500 MCM THHN/THWN CU. & 1-#3 THHN/THWN CU. GND.
15	1" C., 2-#10 THHN/THWN CU. & 1-#10 THHN/THWN CU. GND.
16	2" C., EMPTY W/PULLWIRE
17	1 1/4" C., 24-#14 THHN/THWN CU. & 1-#12 THHN/THWN CU. GND.
18	1 1/2" C., 4-#2 THHN/THWN CU.
19	1 1/2" C., 4-#2 THHN/THWN CU. & 1-#8 THHN/THWN CU. GND.
20	2 EA. - 4" C., EMPTY W/PULLWIRE (PER POWER COMPANY REQUIREMENTS)
21	1" C., 10-#14 THHN/THWN CU. & 1-#12 THHN/THWN CU. GND.

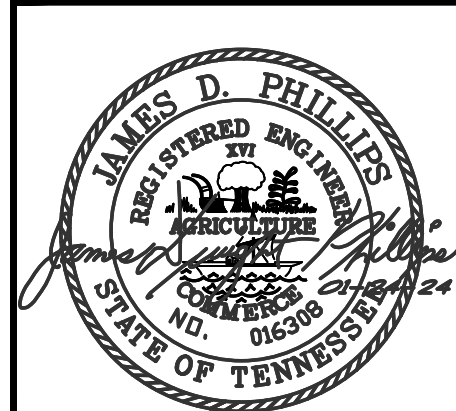
DIESEL ENGINE--GENERATOR SET SCHEDULE

CONTINUOUS STANDBY RATING:	125 KW AT 0.80 PF, 150 KVA.
VOLTAGE & FREQUENCY:	277/480 VOLT, 3 PH, 4 WIRE, 60 HERTZ.
VOLTAGE REGULATION:	±0.5%
FREQUENCY VARIATION:	±0.25%
SKID MOUNTED FUEL TANK & SIZE:	DOUBLE WALL, 48 HOUR FULL LOAD CAPACITY, SUB BASE, WITH LEAK DETECTOR
FUEL GRADE & TYPE:	NO. 2 DIESEL
ENGINE COOLING:	UNIT MOUNTED RADIATOR, HIGH AMBIENT -- 122 DEGREES F.(50C.)
ENGINE DISPLACEMENT & DESIGN:	272 C.I., 4 CYCLE, 4 CYLINDER, DIESEL
MANUFACTURER:	CUMMINS OR CATERPILLAR W/WEATHERPROOF SOUND ATTENUATED ENCLOSURE AND ACCESS PLATFORM

NOTE: 1. SEE DETAILED SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND ACCESSORIES.
2. PROVIDE 1 EA. - 200 A., 3 P., CIRCUIT BREAKER

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
(---)	CONDUIT CONCEALED IN WALL OR CEILING
(---)	CONDUIT CONCEALED IN FLOOR SLAB OR UNDERGROUND
(---)	CONDUIT EXPOSED ON WALL OR CEILING
(=)	CAPPED CONDUIT
(00000)	FLEXIBLE CONDUIT
(~~~~~)	WEATHERPROOF CABLE
(J)	JUNCTION BOX
(F)	PULL BOX
(S)	SINGLE POLE SWITCH, 20 AMP, MTD. HT. PER SPECS.
(S3)	SWITCH - 3 WAY, 20 AMP, MTD. HT. PER SPECS.
(S4)	SWITCH - 4 WAY, 20 AMP, MTD. HT. PER SPECS.
(SDP)	DOUBLE POLE, SINGLE THROW SWITCH, 20 AMP, MTD. HT. PER SPECS.
(SWP)	WEATHERPROOF SWITCH, MTD. HT. PER SPECS.
(MS)	MANUAL MOTOR SWITCH W/ THERMAL PROTECTION
(OS)	CEILING MTD. OCCUPANCY SENSOR
(DH)	CEILING MTD. DAYLIGHT HARVESTER
(PC)	PHOTOELECTRIC CELL
(HDS)	HAND - OFF - AUTO SELECTOR SWITCH
(S) (S2)	START - STOP PUSHBUTTON STATIONS
(T)	THERMOSTAT
(R)	SINGLE RECEPTACLE - 20 AMP.
(R2)	DUPLEX RECEPTACLE - MTD. HT. PER SPECS.
(R3)	DOUBLE DUPLEX RECEPTACLE - MTD. HT. PER SPECS.
(RWP)	WEATHERPROOF DUPLEX RECEPTACLE
(R-DF1)	DUPLEX RECEPTACLE, GROUND FAULT INTERRUPTER TYPE
(R-DF)	DUPLEX RECEPTACLE, MTD. ABOVE COUNTER
(R2)	DOUBLE DUPLEX RECEPTACLE, MTD. ABOVE COUNTER
(R2/230)	208/230 VOLT RECEPTACLE, VOLTAGE, POLES AS INDICATED
(R-)	DUPLEX RECEPTACLE - HALF HOT, HALF SWITCHED
(R-)	DUPLEX RECEPTACLE - ISOLATED GROUND
(R-)	WELDING RECEPTACLE - 60 AMP, VOLTAGE, POLES AS INDICATED
(R)	FLOOR RECEPTACLE
(T)	FLOOR TYPE TELEPHONE OUTLET
(DC)	FLOOR TYPE DATA/COMM. OUTLET
(T)	TELEPHONE OUTLET - MTG. HT. & CONDUIT SIZE PER SPECS.
(T)	TELEPHONE OUTLET - MTD. ABOVE COUNTER, COND. SIZE PER SPECS.
(T)	TELEPHONE OUTLET - WALL MOUNTED, CONDUIT SIZE PER SPECS.
(TV)	TELEVISION SYSTEM ANTENNA OUTLET, 3/4" C. TO ACCESSIBLE CEILING SPACE
(TV)	TELEVISION ANTENNA JACK
(CT)	COMPUTER TERMINAL OUTLET, 3/4" C. TO ACCESSIBLE CEILING SPACE
(D)	DATA/COMM. OUTLET, 2 GANG BOX, SINGLE PLASTER RING, 3/4" C.
(S)	SURFACE MOUNTED FIXTURE W/IDENTIFICATION, INCAND. PL FLUOR., OR H.I.D.
(S)	WALL BRACKET FIXTURE, INCANDESCENT OR PL FLUOR.
(R)	RECESSED FIXTURE, INCANDESCENT, PL TYPE FLUOR., OR H.I.D.
(F)	FLUORESCENT FIXTURE, SURFACE OR RECESSED, 2X2, 1X4, 2X4
(F)	FLUORESCENT FIXTURE, OPEN TUBE STRIP, SURFACE MTD.
(3/2) (S)	DISCONNECT SWITCH, FUSIBLE, 30 AMP / 3 POLE
(3/2) (S)	DISCONNECT SWITCH, NON-FUSIBLE, 30 AMP / 3 POLE
(3/2) (S) RT	DISCONNECT SWITCH, NON-FUSIBLE, RAINIGHT, 30 AMP / 3 POLE
(F)	EXHAUST FAN
(Z)	DISTRIBUTION PANEL
(P)	LIGHTING OR BRANCH CIRCUIT PANELBOARD
(E)	EMERGENCY LIGHT
(E)	EMERGENCY LIGHT / EXIT LIGHT COMBINATION
(E)	EXIT LIGHT
(O)	OUTSIDE LIGHTING FIXTURE, POLE TYPE
(M)	MOTOR CONTROLLER OR STARTER, MAGNETIC
(M)	MOTOR CONTROLLER OR STARTER, MANUAL
(M)	COMBINATION STARTER AND DISCONNECT
(M)	MOTOR W/ APPROXIMATE HORSEPOWER
(M)	METAL, ALUMINUM, OR STEEL POLE
(M)	WOOD POLE
(M)	DESIGNATES HEATER TYPE
(M)	DESIGNATES NOTE NUMBER
(M)	DESIGNATES CONDUIT & WIRE DESCRIPTION PER SCHEDULE
(M)	GROUNDING ELECTRODE AND CONDUCTOR SYSTEM
(M)	GROUNDING ELECTRODE SYSTEM
(PS)	PRESSURE SWITCH
(FT)	FLOW TRANSMITTER
(SV)	SOLENOID VALVE
(BV)	ELECTRICALLY ACTUATED BALL VALVE W/POSITION INDICATION
(FS)	FLOAT SWITCH
(PT)	PRESSURE TRANSMITTER
(LS)	LIMIT SWITCH
(RDF)	RATE OF FLOW CONTROLLER
(M)	MOTOR OPERATED VALVE
(LH)	LOSS OF HEAD TRANSMITTER
(LT)	LEVEL TRANSMITTER



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23019-E5

SHEET	E5	OF	5	SEWER SYSTEM IMPROVEMENTS CONTRACT 22-01 DUCK RIVER SEWAGE PUMPING STATION REPLACEMENT
REVISION OR ISSUE	-	-	-	ELECTRICAL SCHEDULES, DETAILS AND LEGEND
FOR				COLUMBIA, TENNESSEE
SCALE	AS SHOWN	DATE	JAN. 2024	DESIGNED JDP
PROJECT NUMBER	2162			DRAWN TWR
				CHECKED JDP

WAUFORD

Nashville, Tennessee
(615) 883-3243
www.jrwauford.com



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Michele Stevens, Senior Administrative Assistant, mstevens@columbiatn.gov, 931-560-1010

AGENDA ITEM TITLE: APPROVE BID AWARD TO CUMBERLAND VALLEY CONSTRUCTORS, INC. IN THE AMOUNT OF \$5,272,800 FOR CONSTRUCTION OF THE BEAR CREEK PIKE SEWAGE PUMP STATION REPLACEMENT

RECOMMENDATION: Approve.

INFORMATION: The City of Columbia's Wastewater Department requests approval of the bid award to Cumberland Valley Constructors, Inc. for construction of the Bear Creek Pike Sewage Pump Station Replacement in the amount of \$5,272,800.00. This would replace an outdated pump station and provide continued quality service to the citizens of the City of Columbia.

CERTIFICATION: The Chief Financial Officer certifies that \$5,272,800 is budgeted and unencumbered in Wastewater - Pump Stations - Bear Creek PS.

ATTACHMENTS:

Award Letter
Bid Tab

WAUFORD

J. R. Wauford & Company, Consulting Engineers, Inc.
www.jrwauford.com

January 31, 2025

Mr. Donnie Boshers
Director
Columbia Wastewater System
1244 Treatment Plant Road
Columbia, Tennessee 38401

RE: Sewer System Improvements
Bear Creek Sewage Pumping Station
Replacement
City of Columbia, Tennessee
Wauford Project No. 2198, Contract 24-01
ARPA Grant No. 8437-WW-COStru-1

Dear Mr. Boshers:

As you are aware, five bids were received in your presence on January 30, 2025, at 2:00 p.m. as shown on the attached bid tabulation sheet.

The low bidder is Cumberland Valley Constructors, Inc. of Nashville, Tennessee at the bid price of \$5,272,800.00. This contractor has successfully constructed projects for our firm and was prequalified to bid this project; therefore, we recommend award of this contract to Cumberland Valley Constructors, Inc. of Nashville, Tennessee at the bid price of \$5,272,800.00.

Please be advised that this project involves unit price pay items which means the final quantities will determine the final contract amount.

Yours very truly,

J. R. WAUFORD & COMPANY,
CONSULTING ENGINEERS, INC.



Daniel G. Tribble, P.E.
Manager of Engineering Services

DGT:rew

Attachment

BIDS OPENED: 2:00 P.M. CENTRAL TIME
THURSDAY, JANUARY 30, 2025
1244 TREATMENT PLANT ROAD
COLUMBIA, TENNESSEE 38401

TABULATION OF BIDS
SEWER SYSTEM IMPROVEMENTS
FOR THE CITY OF
COLUMBIA, TENNESSEE

J. R. WAUFORD & CO.
CONSULTING ENGINEERS, INC.
NASHVILLE, TENNESSEE

WAUFORD PROJECT 2198 (CONTRACT 24-01 – BEAR CREEK SEWAGE PUMPING STATION REPLACEMENT)

			CUMBERLAND VALLEY CONSTRUCTORS, INC. 2518 PLUM STREET NASHVILLE, TN 37207			JUDY CONSTRUCTION COMPANY 103 S CHURCH STREET CYNTHIANA, KY 41031			BOWEN ENGINEERING CORPORATION 8802 N MERIDIAN STREET INDIANAPOLIS, IN 46260			W&O CONSTRUCTION COMPANY, INC. 150 CONSTRUCTION DRIVE LIVINGSTON, TN 38570			SMITH CONTRACTORS, INC. P.O. BOX 480 LAWRENCEBURG, KY 40342
ITEM NO.	QUANTITY	ITEM DESCRIPTION	UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL	
		NOTE: BIDS SHALL INCLUDE SALES TAX AND ALL OTHER APPLICABLE TAXES AND FEES	FIDELITY AND DEPOSIT COMPANY OF MARYLAND		CONTINENTAL CASUALTY COMPANY		CONTINENTAL CASUALTY COMPANY		THE CINCINNATI INSURANCE COMPANY		LIBERTY MUTUAL INSURANCE COMPANY				
		CONTRACT 24-01 – BEAR CREEK SEWAGE PUMPING STATION REPLACEMENT – BID FORM A													
9a.	LUMP SUM	FOR PERFORMING ALL LABOR AND FURNISHING ALL MATERIALS AND EQUIPMENT NECESSARY FOR THE NEW BEAR CREEK SEWAGE PUMPING STATION USING SUBMERSIBLE PUMPS, COMPLETE IN PLACE, INCLUDING ALL EQUIPMENT, ELECTRICAL WORK, ALL SITE DEVELOPMENT, ELECTRICAL BUILDING, FLOW METER PIT, PIPING, EMERGENCY PUMP CONNECTION, DUCTILE IRON FORCE MAIN SEGMENTS, AND APPURTENANCES AS SHOWN ON THE PLANS AND/OR SPECIFIED FOR THE LUMP SUM AMOUNT OF:													
		TOTAL BID		\$5,268,000.00		\$6,120,000.00		\$6,673,825.00		\$7,550,000.00*		\$10,027,000.00*			
9b.		EQUIPMENT TO BE FURNISHED													
9A.		MECHANICALLY CLEANED BAR SCREEN													
		DUPERON				\$350,000.00		\$475,000.00		\$400,000.00		\$475,000.00			
		HUBER TECHNOLOGY, INC.				\$326,000.00		\$376,500.00		\$330,000.00		\$326,000.00			
		VULCAN INDUSTRIES, INC.	BASE BID	\$271,000.00	BASE BID	\$271,000.00	BASE BID	\$292,000.00	BASE BID	\$292,000.00	BASE BID	\$271,000.00	BASE BID	\$271,000.00	
		PRE-APPROVED EQUAL													
9B.		SUBMERSIBLE PUMPS AND ACCESSORIES													
		KSB	BASE BID	\$228,360.00	BASE BID	\$230,000.00	BASE BID	\$228,360.00	BASE BID	\$230,000.00	BASE BID	\$228,360.00	BASE BID	\$228,360.00	
		PENTAIR				\$360,000.00		\$360,000.00		\$320,000.00		\$360,000.00			
		ABS SULZER				\$318,500.00		\$331,000.00		\$331,000.00		\$318,500.00			
		PRE-APPROVED EQUAL													
9B.		VARIABLE FREQUENCY DRIVES													
		ABB	BASE BID	\$209,466.00	BASE BID	\$210,000.00	BASE BID	\$209,500.00	BASE BID	\$210,000.00	BASE BID	\$209,500.00	BASE BID	\$209,500.00	
		DANFOSS													
		YASKAWA				\$210,000.00		\$210,000.00		\$400,000.00		\$220,000.00			
		PRE-APPROVED EQUAL													
9C.		PUMP AUTOMATIC CONTROL SYSTEM AND ACCESSORIES													
		SOUTHERN SALES COMPANY, INC.			BASE BID	\$67,000.00		\$103,000.00	BASE BID	\$67,000.00	BASE BID	\$67,000.00	BASE BID	\$67,000.00	
		SOUTHERN FLOW INC.	BASE BID	\$79,000.00		\$75,000.00	BASE BID	\$79,000.00		\$85,000.00		\$85,000.00			
		PRE-APPROVED EQUAL													
10.		ELECTRICAL EQUIPMENT													
		SQUARE D													
		EATON	BASE BID	\$132,000.00	BASE BID	\$132,000.00	BASE BID	\$132,000.00	BASE BID	\$132,000.00	BASE BID	\$132,000.00	BASE BID	\$132,000.00	
		PRE-APPROVED EQUAL													
		UNIT PRICES FOR ADJUSTMENT ITEMS													
		THE FOLLOWING ITEMS (ITEM NOS. 1 THROUGH 3) ARE FOR USE IN PERFORMING WORK NOT SHOWN ON THE PLANS OR SPECIFIED UNDER THE SCOPE OF BID FORM A, LUMP SUM PRICE. PRICES LISTED FOR ADJUSTMENT ITEMS WILL BE USED ONLY FOR ACCOMPLISHING ANY FIELD CHANGES DIRECTED BY THE ENGINEER OUTSIDE THE SCOPE OF THE LUMP SUM PRICE.													
1.	15 C.Y.	UNDERCUT EXCAVATION IN EARTH 0 TO 5 FEET DEEP BELOW SUBGRADE FOR:	\$150.00	\$2,250.00	\$20.00	\$300.00	\$194.00	\$2,910.00	\$20.00	\$300.00	\$5.00	\$75.00			
2.	15 C.Y.	UNDERCUT STONE REFILL (SHOT ROCK) FOR:	\$100.00	\$1,500.00	\$28.00	\$420.00	\$54.00	\$810.00	\$20.00	\$300.00	\$20.00	\$300.00			
3.	15 C.Y.	UNDERCUT STONE REFILL (TDOT NO. 57) FOR:	\$70.00	\$1,050.00	\$75.00	\$1,125.00	\$105.00	\$1,575.00	\$80.00	\$1,200.00	\$50.00	\$750.00			
		TOTAL BID FORM B ADJUSTMENT ITEMS 1-3 INCLUSIVE		\$4,800.00		\$1,845.00		\$5,295.00		\$1,800.00		\$1,125.00			
		TOTAL BID FORM A (REPEAT FROM BF-3)		\$5,268,00.00		\$6,120,000.00		\$6,673,825.00		\$7,550,000.00		\$10,027,000.00			
		TOTAL BID, CONTRACT 24-01, SUM OF BID FORM A PLUS BID FORM B		\$5,272,800.00		\$6,121,845.00		\$6,679,120.00		\$7,551,800.00		\$10,028,125.00			
			LOW BIDDER												
		FORMS REQUIRED – PROPERLY EXECUTED													
		ACKNOWLEDGEMENT REGARDING BIDDER SAM REGISTRATION	YES		YES		YES		YES		YES		YES		
		CERTIFICATION OF BIDDER REGARDING EQUAL EMPLOYMENT OPPORTUNITY	YES		YES		YES		YES		YES		YES		
		STATE OF TENNESSEE CERTIFICATION OF BIDDER REGARDING USE OF WOMEN/MINORITY SUBCONTRACTORS	YES		YES		YES		YES		YES		YES		
		STATE OF TENNESSEE CERTIFICATION REGARDING DEBARMENT, SUSPENSION AND OTHER RESPONSIBILITY MATTERS	YES		YES		YES		YES		YES		YES		
		CERTIFICATION BY PROPOSED SUBCONTRACTOR REGARDING EQUAL EMPLOYMENT OPPORTUNITY	N/A		N/A		YES		N/A		N/A		N/A		
		CERTIFICATION BY PROPOSED SUBCONTRACTOR REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND EXCLUSION	N/A		N/A		YES		N/A		N/A		N/A		
		STATE OF TENNESSEE BYRD ANTI-LOBBYING AMENDMENT CERTIFICATION	YES		YES		YES		YES		YES		YES		
		DRUG-FREE WORKPLACE AFFIDAVIT	YES		YES		YES		YES		YES		YES		
		STATEMENT OF COMPLIANCE CERTIFICATE ILLEGAL IMMIGRANT	YES		YES		YES		YES		YES		YES		
		STATE OF TENNESSEE IRAN DIVESTMENT ACT CERTIFICATION	YES		YES		YES		YES		YES		YES		
		STATE OF TENNESSEE NON-BOYCOTT OF ISRAEL CERTIFICATION	YES		YES		YES		YES		YES		YES		
		* – DENOTES ERROR IN BID													
		I HEREBY CERTIFY THAT THE ABOVE IS A TRUE AND CORRECT COPY OF THE BIDS RECEIVED J.R. WAUFORD & CO., CONSULTING ENGINEERS, INC.  1/31/2025 DANIEL G. TRIBBLE – TN PE #124119													



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Michele Stevens, Administrative Assistant, mstevens@columbiatn.gov, 931-560-1010

AGENDA ITEM TITLE: RESOLUTION NO. 25-09 - A RESOLUTION TO ACCEPT THE OWNERSHIP AND MAINTENANCE OF SEWER IMPROVEMENTS SERVING HONEY FARMS PHASE 3

RECOMMENDATION: Approve Resolution No. 25-09

INFORMATION: Honey Farms Phase 3 consists of 710 linear feet of 8" sanitary sewer main. The Developers met all of the qualifications for acceptance. The Wastewater Department has performed the necessary testing and inspections.

CERTIFICATION:

ATTACHMENTS:

Resolution No. 25-09

Resolution No. 25-09 Dedication Letter

**A RESOLUTION TO ACCEPT THE OWNERSHIP AND MAINTENANCE OF
SEWER IMPROVEMENTS SERVING HONEY FARMS PHASE 3**

WHEREAS, The City of Columbia, has been requested to accept ownership and maintenance of 710 linear feet of 8" gravity main serving Honey Farms Phase 3; and

WHEREAS, the City of Columbia has inspected said sewer improvements and has determined that said sewer improvements meet the requirements imposed by the City of Columbia.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY OF COLUMBIA, that the City of Columbia does hereby accept the ownership and maintenance of said sanitary sewer improvements serving Honey Farms Phase 3.

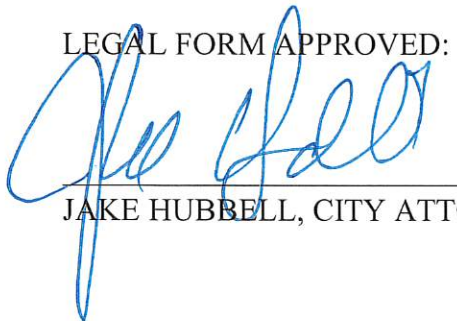
PASSED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF COLUMBIA, TENNESSEE, this the 13th day of February, 2025.

CHARLES (CHAZ) M. MOLDER - MAYOR

ATTEST:

THAD H. JABLONSKI - CITY RECORDER

LEGAL FORM APPROVED:



JAKE HUBBELL, CITY ATTORNEY



Date: 14 January 2025

Columbia City Council
City of Columbia, Tennessee
City Hall
700 North Garden Street
Columbia, Tennessee 38401

Dear Council Members:

I wish to present for dedication to the Council of the City of Columbia, Tennessee, the wastewater system improvements installed to service Honey Farms Phase 3 in the amount of 710 linear feet. The Contractor installed the sanitary sewer according to the Standard Sewer Specifications of the City of Columbia.

You have been provided with CCTV and as-built drawings of the project and all inspections and testing has been completed. All fees required for dedication have been paid. You have also been provided a one-year maintenance surety in the amount of \$17,217.50, set to expire one year from date of Council acceptance.

Acceptance by the Columbia City Council for these wastewater system improvements would be appreciated.

Sincerely,

Signed:

A handwritten signature in blue ink, appearing to read "Dylan Ray", written over a horizontal line.

Print: Dylan Ray – VP of Land Development

Lot Numbers included in this dedication: Lots 195-250



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Michele Stevens, Administrative Assistant, mstevens@columbiatn.gov, 931-560-1010

AGENDA ITEM TITLE: RESOLUTION NO. 25-11 - A RESOLUTION TO ACCEPT THE OWNERSHIP AND MAINTENANCE OF SEWER IMPROVEMENTS SERVING MCCLURE FARMS PHASE 1A

RECOMMENDATION: Approve Resolution No. 25-11

INFORMATION: McClure Farms Phase 1A consists of 602 linear feet of 8" sanitary sewer main. The Developers met all of the qualifications for acceptance. The Wastewater Department has performed the necessary testing and inspections.

CERTIFICATION:

ATTACHMENTS:

Resolution No. 25-11

Resolution No. 25-11 Dedication Letter

**A RESOLUTION TO ACCEPT THE OWNERSHIP AND MAINTENANCE OF
SEWER IMPROVEMENTS SERVING MCCLURE FARMS PHASE 1A**

WHEREAS, The City of Columbia, has been requested to accept ownership and maintenance of 602 linear feet of 8" gravity main serving McClure Farms Phase 1A; and

WHEREAS, the City of Columbia has inspected said sewer improvements and has determined that said sewer improvements meet the requirements imposed by the City of Columbia.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY OF COLUMBIA, that the City of Columbia does hereby accept the ownership and maintenance of said sanitary sewer improvements serving McClure Farms Phase 1A.

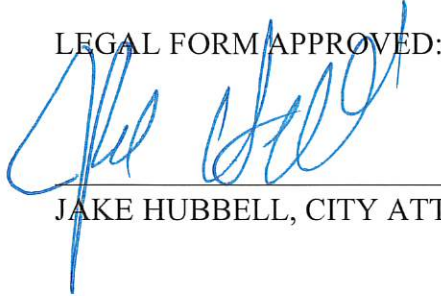
PASSED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF COLUMBIA, TENNESSEE, this the 13th day of February, 2025.

CHARLES (CHAZ) M. MOLDER - MAYOR

ATTEST:

THAD H. JABLONSKI - CITY RECORDER

LEGAL FORM APPROVED:



JAKE HUBBELL, CITY ATTORNEY

Date: 8 January 2025

Columbia City Council
City of Columbia, Tennessee
City Hall
700 North Garden Street
Columbia, Tennessee 38401

Dear Council Members:

I wish to present for dedication to the Council of the City of Columbia, Tennessee, the wastewater system improvements installed to service McClure Farms Phase 1A in the amount of 602 linear feet. The Contractor installed the sanitary sewer according to the Standard Sewer Specifications of the City of Columbia.

You have been provided with CCTV and as-built drawings of the project and all inspections and testing has been completed. All fees required for dedication have been paid. You have also been provided a one-year maintenance surety in the amount of \$14,598.50, set to expire one year from date of Council acceptance.

Acceptance by the Columbia City Council for these wastewater system improvements would be appreciated.

Sincerely,

Signed: 

Print: Andy Davidson

Lot Numbers included in this dedication:

76-81 70-75 96-97



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Regina Connelly, City Recorder's Office, rconnelly@columbiatn.com, 931-560-1520

AGENDA ITEM TITLE: RESOLUTION NO. 25-12 – TAX CORRECTIONS

RECOMMENDATION: Approve Resolution No. 25-12.

INFORMATION: The City Recorder is presenting tax corrections through 1/24/2025 for Council consideration as submitted by Mr. Bobby Daniels, Maury County Tax Assessor.

CERTIFICATION:

ATTACHMENTS: Staff Report for Resolution 25-12; Resolution No. 25-12; Resolution No. 25-12 Exhibit A.

RESOLUTION

WHEREAS, the City of Columbia, Tennessee, has on its books certain property that is assessed which should not be assessed; and

WHEREAS, the City of Columbia, Tennessee, has on its books certain property that is incorrectly assessed; and

WHEREAS, the City of Columbia, Tennessee, desires to correct these errors to properly reflect the corrections on the books of the City of Columbia.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY OF COLUMBIA, that the following corrections are hereby approved:

(SEE SCHEDULE "A" and "B" ATTACHED HERETO)

PASSED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF

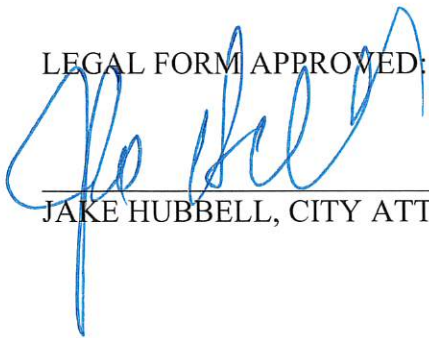
COLUMBIA, TENNESSEE, this the _____ day of _____, 2025.

CHARLES (CHAZ) M. MOLDER - MAYOR

ATTEST:

THAD H. JABLONSKI, CITY RECORDER

LEGAL FORM APPROVED:



JAKE HUBBELL, CITY ATTORNEY

TAX CORRECTIONS – EXHIBIT A
RESOLUTION NO. 24-12

1. DELETE 2024 PROPERTY TAX IN THE NAME OF REGENT HOMES LLC. MAP 112F G 016.00, 5148 PACE PARK CIR. PROPERTY VALUE \$295,000.00, ASSESSED VALUE \$73,750.00, AND TAXES \$609.00. DUE TO DEED TRANSFER TO WRONG PARCEL AND CORRECTING ERROR TO CORRECT OWNERSHIP PER MAURY COUNTY TAX ASSESSOR.
2. CHANGE 2024 PERSONAL PROPERTY TAX IN THE NAME OF FRESENIUS MEDICAL CARE COLUMBIA, C/O PROPERTY VALUATION SERVICES. MAP 100B B 001.01 P 001, 861 W JAMES M CAMPBELL BLVD. PROPERTY VALUE FROM \$831,415.00 TO \$826,981.00, ASSESSED VALUE FROM \$249,425.00 TO \$248,094.00 AND TAXES FROM \$1,630.00. TO \$1,621.00. DUE TO KEYING ERROR PER MAURY COUNTY TAX ASSESSOR.
3. CHANGE 2024 PROPERTY TAX IN THE NAME OF SOUND INVESTMENT CONCEPT LLC. MAP 099H G 004.00 S/I 001, 107 D-7 E 9TH ST. PROPERTY VALUE FROM \$461,000.00 TO \$461,000.00, ASSESSED VALUE FROM \$184,400.00 TO \$115,250.00 AND TAXES FROM \$951.00. TO \$570.00. DUE TO ERROR IN ASSESSING AT 40% BUT SHOULD BE 25% PER MAURY COUNTY TAX ASSESSOR.
4. CHANGE 2024 PROPERTY TAX IN THE NAME OF SOUND INVESTMENT CONCEPT LLC. MAP 099H G 004.00 S/I 002, 107 C-5 E 9TH ST. PROPERTY VALUE FROM \$461,300.00 TO \$461,300.00, ASSESSED VALUE FROM \$184,520.00 TO \$115,325.00 AND TAXES FROM \$1,522.00. TO \$952.00. DUE TO ERROR IN ASSESSING AT 40% BUT SHOULD BE 25% PER MAURY COUNTY TAX ASSESSOR.
5. CHANGE 2024 PROPERTY TAX IN THE NAME OF SOUND INVESTMENT CONCEPT LLC. MAP 099H G 004.00 S/I 003, 107 C-C E 9TH ST. PROPERTY VALUE FROM \$304,200.00 TO

- \$304,200.00, ASSESSED VALUE FROM \$121,680.00 TO \$76,050.00 AND TAXES FROM \$627.00. TO \$377.00. DUE TO ERROR IN ASSESSING AT 40% BUT SHOULD BE 25% PER MAURY COUNTY TAX ASSESSOR.
6. PICK UP 2024 PERSONAL PROPERTY TAX IN THE NAME OF TN FARMERS MUTUAL INS CLAIMS OFFICE. MAP 090 007.04 P S/I 500, 181 THETA PIKE. PROPERTY VALUE \$221,473.00, ASSESSED VALUE \$66,442.00, ASSESSED VALUE WITH EQ FACTOR \$52,609.00 AND TAXES \$434.00. PICKUP DUE TO 2024 AUDIT FOR 2024 TAX YEAR PER MAURY COUNTY TAX ASSESSOR.
 7. PICK UP 2024 PERSONAL PROPERTY TAX IN THE NAME OF TN FARMERS MUTUAL INS CLAIMS OFFICE. MAP 090 007.04 P S/I 501, 181 THETA PIKE. PROPERTY VALUE \$122,300.00, ASSESSED VALUE \$36,690.00, AND TAXES \$303.00. PICKUP DUE TO 2024 AUDIT FOR 2023 TAX YEAR PER MAURY COUNTY TAX ASSESSOR.
 8. PICK UP 2024 PROPERTY TAX IN THE NAME OF WOOD, TIMOTHY D, ETUX JULIE L WOOD. MAP 112F G 016.00, 5148 PACE PARK CIR. PROPERTY VALUE \$295,000.00, ASSESSED VALUE \$73,750.00 AND TAXES \$609.00. DUE TO DEED TRANSFER TO WRONG PARCEL AND CORRECTING ERROR TO CORRECT OWNERSHIP PER MAURY COUNTY TAX ASSESSOR.
 9. PICK UP 2024 PROPERTY TAX IN THE NAME OF REGENT HOMES LLC. MAP 112F G 005.00, 5116 PACE PARK CIR. PROPERTY VALUE \$294,300.00, ASSESSED VALUE \$73,575.00, AND TAXES \$607.00. DUE TO DEED TRANSFER TO WRONG PARCEL AND CORRECTING ERROR TO CORRECT OWNERSHIP PER MAURY COUNTY TAX ASSESSOR.
 10. REFUND PARTIAL 2024 PROPERTY TAX IN THE NAME OF SOUND INVESTMENT CONCEPT LLC. MAP 099H G 004.00 004, 107 D-8 E 9TH ST. PROPERTY VALUE FROM \$460,400.00 TO \$460,400.00, ASSESSED VALUE FROM \$184,160.00 TO \$115,100.00 AND TAXES FROM \$1,520.00 TO \$950.00. REFUND

DUE TO ERROR IN ASSESSING AT 40% BUT SHOULD BE 25%
PER MAURY COUNTY TAX ASSESSOR.

11. REFUND 2024 PROPERTY TAX IN THE NAME OF WOOD,
TIMOTHY D, ETUX JULIE L WOOD. MAP 112F G 005.00, 5116
PACE PARK CIR. PROPERTY VALUE \$294,300.00, ASSESSED
VALUE \$73,575.00 AND TAXES \$607.00. REFUND DUE TO
DEED TRANSFER TO WRONG PARCEL AND TAXES WERE
ALREADY PAID WHEN ERROR WAS DISCOVERED PER
MAURY COUNTY TAX ASSESSOR.



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Michele Stevens, Administrative Assistant, mstevens@columbiatn.gov, 931-560-1010

AGENDA ITEM TITLE: RESOLUTION NO. 25-13 - A RESOLUTION TO ACCEPT THE OWNERSHIP AND MAINTENANCE OF SEWER IMPROVEMENTS SERVING HAMPSHIRE HILLS

RECOMMENDATION: Approve Resolution No. 25-13

INFORMATION: Hampshire Hills consists of 2,340 linear feet of 8" sanitary sewer main. The Developers met all of the qualifications for acceptance. The Wastewater Department has performed the necessary testing and inspections.

CERTIFICATION:

ATTACHMENTS:

Resolution No. 25-13

Resolution No. 25-13 Dedication Letter

**A RESOLUTION TO ACCEPT THE OWNERSHIP AND MAINTENANCE OF
SEWER IMPROVEMENTS SERVING HAMPSHIRE HILLS**

WHEREAS, The City of Columbia, has been requested to accept ownership and maintenance of 2,340 linear feet of 8" gravity main serving Hampshire Hills; and

WHEREAS, the City of Columbia has inspected said sewer improvements and has determined that said sewer improvements meet the requirements imposed by the City of Columbia.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY OF COLUMBIA, that the City of Columbia does hereby accept the ownership and maintenance of said sanitary sewer improvements serving Hampshire Hills.

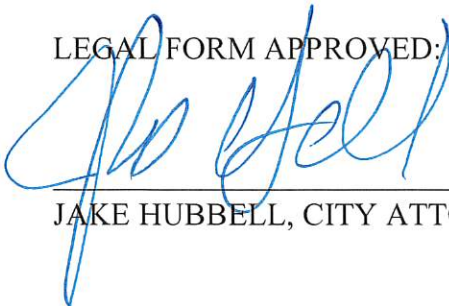
PASSED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF COLUMBIA, TENNESSEE, this the 13th day of February, 2025.

CHARLES (CHAZ) M. MOLDER - MAYOR

ATTEST:

THAD H. JABLONSKI - CITY RECORDER

LEGAL FORM APPROVED:



JAKE HUBBELL, CITY ATTORNEY

Date: 21 January 2025

Columbia City Council
City of Columbia, Tennessee
City Hall
700 North Garden Street
Columbia, Tennessee 38401

Dear Council Members:

I wish to present for dedication to the Council of the City of Columbia, Tennessee, the wastewater system improvements installed to service Hampshire Hills in the amount of 2340 linear feet. The Contractor installed the sanitary sewer according to the Standard Sewer Specifications of the City of Columbia.

You have been provided with CCTV and as-built drawings of the project and all inspections and testing has been completed. All fees required for dedication have been paid. You have also been provided a one-year maintenance surety in the amount of \$56,745.00, set to expire one year from date of Council acceptance.

Acceptance by the Columbia City Council for these wastewater system improvements would be appreciated.

Sincerely,

Signed:



Print: BENJAMIN BEASLEY
MEMBER, CYPRESS HOMES

Lot Numbers included in this dedication: Lots 1-43



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Paul Keltner, AICP, Development Services Director pkeltner@columbiatn.gov 931-560-1560

AGENDA ITEM TITLE: RESOLUTION NO. 25-14 - A RESOLUTION AUTHORIZING THE MAYOR TO SIGN A MEMORANDUM OF UNDERSTANDING WITH MAURY COUNTY 911 REGARDING THE RESPONSIBILITY OF ASSIGNING ALL ADDRESSES WITHIN THE CITY LIMITS OF COLUMBIA - CITYWIDE, FINANCIALLY RESPONSIBLE CITY PROVIDING EXCELLENT SERVICES.

RECOMMENDATION: Approve Resolution No. 25-14.

INFORMATION: TCA §7-8-127(b) allows a municipality to authorize emergency communications to assign and address streets, roads and property numbers relating to such. The Memorandum of Understanding is the agreement with Maury County 911 to be responsible in processing these items in accordance to the fee schedule and the renewable three (3) year term of agreement.

CERTIFICATION: N/A

ATTACHMENTS: Staff Report, Resolution No. 25-14, MOU.

**A RESOLUTION AUTHORIZING THE MAYOR TO SIGN A
MEMORANDUM OF UNDERSTANDING WITH MAURY COUNTY 911
REGARDING THE RESPONSIBILITY OF ASSIGNING ALL ADDRESSES
WITHIN THE CITY LIMITS OF COLUMBIA.**

WHEREAS, Tennessee Code Annotated (TCA) §7-86-127(a) vests municipalities with the authority to name public and private roads and streets, including roads and streets located within residential developments, and to assign property numbers relating to the roads and streets; and

WHEREAS, §7-86-127(b) allows the legislative body of a municipality to delegate the authority to name public and private roads and streets and to assign property numbers relating to roads and streets to the emergency communications district; and

WHEREAS, a Memorandum of Understanding between the City of Columbia and Maury County 911 is necessary to formalize the delegation.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF COLUMBIA, TENNESSEE, delegates to Maury 911 the authority to name public and private roads and streets within the City of Columbia and to assign property numbers relating to those roads and streets, and the City Council authorizes the Mayor to sign the Memorandum of Understanding.

PASSED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF COLUMBIA, TENNESSEE THIS 13TH DAY OF FEBRUARY, 2025.

CHARLES (CHAZ) M. MOLDER, MAYOR

ATTEST:

THAD H. JABLONSKI, CITY RECORDER

LEGAL FORM APPROVED:



JAKE HUBBELL, CITY ATTORNEY

MEMORANDUM OF UNDERSTANDING

Between

City of Columbia, Tennessee

700 N. Garden St., Columbia, TN 38401

And

Maury County 911

2907 Cayce Lane, Columbia, TN 38401

Purpose

This Memorandum of Understanding (MOU) establishes an agreement between the City of Columbia (referred to as the "City") and Maury County 911 (referred to as "911") regarding the responsibility of assigning all addresses within the city limits of Columbia, Tennessee. Maury County 911 will assume responsibility for addressing in accordance with the fee schedule set forth by the Maury County Emergency Communications Board.

Terms of Agreement

1. Scope of Responsibility

- Maury County 911 will take full responsibility for assigning all addresses within the city limits of Columbia, Tennessee.
- The process for assigning street names remains unchanged, with developers or the City continuing to work directly with Maury County 911 unless modifications to the current procedure are requested. Fees to reserve street names will be required.

2. Proposed Handling of Addressing Scenarios

- **Street Name Assignments:**
Developers or the City will work with Maury County 911 for street name assignments under the current procedure unless otherwise modified.
- **Development Projects:**
Addressing for larger developments will be assigned during the final plat approval stage. Developers must allocate sufficient time before final plat submission to ensure completion of the addressing process.
 - A concept plan must be submitted.
 - All approved street names must be labeled on the plat.
 - Lot numbers must not change.
 - If there are any changes to lots, Maury 911 must be notified immediately.
- **Single Address/Infill Lots:**
For single addresses or infill lots, developers must provide a PDF layout clearly showing the structure and its entrance to the street. Addressing requests must include a City of Columbia building permit or be submitted as otherwise directed.

3. Additional Notes

- Maury County 911 will continue participating in monthly screening meetings via in-person attendance, virtual sessions, or email communications.
- Addressing inquiries should be directed to www.maury911.org.
- Updates will be available daily from the FTP site. Maury County 911 can also explore automating the process with a script for nightly updates or as needed.
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4. Backlog of Address Requests

If a backlog of unissued addresses exists at the time of transition, the City of Columbia will retain responsibility for completing those requests.

5. Term of Agreement

- The initial term of this agreement is three (3) years, effective upon the date of the last signature below.
- This agreement will be renewed automatically for successive three-year terms unless terminated in accordance with the provisions outlined below.

6. Termination

Either party may terminate this agreement by providing written notice at least ninety (90) days prior to the intended termination date.

7. Effective Date

This agreement becomes effective upon approval and the execution of signatures below.

Authorized Signatures

For the City of Columbia:

Name:

Title:

Date:

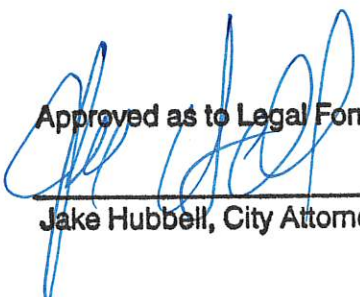
For Maury County 911:

Name:

Title:

Date:

Approved as to Legal Form:



Jake Hubbell, City Attorney



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Lauryn Shockey, Administrative Assistant, LShockey@columbiatn.gov, 931-560-1529

AGENDA ITEM TITLE: RESOLUTION NO. 25-15 - A RESOLUTION ACCEPTING OWNERSHIP AND MAINTENANCE OF THE TRAFFIC SIGNAL AS WELL AS ROADWAY IMPROVEMENTS AT NASHVILLE HIGHWAY AND GREENS MILL ROAD IN THE CITY OF COLUMBIA.

RECOMMENDATION: Approve resolution No. 25-15

INFORMATION: This resolution refers to acceptance for ownership and maintenance of the traffic signal, as well as roadway improvements at Nashville Highway and Greens Mill Road in the City of Columbia. These improvements were a result of multiple subdivisions including Villages at Carters Station, Drumwright, Preserve at Drumwright, The Landings at Greens Mill, and Steadfast at Greens Mill, as outlined in their associated traffic impact studies. The cost of all design and installation were covered by the Developers, and they now wish to turn the improvements over to the City of Columbia for ownership and maintenance.

CERTIFICATION:

ATTACHMENTS: Resolution No. 25-15 Staff Report, Resolution No. 25-15, Dedication Letter

**RESOLUTION ACCEPTING THE TRAFFIC SIGNAL AND ROADWAY
IMPROVEMENTS AT NASHVILLE HWY AND GREENS MILL ROAD IN THE
CITY OF COLUMBIA FOR OWNERSHIP AND MAINTENANCE**

WHEREAS, the City of Columbia, Tennessee, has received a request to accept the traffic signal and roadway improvements at Nashville Hwy and Greens Mill Road located within the city limits of Columbia, Tennessee, for ownership and maintenance; and

WHEREAS, the City of Columbia has inspected said traffic signal and roadway improvements determined that said meet the requirements imposed by the City of Columbia.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY OF COLUMBIA,

that the City of Columbia does hereby accept the ownership and maintenance of said traffic signal and roadway improvements at Nashville Hwy and Greens Mill Road located in the City of Columbia.

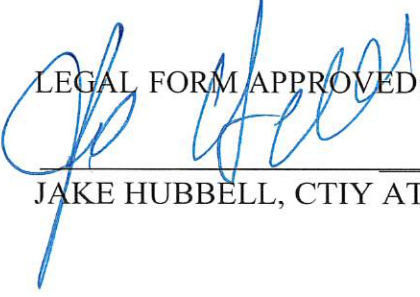
**PASSED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF
COLUMBIA, TENNESSEE**, this is the 13th day of February, 2025.

CHARLES (CHAZ) M. MOLDER, MAYOR

ATTEST:

THAD H. JABLONSKI, CITY RECORDER

LEGAL FORM APPROVED:



JAKE HUBBELL, CITY ATTORNEY



ISO 9001:2015 CERTIFIED

ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS

500 11th Avenue North, Suite 290 • Nashville, TN 37203 • Phone 615.370.8410 • Fax 615.370.8455

January 17, 2025

Mr. Glen Harper
City Engineer
City of Columbia
700 North Garden Street
Columbia, TN 38401

**Re: Traffic Signal – US Hwy 31 at Greens Mill Road
Columbia, TN**

Subject: Request for City of Columbia to Take Ownership of Traffic Signal

Dear Mr. Harper:

This letter is a formal request for the City of Columbia to take ownership of the newly installed traffic signal at the intersection of US Hwy 31 and Greens Mill Road. I am submitting this request on behalf of the Endeavor Real Estate Group for the Citizen House Spring Hill project which is adjacent to the intersection and traffic signal. It is our understanding that the final inspection by the City has occurred and there are no remaining punch list items to be completed.

Please let me know if you have any questions.

Sincerely,
KCI Technologies, Inc.

Brandon Taylor, P.E.
Practice Leader



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Wanda McClain, HR Director, wmccclain@columbiatn.gov 931.560.1574

AGENDA ITEM TITLE: 2ND CONSIDERATION OF ORDINANCE NO. 4539 AS AMENDED - AN ORDINANCE TO AMEND ORDINANCE NO. 4504 THE CLASSIFICATION AND COMPENSATION PLAN FOR THE EMPLOYEES OF THE CITY OF COLUMBIA FOR THE 2024-2025 FISCAL YEAR

RECOMMENDATION: Approve Ordinance No. 4539 on second consideration as amended.

INFORMATION: The 2024-2025 Classification and Compensation Plan for the City of Columbia employees is reviewed and updated as necessary. The Parks and Recreation Department staff is expanding with the purchase of Muletown Recreation, which requires an Aquatics Manager position to oversee three pools and three splash pads. The Grade level for this position will be Grade Level I.

The City of Columbia will add the position of Special Legal Counsel to Section 2, Temporary Positions, of the Classification and Compensation Plan. This position is being created due to the retirement of Tim Tisher, our current City Attorney. Attorney Tisher has twenty-plus years of knowledge of City of Columbia legalities. Attorney Tisher will be temporarily available to counsel City Attorney Jake Hubbell for the introduction period.

The job title for Shift Commander in Fire & Rescue is changing to Battalion Chief, this is only a title change, the grade will remain the same.

The position of Recreation Aide II, Grade Level D is being added to Parks and Recreation.

ATTACHMENTS: Staff Report, Ordinance No. 4539, Exhibit A.

**AN ORDINANCE TO AMEND ORDINANCE NO. 4504 THE CLASSIFICATION AND
COMPENSATION PLAN FOR THE EMPLOYEES OF THE CITY OF COLUMBIA
FOR THE 2024-2025 FISCAL YEAR**

WHEREAS, pursuant to Article 4, and Article 9, of the City Charter, the City of Columbia shall, among other things, establish, alter, or abolish city departments, offices, or agencies and set all salaries in all departments by Ordinance; and

WHEREAS, the city is adding the position of Aquatics Manager to Parks and Recreation Department, Grade I; and

WHEREAS, the city is adding the position of Special Legal Counsel to Section 2: Temporary Positions; and

WHEREAS, the city is changing the job title of Shift Commander in Fire & Rescue, Grade K, to Battalion Chief, Grade K; and

WHEREAS, the city is adding the position of Recreation Aide II to Parks and Recreation Department, Grade D.

NOW THEREFORE, BE IT ORDAINED BY THE CITY OF COLUMBIA:

Section 1: The classification and compensation plan as amended for the employees of the City of Columbia for the fiscal year of 2024-2025 which is attached hereto as Exhibit A and incorporated herein by reference is approved.

Section 2: This ordinance shall take effect February 13, 2025.

PASSED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF COLUMBIA,
TENNESSEE, THIS THE ____ OF ____, 2025.

CHARLES (CHAZ) M. MOLDER, MAYOR

ATTEST:

THAD H. JABLONSKI, CITY RECORDER

LEGAL FORM APPROVED:



JAKE HUBBELL, CITY ATTORNEY

APPROVED FOR FIRST CONSIDERATION:

ANTHONY R. MASSEY, CITY MANAGER

Passed 1st Consideration _____

Passed 2nd Consideration _____

City of Columbia
Classification and Compensation Plan FY 2024-2025

Exhibit A

Part time regular employees will receive increase at the same rate and time as regular full time employees and are authorized to work a maximum of 1456 hours per year, (28 hours per week)

Section 1: All full and part time regular employees will be paid from the following:

Department	Job Title	Annual Hours	Pay Grade	Beginning		Maximum	
				Hourly	Annualized	Hourly	Annualized
CITY MANAGER	Assistant City Manager**	2,080	O	56.73	117,998	76.75	159,640
CITY MANAGER	Tourism and Marketing Director**	2,080	M	45.22	94,058	61.18	127,254
CITY MANAGER	PIO/Communications Coordinator**	2,080	H	25.66	53,373	34.72	72,218
CITY MANAGER	Executive Secretary	2,080	H	25.66	53,373	34.72	72,218
CITY MANAGER	Marketing Coordinator	2,080	G	22.91	47,653	30.99	64,459
CITY MANAGER	Administrative Assistant	2,080	E	18.26	37,981	24.70	51,376
DEVELOPMENT SERV	Director of Development Services**	2,080	N	50.65	105,352	68.53	142,542
DEVELOPMENT SERV	City Engineer**	2,080	N	50.65	105,352	68.53	142,542
DEVELOPMENT SERV	Assistant City Engineer**	2,080	M	45.22	94,058	61.18	127,254
DEVELOPMENT SERV	City Planner**	2,080	M	45.22	94,058	61.18	127,254
DEVELOPMENT SERV	Chief Building Official**	2,080	L	40.38	83,990	54.63	113,630
DEVELOPMENT SERV	Engineer II **	2,080	L	40.38	83,990	54.63	113,630
DEVELOPMENT SERV	Principal Planner **	2,080	K	36.05	74,984	48.77	101,442
DEVELOPMENT SERV	GIS Analyst	2,080	K	36.05	74,984	48.77	101,442
DEVELOPMENT SERV	Engineer I	2,080	J	32.18	66,934	43.54	90,563
DEVELOPMENT SERV	Building & Codes Asst Chief	2,080	I	28.74	59,779	38.88	80,870
DEVELOPMENT SERV	Planner II **	2,080	I	28.74	59,779	38.88	80,870
DEVELOPMENT SERV	Building Inspector II	2,080	H	25.66	53,373	34.72	72,218
DEVELOPMENT SERV	Planner I	2,080	H	25.66	53,373	34.72	72,218
DEVELOPMENT SERV	Engineering Inspector	2,080	H	25.66	53,373	34.72	72,218
DEVELOPMENT SERV	Engineering Associate	2,080	G	22.91	47,653	30.99	64,459
DEVELOPMENT SERV	Building Inspector I	2,080	G	22.91	47,653	30.99	64,459
DEVELOPMENT SERV	Engineering Technician	2,080	G	22.91	47,653	30.99	64,459
DEVELOPMENT SERV	Code Enforcement Officer	2,080	G	22.91	47,653	30.99	64,459
DEVELOPMENT SERV	Administrative Assistant	2,080	E	18.26	37,981	24.70	51,376
DEVELOPMENT SERV	Planning Technician	2,080	E	18.26	37,981	24.70	51,376
DEVELOPMENT SERV	Permit Technician	2,080	E	18.26	37,981	24.70	51,376
DEVELOPMENT SERV	Building Maintenance and Custodian	2,080	D	16.30	33,904	22.06	45,885
DEVELOPMENT SERV	Custodial Worker	1,456	C	14.56	21,199	19.70	28,683
FINANCE / CITY RECORDER	Finance Director / Asst. City Manager / City Recorder**	2,080	P	63.54	132,163	85.96	178,797
FINANCE / CITY RECORDER	Finance Director**	2,080	N	50.65	105,352	68.53	142,542
FINANCE / CITY RECORDER	Assistant Finance Director**	2,080	L	40.38	83,990	54.63	113,630
FINANCE / CITY RECORDER	City Recorder**	2,080	L	40.38	83,990	54.63	113,630
FINANCE / CITY RECORDER	Assistant City Recorder**	2,080	K	36.05	74,984	48.77	101,442
FINANCE / CITY RECORDER	Benefits Administrator	2,080	J	32.18	66,934	43.54	90,563
FINANCE / CITY RECORDER	Purchasing Agent**	2,080	I	28.74	59,779	38.88	80,870
FINANCE / CITY RECORDER	Staff Accountant	2,080	I	28.74	59,779	38.88	80,870
FINANCE / CITY RECORDER	Senior Accounting Technician	2,080	G	22.91	47,653	30.99	64,459
FINANCE / CITY RECORDER	Accounting Specialist	2,080	G	22.91	47,653	30.99	64,459
FINANCE / CITY RECORDER	Court and Internal Records Administrator	2,080	F	20.46	42,557	27.68	57,574
FINANCE / CITY RECORDER	Accounting Technician	2,080	E	18.26	37,981	24.70	51,376
FIRE AND RESCUE	Fire Chief**	2,080	O	56.73	117,998	76.75	159,640
FIRE AND RESCUE	Deputy Fire Chief **	2,080	N	50.65	105,352	68.53	142,542
FIRE AND RESCUE	Assistant Fire Chief - Emergency Management**	2,080	M	45.22	94,058	61.18	127,254
FIRE AND RESCUE	Assistant Fire Chief - Admin**	2,080	M	45.22	94,058	61.18	127,254
FIRE AND RESCUE	Assistant Fire Chief - Suppression**	2,080	M	45.22	94,058	61.18	127,254
FIRE AND RESCUE	Chief Training Fire Officer **	2,080	K	36.05	74,984	48.77	101,442
FIRE AND RESCUE	Fire Marshal	2,080	K	36.05	74,984	48.77	101,442
FIRE AND RESCUE	Battalion Chief	2,764	K	27.13	74,984	36.70	101,442
FIRE AND RESCUE	Fire Captain	2,080	J	32.18	66,934	43.54	90,563
FIRE AND RESCUE	Fire Captain - OEM	2,764	J	24.22	66,934	32.77	90,563
FIRE AND RESCUE	Assistant Fire Marshal	2,080	J	32.18	66,934	43.54	90,563
FIRE AND RESCUE	Fire Lieutenant	2,764	I	21.63	59,779	29.26	80,870

CITY OF COLUMBIA
JOB TABLE BY
DEPARTMENT

Department	Job Title	Annual Hours	Pay Grade	Beginning		Maximum	
				Hourly	Annualized	Hourly	Annualized
FIRE AND RESCUE	Medical Officer	1,456	I	28.74	41,845	38.88	56,609
FIRE AND RESCUE	Fire Inspector	2,080	H	25.66	53,373	34.72	72,218
FIRE AND RESCUE	Community Risk Reduction Officer	2,080	H	25.66	53,373	34.72	72,218
FIRE AND RESCUE	Fire Engineer	2,764	H	19.31	53,373	26.13	72,218
FIRE AND RESCUE	Firefighter	2,764	G	17.24	47,653	23.32	64,459
FIRE AND RESCUE	Building Maintenance	2,080	F	20.46	42,557	27.68	57,574
FIRE AND RESCUE	Fire Cadet	1,456	F	15.40	22,422	20.83	30,328
FIRE AND RESCUE	Administrative Assistant	2,080	E	18.26	37,981	24.70	51,376
MIS	MIS Director**	2,080	N	50.65	105,352	68.53	142,542
MIS	System Administrator**	2,080	K	36.05	74,984	48.77	101,442
MIS	Network Administrator**	2,080	H	25.66	53,373	34.72	72,218
MIS	PC Specialist	2,080	G	22.91	47,653	30.99	64,459
PARKS AND RECREATION	Director of Parks and Recreation**	2,080	N	50.65	105,352	68.53	142,542
PARKS AND RECREATION	Assistant Director Parks and Rec**	2,080	K	36.05	74,984	48.77	101,442
PARKS AND RECREATION	Marketing and Communications Manager	2,080	J	32.18	66,934	43.54	90,563
PARKS AND RECREATION	P & R Maintenance Supervisor	2,080	J	32.18	66,934	43.54	90,563
PARKS AND RECREATION	Aquatics Manager	2,080	I	28.74	59,779	38.88	80,870
PARKS AND RECREATION	Operation - Athletics Manager	2,080	I	28.74	59,779	38.88	80,870
PARKS AND RECREATION	Recreation Manager	2,080	I	28.74	59,779	38.88	80,870
PARKS AND RECREATION	Crew Leader - Parks and Recreation	2,080	H	25.66	53,373	34.72	72,218
PARKS AND RECREATION	Turf Manager	2,080	G	22.91	47,653	30.99	64,459
PARKS AND RECREATION	Recreation Coordinator	2,080	F	20.46	42,557	27.68	57,574
PARKS AND RECREATION	Equipment Operator	2,080	E	18.26	37,981	24.70	51,376
PARKS AND RECREATION	Building and Grounds Maintenance II	2,080	E	18.26	37,981	24.70	51,376
PARKS AND RECREATION	Recreation Programmer	2,080	E	18.26	37,981	24.70	51,376
PARKS AND RECREATION	Administrative Assistant	2,080	E	18.26	37,981	24.70	51,376
PARKS AND RECREATION	Recreation Aide II	2,080	D	16.30	33,904	22.06	45,885
PARKS AND RECREATION	Building and Grounds Maintenance I	2,080	D	16.30	33,904	22.06	45,885
PARKS AND RECREATION	Recreation Aide	1,456	B	13.00	18,928	17.58	25,596
HUMAN RESOURCES	Director of Human Resources**	2,080	M	45.22	94,058	61.18	127,254
HUMAN RESOURCES	HR Specialist - Administrative	2,080	G	22.91	47,653	30.99	64,459
POLICE DEPARTMENT	Police Chief**	2,080	O	56.73	117,998	76.75	159,640
POLICE DEPARTMENT	Assistant Police Chief**	2,080	N	50.65	105,352	68.53	142,542
POLICE DEPARTMENT	Police Captain**	2,080	M	45.22	94,058	61.18	127,254
POLICE DEPARTMENT	Police Lieutenant	2,236	K	36.05	80,608	48.77	109,050
POLICE DEPARTMENT	Police Sergeant	2,236	J	32.18	71,954	43.54	97,355
POLICE DEPARTMENT	Police Corporal	2,236	I	28.74	64,263	38.88	86,936
POLICE DEPARTMENT	Crime Analyst	2,080	H	25.66	53,373	34.72	72,218
POLICE DEPARTMENT	Police Officer	2,236	G	22.91	51,227	30.99	69,294
POLICE DEPARTMENT	Records Supervisor	2,080	G	22.91	47,653	30.99	64,459
POLICE DEPARTMENT	Administrative Assistant	2,080	F	20.46	42,557	27.68	57,574
POLICE DEPARTMENT	Fleet/Equipment Coordinator	2,080	F	20.46	42,557	27.68	57,574
POLICE DEPARTMENT	Evidence Technician	2,080	F	20.46	42,557	27.68	57,574
POLICE DEPARTMENT	Police Records Clerk	2,080	E	18.26	37,981	24.70	51,376
POLICE DEPARTMENT	Animal Control Officer	2,080	E	18.26	37,981	24.70	51,376
POLICE DEPARTMENT	Building Maintenance Custodian	2,080	D	16.30	33,904	22.06	45,885
POLICE DEPARTMENT	PT Litter Officer	1,040	D	16.30	16,952	22.06	22,942
POLICE DEPARTMENT	Parking Control Officer	1,456	C	14.56	21,199	19.70	28,683

CITY OF COLUMBIA
JOB TABLE BY
DEPARTMENT

Department	Job Title	Annual Hours	Pay Grade	Beginning		Maximum	
				Hourly	Annualized	Hourly	Annualized
SANITATION	Sanitation Supervisor	2,080	I	28.74	59,779	38.88	80,870
SANITATION	Sanitation Specialist	2,080	H	25.66	53,373	34.72	72,218
SANITATION	Crew Leader Sanitation	2,080	H	25.66	53,373	34.72	72,218
SANITATION	Sanitation Operator II	2,080	F	20.46	42,557	27.68	57,574
SANITATION	Sanitation Operator I	2,080	E	18.26	37,981	24.70	51,376
STREET DEPARTMENT	Director of Public Works**	2,080	N	50.65	105,352	68.53	142,542
STREET DEPARTMENT	Assistant Director of Public Works**	2,080	L	40.38	83,990	54.63	113,630
STREET DEPARTMENT	Traffic Maintenance Supervisor	2,080	J	32.18	66,934	43.54	90,563
STREET DEPARTMENT	Fleet Supervisor	2,080	I	28.74	59,779	38.88	80,870
STREET DEPARTMENT	Street Maintenance Supervisor	2,080	I	28.74	59,779	38.88	80,870
STREET DEPARTMENT	Traffic Maintenance Technician II	2,080	H	25.66	53,373	34.72	72,218
STREET DEPARTMENT	Crew Leader	2,080	H	25.66	53,373	34.72	72,218
STREET DEPARTMENT	Equipment Mechanic	2,080	G	22.91	47,653	30.99	64,459
STREET DEPARTMENT	Traffic Maintenance Technician I	2,080	G	22.91	47,653	30.99	64,459
STREET DEPARTMENT	Sign Technician II	2,080	G	22.91	47,653	30.99	64,459
STREET DEPARTMENT	Concrete Worker	2,080	F	20.46	42,557	27.68	57,574
STREET DEPARTMENT	Sign Technician I	2,080	F	20.46	42,557	27.68	57,574
STREET DEPARTMENT	Equipment Operator II	2,080	F	20.46	42,557	27.68	57,574
STREET DEPARTMENT	Equipment Operator I	2,080	E	18.26	37,981	24.70	51,376
STREET DEPARTMENT	Fleet Equipment Coordinator	2,080	E	18.26	37,981	24.70	51,376
STREET DEPARTMENT	Administrative Assistant	2,080	E	18.26	37,981	24.70	51,376
STREET DEPARTMENT	Public Works Maintenance Worker	1,456	D	16.30	23,733	22.06	32,119
STREET DEPARTMENT	Part-Time Custodian	1,456	C	14.56	21,199	19.70	28,683
Tourism & Main Street Marketing	Main Street Manager **	2,080	I	28.74	59,779	38.88	80,870
Tourism & Main Street Marketing	Visitor Services Assistant	1,040	D	16.30	16,952	22.06	22,942
WASTEWATER	Director of Wastewater**	2,080	N	50.65	105,352	68.53	142,542
WASTEWATER	Assistant Wastewater Director**	2,080	L	40.38	83,990	54.63	113,630
WASTEWATER	Engineer II**	2,080	L	40.38	83,990	54.63	113,630
WASTEWATER	Wastewater Plant Superintendent**	2,080	L	40.38	83,990	54.63	113,630
WASTEWATER	Wastewater Collection Superintendent**	2,080	L	40.38	83,990	54.63	113,630
WASTEWATER	Wastewater CMOM/GIS Coordinator**	2,080	K	36.05	74,984	48.77	101,442
WASTEWATER	Laboratory and Pretreatment Manager**	2,080	K	36.05	74,984	48.77	101,442
WASTEWATER	WW Civil Engineer**	2,080	J	32.18	66,934	43.54	90,563
WASTEWATER	Engineer I	2,080	J	32.18	66,934	43.54	90,563
WASTEWATER	Chief Operator	2,080	I	28.74	59,779	38.88	80,870
WASTEWATER	Foreman - Sewer Rehabilitation	2,080	I	28.74	59,779	38.88	80,870
WASTEWATER	Laboratory Manager	2,080	I	28.74	59,779	38.88	80,870
WASTEWATER	Pump Station Maintenance Supervisor	2,080	I	28.74	59,779	38.88	80,870
WASTEWATER	Pretreatment Coordinator	2,080	I	28.74	59,779	38.88	80,870
WASTEWATER	WW Plant Operator III	2,080	H	25.66	53,373	34.72	72,218
WASTEWATER	Inspector Utility Locator	2,080	G	22.91	47,653	30.99	64,459
WASTEWATER	WW Collection Technician	2,080	G	22.91	47,653	30.99	64,459
WASTEWATER	Engineering Technician	2,080	G	22.91	47,653	30.99	64,459
WASTEWATER	Lab Specialist	2,080	G	22.91	47,653	30.99	64,459
WASTEWATER	Wastewater Maintenance Worker	2,080	G	22.91	47,653	30.99	64,459
WASTEWATER	WW Plant Operator II	2,080	G	22.91	47,653	30.99	64,459
WASTEWATER	Safety Coordinator	2,080	F	20.46	42,557	27.68	57,574
WASTEWATER	Equipment Operator II	2,080	F	20.46	42,557	27.68	57,574
WASTEWATER	WW Plant Operator I	2,080	F	20.46	42,557	27.68	57,574
WASTEWATER	Administrative Assistant	2,080	E	18.26	37,981	24.70	51,376
WASTEWATER	Equipment Operator I	2,080	E	18.26	37,981	24.70	51,376
WASTEWATER	Operation Worker	2,080	E	18.26	37,981	24.70	51,376
WASTEWATER	Part-Time Administrative Assistant	1,456	D	16.30	23,733	22.06	32,119
WASTEWATER	Part Time Grounds Maintenance	1,456	D	16.30	23,733	22.06	32,119
Note - Promotional	Senior Administrative Assistant	2,080	F	20.46	42,557	27.68	57,574
Grade F - Position available to promote administrative assistants with significantly increased duties and job responsibilities.							
Exempt Employees**							

Department	Job Title	Annual Hours	Pay Grade	Beginning		Maximum	
				Hourly	Annualized	Hourly	Annualized

Section 2: Temporary Positions - Authorize part time positions working less than 1456 hours per year (28 hours per week) and full time temporary positions working less than 1456 hours per year and lasting less than five months to be paid as follows:

Position	Minimum	Maximum
Lifeguard	\$13.00	\$18.34
Head Lifeguard	\$14.55	\$20.55
Utility Worker	\$11.67	\$14.90
Facility Attendant	\$11.67	\$14.90
Pool Manager	\$18.26	\$25.78
School Crossing Guards	\$50.00 per day(s) worked	
Special Legal Counsel	\$3,173.07 bi-weekly	

Section 3: Appointments - Appointments made by the Mayor or City Council shall be paid a bi-weekly stipend as follows:

City Judge	\$961.54 bi-weekly if sitting as judge; \$120.19 per week when absent.
City Judge Pro Tem	\$721.16 Bi-weekly if sitting as judge.
Prosecuting Attorney	\$755.54 Biweekly

Section 4: Elected Officials - Elected Officials shall be paid bi-weekly as follows:

Mayor	\$346.16
Vice Mayor	\$276.96
Council Member	\$230.77

City of Columbia				
GRADE	BEGINNING		MAXIMUM	
	2080 HOURS	2764 HOURS	2080 HOURS	2764 HOURS
A	11.60		15.70	
B	13.00		17.58	
C	14.56		19.70	
D	16.30		22.06	
E	18.26	13.74	24.70	18.59
F	20.46	15.40	27.68	20.83
G	22.91	17.24	30.99	23.32
H	25.66	19.31	34.72	26.13
I	28.74	21.63	38.88	29.26
J	32.18	24.22	43.54	32.77
K	36.05	27.13	48.77	36.70
L	40.38	30.39	54.63	41.11
M	45.22		61.18	
N	50.65		68.53	
O	56.73		76.75	
P	63.54		85.96	

GRADE	BEGINNING	MAXIMUM
A	24,128	32,656
B	27,040	36,566
C	30,285	40,976
D	33,904	45,885
E	37,981	51,376
F	42,557	57,574
G	47,653	64,459
H	53,373	72,218
I	59,779	80,870
J	66,934	90,563
K	74,984	101,442
L	83,990	113,630
M	94,058	127,254
N	105,352	142,542
O	117,998	159,640
P	132,163	178,797



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Paul Keltner, AICP, Development Services Director pkeltner@columbiatn.gov 931-560-1560

AGENDA ITEM TITLE: 1ST CONSIDERATION ON ORDINANCE NO. 4536 - AN ORDINANCE AMENDING ORDINANCE NO. 4400, THE SAME BEING THE ZONING ORDINANCE FOR THE CITY OF COLUMBIA, TENNESSEE REGARDING BUILDING, LOT AND SITE STANDARDS IN ARTICLE 4 BY REPEALING SUCH ARTICLE AND REPLACING IT WITH A NEW ARTICLE 4 BUILDING, LOT AND BUILDING SITE STANDARDS - CITYWIDE, MORE ATTRACTIVE, LIVABLE CITY.

RECOMMENDATION: Approve Ordinance 4536 on first consideration.

INFORMATION: The Department of Development Services is requesting to amend the Article 4 of Zoning Ordinance 4400. The proposed amendments include Uses, Limitations and Standards regarding Short Term Rentals, Home Occupations, Vape, Tobacco, & Cannabinoids, and Bars, Taverns & Nightclubs. The Planning Commission recommended approval of this request with a vote of 6-0 at their December 4, 2024 meeting with the conditions from the Planning Commission recommending:

- That within the Columbia Arts District Overlay the applicant shall demonstrate that no pre-existing place of Worship, School, or Public Park be located within 200 ft. (reduced from 500 ft.) of a proposed bar, tavern, or nightclub.
- Modification of the Planning Fee Schedule for Short Rentals requiring Conditional Use Approval with the Board of Zoning Appeals to be \$300 with staff approval of Short-Term Rentals being \$150.
- That the separation requirement for Tobacco, Vape, and Cannabinoid Retailers be increased from 500 feet to 1,000 feet from an already existing establishment from a new proposed Tobacco, Vape, and Cannabinoid Retailer, and keeping the separation of such newly established retailer from Schools, parks, and religious facilities remain at 500 feet and not allowed with a CD-5 district as drafted by Staff.

CERTIFICATION: N/A

ATTACHMENTS: Ordinance 4536; Exhibit A; Home Occupation Use Table; STR Posting; STR Use Table Parking; Vape_CBD Use Table; BarTavernNightClub Limitations; Home Occ Limitations; STR Limitations; VapeTobaccoCannabinoid Limitations; DS Staff Report.

AN ORDINANCE AMENDING ORDINANCE NO. 4400, THE SAME BEING THE ZONING ORDINANCE OF THE CITY OF COLUMBIA, TENNESSEE BY REPEALING ARTICLE 4 AND REPLACING SUCH ARTICLE WITH NEW ARTICLE 4 BUILDING, LOT AND BUILDING SITE STANDARDS.

WHEREAS, Section §13-7-201 of the Tennessee Code Annotated empowers the city to enact a zoning ordinance and to provide for its administration, enforcement, and amendment; and

WHEREAS, the City Council deems it necessary for the purpose of promoting the health, safety, morals and general welfare of the city to enact such an ordinance; and

WHEREAS, the City Council, pursuant to the provisions of Section §13-4-101 of the Tennessee Code Annotated has appointed a Planning Commission to recommend the appropriate regulations to be enforced therein; and

WHEREAS, on the 4th day of December 2024, the Planning Commission reviewed and recommended specific changes in accordance to Section 8.5.18, to the Zoning Ordinance regarding Building, Lot and Building Site Standards in Article 4. As a result, Article 4 is being repealed in its entirety and replaced with a new Article 4 which is attached hereto as Exhibit A and incorporated herein by reference. Said recommendations are being considered after a public hearing held on the 9th day of January, 2025, notice of which was published in the Daily Herald of Columbia fifteen (15) days or more prior to said meeting; and

NOW, THEREFORE, BE IT ORDAINED BY THE CITY OF COLUMBIA:

Section 1: That Ordinance number 4400, the same being the Zoning Ordinance of the City of Columbia, Tennessee is hereby amended repealing Article 4 in its entirety and replacing such Article with a new Article 4, Building, Lot, and Building Site Standards which is attached hereto as Exhibit A and incorporated herein by reference;

Section 2: That pursuant to Section 8.5.18.J.4, the City Council makes the following specific findings:

- a. The extent to which the proposed Zoning Ordinance Amendment is consistent with the remainder of this Ordinance, including, specifically, any purpose and intent statements;
- b. The extent to which the proposed Zoning Ordinance Amendment represents a new idea not considered in this Ordinance, or represents a revision necessitated by changing circumstances over time;
- c. Whether or not the proposed Zoning Ordinance Amendment corrects an error in this Ordinance; and
- d. Whether or not the proposed Zoning Ordinance Amendment revises this Ordinance to comply with state or federal statutes or case law.

Section 3: That ordinances or parts of ordinances in conflict herewith are hereby repealed

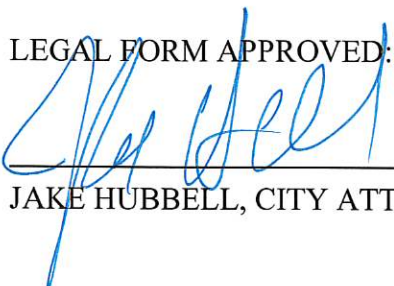
PASSED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF
COLUMBIA, TENNESSEE, this the 13th day of February, 2025.

CHARLES (CHAZ) M. MOLDER, MAYOR

ATTEST:

THAD H. JABLONSKI, CITY RECORDER

LEGAL FORM APPROVED:



JAKE HUBBELL, CITY ATTORNEY

APPROVED FOR FIRST CONSIDERATION:

ANTHONY R. MASSEY – CITY MANAGER

Passed on 1st consideration _____

Passed on 2nd consideration: _____

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

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ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

ARTICLE 4 BUILDING, LOT & SITE STANDARDS

SECTION 4.1 GENERAL

This Article applies to all Buildings, Lots, and Building Sites located or proposed within the City, except as otherwise provided in Section 1.22 with respect to Nonconformities.

SECTION 4.2 PLAN REQUIRED

No Building shall be constructed, re-constructed, Altered, modified, raised, moved, extended, reduced, or enlarged, and no Lot or Building Site or other land shall be Developed, re-Developed, Improved, subdivided, or re-subdivided, and none of the same shall be used, except in compliance with this Article 4, the Official Zoning Map, and pursuant to a Development Plan or Master PUD Development Plan that conforms with and has been prepared, submitted, reviewed and approved in accordance with Article 8 (Administration, Procedures & Enforcement), this Article 4, and all other standards and requirements applicable thereto.

SECTION 4.3 BUILDING, LOT & BUILDING SITE STANDARD

4.3.1 CIVIC DISTRICT BUILDINGS & LOTS

A. Definitions

The terms Civic District, Civic Space and Civic Building are defined in **Article 9 (Definitions)**.

B. Design; Compliance

If a Building, Lot, or Building Site is located within an area designated on the Official Zoning Map as Civic District, Civic Space or Civic Building.

1. Civic Space shall be designed generally as described in **Table 5.3.3-A (Civic Space Types - Summary)** and **Table 5.3.3-B (Civic Space Types - Specific Standards)**, as related to the Adjacent District, or if Adjacent more than one, as related to the Adjacent District with the largest number of linear feet of common boundary with the Civic Space.
2. Development, re-Development, Lots, Buildings, Building Sites, Structures, and Improvements and Use thereof within Civic Districts must comply with the applicable standards and requirements of **Table 4.3.1-N (District Standards-Civic)**, subject, however, to Section 4.3.1.B.4.
3. Without limitation to Section 4.3.1.B.2, Civic Buildings within Civic Districts must comply with the standards and requirements of Table 4.3.1-N(District Standards-Civic) and any other requirements as may be determined by the City Council.
4. Buildings operated for Civic purposes but not located within a Civic District must comply with the applicable District standards of the District in which they are situated.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

4.3.2 DISTRICT BUILDINGS, LOTS & BUILDING SITES

The standards for Buildings, Lots, and Building Sites within Districts are set forth in this Section 4.3 and elsewhere in this Ordinance.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-2 TABLE 4.3.1-A DISTRICT STANDARDS: RURAL CHARACTER DISTRICT



General Description

The CD-2 Rural Character District consists of large-lot semi-rural estates, open spaces, and legacy agricultural operations in low density single-family detached Residential areas. CD-2 is an appropriate District for the Rural Transition and Hillsides & Natural Spaces future land use Character Areas described in the Comprehensive Plan.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-2 TABLE 4.3.1-A DISTRICT STANDARDS: RURAL CHARACTER DISTRICT

Density / Floor Area Ratio (FAR)

**Applicable only to Development Parcels*

1 Density Unit per acre max

BLOCK SIZE*

**Applicable only to Development Parcels*

Block Perimeter

NR

Private Frontage Types

Common Yard	P	Stepfront	NP
Porch	P	Shopfront	NP
Fence	P	Gallery	NP
Terrace/Lightwell	NP	Arcade	NP
Forecourt	NP	Officefront	NP
Stoop	NP		

See Table 4.3.7.A (Private Frontage Types)

Civic Space Types*

**Applicable only to Development Parcels*

Natural Area	P	Playground	P
Green	P	Sport Field	P
Square	NP	Community Garden	P
Plaza	NP	Pocket Park	NP

See Table 5.3.3.A (Civic Space Types - Summary) and Table 5.3.3.B (Civic Space - Specific Standards)

Permitted Uses

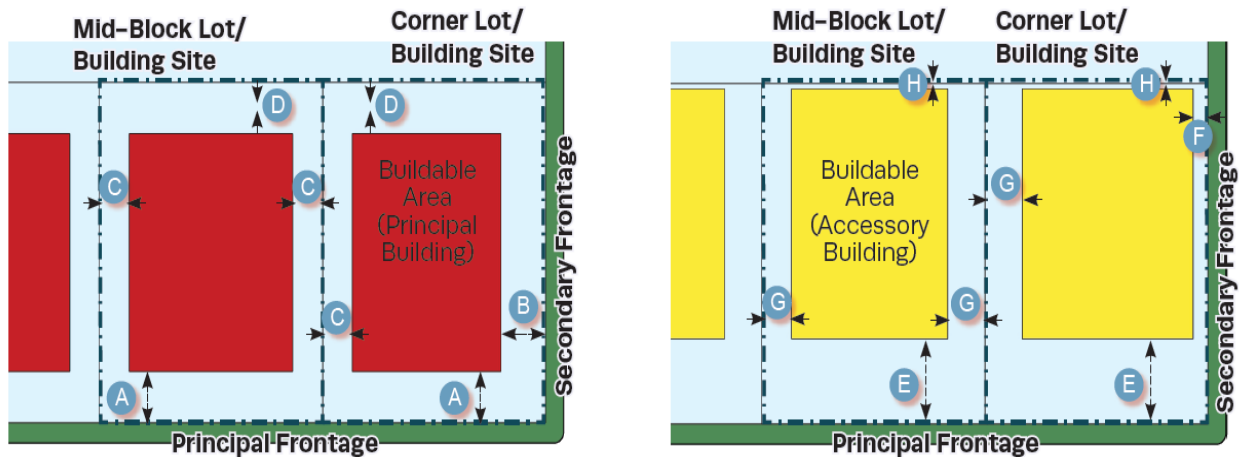
See Table 4.3.9.A-1 (Building, Lot & Building Site Principal Use), Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses), and Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses). For Development Parcels, see also Table 5.1.7 (Principal Use Mix).

Number of Buildings

Principal Building	1 max
Accessory Buildings	2 max

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-2 **TABLE 4.3.1-A DISTRICT STANDARDS:**
RURAL CHARACTER DISTRICT



Lot Occupation

Lot/ Building Site Width	125 ft. min.
Frontage Buildout	NR
Lot/ Building Site Area	12,500 sp. ft. min.
Impervious Surface Coverage	NR
Lot/ Building Site Enfrontment	Must enfront a vehicular Thoroughfare
Lot/ Building Site Access	All lots must have legal and physical vehicular access to a vehicular Thoroughfare via Driveway or Easement.

Setbacks / Yards

Setbacks / Yards – Principal Building			Setbacks / Yards – Accessory Building		
Front Setback / Yard, Principal Frontage	30 ft. min	A	Front Setback / Yard, Principal Frontage	20 ft. min + Principal Building Front Setback / Yard	E
Front Setback / Yard, Secondary Frontage	30 ft. min	B	Front Setback / Yard, Secondary Frontage	30 ft. min	F
Side Setback / Yard, each side	20 ft. min	C	Side Setback / Yard, each side	20 ft. min	G
Rear Setback	30 ft. min; or 15 ft. min from center line of Rear Alley	D	Rear Setback	5 ft. min	H

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-2 TABLE 4.3.1-A DISTRICT STANDARDS: RURAL CHARACTER DISTRICT

Building Standards

Building Height*

Principal Building 3 Stories max

Accessory Building 2 Stories max

*Stories and height do not include Attics and Basements, chimneys, flagpoles, towers, spires, belfries, parapet walls, aerials, or antennas. Any Building exceeding 35 feet in height must obtain approval from the stipulations made by the Fire Department in accordance with the above cited codes shall be required.

*The Fire Department may stipulate special fire measures in accordance with National Fire Protection Association and International Building Code criteria as a condition of approval of such Structure. In such instance stipulations made by the Fire Department in accordance to with the above cited codes shall be required. *

Ceiling Height

NR

Building Composition

Vertical Composition Each Principal Building must have an identifiable Base, Middle, & Cap

Finished Floor Level NR

Façade

Main Entrance Main Entrance must be in Façade of Principal Frontages, located no further than 50% of the total Façade width for the Principal Frontage from the First Layer

Façade Position Parallel to straight Frontage Line or to tangent of curved Frontage Line

Façade & Façade Element Design NR

Proportions

Blank Walls NP at Frontage

Porch Frontages Min. 6 ft. clear depth, excluding rails, pillars, columns or other features

Roof Type & Pitch

Flat NP

Shed P at rear only and if ridge is attached to an exterior Building wall; except for porches, stoops or dormers which may have a shed rood anywhere on the Building.

Hip P

Gable P

Pitch 6:12 – 6:14, except for shed roofs which may be 3:12 – 14:12 and except rood pitch may match the primary roof pitch of an existing Building that is less than 6:12

Roof Design

Eaves shall extend no less than nine inches beyond the supporting walls.

Gable end rakes shall overhang at least six inches.

Eaves and rakes on Accessory Buildings and dormers shall overhang at least six inches.

Soffits shall be placed perpendicular to the Building wall, not sloping in plane with the roof (except for gable end rakes).

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-2 **TABLE 4.3.1-A DISTRICT STANDARDS:**
RURAL CHARACTER DISTRICT

Building Materials Continued

Building Materials

Primary Building	Brick	P	Exposed concrete	NP
Material on Facades	Natural stone	P	Vinyl siding	P
	Wood	P	Aluminum siding	NP
	Cementitious siding	P	Corrugated and/or sheet metal	NP
	Authentic stucco over masonry	P		
Changes in Building Materials	Primary materials must continue alongside Elevations through 2 nd layer. Primary materials shall continue for entire length of all Facades facing a frontage. Any material changes must coincide with form, structural, or massing changes and shall not occur at outside corner of any such change.			
Building Colors				
Foundation Cladding	Required; brick, stone, or stucco except renovations and minor expansions of existing structures may match current material, or absence of cladding.			
Porch Pier Cladding	Required; brick or stone, with any space under Porch concealed by painted or stained latticework between piers, except renovations and minor expansions of existing structures, pier cladding, or absence of cladding, may match current material.			
Chimney Cladding	Required; brick, natural stone, with material matching primary material of Façade			

Building Types

House	P	Commercial	NP
Duplex	NP	Mixed Use	NP
Townhouse	NP	Flex	NP
Small Multifamily	NP	Mid-Rise	NP
Large Multifamily	NP	Large Scale Commercial	NP
Live/Work	NP	Civic	P

See *Table 4.3.8.A (Principal Building Types - Summary)* and *Table 4.3.8.B (Principal Building Types - Specific Standards)*. For Development Parcels, see also *Table 5.1.6 (Building Type Mix)*.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-2 **TABLE 4.3.1-A DISTRICT STANDARDS:**
RURAL CHARACTER DISTRICT

Vehicular Parking Requirements		
Parking Location	On-Street Parking	Off-Street Parking
Domestic Vehicles	P	P in 3 rd Layer only, and in Driveway
Recreational Vehicles	NP	P in 3 rd Layer only, and in Driveway
Heavy Equipment	NP	P in 3 rd Layer only, and in Driveway
Tractor trailers (including trailers for storage)	NP on-Street, except for delivery and Temporary Use of trailers	NP
All other vehicles	NP	P in 3 rd Layer only, and in Driveway

Additional Parking Requirements	
Off-Street Parking Surface	P Prepared surface of gravel, asphalt, concrete, or other hard surface
Garage Location	In 2 nd or 3 rd Layer only; Min interior dimensions 10 ft. x 20 ft. per vehicle Parking space
Garage Design	If Garage faces Street in 1 st or 2 nd layer: max. Garage door width 33% of total Garage
Driveway/ Vehicular Entrance Location	P in any Layer
Driveway/ Vehicular Entrance Maximum Width	10' – 20' in 1 st Layer
Parking Structure	NP
Parking Structure Pedestrian Exit Location	N/A

Bicycle Parking

See Section 4.3.13

Thoroughfare & Internal Drive Types*

* Applicable only to Development Parcels

See Article 5 (Development Parcel Standards) for additional requirements

Loading & Access

Off-Street Loading and Storage	P in 3 rd Layer only
Utility Box & Service Meter* Locations (*Not including water meters)	P in 3 rd Layer only
Off-Street Trash Receptacle Locations	P in 3 rd Layer only
Off-Street Dumpster Locations	N/A
Drive- Through Locations	N/A

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-2 TABLE 4.3.1-A DISTRICT STANDARDS: RURAL CHARACTER DISTRICT

Non-Building Components			
	1 st Layer	2 nd Layer	3 rd Layer
HVAC Equipment, Utility, Service and Mechanical Equipment	NP	NP	P
Solar Panels	P if coplanar to and integrated into roof design	P if coplanar to and integrated into roof design	P
Antennas & Satellite Equipment	P in 1 st or 2 nd Layer if such Layer is only possible location for satisfactory reception	P in 1 st or 2 nd Layer if such Layer is only possible location for satisfactory reception	P
Recreation or Play Equipment	NP	P	P
Animals Enclosures, Runs or Shelters	NP	NP	P
Swimming pools, Hot Tubs and Spas	NP		P
Transmitting and/or receiving towers, or antennas and wind-generating machines	NP	NP	P

Signs

See Sign Standards in Article 7 (Sign Standards) and Table 7.12.B-1 (Sign Types - Summary) and Table 7.1.2.B-2 (Sign Types- Specific Standards)

Lighting

See Private Lighting Requirements in Section 4.3.17 and Table 4.3.17.B (Private Lighting Standards)

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-2 TABLE 4.3.1-A DISTRICT STANDARDS:
RURAL CHARACTER DISTRICT

Private Landscaping and Fencing
Landscaping

In compliance with Section 4.3.16; with one (1) tree min per 50 ft. of Frontage

Walls & Fencing (not including Screens)

Height	4 ft. max at Frontage; otherwise, 6 ft. max; height measured from avg. undisturbed grade of Adjacent property at property line.
Construction	Finished side must face Adjacent property, Thoroughfare, Path, Passage or Waterbody
Maintenance	Must be well maintained, in upright condition and free of missing or broken parts and graffiti.

Materials

Natural Wood	P	Chain Link	P at sides and rear only
Brick, Natural Stone, or Stucco over Masonry	P	Barbed/ Razor/ Concertina Wire	NP
Wrought Iron or Aluminum	P	Exposed or Painted Aggregate Concrete	NP
Vinyl	P	Smooth or Split-faced Block	NP

Additional Standards

Pedestrian Connections through to Adjacent Neighborhoods or Uses	Required
Locations of Retaining Walls	P within required Yards, per Section 4.3.10

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-2

**TABLE 4.3.1-A DISTRICT STANDARDS:
RURAL CHARACTER DISTRICT**

Screens, Street-Screens & Buffers

Height

	At Frontage or Adjacent to Civic Space	Not at Frontage or Adjacent to Civic Space
Wall Screen/Street-Screen Height	3ft. to 3.5ft.	5ft. to 6ft; Minimum 6ft. for Dumpsters and Trash Receptacles
Fence Screen/ Street-Screen Height	NP	5ft. to 6ft. for Dumpsters and Trash Receptacles
Hedge Screen/ Street-Screen Height	3ft. to 3.5ft at installation	5ft. to 6ft. at installation

Materials

Wall Screen or Street-Screen	Brick, Natural Stone or Stucco over Masonry
Fence Screen or Street-Screen	Natural Wood, painted or unpainted
Hedge Screen or Street-Screen	Evergreen plants with min. 80% opacity

Additional Standards

Non-Residential & Multi-Family Residential Screen/ Streetscreen Adjacent to or across Thoroughfare from Non-Multi-Family Residential	N/A (Uses not permitted in District)
Screening of Parking, Loading Areas, Service Areas, Outdoor Storage, Drive-Throughs, Trash Receptacles/ Dumpsters, HVAC and other equipment Screened from Frontage, Civic Space and Adjacent Property.	R ; except as Driveways. Parking Lots and Parking Areas must be Screened from Frontage and Civic Space by Building or Streetscreen, Screening must be by Building wall, hedge, or fence at Frontage or Building, Wall, hedge or fence not at Frontages or Adjacent to Civic Space.
Rooftop Antenna Screening	NR
HVAC, Mechanical and other Equipment Screening	R ; must be Screened from Frontage and Civic Space by Building parapet or other Building Element
Self-Storage Warehouse Screening	N/A (not permitted in District)
Streetscreen Location	2 nd Layer
Parcel Buffer	Sections 4.3.11.H
Project Buffer	Section 5.8

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-3L

TABLE 4.3.1-B DISTRICT STANDARDS: NEIGHBORHOOD LARGE LOT CHARACTER DISTRICT



General Description

The CD-3L Neighborhood Large Lot Character District consist of primarily a low density single-family detached Residential area in which House is the predominant Building type. It has large Lot or Building Sites, medium deep front Setback and medium to wide side Setbacks. Its Thoroughfares and Internal Drives have curbs and may include Sidewalks, and/or street trees, and form medium to large blocks. CD-3L is an appropriate District for the Suburban Neighborhoods future land use Character Area described in the Comprehensive plan.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-3L TABLE 4.3.1-B DISTRICT STANDARDS: NEIGHBORHOOD LARGE LOT CHARACTER DISTRICT

Density / Floor Area Ratio (FAR)

**Applicable only to Development Parcels*

2 Density Unit per acre max

BLOCK SIZE*

**Applicable only to Development Parcels*

Block Perimeter 3600 ft. max

Private Frontage Types

Common Yard	P	Stepfront	NP
Porch	P	Shopfront	NP
Fence	P	Gallery	NP
Terrace/Lightwell	NP	Arcade	NP
Forecourt	NP	Officefront	NP
Stoop	NP		
See Table 4.3.7.A (Private Frontage Types)			

Civic Space Types*

**Applicable only to Development Parcels*

Natural Area	P	Playground	P
Green	P	Sport Field	P
Square	NP	Community Garden	P
Plaza	NP	Pocket Park	P

See Table 5.3.3.A (Civic Space Types - Summary) and Table 5.3.3.B (Civic Space - Specific Standards)

Permitted Uses

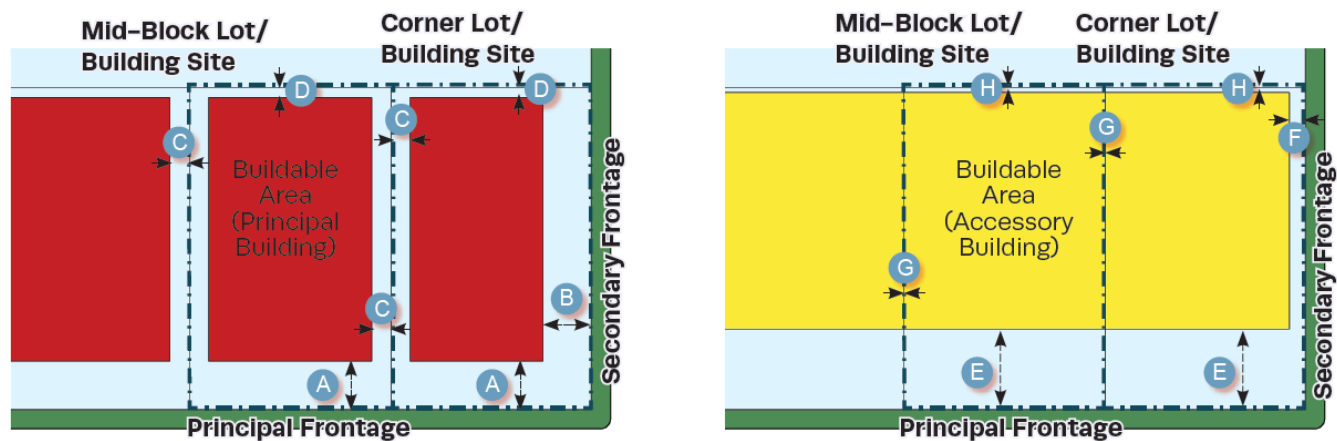
See Table 4.3.9.A-1 (Building, Lot & Building Site Principal Use), Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses), and Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses). For Development Parcels, see also Table 5.1.7 (Principal Use Mix).

Number of Buildings

Principal Building	1 max
Accessory Buildings	2 max

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-3L TABLE 4.3.1-B DISTRICT STANDARDS:
NEIGHBORHOOD LARGE LOT CHARACTER DISTRICT



Lot Occupation

Lot/ Building Site Width 100 ft. min.

Frontage Buildout **NR**

Lot/ Building Site Area **NR**

Impervious Surface Coverage **NR**

Lot/ Building Site Enfrontment

Must enfront a vehicular Thoroughfare or Internal Drive, except $\leq 20\%$ of the Lots or Building Sites within each type of Character District of a Development Parcel may Enfront a Pedestrian Path, Passage, pedestrian walkway or water body if such Lots have legal and physical vehicular access to a vehicular Thoroughfare via Driveway or Easement.

Lot/ Building Site Access

All lots must have legal and physical vehicular access to a vehicular Thoroughfare or Internal drive via Driveway or Easement.

Setbacks / Yards

Setbacks / Yards – Principal Building			Setbacks / Yards – Accessory Building		
Front Setback / Yard, Principal Frontage	30 ft. min	A	Front Setback / Yard, Principal Frontage	20 ft. min behind Principal Building Frontage	E
Front Setback / Yard, Secondary Frontage	30 ft. min	B	Front Setback / Yard, Secondary Frontage	30 ft. min	F
Side Setback / Yard	12 ft. min	C	Side Setback / Yard	10 ft. min	G
Rear Setback / Yard	30 ft. min; or 15 ft. min from center line of rear Alley.	D	Rear Setback / Yard	5 ft. min; or 15 ft. min from center line of rear Alley.	H

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-3L TABLE 4.3.1-B DISTRICT STANDARDS: NEIGHBORHOOD LARGE LOT CHARACTER DISTRICT

Building Standards

Building Height*

Principal Building	3 Stories max
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Accessory Building	2 Stories max
--------------------	---------------

*Stories/ Height do not include Attics and Basements, chimneys, flagpoles, towers, spires, belfries, parapet walls, aerials, or antennas. Any Building exceeding 35 feet in height must obtain approval from stipulations made by the Fire Department in accordance with the above cited codes shall be required. *

*The Fire Department may stipulate special fire measures in accordance with National Fire Protection Association and International Building Code criteria as a condition of approval of such Structure. In such instance stipulations made by the Fire Department in accordance to with the above cited codes shall be required. *

Ceiling Height

NR

Building Composition

Vertical Composition	Each Principal Building must have an identifiable Base, Middle, & Cap
----------------------	---

Finished Floor Level	NR
----------------------	----

Façade

Main Entrance	Main Entrance must be in Façade of Principal Frontages, located no further than 50% of total Façade width for the Principal Frontage from the First Layer
---------------	---

Façade Position	Parallel to straight Frontage Line or to tangent of curved Frontage Line
-----------------	--

Blank Walls	NP at Frontage
-------------	----------------

Façade Articulation	NR
---------------------	----

Porch Frontages	Min. 6 ft. clear depth, excluding rails, pillars, columns or other features
-----------------	---

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-3L TABLE 4.3.1-B DISTRICT STANDARDS:
NEIGHBORHOOD LARGE LOT CHARACTER DISTRICT

Building Standards (continued)				
Roof Type & Pitch				
Flat	NP			
Shed	P at rear only and if ridge is attached to an exterior Building wall; except for porches, stoops or dormers which may have a shed roof anywhere on the Building.			
Hip	P			
Gable	P			
Pitch	6:12 – 6:14, except for shed roofs which may be 3:12 – 14:12 and except roof pitch may match the primary roof pitch of an existing Building that is less than 6:12			
Roof Design				
Eaves shall extend no less than nine inches beyond the supporting walls.				
Gable end rakes shall overhang at least six inches.				
Eaves and rakes on Accessory Buildings and dormers shall overhang at least six inches.				
Soffits shall be placed perpendicular to the Building wall, not sloping in plane with the roof (except for gable end rakes).				
Building Materials				
Primary Building	Brick	P	Exposed concrete	NP
Material on Facades	Natural stone	P	Vinyl siding	P
	Wood	P	Aluminum siding	NP
	Cementitious siding	P	Corrugated and/or sheet metal	NP
	Authentic stucco over masonry	P		
Changes in Building Materials	Primary materials must continue alongside Elevations through 2 nd layer. Primary materials shall continue for entire length of all Facades facing a frontage. Any material changes must coincide with form, structural, or massing changes and shall not occur at outside corner of any such change.			
Building Colors	NR			
Foundation Cladding	Required; brick, stone, or stucco except renovations and minor expansions of existing structures may match current material, or absence of cladding.			
Porch Pier Cladding	Required; brick or stone, with any space under Porch concealed by painted or stained latticework between piers, except renovations and minor expansions of existing structures, pier cladding, or absence of cladding, may match current material.			
Chimney Cladding	Required; brick, natural stone, with material matching primary material of Façade			

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-3L TABLE 4.3.1-B DISTRICT STANDARDS: NEIGHBORHOOD LARGE LOT CHARACTER DISTRICT

Building Types

House	P	Commercial	NP
Duplex	NP	Mixed Use	NP
Townhouse	NP	Flex	NP
Small Multifamily	NP	Mid-Rise	NP
Large Multifamily	NP	Large Scale Commercial	NP
Live/Work	NP	Civic	P

See Table 4.3.8.A (Principal Building Types - Summary) and Table 4.3.8.B (Principal Building Types - Specific Standards). For Development Parcels, see also Table 5.1.6 (Building Type Mix).

Vehicular Parking Requirements

Parking Location

	On-Street Parking	Off-Street Parking
Domestic Vehicles	P	P in 3 rd layer only, and in Driveway
Recreational Vehicles	NP	P in 3 rd layer only, and in Driveway
Heavy Equipment	NP	P in 3 rd layer only, and in Driveway
Tractor Trailers (including trailers for Storage)	NP on Street, except for delivery and Temporary Use of Trailers	NP
All Other Vehicles	NP	P in 3 rd layer only, and in Driveway

Additional Parking Requirements

Off-Street Parking Surface	P Prepared surface of, asphalt, concrete, or another hard surface for 30 feet from Thoroughfare or Internal Drive, gravel permitted for any remaining depth of driveway.
Garage Location	P In 2 nd or 3 rd Layer only
Garage Design	Min. interior dimensions 10 ft. x 20 ft. per vehicle Parking space If Garage faces Street in 1 st or 2 nd layer: max. Garage door width 33% of total Garage + Façade width
Driveway/ Vehicular Entrance Location	P in any Layer
Driveway/ Vehicular Entrance Maximum Width	10 – 20 ft. in 1 st Layer
Parking Structure	NP
Parking Structure Pedestrian Exit Location	

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-3L TABLE 4.3.1-B DISTRICT STANDARDS: NEIGHBORHOOD LARGE LOT CHARACTER DISTRICT

Bicycle Parking

See Section 4.3.13

Thoroughfare & Internal Drive Types*

* Applicable only to Development Parcels

See Article 5 (Development Parcel Standards) for additional requirements

Loading & Access

Off-Street Loading and Storage	P in 3 rd Layer only
Utility Box & Service Meter* Locations (*Not including water meters)	P in 3 rd Layer only
Off-Street Trash Receptacle Locations	P in 3 rd Layer only
Off-Street Dumpster Locations	N/A
Drive- Through Locations	N/A

Non-Building Components

	1 st Layer	2 nd Layer	3 rd Layer
HVAC Equipment, Utility, Service and Mechanical Equipment	NP	NP	P
Solar Panels	P if coplanar to and integrated into roof design		P
Antennas & Satellite Equipment	P in 1 st or 2 nd Layer if such Layer is only possible location for satisfactory reception		P
Recreation or Play Equipment	NP	P	P
Animals Enclosures, Runs or Shelters	NP	NP	P
Swimming pools, Hot Tubs and Spas	NP	P	P
Transmitting and/or receiving towers, or antennas and wind-generating machines	NP	NP	P

Signs

See Sign Standards in Article 7 (Sign Standards) and Table 7.12.B-1 (Sign Types - Summary) and Table 7.1.2.B-2 (Sign Types- Specific Standards)

Lighting

See Private Lighting Requirements in Section 4.3.17 and Table 4.3.17.B (Private Lighting Standard)

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-3L TABLE 4.3.1-B DISTRICT STANDARDS: NEIGHBORHOOD LARGE LOT CHARACTER DISTRICT

Private Landscaping and Fencing

Landscaping

In compliance with Section 4.3.16; with one (1) tree min per 50 ft. of Frontage and continuous shrubs around foundation at Frontage

Walls & Fencing (not including Screens)

Height	4 ft. max at Frontage; otherwise, 6 ft. max; height measured from avg. undisturbed grade of Adjacent property at property line
Construction	Finished side must face Adjacent property, Thoroughfare or Internal Drive, Path, Passage or Waterbody.
Maintenance	Must be well-maintained, in up-right condition and free of missing or broken parts and graffiti.

Materials

Natural Wood	P	Chain Link	P at sides and rear only
Brick, Natural Stone, or Stucco over Masonry	P	Barbed/ Razor/ Concertina Wire	NP
Wrought Iron or Aluminum	P	Exposed or Painted Aggregate Concrete	NP
Vinyl	P	Smooth or Split-faced Block	NP

Additional Standards

Pedestrian Connections through to Adjacent Neighborhoods or Uses	Required
Location of Retaining Walls	P within required Yards, per Section 4.3.10 If supporting grade 8 ft. or higher than grade at property line, must be set back 10 ft. from property line.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

**CD-3L TABLE 4.3.1-B DISTRICT STANDARDS:
NEIGHBORHOOD LARGE LOT CHARACTER DISTRICT**

Screens, Street-Screens & Buffers		
Height		
	At Frontage or Adjacent to Civic Space	Not at Frontage or Adjacent to Civic Space
Wall Screen/Street-Screen Height	3ft. to 3.5ft.	5ft. to 6ft; Minimum 6ft. for Dumpsters and Trash Receptacles
Fence Screen/ Street-Screen Height	NP	5ft. to 6ft. for Dumpsters and Trash Receptacles
Hedge Screen/ Street-Screen Height	3ft. to 3.5ft at installation	5ft. to 6ft. at installation
Materials		
Wall Screen or Streetscreen	Brick, Natural Stone or Stucco over Masonry	
Fence Screen or Streetscreen	Natural Wood, painted or unpainted	
Hedge Screen or Streetscreen	Evergreen plants with min. 80% opacity	
Additional Standards		
Non-Residential & Multi-Family Residential Screen / Streetscreen Adjacent to or across Throughfare from Non-Multi-Family Residential	N/A (Uses not permitted in District)	
Screening of Parking, Loading Areas, Service Areas, Outdoor Storage, Drive-Throughs, Trash Receptacles/Dumpsters, HVAC and other equipment screened from Frontage, Civic Space and Adjacent Property	R; except at Driveways: Parking Lots and Parking Areas must be Screened from Frontage and Civic Space by Building or Streetscreen; otherwise, Screening must be by Building, wall, hedge, or fence at Frontage or Building, Wall, hedge or fence not at Frontages or Adjacent to Civic Space.	
Rooftop Antenna Screening	NR	
HVAC, Mechanical and other Equipment Screening	R; must be Screened from Frontage and Civic Space by Building parapet or other Building Element	
Self-Storage Warehouse Screening	N/A (not permitted in District)	
Streetscreen Location	2 nd Layer	
Parcel Buffer	Section 4.3.11.H	
Project Buffer	Section 5.8	

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-3 TABLE 4.3.1-C DISTRICT STANDARDS: NEIGHBORHOOD CHARACTER DISTRICT



General Description

The CD-3 Neighborhood Large Lot Character District consist of primarily medium density single-family detached Residential area in which House is the predominant Building type. It has medium to deep front Setback and medium to wide side Setbacks. Its Thoroughfares and Internal Drives have curbs and may include Sidewalks, and/or street tress, and form medium to large blocks. CD-3 is an appropriate District for the Suburban Neighborhoods Future Land Use Character Area described in the Comprehensive plan; it is also appropriate for City Center Urban Village Future Land Use Character Area where the Planning Commission determines that is compatible with the established land use pattern in the surrounding area.



ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-3 TABLE 4.3.1-C DISTRICT STANDARDS: NEIGHBORHOOD CHARACTER DISTRICT

Density / Floor Area Ratio (FAR)

**Applicable only to Development Parcels*

4 Density Unit per acre max

BLOCK SIZE*

**Applicable only to Development Parcels*

Block Perimeter

2800 ft. max

Private Frontage Types

Common Yard	P	Stepfront	NP
Porch	P	Shopfront	NP
Fence	P	Gallery	NP
Terrace/Lightwell	NP	Arcade	NP
Forecourt	NP	Officefront	NP
Stoop	P		

See Table 4.3.7.A (Private Frontage Types)

Civic Space Types*

**Applicable only to Development Parcels*

Natural Area	P	Playground	P
Green	P	Sport Field	P
Square	NP	Community Garden	P
Plaza	NP	Pocket Park	P

See Table 5.3.3.A (Civic Space Types - Summary) and Table 5.3.3.B (Civic Space - Specific Standards)

Permitted Uses

See Table 4.3.9.A-1 (Building, Lot & Building Site Principal Use), Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses), and Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses). For Development Parcels, see also Table 5.1.7 (Principal Use Mix).

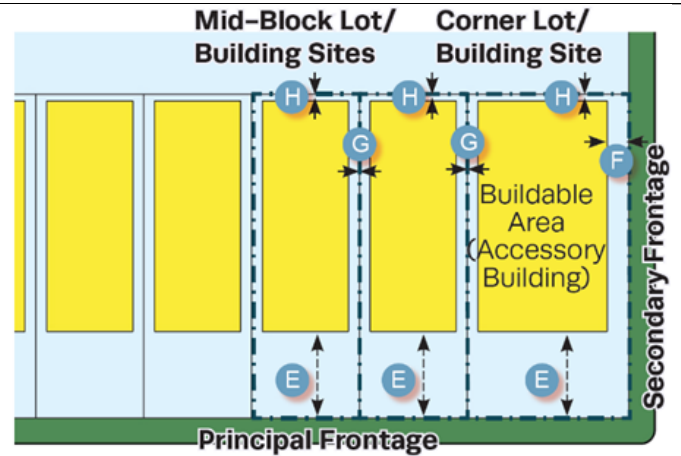
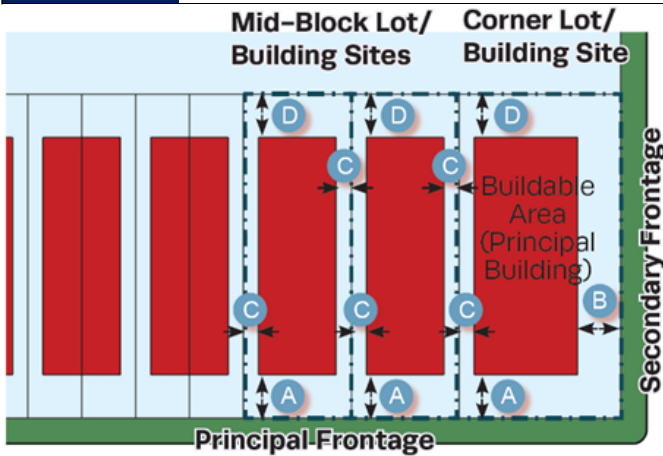
Number of Buildings

Principal Building	1 max
Accessory Buildings	2 max

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-3

TABLE 4.3.1-C DISTRICT STANDARDS:
NEIGHBORHOOD CHARACTER DISTRICT



Lot Occupation

Lot/ Building Site Width	House: 40 ft. min if Alley loaded at rear, otherwise 65 ft. min Duplex: 50 ft. min for each unit of Duplex Civic: 50 ft. min
Frontage Buildout	NR
Lot/ Building Site Area	NR
Impervious Surface Coverage	50% max
Lot/ Building Site Enfrontment	Must enfront a vehicular Thoroughfare or Internal Drive, except $\leq 20\%$ of the Lots or Building Sites within each type of Character District of a Development Parcel may Enfront a Pedestrian Path, Passage, pedestrian walkway or water body if such Lots have legal and physical vehicular access to a vehicular Thoroughfare via Driveway or Easement. The Planning Commission may approve alternative enfrontment within a Development Parcel as described in 8.5.6.O.
Lot/ Building Site Access	All lots must have legal and physical vehicular access to a vehicular Thoroughfare or Internal drive via Driveway or Easement.

Setbacks / Yards

Setbacks / Yards – Principal Building			Setbacks / Yards – Accessory Building		
Front Setback / Yard, Principal Frontage	25 ft. min	A	Front Setback / Yard, Principal Frontage	20 ft. min behind Principal Building Frontage	E
Front Setback / Yard, Secondary Frontage	20 ft. min	B	Front Setback / Yard, Secondary Frontage	20 ft. min	F
Side Setback / Yard	8 ft. min	C	Side Setback / Yard	5 ft. min	G
Rear Setback / Yard	25 ft. min; or 15 ft. min from center line of rear Alley.	D	Rear Setback / Yard	5 ft. min; or 15 ft. min from center line of rear Alley.	H

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-3 TABLE 4.3.1-C DISTRICT STANDARDS: NEIGHBORHOOD CHARACTER DISTRICT

Building Standards

Building Height*

Principal Building	3 Stories max
--------------------	---------------

Accessory Building	2 Stories max
--------------------	---------------

*Stories/ Height do not include Attics and Basements, chimneys, flagpoles, towers, spires, belfries, parapet walls, aerials, or antennas. Any Building exceeding 35 feet in height must obtain approval from stipulations made by the Fire Department in accordance with the above cited codes shall be required. *

*The Fire Department may stipulate special fire measures in accordance with National Fire Protection Association and International Building Code criteria as a condition of approval of such Structure. In such instance stipulations made by the Fire Department in accordance to with the above cited codes shall be required. *

Ceiling Height

NR

Building Composition

Vertical Composition	Each Principal Building must have an identifiable Base, Middle, & Cap
----------------------	---

Finished Floor Level	NR
----------------------	----

Façade

Main Entrance	Main Entrance must be in Façade of Principal Frontages, located no further than 50% of total Façade width for the Principal Frontage from the First Layer
---------------	---

Façade Position	Parallel to straight Frontage Line or to tangent of curved Frontage Line
-----------------	--

Façade & Façade Element Design Proportions	NR
--	----

Blank Walls	NP at Frontage
-------------	----------------

Façade Articulation	NR at Frontage
---------------------	----------------

Façade Openings	NR
-----------------	----

Façade Glazing	NR
----------------	----

Window Shape	NR
--------------	----

Window Alignment	NR
------------------	----

Window Types	NR
--------------	----

Window Glazing Material	NR
----------------------------	----

Window Trim in 1 st Layer	NR
---	----

Shutters	NR
----------	----

Façade Window Sill Height	NR
------------------------------	----

Porch Frontages	Min. 6 ft. clear depth, excluding rails, pillars, columns or other features
-----------------	---

Shopfront Frontages	NR
---------------------	----

Façade Variety	NR
----------------	----

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-3 **TABLE 4.3.1-C DISTRICT STANDARDS:**
NEIGHBORHOOD CHARACTER DISTRICT

Building Standards (continued)			
Roof Type & Pitch			
Flat	NP		
Shed	P at rear only and if ridge is attached to an exterior Building wall; except for porches, stoops or dormers which may have a shed roof anywhere on the Building.		
Hip	P		
Gable	P		
Pitch	6:12 – 6:14, except for shed roofs which may be 3:12 – 14:12 and except roof pitch may match the primary roof pitch of an existing Building that is less than 6:12		
Roof Design			
Eaves shall extend no less than nine inches beyond the supporting walls.			
Gable end rakes shall overhang at least six inches.			
Eaves and rakes on Accessory Buildings and dormers shall overhang at least six inches.			
Soffits shall be placed perpendicular to the Building wall, not sloping in plane with the roof (except for gable end rakes).			
Building Materials			
Primary Building Material on Facades	Brick	P	Exposed concrete NP
	Natural stone	P	Vinyl siding P for Residential Use
	Wood	P	Aluminum siding NP
	Cementitious siding	P	Corrugated and/or sheet metal NP
	Authentic stucco over masonry	P	
Changes in Building Materials	Primary materials must continue alongside Elevations through 2 nd layer. Primary materials shall continue for entire length of all Facades facing a frontage. Any material changes must coincide with form, structural, or massing changes and shall not occur at outside corner of any such change.		
Building Colors	NR		
Foundation Cladding	Required; brick, stone, or stucco except renovations and minor expansions of existing structures may match current material, or absence of cladding.		
Porch Pier Cladding	Required; brick or stone, with any space under Porch concealed by painted or stained latticework between piers, except renovations and minor expansions of existing structures, pier cladding, or absence of cladding, may match current material.		
Chimney Cladding	Required; brick, natural stone, with material matching primary material of Façade		

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-3 **TABLE 4.3.1-C DISTRICT STANDARDS:**
NEIGHBORHOOD CHARACTER DISTRICT

Building Types			
House	P	Commercial	NP
Duplex	P	Mixed Use	NP
Townhouse	NP	Flex	NP
Small Multifamily	NP	Mid-Rise	NP
Large Multifamily	NP	Large Scale Commercial	NP
Live/Work	NP	Civic	P

See Table 4.3.8.A (Principal Building Types - Summary) and Table 4.3.8.B (Principal Building Types - Specific Standards). For Development Parcels, see also Table 5.1.6 (Building Type Mix).

Vehicular Parking Requirements		
Parking Location		
	On-Street Parking	Off-Street Parking
Domestic Vehicles	P	P in 3 rd layer only, and in Driveway
Recreational Vehicles	NP	P in 3 rd layer only, and in Driveway
Heavy Equipment	NP	P in 3 rd layer only, and in Driveway
Tractor Trailers (including trailers for storage)	NP on Street, except for delivery and Temporary Use of Trailers	NP
All other Vehicles	NP	P in 3 rd layer only, and in Driveway

Additional Parking Requirements	
Off-Street Parking Surface	P Prepared surface of, asphalt, concrete, or another hard surface for 100 feet from Thoroughfare or Internal Drive, gravel permitted for any remaining depth.
Garage Location	P In 2 nd or 3 rd Layer only
Garage Design	Min. interior dimensions 10 ft. x 20 ft. per vehicle Parking space If Garage faces Street in 1 st or 2 nd layer: max. Garage door width 33% of total Garage + Façade width
Driveway/ Vehicular Entrance Location	P in any Layer
Driveway/ Vehicular Entrance Maximum Width	20 ft. max in 1 st Layer
Parking Structure	NP
Parking Structure Pedestrian Exit Location	N/A

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-3 TABLE 4.3.1-C DISTRICT STANDARDS: NEIGHBORHOOD CHARACTER DISTRICT

Bicycle Parking

See Section 4.3.13

Thoroughfare & Internal Drive Types*

* Applicable only to Development Parcels

See Article 5 (Development Parcel Standards) for additional requirements

Loading & Access

Off-Street Loading and Storage	P in 3 rd Layer only
Utility Box & Service Meter* Locations (*Not including water meters)	P in 3 rd Layer only
Off-Street Trash Receptacle Locations	P in 3 rd Layer only
Off-Street Dumpster Locations	N/A
Drive- Through Locations	N/A

Non-Building Components

	1st Layer	2nd Layer	3rd Layer
HVAC Equipment, Utility, Service and Mechanical Equipment	NP	P	P
Solar Panels	P if coplanar to and integrated into roof deign	P if coplanar to and integrated into roof deign	P
Antennas & Satellite Equipment	P in 1 st or 2 nd Layer if such Layer is only possible location for satisfactory reception	P in 1 st or 2 nd Layer if such Layer is only possible location for satisfactory reception	P
Recreation or Play Equipment	NP	P	P
Animals Enclosures, Runs or Shelters	NP	NP	P
Swimming pools, Hot Tubs and Spas	NP	P	P
Transmitting and/or receiving towers, or antennas and wind- generating machines	NP	NP	P

Signs

See Sign Standards in Article 7 (Sign Standards) and Table 7.12.B-1 (Sign Types - Summary) and Table 7.1.2.B-2 (Sign Types- Specific Standards)

Lighting

See Private Lighting Requirements in Section 4.3.17 and Table 4.3.17.B (Private Lighting Standards)

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-3 TABLE 4.3.1-C DISTRICT STANDARDS:
NEIGHBORHOOD CHARACTER DISTRICT

Private Landscaping and Fencing			
Landscaping			
In compliance with Section 4.3.16; with one (1) tree min per 50 ft. of Frontage and continuous shrubs around foundation at Frontage			
Walls & Fencing (not including Screens)			
Height	4 ft. max at Frontage; otherwise, 6 ft. max; height measured from avg. undisturbed grade of Adjacent property at property line		
Construction	Finished side must face Adjacent property, Thoroughfare or Internal Drive, Path, Passage or Waterbody.		
Maintenance	Must be well-maintained, in up-right condition and free of missing or broken parts and graffiti.		
Materials			
Natural Wood	P	Chain Link	P at sides and rear only
Brick, Natural Stone, or Stucco over Masonry	P	Barbed/ Razor/ Concertina Wire	NP
Wrought Iron or Aluminum	P	Exposed or Painted Aggregate Concrete	NP
Vinyl	P	Smooth or Split-faced Block	NP
Additional Standards			
Pedestrian Connections through to Adjacent Neighborhoods or Uses	Required		
Location of Retaining Walls	P within required Yards, per Section 4.3.10 If supporting grade 8 ft. or higher than grade at property line, must be set back 10 ft. from property line.		

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-3 **TABLE 4.3.1-C DISTRICT STANDARDS:**
NEIGHBORHOOD CHARACTER DISTRICT

Screens, Street-Screens & Buffers

Height	At Frontage or Adjacent to Civic Space	Not at Frontage or Adjacent to Civic Space
Wall Screen/Street-Screen Height	3ft. to 3.5ft.	5ft. to 6ft; Minimum 6ft. for Dumpsters and Trash Receptacles
Fence Screen/ Street-Screen Height	NP	5ft. to 6ft. for Dumpsters and Trash Receptacles
Hedge Screen/ Street-Screen Height	3ft. to 3.5ft at installation	5ft. to 6ft. at installation

Materials

Wall Screen or Street-Screen	Brick, Natural Stone or Stucco over Masonry
Fence Screen or Street-Screen	Natural Wood, painted or unpainted
Hedge Screen or Street-Screen	Evergreen plants with min. 80% opacity

Additional Standards

Non-Residential & Multi-Family Residential Screen / Streetscreen Adjacent to or across Throughfare from Non-Multi-Family Residential	N/A (Uses not permitted in District)
Screening of Parking, Loading Areas, Service Areas, Outdoor Storage, Drive-Throughs, Trash Receptacles/Dumpsters, HVAC and other equipment screened from Frontage, Civic Space and Adjacent Property	R ; except at Driveways: Parking Lots and Parking Areas must be Screened from Frontage and Civic Space by Building or Streetscreen; otherwise, Screening must be by Building, wall, hedge, or fence at Frontage or Building, Wall, hedge or fence not at Frontages or Adjacent to Civic Space.
Rooftop Antenna Screening	NR
HVAC, Mechanical and other Equipment Screening	R ; must be Screened from Frontage and Civic Space by Building parapet or other Building Element
Self-Storage Warehouse Screening	N/A (not permitted in District)
Streetscreen Location	2 nd Layer
Parcel Buffer	Section 4.3.11.H
Project Buffer	Section 5.8

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-4 TABLE 4.3.1-D DISTRICT STANDARDS: GENERAL URBAN CHARACTER DISTRICT



General Description

The CD-4 General Urban Character District consist of a medium density area that has a mix of Building Types and primarily Residential, Retail/ Personal Service/ Artisan, Office, Lodging and Civic Uses. There are medium, shallow or no front Setbacks and narrow to medium side Setbacks. It has variable private landscaping. Has Thoroughfares and Internal Drives with curbs, Sidewalks and tress that define medium-sized blocks. CD-4 is an appropriate District for the City Center Urban Village Future Land Use Character described in the Comprehensive Plan.



ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-4 TABLE 4.3.1-D DISTRICT STANDARDS: GENERAL URBAN CHARACTER DISTRICT

Density / Floor Area Ratio (FAR)

**Applicable only to Development Parcels*

12 Density Units per acre max

BLOCK SIZE*

**Applicable only to Development Parcels*

Block Perimeter 2400 ft. max

Private Frontage Types

Common Yard	P	Stepfront	P
Porch	P	Shopfront	P
Fence	P	Gallery	P
Terrace/Lightwell	P	Arcade	NP
Forecourt	P	Officefront	P
Stoop	P		

See Table 4.3.7.A (Private Frontage Types)

Civic Space Types*

**Applicable only to Development Parcels*

Natural Area	P	Playground	P
Green	P	Sport Field	P
Square	P	Community Garden	P
Plaza	NP	Pocket Park	P

See Table 5.3.3.A (Civic Space Types - Summary) and Table 5.3.3.B (Civic Space - Specific Standards)

Permitted Uses

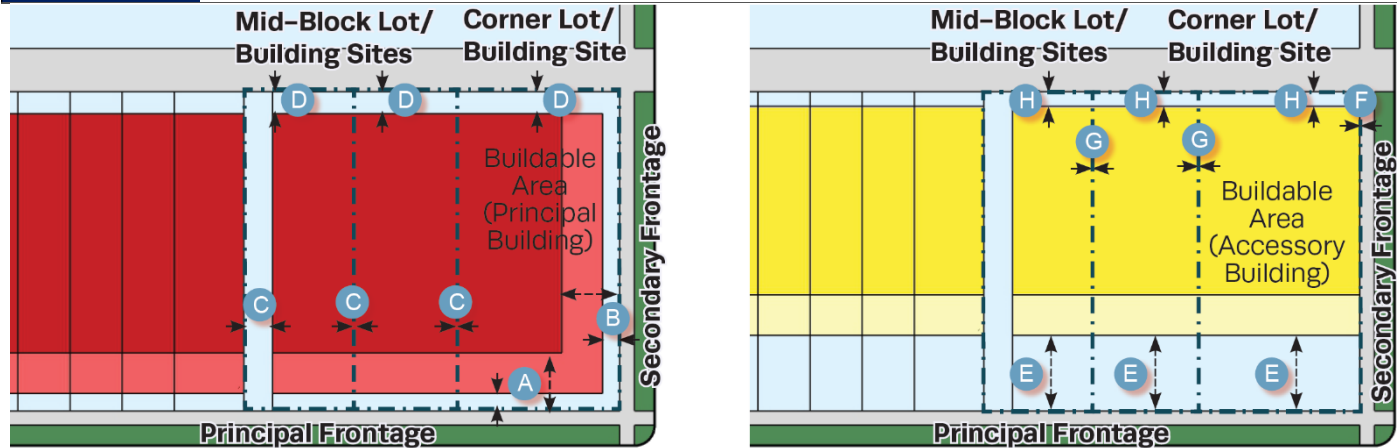
See Table 4.3.9.A-1 (Building, Lot & Building Site Principal Use), Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses), and Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses). For Development Parcels, see also Table 5.1.7 (Principal Use Mix).

Number of Buildings

Principal Building	1 max
Accessory Buildings	1 max

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-4 TABLE 4.3.1-D DISTRICT STANDARDS:
GENERAL URBAN CHARACTER DISTRICT



Lot Occupation	
Lot/ Building Site Width	House: 38 ft. min if Alley loaded Garage at rear, otherwise 50 ft. min
	Duplex: 30 ft. min for each unit of Duplex
	Townhouse: For Townhouses with each unit on its own Lot or Building Site: 18- 36 ft. for single Townhouse unit attached to other Townhouse units x8 max. attached Townhouse units. For multiple Townhouses on a single Lot or Building Site 18-20 ft. per Townhouse unit X 8max. attached Townhouse units
	All other Building Types: 18 ft. max
Frontage Buildout	60% min
Lot/ Building Site Area	NR
Impervious Surface Coverage	80% max
Lot/ Building Site Enfrontment	Townhouse: Must enfront a vehicular Thoroughfare, Internal Drive, or Courtyard, except ≤ 20% of the Lots or Building Sites within a Development Parcel may Enfront a Pedestrian Path, Passage, pedestrian walkway or water body if such Lots have legal and physical vehicular access to a vehicular Thoroughfare via Driveway or Easement. All others; Must enfront a vehicular Thoroughfare or Internal Drive, except ≤ 20% of the Lots or Building Sites within each type of Character District of a Development Parcel may Enfront a Pedestrian Path, Passage, pedestrian walkway or water body if such Lots have legal and physical vehicular access to a vehicular Thoroughfare via Driveway or Easement. The Planning Commission may approve alternative enfrontment within a Development Parcel as described in 8.5.6.O.
	All lots must have legal and physical vehicular access to a vehicular Thoroughfare or Internal drive via Driveway or Easement.
Lot/ Building Site Access	

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-4 **TABLE 4.3.1-D DISTRICT STANDARDS:**
GENERAL URBAN CHARACTER DISTRICT

Setbacks / Yards					
Setbacks / Yards – Principal Building			Setbacks / Yards – Accessory Building		
Front Setback / Yard, Principal Frontage	6 ft. min, 20 ft. max	A	Front Setback / Yard, Principal Frontage	20 ft. min behind Principal Building Frontage	E
Front Setback / Yard, Secondary Frontage	6 ft. min, 20 ft. max	B	Front Setback / Yard, Secondary Frontage	0 ft. min	F
Side Setback / Yard	0 ft. min. between individual Townhouse Units & Duplex Units; otherwise, 6 ft. min.	C	Side Setback / Yard	0 ft. min	G
Rear Setback / Yard	3 ft. min; or 15 ft. min from center line of rear Alley.	D	Rear Setback / Yard	3 ft. min; or 15 ft. min from center line of rear Alley.	H
Building Standards					
Building Height*					
Principal Building	3 Stories max				
Accessory Building	2 Stories max				

*Stories/ Height do not include Attics and Basements, chimneys, flagpoles, towers, spires, belfries, parapet walls, aerials, or antennas. Any Building exceeding 35 feet in height must obtain approval from stipulations made by the Fire Department in accordance with the above cited codes shall be required. *

*The Fire Department may stipulate special fire measures in accordance with National Fire Protection Association and International Building Code criteria as a condition of approval of such Structure. In such instance stipulations made by the Fire Department in accordance to with the above cited codes shall be required. *

Ceiling Height	
May not exceed 14 ft. from finished floor to finished ceiling, except for a first floor Shopfront Facade, which may not exceed 25ft.	

Building Composition	
Vertical Composition	Each Principal Building must have an identifiable Base, Middle & Cap
Finished Floor Level	If Residential: 18 ft., 48 in. max above average grade at façade

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-4 **TABLE 4.3.1-D DISTRICT STANDARDS:**
GENERAL URBAN CHARACTER DISTRICT

Building Standards (continued)	
Façade	
Main Entrance	Main Entrance must be in Façade of Principal Frontages. If Shop Frontage at corner Main Entrance may be at Principal Frontage, or at corner.
Façade Position	Parallel to straight Frontage Line or to tangent of curved Frontage Line
Façade & Façade Element Design Proportions	Must be vertically proportioned
Blank Walls	NP at Frontage
Façade Articulation	A Façade greater than 100 ft. in width must be differentiated so that it appears to be comprised of two or more Adjacent Buildings, by dividing such Façade into two segments each of which includes a separate entrance and (1) differs from each of the other segments with respect to all of the following: (a) a change in shape, sill, and header height, detail, size, spacing, rhythm, and muntin pattern of windows; (b) a change of Building or cornice height; (c) a change in cornice details; (d) a change of wall material or wall color; a change in trim courses and other horizontal elements; (e) a change in dormer or balcony design, if any, and (f) providing or changing pilasters, columns, or other Façade elements; and (2) is composed with a defined center and edges. (See Illustration 4.3.5.A-3)
Façade Openings	Windows, and/or doors spaced ≤ 20 ft. apart In Stories above first Façade openings must be $\leq 50\%$ of the total Façade area
Façade Glazing	20% - 60% of total ground floor Façade area
Window Shape	Square or vertical in proportion, except transoms
Window Alignment	Upper floor windows and other features must be aligned with those of first floor
Window Types	Except for transoms and sidelights, Windows in Façade and 1st & 2nd Layers must be single-hung, double-hung, casement or awning types
Window Glazing Material	Clear glass is Required for all Elevations
Window Trim in 1 st Layer	Min. 4 in. trim with sill and top plate if siding surrounding window; soldier course above lintel and rollock course below sill if brick or stone surrounds window
Shutters	If any, must be functional and proportioned to cover half of window width from each side or entire window width, with shutter dogs
Façade Window Sill Height	If Residential, 5 ft. min above average grade at Façade
Porch Frontages	Min. 6 ft. clear depth, excluding rails, pillars, columns or other features
Shopfront Frontages	12 in. – 24 in. knee wall required at Frontage
Façade Variety	Within a Development Parcel no Façade may exist more than once in a Block Face

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-4 **TABLE 4.3.1-D DISTRICT STANDARDS:**
GENERAL URBAN CHARACTER DISTRICT

Building Standards (continued)	
Roof Type & Pitch	
Flat	P
Shed	P at rear only and if ridge is attached to an exterior Building wall; except for porches, stoops or dormers which may have a shed roof anywhere on the Building.
Hip	P
Gable	P
Pitch	If pitched, 6:12 – 14:12, except for shed roofs which may be 3:12 – 14:12 and except roof pitch may match the primary roof pitch of an existing Building that is less than 6:12
Roof Design	
Eaves shall extend no less than nine inches beyond the supporting walls.	
Gable end rakes shall overhang at least six inches.	
Eaves and rakes on Accessory Buildings and dormers shall overhang at least six inches.	
Soffits shall be placed perpendicular to the Building wall, not sloping in plane with the roof (except for gable end rakes).	

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-4 **TABLE 4.3.1-D DISTRICT STANDARDS:**
GENERAL URBAN CHARACTER DISTRICT

Building Materials				
Primary Building	Brick	P	Exposed concrete	NP
Material on Facades	Natural stone	P	Vinyl or Aluminum siding	NP
	Wood	P	Aluminum siding	NP
	Cementitious siding	P	Corrugated and/or sheet metal	NP
	Authentic stucco over masonry	P		
Changes in Building Materials	Primary materials must continue alongside Elevations through 2 nd layer. Primary materials shall continue for entire length of all Facades facing a frontage. Any material changes must coincide with form, structural, or massing changes and shall not occur at outside corner of any such change.			
Building Colors	Up to three (3) colors, including the natural color of any allowed materials, but not excluding trim			
Foundation Cladding	Required; except foundation cladding, or absence of cladding, may match current material on renovations and minor expansions of existing structures.			
Porch Pier Cladding	Required; brick or stone, with any space under Porch concealed by painted or stained latticework between piers, except pier cladding, or absence of cladding, may match current material on renovations and minor expansions of existing structures.			
Chimney Cladding	Required; brick, natural stone, with material matching primary material of Façade			
Building Types				
House	P	Commercial	P	
Duplex	P	Mixed Use	P	
Townhouse	P	Flex	P	
Small Multifamily	P	Mid-Rise	NP	
Large Multifamily	P	Large Scale Commercial	NP	
Live/Work	P	Civic	P	

See *Table 4.3.8.A (Principal Building Types - Summary)* and *Table 4.3.8.B (Principal Building Types - Specific Standards)*. For Development Parcels, see also *Table 5.1.6 (Building Type Mix)*.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-4 TABLE 4.3.1-D DISTRICT STANDARDS: GENERAL URBAN CHARACTER DISTRICT

Vehicular Parking Requirements

Parking Location

	On-Street Parking	Off-Street Parking
Domestic Vehicles	P	P in 3 rd layer only, and in Driveway
Recreational Vehicles	NP	P in 3 rd layer only, and in Driveway
Heavy Equipment	NP	P in 3 rd layer only, and in Driveway
Tractor Trailers (including trailers for storage)	NP on Street, except for delivery and Temporary Use of Trailers	NP
All other Vehicles	NP	P in 3 rd layer only, and in Driveway

Additional Parking Requirements

Off-Street Parking Surface	Asphalt, concrete, or another hard surface
Garage Location	P In 3 rd Layer only
Garage Design	Min. interior dimensions 10 ft. x 20 ft. per vehicle Parking space If Garage faces Street in 1 st or 2 nd layer: max. Garage door width 33% of total Garage + Façade width Garage must be detailed, finished, & designed like the rest of the Building with carriage house doors; max. Garage door width 9ft; each Garage door must have ornamental lighting fixture above it; min 2ft separation between Garage doors.
Driveway/ Vehicular Entrance Location	P in any Layer
Driveway/ Vehicular Entrance Maximum Width	10 ft. max in 1 st Layer if Residential; 36 ft. max in 1 st layer if non-Residential; regardless if shared or not.
Parking Structure	P if Screen from Frontage by Liner Buildings
Parking Structure Pedestrian Exit Location	Via pedestrian access to Frontage

Bicycle Parking

See Section 4.3.13

Thoroughfare & Internal Drive Types*

* Applicable only to Development Parcels

See Article 5 (Development Parcel Standards) for additional requirements

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-4 TABLE 4.3.1-D DISTRICT STANDARDS: GENERAL URBAN CHARACTER DISTRICT

Loading & Access

Off-Street Loading and Storage	P in 3 rd Layer only
Utility Box & Service Meter* Locations (*Not including water meters)	P in 3 rd Layer only
Off-Street Trash Receptacle Locations	P in 3 rd Layer only
Off-Street Dumpster Locations	P in 3 rd Layer only
Drive- Through Locations	P in 3 rd Layer only

Non-Building Components

	1 st Layer	2 nd Layer	3 rd Layer
HVAC Equipment, Utility, Service and Mechanical Equipment	NP	P if Screened from Frontage	P
Solar Panels	P if coplanar to and integrated into roof design		P
Antennas & Satellite Equipment	P in 1 st or 2 nd Layer if such Layer is only possible location for satisfactory reception		P
Recreation or Play Equipment	NP	NP	P
Animals Enclosures, Runs or Shelters	NP	NP	P
Swimming pools, Hot Tubs and Spas	NP	NP	P
Transmitting and/or receiving towers, or antennas and wind-generating machines	NP	NP	P

Signs

See Sign Standards in Article 7 (Sign Standards) and Table 7.12.B-1 (Sign Types - Summary) and Table 7.1.2.B-2 (Sign Types- Specific Standards)

Lighting

See Private Lighting Requirements in Section 4.3.17 and Table 4.3.17.B (Private Lighting Standards)

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-4 TABLE 4.3.1-D DISTRICT STANDARDS: GENERAL URBAN CHARACTER DISTRICT

Private Landscaping and Fencing

Landscaping

Required continuous shrubs around foundation at Frontage if 1st Layer $\geq$ 3ft. deep, plus if 1st Layer is $\geq$ 15ft. deep, 1 tree planted in 1st Layer every 50' ft of Frontage. Drive aisles within 1st Layer, continuous shrubs Landscaping must comply with Section 4.3.16

Walls & Fencing (not including Screens)

Height 4 ft max at Frontage, otherwise 6 ft max; height measured from average undisturbed grade of Adjacent property at property line

Construction Finished side must face Adjacent property, Thoroughfare, Path, Passage or Waterbody

Maintenance Must be well maintained, in upright condition and free of missing or broken parts and graffiti.

Materials

Natural Wood	P only Picket type allowed at Frontage; other types allowed on sides and rear	Chain Link	P at sides and rear only
Brick, Natural Stone, or Stucco over Masonry	P	Barbed/ Razor/ Concertina Wire	NP
Wrought Iron or Aluminum	P	Exposed or Painted Aggregate Concrete	NP
Vinyl	P	Smooth or Split-faced Block	NP

Additional Standards

Pedestrian connections through to Adjacent Neighborhoods or Uses **Required**

Location of Retaining Walls **P** within required Yards, per Section 4.3.10
If supporting grade 8 ft. or higher than grade at property line, must be set back 10 ft. from property line

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-4 **TABLE 4.3.1-D DISTRICT STANDARDS:**
GENERAL URBAN CHARACTER DISTRICT

Screens, Street-Screens & Buffers		
Height		
	At Frontage or Adjacent to Civic Space	Not at Frontage or Adjacent to Civic Space
Wall Screen/Street-Screen Height	3 ft. to 5 ft.	5ft. to 6ft; Minimum 6ft. for Dumpsters and Trash Receptacles
Fence Screen/ Street-Screen Height	NP	5ft. to 6ft. for Dumpsters and Trash Receptacles
Hedge Screen/ Street-Screen Height	3 ft. to 5 ft at installation	5ft. to 6ft. at installation
Materials		
Wall Screen or Street-Screen	Brick, Natural Stone or Stucco over Masonry	
Fence Screen or Street-Screen	Natural Wood, painted or unpainted	
Hedge Screen or Street-Screen	Evergreen plants with min. 80% opacity	
Additional Standards		
Non-Residential & Multi-Family Residential Screen / Streetscreen Adjacent to or across Throughfare from Non-Multi-Family Residential	N/R	
Screening of Parking, Loading Areas, Service Areas, Outdoor Storage, Drive-Throughs, Trash Receptacles/Dumpsters, HVAC and other equipment screened from Frontage, Civic Space and Adjacent Property	R; except at Driveways: Parking Lots and Parking Areas must be Screened from Frontage and Civic Space by Building or Streetscreen; otherwise, Screening must be by Building, wall, hedge, or fence at Frontage or Building, Wall, hedge or fence not at Frontages or Adjacent to Civic Space.	
HVAC, Mechanical and other Equipment Screening	R; must be Screened from Frontage and Civic Space by Building parapet or other Building Element	
Self-Storage Warehouse Screening	N/A (not permitted in District)	
Streetscreen Location	2 nd Layer	
Parcel Buffer	Section 4.3.11.H	
Project Buffer	Section 5.8	

CD-4C TABLE 4.3.1-E DISTRICT STANDARDS: GENERAL URBAN CORRIDOR CHARACTER DISTRICT



General Description

The CD-4C General Urban – Corridor Character District consists of a medium density area along a corridor. It provides for a balanced automobile and pedestrian-oriented built environment and a mix of Building Types and primarily Residential, Retail/ Personal Service/ Artisan, Office, Lodging and Civic Uses; there are medium, narrow or no front Setbacks and narrow to medium side Setbacks. It has variable private landscaping and it has Thoroughfares and Internal Drives with curbs, Sidewalks and trees that define medium-sized blocks. CD-4C is an appropriate District for parcels identified as Facilitate or Active on the Areas of Change map of the Comprehensive Plan, which have access onto a public right-of-way classified as principal arterial or minor arterial in the Transportation element of the Plan and are located in Suburban Neighborhoods and City Center Urban Village Future Land Use Character Areas described in the Comprehensive Plan.



ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-4C TABLE 4.3.1-E DISTRICT STANDARDS: GENERAL URBAN CORRIDOR CHARACTER DISTRICT

Density / Floor Area Ratio (FAR)

**Applicable only to Development Parcels*

24 Density Units per acre max

BLOCK SIZE*

**Applicable only to Development Parcels*

Block Perimeter 2400 ft. max

Private Frontage Types

Common Yard	P	Stepfront	NP
Porch	P	Shopfront	P
Fence	P	Gallery	P
Terrace/Lightwell	P	Arcade	NP
Forecourt	P	Officefront	P
Stoop	P		

See Table 4.3.7.A (Private Frontage Types)

Civic Space Types*

**Applicable only to Development Parcels*

Natural Area	NP	Playground	P
Green	NP	Sport Field	NP
Square	P	Community Garden	P
Plaza	P	Pocket Park	P

See Table 5.3.3.A (Civic Space Types - Summary) and Table 5.3.3.B (Civic Space - Specific Standards)

Permitted Uses

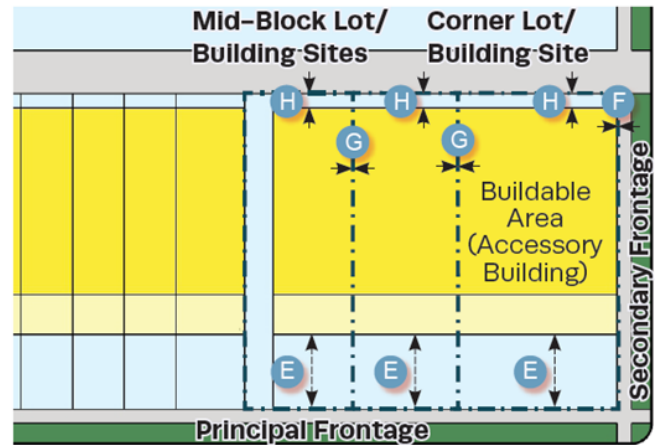
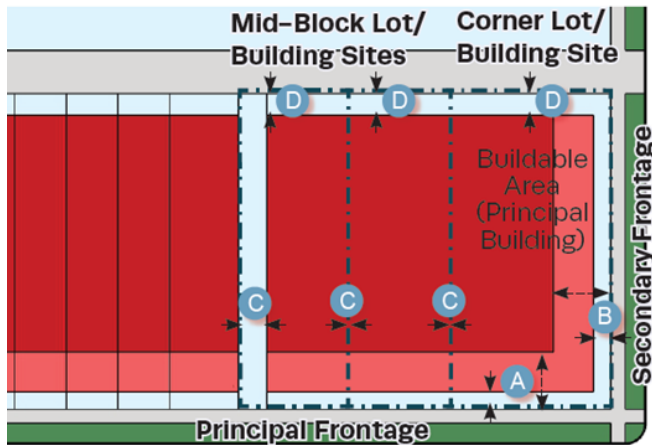
See Table 4.3.9.A-1 (Building, Lot & Building Site Principal Use), Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses), and Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses). For Development Parcels, see also Table 5.1.7 (Principal Use Mix).

Number of Buildings

Principal Building	1 max
Accessory Buildings	1 max

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-4C **TABLE 4.3.1-E DISTRICT STANDARDS:**
GENERAL URBAN CORRIDOR CHARACTER DISTRICT



Lot Occupation

Lot/ Building Site Width

House: 38' min if Alley loaded Garage at rear, otherwise 50 ft. min
 Duplex: 30 ft. min for each unit of Duplex
 Townhouse: For Townhouses with each unit on its own Lot or Building Site: 18- 36 ft. for single Townhouse unit attached to other
 Townhouse units x8 max. attached Townhouse units. For multiple Townhouses on a single Lot or Building Site 18-20 ft. per Townhouse unit x6max. attached Townhouse units
 Large Scale Commercial: 600 ft max
 All other Building Types: 18 ft. min – 200 ft. max

Frontage Buildout

60% min except commercial 40% min

Lot/ Building Site Area

NR

Impervious Surface Coverage

80% max

Lot/ Building Site Enfrontment

Must enfront a vehicular Thoroughfare or Internal Drive, except $\leq$ 20% of the Lots or Building Sites within each type of Character District of a Development Parcel may Enfront a Pedestrian Path, Passage, pedestrian walkway or water body if such Lots have legal and physical vehicular access to a vehicular Thoroughfare via Driveway or Easement. The Planning Commission may approve alternative enfrontment within a Development Parcel as described in 8.5.6.O

Lot/ Building Site Access

All lots must have legal and physical vehicular access to a vehicular Thoroughfare or Internal drive via Driveway or Easement.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-4C **TABLE 4.3.1-E DISTRICT STANDARDS:**
GENERAL URBAN CORRIDOR CHARACTER DISTRICT

Setbacks / Yards					
Setbacks / Yards – Principal Building			Setbacks / Yards – Accessory Building		
Front Setback / Yard, Principal Frontage	6 ft. min, 40 ft. max except where the Lot or Building Site enfronts a Thoroughfare with a functional classification of Arterial and parking is located in the First Layer, max 85 ft	A	Front Setback / Yard, Principal Frontage	20 ft. min behind Principal Building Frontage	E
Front Setback / Yard, Secondary Frontage	6 ft. min, 40 ft. max except where the Lot or Building Site enfronts a Thoroughfare with a functional classification of Arterial and parking is located in the First Layer, max 85 ft	B	Front Setback / Yard, Secondary Frontage	5 ft. min	F
Side Setback / Yard, each side	0 ft. min. per side	C	Side Setback / Yard, each side	5 ft. min	G
Rear Setback / Yard	3 ft. min; or 15 ft. min from center line of rear Alley.	D	Rear Setback / Yard	3 ft. min; or 5 ft. min if Garage faces rear Alley.	H

Building Standards

Building Height*

Principal Building 4 Stories max

Accessory Building 2 Stories max

*Stories/ Height do not include Attics and Basements, chimneys, flagpoles, towers, spires, belfries, parapet walls, aerials, or antennas. Any Building exceeding 35 feet in height must obtain approval from stipulations made by the Fire Department in accordance with the above cited codes shall be required. *

*The Fire Department may stipulate special fire measures in accordance with National Fire Protection Association and International Building Code criteria as a condition of approval of such Structure. In such instance stipulations made by the Fire Department in accordance to with the above cited codes shall be required. *

Ceiling Height

May not exceed 14 ft. from finished floor to finished ceiling, except for a first floor Shopfront Facade, which may not exceed 25 ft.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

Building Composition

Vertical Composition	Each Principal Building must have an identifiable Base, Middle & Cap
Finished Floor Level	NR

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-4C **TABLE 4.3.1-E DISTRICT STANDARDS:**
GENERAL URBAN CORRIDOR CHARACTER DISTRICT

Building Standards	
Façade	
Main Entrance	Main Entrance must be in Façade of Principal Frontages. If Shop Frontage at corner Main Entrance may be at Principal Frontage, or at corner.
Façade Position	Parallel to straight Frontage Line or to tangent of curved Frontage Line
Façade & Façade Element Design Proportions	Must be vertically proportioned
Blank Walls	NP at Frontage
Façade Articulation	Except for House Building Types, A Façade greater than 100 ft. in width must be differentiated so that it appears to be comprised of two or more Adjacent Buildings, by dividing such Façade into two segments each of which includes a separate entrance and (1) differs from each of the other segments with respect to all of the following: (a) a change in shape, sill, and header height, detail, size, spacing, rhythm, and muntin pattern of windows; (b) a change of Building or cornice height; (c) a change in cornice details; (d) a change of wall material or wall color; a change in trim courses and other horizontal elements; (e) a change in dormer or balcony design, if any, and (f) providing or changing pilasters, columns, or other Façade elements; and (2) is composed with a defined center and edges. (See Illustration 4.3.5.A-3)
Façade Openings	Windows, and/or doors spaced ≤ 20 ft. apart In Stories above first Façade openings must be $\leq 50\%$ of the total Façade area
Façade Glazing	Non-Shopfront: 20% - 60% of total ground floor Façade area for Shopfront: min. 50% of total ground floor Façade area, min. 20% of total Façade area on upper floors and secondary elevations
Window Shape	Square or vertical in proportion, except transoms
Window Alignment	Upper floor windows and other features must be aligned with those of first floor
Window Types	Except for transoms and sidelights, Windows in Façade and 1st & 2nd Layers must be single-hung, double-hung, casement or awning types
Window Glazing Material	Clear glass is Required for all Elevations
Window Trim in 1 st Layer	Min. 4 in. trim with sill and top plate if siding surrounding window; soldier course above lintel and rollock course below sill if brick or stone surrounds window
Shutters	If any, must be functional and proportioned to cover half of window width from each side or entire window width, with shutter dogs
Façade Window Sill Height	If Residential, 5 ft. min above average grade at Façade
Porch Frontages	Min. 6 ft. clear depth, excluding rails, pillars, columns or other features
Shopfront Frontages	12 in. – 24 in. knee wall required at Frontage
Façade Variety	No Façade may exist more than once in a Block Face

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-4C **TABLE 4.3.1-E DISTRICT STANDARDS:**
GENERAL URBAN CORRIDOR CHARACTER DISTRICT

Building Standards (Continued)

Roof Type & Pitch

Flat	P
Shed	P at rear only and if ridge is attached to an exterior Building wall; except for porches, stoops or dormers which may have a shed roof anywhere on the Building.
Hip	P
Gable	P
Pitch	6:12 – 14:12, except for shed roofs which may be 3:12 – 14:12 and except roof pitch may match the primary roof pitch of an existing Building that is less than 6:12

Roof Design

Eaves shall extend no less than nine inches beyond the supporting walls.

Gable end rakes shall overhang at least six inches.

Eaves and rakes on Accessory Buildings and dormers shall overhang at least six inches.

Soffits shall be placed perpendicular to the Building wall, not sloping in plane with the roof (except for gable end rakes).

Building Materials

Primary Building Material on Facades	Brick	P	Authentic stucco over masonry	P
	Natural stone	P	Exposed concrete	NP
	Wood	P	Vinyl or Aluminum siding	NP
	Cementitious siding	P	Corrugated and/or sheet metal	NP

Changes in Building Materials Primary materials must continue alongside Elevations through 2nd layer. Primary materials shall continue for entire length of all Facades facing a frontage. Any material changes must coincide with form, structural, or massing changes and shall not occur at outside corner of any such change.

Building Colors Up to three (3) colors, including the natural color of any allowed materials, but not excluding trim

Foundation Cladding **Required**; brick, stone, or stucco except renovations and minor expansions of existing structures may match current material, or absence of cladding.

Porch Pier Cladding **Required**; brick or stone, with any space under Porch concealed by painted or stained latticework between piers, except renovations and minor expansions of existing structures, pier cladding, or absence of cladding, may match current material.

Chimney Cladding **Required**; brick, natural stone, with material matching primary material of Façade

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-4C TABLE 4.3.1-E DISTRICT STANDARDS: GENERAL URBAN CORRIDOR CHARACTER DISTRICT

Building Types

House	P	Commercial	P
Duplex	P	Mixed Use	P
Townhouse	P	Flex	P
Small Multifamily	P	Mid-Rise	NP
Large Multifamily	P	Large Scale Commercial	P
Live/Work	P	Civic	P

See Table 4.3.8.A (Principal Building Types - Summary) and Table 4.3.8.B (Principal Building Types - Specific Standards). For Development Parcels, see also Table 5.1.6 (Building Type Mix).

Vehicular Parking Requirements

Parking Location

	On-Street Parking	Off-Street Parking
Domestic Vehicles	P	P in 3 rd layer only, and in Driveway
Recreational Vehicles	NP	P in 3 rd layer only, and in Driveway
Heavy Equipment	NP	P in 3 rd layer only, and in Driveway
Tractor Trailers (including trailers for storage)	NP	P in 3 rd layer only, and in Driveway
All other vehicles	NP	P in 3 rd layer only, and in Driveway except where the Lot or Building Site utilizing Commercial, Large-Scale Commercial, Mixed Use, or Flex buildings enfronts a Thoroughfare with an Arterial functional classification, a maximum of two bays of on-site parking and a drive aisle between the building and the Thoroughfare is permitted.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-4C TABLE 4.3.1-E DISTRICT STANDARDS: GENERAL URBAN CORRIDOR CHARACTER DISTRICT

Vehicular Parking Requirements (Continued)

Additional Parking Requirements

Off-Street Parking Surface	Prepared surface of asphalt, concrete, or another hard surface
Garage Location	P In 3 rd Layer only
Garage Design	Min. interior dimensions 10 ft. x 20 ft. per vehicle Parking space If Garage faces Street: max Garage door width 33% of total Garage + Façade width Garage must be detailed, finished, & designed like the rest of the Building with carriage house doors; max. Garage door width 9ft; each Garage door must have ornamental lighting fixture above it; min 2ft separation between Garage doors.
Driveway/ Vehicular Entrance Location	P in any Layer
Driveway/ Vehicular Entrance Maximum Width	10 ft. max in 1 st Layer if Residential; 36 ft. max in 1 st layer if non-Residential; regardless if shared or not.
Parking Structure	P if Screen from Frontage by Liner Buildings
Parking Structure Pedestrian Exit Location	Via pedestrian access to Frontage

Bicycle Parking

See Section 4.3.13

Thoroughfare & Internal Drive Types*

* Applicable only to Development Parcels

See Article 5 (Development Parcel Standards) for additional requirements

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-4C TABLE 4.3.1-E DISTRICT STANDARDS: GENERAL URBAN CORRIDOR CHARACTER DISTRICT

Loading & Access

Off-Street Loading and Storage	P in 3 rd Layer only
Utility Box & Service Meter* Locations (*Not including water meters)	P in 3 rd Layer only
Off-Street Trash Receptacle Locations	P in 3 rd Layer only
Off-Street Dumpster Locations	P in 3 rd Layer only
Drive- Through Locations	P in 3 rd Layer only

Non-Building Components

	1 st Layer	2 nd Layer	3 rd Layer
HVAC Equipment, Utility, Service and Mechanical Equipment	NP	P if Screened from Frontage	P
Solar Panels	P if coplanar to and integrated into roof design		P
Antennas & Satellite Equipment	P in 1 st or 2 nd Layer if such Layer is only possible location for satisfactory reception		P
Recreation or Play Equipment	NP	NP	P
Animals Enclosures, Runs or Shelters	NP	NP	P
Swimming pools, Hot Tubs and Spas	NP	NP	P
Transmitting and/or receiving towers, or antennas and wind-generating machines	NP	NP	P

Signs

See Sign Standards in Article 7 (Sign Standards) and Table 7.12.B-1 (Sign Types - Summary) and Table 7.1.2.B-2 (Sign Types- Specific Standards)

Lighting

See Private Lighting Requirements in Section 4.3.17 and Table 4.3.17.B (Private Lighting Standards)

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-4C

TABLE 4.3.1-E DISTRICT STANDARDS: GENERAL URBAN CORRIDOR CHARACTER DISTRICT

Private Landscaping and Fencing

Landscaping

Required continuous shrubs around foundation at Frontage if 1st Layer $\geq$ 3ft. deep, plus if 1st Layer is $\geq$ 15ft. deep, 1 tree planted in 1st Layer every 50' ft of Frontage. Drive aisles within 1st Layer, continuous shrubs Landscaping must comply with Section 4.3.16

Walls & Fencing

Height	3.5 - 4 ft max at Frontage, otherwise 6 ft max; height measured from avg. undisturbed grade of Adjacent property at property line
Construction	Finished side must face Adjacent property, Thoroughfare, Path, Passage or Waterbody
Maintenance	Must be well maintained, in upright condition and free of missing or broken parts and graffiti

Materials

Natural Wood	P only Picket type allowed at Frontage; other types allowed on sides and rear	Chain Link	P at sides and rear only
Brick, Natural Stone, or Stucco over Masonry	P	Barbed/ Razor/ Concertina Wire	NP
Wrought Iron or Aluminum	P	Exposed or Painted Aggregate Concrete	NP
Vinyl	P	Smooth or Split-faced Block	NP

Additional Standards

Pedestrian connections through to Adjacent Neighborhoods or Uses	Required Where parking is located in the First Layer, continuous pedestrian connection shall be provided from the Main Entrance of the Building to the Frontage Line and adjacent uses by way of an elevated crosswalk traversing the parking area and connected sidewalks
Location of Retaining Walls	P within required Yards, per Section 4.3.10 If supporting grade 8 ft. or higher than grade at property line, must be set back 10 ft. from property line.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-4C **TABLE 4.3.1-E DISTRICT STANDARDS:**
GENERAL URBAN CORRIDOR CHARACTER DISTRICT

Screens, Street-Screens & Buffers		
Height		
	At Frontage or Adjacent to Civic Space	Not at Frontage or Adjacent to Civic Space
Wall Screen/Street-Screen Height	3 ft. to 5 ft.	5ft. to 6ft; Minimum 6ft. for Dumpsters and Trash Receptacles
Fence Screen/ Street-Screen Height	NP	5ft. to 6ft. for Dumpsters and Trash Receptacles
Hedge Screen/ Street-Screen Height	3 ft. to 5 ft at installation	5ft. to 6ft. at installation
Materials		
Wall Screen or Street-Screen	Brick, Natural Stone or Stucco over Masonry	
Fence Screen or Street-Screen	Natural Wood, painted or unpainted	
Hedge Screen or Street-Screen	Evergreen plants with min. 80% opacity	
Additional Standards		
Non-Residential & Multi-Family Residential Screen / Streetscreen Adjacent to or across Throughfare from Non-Multi-Family Residential	N/R	
Screening of Parking, Loading Areas, Service Areas, Outdoor Storage, Drive-Throughs, Trash Receptacles/Dumpsters, HVAC and other equipment screened from Frontage, Civic Space and Adjacent Property	R; except at Driveways: Parking Lots and Parking Areas must be Screened from Frontage and Civic Space by Building or Streetscreen; Parking Structures must be Screened from Frontages by Liner Buildings. Otherwise, Screening must be by Building, wall, hedge or fence at Frontage or Building, Wall, hedge or fence not at Frontages or Adjacent to Civic Space. Where parking is located in the First Layer, it shall be screened by a landscape buffer at least 10 feet in width consisting of two canopy trees and two accent trees per 100 linear feet of property frontage.	
HVAC, Mechanical and other Equipment Screening	R; must be Screened from Frontage and Civic Space by Building parapet or other Building Element	
Self-Storage Warehouse Screening	N/A (not permitted in District)	
Streetscreen Location	2 nd Layer	
Parcel Buffer	Section 4.3.11.H	
Project Buffer	Section 5.8	

CD-5 TABLE 4.3.1-F DISTRICT STANDARDS: URBAN CENTER CHARACTER DISTRICT



General Description

The CD-5 Urban Center Character District consists of medium to high-density Mixed-Use areas. It has a tight network of Thoroughfares and Internal Drives with Sidewalks, streetlights, and regular tree spacing, defining medium sized blocks. Buildings are set close to the Sidewalks. CD-5 is an appropriate District for the City Center Urban Village Future Land Use Character Area described in the Comprehensive Plan.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-5 TABLE 4.3.1-F DISTRICT STANDARDS: URBAN CENTER CHARACTER DISTRICT

Density / Floor Area Ratio (FAR)

**Applicable only to Development Parcels*

NR

BLOCK SIZE*

**Applicable only to Development Parcels*

Block Perimeter 2000 ft. max or 3000 ft max if a parking structure provided within Block

Private Frontage Types

Common Yard	NP	Stepfront	P
Porch	NP	Shopfront	P
Fence	NP	Gallery	P
Terrace/Lightwell	P	Arcade	P
Forecourt	P	Officefront	P
Stoop	P		

See Table 4.3.7.A (Private Frontage Types)

Civic Space Types*

**Applicable only to Development Parcels*

Natural Area	NP	Playground	P
Green	NP	Sport Field	NP
Square	P	Community Garden	P
Plaza	P	Pocket Park	P

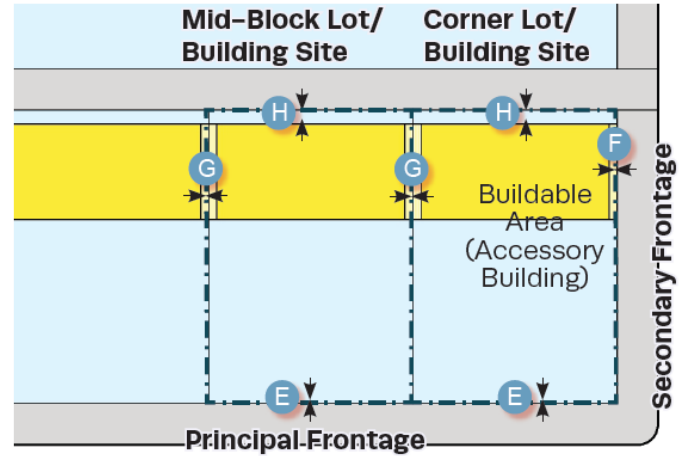
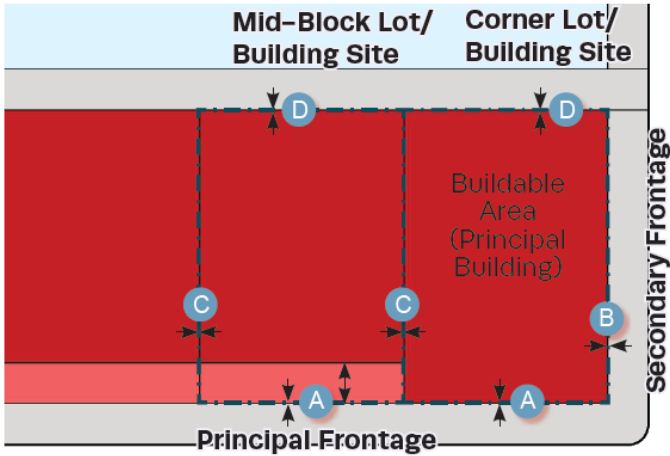
See Table 5.3.3.A (Civic Space Types - Summary) and Table 5.3.3.B (Civic Space - Specific Standards)

Permitted Uses

See Table 4.3.9.A-1 (Building, Lot & Building Site Principal Use), Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses), and Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses). For Development Parcels, see also Table 5.1.7 (Principal Use Mix).

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-5 **TABLE 4.3.1-F DISTRICT STANDARDS:**
URBAN CENTER CHARACTER DISTRICT



Number of Buildings

Principal Building	1 max
Accessory Buildings	1 max

Lot Occupation

Lot/ Building Site Width	House: 38 ft min if Alley loaded Garage at rear, otherwise 50 ft. min
	Duplex: 30 ft. min for each unit of Duplex
	Townhouse:
	For Townhouses with each unit on its own Lot or Building Site: 18- 36 ft. for single Townhouse unit attached to other Townhouse units x8 max. attached Townhouse units. For multiple Townhouses on a single Lot or Building Site 18- 20 ft. per Townhouse unit x6max. attached Townhouse units
Frontage Buildout	All other Building Types: 18 ft. min – 120 ft. max
Frontage Buildout	80% min except House and Duplex 60% min
Lot/ Building Site Area	NR
Impervious Surface Coverage	100% max
Lot/ Building Site Enfrontment	Must enfront a vehicular Thoroughfare or Internal Drive, except $\leq 20\%$ of the Lots or Building Sites within each type of Character District of a Development Parcel may Enfront a Pedestrian Path, Passage, pedestrian walkway or water body if such Lots have legal and physical vehicular access to a vehicular Thoroughfare via Driveway or Easement.
Lot/ Building Site Access	All lots must have legal and physical vehicular access to a vehicular Thoroughfare or Internal drive via Driveway or Easement.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-5 TABLE 4.3.1-F DISTRICT STANDARDS: URBAN CENTER CHARACTER DISTRICT

Setbacks / Yards					
Setbacks / Yards – Principal Building			Setbacks / Yards – Accessory Building		
Front Setback / Yard, Principal Frontage	0 ft. at corners; 0 ft. min; 15 ft. max. elsewhere	A	Front Setback / Yard, Principal Frontage	40 ft. max from rear property line; except	E
Front Setback / Yard, Secondary Frontage	0 ft. at corners; 0 ft. min; 15 ft. max. elsewhere	B	Side Setback / Yard	3 ft. max	F
Side Setback / Yard, each side	0 ft. min; 24 ft. max per side	C	Rear Setback / Yard	5 ft. min	G
Rear Setback / Yard	NR	D			

Building Standards

Building Height*

Principal Building	2 Story min; 5 Stories max. adjacent to CD-5; all other areas 3 stories max
Accessory Building	2 Stories max

*Stories/ Height do not include Attics and Basements, chimneys, flagpoles, towers, spires, belfries, parapet walls, aerials, or antennas. Any Building exceeding 35 feet in height must obtain approval from stipulations made by the Fire Department in accordance with the above cited codes shall be required. *

*The Fire Department may stipulate special fire measures in accordance with National Fire Protection Association and International Building Code criteria as a condition of approval of such Structure. In such instance stipulations made by the Fire Department in accordance to with the above cited codes shall be required. *

Ceiling Height

May not exceed 14 ft. from finished floor to finished ceiling, except for a first floor Business/ Commercial, Office, Retail/ Personal Service, or Accommodation/ Lodging Use, which must be a minimum of 11ft. with a maximum of 25 ft.

Building Composition

Vertical Composition	Each Principal Building must have an identifiable Base, Middle & Cap
Finished Floor Level	If Residential: 18 in. min., 48 in. max. above average grade at Façade

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-5 TABLE 4.3.1-F DISTRICT STANDARDS: URBAN CENTER CHARACTER DISTRICT

Building Standards (Continued)	
Façade	
Main Entrance	Main Entrance must be in Façade of Principal Frontages. If Shop Frontage at corner Main Entrance may be at Principal Frontage, or at corner.
Façade Position	Parallel to straight Frontage Line or to tangent of curved Frontage Line
Façade & Façade Element Design Proportions	Must be vertically proportioned
Blank Walls	NP at Frontage
Façade Articulation	A Façade greater than 100 ft. in width must be differentiated so that it appears to be comprised of two or more Adjacent Buildings, by dividing such Façade into two segments each of which includes a separate entrance and (1) differs from each of the other segments with respect to all of the following: (a) a change in shape, sill, and header height, detail, size, spacing, rhythm, and muntin pattern of windows; (b) a change of Building or cornice height; (c) a change in cornice details; (d) a change of wall material or wall color; a change in trim courses and other horizontal elements; (e) a change in dormer or balcony design, if any, and (f) providing or changing pilasters, columns, or other Façade elements; and (2) is composed with a defined center and edges. (See Illustration 4.3.5.A-3)
Façade Openings	Windows, and/or doors spaced ≤ 20 ft. apart In Stories above first Façade openings must be $\leq 50\%$ of the total Façade area
Façade Glazing	Non-Shopfront 20% - 60% of total ground level Façade area; for Shopfront: min 50% of total ground level Façade area, min. 20% of total Façade area on upper floors and secondary elevations
Window Shape	Square or vertical in proportion, except transoms
Window Alignment	Upper floor windows and other features must be aligned with those of first floor
Window Types	Except in Shopfront or Gallery Frontage, and except for Transoms and sidelights, Windows in Façade and 1st & 2nd Layers must be single-hung, double-hung, casement or awning types. In Stories above first, Façade openings must be $\leq 50\%$ of total Façade area.
Window Glazing Material	Clear glass is Required for all Elevations
Window Trim in 1 st Layer	Min. 4 in. trim with sill and top plate if siding surrounding window; soldier course above lintel and rollock course below sill if brick or stone surrounds window
Shutters	If any, must be functional and proportioned to cover half of window width from each side or entire window width, with shutter dogs
Façade Window Sill Height	If Residential, 5 ft. min above average grade at Façade
Porch Frontages	Min. 6 ft. clear depth, excluding rails, pillars, columns or other features
Shopfront Frontages	12 in. – 24 in. knee wall required at Frontage
Façade Variety	No Façade may exist more than once in a Block Face or within view of the same Façade

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-5 **TABLE 4.3.1-F DISTRICT STANDARDS:**
URBAN CENTER CHARACTER DISTRICT

Building Standards (continued)				
Roof Type & Pitch				
Flat	P			
Shed	P at rear only and if ridge is attached to an exterior Building wall; except for porches, stoops or dormers which may have a shed roof anywhere on the Building.			
Hip	P			
Gable	P			
Pitch	6:12 – 14:12, except for shed roofs which may be 3:12 – 14:12 and except roof pitch may match the primary roof pitch of an existing Building that is less than 6:12			
Roof Design				
Eaves shall extend no less than nine inches beyond the supporting walls.				
Gable end rakes shall overhang at least six inches.				
Eaves and rakes on Accessory Buildings and dormers shall overhang at least six inches.				
Soffits shall be placed perpendicular to the Building wall, not sloping in plane with the roof (except for gable end rakes).				
Building Materials				
Primary Building Material on Facades	Brick	P	Authentic stucco over masonry	P
	Natural stone	P	Exposed concrete	NP
	Wood	P	Vinyl or Aluminum siding	NP
	Cementitious siding	P	Corrugated and/or sheet metal	NP
Changes in Building Materials	Primary materials must continue alongside Elevations through 2 nd layer. Primary materials shall continue for entire length of all Facades facing a frontage. Any material changes must coincide with form, structural, or massing changes and shall not occur at outside corner of any such change.			
Building Colors	Up to three (3) colors, including the natural color of any allowed materials, but not excluding trim			

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-5 TABLE 4.3.1-F DISTRICT STANDARDS: URBAN CENTER CHARACTER DISTRICT

Building Types

House	P	Commercial	P
Duplex	P	Mixed Use	P
Townhouse	P	Flex	P
Small Multifamily	P	Mid-Rise	P
Large Multifamily	P	Large Scale Commercial	NP
Live/Work	P	Civic	P

See **Table 4.3.8.A (Principal Building Types - Summary)** and **Table 4.3.8.B (Principal Building Types - Specific Standards)**. For Development Parcels, see also **Table 5.1.6 (Building Type Mix)**.

Vehicular Parking Requirements

Parking Location

	On Street Parking	Off-Street Parking
Domestic Vehicles	P	P in 3 rd layer only, and in Driveway
Recreational Vehicles	NP	P in 3 rd layer only, and in Driveway
Heavy Equipment	NP	P in 3 rd layer only, and in Driveway
Tractor trailers (including trailers for storage)	NP	P in 3 rd layer only, and in Driveway
All Other Vehicles	NP	P in 3 rd layer only, and in Driveway

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-5 TABLE 4.3.1-F DISTRICT STANDARDS: URBAN CENTER CHARACTER DISTRICT

Additional Parking Requirements

Off-Street Parking Surface	Prepared surface of asphalt, concrete, or another hard surface
Garage Location	P In 3 rd Layer only
Garage Design	Min. interior dimensions 10 ft. x 20 ft. per vehicle Parking space If Garage faces Street: max Garage door width 33% of total Garage + Façade width Garage must be detailed, finished, & designed like the rest of the Building with carriage house doors; max. Garage door width 9ft; each Garage door must have ornamental lighting fixture above it; min 2ft separation between Garage doors.
Driveway/ Vehicular Entrance Location	P in any Layer
Driveway/ Vehicular Entrance Maximum Width	24 ft. max in 1 st Layer; regardless if shared or not.
Parking Structure	P if Screen from Frontage by Liner Buildings
Parking Structure Pedestrian Exit Location	Via pedestrian access to Frontage

Vehicular Parking Requirements

Bicycle Parking

See Section 4.3.13

Thoroughfare & Internal Drive Types*

* Applicable only to Development Parcels

See Article 5 (Development Parcel Standards) for additional requirements

Loading & Access

Off-Street Loading and Storage	P in 3 rd Layer only
Utility Box & Service Meter* Locations (*Not including water meters)	P in 3 rd Layer only
Off-Street Trash Receptacle Locations	P in 3 rd Layer only
Off-Street Dumpster Locations	P in 3 rd Layer only
Drive- Through Locations	P in 3 rd Layer only

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-5 **TABLE 4.3.1-F DISTRICT STANDARDS:**
URBAN CENTER CHARACTER DISTRICT

Non-Building Components

	1 st Layer	2 nd Layer	3 rd Layer
HVAC Equipment, Utility, Service and Mechanical Equipment	NP	P if Screened from Frontage	P
Solar Panels	P if coplanar to and integrated into roof deign	P if coplanar to and integrated into roof deign	P
Antennas & Satellite Equipment	P in 1 st or 2 nd Layer if such Layer is only possible location for satisfactory reception	P in 1 st or 2 nd Layer if such Layer is only possible location for satisfactory reception	P
Recreation or Play Equipment	NP	NP	P
Animals Enclosures, Runs or Shelters	NP	NP	P
Swimming pools, Hot Tubs and Spas	NP	NP	P
Transmitting and/or receiving towers, or antennas and wind-generating machines	NP	NP	P

Signs

See Sign Standards in Article 7 (Sign Standards) and Table 7.12.B-1 (Sign Types - Summary) and **Table 7.1.2.B-2 (Sign Types- Specific Standards)**

Lighting

See Private Lighting Requirements in Section 4.3.17 and **Table 4.3.17.B (Private Lighting Standards)**

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-5 **TABLE 4.3.1-F DISTRICT STANDARDS:**
URBAN CENTER CHARACTER DISTRICT

Private Landscaping and Fencing

Landscaping

NA if paved or ≤ 3ft front Setback/ Yard; Otherwise, shrubs continuous around foundation at Façade. Landscaping must comply with Section 4.3.16

Walls & Fencing

Height	3.5 - 4 ft max at Frontage, otherwise 6 ft max; height measured from avg. undisturbed grade of Adjacent property at property line
Construction	Finished side must face Adjacent property, Thoroughfare, Path, Passage or Waterbody
Maintenance	Must be well maintained, in upright condition and free of missing or broken parts and graffiti

Materials

Natural Wood	P at sides and rear only	Chain Link	P at sides and rear only
Brick, Natural Stone, or Stucco over Masonry	P at sides and rear only	Barbed/ Razor/ Concertina Wire	NP
Wrought Iron or Aluminum	P	Exposed or Painted Aggregate Concrete	NP
Vinyl	NP	Smooth or Split-faced Block	NP

Additional Standards

Pedestrian connections through to Adjacent Neighborhoods or Uses	Required
Location of Retaining Walls	P within required Yards, per Sections 4.3.10 If supporting grade 8 ft. or higher that grade at property line, must be set back 10 ft. from property line

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-5

**TABLE 4.3.1-F DISTRICT STANDARDS:
URBAN CENTER CHARACTER DISTRICT**

Screens, Street-Screens & Buffers

Height

	At Frontage or Adjacent to Civic Space	Not at Frontage or Adjacent to Civic Space
Wall Screen/Street-Screen Height	3 ft. to 5 ft.	5ft. to 6ft; Minimum 6ft. for Dumpsters and Trash Receptacles
Fence Screen/ Street-Screen Height	NP	5ft. to 6ft. for Dumpsters and Trash Receptacles
Hedge Screen/ Street-Screen Height	3 ft. to 5 ft at installation	5ft. to 6ft. at installation

Materials

Wall Screen or Street-Screen	Brick, Natural Stone or Stucco over Masonry
Fence Screen or Street-Screen	Natural Wood, painted or unpainted
Hedge Screen or Street-Screen	Evergreen plants with min. 80% opacity

Additional Standards

Non-Residential & Multi-Family Residential Screen. Street-Screen Adjacent to or across Thoroughfare from Non-Family Residential	NR
Screening of Parking, Loading Areas, Service Areas, Outdoor Storage, Drive-Throughs, Trash Receptacle/Dumpsters, HVAC and other equipment Screened from Frontage, Civic Space and Adjacent Property	Required; except at Driveways: Parking Lots and Parking Areas must be Screened from Frontage and Civic Space by Building or Street-Screen; otherwise, Screening must be by Building, wall, hedge or fence at Frontage or Building wall, hedge or fence not at Frontage or Adjacent to Civic Space.
Rooftop Antenna Screening and HVAC, Mechanical and other Equipment Screening	Required; must be Screened from Frontage and Civic Space by Building Parapet or other Building element
Self-Storage Warehouse Screening	N/A (not permitted in District)
Street-Screen Location	2 nd Layer
Parcel Buffer	Section 4.3.11.H
Project Buffer	Section 5.8

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-5C

TABLE 4.3.1-G DISTRICT STANDARDS:
URBAN CENTER CORRIDOR CHARACTER DISTRICT



General Description

The CD-5C Urban Center Corridor Character District consists of medium to higher density Mixed Use areas. It provides for a balanced automobile and pedestrian oriented built environment, a mix of Building Types and primarily has a tight network of Thoroughfares and Internal Drives with Sidewalks, street lights, and regular tree spacing defining medium-sized blocks. Buildings are set close to Sidewalks. CD-5C is limited to parcels identified as Active on the Areas of Change map of the Comprehensive Plan which have access to a Principal Arterial identified in the Transportation Plan located in the City Center Urban Village Character Area described in the Comprehensive Plan.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-5C

TABLE 4.3.1-G DISTRICT STANDARDS: URBAN CENTER CORRIDOR CHARACTER DISTRICT

Density / Floor Area Ratio (FAR)

**Applicable only to Development Parcels*

NR

BLOCK SIZE*

**Applicable only to Development Parcels*

Block Perimeter 2000 ft. max or 3000 ft max if a parking structure provided within Block

Private Frontage Types

Common Yard	NP	Stepfront	NP
Porch	NP	Shopfront	P
Fence	NP	Gallery	P
Terrace/Lightwell	P	Arcade	P
Forecourt	P	Officefront	P
Stoop	P		

See Table 4.3.7.A (Private Frontage Types)

Civic Space Types*

**Applicable only to Development Parcels*

Natural Area	NP	Playground	P
Green	NP	Sport Field	NP
Square	P	Community Garden	P
Plaza	P	Pocket Park	P

See Table 5.3.3.A (Civic Space Types - Summary) and Table 5.3.3.B (Civic Space - Specific Standards)

Permitted Uses

See Table 4.3.9.A-1 (Building, Lot & Building Site Principal Use), Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses), and Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses). For Development Parcels, see also Table 5.1.7 (Principal Use Mix).

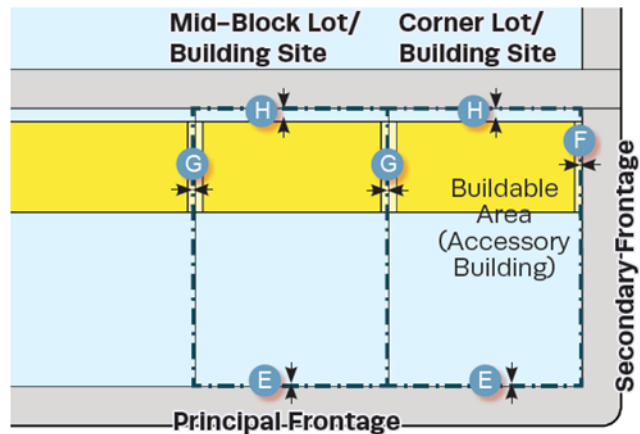
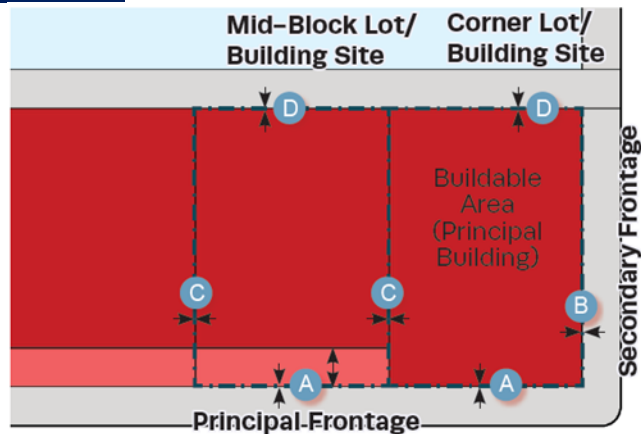
Number of Buildings

Principal Building	1 max
Accessory Buildings	1 max

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-5C

TABLE 4.3.1-G DISTRICT STANDARDS:
URBAN CENTER CORRIDOR CHARACTER DISTRICT



Lot Occupation

Lot/ Building Site Width	Townhouse: For Townhouses with each unit on its own Lot or Building Site: 18-36 ft. for single Townhouse unit attached to other Townhouse units x8 max. attached Townhouse units. For multiple Townhouses on a single Lot or Building Site 18-20 ft. per Townhouse unit x8 max. attached Townhouse units All other Building Types: 18 ft. min All Building Types: 120 ft. max
Frontage Buildout	80% min.
Lot/ Building Site Area	NR
Impervious Surface Coverage	100% max
Lot/ Building Site Enfrontment	Must enfront a vehicular Thoroughfare or Internal Drive, except $\leq 20\%$ of the Lots or Building Sites within each type of Character District of a Development Parcel may Enfront a Pedestrian Path, Passage, pedestrian walkway or water body if such Lots have legal and physical vehicular access to a vehicular Thoroughfare via Driveway or Easement.
Lot/ Building Site Access	All lots must have legal and physical vehicular access to a vehicular Thoroughfare or Internal drive via Driveway or Easement.

Setbacks / Yards

Setbacks / Yards – Principal Building			Setbacks / Yards – Accessory Building		
Front Setback / Yard, Principal Frontage	0 ft. at corners; 0 ft. min; 15 ft. max elsewhere	A	Front Setback / Yard, Principal Frontage	40 ft. max. from rear property line	E
Front Setback / Yard, Secondary Frontage	0 ft. at corners; 0 ft. min; 15 ft. max elsewhere	B	Side Setback / Yard	3 ft. max.	F
Side Setback / Yard, each side	0 ft. min; 24 ft. max. per side	C	Rear Setback / Yard	3 ft. min. or 5 ft. min. if Garage door faces Rear Alley	G
Rear Setback	NR	D			

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-5C

**TABLE 4.3.1-G DISTRICT STANDARDS:
URBAN CENTER CORRIDOR CHARACTER DISTRICT**

Building Standards

Building Height*

Principal Building	2 Story min; 4 Stories max
Accessory Building	2 Stories max

*Stories/ Height do not include Attics and Basements, chimneys, flagpoles, towers, spires, belfries, parapet walls, aerials, or antennas. Any Building exceeding 35 feet in height must obtain approval from stipulations made by the Fire Department in accordance with the above cited codes shall be required. *

*The Fire Department may stipulate special fire measures in accordance with National Fire Protection Association and International Building Code criteria as a condition of approval of such Structure. In such instance stipulations made by the Fire Department in accordance to with the above cited codes shall be required. *

Ceiling Height

May not exceed 14 ft. from finished floor to finished ceiling, except for a first floor Business/ Commercial, Office, Retail/ Personal Service, or Accommodation/ Lodging Use, which must be a minimum of 11ft. with a maximum of 25 ft.

Building Composition

Vertical Composition	Each Principal Building must have an identifiable Base, Middle & Cap
Finished Floor Level	If Residential: 18 in. min., 48 in. max. above average grade at Façade

Façade

Main Entrance	Main Entrance must be in Façade of Principal Frontages. If Shop Frontage at corner Main Entrance may be at Principal Frontage, or at corner.
Façade Position	Parallel to straight Frontage Line or to tangent of curved Frontage Line
Façade & Façade Element Design Proportions	Must be vertically proportioned
Blank Walls	NP at Frontage
Façade Articulation	Except for House Building Types, a Façade greater than 100 ft. in width must be differentiated so that it appears to be comprised of two or more Adjacent Buildings, by dividing such Façade into two segments each of which includes a separate entrance and (1) differs from each of the other segments with respect to all of the following: (a) a change in shape, sill, and header height, detail, size, spacing, rhythm, and muntin pattern of windows; (b) a change of Building or cornice height; (c) a change in cornice details; (d) a change of wall material or wall color; a change in trim courses and other horizontal elements; (e) a change in dormer or balcony design, if any, and (f) providing or changing pilasters, columns, or other Façade elements; and (2) is composed with a defined center and edges. (See Illustration 4.3.5.A-3)
Façade Openings	Windows, and/or doors spaced $\leq$ 20 ft. apart In Stories above first Façade openings must be $\leq$ 50% of the total Façade area
Façade Glazing	20% - 60% of total Façade area for non-Shopfront; 70% of total Façade area, min. for Shopfront
Window Shape	Square or vertical in proportion, except transoms
Window Alignment	Upper floor windows and other features must be aligned with those of first floor

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-5C

**TABLE 4.3.1-G DISTRICT STANDARDS:
URBAN CENTER CORRIDOR CHARACTER DISTRICT**

Building Standards (Continued)

Façade

Window Types	Except in Shopfront or Gallery Frontage, and except for Transoms and sidelights, Windows in Façade and 1 st & 2 nd Layers must be single-hung, double-hung, casement or awning types. In Stories above first, Façade openings must be ≤ 50% of total Façade area.
Window Glazing Material	Clear glass is Required for all Elevations
Window Trim in 1 st Layer	Min. 4 in. trim with sill and top plate if siding surrounding window; soldier course above lintel and rollock course below sill if brick or stone surrounds window
Shutters	If any, must be functional and proportioned to cover half of window width from each side or entire window width, with shutter dogs
Façade Window Sill Height	If Residential, 5 ft. min above average grade at Façade
Porch Frontages	Min. 6 ft. clear depth, excluding rails, pillars, columns or other features
Shopfront Frontages	12 in. – 24 in. knee wall required at Frontage
Façade Variety	No Façade may exist more than once in a Block Face or within view of the same Façade

Roof Type & Pitch

Flat	P
Shed	P at rear only and if ridge is attached to an exterior Building wall; except for porches, stoops or dormers which may have a shed roof anywhere on the Building.
Hip	P
Gable	P
Pitch	6:12 – 14:12, except for shed roofs which may be 3:12 – 14:12 and except roof pitch may match the primary roof pitch of an existing Building that is less than 6:12

Roof Design

Eaves shall extend no less than nine inches beyond the supporting walls.

Gable end rakes shall overhang at least six inches.

Eaves and rakes on Accessory Buildings and dormers shall overhang at least six inches.

Soffits shall be placed perpendicular to the Building wall, not sloping in plane with the roof (except for gable end rakes).

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-5C

**TABLE 4.3.1-G DISTRICT STANDARDS:
URBAN CENTER CORRIDOR CHARACTER DISTRICT**

Building Standards (Continued)

Building Materials

Primary Building	Brick	P	Authentic stucco over masonry	P
Material on Facades	Natural stone	P	Exposed concrete	NP
	Wood	P	Vinyl or Aluminum siding	NP
	Cementitious siding	P	Corrugated and/or sheet metal	NP
Changes in Building Materials	Primary materials must continue alongside Elevations through 2 nd layer. Primary materials shall continue for entire length of all Facades facing a frontage. Any material changes must coincide with form, structural, or massing changes and shall not occur at outside corner of any such change.			
Building Colors	Up to three (3) colors, including the natural color of any allowed materials, but not excluding trim			
Foundation Cladding	Required; brick, stone, or stucco except renovations and minor expansions of existing structures may match current material, or absence of cladding.			
Porch Pier Cladding	Required; brick or stone, with any space under Porch concealed by painted or stained latticework between piers, except renovations and minor expansions of existing structures, pier cladding, or absence of cladding, may match current material.			
Chimney Cladding	Required; brick, natural stone, with material matching primary material of Façade			

Building Types

House	NP	Commercial	P
Duplex	NP	Mixed Use	P
Townhouse	P	Flex	P
Small Multifamily	P	Mid-Rise	P
Large Multifamily	P	Large Scale Commercial	P
Live/Work	P	Civic	P

See **Table 4.3.8.A (Principal Building Types - Summary)** and **Table 4.3.8.B (Principal Building Types - Specific Standards)**. For Development Parcels, see also **Table 5.1.6 (Building Type Mix)**.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-5C

TABLE 4.3.1-G DISTRICT STANDARDS:
URBAN CENTER CORRIDOR CHARACTER DISTRICT

Vehicular Parking Requirements

Parking Location

	On-Street Parking	Off-Street Parking
Domestic Vehicles	P	P in 3 rd layer only, and in Driveway
Recreational Vehicles	NP	P in 3 rd layer only, and in Driveway
Heavy Equipment	NP	P in 3 rd layer only, and in Driveway
Tractor trailers (including trailers for storage)	NP on-Street, except for delivery	P in 3 rd layer only, and in Driveway and Temporary Use of trailers
All Other Vehicles	NP	P in 3 rd Layer only, and in Driveway

Vehicular Parking Requirements (Continued)

Additional Parking Requirements

Off-Street Parking Surface	Prepared surface of asphalt, concrete, or another hard surface
Garage Location	P In 3 rd Layer only
Garage Design	Min. interior dimensions 10 ft. x 20 ft. per vehicle Parking space If Garage faces Street: max Garage door width 33% of total Garage + Façade width Garage must be detailed, finished, & designed like the rest of the Building with carriage house doors; max. Garage door width 9ft; each Garage door must have ornamental lighting fixture above it; min 2ft separation between Garage doors.
Driveway/ Vehicular Entrance Location	P in any Layer
Driveway/ Vehicular Entrance Maximum Width	24 ft. max in 1 st Layer; regardless if shared or not.
Parking Structure	P if Screen from Frontage by Liner Buildings
Parking Structure Pedestrian Exit Location	Via pedestrian access to Frontage

Bicycle Parking

See Section 4.3.13

Thoroughfare & Internal Drive Types*

**Only applicable to Development Parcels*

See Article 5 (Development Parcel Standards) for additional requirements

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-5C

**TABLE 4.3.1-G DISTRICT STANDARDS:
URBAN CENTER CORRIDOR CHARACTER DISTRICT**

Loading & Access

Off-Street Loading and Storage	P in 3 rd Layer only
Utility Box & Service Meter* Locations (*Not including water meters)	P in 3 rd Layer only
Off-Street Trash Receptacle Locations	P in 3 rd Layer only
Off-Street Dumpster Locations	P in 3 rd Layer only
Drive- Through Locations	P in 3 rd Layer only

Non-Building Components

	1 st Layer	2 nd Layer	3 rd Layer
HVAC Equipment, Utility, Service and Mechanical Equipment	NP	P if Screened from Frontage	P
Solar Panels	P if coplanar to and integrated into roof design		P
Antennas & Satellite Equipment	P in 1 st or 2 nd Layer if such Layer is only possible location for satisfactory reception		P
Recreation or Play Equipment	NP	NP	P
Animals Enclosures, Runs or Shelters	NP	NP	P
Swimming pools, Hot Tubs and Spas	NP	NP	P
Transmitting and/or receiving towers, or antennas and wind-generating machines	NP	NP	P

Signs

See Sign Standards in Article 7 (Sign Standards) and Table 7.12.B-1 (Sign Types - Summary) and Table 7.1.2.B-2 (Sign Types- Specific Standards)

Lighting

See Private Lighting Requirements in Section 4.3.17 and Table 4.3.17.B (Private Lighting Standards)

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-5C

TABLE 4.3.1-G DISTRICT STANDARDS:
URBAN CENTER CORRIDOR CHARACTER DISTRICT

Private Landscaping and Fencing

Landscaping

NA if paved or ≤ 3ft front Setback/ Yard; Otherwise, shrubs continuous around foundation at Façade. Landscaping must comply with Section 4.3.16

Walls & Fencing

Height	3.5 - 4 ft max at Frontage, otherwise 6 ft max; height measured from avg. undisturbed grade of Adjacent property at property line
Construction	Finished side must face Adjacent property, Thoroughfare, Path, Passage or Waterbody
Maintenance	Must be well maintained, in upright condition and free of missing or broken parts and graffiti.

Materials

Natural Wood	P at sides and rear only	Chain Link	P at sides and rear only
Brick, Natural Stone, or Stucco over Masonry	P at sides and rear only	Barbed/ Razor/ Concertina Wire	NP
Wrought Iron or Aluminum	P	Exposed or Painted Aggregate Concrete	NP
Vinyl	NP	Smooth or Split-faced Block	NP

Additional Standards

Pedestrian Connections through to Adjacent Neighborhoods or Uses	Required
	P within required Yards, per Section 4.3.10
Locations of Retaining Walls	If supporting grade 8 ft. or higher than property line, must be set back 10 ft. from property line

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CD-5C

TABLE 4.3.1-G DISTRICT STANDARDS:
URBAN CENTER CORRIDOR CHARACTER DISTRICT

Screens, Street-Screens & Buffers

Height

	At Frontage or Adjacent to Civic Space	Not at Frontage or Adjacent to Civic Space
Wall Screen/Street-Screen Height	3.5 ft. to 5 ft.	5ft. to 6ft; Minimum 6ft. for Dumpsters and Trash Receptacles
Fence Screen/ Street-Screen Height	NP	5ft. to 6ft. for Dumpsters and Trash Receptacles
Hedge Screen/ Street-Screen Height	3 ft. to 5 ft at installation	5ft. to 6ft. at installation

Materials

Wall Screen or Street-Screen	Brick, Natural Stone or Stucco over Masonry
Fence Screen or Street-Screen	Natural Wood, painted or unpainted
Hedge Screen or Street-Screen	Evergreen plants with min. 80% opacity

Additional Standards

Non-Residential & Multi-Family Residential Screen. Street Screen Adjacent to or across Thoroughfare from Non-Family Residential	NR
Screening of Parking, Loading Areas, Service Areas, Outdoor Storage, Drive-Throughs, Trash Receptacle/Dumpsters, HVAC and other equipment Screened from Frontage, Civic Space and Adjacent Property	Required; except at Driveways: Parking Lots and Parking Areas must be Screened From Frontage and Civic Space by Building or Street-Screen; otherwise, Screening must be by Building, wall, hedge or fence at Frontage or Building wall, hedge or fence not at Frontage or Adjacent to Civic Space.
Rooftop Antenna Screening and HVAC, Mechanical and other Equipment Screening	Required; must be Screened from Frontage and Civic Space by Building Parapet or other Building element
Self-Storage Warehouse Screening	N/A (not permitted in District)
Street-Screen Location	2 nd Layer
Parcel Buffer	Section 4.3.11.H
Project Buffer	Section 5.8

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-MHP **TABLE 4.3.1-H DISTRICT STANDARDS:**
MANUFACTURED HOME PARK RESIDENTIAL SPECIAL DISTRICT

General Description

This District is designed to provide suitable areas for Manufactured Home Parks where sufficient urban facilities are available prior to Development. Manufactured Homes and Buildings necessary to support the Residential occupancy of Manufactured Homes are permitted. This District is intended also to permit community facilities and public utility installations that are necessary to service specifically the residents of this District, or which are benefited by and compatible with a Residential environment. SD-MHP is appropriate for the Suburban Neighborhoods Future Land Use Character Area described in the Comprehensive Plan.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-MHP

TABLE 4.3.1-H DISTRICT STANDARDS: MANUFACTURED HOME PARK RESIDENTIAL SPECIAL DISTRICT

Density / Floor Area Ratio (FAR)

**Applicable only to Development Parcels*

6 Density Unites per acre max

BLOCK SIZE*

**Applicable only to Development Parcels*

Block Perimeter 2,400 ft. max

Private Frontage Types

Common Yard	NP	Stepfront	P
Porch	NP	Shopfront	P
Fence	NP	Gallery	P
Terrace/Lightwell	P	Arcade	P
Forecourt	P	Officefront	P
Stoop	P		

See Table 4.3.7.A (Private Frontage Types)

Civic Space Types*

**Applicable only to Development Parcels*

Natural Area	P	Playground	P
Green	P	Sport Field	P
Square	NP	Community Garden	P
Plaza	NP	Pocket Park	P

See Table 5.3.3.A (Civic Space Types - Summary) and Table 5.3.3.B (Civic Space - Specific Standards)

Permitted Uses

See Table 4.3.9.A-1 (Building, Lot & Building Site Principal Use), Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses), and Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses). For Development Parcels, see also Table 5.1.7 (Principal Use Mix).

Number of Buildings Per Lot or Building Site

Principal Building	1 max. per Manufactured Home Site or Building Site
Accessory Buildings	1 max. per Manufactured Home Site or Building Site

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-MHP

**TABLE 4.3.1-H DISTRICT STANDARDS:
MANUFACTURED HOME PARK RESIDENTIAL SPECIAL DISTRICT**

Manufactured Home Site / Building Site / Manufactured Home Park Occupation

Manufactured Home / Building Site Width	Residential: ⁽¹⁾ Non-Residential Use: 60 ft. min.
Manufactures Home Park Minimum Street / Highway Frontage	50 ft. min.
Frontage Buildout	if non-mobile: 40% min, otherwise NR
Manufactured Home Site / Building Site Depth	NR
Manufactured Home Site / Building Site Area	Residential Use: 6,000 sf. Min. Non-Residential Use: 10,000 sf. min.
Manufactured Home Stand	max. 25% of Manufactured Home Site
Impervious Surface Coverage	35% max
Building Site Enfrontment	Must enfront a vehicular Thoroughfare or Internal Drive, except ≤ 20% of the Manufactured Home Site if a Development Parcel may Enfront a Pedestrian Path, Passage, pedestrian walkway or waterbody if such Manufactured Home Sites have legal and Physical vehicular access to a vehicular Thoroughfare via Driveway or Easement. All Manufactured Home Sites must have legal and physical vehicular access to a vehicular Thoroughfare via Driveway or Easement.

Setbacks / Yards

Setbacks / Yards – Principal Building			Setbacks / Yards – Accessory Building		
Street Yard- Arterial	Residential: ⁽¹⁾ Non-Residential: 50 ft. min.	A	Side Yard- Per side	Residential: ⁽¹⁾ Non-Residential: 2 Stories or less 15 ft. min 3 or more Stories 25 ft. min	B
Street Yard- Collector	Residential: ⁽¹⁾ Non-Residential: 50 ft. min.	A	Side Yard- Total	Residential: ⁽¹⁾ Non-Residential: NR	B
Street Yard- Minor	Residential: ⁽¹⁾ Non-Residential: 50 ft. min.	A	Rear Yard	Residential: ⁽¹⁾ Non-Residential: 20 ft. min	

⁽¹⁾Street Yard Manufactured Home Park, dimensional standards shall be required for all uses of a Manufactured Home (including a Manufactured Home not in a park) shall conform to the standards of the CD-3 Character District.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-MHP

TABLE 4.3.1-H DISTRICT STANDARDS:
MANUFACTURED HOME PARK RESIDENTIAL SPECIAL DISTRICT

Building Standards

Building Height*

Principal Building	2 Stories max
Accessory Building	2 Stories max

*Stories/ Height do not include Attics and Basements, chimneys, flagpoles, towers, spires, belfries, parapet walls, aerials, or antennas. Any Building exceeding 35 feet in height must obtain approval from stipulations made by the Fire Department in accordance with the above cited codes shall be required. *

*The Fire Department may stipulate special fire measures in accordance with National Fire Protection Association and International Building Code criteria as a condition of approval of such Structure. In such instance stipulations made by the Fire Department in accordance to with the above cited codes shall be required. *

Ceiling Height

NR

Building Composition

Vertical Composition	NR
Finished Floor Level	NR
Support piers, plumbing, HVAC, hitch and Wheels	Required to be concealed by apron between floor level and ground on all sides, including beneath Porch or Stoop

Façade

Main Entrance	If non-mobile: Required prominently located on Façade at Principal Frontage; otherwise, NR
Façade Position	If non-mobile: Parallel to straight Frontage Line or tangent of curved Frontage Line; otherwise, NR
Blank Walls	NP at Frontage
Façade Glazing	20% - 60% of total Façade area

Roof Type & Pitch

NR

Building Materials

NR except **Required** clear glass for windows at Frontage

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-MHP

TABLE 4.3.1-H DISTRICT STANDARDS:
MANUFACTURED HOME PARK RESIDENTIAL SPECIAL DISTRICT

Building Types

Manufactured Homes & Associated Buildings

Vehicular Parking Requirements

Parking Location

	On-Street Parking	Off-Street Parking
Domestic Vehicles	P	P in 3 rd layer only, and in Driveway
Recreational Vehicles	NP	P in 3 rd layer only, and in Driveway
Heavy Equipment	NP	P in 3 rd layer only, and in Driveway
Tractor trailers (including trailers for storage)	NP on-Street except for delivery	P in 3 rd layer only, and in Driveway
All Other Vehicles	NP	P in 3 rd Layer only, and in Driveway

Additional Parking Requirements

Off-Street Parking Surface	Prepared surface of asphalt, concrete, or another hard surface
Garage Location	P In Rear Yard only
Garage Design	NR
Driveway/ Vehicular Entrance Location	P in any Layer
Driveway/ Vehicular Entrance Maximum Width	10 ft. max. single lane; 20 ft. max. width double lane
Parking Structure	N/A
Parking Structure Pedestrian Exit Location	N/A

Bicycle Parking

NR

Thoroughfare & Internal Drive Types*

**Applicable only to Development Parcels*

See Article 5 (Development Parcel Standards) for additional requirements

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-MHP

TABLE 4.3.1-H DISTRICT STANDARDS:
MANUFACTURED HOME PARK RESIDENTIAL SPECIAL DISTRICT

Loading & Access

Off-Street Loading and Storage	P in 3 rd Layer only
Utility Box & Service Meter* Locations (*Not including water meters)	P in 3 rd Layer only
Trash Receptacle Locations – Manufactured Home Sites	P in 3 rd Layer only, except when moved to 1 st or 2 nd Layer for pickup
Community Trash Receptacle or Dumpster Locations	P in 3 rd Layer only, must be screened from Frontage and fully enclosed on 3 sides and enclosed on the 4 th side with self-closing gate
Drive- Through Locations	N/A

Non-Building Components

	1 st Layer	2 nd Layer	3 rd Layer
HVAC Equipment, Utility, Service and Mechanical Equipment	NP	NP	P
Solar Panels	P if coplanar to and integrated into roof deign		P
Antennas & Satellite Equipment	P in 1 st or 2 nd Layer if such Layer is only possible location for satisfactory reception		P
Recreation or Play Equipment	NP	NP	P
Animals Enclosures, Runs or Shelters	NP	NP	P
Swimming pools, Hot Tubs and Spas	NP	NP	P
Transmitting and/or receiving towers, or antennas and wind-generating machines	NR		

Signs

See Sign Standards in Article 7 (Sign Standards) and Table 7.12.B-1 (Sign Types - Summary) and Table 7.1.2.B-2 (Sign Types- Specific Standards)

Lighting

See Private Lighting Requirements in Section 4.3.17 and Table 4.3.17.B (Private Lighting Standards)

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-MHP

TABLE 4.3.1-H DISTRICT STANDARDS:
MANUFACTURED HOME PARK RESIDENTIAL SPECIAL DISTRICT

Private Landscaping and Fencing

Landscaping

Required Street Yard and any required Side Yard of a corner Manufactured Home Site must be landscaped in compliance with Section 4.3.16., including 1 tree per Manufactured Home Site and continuous shrub plantings around foundation facing Frontage.

Walls & Fencing

Height 4 ft max at Frontage, otherwise 6 ft max; height measured from avg. undisturbed grade of Adjacent property at property line

Construction Finished side must face Adjacent property, Thoroughfare, Path, Passage or Waterbody

Maintenance Must be well maintained, in upright condition and free of missing or broken parts and graffiti.

Materials

Natural Wood	P	Chain Link	NP
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Brick, Natural Stone, or Stucco over Masonry	P	Barbed/ Razor/ Concertina Wire	NP
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Wrought Iron or Aluminum	NP	Exposed or Painted Aggregate Concrete	NP
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Vinyl	NP	Smooth or Split-faced Block	NP
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Additional Standards

Pedestrian Connections through to Adjacent Neighborhoods or Uses	Required
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P within required Yards, per Section 4.3.10

Locations of Retaining Walls	If supporting grade 8 ft. or higher than property line, must be set back 10 ft. from property line
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ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-MHP

TABLE 4.3.1-H DISTRICT STANDARDS:
MANUFACTURED HOME PARK RESIDENTIAL SPECIAL DISTRICT

Screens, Street-Screens & Buffers		
Height		
	At Frontage or Adjacent to Civic Space	Not at Frontage or Adjacent to Civic Space
Wall Screen/Street-Screen Height	3.5 ft. to 5 ft.	5ft. to 6ft; Minimum 6ft. for Dumpsters and Trash Receptacles
Fence Screen/ Street-Screen Height	NP	5ft. to 6ft. for Dumpsters and Trash Receptacles
Hedge Screen/ Street-Screen Height	3 ft. to 5 ft at installation	5ft. to 6ft. at installation
Materials		
Wall Screen or Street-Screen	Brick, Natural Stone or Stucco over Masonry	
Fence Screen or Street-Screen	Natural Wood, painted or unpainted	
Hedge Screen or Street-Screen	Evergreen plants with min. 80% opacity	
Additional Standards		
Non-Residential & Multi-Family Residential Screen. Street Screen Adjacent to or across Thoroughfare from Non-Family Residential	N/A (Uses not permitted in District)	
Screening of Parking, Loading Areas, Service Areas, Outdoor Storage, Drive-Throughs, Trash Receptacle/Dumpsters, HVAC and other equipment Screened from Frontage, Civic Space and Adjacent Property	Required ; except at Driveways: Parking Lots and Parking Areas must be Screened From Frontage and Civic Space by Building or Street-Screen; Parking Structures must be Screened from Frontages and Civic Space by Liner Buildings otherwise, Screening must be by Building, wall, hedge or fence at Frontage or Building wall, hedge or fence not at Frontage or Adjacent to Civic Space.	
Rooftop Antenna Screening and HVAC, Mechanical and other Equipment Screening	Required ; must be Screened from Frontage and Civic Space by Building Parapet or other Building element	
Self-Storage Warehouse Screening	N/A (Uses not permitted in District)	
Parcel Buffer	Section 4.3.11.H	
Project Buffer	Section 5.8	

SD-INT **TABLE 4.3.1-I DISTRICT STANDARDS:**
INTERSTATE SERVICE SPECIAL DISTRICT

General Description

This District is designed to provide space along I-65 to serve the needs of the motoring public. Automobile and other vehicular service establishments, transient sleeping accommodations, and eating and drinking establishments to primarily characterize this District. Appropriate locations for this District are along I-65 in an environment of general Commercial and Mixed-Use activity. Due to the high traffic volumes and general incompatibility between some of the Uses permitted within this District and those in CD-3L and CD-3 areas, this District shall not be located in or Adjacent to a CD-3L or CD-3 District. The SD-INT District is an appropriate District for the Technology Employment Center Future Land Use Character Area described in the Comprehensive Plan. SD-INT is limited to Parcels within 3,690 feet of an Interstate, Freeway, or other limited access highway identified in the Transportation element of the Plan.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-INT

**TABLE 4.3.1-I DISTRICT STANDARDS:
INTERSTATE SERVICE SPECIAL DISTRICT**

Density / Floor Area Ratio (FAR)

**Applicable only to Development Parcels*

24 Density Units per acre max

Parcel Size

Parcel Size Min. 1 gross acre

Block Size*

**Applicable only to Development Parcels*

Block Perimeter NR

Private Frontage Types

NR

Civic Space Types*

**Applicable only to Development Parcels*

NR

Permitted Uses

See Table 4.3.9.A-1 (Building, Lot & Building Site Principal Use), Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses), and Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses). For Development Parcels, see also Table 5.1.7 (Principal Use Mix).

Number of Buildings Per Lot or Building Site

Principal Building	1 max. per Lot or Building Site
Accessory Buildings	1 max.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-INT

**TABLE 4.3.1-I DISTRICT STANDARDS:
INTERSTATE SERVICE SPECIAL DISTRICT**

Lot Occupation	
Lot/ Building Width	100 ft. min
Lot Frontage on Street / Highway	100 ft. min
Lot Depth	NR
Frontage Buildout	NR
Lot/ Building Site Area	20,000 SF min.
Impervious Surface Coverage	NR
Usable Open Space	Min. 7% of gross site area
Lot/ Building Site Enfrontment	Must enfront a vehicular Thoroughfare, Internal Drive, or Driveway. Lots or Building Sites within a Development Parcel may Enfront a Pedestrian Path, Passage, pedestrian walkway or water body if such Lots have legal and physical vehicular access to a vehicular Thoroughfare via Driveway or Easement.
Lot/ Building Site Access	All Lots and Building Sites must have legal and physical vehicular access to a vehicular Thoroughfare via Driveway or Easement
Setback / Yards	
Setback / Yards – Principal Building	
	As applicable:
	1. For sites Adjacent to a District which a Residential use is allowed:
	a) An Addition to an existing Building with a Façade of variable distance from the Street may be extended to the plane of the existing Façade closest to the Street.
Street Yard – Min	b) Except for an addition to an existing Building described in 1.a above, the lesser of A
	i) The Average depth of Street Yards of existing Buildings within 100 ft. on each side of a Lot or Building Site or
	ii) 60 ft.
	2. Otherwise, 30 ft.
	0 ft. min along Lot Lines or Building Site Lines Adjacent to a Lot or Building Site on which no
Side Yard – Per side	Mixed Use or Residential Use is located, or is being constructed; B
Notes: *See Article 9 (definitions) for FAR measurement information.	
	(1) Additional Side Yard or Rear Yard depth may be necessary to accommodate Buffers and landscaping required in Sections 4.3.11, 4.3.16, and 5.8
	(2) The Required Rear Yard depth may be reduced by a different District combination, but not less than 0 ft. min along Lot Lines or Building Site Lines Adjacent to a Lot or Building Site on which no
Rear Yard	Mixed Use or Residential Use is located, or is being constructed; C
	and on all other tracts of land, both on the Effective date of this Ordinance and on the date of application for a Zoning Permit. Such reduction shall be as follows:
	a. For all interior Lots between 80 ft. and 100 ft. deep, the required Rear Yard shall be reduced by an amount equal to the lesser of (1) 100 ft. minus the depth of the Lot or (2) 10ft.
	b. For Interior Lots < 80 ft. deep within Non-Residential Districts, the required Rear Yard depth shall be 0 ft., but if any Rear Yard is provided, it must be at least 10 ft. deep.
	(3) Buffering requirements are not applicable to Side Yards or Rear Yards with zero depth.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

Otherwise, 10 ft. min ⁽¹⁾⁽²⁾⁽³⁾

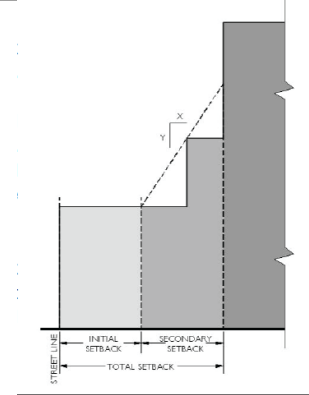
SD-INT

**TABLE 4.3.1-I DISTRICT STANDARDS:
INTERSTATE SERVICE SPECIAL DISTRICT**

Building Standards

Building Height*

Principal Building	Initial Stepback = depth of required Front Setback / Street Yard, within which no Structure is allowed
	Max, height within 1 st 30 ft. beyond initial Stepback ("Secondary Stepback"): 45 ft. + 1.5 ft. (Y) for every additional 1 ft. (X) Building is Stepped back from Initial Stepback (slope of Sky Exposure Plane (x:y) = 1:1.5).
	From and beyond 40 ft. from back of sidewalk ("Total Stepback"), greater of 75 ft. max or height permitted by Conditional Use Permit, if total Impervious Surface Coverage is 40% or less.
Accessory Building	45 ft. max



*Stories/ Height do not include Attics and Basements, chimneys, flagpoles, towers, spires, belfries, parapet walls, aerials, or antennas. Any Building exceeding 35 feet in height must obtain approval from stipulations made by the Fire Department in accordance with the above cited codes shall be required. *

*The Fire Department may stipulate special fire measures in accordance with National Fire Protection Association and International Building Code criteria as a condition of approval of such Structure. In such instance stipulations made by the Fire Department in accordance to with the above cited codes shall be required. *

Ceiling Height

May not exceed 14 ft. from finished floor to finished ceiling, except for a first floor Business/Commercial, Office, Retail/ Personal Service, or Accommodation/ Lodging Use, which must be a minimum of 11 ft. with a maximum of 25 ft.

Building Composition

Vertical Composition	Each Principal Building must have an identifiable Base, Middle & Cap
Finished Floor Level	NR

Façade

Main Entrance	Main Entrance must be in Façade of Principal Frontages.
Façade Position	Parallel to straight Frontage Line or to tangent of curved Frontage Line.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

Façade & Façade Element Design Proportions	Must be vertically proportioned.
Blank Walls	NP at Frontage

SD-INT **TABLE 4.3.1-I DISTRICT STANDARDS:**
INTERSTATE SERVICE SPECIAL DISTRICT

Building Standards (Continued)	
Façade (Continued)	
Façade Articulation	A façade greater than 100 ft. in width must be differentiated so that it appears to be compromised of two or more Adjacent Buildings, by dividing such Façade into two segments each of which includes a separate entrance and (1) differs from each of the other segments with respect to all of the following: (a) a change in shape, sill, and header height, detail, size, spacing, rhythm, and muntin pattern of windows; (b) a change of Building or cornice height; (c) a change in cornice detail; (d) a change of wall material or wall color; a change in trim courses and other horizontal element (e) a change in dormer or balcony design, if any; and (f) providing or changing pilasters, columns, or other Façade elements; and (2) is composed of a defined center and edges. (See Illustration 4.3.5.A-3)
Façade Openings	Windows and/or doors spaced ≤ 20 ft. apart. In Stories above first, Façade openings must be $\leq 50\%$ of total Façade area.
Façade Glazing	20% - 60% of total Façade Area for non-Shopfront; 70% of total Façade Area, min. for Shopfront.
Window Shape	Square or vertical in proportion, except transoms.
Window Alignment	Upper floor windows and other features must be aligned with those of first floor.
Window Types	Except in Shopfront or Gallery Frontage, and except for transoms and sidelights, Windows in Façade and 1 st & 2 nd Layers must be single-hung, double-hung, casement or awning types. In Stories above first, Façade openings must be $\leq 50\%$ of total Façade area.
Window Glazing Material	Clear glass Required for windows at Frontage.
Window Trim in 1 st Layer	Min. 4 in. trim with sill and top plate if siding surrounding window, solidier course above lintel and rollock course below sill if brick or stone surrounds window.
Shutters	If any, must be functional and proportioned to cover half of window width from each side or entire window width, with shutter dogs.
Façade Window Sill Height	If Residential: 5 ft. min. above average grade at Frontage.
Porch Frontages	Min. 6 ft. clear depth, excluding rails, pillars, columns or other features.
Shopfront Frontages	12 in. – 24 in. knee wall required at Frontage.
Façade Variety	No Façade may exist more than once on a Block Face or within view of the same Façade.
Roof Type & Pitch	

NR

Roof Design

NR

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-INT **TABLE 4.3.1-I DISTRICT STANDARDS:**
INTERSTATE SERVICE SPECIAL DISTRICT

Building Standards (Continued)				
Building Materials				
Primary Building Material on Facades	Brick	P	Authentic stucco over masonry	P
	Natural stone	P	Exposed concrete	NP
	Wood	P	Vinyl or Aluminum siding	NP
	Cementitious siding	P	Corrugated and/or sheet metal	NP
Changes in Building Materials		NR		
Building Colors		NR		
Foundation Cladding		NR		
Porch Pier Cladding		NR		
Chimney Cladding		NR		
Building Types				
House	NP	Commercial	P	
Duplex	NP	Mixed Use	P	
Townhouse	NP	Flex	P	
Small Multifamily	NP	Mid-Rise	P	
Large Multifamily	P	Large Scale Commercial	P	
Live/Work	NP	Civic	P	

See **Table 4.3.8.A (Principal Building Types - Summary)** and **Table 4.3.8.B (Principal Building Types - Specific Standards)**. For Development Parcels, see also **Table 5.1.6 (Building Type Mix)**.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-INT **TABLE 4.3.1-I DISTRICT STANDARDS:**
INTERSTATE SERVICE SPECIAL DISTRICT

Vehicular Parking Requirements (Continued)

Parking Location

	On-Street Parking	Off-Street Parking
All Vehicles	NR	P behind first 10 ft. from Frontage Lot Line if site not abutting Residential District; Otherwise, P only in Side Yard or Rear Yard

Additional Parking Requirements

Off-Street Parking Surface	Asphalt, concrete, or other hard surface
Garage Location	P In Rear Yard only
Garage Design	NR
Driveway/ Vehicular Entrance Location	P in any Layer
Driveway/ Vehicular Entrance Maximum Width	10 ft. max. in 1 st Layer if Residential; 36 ft. max. in 1 st Layer if non-Residential, regardless if shared or not
Parking Structure	P, if screened from Frontage by Liner Buildings
Parking Structure Pedestrian Exit Location	Via pedestrian access to Frontage

Bicycle Parking

See Section 4.3.13

Thoroughfare & Internal Drive Types*

**Applicable only to Development Parcels*

See Article 5 (Development Parcel Standards) for additional requirements

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-INT

**TABLE 4.3.1-I DISTRICT STANDARDS:
INTERSTATE SERVICE SPECIAL DISTRICT**

Loading & Access

Off-Street Loading and Storage **P** in 3rd Layer only

Utility Box & Service Meter*
Locations **P** in 3rd Layer only

(*Not including water meters)

Trash Receptacle Locations – **P** in 3rd Layer only, except when moved to 1st or 2nd Layer for pickup

Manufactured Home Sites

Community Trash Receptacle or
Dumpster Locations **P** in 3rd Layer only, must be screened from Frontage and fully enclosed on 3 sides and enclosed on the 4th side with self-closing gate

Drive- Through Locations **P** in 3rd Layer only

Non-Building Components

	1 st Layer	2 nd Layer	3 rd Layer
HVAC Equipment, Utility, Service and Mechanical Equipment	NP	P if Screened from Frontage	P
Solar Panels	P if coplanar to and integrated into roof deign		P
Antennas & Satellite Equipment	P in 1 st or 2 nd Layer if such Layer is only possible location for satisfactory reception		P
Recreation or Play Equipment	NP	NP	P
Animals Enclosures, Runs or Shelters	NP	NP	P
Swimming pools, Hot Tubs and Spas	NP	NP	P
Transmitting and/or receiving towers, or antennas and wind-generating machines	NP	NP	P

SD-INT **TABLE 4.3.1-I DISTRICT STANDARDS:**
INTERSTATE SERVICE SPECIAL DISTRICT

Signs

See Sign Standards in Article 7 (Sign Standards) and Table 7.12.B-1 (Sign Types - Summary) and Table 7.1.2.B-2 (Sign Types- Specific Standards)

Lighting

See Private Lighting Requirements in Section 4.3.17 and Table 4.3.17.B (Private Lighting Standards)

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-INT

TABLE 4.3.1-I DISTRICT STANDARDS:
INTERSTATE SERVICE SPECIAL DISTRICT

Private Landscaping and Fencing

Landscaping

Required continuous shrubs around foundation facing Frontage if 1st Layer is $\geq$ 3 ft. deep, plus if 1st Layer is $\geq$ 15 ft. deep, 1 tree planted in 1st Layer. Landscaping must comply with Section 4.3.16.

Walls & Fencing

Height	3.5- 4 ft max at Frontage, otherwise 6 ft max; height measured from avg. undisturbed grade of Adjacent property at property line
Construction	Finished side must face Adjacent property, Thoroughfare, Path, Passage or Waterbody
Maintenance	Must be well maintained, in upright condition and free of missing or broken parts and graffiti.

Materials

Natural Wood	P at sides and rear only	Chain Link	P at sides and rear only
Brick, Natural Stone, or Stucco over Masonry	P at sides and rear only	Barbed/ Razor/ Concertina Wire	NP
Wrought Iron or Aluminum	P	Exposed or Painted Aggregate Concrete	NP
Vinyl	NP	Smooth or Split-faced Block	NP

Additional Standards

Pedestrian Connections through to Adjacent Neighborhoods or Uses	NR
	P within required Yards, per Section 4.3.10
Locations of Retaining Walls	If supporting grade 8 ft. or higher than property line, must be set back 10 ft. from property line

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-INT **TABLE 4.3.1-I DISTRICT STANDARDS:**
INTERSTATE SERVICE SPECIAL DISTRICT

Screens, Street-Screens & Buffers		
Height		
	At Front or Adjacent to Civic Space	Not at Frontage or Adjacent to Civic Space
Wall Screen/Street-Screen Height	3.5 ft. to 5 ft.	5ft. to 6ft; Min. 6ft. for Dumpsters and Trash Receptacles
Fence Screen/ Street-Screen Height	NP	5ft. to 6ft; Min. 6ft. for Dumpsters and Trash Receptacles
Hedge Screen/ Street-Screen Height	3 ft. to 5 ft at installation	5ft. to 6ft. at installation
Materials		
Wall Screen or Street-Screen	Brick, Natural Stone or Stucco over Masonry	
Fence Screen or Street-Screen	Natural Wood, painted or unpainted	
Hedge Screen or Street-Screen	Evergreen plants with min. 80% opacity	
Additional Standards		
Non-Residential & Multi-Family Residential Screen. Street Screen Adjacent to or across Thoroughfare from Non-Family Residential	NR	
Screening of Parking, Loading Areas, Service Areas, Outdoor Storage, Drive-Throughs, Trash Receptacle/Dumpsters, HVAC and other equipment Screened from Frontage, Civic Space and Adjacent Property	Required; except at Driveways:	
	Parking Lots and Parking Areas must be Screened From Frontage and Civic Space by Building or Street-Screen;	
	Parking Structures must be Screened from Frontages and Civic Space by Liner Buildings.	
	Otherwise, Screening must be by Building, wall, hedge or fence at Frontage or Building wall, hedge or fence not at Frontage or Adjacent to Civic Space.	
Rooftop Antenna Screening and HVAC, Mechanical and other Equipment Screening	Required; must be Screened from Frontage and Civic Space by Building Parapet or other Building element	

SD-LI **TABLE 4.3.1-J DISTRICT STANDARDS:**
LIGHT INDUSTRIAL SPECIAL DISTRICT

General Description
This District is intended to provide space for a wide range of wholesale trade, warehousing of a wide variety of products or materials, manufacturing processes, and industrial and related uses that conform to a high level of performance criteria and have few objectionable characteristics. All operations must be carried on within completely enclosed Buildings, thus providing a standard of Development that removes most adverse characteristics that affect neighboring properties. This District may provide a buffer between other Districts and other industrial activities that have more objectionable influences. This District may require types of Structures and have Uses and other characteristics that cannot be facilitated in other Districts. New Residential Development, Commercial establishments, Retail establishments, personal service Uses, and community facilities and utilities, are permitted, as well as additional Uses that provide needed complementary services or are necessary for the general community welfare. SD-LI is an appropriate District for Technology Employment Center Future Land Use Character Area described in the Comprehensive Plan.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-LI

**TABLE 4.3.1-J DISTRICT STANDARDS:
LIGHT INDUSTRIAL SPECIAL DISTRICT**

Density / Floor Area Ratio (FAR)

**Applicable only to Development Parcels*

NR

Parcel Size

Parcel Size Min. 1 acre

Block Size*

**Applicable only to Development Parcels*

Block Perimeter 2,000 ft. max. or 3,000 ft. max. if a Parking Structure provided within Block

Private Frontage Types

NR

Civic Space Types*

**Applicable only to Development Parcels*

NR

Permitted Uses

See **Table 4.3.9.A-1 (Building, Lot & Building Site Principal Use)**, **Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses)**, and **Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses)**. For Development Parcels, see also **Table 5.1.7 (Principal Use Mix)**.

Number of Buildings Per Lot or Building Site

Principal Building
Accessory Buildings

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-LI

**TABLE 4.3.1-J DISTRICT STANDARDS:
LIGHT INDUSTRIAL SPECIAL DISTRICT**

Lot Occupation	
Lot/ Building Width	100 ft. min
Lot Depth	NR
Frontage Buildout	NR
Lot/ Building Site Area	40,000 SF min.
Impervious Surface Coverage	70% max
Usable Open Space	Min. 7% of gross site area
Lot/ Building Site Enfrontment	Must enfront a vehicular Thoroughfare, Internal Drive, or Driveway. Lots or Building Sites within a Development Parcel may Enfront a Pedestrian Path, Passage, pedestrian walkway or water body if such Lots have legal and physical vehicular access to a vehicular Thoroughfare via Driveway or Easement.
Lot/ Building Site Access	All Lots and Building Sites must have legal and physical vehicular access to a vehicular Thoroughfare via Driveway or Easement
Setback / Yards	
Setback / Yards – Principal Building	
	As applicable:
	1. For sites Adjacent to a District which a Residential use is allowed:
	a. An Addition to an existing Building with a Façade of variable distance from the Street may be extended to the plane of the existing Façade closest to the Street.
Street Yard – Min	b. Except for an addition to an existing Building described in 1.a above, the lesser of A
	I. The Average depth of Street Yards of existing Buildings within 100 ft. on each side of a Lot or Building Site or
	40 ft. ⁽¹⁾
	Otherwise , 20ft.
Notes:	
	(1) Additional Side Yard or Rear Yard depth may be necessary to accommodate Buffers and landscaping required in Sections 4.3.11, 4.3.16, and 5.8
Side Yard – Per side	(2) The Required Rear Yard Depth shall be reduced as provided below if the Lot does not abut a Residential District and its owner separately owns individually B
	from all other tracts of land, both on the Effective date of this Ordinance and on the date of application for a Zoning Permit. Such reduction shall be as follows:
	2. Otherwise, 10 ft. min ⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾
Rear Yard	a. For all interior Lots between 80 ft. and 100 ft. deep, the required Rear Yard shall be reduced by an amount equal to the lesser of (1) 100 ft. minus the C
	depth of the Lot or (2) 10ft.
	3. For sites abutting a Residential District, 50 ft. along the common boundary;
	b. For Interior Lots < 80 ft. deep within Non-Residential Districts, the required Rear Yard depth shall be 0 ft., but if any Rear Yard is provided, it must be at least 10 ft. deep.
	(3) In Industrial Districts, the required Side Yard and Rear Yard depth for Lots along Lot Lines abutting other Industrial Districts or along a railroad Right-Of-Way is 0 ft.
	(4) In Industrial Districts, Buffering requirements are not applicable to Side Yards with zero depth.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

4. Otherwise, 20 ft. min ^{(1)(2)(3) (4)}

SD-LI

**TABLE 4.3.1-J DISTRICT STANDARDS:
LIGHT INDUSTRIAL SPECIAL DISTRICT**

Building Standards

Building Height*

Principal Building	45 ft. max
Accessory Building	45 ft. max

*Any Building exceeding 35 feet in height must obtain approval from the Fire Department prior to the issuance of a Building Permit. *

*The Fire Department may stipulate special fire measures in accordance with National Fire Protection Association and International Building Code criteria as a condition of approval of such Structure. In such instance stipulations made by the Fire Department in accordance to with the above cited codes shall be required. *

Ceiling Height

NR

Building Composition

Vertical Composition	Each Principal Building must have an identifiable Base, Middle, & Cap
Finished Floor Level	NR

Façade

Main Entrance	Main Entrance must be in Façade of Principal Frontages.
Façade Position	Parallel to straight Frontage Line or to tangent of curved Frontage Line
Façade & Façade Element Design Proportions	NR Flex Building with Industrial Category Use Other – Must be vertically proportioned
Blank Walls	NP at Frontage
Façade Articulation	NR Flex Building with Industrial Category Use Others- Façade greater than 100 ft. in width must be differentiated so that it appears to be comprised of two or more Adjacent Buildings, by dividing such Façade into two segments each of which includes a separate entrance and (1) differs from each other segments with respect to all of the following: (a) a change in shape, sill, and header height, detail, size, spacing, rhythm, and muntin pattern of windows; (b) a change of Building or cornice height; (c) a change in cornice details; (d) a change of wall material, or wall color; a change in trim courses and other horizontal elements; (e) a change in dormer or balcony design, if any; and (f) providing or changing pilasters, columns, or other Façade elements; and (2) is composed with a defined center and edges. (See Illustration 4.3.5.A-3)
Façade Openings	NR Flex Building with Industrial Category Use

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

Others – Windows and/or doors spaced < 20 ft. apart; in Stories above first, Façade openings must be < 50% of total Façade area.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-LI **TABLE 4.3.1-J DISTRICT STANDARDS:**
LIGHT INDUSTRIAL SPECIAL DISTRICT

Building Standards (Continued)

Façade (Continued)

Façade Glazing	NR Flex Building with Industrial Category Use Others – 20% - 60% of total Façade area.
Window Shape	NR Flex Building with Industrial Category Use Others - Square or vertical in proportion, except transoms
Window Alignment	NR Flex Building with Industrial Category Use Others - Upper floor windows and other features must be aligned with those of first floor
Window Types	NR Flex Building with Industrial Category Use Others - Except in Shopfront or Gallery Frontage, and except for Transoms and sidelights, Windows in Façade and 1 st & 2 nd Layers must be single-hung, double-hung, casement or awning types.
Window Glazing Material	Flex Building with Industrial Category Use - Clear glass is Required for windows at Frontage Others - Clear glass is Required for all Elevations
Window Trim in 1 st Layer	NR Flex Building with Industrial Category Use Others - Min. 4 in. trim with sill and top plate if siding surrounding window; soldier course above lintel and rollock course below sill if brick or stone surrounds window
Shutters	NR Flex Building with Industrial Category Use Others - If provided must be functional and proportioned to cover half of window width from each side or entire window width, with shutter dogs
Façade Window Sill Height	If Residential, 5 ft. min above average grade at Façade Others – NR
Porch Frontages	NR Flex Building with Industrial Category Use Others – If provided, min. 6 ft. clear depth, excluding rails, pillars, columns or other features
Shop Frontages	NR Flex Building with Industrial Category Use For Shopfront Private Frontage – 12 in. – 24 in. knee wall required at Frontage
Façade Variety	NR Flex Building with Industrial Category Use Others – No façade may exist more than once on a Block Face or within view of the same Façade.

Roof Type & Pitch

Flat	NR Flex Building with Industrial Category Use Others - P
Shed	NR Flex Building with Industrial Category Use P at rear only and if ridge is attached to an exterior Building wall; except for porches, stoops or dormers which may have shed roof anywhere on the Building
Hip	NR Flex Building with Industrial Category Use Others - P
Gable	NR Flex Building with Industrial Category Use Others - P
Pitch	If pitched, 6:12 – 14:12, except for shed roofs which may be 3:12 – 14:12 and except roof pitch may match the primary roof pitch of an existing Building that is less than 6:12

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-LI

**TABLE 4.3.1-J DISTRICT STANDARDS:
LIGHT INDUSTRIAL SPECIAL DISTRICT**

Building Standards (Continued)

Roof Design

Eaves shall extend no less than nine inches beyond the supporting walls.

Gable end rakes shall overhang at least six inches.

Eaves and rakes on Accessory Buildings and dormers shall overhang at least six inches.

Soffits shall be placed perpendicular to the Building wall, not sloping in plane with the roof (except for gable end rakes).

Building Materials

Primary Building Material on Facades	Brick	P	Authentic stucco over masonry	P
	Natural stone	P	Exposed concrete	P Flex Buildings with Industrial Category Use NP Others
	Wood	P	Vinyl or Aluminum siding	NP
	Cementitious siding	P	Corrugated and/or sheet metal	P Flex Buildings with Industrial Category Use NP Others
Changes in Building Materials		NR		
Building Colors		NR		
Foundation Cladding		NR		
Porch Pier Cladding		NR		
Chimney Cladding		NR		

Building Types

House	NP	Commercial	P
Duplex	NP	Mixed Use	P
Townhouse	NP	Flex	P
Small Multifamily	P	Mid-Rise	P
Large Multifamily	P	Large Scale Commercial	P
Live/Work	P	Civic	P

See **Table 4.3.8.A (Principal Building Types - Summary)** and **Table 4.3.8.B (Principal Building Types - Specific Standards)**. For Development Parcels, see also **Table 5.1.6 (Building Type Mix)**.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-LI **TABLE 4.3.1-J DISTRICT STANDARDS:**
LIGHT INDUSTRIAL SPECIAL DISTRICT

Vehicular Parking Requirements		
Parking Location		
	On-Street Parking	Off-Street Parking
Domestic Vehicles	NP	P in any Required Yard, unless specifically prohibited* Except Residential and Commercial in 3 rd Layer only.
Recreational Vehicles	NP	P in any Required Yard, unless specifically prohibited* Except Residential and Commercial in 3 rd Layer only.
Heavy Equipment	NP	P in any Required Yard, unless specifically prohibited* Except Residential and Commercial in 3 rd Layer only.
Tractor Trailers (including trailers for storage)	NP	P in any Required Yard, unless specifically prohibited* Except Residential and Commercial in 3 rd Layer only.
All other Vehicles	NP	P in any Required Yard, unless specifically prohibited* Except Residential and Commercial in 3 rd Layer only.

**Driveways are not permitted within required Project Buffers & may penetrate required Lot/Building Site/ Parcel Buffers to minimum amount necessary to comply with this Ordinance.*

Additional Parking Requirements	
Off-Street Parking Surface	Asphalt or concrete
Garage Location	P In 3 rd Layer only
Garage Design	Min. interior dimensions 10 ft. x 20 ft. per vehicle Parking space
	If Garage faces Street: max Garage door width 33% of total Garage + Façade width Garage must be detailed, finished, & designed like the rest of the Building with carriage house doors; max. Garage door width 9ft; each Garage door must have ornamental lighting fixture above it; min 2ft separation between Garage doors.
Driveway/ Vehicular Entrance Location	P in any Layer
Driveway/ Vehicular Entrance Maximum Width	10 ft max. in 1 st Layer and 2 nd Layer if Residential; 24 ft. max in 1 st Layer if non-Residential, regardless if shared or not.
Parking Structure	P if Screen from Frontage by Liner Buildings
Parking Structure Pedestrian Exit Location	Via pedestrian access to Frontage

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-LI **TABLE 4.3.1-J DISTRICT STANDARDS:**
LIGHT INDUSTRIAL SPECIAL DISTRICT

Vehicular Parking Requirements (Continued)

Bicycle Parking

See Section 4.3.13

Thoroughfare & Internal Drive Types*

**Applicable only to Development Parcels*

See Article 5 (Development Parcel Standards) for additional requirements

Loading & Access

Off-Street Loading and Storage	P only in any Required Side Yard or Rear Yard, unless specifically prohibited
Utility Box & Service Meter* Locations (*Not including water meters)	P only in any Required Side Yard or Rear Yard, unless specifically prohibited
Off-Street Trash Receptacle Locations	P in 3 rd Layer only
Off-Street Dumpster Locations	P in 3 rd Layer only, must be Screened from Frontage and fully enclosed on 3 sides and enclosed on the 4 th side with self-closing gate
Drive- Through Locations	P in 3 rd Layer only

Non-Building Components

	1 st Layer	2 nd Layer	3 rd Layer
HVAC Equipment, Utility, Service and Mechanical Equipment	NP	P if Screened from Frontage	P
Solar Panels	P if coplanar to and integrated into roof design		P
Antennas & Satellite Equipment	P in 1 st or 2 nd Layer if such Layer is only possible location for satisfactory reception		P
Recreation or Play Equipment	NP	NP	P
Animals Enclosures, Runs or Shelters	NP	NP	P
Swimming pools, Hot Tubs and Spas	NP	NP	P
Transmitting and/or receiving towers, or antennas and wind-generating machines	NP	NP	P

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-LI

**TABLE 4.3.1-J DISTRICT STANDARDS:
LIGHT INDUSTRIAL SPECIAL DISTRICT**

Signs

See Sign Standards in Article 7 (Sign Standards) and Table 7.12.B-1 (Sign Types - Summary) and Table 7.1.2.B-2 (Sign Types- Specific Standards)

Lighting

See Private Lighting Requirements in Section 4.3.17 and Table 4.3.17.B (Private Lighting Standards)

Private Landscaping and Fencing

Landscaping

Required continuous shrubs around foundation at Façade if 1st Layer id > 3 ft. deep, plus if 1st Layer is > 15 ft. deep, 1 tree per 50 ft. of Frontage width, planted in 1st Layer. Landscaping must comply with Section 4.3.16

Walls & Fencing (not including Screens)

Height 3.5 - 4 ft max at Frontage, otherwise 6 ft max; height measured from avg. undisturbed grade of Adjacent property at property line

Construction Finished side must face Adjacent property, Thoroughfare, Path, Passage or Waterbody

Maintenance Must be well maintained, in upright condition and free of missing or broken parts and graffiti

Materials

Natural Wood	P only picket type allowed at Frontage; other types allowed at sides and at rear	Chain Link	P at sides and rear only
Brick, Natural Stone, or Stucco over Masonry	P at sides and rear only	Barbed/ Razor/ Concertina Wire	P at sides and rear only & only if not Adjacent to Residential Use
Wrought Iron or Aluminum	P	Exposed or Painted Aggregate Concrete	NP
Vinyl	NP	Smooth or Split-faced Block	NP

Additional Standards

Pedestrian connections through to Adjacent Neighborhoods or Uses **Required**

Location of Retaining Walls P within required Yards, per Sections 4.3.10
If supporting grade 8 ft. or higher that grade at property line, must be set back 10 ft. from property line

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-LI

**TABLE 4.3.1-J DISTRICT STANDARDS:
LIGHT INDUSTRIAL SPECIAL DISTRICT**

Screens, Street-Screens & Buffers		
Height		
	At Frontage or Adjacent to Civic Space	Not at Frontage or Adjacent to Civic Space
Wall Screen/Street-Screen Height	3.5 ft. to 5 ft.	5ft. to 6ft; Minimum 6ft. for Dumpsters and Trash Receptacles
Fence Screen/ Street-Screen Height	NP	5ft. to 6ft. for Dumpsters and Trash Receptacles
Hedge Screen/ Street-Screen Height	3 ft. to 5 ft at installation	5ft. to 6ft. at installation
Materials		
Wall Screen or Street-Screen	Brick, Natural Stone or Stucco over Masonry	
Fence Screen or Street-Screen	Natural Wood, painted or unpainted	
Hedge Screen or Street-Screen	Evergreen plants with min. 80% opacity	
Additional Standards		
Non-Residential & Multi-Family Residential Screen.		
Street Screen Adjacent to or across Thoroughfare from Non-Family Residential	NR	
Screening of Parking, Loading Areas, Service Areas, Outdoor Storage, Drive-Throughs, Trash Receptacle/Dumpsters, HVAC and other equipment Screened from Frontage, Civic Space and Adjacent Property	Required; except at Driveways:	
	Parking Lots and Parking Areas must be Screened From Frontage and Civic Space by Building or Street-Screen;	
	Parking Structures must be Screened from Frontages and Civic Space by Liner Buildings	
	otherwise, Screening must be by Building, wall, hedge or fence at Frontage or Building wall, hedge or fence not at Frontage or Adjacent to Civic Space.	
Rooftop Antenna Screening and HVAC, Mechanical and other Equipment Screening	Required; must be Screened from Frontage and Civic Space by Building Parapet or other Building element	
Self-Storage Warehouse Screening	Required; except at Driveways; Screening must be by Building, wall, hedge or fence at Frontage or Building, Wall, hedge or fence not at Frontages or Adjacent tom Civic Space.	
Street-Screen Location	2 nd Layer	
Parcel Buffer	Section 4.3.11.H	
Project Buffer	Section 5.8	

SD-HI **TABLE 4.3.1-K DISTRICT STANDARDS:**
HEAVY INDUSTRIAL SPECIAL DISTRICT

General Description

This District is intended to provide suitable areas for intense or potentially noxious Industrial operations, including open land operations. It is specifically intended that all newly created Districts be so located and Buffered as to prevent possible negative impact upon Adjacent land and Uses. SD-HI is an appropriate District for Technology Employment Center future land Use Character Area described in the Comprehensive Plan.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-HI		TABLE 4.3.1-K DISTRICT STANDARDS: HEAVY INDUSTRIAL SPECIAL DISTRICT	
Density / Floor Area Ratio (FAR)		*Applicable only to Development Parcels	
NR			
Parcel Size			
Parcel Size	NR		
Block Size*		*Applicable only to Development Parcels	
Block Perimeter		Not Regulated	
Private Frontage Types			
NR			
Civic Space Types*		*Applicable only to Development Parcels	
NR			
Permitted Uses			
See Table 4.3.9.A-1 (Building, Lot & Building Site Principal Use), Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses), and Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses). For Development Parcels, see also Table 5.1.6 (Principal Use Mix).			
Number of Buildings			
Principal Building			
Accessory Buildings			

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-HI

**TABLE 4.3.1-K DISTRICT STANDARDS:
HEAVY INDUSTRIAL SPECIAL DISTRICT**

Lot Occupation

Lot/ Building Width	100 ft. min.
Lot/ Building Site/ Parcel Frontage on Street/ Highway	24 ft min.
Lot Depth	NR
Frontage Buildout	NR
Lot/ Building Site Area	As required to meet all other applicable requirements of this Ordinance
Impervious Surface Coverage	70% max
Usable Open Space	Min. 7% of gross site area
Lot/ Building Site Enfrontment	Must enfront a vehicular Thoroughfare, Internal Drive, or Driveway. Lots or Building Sites within a Development Parcel may Enfront a Pedestrian Path, Passage, pedestrian walkway or water body if such Lots have legal and physical vehicular access to a vehicular Thoroughfare via Driveway or Easement.
Lot/ Building Site Access	All Lots and Building Sites must have legal and physical vehicular access to a vehicular Thoroughfare vis Driveway or Easement

Setback / Yards

Setback / Yards – Principal Building

	As applicable:
	1. For sites Adjacent to a District which a Residential use is allowed:
	a. An Addition to an existing Building with a Façade of variable distance from the Street may be extended to the plane of the existing Façade closest to the Street.
Street Yard – Min	c. Except for an addition to an existing Building described in 1.a above, the lesser of A
	1. The Average depth of Street Yards of existing Buildings within 100 ft. on each side of a Lot or Building Site or
	40 ft. ⁽¹⁾
	2. Otherwise, 20 ft.

Notes:

- As applicable:
- (1) Additional Side Yard or Rear Yard depth may be necessary to accommodate Buffer and landscaping required in Sections 5.3.11, 4.3.16, and 5.8
- (2) The Required Rear Yard Depth shall be reduced as provided below if the Lot does not abut a different District and is owned separately and individually from all other tracts of land, both on the Effective date of this Ordinance and on the date of application for a Zoning Permit. Such reduction shall be as follows:
- a. For all interior Lots between 80 ft. and 100 ft. deep, the required Rear Yard shall be reduced by an amount equal to the lesser of (1) 100 ft. minus the depth of the Lot or (2) 10ft.
- b. For Interior Lots < 80 ft. deep within Non-Residential Districts, the required Rear Yard depth shall be 0 ft., but if any Rear Yard is provided, it must be at least 10 ft. deep.
- (3) In Industrial Districts, the required Side Yard and Rear Yard depth for Lots along Lot Lines abutting other Industrial Districts or along a railroad Right-Of-Way is 0 ft.
- (4) In Industrial Districts, Buffering requirements are not applicable to Side Yards with zero depth.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

	2.	Otherwise, 10 ft. min ⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾	
As applicable:			
Rear Yard	1.	For sites abutting a Residential District, 50 ft. along the common boundary;	C
	2.	Otherwise, 20 ft. min ^{(1)(2)(3))(4)}	

SD-HI

TABLE 4.3.1-K DISTRICT STANDARDS:
HEAVY INDUSTRIAL SPECIAL DISTRICT

Building Standards	
Building Height*	
Principal Building	45 ft. max
Accessory Building	45 ft. max

Any Building exceeding 35 feet in height must obtain approval from the Fire Department prior to the issuance of a Building Permit.

*The Fire Department may stipulate special fire measures in accordance with National Fire Protection Association and International Building Code criteria as a condition of approval of such Structure. In such instance stipulations made by the Fire Department in accordance to with the above cited codes shall be required. *

Ceiling Height

NR

Building Composition	
Vertical Composition	Each Principal Building must have an identifiable Base, Middle, & Cap
Finished Floor Level	NR

Façade	
Main Entrance	Main Entrance must be in Façade of Principal Frontages.
Façade Position	Parallel to straight Frontage Line or to tangent of curved Frontage Line
Façade & Façade Element Design Proportions	NR
Blank Walls	NP at Frontage
Façade Articulation	NR
Façade Openings	NR

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

Façade Glazing	NR
Window Shape	NR
Window Alignment	NR
Window Types	NR
Window Glazing Material	Clear glass is Required for windows at Frontage
Window Trim in 1 st Layer	NR
Shutters	NR
Façade Window Sill Height	NR
Porch Frontages	NR
Shopfront Frontages	NR
Façade Variety	NR

Roof Type & Pitch

NR

Roof Design

NR

Building Materials

Primary Building Material on Facades	Brick	P	Authentic stucco over masonry	P
	Natural stone	P	Exposed concrete	NP
	Wood	P	Vinyl or Aluminum siding	NP
	Cementitious siding	P	Corrugated and/or sheet metal	P
Changes in Building Materials		NR		
Building Colors		NR		
Foundation Cladding		NR		
Porch Pier Cladding		NR		
Chimney Cladding		NR		

Building Types

NR

Vehicular Parking Requirements

Parking Location

	On-Street Parking	Off-Street Parking
Domestic Vehicles	NP	P in any Required Yard, unless specifically prohibited* Except Residential and Commercial in 3 rd Layer only.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-HI

**TABLE 4.3.1-K DISTRICT STANDARDS:
HEAVY INDUSTRIAL SPECIAL DISTRICT**

Vehicular Parking Requirements (Continued)

Additional Parking Requirements

Off-Street Parking Surface	Asphalt or concrete
Garage Location	P In 3 rd Layer only
Garage Design	NR
Driveway/ Vehicular Entrance Location	P in any Layer
Driveway/ Vehicular Entrance Maximum Width	10 ft max. in 1 st Layer and 2 nd Layer if Residential; 36 ft. max in 1 st Layer if non-Residential, regardless if shared or not.
Parking Structure	P if Screen from Frontage by Liner Buildings
Parking Structure Pedestrian Exit Location	Via pedestrian access to Frontage

Bicycle Parking

See Section 4.3.13

Thoroughfare & Internal Drive Types*

**Applicable only to Development Parcels*

See Article 5 (Development Parcel Standards) for additional requirements

Loading & Access

Off-Street Loading and Storage	P only in any Required Side Yard or Rear Yard, unless specifically prohibited
Utility Box & Service Meter* Locations (*Not including water meters)	P only in any Required Side Yard or Rear Yard, unless specifically prohibited
Off-Street Trash Receptacle Locations	P in 3 rd Layer only
Off-Street Dumpster Locations	P in 3 rd Layer only, must be Screened from Frontage and fully enclosed on 3 sides and enclosed on the 4 th side with self-closing gate
Drive- Through Locations	P in 3 rd Layer only

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-HI TABLE 4.3.1-K DISTRICT STANDARDS:
HEAVY INDUSTRIAL SPECIAL DISTRICT

Non-Building Components			
	1st Layer	2nd Layer	3rd Layer
HVAC Equipment, Utility, Service and Mechanical Equipment	NP	P if Screened from Frontage	P
Solar Panels	P if coplanar to and integrated into roof deign		P
Antennas & Satellite Equipment	P in 1st or 2nd Layer if such Layer is only possible location for satisfactory reception		P
Recreation or Play Equipment	NP	NP	P
Animals Enclosures, Runs or Shelters	NP	NP	P
Swimming pools, Hot Tubs and Spas	NP	NP	P
Transmitting and/or receiving towers, or antennas and wind-generating machines	NP	NP	P

Signs

See Sign Standards in Article 7 (Sign Standards) and Table 7.12.B-1 (Sign Types - Summary) and Table 7.1.2.B-2 (Sign Types- Specific Standards)

Lighting

See Private Lighting Requirements in Section 4.3.17 and Table 4.3.17.B (Private Lighting Standards)

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

Private Landscaping and Fencing

Landscaping

Required if 1st Layer $\geq$ 10 ft, minimum of 30% of 1st Layer must be landscaped in compliance with Section 4.3.16, with continuous shrubs around foundation at Façade if 1st Layer is $\geq$ 3 ft. deep, plus if 1st Layer is $\geq$ 15 ft. deep, 1 tree per 50 ft. of Frontage width, planted in 1st Layer. Landscaping must comply with Section 4.3.16

Walls & Fencing (not including Screens)

Height	3.5 - 4 ft max at Frontage, otherwise 6 ft max; height measured from avg. undisturbed grade of Adjacent property at property line
Construction	Finished side must face Adjacent property, Thoroughfare, Path, Passage or Waterbody
Maintenance	Must be well maintained, in upright condition and free of missing or broken parts and graffiti

Materials

Natural Wood	P only picket type allowed at Frontage; other types allowed at sides and at rear	Chain Link	P at sides and rear only
Brick, Natural Stone, or Stucco over Masonry	P at sides and rear only	Barbed/ Razor/ Concertina Wire	P at sides and rear only & only if not Adjacent to Residential Use
Wrought Iron or Aluminum	P	Exposed or Painted Aggregate Concrete	NP
Vinyl	NP	Smooth or Split-faced Block	NP

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SD-HI

**TABLE 4.3.1-K DISTRICT STANDARDS:
HEAVY INDUSTRIAL SPECIAL DISTRICT**

Private Landscaping and Fencing

Additional Standards

Non-Residential & Multi-Family Residential Screen. Street Screen Adjacent to or across Thoroughfare from Non-Family Residential	NR
Screening of Parking, Loading Areas, Service Areas, Outdoor Storage, Drive-Throughs, Trash Receptacle/Dumpsters, HVAC and other equipment Screened from Frontage, Civic Space and Adjacent Property	Required; except at Driveways: Parking Lots and Parking Areas must be Screened From Frontage and Civic Space by Building or Street-Screen; Parking Structures must be Screened from Frontages and Civic Space by Liner Buildings otherwise, Screening must be by Building, wall, hedge or fence at Frontage or Building wall, hedge or fence not at Frontage or Adjacent to Civic Space.
Rooftop Antenna Screening and HVAC, Mechanical and other Equipment Screening	Required; must be Screened from Frontage and Civic Space by Building Parapet or other Building element
Self-Storage Warehouse Screening	Required; except at Driveways; Screening must be by Building, wall, hedge or fence at Frontage or Building, Wall, hedge or fence not at Frontages or Adjacent tom Civic Space.
Street-Screen Location	2 nd Layer
Parcel Buffer	Section 4.3.11.H
Project Buffer	Section 5.8

PUD-R **TABLE 4.3.1-L DISTRICT STANDARDS:**
PLANNED UNIT DEVELOPMENT RESIDENTIAL DISTRICT

General Description

This District permits utilization of the Planned Unit Development process under TCA Section 13-4-310, implementation of the Comprehensive Plan, and review and approval of a Master PUD Development Plan that complies with these standards and establishes them and other standards as entitlements for a property, including a customized combination of Permitted Uses, Building Types, Private Frontage Types, Setbacks and Yards, and Throughfares and Internal Drives.

Specifically, this District is intended for predominately Residential areas on sites with sufficient existing infrastructure, services, and utilities available for a proposed Development. Development in this District (a) is walkable and provides a diverse mixture of housing choices and Building Types, (b) is necessary to implement and is consistent with the Comprehensive Plan, (c) cannot under any circumstances, plan, or design conform to one or more of the other Districts and standards therefore due to its necessary and intrinsic Uses or size or form, (d) provides an innovative plan and design, (e) is harmonious with and respects the land use, character, and natural or man-made features of both the subject property and Adjacent property, (f) promotes quality and environmentally sensitive planning and design by taking advantage of special site characteristics, locations, and land uses, (g) provides Civic Space, (h) is the best use of the site consistent with the goals of protecting and enhancing the natural environment. There are specific Development standards provided for this District, which may be supplemented by additional standards approved in the applicable Final Master PUD Development Plan. The Planning Commission may determine that a specific PUD-R Master Plan is consistent with the future land map use of the Comprehensive Plan.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

PUD-R

**TABLE 4.3.1-L DISTRICT STANDARDS:
PLANNED UNIT DEVELOPMENT RESIDENTIAL DISTRICT**

Density / Floor Area Ratio (FAR)

**Applicable only to Development Parcels*

12 Density Units per acre max

Parcel Size

Parcel Size

Min. more than 10 gross acres

BLOCK SIZE*

**Applicable only to Development Parcels*

Block Perimeter

2000 ft. max or 3000 ft max if a parking structure provided within Block

Private Frontage Types

Common Yard	P	Stepfront	P
Porch	P	Shopfront	P
Fence	P	Gallery	NP
Terrace/Lightwell	P	Arcade	NP
Forecourt	P	Officefront	NP
Stoop	P		

See **Table 4.3.7.A (Private Frontage Types)**

Civic Space Types*

**Applicable only to Development Parcels*

Natural Area	P	Playground	P
Green	P	Sport Field	NP
Square	P	Community Garden	P
Plaza	P	Pocket Park	P

See **Table 5.3.3.A (Civic Space Types - Summary)**

Permitted Uses

See **Table 4.3.9.A-1 (Building, Lot & Building Site Principal Use)**, **Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses)**, and **Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses)**. For Development Parcels, see also **Table 5.1.6 (Principal Use Mix)**.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

PUD-R

**TABLE 4.3.1-L DISTRICT STANDARDS:
PLANNED UNIT DEVELOPMENT RESIDENTIAL DISTRICT**

Number of Buildings Per Lot or Building Site

Principal Building	6 max per Lot / Building Site for attached Townhouse Buildings; otherwise, 1 max. per Lot / Building Site
Accessory Buildings	1 max per Building Site

Lot Occupation

	18 ft. min; 180 ft. max;
Lot/ Building Site Width	For Townhouses with each unit on its own Lot or Building Site: 18-36 ft. for single Townhouse unit attached to other Townhouse units x 8 max. attached Townhouse units. For multiple Townhouses on a single Lot or Building Site: 18-20 ft. per Townhouse unit x 8 max. attached Townhouse units.
Frontage Buildout	38 ft. min for House, 25 ft. min, for each Duplex unit or 50 ft. min for both units of Duplex, and 100 ft. max. for small Multifamily Building.
Lot/ Building Site Area	60% min.
Impervious Surface Coverage	NR
	70% max; except 90% max. for each group of attached Townhouse units.
Lot/ Building Site Enfrontment	Must enfront a vehicular Thoroughfare or Internal Drive, except $\leq 20\%$ of the Lots / Building Sites within a Development Parcel may Enfront a Pedestrian Path, Passage, pedestrian walkway or water body if such Lots / Building Sites have legal and physical vehicular access to a vehicular Thoroughfare via Driveway or Easement.
Lot/ Building Site Access	All lots must have legal and physical vehicular access to a vehicular Thoroughfare or Internal drive via Driveway or Easement.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

PUD-R

TABLE 4.3.1-L DISTRICT STANDARDS:
PLANNED UNIT DEVELOPMENT RESIDENTIAL DISTRICT

Setbacks / Yards					
Setbacks / Yards – Principal Building			Setbacks / Yards – Accessory Building		
Front Setback / Yard, Principal Frontage	15 ft. – 35 ft.	A	Front Setback / Yard, Principal Frontage	40 ft. max. from Rear Lot / Building Site Line	E
Front Setback / Yard, Secondary Frontage	15 ft. – 35 ft.	B	Side Setback / Yard	0 ft. min.	F
Side Setback / Yard, each side	0 ft. min. on attached side(s) of attached Building Types; otherwise, 10 ft. min; 24 ft. max. per side	C	Rear Setback / Yard	3 ft. max	G
Rear Setback	10 ft. min.	D			

Building Standards	
Building Height*	
Principal Building	1-2 Stories for House and Duplex Building Types; 2-3 Stories for Townhouse, Live/ Work and Small Multifamily Building Types; 2-4 Stories for Large Multifamily Building Type.
Accessory Building	2 Stories max; Allowed in 3 rd Layer only.

*Stories/ Height do not include Attics and Basements, chimneys, flagpoles, towers, spires, belfries, parapet walls, aerials, or antennas. Any Building exceeding 35 feet in height must obtain approval from stipulations made by the Fire Department in accordance with the above cited codes shall be required. *

*The Fire Department may stipulate special fire measures in accordance with National Fire Protection Association and International Building Code criteria as a condition of approval of such Structure. In such instance stipulations made by the Fire Department in accordance to with the above cited codes shall be required. *

Ceiling Height

May not exceed 14 ft. from finished floor to finished ceiling.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

PUD-R

**TABLE 4.3.1-L DISTRICT STANDARDS:
PLANNED UNIT DEVELOPMENT RESIDENTIAL DISTRICT**

Building Composition	
Vertical Composition	Each Principal Building must have an identifiable Base, Middle & Cap
Finished Floor Level	Min. 18 in. above average grade at Façade
Façade	
Main Entrance	Main Entrance must be in Façade of Principal Frontages. If Shop Frontage at corner Main Entrance may be at Principal Frontage, or at corner.
Façade Position	Parallel to straight Frontage Line or to tangent of curved Frontage Line
Façade & Façade Element Design Proportions	Must be vertically proportioned
Blank Walls	NP at Frontage
Façade Articulation	Except for House Building Types, a Façade greater than 100 ft. in width must be differentiated so that it appears to be comprised of two or more Adjacent Buildings, by dividing such Façade into two segments each of which includes a separate entrance and (1) differs from each of the other segments with respect to all of the following: (a) a change in shape, sill, and header height, detail, size, spacing, rhythm, and muntin pattern of windows; (b) a change of Building or cornice height; (c) a change in cornice details; (d) a change of wall material or wall color; a change in trim courses and other horizontal elements; (e) a change in dormer or balcony design, if any, and (f) providing or changing pilasters, columns, or other Façade elements; and (2) is composed with a defined center and edges. (See Illustration 4.3.5.A-3)
Façade Openings	Façade windows, and/or doors spaced ≤ 20 ft. apart In Stories above first Façade openings must be $\leq 50\%$ of the total Façade area
Façade Glazing	20% - 60% of total Façade area for non-Shopfront; 70% of total Façade area, min. for Shopfront
Window Shape	Square or vertical in proportion, except transoms
Window Alignment	Upper floor windows and other features must be aligned with those of first floor
Window Types	Except in Shopfront or Gallery Frontage, and except for Transoms and sidelights, Windows in Façade and 1 st & 2 nd Layers must be single-hung, double-hung, casement or awning types. In Stories above first, Façade openings must be $\leq 50\%$ of total Façade area.
Window Glazing Material	Clear glass is Required for all Elevations
Window Trim in 1 st Layer	Min. 4 in. trim with sill and top plate if siding surrounding window; soldier course above lintel and rollock course below sill if brick or stone surrounds window
Shutters	If any, must be functional and proportioned to cover half of window width from each side or entire window width, with shutter dogs
Façade Window Sill Height	If Residential: 5 ft. min above average grade at Façade
Porch Frontages	Min. 6 ft. clear depth, excluding rails, pillars, columns or other features
Shopfront Frontages	12 in. – 24 in. knee wall required at Frontage
Façade Variety	No Façade may exist more than once in a Block Face or within view of the same Façade

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

PUD-R

TABLE 4.3.1-L DISTRICT STANDARDS:
PLANNED UNIT DEVELOPMENT RESIDENTIAL DISTRICT

Building Standards (continued)

Roof Type & Pitch

Flat	NP
Shed	P at rear only and if ridge is attached to an exterior Building wall; except for porches, stoops or dormers which may have a shed roof anywhere on the Building.
Hip	P
Gable	P
Pitch	6:12 – 14:12, except for shed roofs which may be 3:12 – 14:12 and except roof pitch may match the primary roof pitch of an existing Building that is less than 6:12

Roof Design

Eaves shall extend no less than nine inches beyond the supporting walls.

Gable end rakes shall overhang at least six inches.

Eaves and rakes on Accessory Buildings and dormers shall overhang at least six inches.

Soffits shall be placed perpendicular to the Building wall, not sloping in plane with the roof (except for gable end rakes).

Building Materials

Primary Building Material on Facades	Brick	P	Authentic stucco over masonry	P
	Natural stone	P	Exposed concrete	NP
	Wood	P	Vinyl or Aluminum siding	NP
	Cementitious siding	P	Corrugated and/or sheet metal	NP

Changes in Building Materials Primary materials must continue alongside Elevations through 2nd layer. Primary materials shall continue for entire length of all Facades facing a frontage. Any material changes must coincide with form, structural, or massing changes and shall not occur at outside corner of any such change.

Building Colors Up to three (3) colors, including the natural color of any allowed materials, but not excluding trim

Foundation Cladding **Required**; brick or stone.

Porch Pier Cladding **Required**; brick or stone, with any space under Porch concealed by painted or stained latticework between piers.

Chimney Cladding **Required**; brick, natural stone, with material matching primary material of Façade

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

PUD-R

TABLE 4.3.1-L DISTRICT STANDARDS:
PLANNED UNIT DEVELOPMENT RESIDENTIAL DISTRICT

Building Types

House	P	Commercial	NP
Duplex	P	Mixed Use	NP
Townhouse	P	Flex	NP
Small Multifamily	P	Mid-Rise	NP
Large Multifamily	P	Large Scale Commercial	NP
Live/Work	P	Civic	P

See *Table 4.3.8.A (Principal Building Types - Summary)* and *Table 4.3.8.B (Principal Building Types - Specific Standards)*. For Development Parcels, see also *Table 5.1.6 (Building Type Mix)*.

Vehicular Parking Requirements

Parking Location

	On-Street Parking	Off-Street Parking
All Vehicles	P	P in any Required Yard, unless specifically prohibited

Additional Parking Requirements

Off-Street Parking Surface	Asphalt, concrete, or another hard surface
Garage Location	P In 3 rd Layer only
Garage Design	Min. interior dimensions 10 ft. x 20 ft. per vehicle Parking space If Garage faces Street: max Garage door width 33% of total Garage + Façade width Garage must be detailed, finished, & designed like the rest of the Building with carriage house doors; max. Garage door width 9ft; each Garage door must have ornamental lighting fixture above it; min 2ft separation between Garage doors.
Driveway/ Vehicular Entrance Location	P in any Layer
Driveway/ Vehicular Entrance Maximum Width	10 ft. max in 1 st Layer if Residential; 24 ft. max in 1 st Layer if non-Residential, regardless if shared or not.
Parking Structure	P if Screen from Frontage by Liner Buildings
Parking Structure Pedestrian Exit Location	Via pedestrian access to Frontage

Bicycle Parking

See Section 4.3.13

Thoroughfare & Internal Drive Types*

*Applicable only to Development Parcels

See Article 5 (Development Parcel Standards) for additional requirements

PUD-MU

TABLE 4.3.1-M DISTRICT STANDARDS:
PLANNED UNIT DEVELOPMENT – MIXED USE

General Description

This District allows utilization of the Planned Unit Development process under TCA Section 13-4-310, implementation of the Comprehensive Plan, and review and approval of a Master PUD Development Plan that complies with these standards and establishes them and other standards as entitlements for a property, including a customized combination of permitted Uses, Building Types, Private Frontage Types, Setbacks and Yards, and Thoroughfares and Internal Drives.

Specifically, this District is intended for Commercial, Office, Mixed Use, and Multifamily Uses on sites with sufficient existing infrastructure, services, and utilities available for a proposed Development. Development in this District (a) is walkable and provides a diverse mixture of housing choices and Building Types, (b) is necessary to implement an is consistent with the Comprehensive Plan, (c) cannot under any circumstances, plan, or design conform to one or more of the other Districts and standards therefore due to its necessary and intrinsic Use or size or form,)d) provides an innovative plan and design, (e) is harmonious with both the subject property and Adjacent property, (f) promotes quality and environmentally sensitive planning and design by taking advantage of special site characteristics, locations, and land uses, (g) provides Civic Space, (h) is the best use of the site consistent with the goals of protecting and enhancing the natural environment. There are specific Development standards provided for this District, which may be supplemented by additional standards approved in the applicable Final Master PUD Development Plan. The Planning Commission may determine that a specific PUD-MU Master Plan is consistent with the future land use map of this Comprehensive Plan.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

PUD-MU **TABLE 4.3.1-M DISTRICT STANDARDS:**
PLANNED UNIT DEVELOPMENT – MIXED USE

Density / Floor Area Ratio (FAR) *Applicable only to Development Parcels

12 Density Units per acre max

Parcel Size

Parcel Size Min. more than 10 gross acres

BLOCK SIZE* *Applicable only to Development Parcels

Block Perimeter 2000 ft. max or 3000 ft max if a parking structure provided within Block

Private Frontage Types

Common Yard	NP	Stepfront	P
Porch	NP	Shopfront	P
Fence	NP	Gallery	P
Terrace/Lightwell	P	Arcade	P
Forecourt	P	Officefront	P
Stoop	P		

See Table 4.3.7.A (Private Frontage Types)

Civic Space Types* *Applicable only to Development Parcels

Natural Area	NP	Playground	P
Green	NP	Sport Field	NP
Square	P	Community Garden	P
Plaza	P	Pocket Park	P

See Table 5.3.3.A (Civic Space Types - Summary)

Permitted Uses

See Table 4.3.9.A-1 (Building, Lot & Building Site Principal Use), Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses), and Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses). For Development Parcels, see also Table 5.1.6 (Principal Use Mix).

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

PUD-MU

**TABLE 4.3.1-M DISTRICT STANDARDS:
PLANNED UNIT DEVELOPMENT – MIXED USE**

Number of Buildings Per Lot or Building Site					
Principal Building		1 max			
Accessory Buildings		1 max			
Lot Occupation					
Lot/ Building Site Width		18 ft. min; 180 ft. max; except for Townhouses, 18-24 ft. for single Townhouse unit attached to other Townhouse units or 18 -24 ft. per Townhouse unit X number of attached Townhouse units on single Lot or Building Site, with max of 6 units; 100 ft. max. for small Multifamily Building. Large Scale Commercial: 600 ft. max			
Frontage Buildout		60% min.			
Lot/ Building Site Area		NR			
Impervious Surface Coverage		100% max			
Lot/ Building Site Enfrontment		Must enfront a vehicular Thoroughfare or Internal Drive, except ≤ 20% of the Lots / Building Sites within a Development Parcel may Enfront a Pedestrian Path, Passage, pedestrian walkway or water body if such Lots / Building Sites have legal and physical vehicular access to a vehicular Thoroughfare via Driveway or Easement.			
Lot/ Building Site Access		All lots must have legal and physical vehicular access to a vehicular Thoroughfare or Internal drive via Driveway or Easement.			
Setbacks / Yards					
Setbacks / Yards – Principal Building			Setbacks / Yards – Accessory Building		
Front Setback / Yard, Principal Frontage	0 – 20 ft.	A	Front Setback / Yard, Principal Frontage	40 ft. max. from rear property line.	E
Front Setback / Yard, Secondary Frontage	0 – 20 ft.	B	Side Setback / Yard	0 ft. min.	F
Side Setback / Yard, each side	0 ft. min. for attached Buildings; Otherwise, 10-24 ft.	C	Rear Setback / Yard	3 ft. max	G
Rear Setback	NR	D			

If the District abuts property zoned for Residential Uses that is not included within the District, all Buildings shall be setback as follows:

- Where the property is zoned, but not currently utilized, for Residential purposes, a distance equal to the setback established for the Residential District.
- Where property is currently utilized for Residential purposes, a distance equal to the lesser of (i) the present average setback of properties located 200 feet from the nearest point on the subject property and (ii) twice the minimum setback established for the CD-4C District.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

PUD-MU **TABLE 4.3.1-M DISTRICT STANDARDS:**
PLANNED UNIT DEVELOPMENT – MIXED USE

Building Standards

Building Height*

Principal Building	One story greater than maximum height permitted in adjacent character district, or as determined by the Planning Commission based on proposed use and site conditions
Accessory Building	2 Stories max or as determined by the Planning Commission based on proposed use and site conditions

*Stories/ Height do not include Attics and Basements, chimneys, flagpoles, towers, spires, belfries, parapet walls, aerials, or antennas. Any Building exceeding 35 feet in height must obtain approval from stipulations made by the Fire Department in accordance with the above cited codes shall be required. *

*The Fire Department may stipulate special fire measures in accordance with National Fire Protection Association and International Building Code criteria as a condition of approval of such Structure. In such instance stipulations made by the Fire Department in accordance to with the above cited codes shall be required. *

Ceiling Height

May not exceed 14 ft. from finished floor to finished ceiling, except for first floor Commercial, Office, Retail/Personal Service, or Accommodation/ Lodging Use, which must be a minimum of 11 ft. with a maximum of 25 ft.

Building Composition

Vertical Composition	Each Principal Building must have an identifiable Base Middle & Cap
Finished Floor Level	Residential: 18 in. – 48 in. above finished grade at Façade Non-Residential & Mixed Use: 48 in. max. above finished grade at Façade.

Façade

Main Entrance	Main Entrance must be in Façade of Principal Frontages. If Shop Frontage at corner Main Entrance may be at Principal Frontage, or at corner.
Façade Position	Parallel to straight Frontage Line or to tangent of curved Frontage Line
Façade & Façade Element Design Proportions	Must be vertically proportioned
Blank Walls	NP at Frontage
Façade Articulation	A Façade greater than 100 ft. in width must be differentiated so that it appears to be comprised of two or more Adjacent Buildings, by dividing such Façade into two segments each of which includes a separate entrance and (1) differs from each of the other segments with respect to all of the following: (a) a change in shape, sill, and header height, detail, size, spacing, rhythm, and muntin pattern of windows; (b) a change of Building or cornice height; (c) a change in cornice details; (d) a change of wall material or wall color; a change in trim courses and other horizontal elements; (e) a change in dormer or balcony design, if any, and (f) providing or changing pilasters, columns, or other Façade elements; and (2) is composed with a defined center and edges. (See Illustration 4.3.5.A-3)
Façade Openings	Façade windows, and/or doors spaced ≤ 20 ft. apart In Stories above first Façade openings must be $\leq 50\%$ of the total Façade area
Façade Glazing	Non-Shopfront: 20% – 60% of total ground floor Facade area. Shopfront: min. 50% of total ground floor Facade area; min. 20% of total Façade area on upper floors and secondary elevations.
Window Shape	Square or vertical in proportion, except transoms
Window Alignment	Upper floor windows and other features must be aligned with those of first floor

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

Window Types	Except in Shopfront or Gallery Frontage, and except for Transoms and sidelights, Windows in Facade and 1 st & 2 nd Layers must be single-hung, double-hung, casement or awning types. In Stories above first, Façade openings must be ≤ 50% of total Façade area.
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ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

PUD-MU **TABLE 4.3.1-M DISTRICT STANDARDS:**
PLANNED UNIT DEVELOPMENT – MIXED USE

Building Standards (Continued)

Façade (Continued)

Window Glazing Material	Clear glass is Required for all Elevations
Window Trim in 1 st Layer	Min. 4 in. trim with sill and top plate if siding surrounding window; soldier course above lintel and rollock course below sill if brick or stone surrounds window
Shutters	If any, must be functional and proportioned to cover half of window width from each side or entire window width, with shutter dogs
Façade Window Sill Height	If Residential: 5 ft. min above average grade at Façade
Porch Frontages	Min. 6 ft. clear depth, excluding rails, pillars, columns or other features
Shopfront Frontages	12 in. – 24 in. knee wall required at Frontage
Façade Variety	No Façade may exist more than once in a Block Face

Roof Type & Pitch

Flat	P
Shed	P at rear only and if ridge is attached to an exterior Building wall; except for porches, stoops or dormers which may have a shed roof anywhere on the Building.
Hip	P
Gable	P
Pitch	6:12 – 14:12, except for shed roofs which may be 3:12 – 14:12 and except roof pitch may match the primary roof pitch of an existing Building that is less than 6:12

Roof Design

Eaves shall extend no less than nine inches beyond the supporting walls.

Gable end rakes shall overhang at least six inches.

Eaves and rakes on Accessory Buildings and dormers shall overhang at least six inches.

Soffits shall be placed perpendicular to the Building wall, not sloping in plane with the roof (except for gable end rakes).

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

PUD-MU

**TABLE 4.3.1-M DISTRICT STANDARDS:
PLANNED UNIT DEVELOPMENT – MIXED USE**

Building Materials				
Primary Building Material on Facades	Brick	P	Authentic stucco over masonry	P
	Natural stone	P	Exposed concrete	NP
	Wood	P	Vinyl or Aluminum siding	NP
	Cementitious siding	P	Corrugated and/or sheet metal	NP
Changes in Building Materials	Primary materials must continue alongside Elevations through 2 nd layer. Primary materials shall continue for entire length of all Facades facing a frontage. Any material changes must coincide with form, structural, or massing changes and shall not occur at outside corner of any such change.			
Building Colors	Up to three (3) colors, including the natural color of any allowed materials, but not excluding trim			
Foundation Cladding	Required; brick or stone.			
Porch Pier Cladding	Required; brick or stone, with any space under Porch concealed by painted or stained latticework between piers.			
Chimney Cladding	Required; brick, natural stone, with material matching primary material of Façade			
Building Types				
House	P	Commercial	P	
Duplex	P	Mixed Use	P	
Townhouse	P	Flex	P	
Small Multifamily	P	Mid-Rise	P	
Large Multifamily	P	Large Scale Commercial	P	
Live/Work	P	Civic	P	

See **Table 4.3.8.A (Principal Building Types - Summary)** and **Table 4.3.8.B (Principal Building Types - Specific Standards)**. For Development Parcels, see also **Table 5.1.6 Building Type Mix**.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

PUD-MU

**TABLE 4.3.1-M DISTRICT STANDARDS:
PLANNED UNIT DEVELOPMENT – MIXED USE**

Additional Parking Requirements

Off-Street Parking Surface	Asphalt, concrete, or another hard surface
Garage Location	P In 3 rd Layer only
Garage Design	Min. interior dimensions 10 ft. x 20 ft. per vehicle Parking space If Garage faces Street: max Garage door width 33% of total Garage + Façade width Garage must be detailed, finished, & designed like the rest of the Building with carriage house doors; max. Garage door width 9ft; each Garage door must have ornamental lighting fixture above it; min 2ft separation between Garage doors.
Driveway/ Vehicular Entrance Location	P in any Layer
Driveway/ Vehicular Entrance Maximum Width	24 ft. max width, regardless if shared or not.
Parking Structure	P if Screen from Frontage by Liner Buildings
Parking Structure Pedestrian Exit Location	Via pedestrian access to Frontage

Vehicular Parking Requirements

Parking Location

	On-Street Parking	Off-Street Parking
All Vehicles	P	P in 3 rd Layer only

Bicycle Parking

See Section 4.3.13

Thoroughfare & Internal Drive Types*

**Applicable only to Development Parcels*

See Article 5 (Development Parcel Standards) for additional requirements

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

PUD-MU

TABLE 4.3.1-M DISTRICT STANDARDS: PLANNED UNIT DEVELOPMENT – MIXED USE

Loading & Access

Off-Street Loading and Storage	Required per Table 4.3.14.b (Loading Requirements); P in 3 rd Layer only
Utility Box & Service Meter* Locations (*Not including water meters)	Required per Table 4.3.14.b (Loading Requirements); P in 3 rd Layer only
Off-Street Trash Receptacle Locations	P in 3 rd Layer only
Off-Street Dumpster Locations	P in 3 rd Layer only, must be Screened from Frontage and fully enclosed on 3 sides and enclosed on the 4 th side with self-closing gate
Drive- Through Locations	P in 3 rd Layer only

Non-Building Components

	1st Layer	2 nd Layer	3 rd Layer
HVAC Equipment, Utility, Service and Mechanical Equipment	NP	P if Screened from Frontage	P
Solar Panels	P if coplanar to and integrated into roof deign		P
Antennas & Satellite Equipment	P in 1 st or 2 nd Layer if such Layer is only possible location for satisfactory reception		P
Recreation or Play Equipment	NP	NP	P
Animals Enclosures, Runs or Shelters	NP	NP	P
Swimming pools, Hot Tubs and Spas	NP	NP	P
Transmitting and/or receiving towers, or antennas and wind- generating machines	NP	NP	P

Signs

See Sign Standards in Article 7 (Sign Standards) and **Table 7.12.B-1 (Sign Types - Summary)** and **Table 7.1.2.B-2 (Sign Types- Specific Standards)**

Lighting

See Private Lighting Requirements in Section 4.3.17 and **Table 4.3.17.B (Private Lighting Standards)**

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

PUD-MU

**TABLE 4.3.1-M DISTRICT STANDARDS:
PLANNED UNIT DEVELOPMENT – MIXED USE**

Private Landscaping and Fencing

Landscaping

Required if 1st Layer $\geq$ 3ft, 30% of 1st Layer must be landscaped, with continuous shrubs along foundation at Façade and additionally if 1st Layer $\geq$ 15 ft, sod, and 1 tree per 50 ft. of Frontage, width, planted in 1st Layer. Landscaping must comply with Section 4.3.16.

NA in front if $\leq$ 3 ft front setback.

Additionally, any Yard Adjacent to a Street must be landscaped and maintained for a distance of 10 ft. from Lot Line or Building Site Line Adjacent to the Street, except for portions that adjoin Lots or Building Sites in Residential Use, which shall be so landscaped and maintained for the full width or depth of the required Yards within 25 feet of adjoining Lot Lines or Building Site Lines.

Side Yards Adjacent to Lots or Building Sites in Residential Use shall be similarly landscaped and maintained for their full required minimum width. No such required landscaped area shall be used for Parking or loading.

Walls & Fencing

Height	3.5 - 4 ft max at Frontage, otherwise 6 ft max; height measured from avg. undisturbed grade of Adjacent property at property line
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Construction	Finished side must face Adjacent property, Thoroughfare, Path, Passage or Waterbody
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Maintenance	Must be well maintained, in upright condition and free of missing or broken parts and graffiti.
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Materials

Natural Wood	P at sides and rear only	Chain Link	P at sides and rear only
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Brick, Natural Stone, or Stucco over Masonry	P	Barbed/ Razor/ Concertina Wire	NP
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Wrought Iron or Aluminum	P	Exposed or Painted Aggregate Concrete	NP
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Vinyl	NP	Smooth or Split-faced Block	NP
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Additional Standards

Pedestrian Connections through to Adjacent Neighborhoods or Uses	Required
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Locations of Retaining Walls	P within required Yards, per Section 4.3.10
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	If supporting grade 8 ft. or higher than grade at interior edge of a required Buffer, must be set back 10 ft. from such interior edge.
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ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

PUD-MU

**TABLE 4.3.1-M DISTRICT STANDARDS:
PLANNED UNIT DEVELOPMENT – MIXED USE**

Screens, Street-Screens & Buffers

Height

	At Frontage or Adjacent to Civic Space	Not at Frontage or Adjacent to Civic Space
Wall Screen/Street-Screen Height	3.5 ft. to 5 ft.	5ft. to 6ft; Minimum 6ft. for Dumpsters and Trash Receptacles
Fence Screen/ Street-Screen Height	NP	5ft. to 6ft. for Dumpsters and Trash Receptacles
Hedge Screen/ Street-Screen Height	3 ft. to 5 ft at installation	5ft. to 6ft. at installation

Materials

Wall Screen or Street-Screen	Brick, Natural Stone or Stucco over Masonry
Fence Screen or Street-Screen	Natural Wood, painted or unpainted
Hedge Screen or Street-Screen	Evergreen plants with min. 80% opacity

Additional Standards

Non-Residential & Multi-Family Residential Screen. Street Screen Adjacent to or across Thoroughfare from Non-Family Residential	NR
Screening of Parking, Loading Areas, Service Areas, Outdoor Storage, Drive-Throughs, Trash Receptacle/Dumpsters, HVAC and other equipment Screened from Frontage, Civic Space and Adjacent Property	Required; except at Driveways: Parking Lots and Parking Areas must be Screened From Frontage and Civic Space by Building or Street-Screen; Parking Structures must be Screened from Frontages by Liner Buildings; Otherwise, Screening must be by Building, wall, hedge or fence at Frontage or Building wall, hedge or fence not at Frontage or Adjacent to Civic Space.
Rooftop Antenna Screening and HVAC, Mechanical and other Equipment Screening	Required; must be Screened from Frontage and Civic Space by Building Parapet or other Building element
Self-Storage Warehouse Screening	N/A (not permitted in District)
Street-Screen Location	2 nd Layer
Parcel Buffer	Section 4.3.11.H
Project Buffer	Section 5.8

Market Analysis

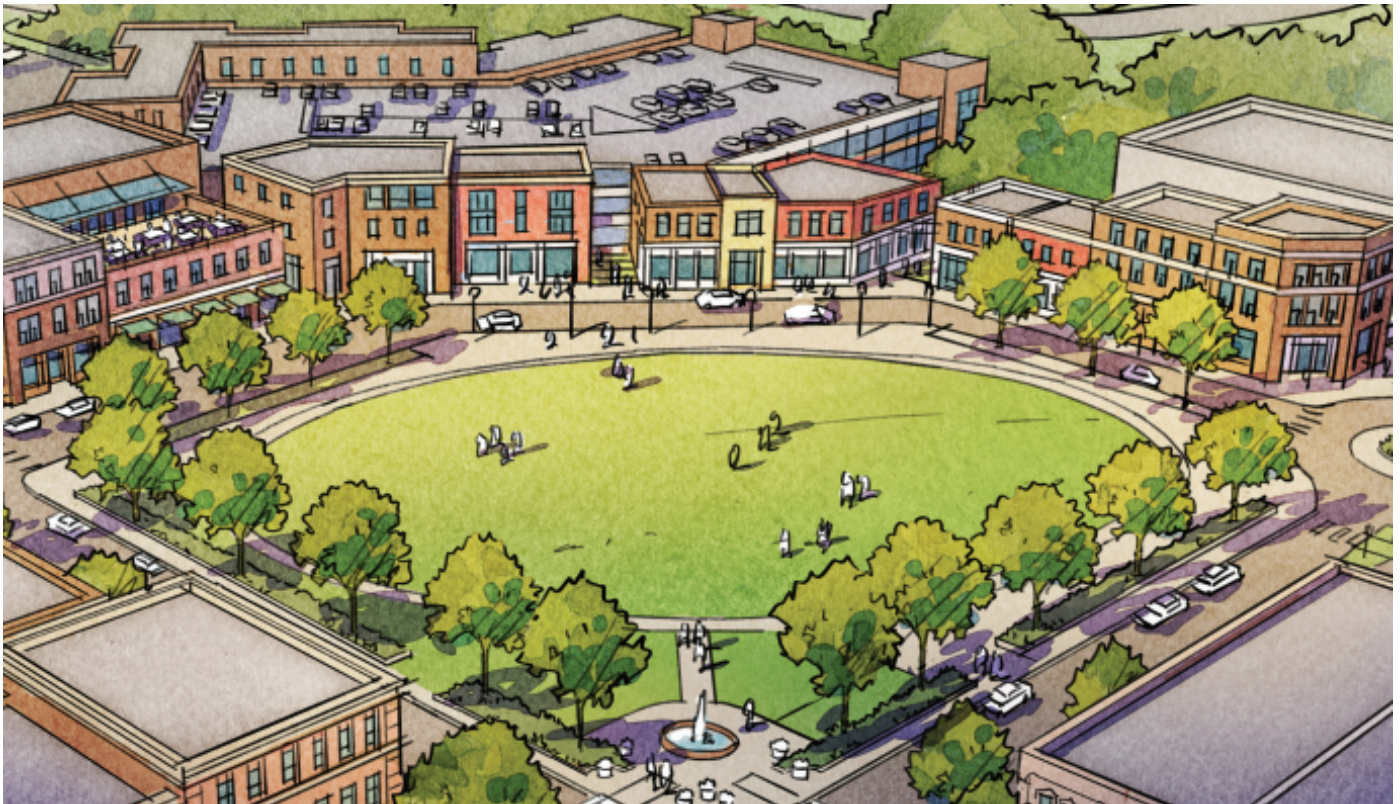
The Planning Commission may require a market analysis for any proposed PUD-MU Development. The market analysis will be utilized, among other things, to determine the impact of the proposed Development on the long-range Development of the commercial land use in the Columbia area, to determine the timing of any proposed Development, to limit the extent of the PUD-Mu; to ascertain the effect of a proposed Development upon other lands used or zoned for similar purposes; to form a basis for evaluating the estimated effects on traffic, and other purposes which assist in an understanding of the public interest pertinent in the evaluation of a proposed Development. The market analysis, if required, shall be provided by the landholder and the landowner shall provide any other economic data or analysis as may be reasonably requested by the Planning Commission or City Council.

**OTHER DISTRICTS FROM PREVIOUS ORDINANCES TO BE
REGULATED BY THEIR PUD APPROVALS.**

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CV

TABLE 4.3.1-N DISTRICT STANDARDS:
CIVIC DISTRICT



General Description

Civic District (CV) is assigned to areas designed for Civic purposes. These may be one or more Civic Space Types allowed within or Adjacent to any specific Character District or Special District, as well as sites dedicated to significant Buildings to be used for Civic purposes, such as City Halls, Post Offices, Libraries, Places of Assembly, Places of Worship, and community centers. This District is appropriate to all future land use Character Areas described in the Comprehensive Plan as determined by the Planning Commission.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CV TABLE 4.3.1-N DISTRICT STANDARDS: CIVIC DISTRICT

Density / Floor Area Ratio (FAR)

**Applicable only to Development Parcels*

NR

BLOCK SIZE*

**Applicable only to Development Parcels*

Block Perimeter

NR

Private Frontage Types

NR

Civic Space Types*

**Applicable only to Development Parcels*

Natural Area	P	Playground	P
Green	P	Sport Field	NP
Square	P	Community Garden	P
Plaza	P	Pocket Park	P

See Table 5.3.3.A (Civic Space Types - Summary)

Permitted Uses

See Table 4.3.9.A-1 (Building, Lot & Building Site Principal Use), Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses), and Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses). For Development Parcels, see also Table 5.1.7 (Principal Use Mix).

Number of Buildings Per Lot or Building Site

Principal Building	1 max
Accessory Buildings	1 max

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CV

TABLE 4.3.1-N DISTRICT STANDARDS:
CIVIC DISTRICT

Lot Occupation

Lot/ Building Site Width	NR
Frontage Buildout	NR
Lot/ Building Site Area	NR
Impervious Surface Coverage	80% max
Lot/ Building Site Enfrontment	Must enfront a vehicular Thoroughfare or Internal Drive, Pedestrian Path, Passage, pedestrian walkway or water body.
Lot/ Building Site Access	All lots must have legal and physical vehicular access to a vehicular Thoroughfare or Internal drive via Driveway or Easement.

Setbacks / Yards

Setbacks / Yards – Principal Building

Front Setback / Yard, Principal Frontage	0 ft. min., 50 ft. of Lot Depth max.	A
Front Setback / Yard, Secondary Frontage	0 ft. min	B
Side Setback / Yard	0 ft. min	
Rear Setback / Yard	0 ft. min	

Building Standards

Building Height*

Principal Building	20 ft. higher than maximum Height of any Adjacent Character District, max.
Accessory Building	Not to exceed Principal Building Height

*Stories/ Height do not include Attics and Basements, chimneys, flagpoles, towers, spires, belfries, parapet walls, aerials, or antennas. Any Building exceeding 35 feet in height must obtain approval from stipulations made by the Fire Department in accordance with the above cited codes shall be required. *

*The Fire Department may stipulate special fire measures in accordance with National Fire Protection Association and International Building Code criteria as a condition of approval of such Structure. In such instance stipulations made by the Fire Department in accordance to with the above cited codes shall be required. *

Ceiling Height

14 ft. min. 1st floor; 10 ft. min. other floors.

Building Composition

Vertical Composition	Each Principal Building must have an identifiable Base Middle & Cap
Finished Floor Level	NR

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CV **TABLE 4.3.1-N DISTRICT STANDARDS:**
CIVIC DISTRICT

Building Standards (Continued)	
Façade	
Main Entrance	Main Entrance must be in Façade of Principal Frontages.
Façade Position	Parallel to straight Frontage Line or to tangent of curved Frontage Line
Façade & Façade Element Design Proportions	Must be vertically proportioned
Blank Walls	NP at Frontage
Façade Articulation	NR
Façade Openings	In Stories above first, Façade openings must be $\leq 50\%$ of the total Façade area
Façade Glazing	20% min. - 60% max.
Window Shape	Square or vertical in proportion, except transoms
Window Alignment	Upper floor windows and other features must be aligned with those of first floor
Window Types	Except in Shopfront or Gallery Frontage, and except for Transoms and sidelights, Windows in Façade and 1 st & 2 nd Layers must be single-hung, double-hung, casement or awning types. In Stories above first, Façade openings must be $\leq 50\%$ of total Façade area.
Window Glazing Material	Clear glass is Required for all Elevations
Window Trim in 1 st Layer	Min. 4 in. trim with sill and top plate if siding surrounding window; soldier course above lintel and rollock course below sill if brick or stone surrounds window
Shutters	If any, must be functional and proportioned to cover half of window width from each side or entire window width, with shutter dogs
Façade Window Sill Height	NR
Porch Frontages	NR
Shopfront Frontages	NR
Façade Variety	No Façade may exist more than once in a Block Face or within view of the same Façade
Roof Type & Pitch	
Flat	P
Shed	P at rear only and if ridge is attached to an exterior Building wall; except for porches, stoops or dormers which may have a shed roof anywhere on the Building.
Hip	P
Gable	P
Pitch	6:12 – 14:12, except for shed roofs which may be 3:12 – 14:12 and except roof pitch may match the primary roof pitch of an existing Building that is less than 6:12
Roof Design	
Eaves shall extend no less than nine inches beyond the supporting walls.	
Gable end rakes shall overhang at least six inches.	
Eaves and rakes on Accessory Buildings and dormers shall overhang at least six inches.	
Soffits shall be placed perpendicular to the Building wall, not sloping in plane with the roof (except for gable end rakes).	

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CV

TABLE 4.3.1-N DISTRICT STANDARDS:
CIVIC DISTRICT

Building Standards (Continued)				
Building Materials				
Primary Building Material on Facades	Brick	P	Authentic stucco over	P
	Natural stone	P	Exposed concrete	NP
	Wood	P	Vinyl or Aluminum	NP
	Cementitious siding	P	Corrugated and/or	NP
Changes in Building Materials	Primary materials must continue alongside Elevations through 2 nd layer. Primary materials shall continue for entire length of all Facades facing a frontage. Any material changes must coincide with form, structural, or massing changes and shall not occur at outside corner of any such change.			
Building Colors	Up to three (3) colors, including the natural color of any allowed materials, but not excluding trim			
Foundation Cladding	Required; brick or stone.			
Porch Pier Cladding	Required; brick or stone, with any space under Porch concealed by painted or stained latticework between piers.			
Chimney Cladding	Required; brick, natural stone, with material matching primary material of Façade			

Building Types			
House	NP	Commercial	NP
Duplex	NP	Mixed Use	NP
Townhouse	NP	Flex	NP
Small Multifamily	NP	Mid-Rise	NP
Large Multifamily	NP	Large Scale Commercial	NP
Live/Work	NP	Civic	P

See Table 4.3.8.A (Principal Building Types - Summary) and Table 4.3.8.B (Principal Building Types - Specific Standards). For Development Parcels, see also Table 5.1.6 (Building Type Mix).

Vehicular Parking Requirements			
Parking Location			
	On-Street Parking		Off-Street Parking
Domestic Vehicles	P		P in 3 rd layer only, and in Driveway
Recreational Vehicles	NP		P in 3 rd layer only, and in Driveway
Heavy Equipment	NP		P in 3 rd layer only, and in Driveway
Tractor trailers (including trailers for storage)	NP on-Street, except for delivery and Temporary Use of trailers		NP
All Other Vehicles	NP		P in 3 rd Layer only, and in Driveway

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CV

**TABLE 4.3.1-N DISTRICT STANDARDS:
CIVIC DISTRICT**

Vehicular Parking Requirements (Continued)

Additional Parking Requirements

Off-Street Parking Surface	Prepared surface of gravel, asphalt, concrete, or another hard surface
Garage Location	P In 3 rd Layer only
Garage Design	Min. interior dimensions 10 ft. x 20 ft. per vehicle Parking space. If Garage faces Street: max Garage door width 33% of total Garage + Façade width. Garage must be detailed, finished, & designed like the rest of the Building with carriage house doors; max. Garage door width 9ft; each Garage door must have ornamental lighting fixture above it; min 2ft separation between Garage doors.
Driveway/ Vehicular Entrance Location	P in any Layer
Driveway/ Vehicular Entrance Maximum Width	24 ft. max in 1 st and 2 nd Layer
Parking Structure	P if Screen from Frontage by Liner Buildings
Parking Structure Pedestrian Exit Location	Via pedestrian access to Frontage

Bicycle Parking

See Section 4.3.13

Thoroughfare & Internal Drive Types*

**Applicable only to Development Parcels*

See Article 5 (Development Parcel Standards) for additional requirements

Loading & Access

Off-Street Loading and Storage	P in 3 rd Layer only
Utility Box & Service Meter* Locations (*Not including water meters)	P in 3 rd Layer only
Off-Street Trash Receptacle Locations	P in 3 rd Layer only
Off-Street Dumpster Locations	P in 3 rd Layer only, must be Screened from Frontage and fully enclosed on 3 sides and enclosed on the 4 th side with self-closing gate
Drive- Through Locations	P in 3 rd Layer only

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CV

TABLE 4.3.1-N DISTRICT STANDARDS:
CIVIC DISTRICT

Non-Building Components

	1st Layer	2nd Layer	3rd Layer
HVAC Equipment, Utility, Service and Mechanical Equipment	NP	P if Screened from Frontage	P
Solar Panels	P if coplanar to and integrated into roof design		P
Antennas & Satellite Equipment	P in 1 st or 2 nd Layer if such Layer is only possible location for satisfactory reception		P
Recreation or Play Equipment	NP	NP	P
Animals Enclosures, Runs or Shelters	NP	NP	NP
Swimming pools, Hot Tubs and Spas	NP	NP	P
Transmitting and/or receiving towers, or antennas and wind-generating machines	NP	NP	P

Signs

See Sign Standards in Article 7 (Sign Standards) and Table 7.12.B-1 (Sign Types - Summary) and Table 7.1.2.B-2 (Sign Types- Specific Standards)

Lighting

See Private Lighting Requirements in Section 4.3.17 and Table 4.3.17.B (Private Lighting Standards)

Private Landscaping and Fencing

Landscaping

NR

Walls & Fencing (not including Screens)

Height	3.5 - 4 ft max at Frontage, otherwise 6 ft max; height measured from avg. undisturbed grade of Adjacent property at property line
Construction	Finished side must face Adjacent property, Thoroughfare, Path, Passage or Waterbody
Maintenance	Must be well maintained, in upright condition and free of missing or broken parts and graffiti.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CV

**TABLE 4.3.1-N DISTRICT STANDARDS:
CIVIC DISTRICT**

Private Landscaping and Fencing (Continued)

Materials

Natural Wood	P at sides and rear only	Chain Link	P at sides and rear only
Brick, Natural Stone, or Stucco over Masonry	P	Barbed/ Razor/ Concertina Wire	NP
Wrought Iron or Aluminum	P	Exposed or Painted Aggregate Concrete	NP
Vinyl	NP	Smooth or Split-faced Block	NP

Additional Standards

Pedestrian Connections through to Adjacent Neighborhoods or Uses	Required
Locations of Retaining Walls	P within required Yards, per Section 4.3.10 If supporting grade 8 ft. or higher than grade at interior edge of a required Buffer, must be set back 10 ft. from such interior edge.

Screens, Street-Screens & Buffers

Height

	At Frontage or Adjacent to Civic Space	Not at Frontage or Adjacent to Civic Space
Wall Screen/Street-Screen Height	3.5 ft. to 5 ft.	5ft. to 6ft; Minimum 6ft. for Dumpsters and Trash Receptacles
Fence Screen/ Street-Screen Height	NP	5ft. to 6ft. for Dumpsters and Trash Receptacles
Hedge Screen/ Street-Screen Height	3 ft. to 5 ft at installation	5ft. to 6ft. at installation

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CV

TABLE 4.3.1-N DISTRICT STANDARDS:
CIVIC DISTRICT

Private Landscaping and Fencing (Continued)

Materials

Wall Screen or Street-Screen	Brick, Natural Stone or Stucco over Masonry
Fence Screen or Street-Screen	Natural Wood, painted or unpainted
Hedge Screen or Street-Screen	Evergreen plants with min. 80% opacity

Additional Standards

Non-Residential & Multi-Family Residential Screen. Street Screen Adjacent to or across Thoroughfare from Non-Family Residential	NA
Screening of Parking, Loading Areas, Service Areas, Outdoor Storage, Drive-Throughs, Trash Receptacle/Dumpsters, HVAC and other equipment Screened from Frontage, Civic Space and Adjacent Property	Required; except at Driveways: Parking Lots and Parking Areas must be Screened From Frontage and Civic Space by Building or Street-Screen; Parking Structures must be Screened from Frontages by Liner Buildings; Otherwise, Screening must be by Building, wall, hedge or fence at Frontage or Building wall, hedge or fence not at Frontage or Adjacent to Civic Space.
Rooftop Antenna Screening and HVAC, Mechanical and other Equipment Screening	Required; must be Screened from Frontage and Civic Space by Building Parapet or other Building element
Self-Storage Warehouse Screening	N/A (not permitted in District)
Street-Screen Location	2 nd Layer

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

4.3.3 LOTS & BUILDING SITES

A. Layers

1. Lots and Building Sites are comprised of three Layers, the First Layer, the Second Layer, and the Third Layer, as related to the Frontage(s), as shown in **Illustration 4.3.3.A (Layers)** and as defined in **Article 9 (Definitions)**.
2. Layers are used to regulate the placement of, Structures and Uses on a Lot or Building Site, as set forth in **Tables 4.3.1-A - 4.3.1-N (District Standards)**.
3. For Lots and Building Sites, which have both a Principal Frontage and Secondary Frontage(s), typically Corner Lots:
 - a. Standards and prescriptions for the First Layer apply to the First Layer as related to all Frontages, except for Through Lots and Building Sites where they are permitted by this Ordinance or exist as legal non-conforming lots of record and
 - b. Standards and prescriptions for the Second Layer pertain only to such Layers as related to the Principal Frontage.
4. Standards and prescriptions for the First Layer apply to a depth of (twenty) 20 feet as related to the secondary frontage of a Through Lot or Building Site which is parallel to the Principal Frontage.

ILLUSTRATION 4.3.3.A (LAYERS)



B. Dimensions

Lots and Building Sites within each District must be dimensioned according to Tables 4.3.1-A - 4.3.1-N (District Standards).

C. Enfrontment

Within all Districts, each Lot or Building Site must have Frontage along a Thoroughfare or Internal Drive, except as provided in Tables 4.3.1-A - 4.3.1-N (District Standards).

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

D. Through Lots

Through Lots and Building Sites are prohibited, except

1. Blocks entirely comprised of Civic Spaces;
 - a. Lots and Building Sites enfronting a roadway with a functional classification of Principal Arterial; and
 - b. Lots and Building Sites within 3,000 feet of and Interstate interchange.
2. In any case in which a Nonconforming Lot is a Through Lot or Building Site, or a Through Lot or Building Site is permitted by this Ordinance the Frontage and Front Setback regulations shall apply to both Frontages.
3. The Façade of each Principal Building located on a Through Lot and Building Site, where they are permitted by this Ordinance or exist as legal non-conforming lots of record, shall face the same Principal Frontage as Buildings on any adjacent Lot or Building Site. Where adjacent Lots and Building Sites are vacant, or the appropriate Principal Frontage cannot be determined, the Zoning Administrator shall determine which Frontage is the Principal Frontage, typically the roadway with the lesser functional classification.

E. Required Spaces or Areas

1. The Setback and Yard requirements in **Tables 4.3.1-A - 4.3.1-N (District Standards)** shall be applicable to each Lot, Building Site, or parcel of land
2. If required Setbacks and Required Yards shall be maintained and have no obstructions or Encroachments except as allowed in **Tables 4.3.1-A - 4.3.1-N (District Standards)**
3. Existing interior Lots or Building Sites may be permitted a reduction in required Rear Yard depth by Administrative Adjustment, subject to meeting the following:
 - a. The Lot must be located in a single District and not about another District
 - b. The Lot must be owned separately and individually from all other tracts of land, both on the Effective Date of this Ordinance and on the date of application for a Zoning Permit, if applicable.
 - c. For a Lot between 80 - 100 feet deep, the required Rear Yard may be reduced by the lesser of (i) 100 feet minus the depth of the Lot, or (ii) ten feet (10 ft.).

Example: if Lot is 95 ft. deep, the required Rear Yard may be reduced by five feet (5 ft.) [100 ft. – 95 ft. = 5 ft.], but if a Lot is 80 ft. deep, the required Rear Yard may only be reduced by ten feet (10 ft.).

- d. Within all Non-Residential Districts and for all Non-Residential Uses, interior Lots or Building Sites that are less than 80 ft. deep may be permitted a reduction in required Rear Yard depth to reduce the required Rear Yard depth to zero; however, if any Rear Yard is provided, the minimum required depth shall be 10 ft.
4. No Lot shall be divided or reduced so as to result in its area or dimensions not complying with the standards required by this Section 4.3.3, nor shall any Setback required for a Principal Building be included as part of a Setback required under this Ordinance for any other Building.
5. A minimum required Lot or Yard size for one Structure shall not be used in whole or in part as any part of a required Lot or Yard for a second Structure.
6. The required Lot or Yard for an existing Structure shall not be diminished below the minimum requirements of this Ordinance.
7. Where a Structure has zero clearance from an Adjacent Lot or Building Site, as defined in the International Building Code, at all points of attachment along the shared Lot Line or Building Site Line,

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

Buildings shall be separated from each other by fire-rated walls, as defined by the latest adopted version of the International Building Code and fire prevention codes, extending from footings to the underside of the roof deck without openings which would permit the spread of fire.

8. In addition to the requirements listed in paragraph 7 above, the following shall apply to common or Party Walls:

- a. A firewall shall bisect the line dividing each portion of the Building, Lot, or Building Site so that 1/2 of the firewall is held by each of the abutting properties.
- b. If a firewall is destroyed or damaged by fire or other casualty, any owner may restore said wall and if other owners thereafter make use of the wall, they shall contribute to the cost of the restoration thereof in proportion to such use without prejudice, however, to the right of any such owner to call for a larger contribution from the others under applicable law requiring liability for negligent or willful acts and omissions.
- c. Each abutter who may share in the ownership of any firewall shall have an Easement on the property of other owner(s) for the purpose of reconstruction and protection of remaining property from the elements.

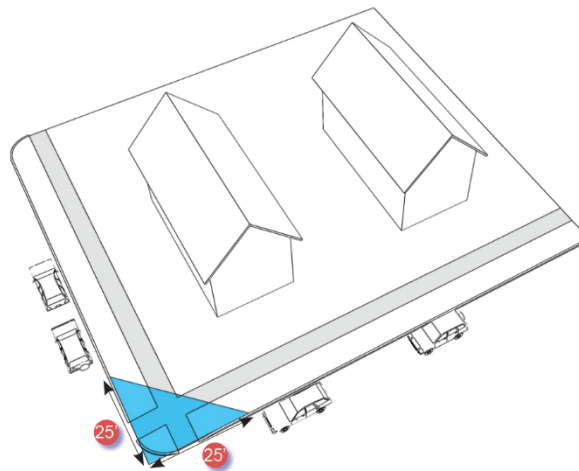
F. Lots in Two Districts

Where a District boundary divides a Lot, Building Site, or parcel in a single ownership of record at the time when such line is adopted, regulations for the less restricted portion of such Lot, Building Site, or parcel may extend not more than 30 feet into the more restricted portion, provided that the Lot, Building Site, or parcel has Frontage on a Thoroughfare or Internal Drive in a less restricted District.

G. Visibility

1. On a Corner Lot or Building Site, no Fence, Wall, hedge, Structure, or planting more than 3 feet in height, measured above the Curb level shall be erected, placed, or maintained within the triangular area formed by the intersecting lines of the curbs of the enfronting Thoroughfares or Internal Drives and a line drawn between points along such Thoroughfare or Internal Drive Lines that are 25 feet distant from their point of intersection.

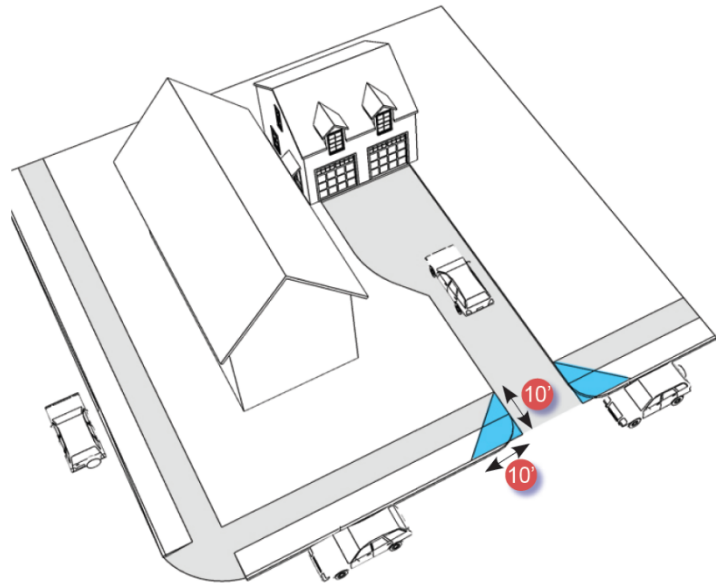
ILLUSTRATION 4.3.3.G.1 (SIGHT TRIANGLE - CORNER)



ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

2. For any Driveway, no Fence, Wall, hedge, Structure, or planting more than 3 feet in height, measured above the Curb level, shall be erected, placed, or maintained within the triangular area formed on each side of the Driveway by a line drawn between a point that is 10 feet from the back of the curb and extends 10 feet to its point of intersection with the Thoroughfare or Internal Drive.

ILLUSTRATION 4.3.3.G.2 (SIGHT TRIANGLE - DRIVEWAY)



H. Access Requirements.

1. No Building shall be erected on a Lot or Building Site that does not Abut an open public Thoroughfare, an approved private Thoroughfare or Internal Drive, or an approved private vehicular access Easement.
2. Where access is provided by an approved private street or Easement, an Easement for the same is required for each Lot, Building Site, or tract of land across which it traverses.
3. Additional access requirements may be found in Sections 4.3.12, 4.3.14, and 6.7, and elsewhere in this Ordinance, including City adopted Access Management Plan.

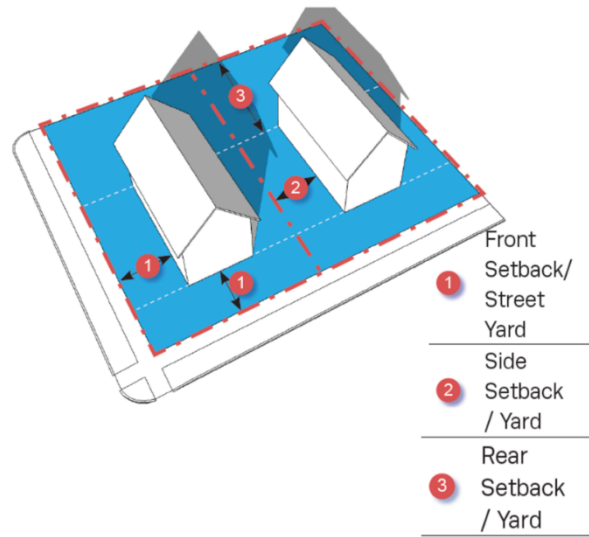
4.3.4 BUILDING PLACEMENT & NUMBER

A. Building Placement

1. Every Building shall be located on a Lot or Building Site. Buildings shall be located in relation to the boundaries of their Lots or Building Sites and shall comply with the Setback or Yard standards within each District according to **Tables 4.3.1-A - 4.3.1-N (District Standards)**.
2. To accommodate slopes over ten percent (10%), relief from front Setback or Yard requirements may be granted by Administrative Adjustment by the Zoning Administrator.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

ILLUSTRATION 4.3.4.A SETBACK /YARD DESIGNATIONS

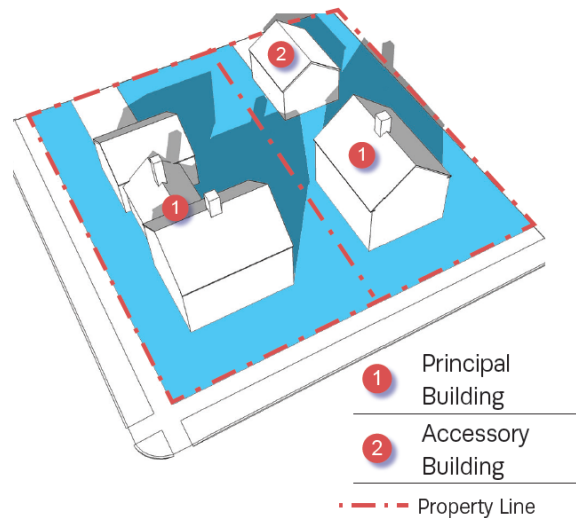


B. Principal Buildings

Within each District:

1. The number of Principal Buildings on each Lot or Building Site shall not exceed that indicated in **Tables 4.3.1-A - 4.3.1-U (District Standards)** and
2. Principal Buildings shall be oriented and situated as specified in **Tables 4.3.1-A - 4.3.1-N (District Standards)** and illustrated in **Illustration 4.3.4.B (Principal Building / Accessory Building)**.

ILLUSTRATION 4.3.4.B PRINCIPAL BUILDING / ACCESSORY BUILDING



ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

C. Accessory Buildings & Accessory Structures

1. Within each District:
 - a. The number of Accessory Buildings on each Lot or Building Site must not exceed that indicated in **Tables 4.3.1-A - 4.3.1-N (District Standards)**; and
2. Any such Accessory Buildings must be located as specified in **Tables 4.3.1-A - 4.3.1-N (District Standards)** as applicable and illustrated generally in **Illustration 4.3.4.B (Principal Building / Accessory Building)**.
3. Except within Civic Districts and Agricultural uses, Accessory Buildings or other Structures may not be erected on a Lot or Building Site on which there is no Principal Building.
4. Where Accessory Buildings and Structures are permitted:
 - a. Except within Civic Districts and CD-2, the footprint of a detached Accessory Building shall not exceed 60% of the building footprint of the Principal Building on the Lot;
 - b. Any Accessory Building shall be located in the Layer indicated in **Tables 4.3.1-A - 4.3.1-N (District Standards)**;
 - c. Except for Communications Towers, transmitting and/or receiving towers or antennas and wind turbines shall not be located in the First Layer or Second Layer; and
 - d. Guy wires or any other structural supports shall not Encroach upon any right-of-way, Adjoining property, Easements, Setback, or Yard areas.
5. An Accessory Building or Accessory Structure may be detached from or constructed as a structural part of a Principal Building, including those attached by means of a breezeway or a roofed passageway with open or latticed sides. If constructed as a structural part of a Principal Building, its walls shall be regarded as walls of the Principal Building in applying the standards and requirements of this Ordinance.
6. Where more than one Building exists or is proposed to be constructed on a single Lot or Building Site, all zoning requirements applicable to Principal Buildings or Accessory Buildings, respectively shall be applicable to each of such Buildings.

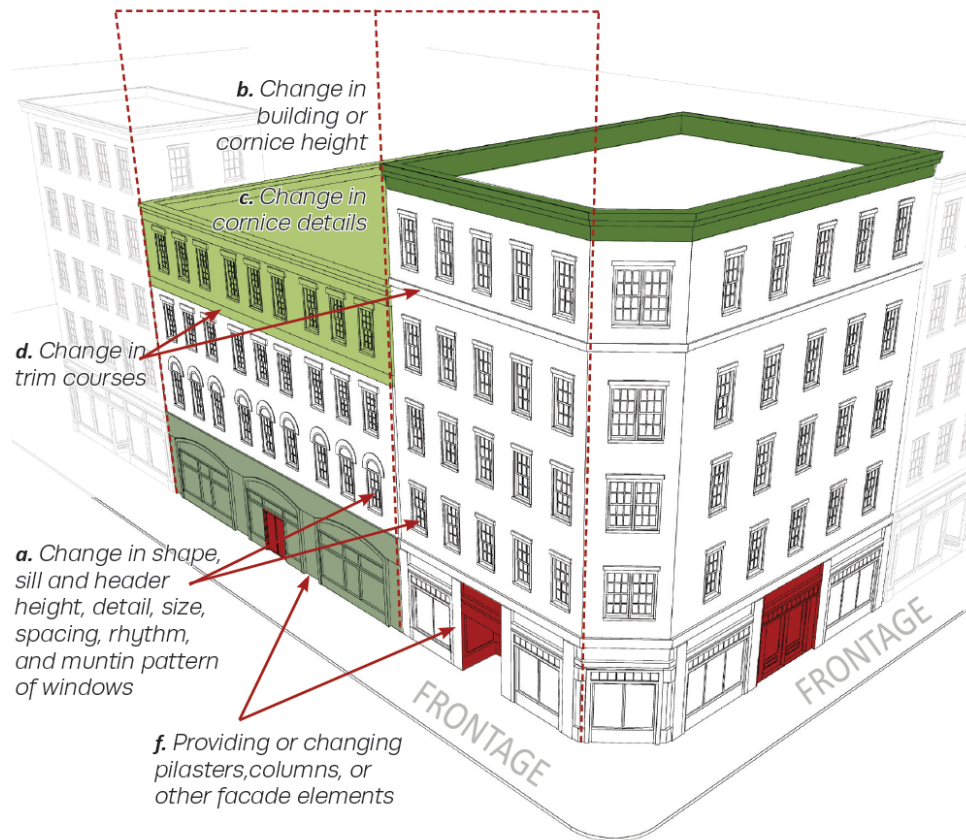
4.3.5 BUILDING STANDARDS

A. Facade

1. Principal Building Facades shall conform to **Tables 4.3.1-A - 4.3.1-N (District Standards)**.
2. The Façade of the Principal Building shall be built along the minimum percentage of the Front Lot Line or Building Site Line width at the Setback or back Street Yard line, specified as Frontage Buildout on **Tables 4.3.1-A - 4.3.1-N (District Standards)**. A Streetscreen may be substituted for a Façade for up to twenty percent (20%) of the applicable Frontage Buildout requirement. Required driveways may be subtracted from the Front Lot Line or Building Site Line where Alley access or cross access with an adjacent property is not available.
3. Principal Building Facades shall be articulated as shown in **(See Illustration 4.3.5.A-3)**.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

ILLUSTRATION 4.3.5.A-3 (FACADE ARTICULATION)



B. Building Design & Materials

The design and exterior materials of Buildings shall conform to Tables 4.3.1-A - 4.3.1-U (District Standards).

C. Building Height, Ceiling Height & Ground Floor Finish Elevation

Building Height, ceiling height, and ground floor finish elevation must conform to Tables 4.3.1-A - 4.3.1-N (District Standards).

D. Roof Type & Pitch

Building roof type and pitch must conform to Tables 4.3.1-A - 4.3.1-N (District Standards). See Illustration 4.3.5.D-1 (Roof Types) and Illustration 4.3.5.D-2 (Roof Pitch).

E. Vertical Composition

Vertical composition must conform to Tables 4.3.1-A - 4.3.1-N (District Standards) provided that:

1. The discernable Base of all new structures, where regulated, must be at least 8 (eight) inches high; and
2. The discernable Base of all new non-residential structures, where regulated, must be at least twelve (12) inches high.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

ILLUSTRATION 4.3.5.D-1 (ROOF TYPES)

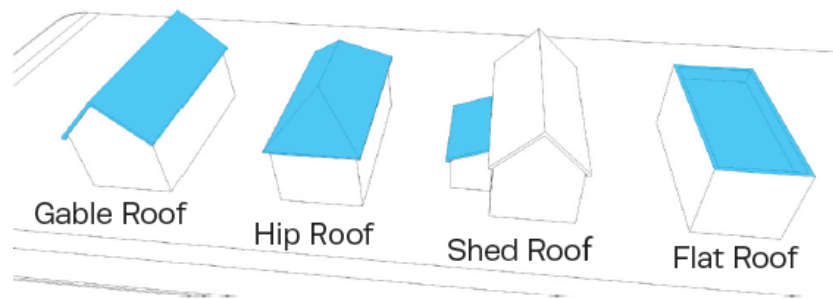
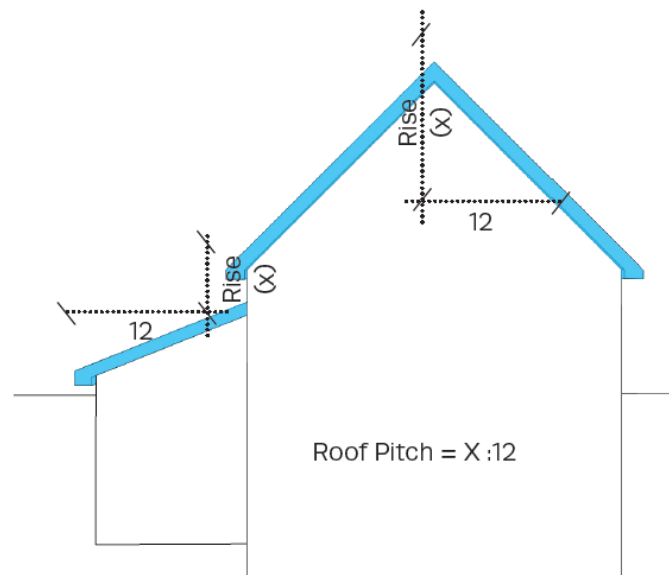


ILLUSTRATION 4.3.5.D-2 (ROOF PITCH)



4.3.6 FENCES & WALLS

A. Fences and non-Building Walls

1. Fences and non-Building Walls shall not:
 - a. Encroach a public right-of-way, including Alleys, or in areas reserved or dedicated for public right-of-way;
 - b. Obstruct sight distance visibility of intersections or driveways;
 - c. Block access within an access easement; or
 - d. Block access to fire hydrants, mechanical equipment, or utility equipment.
2. A finished side of all fences shall face off site
3. Within each District, Fences and non-Building Walls may be installed within Public Utility and Drainage Easements where permitted by the City Engineer, but shall not block or divert water

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

flow onto or off of any other property. Fences erected within Public Utility and Drainage Easements may be removed by the City or utility providers at any time without notice.

B. Height

1. Within each District, Fences and non-Building Walls must comply with the height standards in **Tables 4.3.1-A - 4.3.1-N (District Standards)**.
2. Fence and wall height shall be measured from the lowest adjacent grade to the top of the fence or wall. The use of a berm to increase a fence or wall height is prohibited, unless used in accordance with Section 8.1.2 Transition Areas Abutting Residential Lots.

C. Material

1. Within each District, Fences and non-Building Walls must comply with the material standards in **Tables 4.3.1-A - 4.3.1-N (District Standards)**.
2. Where chain link is permitted, it shall be coated with dark green or black material; plastic or metal slats in chain link are prohibited.

D. Retaining Walls

1. Within required yards on individual single-family CD-2, CD-3L, and CD-3 Lots and Building Sites, retaining walls shall conform to the limitations at Table 4.3.10 Encroachments.
2. In all other districts, and within CD-2, CD-3L, and CD-3 common areas and Civic Spaces, retaining walls shall conform to the following:
 - a. Retaining walls in CD-2, CD-3L, and CD-3 shall not exceed fifteen (15) feet in height.
 - (1) Where the overall grade change exceeds fifteen (15) feet, walls may be terraced with a minimum horizontal separation of ten (10) feet from face of wall to face of wall, provided no individual wall may exceed fifteen (15) feet in height.
 - (2) Where the overall grade change exceeds ten (10) feet, walls shall be terraced with a minimum horizontal separation of six (6) feet, provided no individual wall may exceed fifteen (15) feet in height.
 - b. Retaining walls in all other districts shall not exceed twenty (20) feet in height.
 - (1) Where the overall grade change exceeds twenty (20) feet, walls may be terraced with a minimum horizontal separation of ten (10) feet from face of wall to face of wall, provided no individual wall may exceed fifteen (20) feet in height.
 - (2) Where the overall grade change exceeds ten (10) feet, walls shall be terraced with a minimum horizontal separation of six (6) feet, provided no individual wall may exceed twenty (20) feet in height. The Zoning Administrator may approve a waiver to this requirement if the City Engineer has determined that no other practicable or feasible alternatives exist; and, the Zoning Administrator determines that there will be no harmful impact to adjacent property owners or the public
3. Each retaining wall shall be screened by a row of evergreen shrubs, planted every five feet on center, at the base of the wall. Shrubs shall be a minimum of 30 inches in height at the time of planting. The Zoning Administrator may permit alternative trees or groundcover which provide equivalent all-seasons screening.
4. Retaining walls shall be clad in brick, or stone. Where not visible from a Thoroughfare, Internal Drive, or Civic Space, stained or stamped concrete and split-face block are also permitted.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

4.3.7 PRIVATE FRONTAGE, BUILDING FORM & BUILDING TYPE; FLOOR ELEVATION

A. Private Frontage – General

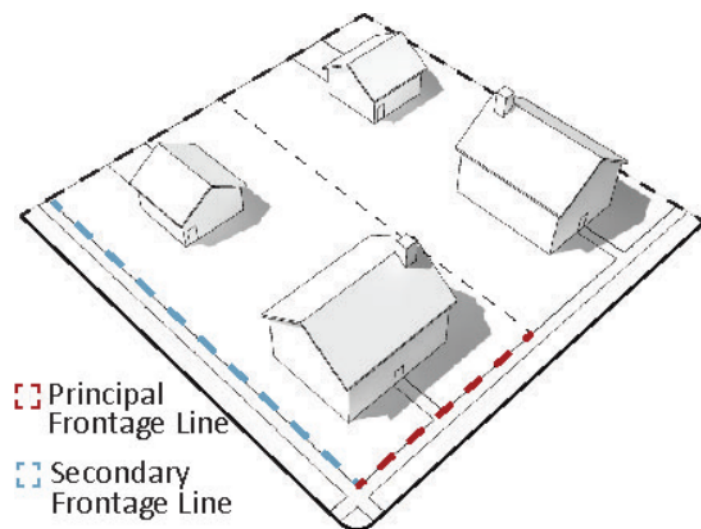
The Private Frontage of each Lot or Building Site must conform to and be allocated in accordance with Table 4.3.7.A (Private Frontage Types Summary) Table 4.3.7B (Private Frontage Types), and Tables 4.3.1-A - 4.3.1-N (District Standards).

B. Private Frontage – Corner Lots / Building Sites

Principal Buildings on Corner Lots or Building sites shall have two Private Frontages:

1. a Principal Frontage and
2. a Secondary Frontage(s), as illustrated generally in Illustration 4.3.7.B-2 (Frontage & Lot / Building Site Lines).

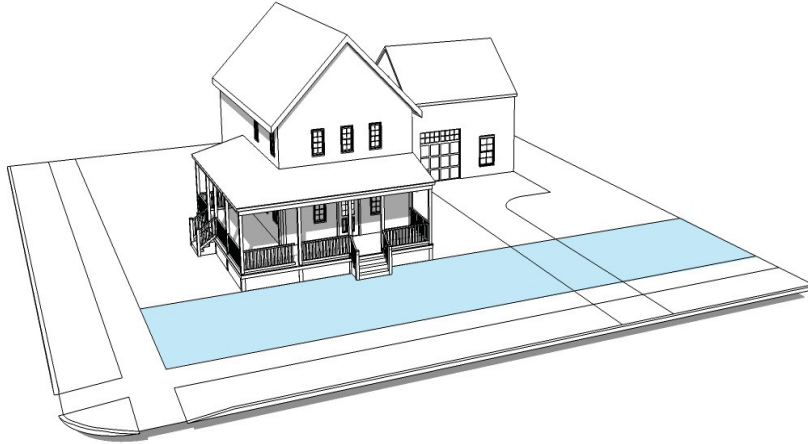
ILLUSTRATION 4.3.7.B-2 (FRONTAGE & LOT / BUILDING SITE LINES)



ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

COMMON YARD

TABLE 4.3.7.A PRIVATE FRONTAGE TYPES



Permitted Districts

CD-2

CD-3L

CD-3

CD-4

CD-4C

SD-MHP

PUD-R

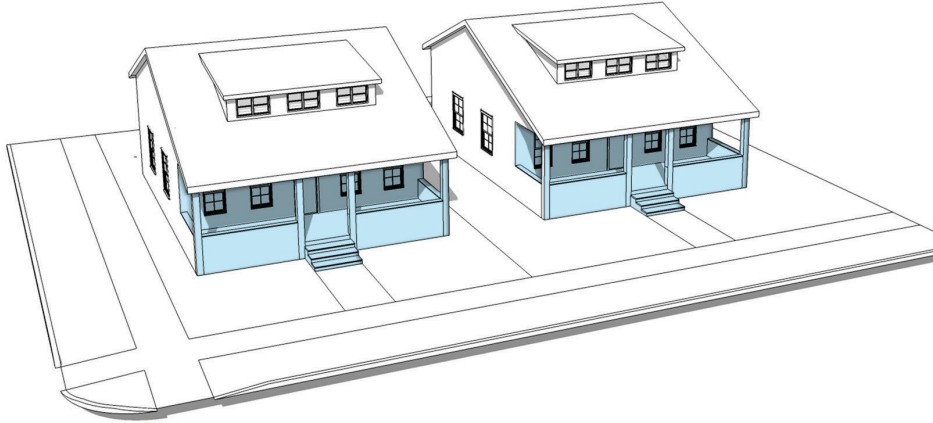
A planted Frontage wherein the Facade is set back substantially from the Frontage Line, and the Front Yard so created remains unfenced and is visually continuous with Adjacent yards, supporting a common landscape. This may be used with or without a Porch.



ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

PORCH

TABLE 4.3.7.A PRIVATE FRONTAGE TYPES



Permitted Districts

CD-2

CD-3L

CD-3

CD-4

CD-4C

SD-MHP

PUD-R

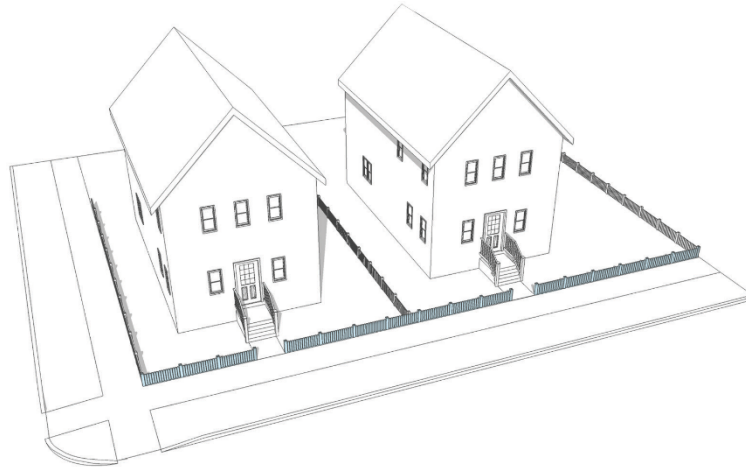
A planted Frontage wherein the Facade is set back from the Frontage Line with an attached exterior covered area large enough to accommodate outdoor furniture and/or gathering, which is permitted to Encroach into the Front Setback. This may be used with or without a Fence to maintain Thoroughfare / Internal Drive spatial definition.



ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

FENCE

TABLE 4.3.7.A PRIVATE FRONTAGE TYPES



Permitted Districts

CD-2

CD-3L

CD-3

CD-4

CD-4C

SD-MHP

PUD-R

A Frontage wherein the Facade is set back from the Frontage Line, and the Front Yard so created is separated from the Public Frontage by a Fence. This may be used with or without a Porch



ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TERRACE/LIGHTWELL

TABLE 4.3.7.A PRIVATE FRONTAGE TYPES



Permitted Districts

CD-4

CD-4C

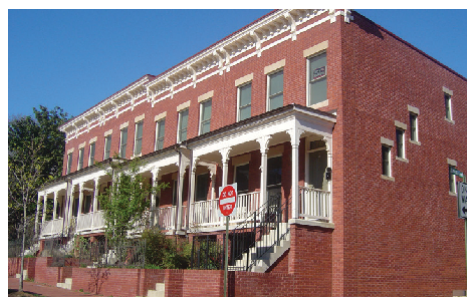
CD-5

CD-5C

PUD-R

PUD-MU

A Frontage wherein the Facade is set back from the Frontage Line by an elevated landing and a sunken Lightwell. This type buffers Residential Uses from urban Sidewalks with the first Story elevated from the Sidewalk for privacy, and may allow for activation of space below grade. An exterior stair and landing provides access to the entrance. This type is recommended for ground-floor Residential Use.



FORECOURT

TABLE 4.3.7.A PRIVATE FRONTAGE TYPES



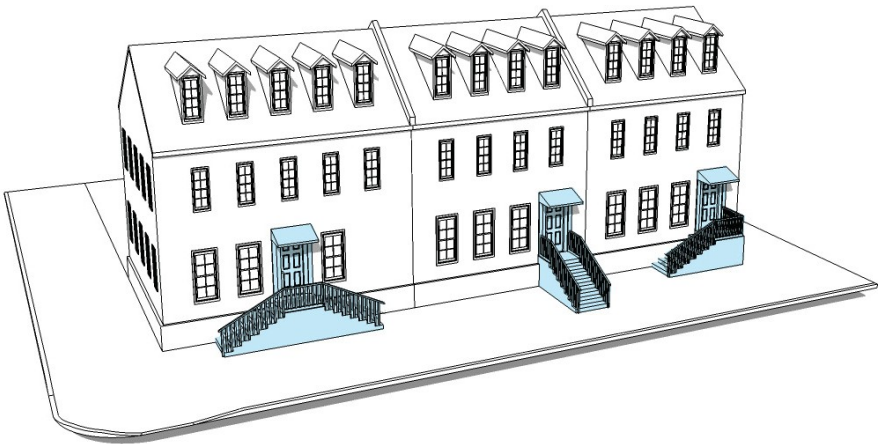
Permitted Districts

CD-4	CD-4C	CD-5	CD-5C	PUD-R	PUD-MU
------	-------	------	-------	-------	--------

A Frontage wherein a portion of the Facade is close to the Frontage Line and the central portion is set back creating a gathering space for residents or additional shopping or restaurant seating area within Retail / Personal Service / Repair / Art / Artisan Use areas. This type should be used sparingly and may be used in conjunction with other Frontage types.



STOOP TABLE 4.3.7.A PRIVATE FRONTAGE TYPES



Permitted Districts

CD-3	CD-4	CD-4C	CD-5	CD-5C	SD-MUP	PUD-MU	PUD-R
------	------	-------	------	-------	--------	--------	-------

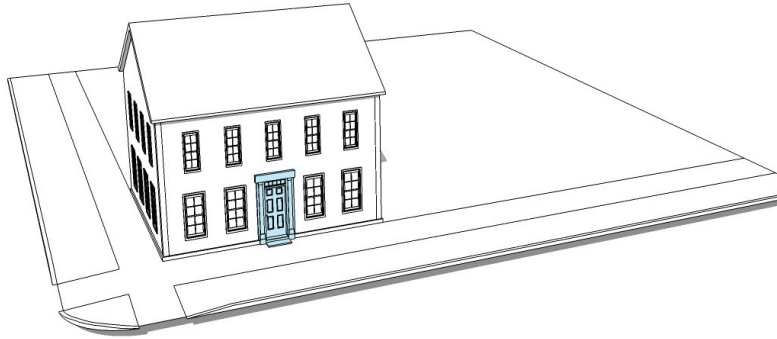
A Frontage wherein the Facade is aligned close to the Frontage Line with the first Story elevated from the Sidewalk for privacy. An exterior stair and landing provide access to the entrance. This type is recommended for ground-floor Residential Use.



ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

STEPFRONT

TABLE 4.3.7.A PRIVATE FRONTAGE TYPES



Permitted Districts

CD-4

CD-5

PUD-R

PUD-MU

A Frontage wherein the Facade is aligned very close to the Frontage Line. The entrance is usually an exterior single step without a landing. This type is recommended for ground floor Residential / Retail / Personal Service / Art / Artisan Use.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SHOPFRONT

TABLE 4.3.7.A PRIVATE FRONTAGE TYPES



Permitted Districts

CD-4

CD-4C

CD-5

CD-5C

SD-LI

PUD-MU

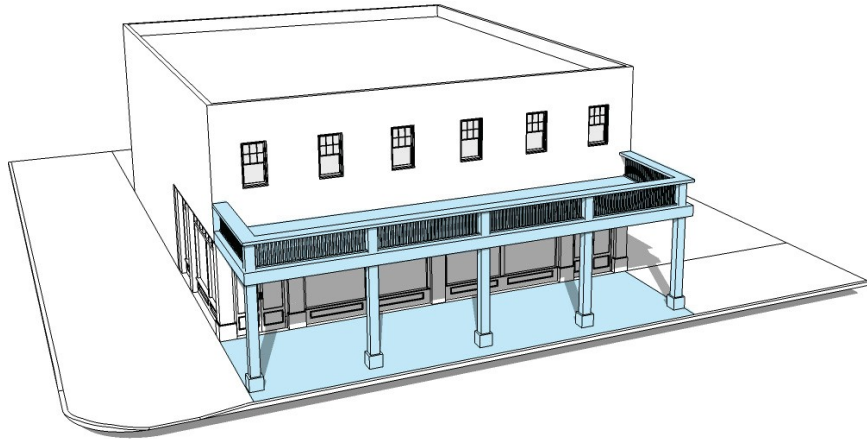
PUD-R

A Frontage conventional for Retail / Personal Service / Repair / Art / Artisan Use, wherein the Facade is aligned close to or at the Frontage Line with the Building entrance at Sidewalk grade. This Frontage has substantial glazing at the Sidewalk level and may include an awning overlapping the Sidewalk.



ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

GALLERY TABLE 4.3.7.A PRIVATE FRONTAGE TYPES



Permitted Districts

CD-4

CD-4C

CD-5

CD-5C

SD-INT

PUD-R

PUD-MU

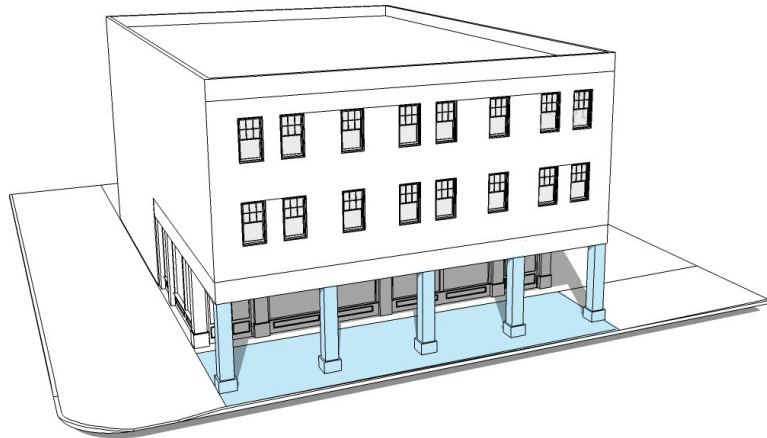
A Private Frontage conventional for Retail / Personal Service / Repair / Art / Artisan Use, wherein the Facade is aligned close to the Frontage Line with an attached cantilevered shed or lightweight colonnade overlapping the Sidewalk.



ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

ARCADE

TABLE 4.3.7.A PRIVATE FRONTAGE TYPES



Permitted Districts

CD-5

CD-5C

PUD-MU

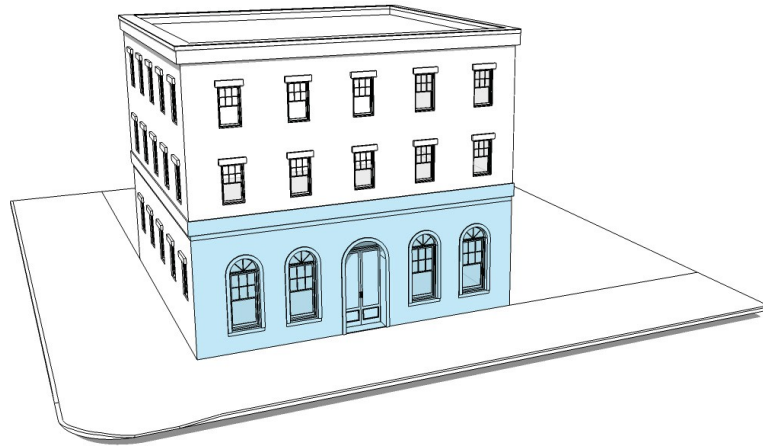
A Private Frontage conventional for Retail / Personal Service / Repair / Art / Artisan Use, wherein a colonnade supporting habitable space in one or more upper levels overlaps the Sidewalk, while the Façade at the first level remains at the Frontage Line.



ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

OFFICEFRONT

TABLE 4.3.7.A PRIVATE FRONTAGE TYPES



Permitted Districts

CD-4

CD-4C

CD-5

CD-5C

PUD-MU

A Frontage wherein the Facade is aligned close to or at the Frontage Line with the Building entrance at or above Sidewalk grade. This type is conventional for Office Use. It may have a substantial glazing on the Facade.



ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

4.3.8 BUILDING TYPES

A. General

Principal Buildings must be of one or more of the Principal Building Types specified for such District in **Table 4.3.8.A (Principal Building Types - Summary)** and **Table 4.3.8.B (Principal Building Types – Specific Standards)**. The mix of Building Types on each Development Parcel is further regulated under Section 5.1.10.

TABLE 4.3.8.A PRINCIPAL BUILDING TYPES - SUMMARY

PRINCIPAL BUILDING TYPE		PERMITTED DISTRICTS	
MANUFACTURED HOME			
A detached one family dwelling constructed as a single self-contained unit and mounted on a single chassis transportable after fabrication on its own wheels or detachable wheels, as further defined in Article 9 (Definitions).		SD-MHP	
House			
	A medium-sized Building designed as a Single-Family Detached Dwelling, situated on a medium or large Lot or Building Site with an Edgeyard, often shared with an Accessory Building in the rear.	CD-2	CD-3L
		CD-3	CD-4
		CD-4C	PUD-R
		CD-5	
Duplex			
	A small- to medium- sized Principal Building, other than a manufactured housing unit, situated on a small-to-medium sized Lot or Building Site with an Edgeyard or Sideyard, which Building contains two Dwelling Units with separate entrances at least one of which faces the Thoroughfare or Internal Drive. Both Dwelling Units, whether side-by-side, front-to-back, or over-and-under, are contained within a single Building Massing.	CD-3	CD-4
		CD-5	PUD-R
		CD-4C	

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

	Townhouse	A Principal Building in a collection of very narrow- to medium-sized attached Buildings on contiguous Lots or Building Sites with a Rearyard (or Sideyard if an end unit), which collection consists of side-by-side Dwelling Units with individual entries facing the Thoroughfare or Internal Drive. Each Building occupies the full Frontage Line of its Lot or Building Site and shares at least one party Wall with another Building of the same type.	CD-4 CD-5 SD-INT PUD-MU	CD-4C CD-5C PUD-R
	Small Multi-Family Building	A Principal Building that incorporates between three (3) and six (6) side-by-side and/or horizontally stacked Dwelling Units, typically with one or more shared entries.	CD-4 CD-5 SD-LI PUD-MU	CD-4C CD-5C PUD-R SD-INT
	Large Multi-Family Building	A Principal Building that incorporates between seven (7) and TWENTY-FOUR (24) side-by-side and/or horizontally stacked Dwelling Units, which may have one or more shared entries.	CD-4 CD-5 SD-LI PUD-MU	CD-4C CD-5C PUD-R SD-INT
	Live/Work Building	A small- to medium-sized attached or detached Principal Building, which includes a flexible space for Commercial Use and an internally connected Residential Dwelling Unit above and/or behind the flexible space.	CD-4 CD-5 SD-LI PUD-MU	CD-4C CD-5C PUD-R SD-INT
	Commercial Building	A small- to medium-sized attached or detached non-Residential Building, typically designed to facilitate pedestrian-oriented Retail / Personal Service / Repair / Art / Artisan Uses and Office Uses.	CD-4 CD-5 SD-INT	CD-4C CD-5C PUD-MU
	Mixed-Use Building	A typically attached Principal Building, which provides a vertical and/or horizontal mix of Uses typically designed to facilitate	CD-4 CD-5 PUD-MU	CD-4C CD-5C

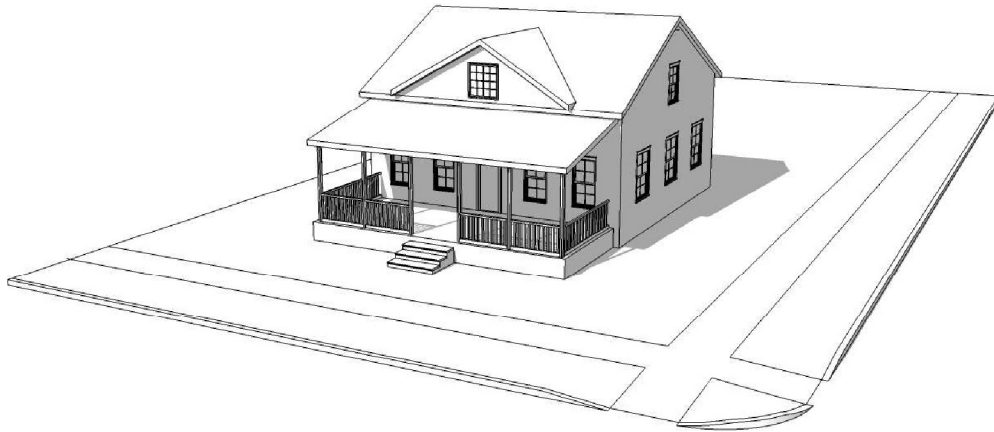
ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

	pedestrian-oriented Retail / Personal Service / Repair / Art / Artisan, Lodging, or Office Uses on the ground floor, with upper floors typically designed for Residential or Office Uses.		
	Flex Building A large footprint Principal Building designed to accommodate either a single Use or a vertical or horizontal mix of Uses.	CD-4 CD-5 SD-LI PUD-MU	CD-4C CD-5C SD-HI SD-INT
	Mid-Rise Building An attached or detached Building that may provide a vertical and/or horizontal mix of Uses, typically designed to facilitate pedestrian-oriented Retail/Personal Service, Lodging, Business/Commercial, or Office Uses on the ground floor, with upper floors typically designed for Residential or Office Uses.	CD-5 SD-LI	CD-5C PUD-MU
	Large-Scale Commercial Building A building of 50,000 square feet or more that is most commonly associated with a large-format retailer. It has in-line Retail or Liner Buildings along the front of the Building.	CD-4C SD-INT PUDMU	CD-5C SD-LI
	Civic Building A medium- to large-sized attached or detached Principal Building, which is operated by a not-for-profit organization or governmental entity dedicated to Civic activities, and is designed to stand apart from its surroundings due to the specialized nature of its Civic purpose. Examples include Libraries, Places of Worship, Places of Assembly, Courthouses, schools, centers of government, Performing Arts Venues, and Museums. Civic Buildings are often the	CD-2 CD-3 CD-4C CD-5C SD-HI PUD-R	CD-3L CD-4 CD-5 SD-LI SD-INT PUD-MU CV

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

HOUSE

TABLE 4.3.8.B PRINCIPAL BUILDING TYPES
SPECIFIC STANDARDS



Permitted Districts

CD-2 CD-3L CD-3 CD-4 CD-4C PUD-R
CD-5

General Description

A medium-sized Building designed as a Single-Family Detached Dwelling having an Edgeyard yard type that may be shared with an Accessory Building in the backyard. This Building type typically incorporates a single Residential unit.

Lot/Building Site

Width Per District Lot/Building Site Width

Number of Units

Units per Building 1 max.

Allowed Private Frontages

Common Yard	P
Fence	P
Porch	P
Stoop	P

Building Size & Massing

Height

2 Stories max

Width

Not Regulated

Pedestrian Access

Main Entrance Principal Frontage
Location

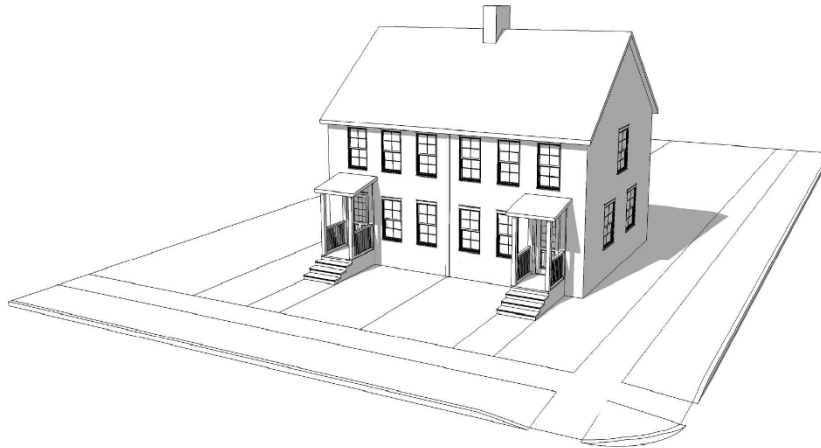
Vehicle Access & Parking

Parking may be accessed from an Alley, side Thoroughfare or Front Thoroughfare

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

DUPLEX

**TABLE 4.3.8.B PRINCIPAL BUILDING TYPES
SPECIFIC STANDARDS**



Permitted Districts

CD-3 CD-4 CD-4C PUD-R

General Description

A small- to medium- sized Principal Building, other than a manufactured housing unit, situated on a small-to-medium sized Lot or Building Site with an Edgeyard or Sideyard, which Building contains two Dwelling Units with separate entrances at least one of which faces the Thoroughfare or Internal Drive. Both Dwelling Units, whether side-by-side, front-to-back, or over-and-under, are contained within a single Building Massing.

Lot/Building Site

Width	Per District lot/Building site width
-------	--------------------------------------

Number of Units

Units / Building	2
------------------	---

Allowed Private Frontages

Common Yard	P
Fence	P
Porch	P
Stoop	P

Building Size & Massing

Height

2 Stories max

Width

Per District standards

Pedestrian Access

Main Entrance Location	Principal Frontage
------------------------	--------------------

Vehicle Access & Parking

Parking may be accessed from an Alley, side Thoroughfare or front Thoroughfare

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TOWNHOUSE

TABLE 4.3.8.B PRINCIPAL BUILDING TYPES
SPECIFIC STANDARDS



Permitted Districts

CD-4 CD-4C CD-5 CD-5C PUD-R

General Description

A Principal Building in a collection of very narrow- to medium-sized attached Buildings on contiguous Lots or Building Sites with a Rearyard (or Sideyard if an end unit), which collection consists of side-by-side Dwelling Units with individual entries facing the Thoroughfare or Internal Drive. Each Building occupies the full Frontage Line of its Lot or Building Site and shares at least one Party Wall with another Building of the same type.

Lot/Building Site

Width	Per District lot/building site width
-------	--------------------------------------

Number of Units

Units per townhouse	1 max
Number of townhomes connected to another	3 min – 8 max

Allowed Private Frontages

Porch	P
Stoop	P
Terrace/Lightwell	P

Building Size & Massing

Height

Per Character District Height Standards

Width

18 ft. min per Townhouse

Pedestrian Access

Main Entrance Location	Principal Frontage
------------------------	--------------------

Vehicle Access & Parking

Parking may be accessed from an Alley, side Thoroughfare, or front Thoroughfare

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

SMALL MULTIFAMILY

**TABLE 4.3.8.B PRINCIPAL BUILDING TYPES
SPECIFIC STANDARDS**



Permitted Districts

CD-4 CD-4C CD-5 CD-5C SD-LI PUD-R
PU-MU

General Description

A Principal Building that incorporates three (3) to six (6) side-by-side, and/or, horizontally stacked Dwelling Units typically with one or more shared entries.

Lot/Building Site

Width	Per district lot/building site width
-------	--------------------------------------

Number of Units

Units per building	3 min
--------------------	-------

Allowed Private Frontages

Porch	P
Stoop	P
Forecourt	P
Terrace/ Lightwell	P

Building Size & Massing

Height

Per District height standards

Width

Per district lot/building site width and side setback/ yard standards

Pedestrian Access

Main Entrance Location	Principal Frontage
------------------------	--------------------

Vehicle Access & Parking

Parking may be accessed from an Alley, Thoroughfare or internal drive at frontage

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

LARGE MULTIFAMILY

TABLE 4.3.8.B PRINCIPAL BUILDING TYPES
SPECIFIC STANDARDS



Permitted Districts

CD-4 CD-4C CD-5 CD-5C SD-INT SD-LI
PUD-R PU-MU

General Description

A Principal Building that incorporates seven (7) side-by-side, and/or horizontally stacked Dwelling Units typically with one or more shared entries.

Lot/Building Site

Width	Per district lot/building site width
-------	--------------------------------------

Number of Units

Units per building	7 min
--------------------	-------

Allowed Private Frontages

Porch	P
Stoop	P
Forecourt	P
Terrace/Lightwell	P

Building Size & Massing

Height

Per district height standards

Width

Per district lot/building site width and setback/ yard standards

Pedestrian Access

Main Entrance Location	Principal Frontage
------------------------	--------------------

Vehicle Access & Parking

Parking may be accessed from an Alley, Thoroughfare or drive at frontage

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

LIVE/WORK

TABLE 4.3.8.B PRINCIPAL BUILDING TYPES
SPECIFIC STANDARDS



Permitted Districts

CD-4 CD-4C CD-5 CD-5C PUD-R
PU-MU

General Description

A small to medium sized attached or detached Principal Building which includes a flexible space for commercial use and an internally connected residential Dwelling unit above, and/or behind the flexible space.

Lot/Building Site

Width	Per district lot/building site width
-------	--------------------------------------

Number of Units

Units per building	1 residential unit per 1 flexible space
--------------------	---

Allowed Private Frontages

Stoop	P
Terrace/Lightwell	P
Shopfront	P
Officefront	P

Building Size & Massing

Height

Per district height standards

Width

18 ft min – 36 ft max

Pedestrian Access

Main Entrance	Principal frontage
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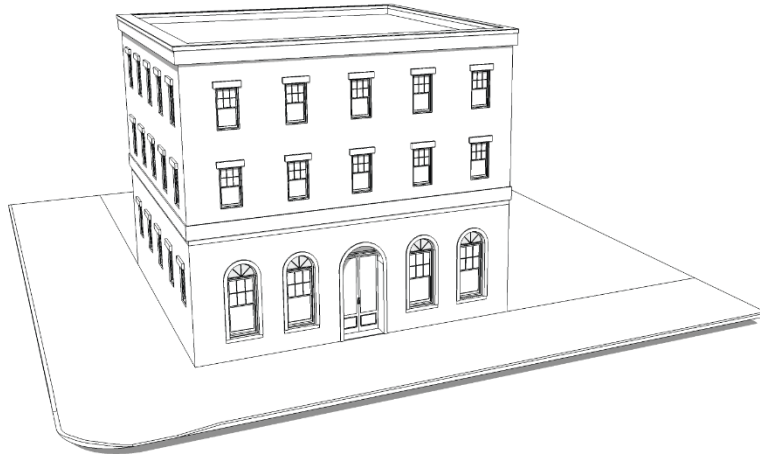
Vehicle Access & Parking

Parking may be accessed from an Alley, Thoroughfare or internal drive at frontage

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

COMMERCIAL

TABLE 4.3.8.B PRINCIPAL BUILDING TYPES
SPECIFIC STANDARDS



Permitted Districts

CD-4 CD-4C CD-5 CD-5C SD-INT
PUD-MU

General Description

A small to medium sized attached or detached non-residential building, typically designed to facilitate pedestrian-oriented Retail/Personal Service/ Repair/ Art/ Artisan Uses and Office Uses.

Lot/Building Site

Width	Per district lot/building site width
-------	--------------------------------------

Number of Units

Units per Building	Unrestricted, except as may be due to building code
--------------------	---

Allowed Private Frontages

Stoop	P
Terrace/Lightwell	P
Shopfront	P
Officefront	P

Building Size & Massing

Height

Per district height standards

Width

Per district lot/building site width and side setback/ yard standards

Pedestrian Access

Main Entrance	Principal Frontage
---------------	--------------------

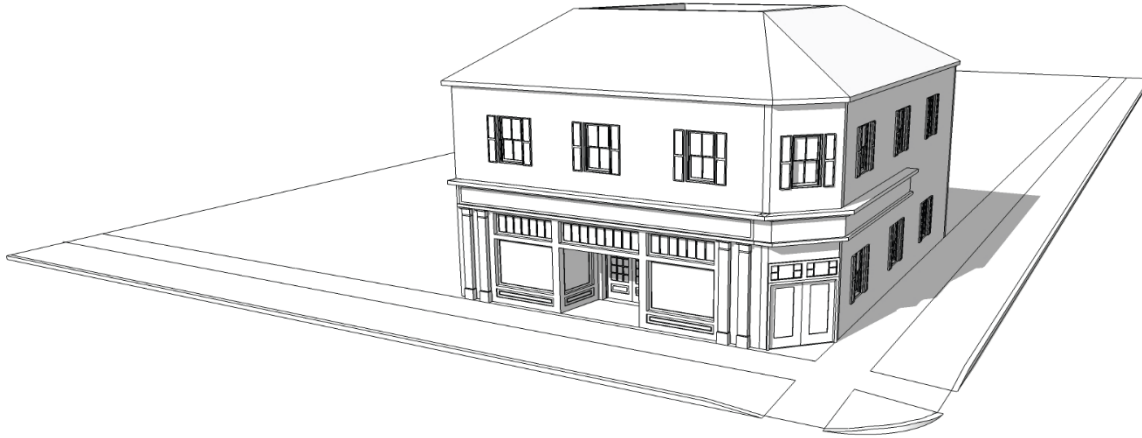
Vehicle Access & Parking

Parking may be accessed from an Alley, a Thoroughfare, or internal drive at frontage

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

MIXED-USE

TABLE 4.3.8.B PRINCIPAL BUILDING TYPES
SPECIFIC STANDARDS



Permitted Districts

CD-4 CD-4C CD-5 CD-5C PUD-MU

General Description

A typically attached Principal Building which provides a vertical and/or horizontal mix of uses typically designed to facilitate pedestrian-oriented Retail/ Personal Service/ Repair/ Art/ Artisan, Accommodations/ Lodging, or Office uses on the ground floor, with upper floors typically designed for residential or office uses.

Lot/Building Site

Width Per district lot/building site width

Number of Units

Units per Building 2 min., which must accommodate Principal Uses

Allowed Private Frontages

Scoop	P	Terrace	P
Forecourt	P	Officefront	P
Terrace/Lightwell	P	Gallery	P
Shopfront	P	Arcade	P

*Only used in conjunction with a shopfront or officefront type

Building Size & Massing

Height

2 stories min, 3 stories max in CD-4, CD-5 per district height standards

Width

Per district lot/building width and yard/side setback standard

Pedestrian Access

Ground floor Principal Frontage

Upper floor Principal or secondary

Upper floors must be accessed by a common entry

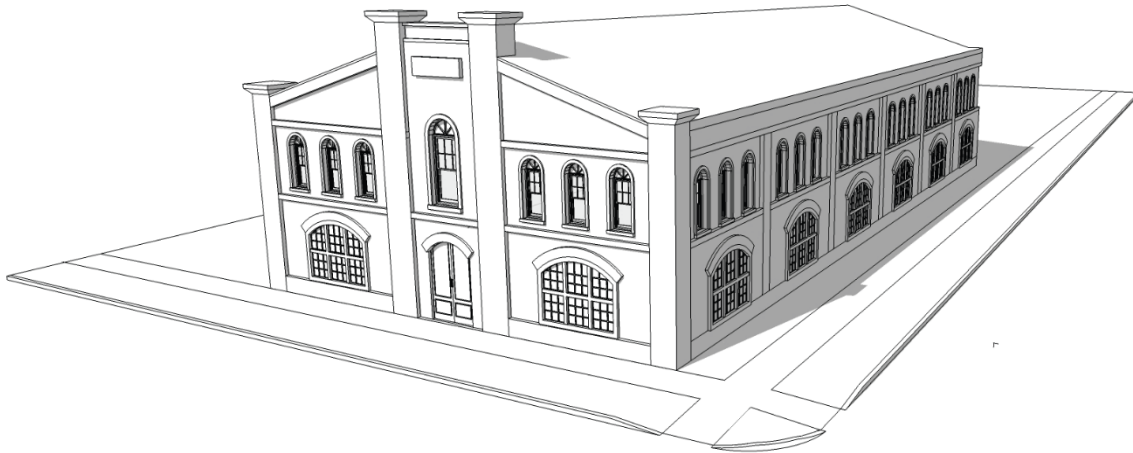
Vehicle Access & Parking

Parking may be accessed from an Alley, Thoroughfare, or internal drive at frontage

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

FLEX

TABLE 4.3.8.B PRINCIPAL BUILDING TYPES
SPECIFIC STANDARDS



Permitted Districts

CD-4 CD-4C CD-5 CD-5C SD-INT SD-LI SD-HI PUD-MU

General Description

A typically attached Principal Building which provides a vertical and/or horizontal mix of uses typically designed to facilitate pedestrian-oriented Retail/ Personal Service/ Repair/ Art/ Artisan, Accommodations/ Lodging, or Office uses on the ground floor, with upper floors typically designed for residential or office uses.

Lot/Building Site

Width Per District lot/building site width

Number of Units

Units per building 2 min, which must accommodate different principal uses

Allowed Private Frontages

Scoop	P	Terrace	P
Forecourt	P	Officefront	P
Terrace/Lightwell	P	Gallery	P
Shopfront	P	Arcade	P

*Only used in conjunction with shopfront or officefront type

Building Size & Massing

Height

2 stories min, 3 stories max in CD-4, CD-5 per district height standards

Width

Per district lot/building width and yard/side setback standard

Pedestrian Access

Ground floor Principal Frontage
Upper floor Principal or secondary frontage

Upper floors must be accessed by a common entry

Vehicle Access & Parking

Parking may be accessed from an alley, thoroughfare, or internal drive at frontage

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

MID-RISE

TABLE 4.3.8.B PRINCIPAL BUILDING TYPES
SPECIFIC STANDARDS



Permitted Districts

CD-5 CD-5C SD-LI PUD-MU

General Description

An attached or detached building that may provide a vertical and/or horizontal mix of uses. Typically designed to facilitate a pedestrian-oriented Retail/ Personal Service/ Repair/ Art/ Artisan Accommodations/ Lodging, Commercial, or Office uses on the ground floor, with upper floors typically designed for Residential or Office use.

Lot/Building Site

Width Per District lot/building Site Width

Number of Units

Units per Building 2 min, which may be residential or non-residential

Allowed Private Frontages

Stoop	P	Terrace	P
Forecourt	P	Officefront	P
Terrace/Lightwell	P	Gallery	P
Shopfront	P	Arcade	P

*Only used in conjunction with Shopfront or Officefront type

Building Size & Massing

Height

4 stories min, 5 max per district
table 4.3.1

Width

Per district lot/building site width
and side yard/ setback standards

Pedestrian Access

Ground Floors Principal Frontage

Upper Floors Principal or secondary frontage

Upper floors must be accessed by common entry

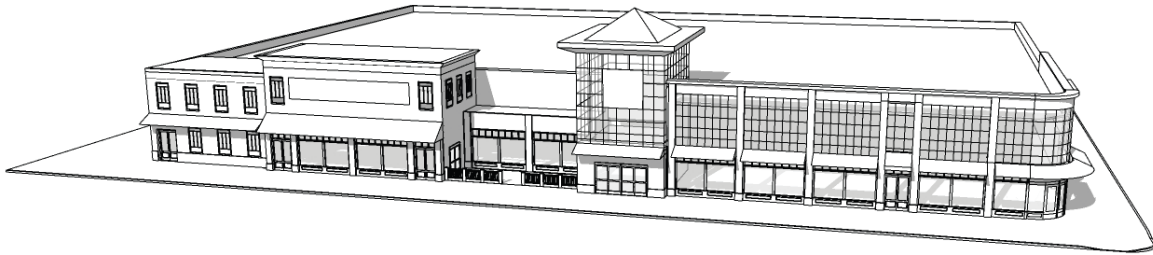
Vehicle Access & Parking

Parking may be accessed from an alley, thoroughfare, or drive at frontage

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

LARGE SCALE COMMERCIAL

**TABLE 4.3.8.B PRINCIPAL BUILDING TYPES
SPECIFIC STANDARDS**



Permitted Districts

CD-4C CD-5C SD-INT SD-LI PUD-MU

General Description

A building of 50,000 square feet, or more, that is most commonly associated with a large-format retailer. It has in-line Retail or Liner Buildings along the front of the building.

Lot/Building Site

Width Per District lot/Building site width

Number of Units

Units per Building Not regulated

Allowed Private Frontages

Stoop	P	Terrace	P
Forecourt	P	Officefront	P
Terrace/Lightwell	P	Gallery	P
Shopfront	P	Arcade	P

*Only used in conjunction with Shopfront or Officefront type

Building Size & Massing

Height

Per district height standards

Width

Per district lot/building site width and side yard/ setback standards

Pedestrian Access

Ground floors	Principal frontage
Upper floors	Principal or secondary frontage

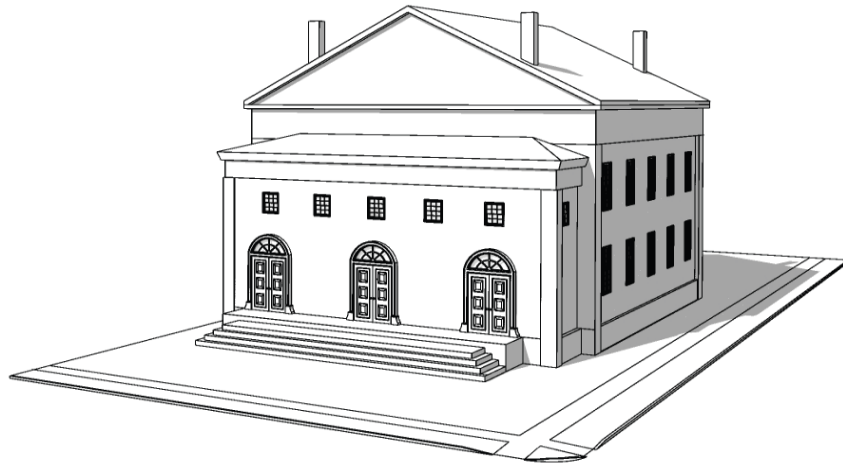
Vehicle Access & Parking

Parking may be accessed from an alley, thoroughfare, or internal drive at frontage

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

CIVIC

TABLE 4.3.8.B PRINCIPAL BUILDING TYPES
SPECIFIC STANDARDS



Permitted Districts

CD-2 CD-3L CD-3 CD-4 CD-4C CD-5 CD-5C
SD-LI SD-HI SD-INT PUD-R PUD-MU CV

General Description

A medium to large-sized attached or detached Principal Building which is operated by a not-for-profit organization or governmental entity dedicated to Civic activities, and is designed to stand apart from its surroundings due to the specialized nature of its Civic purpose. Examples include Libraries, Places of Worship, Places of Assembly, Courthouses, City Halls, schools, centers of government, Performing Arts Venues, and Museums. Civic buildings are often the most prominently sited and architecturally significant Buildings in a community.

Lot/Building Site

Width N/A

Number of Units

N/A

Building Size & Massing

Height

The height of Civic Buildings should be limited to 20 additional feet above the maximum allowed height in any adjacent district.

Width

Not Regulated.

Pedestrian Access

Except as specifically provided in this chapter, Civic Buildings are not subject to Building lot/Building site or Private frontage requirements of this chapter.

Vehicle Access & Parking

Parking may be accessed from an Alley, Thoroughfare, or internal drive at frontage.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

B. Manufactured Homes

1. No Manufactured Home shall be placed on any Lot or Building Site within a Residential District, unless it is used actively for Residential purposes, except as provided in Section 4.3.8. A.2.
2. Non-Residential use of a Manufactured Home may be permitted as a Temporary Use as a construction office during construction, subject to issuance of an annual permit by the Zoning Administrator subject to limitations pursuant to Section 4.3.9.E and **Table 4.3.9.A-3 (Temporary Uses)**.
3. Pursuant to TCA, Section 13-24-201, the provisions of Section 4.3.8.A shall not apply to Double-Wide Manufactured Homes used as single-family residences, which shall instead be considered a single-family home; provided that, pursuant to TCA, § 13-24-202, such Double-Wide Manufactured Homes must have the same general appearance as required for site-built homes and shall comply with all standards and requirements of this Ordinance.

4.3.9 USES

A. General

1. Buildings, Lots, and Building Sites must comply with the Use standards and requirements of this Section 4.3.9. For Development Parcels, the mix of Principal Uses in each District is further regulated under Section 5.1.11.
2. Principal Uses, Accessory Uses, and Temporary Uses are Permitted by Right ("P"), Permitted Subject to Limited Use Standards ("PL"), as Conditional Uses ("CU"), or Not Permitted ("NP") within each District, in each case as indicated in **Table 4.3.9.A-1 (Building, Lot & Building Site Principal Uses)**, **Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses)**, and **Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses)**.
3. Principal Uses, Accessory Uses, or Temporary Uses, as applicable, of Buildings, Lots, and Building Sites, which are indicated in **Table 4.3.9.A-1 (Building & Lot Principal Uses)**, **Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses)**, or **Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses)** as Permitted ("P"), Permitted Subject to Limited Conditions ("PL"), or as Conditional Use ("CU"), are permitted within each District, subject to compliance with all applicable standards, conditions and requirements thereof and obtaining all applicable approvals and permits therefor, including without limitation in the case of Uses Permitted Subject to Limited Use Standards ("PL") and Conditional Uses ("CU"), compliance with the applicable Use standards of Section 4.3.11.D, and in the case of Conditional Uses ("CU"), Board of Zoning Appeals approval pursuant to Article 8 (Administrative, Procedural, and Enforcement).
4. Accessory Uses of Buildings, Lots, and Building Sites in each District must conform to the Accessory Uses specified on **Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses)** for such District and are subject to compliance with all other applicable standards and requirements of this Ordinance.
5. Temporary Uses of Buildings, Lots, and Building Sites in each District must conform to the Temporary Uses specified on **Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses)** for such District and are subject to compliance with all other applicable standards and requirements of this Ordinance.
6. Without limitation, Accessory Uses must be subordinate and customarily incidental to a permitted Principal Use on the Lot.
7. If multiple Principal Uses are allowed within a District, they may exist within a single Building, Lot, or Building Site, subject to compliance with all other applicable standards and requirements.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.9.A-1 BUILDING, LOT & BUILDING SITE PRINCIPAL USE

PRINCIPAL USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Farming	PL	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Greenhouse	PL	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Other Agricultural Uses Not Listed Under any Use Category	PL	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Sand, Stone, and Gravel Quarrying	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	CU	NP	NP	NP
Other Extractive Uses Not Listed Under any Use Category	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
House for Single-Family Dwelling	P	P	P	P	P	P	NP	NP	NP	NP	NP	P	NP	NP
Attached Dwelling - Duplex for 2-Family Dwelling	NP	NP	PL	PL	PL	PL	NP	NP	NP	NP	NP	NP	NP	NP
Attached Dwelling - Townhouses	NP	NP	NP	PL	PL	PL	PL	NP	PL	NP	NP	PL	PL	NP
Attached Dwelling -Small Multifamily Building	NP	NP	NP	PL	PL	PL	PL	NP	PL	PL	NP	PL	PL	NP
Attached Dwelling -Large Multifamily Building	NP	NP	NP	PL	PL	PL	PL	NP	PL	PL	NP	PL	PL	NP
Attached Dwelling -Residence Portion of a Live/Work, Mixed-Use, or Flex Building, if Building Type permitted in District	NP	NP	NP	PL	PL	PL	PL	NP	PL	PL	NP	PL	PL	NP

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.9.A-1 BUILDING, LOT & BUILDING SITE PRINCIPAL USE

PRINCIPAL USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Attached Dwelling -Assisted Living Apartment	NP	NP	NP	PL	PL	PL	PL	NP	NP	PL	NP	NP	PL	NP
Attached Dwelling - Independent Living Apartment	NP	NP	NP	PL	PL	PL	PL	NP	NP	PL	NP	NP	PL	NP
Retirement Community or other Congregate Living Facility with individual Dwelling Units	NP	NP	NP	PL	PL	PL	PL	NP	PL	PL	NP	PL	PL	NP
Manufactured Home	PL	PL	PL	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Manufactured Home- Class A	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Manufactured Home Park	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Other Household Living Uses Not Listed Under any Use Category	NP	NP	NP	NP	NP	NP	NP	PL	NP	NP	NP	NP	NP	NP
Adult Care Home	P	P	P	P	P	NP	NP	NP	NP	NP	NP	P	NP	NP
Boarding or Rooming House, not including Group Home for Persons with Disabilities	NP	NP	NP	NP	NP	P	P	NP	P	P	NP	NP	NP	NP
Dormitory not associated with Educational Institution	NP	NP	NP	PL	PL	PL	PL	NP	NP	PL	NP	NP	NP	NP
Fraternity or Sorority House	NP	NP	NP	PL	PL	PL	PL	NP	NP	PL	NP	NP	NP	NP

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.9.A-1 BUILDING, LOT & BUILDING SITE PRINCIPAL USE

PRINCIPAL USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Group Home for Persons with Disabilities or other Group Living Home	P	P	P	P	P	NP	NP	NP	NP	NP	NP	P	NP	NP
Monastery or Convent	NP	NP	NP	PL	PL	PL	PL	NP	NP	PL	NP	NP	NP	NP
Orphanage	NP	NP	NP	PL	PL	PL	PL	NP	NP	PL	NP	NP	NP	NP
Other Group Living Uses not Listed Under any Use Category	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Civic Building	NP	P	P	P	P	P	NP	NP	NP	NP	NP	NP	NP	P
Philanthropic Institution	NP	NP	NP	P	P	P	P	NP	NP	NP	NP	NP	P	P
Recreation Facility (Civic)	NP	P	P	P	P	P	P	P	NP	P	NP	P	P	P
Other Community Service Use Not Listed Under any Use Category	NP	NP	NP	P	P	P	P	P	NP	P	NP	P	P	P
Adult Day Care Facility (Civic)	P	P	P	P	P	P	P	P	P	P	NP	P	P	P
Children Day Care Facility (Civic)	P	P	P	P	P	P	P	P	P	P	NP	P	P	P
Group Day Care or Family Day Care or Facility (Civic)	PL	PL	PL	PL	PL	PL	PL	PL	PL	PL	NP	PL	PL	PL
Other Day Care Facility Use (Civic) Not Listed Under any Use Category	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	P
Correctional Facilities	NP	NP	NP	NP	NP	NP	NP	NP	CU	CU	CU	NP	NP	CU

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.9.A-1 BUILDING, LOT & BUILDING SITE PRINCIPAL USE

PRINCIPAL USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Other Government Facility Use (Civic) Not Listed Under any Use Category	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	P
Civic Space – Community Garden	P	P	P	P	P	P	NP	P	P	P	NP	P	P	P
Civic Space – Green	NP	P	P	P	P	P	NP	P	P	P	NP	P	P	P
Civic Space – Square or Plaza	NP	NP	NP	P	P	P	NP	NP	NP	NP	NP	NP	P	P
Civic Space – Park or Playground	P	P	P	P	P	P	NP	P	P	P	NP	P	P	P
Civic Space - Sports Field	NP	P	P	P	NP	NP	NP	P	NP	P	NP	P	NP	P
Other Civic Space Use Not Listed Under any Use Category	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Botanical Garden	P	P	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P
Nature Preserve	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Recreational Trail	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Game Preserve	P	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	P
Wildlife Management Area	P	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	P
Refuge	P	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	P
Wild Animal Sanctuary	P	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	P
Water Conservation Area	P	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	P

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.9.A-1 BUILDING, LOT & BUILDING SITE PRINCIPAL USE

PRINCIPAL USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Reservoir	P	P	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	P
Drainage Well	P	P	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	P
Water Supply	P	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	P
Water Well	P	P	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	P
Zoo	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	P
Other Open Space Use Not Listed Under any Use Category	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Place of Worship or other Religious Facilities	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Cemetery / Mausoleum / Columbarium / Memorial Garden	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	P
Funeral Services	NP	NP	NP	P	P	P	P	NP	NP	NP	NP	NP	P	P
Fire / EMS Station	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Police Station	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Adult Continuing Education	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP
Personal Improvement Education	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP
Business, trade, or vocational school, other than Truck Driving School	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.9.A-1 BUILDING, LOT & BUILDING SITE PRINCIPAL USE

PRINCIPAL USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Truck Driving School	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Pre-School or Nursery School	P	P	P	P	P	P	P	NP	P	P	NP	P	P	P
Kindergarten	P	P	P	P	P	P	P	NP	P	P	NP	P	P	P
Elementary School	P	P	P	P	P	P	P	NP	P	P	NP	P	P	P
Middle School	P	P	P	P	P	P	P	NP	P	P	NP	P	P	P
High School	P	P	P	P	P	P	P	NP	P	P	NP	P	P	P
College or University	NP	NP	NP	P	P	P	P	NP	P	P	P	NP	P	P
Community College	NP	NP	NP	P	P	P	P	NP	P	P	P	NP	P	P
Graduate / Professional School	NP	NP	NP	P	P	P	P	NP	P	P	P	NP	P	P
Nursing or Medical Schools not accessory to a Hospital	NP	NP	NP	P	P	P	P	NP	P	P	P	NP	P	P
Seminary	NP	NP	NP	P	P	P	P	NP	P	P	P	NP	P	P
Other Educational Use Not Listed in any Use Category	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Hospital	NP	NP	NP	PL	PL	PL	PL	NP	PL	PL	NP	NP	PL	PL
Rehabilitation Facility or Center for Observation	NP	NP	NP	PL	PL	PL	PL	NP	PL	PL	NP	NP	PL	PL
Other Health Care Institution Use Not Listed Under any Use Category	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.9.A-1 BUILDING, LOT & BUILDING SITE PRINCIPAL USE

PRINCIPAL USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Long Term Care Facility	NP	NP	NP	PL	PL	PL	PL	NP	NP	PL	NP	NP	PL	NP
Continuum of Care Facility	NP	NP	NP	PL	PL	PL	PL	NP	NP	PL	NP	NP	PL	NP
Bed & Breakfast	P	NP	NP	P	P	P	P	NP	NP	NP	NP	NP	P	NP
Extended Stay Hotel	NP	NP	NP	NP	NP	NP	NP	NP	PL	PL	NP	NP	NP	NP
Inn	P	NP	NP	P	P	P	P	NP	NP	NP	NP	NP	P	NP
Hotel, not including Extended Stay Hotel	NP	NP	NP	PL	PL	PL	PL	NP	PL	NP	NP	NP	PL	NP
Motel	NP	NP	NP	NP	NP	NP	NP	NP	PL	PL	NP	NP	NP	NP
Short-Term Rental Unit	NP	NP	NP	PL	PL	PL	PL	NP	NP	NP	NP	NP	NP	NP
Other Accommodation / Lodging Uses Not Listed Under any Use Category	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Adult Day Care Facility (non-Civic)	P	P	P	P	P	P	P	P	P	P	NP	P	P	NP
Child Care Facility (non-Civic), excluding Child Care in Home	P	P	P	P	P	P	P	P	P	P	NP	P	P	NP
Children's Day Camp (non-Civic)	P	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Group Day Care Facility, Family Day Care Facility or other Group Care Facility (non-Civic)	NP	NP	NP	CU	CU	CU	CU	NP	CU	CU	NP	CU	CU	NP

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.9.A-1 BUILDING, LOT & BUILDING SITE PRINCIPAL USE

PRINCIPAL USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Hospice (non-Civic)	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP
Retirement Center or Life Care Community without individual Dwelling Units (non-Civic)	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP
Other Personal & Group Care Facilities Use Not Listed Under any Use Category (non-Civic)	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Bowling Alley	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP
Game Arcade	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP
Gymnastics Facility	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP
Commercial Indoor Athletic Training Facility	NP	PL	PL	PL	P	P	P	NP	P	P	NP	NP	P	NP
Indoor firing range	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	NP	NP	NP	NP
Indoor Sports Academy	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP
Membership Club or Lodge	P	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP
Movie or other Theater	NP	NP	NP	P	P	P	P	NP	P	NP	NP	NP	P	NP
Pool Hall	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP
Recreation Facility (non-Civic)	NP	P	P	P	P	P	P	NP	P	P	NP	P	P	NP
Skating rink	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.9.A-1 BUILDING, LOT & BUILDING SITE PRINCIPAL USE

PRINCIPAL USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Social Club, Lodge, or Organization (non-Civic)	NP	CU	CU	P	P	P	NP	NP	P	P	NP	NP	P	NP
Other Commercial Indoor Recreation Use Not Listed Under any Use Category	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Group Assembly (non-Civic)	NP	NP	NP	PL	PL	PL	PL	NP	PL	PL	NP	NP	PL	NP
Other Commercial Group Assembly Use (non-Civic) Not Listed Under any Use Category	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Amphitheater	NP	NP	NP	PL	PL	PL	PL	NP	PL	PL	NP	NP	PL	NP
Sports Field	NP	NP	NP	PL	PL	PL	PL	NP	PL	PL	NP	NP	PL	NP
BMX Bicycle Park	NP	NP	NP	NP	NP	NP	NP	NP	PL	PL	NP	NP	NP	NP
Campground	NP	NP	NP	NP	NP	NP	NP	NP	PL	PL	NP	NP	NP	NP
Drive-in Theater	NP	NP	NP	NP	NP	NP	NP	NP	PL	PL	NP	NP	NP	NP
Firing Range such as Rifle Range, Archery Range, Handgun, or Skeet Shooting	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	PL	NP	NP	NP
Golf Course, Country Club, Swim Club, and Tennis Club	PL	PL	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Marina / Boating Facility	PL	PL	PL	PL	PL	PL	PL	PL	NP	NP	NP	PL	PL	NP
Recreational Vehicle (RV) Park	NP	NP	NP	NP	NP	NP	NP	NP	PL	PL	NP	NP	NP	NP

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.9.A-1 BUILDING, LOT & BUILDING SITE PRINCIPAL USE

PRINCIPAL USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Paintball Park	NP	NP	NP	NP	NP	NP	NP	NP	PL	PL	NP	NP	NP	NP
Outdoor Entertainment Activity such as Batting Cage, Golf Driving Range, Amusement Park, Miniature Golf Facility	NP	NP	NP	NP	NP	NP	NP	NP	PL	PL	NP	NP	NP	NP
Skateboard Park	NP	NP	NP	NP	NP	NP	NP	NP	PL	PL	NP	NP	NP	NP
Stadium / Arena	NP	NP	NP	NP	NP	NP	NP	NP	NP	PL	NP	NP	NP	NP
Summer Camp (overnight)	NP	NP	NP	NP	NP	NP	NP	NP	PL	PL	NP	NP	NP	NP
Swimming Pool	PL	PL	PL	PL	PL	PL	PL	PL	PL	PL	NP	PL	PL	NP
Tennis Court	PL	PL	PL	PL	PL	PL	PL	PL	PL	PL	NP	PL	PL	NP
Water Park	NP	NP	NP	NP	NP	NP	NP	NP	PL	PL	NP	NP	NP	NP
Other Commercial Outdoor Recreation Use Not Listed Under any Use Category	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Parking Lot	NP	NP	NP	PL	PL	PL	PL	PL	PL	PL	PL	PL	PL	PL
Parking Structure	NP	NP	NP	P	P	P	P	NP	P	P	P	NP	P	P
Restaurant or other Food Service Business without Drive-Through	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP
Small-scale Catering Establishment without Drive-Through	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.9.A-1 BUILDING, LOT & BUILDING SITE PRINCIPAL USE

PRINCIPAL USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Drive-in Restaurant and Any Restaurant with Drive-Through	NP	NP	NP	PL	PL	PL	PL	NP	PL	PL	NP	NP	PL	NP
Bar, Tavern, or Nightclub	NP	NP	NP	PL	PL	PL	PL	NP	PL	PL	NP	NP	PL	NP
Alcoholic Beverage Retail Sales	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP
Artisan Establishment, with or without Retail Sales, & without Drive-Through	NP	NP	NP	P	P	P	P	NP	NP	P	NP	NP	P	NP
Arts-Related Uses	NP	NP	NP	P	P	P	P	NP	NP	P	NP	NP	P	NP
Convenience Store with Gasoline Sales Facility without Drive-Through	NP	NP	NP	PL	PL	PL	PL	NP	PL	PL	PL	NP	PL	NP
Retail, Personal Service, Repair, Arts, or Artisan Establishment with Drive-Through	NP	NP	NP	PL	PL	PL	PL	NP	PL	PL	NP	NP	PL	NP
Food Truck Court	NP	NP	NP	PL	PL	PL	PL	NP	PL	PL	NP	NP	NP	NP
Personal Services, other than Motor Vehicle Body Shop, and Motor Vehicle Maintenance, Repair, Fuel Sales, Service, or Cleaning, without Drive-Through	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP
Repair Services, other than Motor Vehicle Body Shop,	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.9.A-1 BUILDING, LOT & BUILDING SITE PRINCIPAL USE

PRINCIPAL USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
and Motor Vehicle Maintenance, Repair, Fuel														
Retail Membership Club	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP
Retail Food Sales, with or without on-premises preparation or processing, without Drive-Through	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP
Retail Sales, Rental, or Leasing, other than Motor Vehicle - Related Uses, Retail Food Sales, Retail Membership Club, Restaurant, and Warehouse Retail	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP
Other Retail Sales, Rental, or Leasing Not Listed Above without Drive-Through	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP
Tobacco, Vape, and Cannabinoid Retailers	NP	NP	NP	PL	PL	NP	PL	NP	PL	PL	NP	NP	PL	NP
Veterinary Clinic, Animal Hospital, or Non-Agricultural Kennel	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP
Other Personal Service or Repair Uses Not Listed Under any Use Category	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP
Other Art or Artisan Uses Not Listed Under any Use	NP	P	P	P	P	P	P	NP	P	P	NP	NP	P	NP

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.9.A-1 BUILDING, LOT & BUILDING SITE PRINCIPAL USE

PRINCIPAL USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Category without Drive-Through														
Self-Service Storage Facilities	NP	NP	NP	NP	NP	NP	NP	NP	PL	PL	PL	NP	NP	NP
Motor Vehicle Body Shop	NP	NP	NP	NP	NP	NP	NP	NP	P	P	P	NP	NP	NP
Motor Vehicle Maintenance, Repair, Fuel Sales, Service or Cleaning, other than Car Wash	NP	NP	NP	PL	PL	PL	PL	NP	PL	PL	PL	NP	NP	NP
Car Wash	NP	NP	NP	PL	PL	PL	PL	NP	PL	PL	PL	NP	PL	NP
Gasoline Sales Facility or Fuel Sales	NP	NP	NP	PL	PL	PL	PL	NP	PL	PL	PL	NP	PL	NP
Motor Vehicle Sales, Rental, or Leasing	NP	NP	NP	NP	PL	NP	PL	NP	PL	PL	NP	NP	NP	NP
Motor Vehicle Storage	NP	NP	NP	NP	NP	NP	NP	NP	P	P	P	NP	NP	NP
Tire Sales	NP	NP	NP	NP	P	NP	P	NP	P	P	P	NP	NP	NP
Towing Service	NP	NP	NP	NP	NP	P	NP	P	P	P	NP	NP	NP	NP
Other Motor Vehicle - Related Use Not Listed Under any Use Category	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Manufactured Home Sales	NP	NP	NP	NP	NP	NP	NP	NP	PL	PL	NP	NP	NP	NP
Sale of building and construction materials, special trade tools, welding supplies, machine parts,	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP	NP

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.9.A-1 BUILDING, LOT & BUILDING SITE PRINCIPAL USE

PRINCIPAL USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
electrical supplies, janitorial supplies, restaurant equipment, store fixtures, Other Wholesale Sales Uses Not Listed Under any Use Category	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP	NP
Business Office, Business Incubator or Professional Office	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP
Conference Center or Office with Conference Center (non-Civic)	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP
Co-Working Space	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP
Financial Institution or Financial Services	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP
Office with Drive-Through Facilities	NP	NP	NP	PL	PL	PL	PL	NP	PL	PL	NP	NP	PL	NP
Non-Banking Financial Institution	NP	NP	NP	PL	PL	PL	PL	NP	PL	PL	NP	NP	PL	NP
Radio / Television / Recording Studio or Station without Communications Tower	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP
Other Business / Government / Non-Profit Office Uses Not Listed Under any Use Category	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.9.A-1 BUILDING, LOT & BUILDING SITE PRINCIPAL USE

PRINCIPAL USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Dental Office / Dental Clinic, Medical Office / Medical Clinic / Outpatient Clinic, or Medical or Dental Lab	NP	NP	NP	P	P	P	P	NP	P	P	NP	NP	P	NP
Asphalt Plant or other Facilities for Manufacture and Storage of Chemicals, Petroleum Products, Explosives, and Allied Products	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	PL CU	NP	NP	NP
Concrete Batch or Concrete Manufacturing Plant	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	PL CU	NP	NP	NP
Hazardous & Low-Level Nuclear Disposal & Storage	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	PL CU	NP	NP	NP
Wrecking, Junk, & Salvage Yards, & Scrap Operations	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	PL CU	NP	NP	NP
Tile or Brick Manufacturing	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	PL CU	NP	NP	NP
Automobile, Truck, or Tire Manufacturing or Assembly	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	PL CU	NP	NP	NP
Ammonia or Chlorine Manufacturing	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	CU	NP	NP	NP
Metal Casting or Foundries	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	CU	NP	NP	NP
Gas Manufacturing	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	CU	NP	NP	NP

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.9.A-1 BUILDING, LOT & BUILDING SITE PRINCIPAL USE

PRINCIPAL USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Metal or Metal Ore Production, Refining, Smelting, or Alloying	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	CU	NP	NP	NP
Petroleum or Petroleum Product Storage or Refining	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	CU	NP	NP	NP
Boat, Pool, or Spa Manufacturing	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	CU	NN	NP	NP
Keeping, Selling, or Slaughtering of Animals	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	CU	NP	NP	NP
Glass Manufacturing	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	CU	NP	NP	NP
Paper Manufacturing	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	CU	NP	NP	NP
Manufacturing of Materials into Compost	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	CU	NP	NP	NP
Rail Equipment Storage / Repair	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	CU	NP	NP	NP
Railroad Freight Yard	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	CU	NP	NP	NP
Sawmill	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	CU	NP	NP	NP
Wood or Lumber Processing	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	CU	NP	NP	NP
Animal processing, Rendering, Packing, Treating, and Storage	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	CU	NP	NP	NP
Livestock Slaughtering	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	CU	NP	NP	NP

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.9.A-1 BUILDING, LOT & BUILDING SITE PRINCIPAL USE

PRINCIPAL USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Processing of Food and Related Products	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	CU	NP	NP	NP
Sale of Farm Equipment and Machinery and Earth Moving and Heavy Construction Equipment	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	CU	NP	NP	NP
Production of Chemical, Rubber, Leather, Clay, Bone, Plastic, Stone, or Glass Materials or Products	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	CU	NP	NP	NP
Other Heavy Industrial Not Listed in any Use Category	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	CU	NP	NP	NP
Brewery, excluding Brewpubs	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Bottling Plants	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Building Systems / Construction Business	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Carpet cleaning plants or manufacturing	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Catering Service or Catering Events Establishment	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Textile Manufacturing	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Commercial bakery	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Contractor Materials Sales	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.9.A-1 BUILDING, LOT & BUILDING SITE PRINCIPAL USE

PRINCIPAL USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Crematorium	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Dairy Plant	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Distillery	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Distribution / Distribution Facility	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Dry Cleaning Plants	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Equipment Rental	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Fabrication, work, or storage on-site by building, heating, plumbing, electrical, or general contractors, and	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Food Processing plants	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Horticulture and Landscaping Services	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Ice plant	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Institutional bakeries	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Laundry Plant	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Light Manufacturing Plant	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Machine Shop / Woodworking Shop, other than Artisan Establishment	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.9.A-1 BUILDING, LOT & BUILDING SITE PRINCIPAL USE

PRINCIPAL USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Maintenance yard or facility	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Manufacture or assembly of equipment, instruments (including musical instrument	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Non-Hazardous Waste Treatment or Disposal	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Outdoor Storage	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Printing, Publishing, and lithography	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Production of artwork	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Rail Equipment Storage / Repair	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Recycling Processing Facility	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Repair of scientific or professional instruments, electric motors;	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Regional recycling center;	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Research Laboratory / Research & Development	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Sheet metal shop	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Soft drink bottling	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Solid Waste Facility	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.9.A-1 BUILDING, LOT & BUILDING SITE PRINCIPAL USE

PRINCIPAL USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Warehouse / Warehousing	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Welding, machine, tool repair shop	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Winery	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Woodworking, including cabinet makers and furniture manufacturing, but excluding Artisan Establishments	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Other Light Industrial Not Listed in any Use Category	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Bulk storage, including nonflammable liquids, feed and grain storage	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Bus barn	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Cold storage plants, frozen food lockers,	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Household moving and general freight storage	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Separate warehouse used by Retail store such as a furniture or appliance store	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Stockpiling of sand, gravel, or other aggregate materials	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	NP	NP	NP
Transfer and storage Business with no individual storage	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.9.A-1 BUILDING, LOT & BUILDING SITE PRINCIPAL USE

PRINCIPAL USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
areas or where employees are the primary movers of the goods														
Other Warehouse & Freight Movement Not Listed in any Use Category	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Animal waste processing	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	PL	NP	NP	NP
Septic Equipment Installation, Service, or Cleaning	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	PL	NP	NP	NP
Landfill	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	PL	NP	NP	NP
Incinerator	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	PL	NP	NP	NP
Manufacture and production of goods from composting organic material	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	PL	NP	NP	NP
Recyclable material storage, including construction material	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	PL	NP	NP	NP
Recycling center	NP	NP	NP	NP	NP	NP	NP	NP	NP	PL	PL	NP	NP	NP
Transfer station	NP	NP	NP	NP	NP	NP	NP	NP	NP	PL	PL	NP	NP	NP
Recycling Station	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP
Other Waste-Related Service Not Listed in any Use Category	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.9.A-1 BUILDING, LOT & BUILDING SITE PRINCIPAL USE

PRINCIPAL USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Utility Facilities	PL	PL	PL	PL	PL	PL	PL	PL	PL	PL	PL	PL	PL	PL
Utility Transmission Line	PL	PL	NP	NP	NP	NP	NP	NP	PL	PL	PL	PL	PL	NP
Wireless Communication Facility	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU
Other Utilities Use Not Listed Under any other Category	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
Adult - Oriented Establishment	NP	NP	NP	NP	NP	NP	NP	NP	PL	NP	NP	NP	NP	NP

B. Uses Permitted by Right

Principal Uses, Accessory Uses, or Temporary Uses, as applicable, of Buildings, Lots, and Building Sites, which are indicated for each District in **Table 4.3.9.A-1 (Building, Lot & Building Site Principal Uses)**, **Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses)**, or **Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses)** as Permitted (“P”) are allowed by right, subject to compliance with all other applicable provisions of this Ordinance.

C. Required Uses

1. Commercial Corridors

Within the CD-4C Character District, Principal Buildings on any Lot or Building Site located within 400 feet of a Thoroughfare with a Functional Classification of Arterial must contain a Retail Sales or Service use, Restaurant use, Arts-Related Use, or Office use for the entire ground floor. Any permitted use may be established on second, third, and fourth stories of a Principal Building.

2. Downtown Pedestrian Streets

Buildings enfronting the following rights of way must contain a retail sales or service use, restaurant use, arts-related use, or office use at the sidewalk level through the depth of the second layer for at least 80 percent of the building frontage.

- Public Square;
- North Main Street between West 4th Street and Public Square;
- South Main Street between Public Square and West 9th Street, inclusive of all building sites with frontage at the corners of South Main and West 9th street;
- North Garden Street between West 6th Street and West 7th Street, inclusive of all building sites with frontage at the corners of North Garden Street and West 6th Street;

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

- e. North Garden Street between West 7th Street and West 9th Street, inclusive of all building sites with frontage at the corners of South Garden Street and West 9th Street;
- f. South High Street between West 7th Street and West 9th Street, inclusive of all building sites with frontage at the corners of South High Street and West 7th Street, all building sites with frontage at the corners of South High Street and West 8th Street, and all building sites with frontage at the corners of South High Street and West 9th Street;
- g. West 7th Street between Public Square and Frierson Street, inclusive of all building sites with frontage at the corners of Frierson Street and West 7th Street;
- h. East 7th Street between Public Square and North Water Street, inclusive of all building sites with frontage at the corners of South Glade Street and East 7th Street;
- i. West 6th Street between North Main Street and Woodland Street, inclusive of all building sites with frontage at the corners of West 6th Street and Woodland Street;
- j. West 6th Street between North Main Street and North Garden Street; and
- k. West 8th Street between South Garden and South Glade Street, inclusive of all building sites with frontage at the corners of West 8th Street and South Garden Street as well as all building sites with frontage at the corners of West 8th Street and South Glade Street.

D. Prohibited Uses

1. Except as otherwise determined by the Zoning Administrator pursuant to Section 8.5.8 with respect to a Use that is not specifically listed as Permitted (“P”), Permitted Subject to Limited Conditions (“PL”), or as a Conditional Use (“CU”) in **Table 4.3.9.A-1 (Building & Lot Principal Uses)**, **Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses)**, or **Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses)**, as applicable, any Use that is not specifically listed as Permitted (“P”), Permitted Subject to Limited Conditions (“PL”), or as a Conditional Use (“CU”), and any Use that is specifically listed Not Permitted (“NP”) in such applicable Table or is otherwise prohibited pursuant to any other provision of the City Code, is prohibited.
2. In the CD-4C Character District, all uses listed under the heading Residential Uses Category on **Table 4.3.9.A-1** are prohibited on the entire ground floor of any Building located within 400 feet of a Thoroughfare with a Functional Classification of Arterial. Any permitted use may be established on second, third, and fourth stories of a Principal Building.

E. Uses Permitted Subject to Limited Use Standards & Conditional Uses

1. Any Principal Use, Accessory Use, or Temporary Use shown for the applicable District as Permitted Subject to Limited Use Standards (“PL”) on **Table 4.3.9.A-1 (Building & Lot Principal Uses)**, **Table 4.3.9.A-2 (Building & Lot Accessory Uses)**, or **Table 4.3.9.A-3 (Building & Lot Temporary Uses)**, is allowed subject to compliance with all applicable conditions and requirements imposed by this Section 4.3.9.E and Section 4.3.9.4.h.
2. Any Principal Use, Accessory Use, or Temporary Use shown for the applicable District as Conditional Use (“CU”) on **Table 4.3.9.A-1 (Building, Lot, & Building Site Principal Uses)**, **Table 4.3.9.A-2 (Building, Lot, & Building Site Accessory Uses)**, or **Table 4.3.9.A-3 (Building, Lot, & Building Site Temporary Uses)**, is allowed subject to compliance with all applicable conditions and requirements imposed by this Section 4.3.9.E in addition to Conditional Use approval and issuance of a Conditional Use permit pursuant to Article 8 (Administration, Procedures & Enforcement).

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

3. The conditions, standards, and requirements of each Use Permitted Subject to Limited Use Standards or Conditional Use shall be applicable, irrespective of the Use being a Principal Use, an Accessory Use, or a Temporary Use.
4. The conditions and requirements applicable to any Use Permitted Subject to Limited Use Standards or Conditional Use shall be enforceable, and failure to comply with any condition or requirement of a Use Permitted Subject to Limited Use Standards or as a Conditional Use shall subject such Use Permitted Subject to Limited Use Standards or Conditional Use to revocation pursuant to Section 8.6.1.J.
5. No Use Permitted Subject to Limited Use Standards or Conditional Use shall commence or exist, or be conducted or engaged in, on any Lot or Building Site, or within any Building except in accordance with all applicable conditions and requirements for such Use, including without limitation in the case of a Conditional Use, review, approval, and issuance of a Conditional Use Permit by the Board of Zoning Appeals.
6. The following standards shall apply only to those Districts and Uses where the “PL” and / or “CU” is designated on the applicable **Table 4.3.9.A-1 (Building, Lot & Building Site Principal Uses)**, **Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses)**, or **Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses)**, as applicable:
 - a. **Accessory Dwelling**
 - (1) Only one Accessory Dwelling is permitted on any Lot or Building Site.
 - (2) The Accessory Dwelling must be accessory to a House or Townhouse used for Household Living.
 - (3) If the Accessory Dwelling is not attached to the primary dwelling, it must be separated a minimum of ten (10) feet from the primary dwelling.
 - (4) In all districts except CD-2, an Accessory Dwelling may not exceed 600 square feet of habitable space; in a CD-2 Character District, an Accessory Dwelling may not exceed 1,000 square feet of habitable space.
 - (5) An Accessory Dwelling Unit may not be used for Transient accommodations or as a Short-Term Rental Unit.
 - (6) The Accessory Dwelling must share ownership and utility connections with the primary dwelling.
 - b. **Adult - Oriented Establishments** shall be permitted in accordance with the applicable Use Table, subject to the following:
 - (1) No Adult - Oriented Establishment shall be operated or maintained in the City within 1,000 feet, measured from property line to property line, of a school, religious facility, public recreation facility, or licensed day care facility.
 - (2) No Adult - Oriented Establishment shall be operated or maintained in the City within 1,000 feet, from property line to property line, of a boundary of a Residential District or a Residential Use.
 - (3) No Building or Structure associated with the Adult - Oriented Establishment shall be closer than 50 feet to a property line of an adjacent Non-Residential District or Use.
 - (4) No Adult - Oriented Establishment shall be operated or maintained in the City within 1,000 feet, measured from property line to property line, of another Adult - Oriented Establishment.
 - c. **Agricultural Activities**, except as certain enterprises that produce the majority of their income from agricultural activities may be exempted from certain zoning restrictions pursuant to TCA. Section 44-18-104(c)(4) shall be subject to the following:

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

- (1) Barns, feed Lot or Building Sites, pens, and stockyards may be permitted in accordance with the applicable Use Table, subject to the following:
 - (a) Barns, feed Lot or Building Sites, pens and stockyards shall require a minimum separation of 200 feet from all property lines.
 - (b) The location of such an activity shall be in an area sparsely developed during the length of time the Use as a stockyard or feed Lot or Building Site is anticipated;
 - (c) The site area shall be a minimum of twice the minimum required for the applicable District. Sites containing outdoor animal pens shall require a minimum site area of four acres.
 - (d) All proposals shall include a site plan which contains, at minimum, the following information:
 - Existing and proposed contours of the site and up to 100 feet beyond the site boundary. Contour intervals shall be at two foot intervals;
 - Location of the area in which the proposed keeping of animals is to be conducted;
 - Location of all proposed buildings, animal pens, roadways and other facilities proposed on the site;
 - Proposed method of drainage of the animal pens and any proposed waste lagoons;
 - Proposed fencing of the site; and
 - Location of all existing or platted residences on adjacent properties.

d. Asphalt Plants and Other Facilities for the Manufacture and Storage of Chemicals, Petroleum Products, Explosives, and Allied Products shall be permitted in accordance with the applicable Use Table, subject to the following:

- (1) A Heavy Manufacturing Permit shall be required (See Section 8.5.22) in addition to a Conditional Use Permit.
- (2) The boundary of the property shall be at least 1,500 feet from any Residential Use or District.
- (3) The Use shall be totally enclosed by a security fence or wall at least 8 feet high or enclosed within a fire proof Building.
- (4) All plans shall be reviewed by Fire and Emergency staff prior to approval in order to determine that existing services provide adequate protection for citizens.
- (5) Any additional conditions imposed during the Heavy Manufacturing Permit or Conditional Use Permit process.

e. Attached Dwellings, which includes Apartments, the Residence portion of a Live/Work Building, Mixed Use Building, or Flex Building, Multifamily Dwellings, Two-Family Dwellings, Duplexes, Rowhouses, Large Multi-family Buildings and Small Multi-Family Buildings, shall be permitted in accordance with the applicable Use Table, subject to the following:

- (1) Within the CD-2, CD-3L, and CD-3 District no more than one (1) Duplex Building (each Duplex Building containing two Dwellings) may be located on any Block Face.
- (2) Within the CD-3 District, Duplex Buildings shall have only one entrance along the frontage, with any additional exterior entrances located within the 3rd layer.
- (3) Party walls, subject to the provisions of the Standard Building Code and National Fire Protection Association Fire Code, shall be provided along all points of attachment.
- (4) Additional Use limitations may be applicable to specific types of Attached Dwellings.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

- (5) Within the CD-5 District buildings enfronting the rights of way identified in Section 4.3.9.C must contain a retail sales or service use, restaurant use, arts-related use, or office use at the sidewalk level through the depth of the second layer for at least 80 percent of the building frontage.
- (6) In all districts, Townhouses shall be subject to the following limitations:
 - (a) Garages, when they are provided, must be located at the rear of the Building facing an Alley or Driveway;
 - (b) Individual unit parking and driveways must be located at the rear of the Building;
 - (c) On-street parallel parking is permitted;
 - (d) Parking Lots and Parking Areas are permitted in accordance with 4.3.9. E.6.jj and 4.3.12.
- f. **Bar, Tavern, or Nightclub** shall be permitted in accordance with the applicable Use Table, subject to the following:
 - (1) With the exception of nightclubs, taverns, or bars located within the District CD-5 and the Columbia Arts District Overlay, the applicant shall demonstrate that no pre-existing Place of Worship, Schools or public park is located within 500 feet of the proposed nightclub or similar establishment. Within the Columbia Arts District Overlay the applicant shall demonstrate that no pre-existing Place of Worship, Schools or public park is located within 200 feet of the proposed nightclub or similar establishment.
 - (a) The distance shall be measured in a straight line from the front door of the building to the front door of the church.
 - (b) For public parks, said distance shall be measured in a straight line from the front door of the building to the closest point of the park property.
 - (c) For schools, said distance shall be measured in a straight line from the front door of the building to the front door of the school.
 - (2) No nightclub, tavern, or bar shall be located on a Lot or Building Site Adjoining any property zoned CD-2, CD-3L, CD-3, SD-MHP, or PUD-R.
 - (3) No outside storage shall be located on the site.
- g. **Car Wash** shall be permitted in accordance with the applicable Use Table, subject to the following:
 - (1) No storage, repair, or sales of vehicles shall be allowed on the site.
 - (2) Provisions shall be made for an on-site drainage system to capture water used to wash vehicles. This water shall be discharged into a sanitary sewer system or another approved on-site system and shall not be discharged into the stormwater system.
 - (3) No wash bay shall face or be located in the 1st or 2nd Layer or the Frontage.
- h. **Civic Buildings** in all districts may utilize the lot occupation, building, and other standards of the Civic District listed at **Table 4.3.1-N**
- i. **Concrete Batch Plants and Concrete Manufacturing Plants** shall be permitted in accordance with the applicable Use Table, subject to the following:
 - (1) A Heavy Manufacturing Permit shall be required (See Section 8.5.22) in addition to a Conditional Use Permit.
 - (2) The facility shall be at least 1,500 feet from any Residential Use or Residential District.
 - (3) The property may not be adjacent to an existing Hospital, Day Care Facility, Educational facility, Religious Facility, Long Term Care Facility, Continuum of Care Facility, or Assisted Living Facility.
 - (4) The site shall be at least four acres in size and shall have access on a major or minor thoroughfare.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

- (5) Property boundaries facing public streets shall be fenced with a six foot high fence.
- (6) Any additional conditions imposed during the Heavy Manufacturing Permit or Conditional Use Permit process.
- j. **Correctional Facilities** shall be permitted in accordance with the applicable Use Table, subject to the following:
 - (1) In order to accommodate outdoor recreational facilities and to allow for potential building expansion, the site size for facilities located outside the CD-5 Character District shall be a minimum of one acre in size or the minimum of the District, whichever is larger; provided that County and City jail facilities have no minimum site size.
 - (2) The facility shall be at least 650 feet from the nearest property which is Residentially zoned or used.
 - (3) The facility shall not be established within 1,320 feet of a public or private school, day care, or Place of Worship.
 - (4) Site Development shall be in conformance with the landscaping and dimensional requirements of the applicable District.
 - (5) The Use requires a Conditional Use Permit, which may be denied when the Use would be detrimental to nearby properties or may add conditions or safeguards to the approval in order to protect the health and welfare of citizens.
- k. **Drive-Through Facilities** shall be permitted in accordance with the applicable Use Table, subject to the following:
 - (1) Where no street separates the Use and a Residentially zoned or Residentially used property, at least 40 feet of separation shall be maintained between such Residential property Line and the Drive-Through facility.
 - (2) Drive-through Facilities must be located in the 3rd Layer and the location of Drive-Through Facilities and associated facilities (for example: communications systems and access aisles) shall be identified on all submitted Plans.
 - (3) Any speaker systems associated with a Drive-Through Facility shall be designed and located so as not to be audible beyond the Lot or Building Site on which the Drive-Through Facility is located.
 - (4) Vehicular access to a Drive-Through Facility that is between a Thoroughfare or Internal Drive and a Building shall require a Parcel Buffer pursuant to Section 4.3.11 if such access is within 50 feet of, and visible from, the Thoroughfare or Internal Drive. Such Buffer shall be installed and maintained along the entire length of such vehicular access and the Adjacent Thoroughfare or Internal Drive
 - (5) Vehicle stacking areas shall be provided in accordance with Section 4.3.12.H.
 - (6) All other requirements for Drive-Throughs in this Code must be met.
- l. **Extractive Uses** may be permitted in accordance with the applicable Use Table, subject to the following:
 - (1) The application for the Use shall include a plan for restoration procedures once the operation ceases.
 - (2) The location of such an activity shall be in an area sparsely developed during the length of time the mining or quarrying activity is anticipated;
 - (3) Any permit or approval issued or granted hereunder shall be based on a Development Plan or other documents submitted with an application which shall provide, together with all other requirements for such Development Plan, the following:
 - (a) Existing contours of the site and up to 100 feet beyond the site boundary. Contour intervals shall be at two foot intervals.

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- (b) Location of the area in which the proposed quarrying activity is to be conducted.
- (c) Location of all proposed buildings, crusher and screening equipment, roadways, and other facilities proposed on the site.
- (d) Proposed method of drainage of the quarry area.
- (e) Proposed fencing of the quarry area. Fencing shall be provided around all open excavations.
- (f) Methods proposed for blasting. Open blasting commonly referred to as “pop shots” shall be prohibited.
- (g) Methods proposed to control noise, vibration and other particulate matter in order to meet the performance standards as set out in this Ordinance.
- (h) Finished contours of the site after the quarrying operation has been terminated. The site shall be graded and / or filled so as to be in substantial conformity with the topography of the surrounding lands. All fill material shall be nontoxic, nonflammable, and noncombustible solids. All areas that are back – filled shall be left so that adequate drainage is provided.
- (4) Approval for mining and quarrying activity may also include accessory concrete batching plants, asphaltic cement mixing plants and/ or rock crushing activities on the same or Abutting Lots or Building Sites, which may have directly opposing Frontages on the same public street. If such accessory activities are included on the quarry site, the total site must meet all of the Conditional Use requirements for mining and quarrying activities; however, in conditions of multiple Lots or Building Sites, the outer perimeter of the site shall be considered the Lot Line or Building Site Line;
- (5) Before issuing a Conditional Use permit, the Board of Zoning Appeals shall require the owner of the quarry facility to execute a bond not less than \$1,000 per acre or more than \$2,000 per acre of active quarry throughout a five year period to restore the lands in the manner prescribed herein, including the removal of all Structures and machinery;
- (6) Any permit issued hereunder shall not be for a period exceeding five years. After the expiration date of such permit, the Board of Zoning Appeals may review and grant an extension of time in the manner and procedure as prescribed for an original application.
- m. **Family Day Care Facilities** shall be permitted in accordance with the applicable Use Table, subject to the following:
 - (1) A maximum of 12 clients may be served at any one time.
 - (2) Overnight accommodation shall not be permitted.
 - (3) No outdoor public address systems shall be allowed.
 - (4) The facility shall contain twice the minimum Lot area for the underlying District.
 - (5) When the facility is located within a Non-Residential area, the Fire Marshall shall review the proposal prior to approval and make a recommendation.
 - (6) A client drop off area shall be provided. All required Parking shall be in the Rear Yard or Side Yards; however, required Parking may be located in the Street Yard if the Zoning Administrator finds that such Parking is safe, not detrimental to the neighborhood, accessible, and compatible with surrounding properties.
 - (7) All other standards of the applicable District shall be met.
- n. **Food Truck Courts** shall be permitted as a Principal Use on any Lot or Building Site in accordance with **Table 4.3.9.A-1**, subject to the following:

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- (1) Approval of a Development Plan pursuant to Section 8.5.6. As part of the Development Plan application, the Zoning Administrator shall review the items listed below and may request review by other City of Columbia officials.
- (2) Each Food Truck operating within a Food Truck Court must hold a current Mobile Vending permit from the City of Columbia.
- (3) A designated manager must be responsible for the orderly organization of the site, the cleanliness of the site, and compliance with all City of Columbia regulations.
- (4) The Food Truck Court must be kept clear of litter and debris at all times.
- (5) Waste receptacles must be provided on site during all hours of operation.
- (6) At least 30 percent of the lot or building site area must be shared common area not utilized for Food Truck stalls or parking.
- (7) The common area shall be designed for customer use and must include designated seating for patrons.
- (8) Electrical service must be provided on-site.
- (9) Food Truck Courts on lots or building sites greater than or equal to 0.50 acres in area must provide on-site accessible restroom facilities available for both customers and employees within a permanent structure.
- (10) Food Truck Courts on lots or building sites less than 0.50 acres in area must either provide on-site accessible restroom facilities; or a written agreement granting use of restrooms within 300 feet of the Food Truck Court for customers and employees during hours of operation.
- (11) Temporary or portable toilet facilities are not permitted.
- (12) Each Food Truck shall occupy a designated Food Truck Stall.
- (13) Food Truck stalls shall conform to the dimensional standards of a parallel parking stall in **Table 4.3.12.C-1** and to the off-street parking surface requirements of the applicable Character District or Special District.
- (14) There shall be at least ten feet of unobstructed clearance between each Food Truck.
- (15) Food, drink, and other merchandise must be sold directly from Food Trucks or other Mobile Vending Apparatuses.
- (16) Except in Character District CD-5, the sale of alcohol in a Food Truck Court is prohibited.
- (17) Food Truck Courts with more than five Food Truck stalls must utilize a single point of sale system associated with a business entity with a situs and current business license and in the City of Columbia.
- (18) Required parking shall be provided as described at § 4.3.12.B.3; on another lot or building site within 1,320 feet of the Food Truck Court by parking agreement or easement, provided the principal use on the shared site shall maintain minimum required parking;
- (19) On street space within 1,320 feet of the Food Truck Court; or a combination of all above.
- (20) The Food Truck Court operator shall provide a detailed operating plan which includes:
 - (a) The maximum number of Food Trucks that can operate on the site at one time;
 - (b) A copy of the rules of operation to which Food Trucks operating on the site must adhere;
 - (c) A plan for the appropriate disposal of fats, oils, and grease which prevents release into the city sanitary sewer;
 - (d) Hours of operation of the Food Truck Court;
 - (e) Contact information for the designated manager;
 - (f) An explanation of how required parking will be provided; and

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- (g) An explanation of how required restroom facilities will be provided.
- (21) The Food Truck Court operator shall provide a plot or building site plan which depicts:
 - (a) The location of all seating areas, trash receptacles and other movable and permanent physical elements of the Food Truck Court; and
 - (b) All other information deemed necessary by the Zoning Administrator.
- O. Fuel Sales and Gasoline Sales Facilities, including Convenience Store with Gasoline Sales Facility,** shall be permitted in accordance with the applicable Use Table, subject to the following:
 - (1) Fuel pumps shall be located at least 15 feet from any property line.
 - (2) No outdoor storage shall be allowed.
 - (3) Storage of vehicles for more than 24 hours is prohibited.
 - (4) A spill prevention and counter measures plan shall be provided prior to construction plan approval that includes, at a minimum:
 - (a) Clean up procedures for fuel (or other hazardous material) spills occurring inside and outside the Building;
 - (b) Counter measures for use in preventing fuel (or other hazardous material) spills from entering the stormwater collection system;
 - (c) Routine cleanup procedures for work area and Parking Areas; and
 - (d) Washdown water shall not be permitted to enter the stormwater collection system.
 - (5) Pumps shall be located in the 3rd Layer.
 - (6) Within Districts CD-4, CD-4C, CD-5C, and PUD-MU, the maximum number of fuel dispensing pumps shall be eight per Lot or Building Site. Within District CD-5, the maximum number of fuel-dispensing pumps shall be eight for the entire District.
- p. Golf Course, Country Club, Swim Club, and Tennis Club** shall be permitted in accordance with the applicable Use Table, subject to the following:
 - (1) No maintenance Building or clubhouse shall be closer than 100 feet from any Residentially zoned or Residentially used land.
- q. Group Assembly Facilities** shall be permitted in accordance with the applicable Use Table, subject to the following:
 - (1) The locations, size and design of such facilities shall be situated so that the proposed Development shall be compatible with the Development within the surrounding area thus reducing the impact upon the surrounding area;
 - (2) The traffic generated by such facility shall be safely accommodated along major streets without traversing local minor streets; and
 - (3) When an application for a Group Assembly permit includes an amusement park, sports arena, fairground, racetrack, or similar recreational pursuits, the following requirements shall be observed:
 - (a) The minimum site area shall 25 acres;
 - (b) The minimum setback of all Structures from all public roads shall be 100 feet;
 - (c) Such facility shall be situated so that no Residentially zoned or Residentially used property is located closer than 500 feet from the Building entrance of such facility;
 - (4) Access to such facility shall be by a paved public major arterial or major collector thoroughfare. Traffic shall not be directed through Residentially zoned or Residentially used property, through areas that are Adjacent to Residentially zoned or Residentially used property, or on minor Residential

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streets traversing Residentially zoned or Residentially used property areas or areas that are Adjacent thereto;

(5) Any lighting provided at such facilities shall be designed so that no direct light falls on Adjacent Residential property; and

(6) Accessory Uses may be permitted in conjunction with the Principal Use of the property provided that such uses are physically designed as a part of or within the principal Structure. Such Uses may include food sales, beverage sales, gift or souvenir shops, and similar activities.

r. **Group Living Uses** indicated on the applicable Use Table as Uses Permitted with Limited Conditions are permitted subject to following:

(1) The home shall be operated in a manner that is compatible with the neighborhood and shall not be detrimental to Adjacent properties as a result of traffic, noise, refuse, parking, or other activities.

(2) When located in a Residential neighborhood, the home shall maintain a residential appearance compatible with the neighborhood.

(3) The home shall meet all state requirements, and all applicable housing and building codes.

s. **Hazardous and Low Level Nuclear Material Disposal and Storage Areas** shall be permitted in accordance with the applicable Use Table, subject to the following:

(1) A Heavy Manufacturing Permit shall be required (See Section 8.5.22) in addition to a Conditional Use Permit.

(2) The facility shall comply with all applicable State and federal regulations.

(3) The facility shall be located at least 1,500 feet from any Residential property.

(4) Maps and engineering drawings shall be provided showing proposed drainage, proposed sewer system design, the depth of the water table, soil composition, all existing surface water, and all existing uses within ¼-mile of the property line.

(5) The site shall be enclosed by a fence or wall at least 6 feet high. Entrance and exit shall be through a gate which shall be locked during non-business hours.

(6) Any additional conditions imposed during the Heavy Manufacturing Permit or Conditional Use Permit process.

t. **Heavy Industrial Facilities, Not Otherwise Classified** may be permitted in accordance with the applicable Use Table, subject to the following:

(1) A Heavy Manufacturing Permit shall be required (See Section 8.5.22) in addition to a Conditional Use Permit.

(2) The facility shall comply with all applicable State and federal regulations.

(3) Any additional conditions imposed during the Heavy Manufacturing Permit or Conditional Use Permit process.

u. **Home Occupation**, the following standards are intended to ensure that home occupations are compatible with the residential character of neighborhoods where they are located.

(1) There are two classes of Home Occupation:

a. A Minor Home Occupation shall be permitted upon approval of a Minor Home Occupation permit by the Zoning Administrator. The Zoning Administrator shall establish a process for review and issuance of permits for minor home occupations.

b. A Major Home Occupation shall be allowed only with the approval of the Board of Zoning Appeals. Such approval shall follow the process of a conditional use permit.

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The Zoning Administrator shall review such Major Home Occupation requests and recommend appropriate conditions of approval to the Board of Zoning Appeals.

- (2) The Zoning Administrator may refer Minor Home Occupations to the Board of Zoning Appeals upon a determination that the proposed home occupation presents a risk to the residential character of the neighborhood or quiet enjoyment of other property owners.
- (3) If the Zoning Administrator denies a request for a Minor Home Occupation, or revokes a previously issued permit, the applicant may appeal the decision to the Board of Zoning Appeals. Such a request shall be evaluated as a Conditional Use for a Major Home Occupation permit.
- (4) The following limitations apply to all Home Occupations:
 - a. The home occupation shall be clearly incidental and secondary to the use of the property for residential purposes;
 - b. A home occupation shall not be established prior to the residents conducting the home occupation taking possession of, and residing in, the dwelling;
 - c. Outside storage or display of materials, merchandise, or inventory is prohibited;
 - d. Exterior alteration that changes the residential character of the principal building is prohibited;
 - e. No exterior building signs shall be permitted except as specifically provided in Article 7 of this ordinance;
 - f. Receipt, sale or shipment to and from the premises is permitted by regular U.S. Mail and express shipping service characteristic of residential neighborhoods; large-volume, business-to-business commercial deliveries are prohibited; and
 - g. The applicant shall obtain all appropriate licensure required by the State of Tennessee.
- (5) The following limitations apply to Minor Home Occupations:
 - a. The Home Occupation must be conducted entirely within the principal structure;
 - b. The Home Occupation shall not exceed fifty percent of the total floor area of the principal building;
 - c. No person other than a family member residing on the premises shall be employed as part of a minor home occupation unless such employee(s) works off-premises;
 - d. There shall be no customers or clients on the premises of a minor home occupation; and
 - e. No commercial vehicles or trailers, other than ordinary passenger vehicles; shall be permitted on premises.
- (6) The following limitations apply to Major Home Occupations:
 - a. A Major Home Occupation may be conducted within an accessory building;
 - b. A major home occupation may include two employees who do not reside in the home;
 - c. Except in-home childcare licensed by the State of Tennessee, a major home occupation may have no more than two customers or clients on the premises at one time;
 - d. Shipment and delivery to and from the premises are prohibited between the hours of 9 pm and 7 am;

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- e. No employees, customers, or clients may be on the premises between the hours of 9 pm and 7 am;
- f. Trailers, equipment, and commercial vehicles, when permitted by the Board of Zoning Appeals, must be stored in the Third Layer and screened from view; and
- g. The Board of Zoning Appeals may further restrict the number of employees, hours of operation, deliveries, and parking of commercial vehicles and equipment on site.

(7) Revocation

- a. The Zoning Administrator may revoke the Home Occupation permit for failure to comply with these limited use standards, conditions imposed by the Board of Zoning Appeals, or other violations of City of Columbia ordinances.

v. Hospitals, Rehabilitation Facilities, and Centers for Observation shall be permitted in accordance with the applicable Use Table, subject to the following:

- (1) The minimum Side Yards and Rear Yards for Hospitals and Centers for Observation or Rehabilitation Facility shall be 50 feet for one or two Story Buildings, increased by five feet for each Story above two Stories.
- (2) The location and operation of such facility shall be in keeping with the character of the surrounding area and shall not have an adverse effect on the properties in the surrounding area.
- (3) All public utilities including a Central Sewage Collection and Treatment System shall be available to the site.

w. Hotels, Motels, and Extended Stay Hotels shall be permitted in accordance with the applicable Use Table, subject to the following:

- (1) The parcel shall be accessed from a Thoroughfare or Internal Drive.
- (2) Where the property line of a Motel is Adjacent to Residentially zoned or Residentially used property, the minimum depth for the required Yard along such Adjacent property shall be 50 feet and no Structures or Parking shall be permitted in the required Yard.
- (3) Any Accessory Uses such as restaurants and outdoor recreational activities shall not be located on the side of Adjacent to Residentially zoned or Residentially used property.

x. Long Term Care Facilities, Continuum of Care Facilities and Group Care Facilities shall be permitted in accordance with the applicable Use Table, subject to the following:

- (1) The purpose(s) of the facility must be clearly established by the agency responsible and the appropriate staff services must be provided to achieve the stated purpose(s).
- (2) Group Care Facilities accommodating from seven to 12 individuals shall have 24-hour staff and professional services in the behavioral sciences available.
- (3) Group Care Facilities accommodating more than 12 individuals shall have resident 24-hour staff, and shall provide professional services in the behavioral sciences.
- (4) The Planning Commission must make a written finding to the Board of Zoning Appeals regarding the foregoing requirements based on advice from such agencies as the Tennessee Department of Human Services.
- (5) An appropriate license must be secured for any activity regulated by any public agency, including the Tennessee Department of Human Services. Any activity lawfully regulated by any public agency may be permitted for only that time period for which a valid license is obtained. Where grades or classes of approvals are granted, only the most restrictive may be permitted.

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- (6) No more than one of either a Long Term Care Facility, Continuum of Care Facility, or Group Care Facility may be permitted on a single Block.
 - (7) A Family Care Facility may not accommodate more than one individual (excluding staff) per living room.
 - (8) The home shall be operated in a manner that is compatible with the neighborhood and shall not be detrimental to Adjacent properties as a result of traffic, noise, refuse, Parking or other activities.
 - (9) The home shall maintain a Residential appearance compatible with the neighborhood.
 - (10) The home shall meet all state requirements, and all applicable housing and building code requirements.
 - (11) A Group Care Facility must contain 1,500 square feet of net floor space for the first six residents, including resident staff, and 150 square feet of net floor space per person above six residents.
 - (12) Necessary utilities including a Central Sewage Collection and Treatment System shall be available to the site.
 - (13) Group Care Facilities accommodating from seven to 12 persons, and Family Care Facilities accommodating from one to six persons shall meet all bulk regulations for a Residence in the applicable District.
 - (14) Group Care Facilities accommodating from 13 to 50 persons shall have a minimum Lot/Building Site Area of five acres. When more than 50 persons are accommodated, there shall be one additional acre is required for each ten persons accommodated.
 - (15) The minimum Side Yards and Rear Yards for Group Care Facilities accommodating 13 or more persons shall be 50 feet for a one – or two – story building, increased by five feet for each story above two.
 - (16) The Development Plan shall be subject to approval by the Planning Commission, taking into account but not limited to the following considerations:
 - (a) Compatibility with the surrounding area;
 - (b) Any adverse impact of the proposed activity on the character of the area;
 - (c) Needed fencing and screening;
 - (d) Adequate open space and recreation space if appropriate; and
 - (e) All other requirements of this Section.
 - (17) Notwithstanding the factors listed above, the Board of Zoning Appeals shall be permitted to vary the Required Yards or Setbacks and the Screening for Parking when the application involves a change in activities in existing Structures. The Development Plan shall provide for compensating features to offset any potentially adverse conditions that might be brought about by said modification to the requirements.
- y. **Manufactured Homes** shall be permitted in accordance with the applicable Use Table, subject to the following:
- (1) No person shall place a Manufactured Home on any Lot or Building Site within a Residential District, unless it is used actively for Residential purposes. Non-Residential Use of a Manufactured Home may be permitted as a Temporary Use subject to Section 4.3.8.B, Temporary Construction Offices.
- z. **Manufactured Home Parks** shall be permitted in accordance with the applicable Use Table, subject to the following:
- (1) Applications for a Multi-family Dwelling shall be subject to the Site Development Plan Review requirements of Section 8.5.6 and shall require Planning Commission approval.

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- (2) Manufactured Home Parks must be designed and constructed to the same standards as a site-built subdivision to assure a safe, healthy Residential environment.
- (3) Where permitted, Manufactured Homes within a Manufactured Home Park shall be located to minimize hazards due to possible subsidence, flood or erosion, and insect or rodent infestation.
- (4) Landscaping and Buffering shall be provided in conformance with Section 4.3.11. A planting plan shall be submitted with the final Development Plan.
- (5) Publication "NCSBCS Standard for Manufactured Home Installations" (ANSI A 225.1 – 1982), including NFPA Standard for Fire safety Criteria for Manufactured Home Installations, Sites and Communities (NFPA 501A – 1982), shall be applicable to Manufactured Home Parks, and is hereby adopted by reference.
- (6) Each Manufactured Home Park shall be served by a public water supply of adequate quantity, quality and pressure.
- (7) Adequate fire protection, as determined by the Municipal Fire Department, shall be provided for each Manufactured Home located within a Manufactured Home Park.
- (8) Each Manufactured Home within a Manufactured Home Park shall be served by a Central Sewage Collection and Treatment System.
- (9) Solid waste collection stands shall be provided for waste facilities. Such stands shall be so designed as to prevent containers from being tipped, to minimize spillage and container deterioration, and to facilitate cleaning around them. Stands shall be screened in accordance with Section 4.3.11.
- (10) Service Buildings housing sanitation and laundry facilities shall be permanent Structures complying with all applicable Ordinances and statutes regulating buildings, electrical installations, and plumbing and sanitation systems.
- (11) All Manufactured Home Stands shall be located within reasonable proximity to a fire hydrant or similar fire protection facilities.
- (12) A safe, convenient, all-season pedestrian circulation system shall be provided and maintained between locations where pedestrian traffic is concentrated. Such common walks shall have an adequate gradient and a minimum width of three feet.
- (13) Direct vehicular access to the Manufactured Home Park shall be provided by means of an abutting improved public street or way and access to each Manufactured Home site shall be by a permanently maintained private street or way which is protected by a permanent Easement. Sole vehicular access shall not be by an Alley.
- (14) All Vehicular Use Areas used for common access for two or more residents shall be suitably paved and maintained as a condition of approval of the Manufactured Home Park.
- (15) The limits of each Manufactured Home Site shall be marked on the ground by suitable means. Location of Manufactured Home Site limits on the ground shall be the same as shown on accepted plans.
- (16) Manufactured Homes shall have a minimum side-to-side clearance of 25 feet and a minimum end-to-end clearance of 15 feet.
- (17) There shall be a minimum distance of ten feet between the nearest edge of any Manufactured Home Stand and an Abutting Street or Internal Drive.
- (18) Each Manufactured Home Site shall be provided with an outdoor living and service area. Such area shall be improved as necessary to assure reasonable privacy and comfort. The minimum area of such

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outdoor living and service area shall be at least 300 square feet, with a minimum dimension of 15 feet. This area shall not be counted towards required Civic Space.

aa. **Manufactured Home Sales** shall be permitted in accordance with the applicable Use Table, subject to the following:

- (1) The boundary of the property shall be a minimum of 500 feet from any Residentially zoned or Residentially used property.
- (2) The display area shall be set back a minimum of 25 feet from the street right-of-way and shall be Screened from the Frontage in accordance with Section 4.3.11.
- (3) In addition to the landscaping requirements in Sections 4.3.11 and 4.3.16, the following landscaping shall be provided within any Front (Street) Yard:
 - (a) An evergreen hedge which is at least 24 inches in height; or
 - (b) Plantings which meet the requirements for plantings under Section 4.3.9.D.6.y(5).
 - (c) Storage and repair activities shall be screened from off-site views.
- (4) A minimum separation of at least 10 feet shall be maintained between display homes. Display homes which are visible off-site shall be provided with some type of material and/or landscaping around the base which will prevent open views underneath the Manufactured Home.

bb. **Mobile Vending** shall be permitted in accordance with **Table 4.3.9.A-3**, subject to the following:

- (1) Issuance of a Temporary Use Permit pursuant to Section 8.5.9.
- (2) All Mobile Vending shall be subject to the following requirements and limitations:
 - (a) Access, ingress, egress, and interior vehicular or pedestrian circulation at the vending location shall not be impeded.
 - (b) Mobile vendors may not obstruct corner or driveway sight triangles depicted in **Tables 4.3.3.G.1 and 4.3.3.G.2**.
 - (c) The primary use on site shall maintain an adequate parking supply.
 - (d) Upon request of the Zoning Administrator or the Columbia Police Department the Mobile Vendor shall provide a written and signed agreement from the property owner, or owner's authorized agent, granting permission for the temporary use of the property, which shall include a provision for the usage of onsite restroom facilities when tables and/or chairs are incorporated.
 - (e) Trash receptacle of adequate size shall be provided by the vendor.
 - (f) All signage shall be on located on the mobile vending apparatus.
 - (g) With the exception of special events, vending shall only take place on a hard surface conforming to Section 4.3.12.C-7 or on properties with existing non-conforming parking areas with an approved driveway entrance.
 - (h) With the exception of Food Trucks, mobile vendors shall not remain on a single site for more than four (4) consecutive days.
 - (i) Food Trucks and shall remain movable at all times and may not be permanently secured to the site; upon request of the Zoning Administrator, each operator of a Food Truck must show current registration to operate the apparatus on public roads and demonstrate that the apparatus is movable.
 - (j) Mobile vendors must dispose of fats, oils, and grease appropriately and may not connect to city sanitary sewer.
 - (k) Any Mobile Vendor serving alcohol must by licensed by the Tennessee Alcoholic Beverage Commission and must comply with all regulations related to the sale of alcohol. Restroom facilities required for employees.

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- (l) Mobile Vendors operating at a location for a duration of more than four hours must have a written agreement, available upon request by the Zoning Administrator or the City of Columbia Police Department, that permits employees to have access to a restroom no more than 300 feet from the vending location during all the hours of operation.
- (3) Within Character District CD-5, Food Trucks and Pushcarts may be permitted to set up for service or to conduct business in the public right of way under the following criteria:
 - (a) Mobile Vending locations shall be limited to street segments designated as appropriate for Mobile Vending by the Zoning Administrator; the Zoning Administrator shall create a map of street segments designated for mobile vending at least quarterly; Mobile Vendors who set up for service in the right of way must verify allowable vending locations;
 - (b) Hours of operation shall be limited to 7:00 am to 10:00 pm;
 - (c) Only one parking space shall be occupied;
 - (d) Such Food Truck shall be removed from the parking space each day; no Food Truck may remain in the public rights of way for more than six (6) consecutive hours;
 - (e) Mobile Vendors shall not reserve, obstruct, or otherwise limit the use of parking spaces while not actually occupying the space;
 - (f) The Zoning Administrator, the Department of Public Works, or the City of Columbia Police Department may direct the Mobile Vendor to vacate the right of way at any time, the Mobile Vendor must immediately comply with directions to leave a parking space;
 - (g) The mobile vendor shall clearly identify the mobile vending area with traffic cones or similar device.
- (4) Within CIVIC Districts, Food Trucks may be permitted to set up for service or to conduct business under the following criteria:
 - (a) The Mobile Vendor holds a current Mobile Vending Permit
 - (b) The City of Columbia, or a person or organization that has entered into a use agreement with the City of Columbia, has invited the Mobile Vendor to cater a community event;
 - (c) The serving window of the Food Truck must face away from any right of way; and
 - (d) The mobile vendor shall clearly identify the mobile vending area with traffic cones or similar device.
- (5) Except as set forth in Section 4.3.9.E.aa.(3) with respect to Character District CD-5, in order to maintain the safe movement of vehicles and pedestrians on the City's roadways, Mobile Vendors, excluding Ice Cream Truck and Canteen Truck operations, shall not be permitted to set up for service or to conduct business on any public right-of-Way.
- (6) In addition to the circumstances under which Mobile Vendors may be permitted to set up for service or to conduct business in the public right of way of Character District CD-5 under Section 4.3.9.E.aa.(3), Mobile Vendors shall be permitted to set up for service or to conduct business in Character District CD-5 for a special event that includes full or partial street closures, or mass gathering permits sanctioned by the City.
- (7) A canteen truck with a current mobile food vending permit may operate on private property or from the right of way adjacent to a construction site with an active building permit in order to cater to on-site workers: between the hours of 6:00 a.m. and 6:00 p.m. on week days; a Canteen Truck may not remain on any one site for more than one (1) hour each day; the serving window of the Canteen Truck must face private property.
- (8) An Ice Cream Truck with a current mobile food vending permit may operate on private property or from the right of way; an Ice Cream Truck may not remain at any one location for more than 15

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minutes before relocating to another location not less than one-quarter mile from the previous location; the serving window of the Ice Cream Truck must face private property.

(9) The Zoning Administrator may revoke the annual temporary use permit found to be in violation of any provision of this Ordinance.

cc. **Motor Vehicle Maintenance, Repair, Fuel Sales, Service or Cleaning, other than Car Wash** shall be permitted in accordance with the applicable Use Table, subject to the following:

(1) Fuel and oil pumps, if present, shall be at least 15 feet from property lines.

(2) Pump island canopies shall be so located that a vertical downward projection of the edge nearest the Front Lot Line or Building Line shall not be closer than 1/2 the required yard depth for the District in which the Use is located.

(3) Any repair, servicing, maintenance or other work on vehicles shall be conducted within an enclosed Structure.

(4) No outdoor storage shall be allowed.

(5) Storage of vehicles for 15 days or more shall be prohibited.

(6) A spill prevention and counter measures plan shall be provided prior to construction plan approval that includes, at a minimum:

(a) Cleanup procedures for spills occurring inside and outside the Building;

(b) Counter measures for use in preventing spills from entering the stormwater collection system;

(c) Routine cleanup procedures for work areas and Parking areas; and

(d) Wash-down water shall not be permitted to enter the stormwater collection system.

dd. **Motor Vehicle Sales, Leasing, and Rentals** shall be permitted in accordance with the applicable Use Table, subject to the following:

(1) All Junk Vehicles or inoperable vehicles or equipment shall be within a completely enclosed Building.

(2) Vehicle or equipment repairs made on-site shall be conducted within an enclosed Structure.

(3) Adequate on-site area shall exist for the loading and unloading of vehicles from car carriers to ensure that no such loading or unloading occurs in any Right-of-Way.

(4) No vehicles shall be displayed in required landscaping or in Rights-of-Way.

(5) Vehicle sales, leasing, and rental facilities shall meet the following Parking Area landscaping standards rather than those of Section 4.3.12.C:

(a) Trees shall be planted at the rate of one tree per 50 linear feet, and shrubs at the rate of one shrub per five linear feet of display area.

(b) Plants may be grouped together, provided that at least 250 square feet of contiguous growing area, not encroached upon by impervious surfaces, surrounds each planted tree.

(6) The provisions of Section 4.3.9.E (ff) shall not apply.

ee. **Non-Banking Financial Institution** shall be permitted in accordance with the applicable Use Table, subject to the following:

(1) A Non-Banking Financial Institution shall be located no less than 1,320 linear feet from the property line of another property upon which another Non-Banking Financial Institution is located.

ff. **On-Street Vending** shall be permitted in accordance with the applicable Use Table, subject to the following:

(1) Issuance of a Temporary Use Permit pursuant to Section 8.5.9.

gg. **Outdoor Display** shall be permitted in accordance with the applicable Use Table, subject to the following:

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- (1) Outdoor Display shall be permitted only through the Administrative Adjustment process in Section 8.5.8.
 - (2) A binding site plan illustrating the extent of the permitted area for outdoor display shall be required.
 - (3) Vehicles for sale, lease or rent as part of a properly permitted Use (including boats and manufactured housing) shall not be considered merchandise, material or equipment subject to the restrictions of this Section.
 - (4) Plant material at a Plant Nursery or Plant Nursery with Landscape Supply shall not be considered merchandise, material or equipment subject to the restrictions of this Section.
 - (5) Waste generated on-site and deposited in ordinary refuse containers shall not be subject to the restrictions of this Section.
 - (6) Temporary uses permitted by these zoning regulations are not subject to the requirements of this Section.
 - (7) The requirements of this Section do not supersede any previously issued Conditional Use or special exception for outdoor display or storage.
 - (8) The outdoor location of soft drink or similar vending machines shall be considered outdoor display where the location is visible from Adjacent Residential Development.
 - (9) Outdoor acceptance of payment or other remittance (including cash registers or similar devices) shall not be permitted, except for activities permitted through a Temporary Use permit.
- hh. **Outdoor Recreation** shall be permitted in accordance with the applicable Use Table, subject to the following:
- (1) The use shall have direct access from a major or minor thoroughfare.
 - (2) Food sales shall be provided for patrons of the recreational activity only.
 - (3) Passive recreational activities may use alternative Parking surfaces as approved by the City Engineer.
- ii. **Outdoor Storage**, where permitted by this Ordinance, shall be located at least 15 feet from the public right-of-way and any Abutting Residential Use or Residential District. All areas utilized for outdoor storage should be screened from view from the public right-of-way.
- jj. **Parking Lots** shall be permitted in accordance with the applicable Use Table, subject to the following:
- (1) No storage, repair, or sales of vehicles shall be allowed on the site.
 - (2) A wall or continuous evergreen hedgerow of at least 24 inches and fence no more than 48 inches in height shall be placed around the perimeter of the Parking area to prevent Encroachment of vehicles into the surrounding area. Openings for pedestrian and vehicular access are permitted.
 - (3) Compliance with all other applicable provisions of this Code related to Parking Lots.
- kk. **Self-Service Storage Facilities** shall be permitted in accordance with the applicable Use Table, subject to the following:
- (1) Except when located within District SD-LI or SD-HI, there shall be a Parcel Buffer provided pursuant to Section 4.3.11.H, which shall include a perimeter fence no less than four feet and no more than eight feet in height. Such fence shall be Screened in accordance with Section 4.3.1.
 - (2) Barbed-wire, razor wire, or similar accoutrements may not be used on portions of the fence visible from a roadway. Acceptable materials include wrought iron, aluminum, stone, brick or other materials with similar appearance.
 - (3) One Loading Space shall be provided for each 10,000 square feet of enclosed storage area.

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(4) When located within a PUD District, the Use shall maintain a minimum 300 foot Setback from any property line along arterial roadways.

ll. **Short-Term Rental Units** shall be permitted in accordance with the applicable Use Table, subject to the following:

- (1) the Short-Term Rental Unit must be in a Building originally used or designed to be used as an abode or home of a person, family, or household in either a portion of a single-family house, or an individual Dwelling Unit in a two-family Dwelling, or townhouse, which Short-Term Rental Unit is rented wholly or partially for a period of less than thirty (30) continuous days occupancy for a fee;
- (2) the owner, defined as Single-Family Dwelling, of such Short-Term Rental Unit must reside on the premise;
- (3) each Short-Term Rental Unit must be registered with and licensed by the City.
- (4)

mm. **Tobacco, Vape, and Cannabinoid Retailers** shall be permitted where the Building, Lot and Building Site Principal Uses Table permits Retail Sales subject to the following limitations:

- (1) Tobacco, Vape, and Cannabinoid retailers shall be located no less than one thousand feet from
 - a. A existing Tobacco, Vape, and Cannabinoid retailer;
- (2) Tobacco, Vape, and Cannabinoid retailers shall be located no less than five hundred feet from
 - a. Private school serving any grades between kindergarten and twelfth grade;
 - b. A city or county park;
 - c. A daycare center; or
 - d. A church.
- (3) Tobacco, Vape, and Cannabinoid retailers shall be located no less than two hundred feet from any property zoned CD-2, CD-3, CD-3L, SD-MHP, or PUD-R.
- (4) Tobacco, Vape, and Cannabinoid retailers shall be located no less than fifty feet from any property used as a Single-Family or Two-Family home or Townhouse.
- (5) Required distances shall be measured from property line to property line.
- (6) The hours of operation for a Tobacco, Vape, and Cannabinoid Retailers shall be no earlier than six A.M. and no later than ten P.M.

nn. **Townhouses or Rowhouses** shall be permitted in accordance with the applicable Use Table, subject to the following:

- (1) Party walls, subject to the provisions of the Standard Building Code and National Fire Protection Association Fire Code, shall be provided along all points of attachment.

oo. **Transfer Stations and Recycling Facilities** shall be permitted in accordance with the applicable Use Table, subject to the following:

- (1) The transfer station shall handle only waste that can be legally handled or disposed of in a solid waste landfill facility. This limitation shall not preclude use of the transfer station site for collection, processing, storage, and transfer of recyclable materials or for other waste reduction activities.
- (2) Recycling facilities shall handle only recyclable materials for which a permit has been obtained through the appropriate regulatory agency.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

- (3) The entrance Driveway shall be located on a major thoroughfare located within 2,000 feet of an interstate highway interchange.
 - (4) There shall be at least 500 feet of separation between the facility [building and vehicular use areas adjacent to the building] and the nearest Residential Structure.
 - (5) The facility shall conform to all applicable State and federal regulations.
- pp. **Utility Facilities** shall be permitted in accordance with the applicable Use Table, subject to the following:
- (1) Utility Facilities in Residential areas or adjoining Residential Uses shall maintain Residential area Setbacks or Required Yards, be fenced (unless totally enclosed with a Structure), and either be screened from view or designed to have a Residential appearance.
 - (2) Expansion of Utility Facilities originally approved through the issuance of a Conditional Use Permit pursuant to Section 8.5.16 of up to 20% or 1,000 square feet, whichever is greater, may be approved administratively by the Zoning Administrator.
- qq. **Waste Handling Facility, Not Otherwise Classified** may be permitted in accordance with the applicable Use Table, subject to the following:
- (1) A Heavy Manufacturing Permit shall be required (See Section 8.5.22) in addition to a Conditional Use Permit.
 - (2) The facility shall comply with all applicable State and federal regulations.
 - (3) Any additional conditions imposed during the Heavy Manufacturing Permit or Conditional Use Permit process.
- rr. **Wireless Communication Facilities other than Communications Towers** shall be permitted in accordance with the applicable Use Table, subject to the following:
- (1) The requirements set forth in this Section 4.3.9.D.6.n. shall govern the location of Towers that exceed, and antennas that are installed at a height in excess of 70 feet. The height limitations applicable to Buildings and Structures shall not apply to Towers and Antennas.
 - (2) Antennas or Towers located on property owned, leased, or otherwise controlled by the CITY shall be exempt from the requirements of this subsection, provided a license or lease authorizing such Antenna or Tower has been approved by City Council.
 - (3) This Section shall not govern any Tower, or the installation of any Antenna, that is under 70 feet in height and is owned and operated by a federally – licensed amateur radio station operator or is used exclusively for receive – only Antennas.
 - (4) The following requirements must be met:
 - (a) Site and landscape plans drawn to scale and landscape plans drawn to scale;
 - (b) A report including a description of the Tower with technical reasons for its design;
 - (c) Documentation establishing the structural integrity for the Tower’s proposed uses, certified by a professional engineer licensed in the State of Tennessee competent in such design, the general capacity of the Tower and information necessary to assure that ANSI (American National Standard Institute) standards are met;
 - (d) A statement of intent whether excess space on the Tower will be leased;
 - (e) Proof of ownership of the site or a copy of the owner’s authorization to use the site;
 - (f) Copies of any Easements necessary to gain access or limited Development areas;
 - (g) An analysis of the site containing existing topographical contours;

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- (h) A written opinion from an appropriate authority that the soils and underlying materials will support the intended Structure;
 - (i) Evidence that the Tower facility meets technical emissions standards set by the FCC (Federal Communication Commission);
 - (j) Evidence of "Determination of No Hazard" from the FAA (Federal Aviation Administration), as well as all required FCC permit information;
 - (k) Alternatives to the Tower location and why this site was selected; and
 - (l) Evidence that the site complies with requirements of the NEPA (National Environmental Policy Act) in regard to impact on wildlife, endangered species, historical sites, Native American religious sites, floodplains, wetlands, high intensity white lights in Residential neighborhoods, and frequency emissions in excess of FCC guidelines.
- (5) Towers may be built on the same Lot or Building Site with another Principal Use. A separation a minimum of the Tower height between the Tower and any other Principal Use is required in order to provide for the health, safety and welfare of individuals and Structures occupying the same site. Joint use is prohibited on a Lot or Building Site where a proposed or existing Principal Use includes the storage, distribution or sale of volatile, flammable, explosive or hazardous wastes such as LP gas, propane, gasoline, natural gas and corrosive or dangerous chemicals.
- (6) Towers 80 feet or more in height shall be located on the Lot so that the distance from the base of the Tower to any adjoining property line or supporting Structure of another Tower is a minimum of 100% of the proposed Tower height. No Variance shall be granted from this minimum setback requirement.
- (7) Except as specifically required by the FAA (Federal Aviation Administration) or the FCC (Federal Communication Commission), transmission Structures shall:
- (a) use colors such as gray, blue or green which reduce their visual impacts; provided, wooden poles do not have to be painted; and
 - (b) not be illuminated, except equipment shelters may use lighting for security reasons which is compatible with the surrounding neighborhood;
 - (c) not use strobe lights unless specifically required by FAA.
- (8) Any proposed Tower shall be structurally designed so as to accommodate the minimum number of foreseeable shared users.
- (9) No advertising or display is permitted on any Communication Tower.
- (10) Any Accessory Buildings or Structures shall be located a minimum of 50 feet from any adjoining property line. Except for emergency purposes, the accessory facilities may not include offices, long-term vehicular storage, other outdoor storage, or broadcast studios, unless the Use is permitted in the District.
- (11) The Tower base and equipment area shall be enclosed with a fence no less than six feet in height. Access shall be locked at all times when the site is not occupied.
- (12) Where the Tower site abuts or is contiguous to any Residential District, there shall be provided a continuous, solid Screening and it shall be of such plant material as will provide an evergreen Screen. Screening as required herein shall be not less than four feet in height at the time of planting and shall be permanently maintained.
- (13) Location on any other Structure other than a Tower (i.e., water tank, utility poles, roof tops, etc.) is permitted subject to the provisions listed above relating to a Tower location.

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- (14) Co – location on Towers is encouraged. The Zoning Administrator has authority to approve a co – location on an existing Tower subject to:
 - (a) receipt of a letter from a licensed engineer stating that the Tower is structurally adequate to handle the additional load; and
 - (b) the FCC technical emissions standards not being exceeded.
- (15) Any Antenna or Tower that is not operated for a continuous period of 12 months shall be considered abandoned and the owner of such antenna or tower, as well as any shared user(s) of the Tower or Antenna, shall remove same within 90 days of receipt of notice from the City notifying the owner and shared user(s) of such abandonment. If such Antenna or Tower is not removed within said 90 days, the City may remove or have the Structure removed at the owner's expense.
- ss. **Wrecking, junk, and salvage yards** shall be permitted in accordance with the applicable Use Table, subject to the following:
 - (1) A Heavy Manufacturing Permit shall be required (See Section 8.5.22) in addition to a Conditional Use Permit.
 - (2) The facility shall not be within 1,000 feet of Residentially zoned or Residentially used property; however, intervening highways, streets, railroads, and similar Rights-of-Ways shall be included in the 1,000-foot measurement.
 - (3) The facilities shall be enclosed by a fence and shall be Screened from view. The fence shall be six-feet high, measured from the lowest point of grade. The fence shall be maintained in good condition. No stored materials shall be visible from ground level immediately outside the fence.
 - (4) A spill prevention and countermeasures plan shall be provided prior to construction plan approval that includes, at a minimum:
 - (a) Cleanup procedures for spills occurring inside and outside the Building;
 - (b) Countermeasures to prevent spills from entering the stormwater collection system; and
 - (c) Routine cleanup procedures for work areas and parking areas. Washdown water shall not be permitted to enter the stormwater collection system.
 - (5) Any additional conditions imposed during the Heavy Manufacturing Permit or Conditional Use Permit process.

F. General Performance Standards for All Uses

- 1. Any activity which releases smoke, particulate matter, gases or contaminants into the atmosphere shall comply with all applicable federal and State regulations.
- 2. All activities shall comply with the City Fire Codes.
- 3. All activities shall comply at a minimum with all applicable State and federal regulations as well as the appropriate County Health Department regulations and City and County fire department regulations for hazardous materials and wastes.
- 4. All activities shall control electromagnetic frequencies so that there is no interference in the operation of equipment off-site and no adverse effects to persons off-site.
- 5. Any activity which discharges material or liquids into sanitary sewers shall conform to all federal, state and local discharge and release regulations. City sanitation ordinances may also apply. The drainage of waste or stored materials onto adjacent properties or directly into creeks and watercourses or into the stormwater conveyance system is prohibited. Only uncontaminated stormwater runoff may be discharged into the stormwater conveyance system.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

6. All activities shall comply with all federal and State regulations which apply to the handling, storage, and disposal of nuclear material.
7. All activities shall comply with all City regulations which pertain to the emanation of sound waves.

G. Accessory Uses

1. Accessory Uses are Permitted by Right, Permitted Subject to Limited Use Standards, as Conditional Uses, or Not Permitted, as indicated in **Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses)**.
2. Those Uses shown in **Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses)** as “P” (Permitted Accessory Use) are permitted in the applicable District, as indicated, if subordinate and customarily incidental to a permitted Principal Use existing on the Lot or Building Site.
3. Those Uses shown in **Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses)** as “CU” (Conditional Use) are permitted in the applicable District, as indicated, if compliant with all applicable standards, requirements and conditions of Section 4.3.9.E and subject to issuance of a Conditional Use Permit pursuant to Section 8.5.16.
4. Those Uses shown in **Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses)** as “PL” (Permitted Subject to Limited Use Standards) are permitted in the applicable District, as indicated, if compliant with all applicable standards, requirements and conditions of Section 4.3.9.E

TABLE 4.3.9.A-2 BUILDING, LOT & BUILDING SITE ACCESSORY USES

ACCESSORY USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Accessory Building	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Accessory Dwelling Unit	PL	PL	PL	PL	PL	PL	PL	NP	PL	PL	NP	NP	PL	PL
Accessory Garden Center	NP	NP	NP	NP	P	NP	P	NP	P	P	NP	NP	NP	NP
Parish House, Rectory, Parsonage, Monastery, or Convent on Site with Place of Worship	P	P	P	P	P	P	P	P	P	P	NP	P	NP	P
Dormitory on Site with Educational Institution	NP	NP	NP	P	P	P	P	P	P	P	NP	NP	NP	P

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TABLE 4.3.9.A-2 BUILDING, LOT & BUILDING SITE ACCESSORY USES

ACCESSORY USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Hazardous Materials Storage	NP	NP	NP	NP	NP	NP	NP	NP	CU	CU	CU	NP	NP	NP
Minor Home Occupation	PL	PL	PL	PL	PL	PL	PL	PL	PL	PL	NP	PL	PL	NP
Major Home Occupation	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU	NP	CU	CU	NP
Child Care for 4 or fewer In Home	P	P	P	P	P	P	P	P	NP	P	NP	P	P	NP
Outdoor Storage	NP	NP	NP	NP	NP	NP	NP	NP	NP	PL	PL	NP	NP	NP
Parking Area	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Recreation, refreshment and service uses of Structures in Civic Space incidental to the Civic Principal Use	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	P	P
Retail Sales Accessory to Light Manufacturing or Warehouse	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	NP	NP	NP
Motor Vehicle Maintenance that is routine, periodic and incidental, if inside Garage or in 3rd Layer& vehicle is owned and registered occupant of Dwelling	P	P	P	P	P	P	P	P	P	P	P	P	P	NP
Outdoor Display	NP	NP	NP	PL	PL	PL	PL	PL	PL	PL	NP	NP	PL	PL
School on site with Place of Worship	P	P	P	P	P	P	P	P	P	P	NP	P	NP	P
Seminary on site with Place of Worship	P	P	P	P	P	P	P	P	P	P	NP	P	NP	P

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.9.A-2 BUILDING, LOT & BUILDING SITE ACCESSORY USES

ACCESSORY USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Solar Panels	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Sports Court, Swimming Pool, Hot Tub in 3rd Layer	P	P	P	P	P	P	P	P	P	P	NP	P	NP	NP
Tasting Room on site with Brewery, Distillery, Winery	NP	NP	NP	P	P	P	P	P	P	P	P	NP	NP	NP
Telecommunications Receiving Equipment	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Wireless Telecommunications Facility	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU	CU

H. Temporary Uses

1. Temporary Uses indicated in Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses) as Permitted (“P”) are allowed by right, subject to the issuance of a Temporary Use Permit by the Zoning Administrator.
2. Temporary Uses indicated in Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses) as Permitted Subject to Limited Use Standards (“PL”) are allowed by right provided that the applicable standards and requirements are met, subject to the issuance of a Temporary Use Permit by the Zoning Administrator.
3. Temporary Uses indicated in Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses) as Conditional Use (“CU”) are allowed by Conditional Use Permit, subject to compliance with the Conditional Use requirements of this Article and the issuance of a Temporary Use Permit by the Zoning Administrator.
4. Temporary Uses indicated in Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses) as Not Permitted (“NP”), not allowed as Permitted (“P”) or allowed as a Conditional Use (“CU”), or otherwise prohibited by this Ordinance are prohibited as Temporary Uses.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.9.A-3 BUILDING, LOT & BUILDING SITE TEMPORARY USES

PRINCIPAL USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD-5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD-R	PUD-MU	CV
Trailers in Third Layer for Storage of Goods Associated with Commercial Principal Use, for up to 6 months with possible extension to 12 months	NP	NP	NP	CU	CU	CU	CU	CU	CU	CU	CU	NP	CU	NP
Seasonal Uses or Uses for Unusual Non- Recurrent Events, for no more than 30 days	P	P	P	P	P	P	P	P	P	P	P	P	P	P
New Subdivision Sales & Management Office, until development completion	P	P	P	P	P	P	P	P	NP	P	P	P	P	NP
Construction Office Trailer	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Mobile Vending	PL	PL	PL	PL	PL	PL	PL	PL	PL	PL	PL	PL	PL	PL

4.3.10 ENCROACHMENTS

Encroachments of Building Elements are allowed within each District and Civic District only as set forth in **Table 4.3.10 (Encroachments)**.

TABLE 4.3.10 ENCROACHMENTS

ENCROACHMENTS - REQUIRED SETBACKS & YARDS*

**ENCROACHMENTS SHALL MEET REQUIREMENTS FOR A CLEAR SIGHT TRIANGLE.*

Encroachment Type	FRONT/STREET	SIDE	REAR
Steps to Building Entrance	P	P	P
Open Porches, including Steps	P	P	P
	≤ 25% Setback/Yard		

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ENCROACHMENTS - REQUIRED SETBACKS & YARDS*

**ENCROACHMENTS SHALL MEET REQUIREMENTS FOR A CLEAR SIGHT TRIANGLE.*

Encroachment Type	FRONT/STREET	SIDE	REAR
Patios, in permitted applicable Layer	NP	P	P
Decks, in permitted applicable Layer	NP	P ≤ 25% Setback/Yard	P ≤ 25% Setback/Yard
Openwork Fire Escapes & Fire Balconies	NP	P ≤ 6 ft.	P ≤ 6 ft.
Chimney flues, sills, belt courses, cornices, buttresses eaves and other Architectural Features	P	P	P
Satellite dishes/ antennae	NP	NP	P
Mechanical equipment, including HVAC	NP	P	P
Underground utility lines, wires and associated Structures (e.g. poles)	P	P	P
Fences, hedges, walls, Shrubbery, and other landscape features	P	P	P
Parking Areas, Loading Areas and Driveways in 3rd Layer	NP	P	P
Bicycle Parking	P	P	P
Stoops	P	P	P
Balconies and Bay Windows	P	P	P
Driveways & Sidewalks	P	P	P
Retaining walls	P ≤ 3 ft. in height	P ≤ 4 ft. in height	P ≤ 6 ft. in height
Awnings or canopies w/out support other than integral or wall support	P ≤ 6 ft.	P	P
Signs permitted by Article 7 (Signs)	P	P	P
Eaves, gutters, or Downspouts	P	P	P

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

ENCROACHMENTS - REQUIRED SETBACKS & YARDS*

**ENCROACHMENTS SHALL MEET REQUIREMENTS FOR A CLEAR SIGHT TRIANGLE.*

Encroachment Type	FRONT/STREET	SIDE	REAR
	≤ greater of 24" or 20% of Setback / Yard	≤ greater of 24" or 20% of setback / Yard	≤ greater of 24" or 20% of Setback /Yard
Flagpoles w/ < 1 structural ground member	P	P	P
Clothes poles or lines	NP	NP	P
Mailboxes	P	P	P
Sculptures or similar artistic Objects	P	P	P
Street furniture, such as benches, drinking fountains, trash receptacles, ash trays, & lighting standards	P	P	P

4.3.11 SCREENS, STREETSCREENS, & LOT/BUILDING SITE/PARCEL BUFFERS

A. Compliance with Standards

Any Screen, Streetscreen, or Buffer required under this Ordinance shall comply with the applicable standards and requirements in **Tables 4.3.1-A - 4.3.1-N(District Standards)**, and this Section 4.3.11.

B. When Screening Required

Screening of the items and conditions indicated shall be provided as required for each applicable District in **Tables 4.3.1-A - 4.3.1-N(District Standards)**, and this Section 4.3.11, except in each case, at any Driveway.

C. Location of Streetscreen

Any Streetscreen must be located as set forth in **Tables 4.3.1-A - 4.3.1-N(District Standards)**.

D. Wall Screen / Streetscreen Material

A Wall Screen or Streetscreen shall be constructed of the materials specified in **Tables 4.3.1-A - 4.3.1-N(District Standards)**.

E. Fence Screen / Streetscreen Material

A Fence Screen or Streetscreen shall be constructed of the materials specified in **Tables 4.3.1-A - 4.3.1-N(District Standards)**.

F. Hedge Screen / Streetscreen Standards

A hedge Screen or Streetscreen shall consist of plants meeting the standards of **Tables 4.3.1-A - 4.3.1-N(District Standards)**.

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G. Openings in Streetscreens

Streetscreens shall have openings no larger than necessary to allow vehicular and pedestrian access.

H. Lot/Building Site/Parcel Buffer Requirements

1. For Project Buffers applicable to Development Parcels, see Section 5.8.
2. If a Project Buffer exists or is required pursuant to Section 5.7, a Lot/Building Site/ Parcel Buffer is not required under this Section 4.3.11.H.
3. Except as provided in paragraph 4.3.11.H.2 or as otherwise specifically provided in this Ordinance, a Lot/Building Site/ Parcel Buffer must be provided for any new Development or Structure within Districts CD-4C, CD-5C, PUD-R, PUD-MU, or any Special District, along the common Lot, Building Site, or parcel boundary of such Development or Structure and that of any Lot, Building Site, or parcel on which a single-family Dwelling or Two-Family Detached Residential Dwelling is located. Except as otherwise specifically provided in this Ordinance, all Lot/Building Site/ Parcel Buffers required under this Article 4 must meet the following requirements:

I. Modification

1. The Lot/Building Site/Parcel Buffer requirement at 4.3.11.H. may be modified by the Zoning Administrator upon a finding that:
 - a. a modification would be consistent with the purpose of protecting residential land uses from noise, odor, and unsightliness of adjacent higher intensity land uses;
 - b. the actual proposed use of the Lot or Building Site is not incompatible with the use of the abutting parcel;
 - c. a modified buffer, fence, or screening adequately mitigates any potential deleterious impact to abutting parcels; or
 - d. site conditions render the required buffer ineffective.
2. The applicant may appeal the Zoning Administrator's determination as described in 8.5.17.

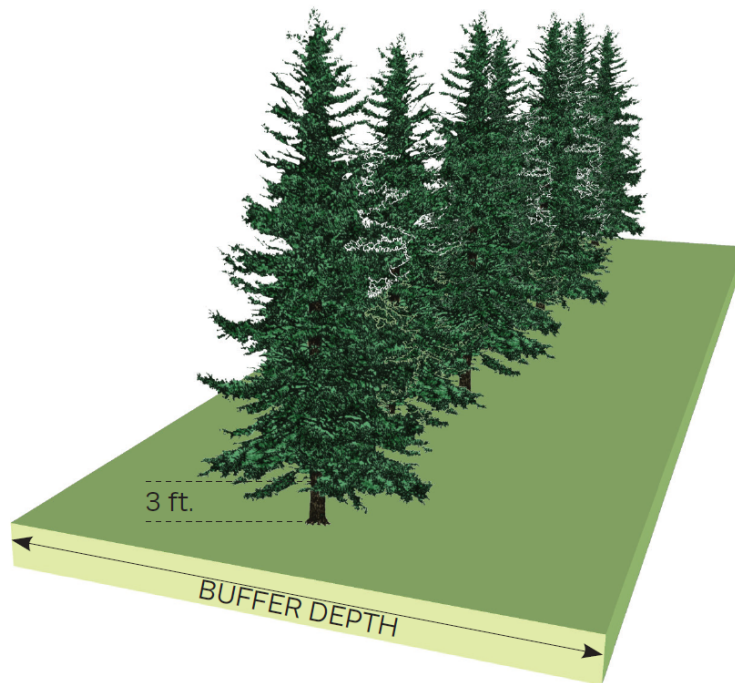
TABLE 4.3.11.H.-1 LOT/BUILDING SITE/PARCEL BUFFER

District of New Dev/Structure	Buffer Depth	Buffer
CD-4	25 ft	Min. 90% opacity 3 ft. from ground and up; Evergreen plants $\geq$ 2.5 in, caliper measured 3 ft. from ground & 8

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		ft. tall @ installation & 20 ft. tall @ maturity, planted $\leq$ 10 ft. O.C
CD-4C	25 ft.	Same
CD-5C	25 ft.	Same
PUD-R or PUD-MU	75 ft.	Same
SD-MHP	50 ft.	Same
SD-INT, SD-LI, or SD-HI	100 ft.	Same

ILLUSTRATION 4.3.11.H-2 BUFFER



4.3.12 PARKING

A. General

Within each District, all Parking Areas, Parking Structures, Parking Lots, Garages, and other Parking accommodations shall be provided, located, designed, accessed, constructed, maintained, operated, and otherwise meet the standards and requirements specified for the applicable District in **Tables 4.3.1-A– 4.3.1-N (District Standards)**, **Table 4.3.12.B (Vehicular Parking Requirements)** and **Table 4.3.12.C (Off-Street Vehicular Parking Space Dimensions)** or **Table 4.3.12.A-3 (Off-Street Compact Vehicular Parking Space Dimensions)**, except as they may be modified by the handicapped Parking regulations found in Section 4.3.12.B.9 and 4.3.12.B.10.

B. Parking Required

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Vehicular Parking shall be provided in accordance with this Section 4.3.12.B and **Table 4.3.12.B (Vehicular Parking Requirements)**, shall comply with and be located and in accordance with **Tables 4.3.1-A–4.3.1-N (District Standards)** and shall be designed in accordance with Section 4.3.12.C and **Table 4.3.12.C (Off-Street Vehicular Parking Space Dimensions)**.

1. Vehicular Parking required for each Lot or Building Site shall be determined based on the quantity of Principal Use(s) of the Lot or Building Site and the number of spaces available to the Lot or Building Site, as determined by Section 4.3.12.B, Section 4.3.12.4, and **Table 4.3.12.B-1 (Vehicular Parking Requirements)**.
2. The number of spaces of Parking available to a Lot or Building Site is the sum of:
 - a. All spaces within the Lot or Building Site;
 - b. All spaces Adjacent to the Frontage Line on the same side of the Thoroughfare or Internal Drive as the Lot or Building Site, and
 - c. If elected by the Applicant, all spaces within the same or an Adjacent Block within a public Parking Lot or Parking Structure or by Parking agreement or Easement.
3. Any fractional spaces shall be rounded down to the nearest whole number.
4. Exemptions
 - a. Within CD-5, the Columbia Arts District Overlay, and the Columbia West End Historic District, existing buildings and uses shall comply with the following:
 - (1) When a non-residential use is changed to another non-residential use, additional parking spaces are not required;
 - (2) A one-time building expansion of ten percent (10%) or less of the existing floor area, up to a maximum expansion of 1,000 square feet, shall not require additional parking spaces, provided that the number of existing parking spaces on the Lot or Building Site shall not be reduced to accommodate the expansion;
 - (3) When a building is demolished and a new building is constructed, or the area of the structure is expanded by more than ten percent (10%), parking shall comply with the standards of this section for the entire square footage of the building.
 - (4) For new construction, the Zoning Administrator may approve counting all public and on-street spaces within 1,320 feet of the Lot or Building Site; and
 - (5) When a residential use is changes to a non-residential use, the Zoning Administrator may approve counting all public and on-street spaces within 1,320 feet of the Lot or Building Site.
 - (6) The number of spaces of Parking available to a Lot or Building Site may not exceed, the number of spaces of Parking determined by Table 4.3.12.B-1 (Vehicular Parking Requirements) by more than thirty percent (30%) based on the quantity of Principal Use(s) on the Lot or Building Site, provided that the minimum number of spaces may be reduced pursuant to Section 4.3.12.B.5 and Section 4.3.12.B.6.
 - (7) For purposes of this Section 4.3.12.B-2, the number of Parking spaces available to a Lot or Building Site may be reduced, at the election of the Applicant, by dividing the number of spaces of Parking required to be available to the Lot or Building Site by the applicable Shared Parking Factor. The Zoning Administrator may assign an appropriate factor to uses not listed.
 - (8) The applicable Shared Parking Factor is determined under Table 4.3.12-B (Shared Parking Factor) for any two Principal Uses within the Lot or Building Site or within the Lot or Building Site and any other Lot or Building Site within the same or any Adjacent Block.

TABLE 4.3.12.B-1 VEHICULAR PARKING REQUIREMENTS

PRINCIPAL USE	MINIMUM NUMBER OF SPACES OF PARKING AVAILABLE TO LOT PER UNIT OF MEASUREMENT
	AGRICULTURAL & EXTRACTIVE USES CATEGORY

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TABLE 4.3.12.B-1 VEHICULAR PARKING REQUIREMENTS

PRINCIPAL USE	MINIMUM NUMBER OF SPACES OF PARKING AVAILABLE TO LOT PER UNIT OF MEASUREMENT
Agricultural	
Any Agricultural Use	Not Regulated
Extractive	
Any Extractive Use	Not Regulated
RESIDENTIAL USES CATEGORY	
Household Living	
Attached Dwellings, except Two Family Dwelling	2 per Dwelling Unit in PUD-R & PUD-MU; 1.5 per Dwelling Unit in other Districts
Residence Portion of a Live/Work, Mixed-Use, or Flex Building	1.5 per Dwelling Unit
Single-Family Detached Dwelling	2 per Dwelling Unit, plus 1 per any rented room
Two Family Dwelling	2 per Dwelling Unit
Group Living	
Group Living Home	2 per Group Living Home + 1 per each Counselor
Other Residential Use Not Listed Under Any Use Category	1.5 per Dwelling Unit
CIVIC USES CATEGORY	
Community Service	
Auditorium (Civic)	1 per 200 square feet of total Usable Floor Area
Civic Building	1 per 3 permanent seats, or 1 per each 40 square feet of seating area where fixed seating is not provided
Civic Space- Community Garden, Green, Square, Plaza, Park, Playground, Sports Field	1 per 5,000 square feet of grass land area
Club or Lodge (Civic)	1 per 1,000 square feet of total Usable Floor Area

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.12.B-1 VEHICULAR PARKING REQUIREMENTS

PRINCIPAL USE	MINIMUM NUMBER OF SPACES OF PARKING AVAILABLE TO LOT PER UNIT OF MEASUREMENT
Conference/ Convention/ Exhibition Center	1 per 3 permanent seats, or 1 per each 40 square feet of seating area where fixed seating is not provided
Courthouse	1 per employee plus 1 per every 3 seats of seating available to the public in the courtrooms
Food Distribution Center (Civic)	1 per 1,000 square feet of total Useable Floor Area
Gallery/ Museum	1 per 3 permanent seats, or 1 per each 40 square feet of seating area where fixed seating is not provided
Library	1 per 100 square feet of seating area
Parking Lot/ Parking Structure (Civic)	Not Regulated
Performing Arts Venue	1 per 3 permanent seats, or 1 per each 40 square feet of seating area where fixed seating is not provided
Place of Assembly	1 per 3 permanent seats, or 1 per each 40 square feet of seating area where fixed seating is not provided
Post Office	1 per 500 square feet of Usable Floor Area
Recreation Facility (Civic)	1 per 200 square feet of activity Usable Floor Area + 1 per 200 square feet of gross swimming water surface area + 2 spaces per tennis court + 5 spaces per basketball court + 15 spaced per athletic field
Sports Venue	1 per 3 permanent seats, or 1 per each 40 square feet of seating area where fixed seating is not provided
Transit Shelter	Not Regulated
Transit Station or Terminal	Transit vehicle storage space + 1 per 50 feet of waiting area + 1 per 2 employees
Day Care Facilities (Civic)	

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.12.B-1 VEHICULAR PARKING REQUIREMENTS

PRINCIPAL USE	MINIMUM NUMBER OF SPACES OF PARKING AVAILABLE TO LOT PER UNIT OF MEASUREMENT
All Day Care Facilities (Civic)	1 per employee + 1 per 10 clients accommodated
CIVIC USES CATEGORY CONTINUED	
Government Facilities	
Correctional Facilities	1 per employee and 1 per 20 inmates
Other Government Facility Use not listed under any Use Category	1 per employee + 1 per 500 square feet of public Usable Floor Area
Open space	
Any Open Space, excluding Civic Space	Not Regulated
Religious Facilities	
Any Place of Worship or other Religious Facility	1 per 3 permanent seats, or 1 per each 40 square feet of seating area where fixed seating is not provided
Other Civic Uses	
Other Civic Use not listed under any Use Category	Not Regulated
CIVIL SUPPORT USES CATEGORY	
Cemetery/ Funeral Services	1 per full time employee + 1 per 40 square feet of public Usable Floor Area
Fire/ EMS Station or Police Station	Not Regulated
EDUCATIONAL USES CATEGORY	
Adult Education/ Personal Improvement/ Business, Trade & Vocational Schools	
Adult Continuing Education	1 per Teacher or other staff + .50 per Student seat
Business, Trade, or Vocational School other than truck driving	1 per Teacher or other staff + .50 per Student seat
Personal Improvement Education	0.50 per Student seat + 1 per Teacher or other staff

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.12.B-1 VEHICULAR PARKING REQUIREMENTS

PRINCIPAL USE	MINIMUM NUMBER OF SPACES OF PARKING AVAILABLE TO LOT PER UNIT OF MEASUREMENT
Truck Driving School	1 per Teacher or other staff + 1 per Student
Pre-school/ Primary/ Intermediate/ Secondary Schools	
Pre-school	1 per Teacher or other staff + 1 per 20 Students
Kindergarten	1 per Teacher or other staff + 1 per 20 Students
Elementary School	1 per Teacher or other staff + 1 per 20 Students
Middle School	1 per Teacher or other staff + 1 per 20 Students
High School	1 per Teacher or other staff + 0.50 per Student seat
Post-Secondary School	
College or University	1 per Teacher or other staff + 1 per Student
Community College	1 per Teacher or other staff + 1 per Student
Graduate or Professional School	1 per Teacher or other staff + 1 per Student
Nursing Por Medical School not accessory to a Hospital	1 per Teacher or other staff + 1 per Student
Seminary	1 per Teacher or other staff + 1 per Student
Other Educational Use	
Other Educational Use Not Listed in Any Other Category	1 per Teacher, Instructor, Care Giver or other staff + 1 per 20 Students or Children
INSTITUTIONAL USE CATEGORY	
Health Care	
Clinic	2 per patient rooms
Hospice, other than at-home care	.50 per bed
Hospital	.50 per bed
Rehabilitation Facility or Facility for Observation	.50 per bed
Long Term Care	

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.12.B-1 VEHICULAR PARKING REQUIREMENTS

PRINCIPAL USE	MINIMUM NUMBER OF SPACES OF PARKING AVAILABLE TO LOT PER UNIT OF MEASUREMENT
Long Term Care Facility or Continuum of Care Facility	1 per 3 beds
Other Institutional Use	
Other Institutional Uses Not Listed in any Use Category	1 per patient or Client room
COMMERCIAL USES CATEGORY	
Accommodations / Lodging	
Bed & Breakfast or Inn	1 per Dwelling Unit + 1 per guest bedroom + 1 per each 2 employees on the premises at one time
Boarding or Rooming House	1 per guest bedroom + 1 per each 2 employees on the premises at one time
Hotel, Extended Stay Hotel, or Motel	1 per guest bedroom + 1 per each 2 employees on the premises at one time
Short-Term Rental Unit	1 per guest bedroom + 1 per each additional bed, cot, sofa or other sleeping accommodation
Other Accommodation/ Lodging/ Use Not Listed Under any Use Category	Not Regulated
Day Care/ Personal & Group Care (non-Civic)	
Adult Day Care (non-Civic)	1 per staff member + 1 per 3 seats or 1 per 200 square feet of activity Usable Floor Area, whichever is greater
Child Care Facility (non-Civic), excluding Child Care in Home	1 per staff member + .50 per child
Children's Day Camp	1 per staff member + .50 per child
Group Day Care or Facility or Family Day Care	1 per staff member + .50 per client
Other Day Care/ Personal & Group Care (non-Civic)	
Other Day Care/ Personal & Group Care (non-Civic)	Not Regulated

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.12.B-1 VEHICULAR PARKING REQUIREMENTS

PRINCIPAL USE	MINIMUM NUMBER OF SPACES OF PARKING AVAILABLE TO LOT PER UNIT OF MEASUREMENT
Indoor Recreation- Commercial	
Bowling Alley	1 per 500 square feet of total Usable Floor Area
Commercial Indoor Athletic Training Facility	1 per 1,00 square feet of total Usable Floor Area
Game Arcade	1 per 100 square feet of total Usable Floor Area
Gymnastics Facility	1 per 1,000 square feet of total Usable Floor Area
Indoor Firing Range	1 per 500 square feet of total Usable Floor Area
Indoor Sports Academy	1 per 1,000 square feet of total Usable Floor Area
Movie or other Theater (non-Civic)	1 per theater, bar, or dining seat or 1 per 100 square feet of total Usable Floor Area, whichever is greater
Pool Hall	1 per 300 square feet of total Usable Floor Area
Recreation Facility	1 per 200 square feet of activity Usable Floor Area + 1 per 200 square feet of gross swimming water surface area + 2 spaces per tennis court + 5 spaces per basketball court + 15 spaced per athletic field
Skating Rink	1 per 300 square feet of total Usable Floor Area
Social (or Civic) Club, Lodge, or Organization	1 per 200 square feet of gathering or activity Usable Floor Area
Other Indoor Recreation- Commercial Use Not Listed Under any Use Category	1 per 500 square feet of total Usable Floor Area
Group Assembly (non-Civic)	
Any Group Assembly (non-Civic)	1 per 4 seats
Outdoor Recreation - Commercial	
Amphitheater	1 per 2 seats + 1 per 20 square feet of standing area

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.12.B-1 VEHICULAR PARKING REQUIREMENTS

PRINCIPAL USE	MINIMUM NUMBER OF SPACES OF PARKING AVAILABLE TO LOT PER UNIT OF MEASUREMENT
BMX Bicycle Park	1 per biker accommodated or 1 per 5,000 square feet, whichever is greater
Campground	1 per campsite
Drive-In Theater	1 per vehicle accommodation
Firing Range, such as a Rifle Range, Archery Range, Handgun Range, or Skeet Shooting	1 per customer firing squad
Golf Course, Swim club, Tennis Club, Country Club	Per Planning Commission Approval
Marina/ Boating Facility	1 per Boat Slip
Recreational Vehicle (RV) Park	1 per motorized RV space + 1 per non-motorized vehicle space
Paintball Park	Per Planning Commission Approval
Outdoor Entertainment Activity, such as Batting Cage, Golf Driving Range, Amusement Park, Miniature Golf Facility	Per Planning Commission Approval
COMMERCIAL USES CONTINUED	
Skateboard Park	Per Planning Commission Approval
Sports Field	Per Planning Commission Approval
Stadium / Arena	Per Planning Commission Approval
Summer Camp (overnight)	Per Planning Commission Approval
Swimming Pool	Per Planning Commission Approval
Tennis Club	Per Planning Commission Approval
Water Park	Per Planning Commission Approval
Other Outdoor Recreational Use – Commercial not listed under any other Use Category	Per Planning Commission Approval
Parking – Commercial	
Parking Lot	Not Regulated

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.12.B-1 VEHICULAR PARKING REQUIREMENTS

PRINCIPAL USE	MINIMUM NUMBER OF SPACES OF PARKING AVAILABLE TO LOT PER UNIT OF MEASUREMENT
Parking Structure	Not Regulated
Restaurant	
Restaurant without Drive-Through Facility or Drive-In Facility	1 per 100 square feet of total Usable Floor Area
Restaurant with Drive-Through Facility or Drive-In Facility	1 per 100 square feet of total Usable Floor Area
Small-scale without Drive-Through Facility	1 per 300 square feet of total Usable Floor Area
Bars, Taverns, or Nightclub	
Bar, Tavern, or Nightclub	1 per 100 square feet of total Usable Floor Area
Retail/ Personal Service/ Repair/ Art/ Artisan	
Alcoholic Beverage Retail Sales	1 per 300 square feet of total Usable Floor Area
Artisan Establishment, with or without Retail Sales	1 per 500 square feet of total Usable Floor Area
Arts-Related Uses	1 per 500 square feet of total Usable Floor Area
Mail-Order or On-Line Retail Sales	1 per 1,000 square feet of total Usable Floor Area
Motor Vehicle Sales, Rental, leasing, or Motor Vehicle Maintenance/ Cleaning/ Repair/ Service	1 per 500 square feet of total Usable Floor Area
Retail Membership Club	1 per 500 square feet of total Usable Floor Area
Retail Food Sales, with or without on-premises preparation or processing	1 per 200 square feet of total Usable Floor Area
Recreation Facility (non-Civic)	1 per 1,000 square feet of total Usable Floor Area
Veterinarian Clinic, Animal Hospital, or non-Agricultural Kennel	1 per treatment, procedure, or surgical room + 100 square feet of total Usable Floor Area
Warehouse Retail	1 per 1,000 square feet of total Usable Floor Area
Other Retail Sales, Rental, or Leasing uses not listed above	1 per 5000 square feet of total Usable Floor Area
Self Service Storage	

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.12.B-1 VEHICULAR PARKING REQUIREMENTS

PRINCIPAL USE	MINIMUM NUMBER OF SPACES OF PARKING AVAILABLE TO LOT PER UNIT OF MEASUREMENT
Self Service Storage	1 per 2,000 square feet of storage space
Boat-Related Uses	
All Boat-Related uses other than Marina/ Boating Facility	1 per 200 square feet of administrative space + 1 per Boat storage spaces + 2 per Boat ramp + 1 per Boat available for rental + 1 per employee work station + 2 per work day
Motor Vehicle-Related Uses	
All motor vehicle-related uses, other than Gasoline or motor vehicle sales, rental or leasing, motor vehicle maintenance/ cleaning/ repair/ service par sales and tire sales	1 per 500 square feet for Usable Floor Area + .25 per vehicle available for rental + 1 per employee work station + vehicle storage space + 1 per work bay
Tire Sales	2 per work station or service bay + 1 per 200 square feet of customer waiting area
Towing Service	1 per 500 square feet of Usable Floor Space + spaces for towed vehicles
Manufactured Home Sales	
Manufactured home Sales	1 per 500 square feet of Usable Floor Area + 1 per employee work station + inventory space + 1 work bay
Wholesale Sales	
All Wholesales not listed under any other category	1 per 10,00 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
OFFICE USES CATEGORY	
All Office Uses not listed under any other Category	1 per 200 square feet of total Usable Floor Area
INDUSTRIAL USES CATEGORY	
Heavy Industrial	
All heavy industrial uses	Not regulated

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.12.B-1 VEHICULAR PARKING REQUIREMENTS

PRINCIPAL USE	MINIMUM NUMBER OF SPACES OF PARKING AVAILABLE TO LOT PER UNIT OF MEASUREMENT
Light Industrial	
Brewery, excluding Brewpubs	1 per 2,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
Bottling Plants	1 per 2,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
Building Systems / Construction Business	1 per 2,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
Carpet Cleaning Plants or Manufacturing	1 per 2,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
Catering Service or Catering Event Establishment	1 per 400 square feet of food preparation area + 1 per 3 permanent seats, or 1 per each 40 square feet of seating area where fixed seating is not provided
Clothing or Textile Manufacturing	1 per 2,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
Commercial or Institutional Bakery	1 per 2,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
Contractor Material Sales	1 per 2,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
Crematorium	1 per employee on the premise at one time, but no fewer than 2 spaces
Dairy Plant	1 per 2,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.12.B-1 VEHICULAR PARKING REQUIREMENTS

PRINCIPAL USE	MINIMUM NUMBER OF SPACES OF PARKING AVAILABLE TO LOT PER UNIT OF MEASUREMENT
Distillery	1 per 2,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
Distribution Facility	1 per 10,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
Dry Cleaning Plant	1 per 2,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
Equipment Rental	1 per 2,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
Fabrication, work or storage on-site by building, heating, plumbing, electrical, or general contractors and others who perform services off-site	1 per 2,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
Food Processing for Wholesale Sales	1 per 2,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
Horticulture & Landscaping Services	.50 space per employee on premises at one time, but no fewer than 2 spaces
INDUSTRIAL USES CONTINUED	
Ice Plant	1 per 5,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
Information Services	.50 space per employee on premises at one time, but no fewer than 2 spaces
Janitorial & Building Maintenance Services	1 per 2,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.12.B-1 VEHICULAR PARKING REQUIREMENTS

PRINCIPAL USE	MINIMUM NUMBER OF SPACES OF PARKING AVAILABLE TO LOT PER UNIT OF MEASUREMENT
Laundry Plant	1 per 2,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
Light Manufacturing Plant with or without Retail Sales	1 space per 2,000 square feet of Usable Floor Area, with a minimum of 1 space per 2 employees on premises at one time, but no fewer than 2 spaces
Machine Shop/ Woodworking Shop, other than Artisan Establishment	1 space per 1,000 square feet of Usable Floor Area, with a minimum of 1 space per 2 employees on premises at one time, but no fewer than 2 spaces
Maintenance Yard or Facility	
Manufacture or assembly of equipment, instruments, appliances, precision items or electrical items, or toys	1 per 2,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
Non-Hazardous Waste Treatment or Disposal	1 per 5,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
Outdoor Storage	Not Regulated
Photo-Finishing or Photography Lab	1 per 2,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
Printing, Publishing, and Lithography	1 space per 1,000 square feet of Usable Floor Area, with a minimum of 1 space per 2 employees on premises at one time, but no fewer than 2 spaces
Production of Artwork	1 per 2,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
Rail Equipment Storage or Repair	1 per employee + 2 per acre
Recycling Collection	1 per collection container

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.12.B-1 VEHICULAR PARKING REQUIREMENTS

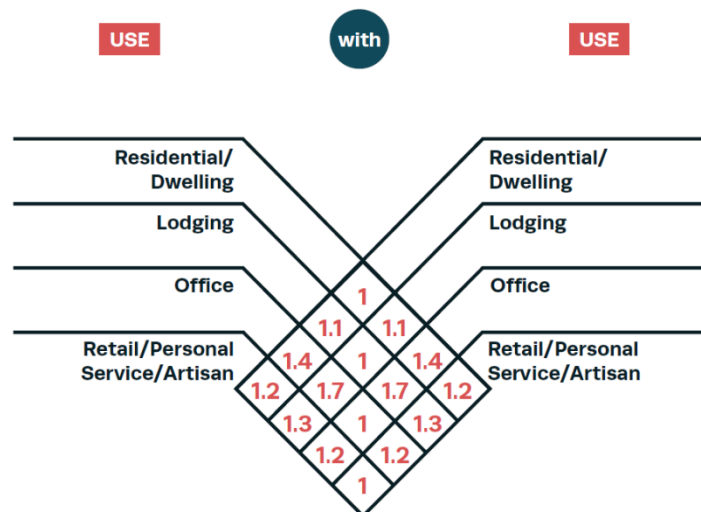
PRINCIPAL USE	MINIMUM NUMBER OF SPACES OF PARKING AVAILABLE TO LOT PER UNIT OF MEASUREMENT
Recycling Processing Facility	1 per 5,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
Repair of scientific or professional instruments or electric motors	1 per 2,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
Research Lab / Research Development	1 per 2,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
Scrap or Salvage Yard	1 per employee + 2 per acre
Sheet Metal Shop	1 per 2,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
Solid Waste Facility	Not Regulated
Towing Facility	Not Regulated
Welding, machine, tool repair shop	1 per 2,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
Wholesale Sales	1 per 2,000 square feet of Usable Floor Area, with a minimum of 1 per employee on premises at one time, but no fewer than 2 spaces
Winery	1 per 2,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
INDUSTRIAL USES CONTINUED	
Woodworking, including cabinet makers and furniture manufacturing, but excluding Artisan Establishment	1 per 2,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.12.B-1 VEHICULAR PARKING REQUIREMENTS

PRINCIPAL USE	MINIMUM NUMBER OF SPACES OF PARKING AVAILABLE TO LOT PER UNIT OF MEASUREMENT
Other Light Industrial Uses not listed in any other Use Category	1 per 2,000 square feet of Usable Floor Area, with a minimum of 1 per employee on premises at one time, but no fewer than 2 spaces
Warehouse & Freight Movement	
All Warehouse/ Warehousing & Freight Movement	1 per 10,000 square feet of Usable Floor Area, with a minimum of 2 spaces per employee on premises at one time, but no fewer than 2 spaces
Waste-Handling	
All Waste-Handling Services	Not Regulated
UTILITIES USES CATEGORY	
All Utility Uses	Not Regulated
OTHER USES CATEGORY	
Adult Entertainment	1 per 2,000 square feet of Usable Floor Area but no fewer than 2 spaces

TABLE 4.3.12.B-2 (SHARED PARKING FACTOR)



ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

- 5. In determining compliance with this Section 4.3.12.B, the following shall not be counted:
 - a. Accessory Dwelling Units; and
 - b. Liner Buildings fewer than 30 feet deep and no more than two Stories.
- 6. Up to 10% of the total number of Parking spaces in Parking Areas, Parking Lots, and Parking Structures that provide Parking for fifty (50) or more cars may be provided as Parking for compact cars, designed in compliance with Section 4.3.12.C.
- 7. Parking spaces to accommodate the needs of handicapped individuals shall be provided in accordance with the following Table 4.3.12.B-3 (Off-Street Handicapped-Accessible Parking), designed in compliance with Section 4.3.12.C.
- 8. One out of every eight required handicapped accessible spaces shall be van-accessible. A minimum of one van-accessible space shall be provided.
- 9. Any Plan submitted under this Ordinance must show the proposed types, numbers, and arrangement of Parking accommodations, including access to such areas from the Thoroughfares and Internal Drives, with spaces complying with all requirements of this Section 4.3.12.B.

C. Design

- 1. In all Districts, Parking Lots shall be designed in accordance with this Section 4.3.12.C and other applicable provisions of this Article 4.
- 2. Except as otherwise provided for compact vehicle Parking accommodations under Section 4.3.12.C.3, the dimensional standards set forth in Table 4.3.12.C-1 (Off-Street Vehicular Parking Space Dimensions) are applicable to off-street Parking accommodations:

TABLE 4.3.12.C-1 (OFF-STREET VEHICULAR PARKING SPACE DIMENSIONS)

Angle of Parking (degrees)	Width of Space (feet)	Length of Space (feet)	Aisle Width (feet)
0	8 ft.	21 ft.	12 ft.
45	9 ft.	19 ft. except 18 ft if adjacent to curb	16 ft.
60	9 ft.	19 ft. except 18 ft if adjacent to curb	18 ft.
90	9 ft.	19 ft. except 18 ft if adjacent to curb	24 ft.

- 3. Any compact car spaces must be separately signed and marked in distinct, separate areas. The dimensional requirements for compact car spaces are as set forth in Table 4.3.12.C-2 (Off-Street Compact Vehicle Parking Space Dimensions):

TABLE 4.3.12.C-2 (OFF-STREET COMPACT VEHICLE PARKING SPACE DIMENSIONS)

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

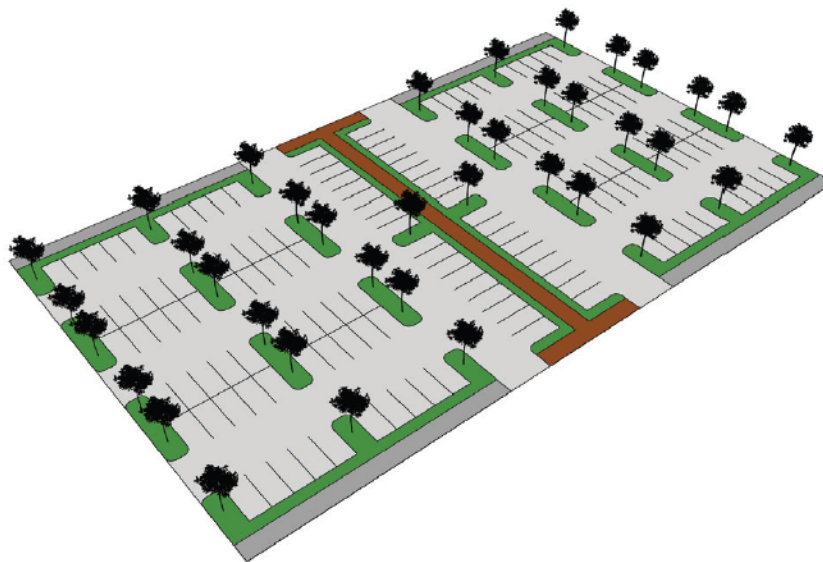
Angle of Parking (degrees)	Width of Space (feet)	Length of Space (feet)	Aisle Width (feet)
0	7.5 ft.	17 ft.	12 ft.
45	7.5 ft.	17 ft.	12 ft.
60	7.5 ft.	18 ft.	15 ft.
90	7.5 ft.	16 ft.	21 ft.

4. Any ramps leading from a Thoroughfare or Internal Drive to a Parking Lot, Parking Area, Garage, or Parking Structure shall be at least twenty feet (20 ft.) wide for two-way traffic and 10 feet (10 ft.) wide for one-way traffic.
5. Curbs must be made of granite or concrete at heights between six inches (6 in.) and eight inches (8 in.) above the elevation of the Thoroughfare and must be at least six inches (6 in.) wide.
6. Curb cuts must be at least 20 feet (20 ft.) wide for two-way access and 10 feet (10 ft.) wide for one-way access. Except as otherwise expressly provided in this Ordinance with respect to numbers of Driveways, Lots and Building Sites shall be limited to one curb cut per Lot or Building Site.
7. Unless alternative Parking surfaces are otherwise permitted by this Ordinance, all off – street Parking Areas and Parking Lots shall be surfaced with asphalt or concrete. Asphalt Parking Areas and Parking Lots shall be compacted after sub-grade with a minimum six-inch stone base, a minimum two inches of modified asphalt binder, and a minimum 1-½ inches of asphalt mix topping and must follow the construction detail provided below. Concrete Parking Areas and Parking Lots shall be constructed according to recognized construction standards. Construction plans for all Parking Areas and Parking Lots construction plans shall be subject to review and approval by the City Engineering Department.
8. Except in District CD-2, all Parking accommodations counted toward the applicable Parking requirements shall be paved and completed prior to issuance of the Final Certificate of Occupancy for the related Building(s).
9. Any Parking Area or Parking Lot in the First or Second Layer shall be Screened from view in accordance with Section 4.3.11 and Tables 4.3.1-A - 4.3.1-U (District Standards).
10. Any Parking Area or Parking Lot having five (5) or more spaces shall include Curbs, paving, Sidewalks, drainage facilities and lighting in accordance with this Ordinance and all other applicable laws, regulations and specifications.
11. The maximum grade permitted for any required Parking shall not exceed 8%.
12. Except in Districts CD-2, CD-3L, and CD-3, all off-street Parking spaces shall be striped with paint or some other form of permanent marking.
13. All access to any City Street from a Driveway shall have a concrete Driveway apron as approved by the City Engineering Department.
14. Any Parking Area or Parking Lot having ten (10) or more parking spaces shall conform to the following:
 - a. Parking Areas and Parking Lots shall contain at least one landscape island for every ten (10) parking spaces. Parking Lots with more than one landscape island shall have such islands distributed throughout the Parking Lot.
 - b. Interior parking rows shall be terminated at both ends with landscape islands.
 - c. Each parking island shall be of a minimum size equal to a standard parking space; provided that each parking island abutting two rows of head-to-head parking spaces shall be of a minimum size and length equal to two (2) parking spaces.
 - d. Parking islands shall contain a minimum of one (1) shade tree for every single island. If a parking island is double length or width, then two (2) shade trees shall be required.
 - e. Rows of parking fronting on drive aisles including alleys shall be provided with a minimum five feet (5 ft.) (excluding curbs) landscaped buffer.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

- f. Root zones for existing trees to remain shall be a minimum of 48 square feet.
- g. For every 2,000 square feet of Parking Area or Parking Lot, at least one tree shall be installed or preserved within the Parking Area or Parking Lot except to the extent that trees outside of the Lot containing the Parking Area or Parking Lot are allowed to satisfy this requirement as set forth below.
- h. No parking space shall be more than seventy-two feet (72 ft.) from a tree within the Lot, as measured from the center of the Tree to the nearest line demarcating the space.
- i. Except for trees allowed to be counted outside the Parking Area or Parking Lot, new trees shall be installed and/or existing trees preserved in Tree islands provided pursuant to this Section and/or at the perimeter of the Parking Area or Parking Lot, provided that the perimeter of the Parking Area or Parking Lot where trees are installed or preserved to meet this requirement lies within the Lot on which the Parking Area or Parking Lot is located.
- j. Trees outside of the Parking Area or Parking Lot located within twenty feet (20 ft.) of the closest portion of such Parking Area or Parking Lot, including but not limited to Trees within Thoroughfare Rights-of-Way, Internal Drive Easements, and Civic Spaces, may be counted toward satisfying the requirements.
- k. In addition to any walkway or Sidewalk around a Parking Area or Parking Lot, each such Parking Area or Parking Lot exceeding one hundred and twenty (120) spaces shall have least one pedestrian walkway bisecting the Parking Area or Parking Lot and connecting to adjoining sidewalks of a minimum width of eight feet (8 ft.) that is paved differently from the parking spaces with respect to texture, material, style, and/or color.

ILLUSTRATION 4.3.12.C-3 PARKING AREA / LOT OR BUILDING SITE LANDSCAPING



- l. Any Parking Area or Parking Lot in the First or Second Layer shall be Screened from view in accordance with Section 4.3.11.
- 15. Parking Areas and Parking Lots shall include Curbs, paving, Sidewalks, drainage facilities and lighting in accordance with this Article as well as any other applicable laws, regulations and specifications.
- 16. Parking Area paving shall be confined to the minimum area necessary to comply with the parking requirements of this Article.
- 17. Any Plan submitted under this Article shall show the proposed arrangement of Parking accommodations, including access to such areas from the Thoroughfares or Internal Drives, with Parking spaces to comply with the requirements of this Section 4.3.12.
- 18. Parking Structures must be Screened from view of any Frontage by one or more Liner Buildings as set forth in **Table 4.3.1-A– Table 4.3.1-N (District Standards)**. Such Liner Buildings must be the same or greater height as the associated Parking Structure that they Screen.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

19. Lighting illuminating off-street Parking accommodations in all Districts other than Districts CD-2, CD-3L, and CD-3 must be installed within and directed only within the applicable Parking Area, Parking Lot, Garage, or Parking Structure.
20. Handicapped-accessible Parking shall comply with the following:
 - a. Handicapped-accessible Parking shall be located as near as possible to the main public entrances of a single Building or centrally located in Parking Areas that serve more than one Building.
 - b. All off-street handicapped-accessible Parking spaces shall be located in the closest Parking Area to a public entrance to the Building but no more than 250 feet from such entrance.
 - c. No stairs or curbs are permitted between a handicapped-accessible Parking space and the entrance which it is intended to serve, and the slope along the accessible route shall not exceed 1:12.
 - d. All off-street handicapped accessible Parking spaces shall be designated by a Sign or other means accepted by State requirements. Van-accessible spaces shall be designated by a sign indicating "Van Accessible" in addition to any other means used.
 - e. A minimum width of 96 inches shall be required for all van-accessible spaces. Van-accessible spaces shall further require a minimum vertical clearance of 98 inches.
 - f. An access aisle of 60 inches shall be provided for all handicapped accessible spaces and an aisle of 96 inches shall be provided for all van-accessible spaces one 96-inch aisle may serve both types of spaces. No ramps may project into this access aisle.
 - g. No required Parking accommodation shall be Encroached upon by any Building, Structure, or Use.

D. Operation & Maintenance

1. No Parking space required for Dwelling Units shall be rented to Persons not living on the premises. All required Parking spaces or Dwelling Units must be made available to occupants of the Dwelling Units as an integral part of their occupancy.
2. Required Parking Accommodations must be available and maintained for such period as the Use or Structure exists that the facilities are designed to serve.

E. Access

1. All Parking Areas, Parking Structures, and Garages shall be accessed by Rear Alleys, when such are available on the Zoning Map or otherwise available.
2. Vehicular access to Parking Areas, Garages, and Parking Lots shall not conflict with general vehicular movement serving the site. Ingress and egress points must be at Curb cuts approved by City Engineer.
3. In all Districts, vehicular entrances and exits shall be designed to be easily identifiable by drivers and pedestrians. Any signage must be simple, clear, and concise. Any gates, arms, or booths must be set back at least 20 feet from the Frontage.
4. Off-street Parking accommodations other than those in Districts CD-2, CD-3L, and CD-3, and Single-family Residential Lots and Building Sites in Districts SD-MHP and PUD-R shall provide access so that backing directly onto a Thoroughfare or Internal Drive is unnecessary.
5. A Driveway, drive aisle, or Internal Drive must be provided for off-street Parking accommodations in all Districts.
6. Driveways and entrances and exits for off-street Parking accommodations in all Districts other than Districts CD-2, CD-3L, and CD-3 and Single-family Residential Lots and Building Sites in Districts SD-MHP and PUD-R, shall be at least 25 feet from a Thoroughfare or Internal Drive at an intersection.
7. Except in Districts CD-2, CD-3L, and CD-3, cross-access Easements must be provided between all contiguous Parking Areas and Parking Lots except where such areas and Lots are accessed from a Rear Alley.
8. In all Districts, Driveways at Frontages must be no wider in the First Layer than the width specified for the applicable District in **Table 4.3.1-A– 4.3.1-N(District Standards)**.
9. For Residential Uses other than Townhomes and Multifamily, Driveways shall not be located within five feet of a Side Building Site Line or Rear Building Site Line unless a shared Driveway is used.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

10. In all other Districts, except 4.3.12.E-9, no Driveway shall be constructed within 25 feet of an Adjacent Driveway. This dimension shall be increased to the greater of 40 feet Adjacent Driveways on State highways.
11. No Driveway curb return shall extend beyond an Adjacent Side Building Site Line or Rear Building Site Line or more than one-half (1/2) the distance to a Driveway located on the same property. This provision may require increased separation from Adjacent properties over the minimum indicated in Sections 4.3.12.E.10 or 4.3.12.E.11 above.
12. In all Districts, pedestrian exits from all Parking Lots, Parking Areas, Garages, and Parking Structures must conform to **Table 4.3.1-A– 4.3.1-N(District Standards)**, except for underground Parking accommodations.

F. Parking Restrictions

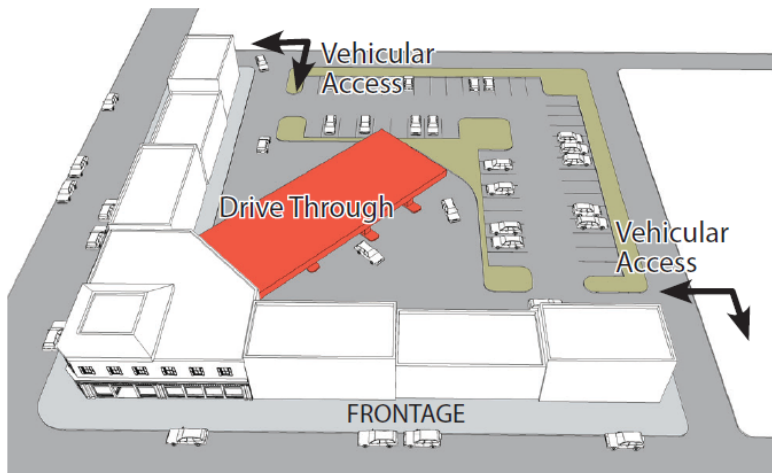
1. Domestic and recreational vehicles such as boats, camper trailers, and utility trailers shall be stored off - street, subject to the location requirements of **Table 4.3.1-A– 4.3.1-N(District Standards)**. Boats, camper trailers, and utility trailers may be stored on an unpaved surface, provided they are parked in the third layer and screened from view from the public right-of-way and adjacent properties.
2. Parking of buses on the site of and directly associated with a permitted Non-Residential Use shall be permitted.
3. Parking of heavy equipment or tractor trailers (including trailers as storage) shall not be permitted. This requirement shall not prohibit commercial vehicles from making deliveries. Trailers may be permitted for temporary storage in association with a construction with a Temporary Use Permit (Sec. 3.8).
4. Single and double axel trucks that exceed 90 inches in width and are greater than 12 feet in height are prohibited from Parking on a street for more than four (4) consecutive hours, unless it is related to performing a service for a property owner, i.e. construction, remodeling, etc.
5. Required Parking spaces and loading facilities shall not be used for the storage or sale of merchandise, vehicle storage, vehicles for sale, or vehicle repair. Non-required spaces proposed for these uses shall be designated on a site plan.
6. The private sale or storage of one vehicle per Dwelling Unit may be permitted as an Accessory Use in association with a Residential Use.
7. Any area designated for required off-street Parking or loading shall not be changed to another use until adequate Parking and/or loading facilities in conformance with this Article have been established.
8. Required Parking spaces may be temporarily used for uses other than Parking and loading with the issuance of a Temporary Use Permit pursuant to Section 8.5.9; provided such use does not negatively impact adjacent roadways, neighborhoods, or other uses and is clearly temporary in nature.

G. Drive-Through Locations & Standards

1. Any drive-through facilities must be located and designed and comply with all standards as specified for the applicable District as set forth in **Tables 4.3.1-A– 4.3.1-N (District Standards)**. See **Illustration 4.3.12.G (Drive-Throughs)**.

ILLUSTRATION 4.3.12.G DRIVE-THROUGH

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS



- Any drive-through locations must be accessed by Rear Alleys, when such are available on the Zoning Map or otherwise available.
- Off-street vehicular stacking spaces shall be provided for all drive-through facilities in accordance with Section 4.3.12.H.

H. Stacking Spaces

- Off-street vehicular stacking spaces shall be provided in accordance with **Table 4.3.12.H (Stacking Spaces)** for the activity type indicated as follows:

TABLE 4.3.12.H (STACKING SPACES)

Activity Type	Min. # of Stacking Spaces	Measured From
Automated Teller Machine	4	Machine
Drive-Through	3	Teller
Bank Teller Drive-Through	4	Teller or Window
Car Wash Bay, Full Service	6	Bay
Car Wash Bay, Self-Service	2	Bay
Dry Cleaning/ Laundry Drive-Through	2	Cleaner/ Laundry Window
Gasoline Pump Island	1	Pump Island
Gatehouse, Staffed	4	Gatehouse
Gate, Unstaffed	2	Gate
Pharmacy Pickup	3	Pharmacy Windows

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

Activity Type	Min. # of Stacking Spaces	Measured From
Restaurant Drive-Through	8	Pickup Window
Valet Parking	3	Valet Stand

*Other as determined by Zoning Administrator in consideration of approved study prepared by a registered engineer with expertise in Transportation Engineering

2. Required stacking spaces shall be subject to the following design and layout standards:
 - a. Stacking spaces shall be a minimum of eight feet in width by 25 feet in length.
 - b. Stacking spaces by shall not impede on- or off-site traffic movement or movement into or out of off-street Parking spaces.
 - c. Stacking spaces for each type of activity or accommodation shall be subject to any location standards applicable to the activity or accommodation itself.
 - d. Stacking spaces shall be separated from other drive aisles, Driveways, or Internal Drives by raised medians. if deemed necessary by the City Engineer for traffic movement and safety.

4.3.13 BICYCLE PARKING

Bicycle Parking Required:

Bicycle Parking shall be provided within CD-4, CD-4C, and CD-5 for a Lot or Building Site as set forth in Table 4.3.13 (Bicycle Parking).

A. Bicycle Parking Standards

1. Bicycle parking shall be provided using Bicycle Racks, Bicycle Lockers, restricted access bicycle enclosures, or similar secured facilities.
2. Bicycle Racks shall be securely anchored.
3. An aisle providing access to bicycle parking areas shall clear maneuverable access without limiting use of any sidewalk. Access aisles must be at least 4-feet wide.
4. Bicycle parking areas may be located in any layer and should be accessible from the main entrance by a continuous sidewalk connection.
5. Bicycle parking areas shall be separated from automobile parking and circulation areas by a physical barrier or a distance of feet.

TABLE 4.3.13 BICYCLE PARKING

USE TYPE	BICYLCE PARKINGREQUIREMENT
Residential/ Dwelling Uses	
Single Family Dwellings	None Required

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

USE TYPE	BICYCLE PARKING REQUIREMENT
Two Family Dwellings	None Required
Multi-Family Dwellings	1 space per 20 parking spaces
Mobile Home	None Required
Lodging Uses	
All Uses	None Required
Educational/ Institutional/ Civic Uses	
All Uses	1 space per 4,00 sq. ft. gross floor area
Medical Uses	
All Uses	None Required
Commercial/ Retail/ Professional & Service Uses	
All Uses	1 space per 4,00 sq. ft. gross floor area
Office Uses	
All Uses	1 space per 20 parking spaces
Communication Uses	
All Uses	None Required
Industrial Uses	
All Uses	None Required
Agricultural Uses	
All Uses	None Required
Utility Uses	
All Uses	None Required
Public or Private Uses	
All Uses	None Required

4.3.14 LOADING SPACE

A. General

1. Loading spaces shall be provided, designed, accessed, and located in accordance with this Section and Table 4.3.14.B (Loading Space Requirement) and Tables 4.3.1-A– 4.3.1-N (District Standards).

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

2. Loading areas must be accessed by Rear Alleys, when such are available on the Zoning Map or otherwise available.

B. Loading Space Required

1. Each Lot or Building Site shall have the minimum number of loading spaces per quantity of the indicated Use as set forth in **Table 4.3.14.B (Loading Space Requirements)**.

TABLE 4.3.14.B LOADING SPACE REQUIREMENTS

Principal Use Category in District	Quantity of Use	# of Loading Spaces	Size of Loading Space(s)
Residential – Multifamily Building	≥100 Dwelling Units	1	10 ft. W x 50 ft. L x 15 ft. H
Commercial, Office, Retail/ Personal Service/ Artisan, Industrial	> 5,000-25,000sf	1	10 ft W x 50 ft. L x 15 ft. H
	25,001-60,000sf	2	
	60,001-120,000sf	3	
	120,001-200,000sf	4	
	201,000-290,000sf	5	
	≥ 290001sf	5+1 for each Additional 90,000sf	
Other	N/A	N/A	N/A

2. Without limitation to the other requirements of this Section, loading spaces shall be provided for each delivery bay, loading dock or delivery entrance.
3. Loading spaces must be available at all times without conflict with any Plan or Improvement element.
4. Space allocated to any loading area or access thereto shall not be used to satisfy the requirements for any Parking or garbage, recycling, or trash facilities.
5. Parking spaces may not be used or counted as meeting loading requirements.
6. No required loading space shall be Encroached upon by Buildings, Structures, Open Storage or any other Use.
7. Required loading facilities may be temporarily used for uses other than loading with the issuance of a Temporary Use Permit pursuant to Section 8.5.9, provided such use does not negatively impact adjacent roadways, neighborhoods, or other uses and is clearly temporary in nature.

C. Location, Design & Access

1. Except as otherwise provided in subparagraph 4.3.14.C.2 below, all required loading spaces shall be provided within the applicable Lot or Building Site.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

2. In Districts CD-4, CD-4C, CD-5, and CD-5C, required loading spaces may be provided either within the applicable Lot or Building Site or in the parking lane of the Enfronting Thoroughfare or Internal Drive.
3. Off-street loading spaces shall be located in accordance with **Tables 4.3.1-A– 4.3.1-N(District Standards)**.
4. Off-street loading areas must be accessed by Rear Alleys, when such are available on the Zoning Map or otherwise available.
5. No loading facility shall be located within 30 feet of a Thoroughfare or Internal Drive intersection.
6. Off-street loading areas shall include Curbs, paving, drainage facilities, and lighting in accordance with City standards and this Ordinance, as well as any other applicable laws, regulations and specifications.
7. Each required loading space shall have the minimum dimensions set forth in **Table 4.3.14.B (Loading Space Requirements)**.
8. Loading facilities may not obstruct facilities required for emergency access, including fire lanes.
9. Each off-street loading space shall be directly accessible from a Thoroughfare, Driveway, drive aisle, Internal Drive, or Alley without crossing or entering any other required off-street loading facility. Such loading space shall be accessible from the interior of the Building it serves and shall be arranged for convenient and safe ingress and egress by motor truck and/or trailer combination.
10. The required dimensions of loading spaces shall not include any access or entrances to, or exits from, such spaces.
11. All off-street loading spaces shall be surfaced with asphalt, concrete, or other hard surfaced material, and constructed so as to support the heaviest anticipated load, including without limitation fire and sanitation equipment and delivery vehicles, and shall provide for adequate drainage, and prevent the release of dust.
12. Loading Spaces provided within a Thoroughfare or Internal Drive shall meet construction requirements of provided by the City Engineer.
13. Each loading space shall be permanently marked and identified as a loading space in which no Parking is allowed. Permanent wheel stops or curbing shall be provided for each off-street loading space to prevent any vehicle using the loading space from Encroaching on the required Yards or Adjacent property.
14. Off-street loading areas shall be Screened in conformance with Section 4.3.11.

4.3.15 REFUSE, SERVICE, EQUIPMENT & OTHER ITEMS

A. Trash Receptacle / Dumpster Requirement

Trash receptacles and dumpsters must be provided for each Lot or Building Site and must be located in accordance with Section 4.3.15.B.

B. Trash Receptacle/Dumpster Locations & Standards

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

1. Dumpsters and trash and recycling receptacles shall be located as specified for the applicable District in **Tables 4.3.1-A– 4.3.1-N (District Standards)**.
2. All dumpsters and trash and recycling receptacles shall be enclosed as required in this Section and **Tables 4.3.1-A– 4.3.1-N (District Standards)**. The enclosures shall be designed to prevent debris from leaving enclosure or being scattered by wind or animals. Except in Districts CD-2, CD-3L, and CD-3, dumpsters and garbage, trash, and recycling receptacles must be placed on concrete pads. The enclosure must be kept closed at all times other than for servicing. Except in Districts CD-2, CD-3L, and CD-3, bollards or posts must be placed on the interior of the enclosure to protect the walls from damage by the trash containers within.
3. Dumpsters and garbage, trash and recycling receptacle locations shall be accessed by Rear Alleys, when such are available on the Official Zoning Map or otherwise available.
4. Space allocated to any off-street garbage, trash, or recycling areas, receptacles, or dumpsters shall not be used to satisfy any Parking or loading requirements.
5. All Uses that generate food-related garbage shall provide water quality treatment to mitigate runoff.

C. Equipment & Other Items Locations & Standards

All heating, ventilation and air-conditioning equipment, utility meters (not including water meters) and equipment, mechanical equipment, antennas and satellite equipment, communications transmitting and receiving equipment, solar panels, recreation, play, and swimming pool, hot tub and spa locations shall be located and meet the other standards and requirements specified for the applicable District, as required in **Tables 4.3.1-A– 4.3.1-N (District Standards)**.

D. Service Areas

1. Service areas shall be located as required in **Tables 4.3.1-A– 4.3.1-U (District Standards)**.
2. Service areas shall be accessed by Rear Alleys, when such are available on the Zoning Map or otherwise available.

4.3.16 PRIVATE LANDSCAPE STANDARDS

A. General

1. Lots and Building Sites in Districts other than the Civic District shall be landscaped in accordance with **Table 4.3.1-A– 4.3.1-N (District Standards)** and this Section 4.3.16.
2. In Civic Districts, Lots and Building Sites shall be landscaped in accordance with **Table 4.3.1-A– 4.3.1-N (District Standards-Civic)** and this Section 4.3.16. Additionally, Civic Spaces shall be designed as set forth in **Table 5.3.3.B (Civic Space -Specific Standards)**.
3. Without limitation to any other provisions of this Section 4.3.16, all Screen, Streetscreen, Buffer, and Parking Area and Parking Lot landscape standards and requirements of this Ordinance must be met.
4. All bare or exposed ground on a Lots and Building Sites and/or in any other landscaped area shall be covered with live plant materials and/or mulch, with the following exceptions:
 - a. Naturally occurring river beds, rock outcroppings or similar landscape features typically lacking in vegetation.
 - b. Hiking trails and/or traces.
 - c. Clay or sand surfaces associated with recreation fields and facilities.
5. Buildings and Structures lawfully existing as of the Effective Date may be modified without providing or modifying landscaping in conformance with this Section 4.3.16, provided that the same does not constitute an Alteration and does not increase the degree by which the Building or Structure is Non-conforming. This shall not be construed as prohibiting the provision of landscaping in full conformance with this Ordinance.
6. The standards and requirements herein set out for landscaping shall not apply to temporary uses or to Development or site work on relatively undeveloped sites which do not involve significant ground disturbance.

B. Maintenance of Landscaping

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

1. All landscaping must be properly maintained by the property owner and his or her successors, heirs, assignees or any consenting grantee.
2. All plantings shall be maintained in an attractive and healthy condition. Maintenance shall include, but not be limited to, watering, mulching, fertilizing and pest management, mowing, weeding, removal of litter and dead plant material, and necessary pruning and trimming.
3. Any required plantings that are dead or diseased plantings shall be removed and replaced with plants meeting all requirements of this Ordinance.
4. Natural water courses within a Buffer shall be maintained in a natural condition consistent with any applicable regulations.
5. A water source shall be supplied within 100 feet of any planting requiring continuing watering. Where non-native or non-drought tolerant native vegetation is incorporated in the Buffer, an irrigation system shall be required.
6. Landscape structural features such as walls, fences, berms or water features shall be maintained in a structurally safe and attractive condition.
7. Where other uses, including pedestrian, bike or other trails, are allowed within a Buffer, these uses shall be maintained to provide for their safe use.
8. If any Person responsible for landscape maintenance fails to maintain same according to the standards of this Ordinance, these regulations shall be enforceable by the City with the right to recover the cost of enforcement, including reasonable attorney fees. The City may also, following reasonable notice and a demand that deficiency of maintenance be corrected, enter the area to maintain same. The cost of such maintenance shall be charged to those persons having the primary responsibility for maintenance of the area.
9. Without limitation to Section 4.3.16.B, a maintenance bond lasting one (1) year must be provided for all plantings required under this Section 4.3.16.

C. Removal of Walls or Trees

None of the following may be removed without the prior approval of the Decision-Making Authority: Walls or trees required or shown on an approved site plan, Development Plan, or Master PUD Development Plan.

D. Plant Material Standards and Sizes

1. Except as otherwise required by Sections 4.3.16.D.4, 4.3.16.D.5, 4.3.16.D.8, 4.3.16.D.9 and 4.3.16.D.10, all required plant materials must meet with the minimum sizes, class and other requirements outlined in American Standards for Nursery Stock (ANSI Z60.1-2004) published by the American Nursery and Landscape Association (ANLA) or other local Nursery Association Standards.
2. Trees shall be chosen from the following list of plant species contained within this Section and/or plants identified in the guide, "Native Plants of the Tennessee Valley", published by the Tennessee Valley Authority (TVA).

TABLE 4.3.16.D-1 (NATIVE PLANTS OF THE TENNESSE VALLEY)

Common Name	Botanical Name
Canopy Trees	
American Beech	Fagus Grandifolia

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

Common Name	Botanical Name
Nuttall Oak	Q. Nuttalli
American Linden	Tilia Americana
Overcup Oak	Q. Lyrata
Baldcypress	Taxodium Distichum
Pecan	Carya Illinoensis
Black Cherry	Prunus Serotina
Persimmon	Diospyros Virginiana
Black Locust	Robinia Pseudoacacia
Post Oak	Q. Stellata
Black Oak	Q. Velutina
Red Maple	Acer Rubrum
Black Walnut	Juglans Nigra
River Birch	Betula Nigra
Blackgum	Nyssa Sylvatica
Sassafras	Sassafras Albidum
Buckeye	Aesculus Spp.
Scarlet Oak	Q. Coccinea
Bur Oak	Q. Marcocarpa
Shortleaf Pine	Pinus Echinata
Cherrybark Oak	Q. Pagoda
Shumard Oak	Q. Shumardii
Chestnut Oak	Q. Prinus
Silver Maple	Acer Saccharinum
Chinkapin Oak	Q. Muehlenbergii
Silverbell	Halesia Carolina
Cumcumbertree	Magnolia Acuminata
Southern Red Oak	Q. Falcata

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

Common Name	Botanical Name
Eastern Hemlock	Tsuga Candensis
Sugar Maple	Acer Saccharum
Eastern Red-Cedar	Juniperus Virginiana
Swamp Chestnut Oak	Q. Michauxii
Eastern White Pine	Pinus Strobus
Sweetgum	Liquidambar Stryaciflua
Green Ash	Fraxinus Pennsylvanica
Sycamore	Platanus Occidentalis
Hickories	Carya Spp.
Water Oak	Q. Nigra
Kentucky Coffeetree	Gymnocladus Dioicus
White Ash	Fraxinus Americana
Loblolly Pine	Pinus Taeda
White Oak	Quercus Alba
Northern Catalpa	Catalpa Speciosa
Willow Oak	Q. Phellos
Northern Red Oak	Q. Rubra
Yellow-Poplar	Liriodendron Tulipifera
Accent Trees	
Alder	Alnus Serrulata
Red Buckeye	Aesculus Pavia
Allegheny Chinkapin	Castanea Pumila
Redbud	Cercis Canadensis
American Holly	Ilex Opaca
Serviceberry	Amelanchier Aborea
Buckthorn Bumelia	Bumelia Lyciodes

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

Common Name	Botanical Name
Shining Sumac	Rhus Copallina
Smoketree	Continus Obovatus
Devil's Walking Stick	Aralia Spinosa
Smooth Sumac	Rhus Galbra
Dogwood	Cornus Florida
Snowbell	Styrax Spp.
False Indigo	Amorpha Fruticosa
Sourwood	Oxydendron Arboreum
Fringetree	Chionanthus Virginicus
Staghorn Sumac	Rhus Typhina
Hawthorn	Crateagus Spp.
Striped Maple	Acer Pennsylvanicum
Hophornbeam	Ostrya Virginiana
Sweetbay	Magnolia Virginiana
Hornbeam	Carpinus Caroliniana
Sweetleaf	Symplocus Tinctoria
Mountain Maple	Acer Spicatum
Witch Hazel	Hamamelis Virginiana
Pawpaw	Asimina Triloba
Yellowwood	Cladrastis Lutea
Carolina Buckthorn	Rhamnus Caroliniana

3. When more than 20 trees are planted on used on a site to meet these regulations, a mix of trees (genera) shall be provided. The following table indicates the maximum percentage of same trees (same genus) that may be planted.

TABLE 4.3.16.D-2 (TREES - # PER GENERA)

Planted on Site	Minimum Number of	Maximum Percentage of
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ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

	Genera Required	Any Genera
20 trees or less	1	Not Applicable
21 to 50 trees	2	70 percent
51 to 100 trees	3	50 percent
101 to 200 trees	4	40 percent
200 to 500 trees	5	30 percent
Over 500 trees	6	25 percent

4. Shrubs when planted as a hedge, the maximum spacing for shrubs shall be 40 inches on center.
5. Canopy trees shall have a planting area no less than 10 feet wide in all dimensions. Accent and substitution trees shall have a planting area no less than eight feet wide in all dimensions. This requirement may be modified administratively by the Zoning Administrator.
6. Plants shall be mulched a minimum of three inches deep. Where selected plant material is not tolerant of deep mulch, a specific note regarding shallower mulch shall be set forth on the final landscape plan and approved by the City as part of the landscape plan. Mulch shall be kept away from tree trunks.
7. Where specified, Building foundation planting shall meet the following requirements:
 - a. Foundation plantings shall be placed within five feet of the building perimeter. If the Zoning Administrator determines that, due to site design considerations such as the location of sidewalks, plazas or service areas, this is not feasible, such plant materials may be located in planter boxes or in the areas of the site in a manner that enhances the overall landscape plan for the development.
 - b. One shrub shall be required as foundation planting for every ten (10) linear feet of Facade for Non-Residential Uses.
8. Any plant materials required for Screening must be evergreen and have an opacity of at least 90% from the ground through the full height of the plant.
9. At the time of installation, trees must be a minimum two and a half inches (2.5 in.) caliper measured three feet (3 ft.) from the base of the trunk.
10. At the time of installation, Shrubs must be a three (3) gallon container minimum and a minimum height above ground level of 30 in.
11. Plantings must not conflict at installation or maturity with the location of any other required Building and Building Site elements or other plantings.
12. Ground vegetation or Shrub plantings with spines, thorns or needles that may present hazards to pedestrians, bicyclists or vehicles are prohibited in the first two feet of the First Layer.

E. Placement of Trees and Shrubs

1. Proposed trees and shrubs must be placed minimally 18 in. from any Sidewalk or pavement edge, measured from the center of the plant.
2. No trees shall be planted in wet retention ponds or drainage maintenance Easements.
3. Trees and shrubs shall be installed at least five feet away from the flow line of a drainage facility unless specifically designed as water quality measures adhering to best management practices.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

4. Existing trees may remain in dry retention ponds provided that the natural grade is undisturbed to the tree line, they are a species adapted to seasonal flooding and the pond is adequately maintained.
5. Accent trees listed in **Table 4.3.16.D-1 (Native Plants of the Tennessee Valley)** and shrubs shall be allowed in access Easements, provided a minimum 20-foot-wide travel way is maintained clear of vegetation, and all clear sight triangle requirements are met.
6. Trees may be planted in Easements for underground utilities with approval by the City and any applicable utility provider, provided the root structure of the proposed tree is not anticipated to extend more than three feet below the ground. Shrubs may be planted, provided they are only within the outer three feet of the Easement. Where such trees and shrubs are planted, the property owner shall be responsible for replacement of such required vegetation if maintenance or other utility requirements require their temporary removal.

F. Artificial Plants / Turf

Artificial plants or artificial turf are prohibited, except on active recreation fields that are typically subject to intense use and soil compaction that prohibits the establishment of turfgrass.

G. Establishment

All required landscape areas must be watered and fertilized as necessary to ensure establishment within the first year planted in accordance with best landscape practices.

H. Screens

Screens must be provided in accordance with Section 4.3.11.

I. Soils

Soil shall be uncompacted coarse loam that is a minimum of 12 inches deep. Soils shall be appreciably free of gravel, stones, rubble or trash. All compacted soil, contaminated soil or road base fill shall be removed. Under no circumstances shall soils have greater than 5% or less than 0.5% organic matter.

J. Condition of Plants

Plants must have normal, well-developed branches and vigorous root systems.

K. Pavement of First Layer

The First Layer shall not be paved, except for the following:

1. Driveways; and
2. Pavement matching the adjoining Public Frontage in Character Districts CD-4, CD-4C, CD-5, and CD-5C, where the Building is set back no more than five feet (5 ft.) from the Front Lot / Building Site Line.

L. Tree Protection

1. Exemptions. The following Tree Removal activities are exempt from this Section 4.3.16.L:
 - a. The tree proposed for removal is located:
 - (1) On a single-family residential Lot or Building Site of one acre or less that is not noted as a Critical Lot or Building Site; or
 - (2) On a Lot or Building Site in Districts CD-5 or CV;
2. Tree Removal. Existing trees on a Lot or Building Site or Development site shall not be removed or disturbed unless:

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

- a. Trees are removed in accordance with an approved Development Plan or Master PUD Development Plan, site plan, Preliminary Plat, Building Permit, or grading permit that meets Sections 4.3.16.L.3 and 4.3.16.L.4; or
 - b. Tree Preservation Plan as part of any Application required for a Development Plan or Master PUD Development Plan, site plan, or Preliminary Plat, the Applicant shall submit a Tree Preservation Plan with the following information:
 - (1) The Lot or Building Site lines associated with the proposed development;
 - (2) A recent aerial photograph with date photograph was taken;
 - (3) The location and extent of the existing on-site tree canopy, including an estimate of the total percentage of the parcels covered by the existing on-site tree canopy;
 - (4) The exact location, health, and size of all Specimen Trees; however, in the instances of large established tree stands, the Zoning Administrator may accept an approximation of the location, health, and size of Specimen Trees if the trees are not being counted towards landscape requirements, or if the trees are located within a designated Tree Save Area; and
 - (5) The minimum tree canopy retention requirement.
3. Protection of Tree Canopy.
- a. Tree Removal activities associated with Agricultural Uses are exempt from this Section 4.3.16.L.3.
 - b. A percentage of the existing tree canopy shall be retained on a Development or construction site in accordance with **Table 4.3.16.L (Tree Canopy Cover Retention)** below:

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

TABLE 4.3.16.L TREE CANOPY COVER RETENTION

Existing Tree Canopy Cover (as % of Total Development, Lot or Building Site Size)	Minimum Tree Canopy Retention by Zoning District (as % of Total Tree Canopy Cover)		
	CD-2	CD-4	
	CD-3L	CD-4C	SD-LI
	CD-3	CD-5C	SD-HI
	CD-4	SD-INT	
	CD-4C	PUD-MU	
	CD-5C		
	SD-MHP		
	SD-INT		
	PUD-R		
	PUD-MU		
80% - 100%	30%	15%	10%
60% - 79%	36%	18%	11%
40% - 59%	45%	22%	12%
20% - 39%	48%	24%	13%
19% - Less	54%	26%	14%

1 Additional tree canopy retention may be required under other provisions of this Ordinance.

2 CD-5 and CV do not have a minimum tree canopy retention requirement.

3 Residential portions of Development or construction in noted Districts.

4 Non-Residential portion of Development or construction in noted Districts.

c. Designation of Tree Save Areas

- (1) The minimum tree canopy to be retained within a construction or Development site shall be located within designated Tree Save Areas, which shall include the areas occupied by the Critical Root Zones of all healthy trees being retained in accordance with this Section 4.3.16.L.3.
- (2) The location of Tree Save Areas shall be based on the presence of any one or more of the following:
 - (a) Woodland forest;
 - (b) Established tree stands;
 - (c) Tree rows; or
 - (d) Specimen Trees.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

- (3) Tree Save Areas shall be depicted as an open space, conservation easement, or Civic Space on the applicable Development Plan or Master PUD Development Plan, site plan, or Preliminary Plat, and recorded on the Final Plat, as applicable.
 - (4) Each single-family residential Lot or Building Site with Tree Save Areas shall be identified on the applicable Development Plan or Master PUD Development Plan, site plan, or Preliminary Plat, and shall be platted on the Final Plat, if applicable.
 - d. Tree Save Area Priorities. Consideration shall be given to the following when determining locations for Tree Save Areas:
 - (1) Woodland forests greater than five acres;
 - (2) Riparian buffers or natural drainage courses;
 - (3) Land with naturally occurring slopes of 20 percent or greater;
 - (4) Habitat used by endangered or threatened species;
 - (5) Scenic corridors and viewsheds;
 - (6) Areas that could serve to extend existing greenways, trails, parks, or recreation areas; and
 - (7) Areas needed for Buffers.
 - e. Removal of Trees in Tree Save Areas. The removal, damage, or destruction of trees within a Tree Save Area shall be a violation of this Ordinance and require mitigation in accordance with the following standards:
 - (1) Any tree that is damaged or removed from the Tree Save Area shall be replaced at a rate of two caliper inches per one caliper inch removed, with each replacement tree having a minimum diameter of two caliper inches. If the total caliper inches removed cannot be determined, the area subject to Tree Removal shall be replanted at the rate of 80 trees per acre for each acre disturbed, or portion thereof. Replacement trees shall not be used to meet any other landscape requirements.
 - (2) Replacement trees for trees removed from the Tree Save Area shall be planted in the Tree Save Area or, in cases where adequate room is not available, planted elsewhere on the Lot or Building Site or Development site. In cases where adequate room on the Lot or Building Site or Development site is not available as determined by the Decision-Making Authority for the applicable review mitigation may take the form of planting on a site within 1,320 feet of the Lot, Building Site, or Development Parcel
 - (3) Following notice of violation from the Zoning Administrator related to this Section 4.3.16.L, no Decision-Making Authority shall review or approve any application for the site from the date of the violation until:
 - (a) A replacement plan has been approved by the Zoning Administrator and a performance guarantee for the associated replacement has been established in accordance with Section 1.26; or
- 4. Protection of Specimen Trees
 - a. General Protections.
 - (1) Specimen Trees shall not be cut, removed, pushed over, killed, or otherwise harmed, except as exempted by Section 4.3.16.L.1 and allowed by Section 4.3.16.L.5.c.
 - (2) The area within the Critical Root Zone, known as the Tree Protection Zone, of any Specimen Tree shall not be subject to any disturbance unless the disturbance is based on an ISA certified arborist report stating that the proposed construction shall cause no harm to the tree and is approved by the Zoning Administrator.
 - b. Designation on Plans and Plats.

Each single-family Residential Lot or Building Site with Specimen Trees shall be identified on each Development Plan, Master PUD Development Plan, and site plan and Final Plat, if applicable, noting that there is a Specimen Tree on such Lot or Building Site, which must be preserved and cannot be removed.
 - c. Removal and Replacement of Specimen Trees. The removal, damage, or destruction of Specimen Trees shall be a violation of this Ordinance and require mitigation in accordance with the following standards:
 - (1) Two caliper inches of replacement trees shall be provided for each caliper inch of Specimen Tree removed. Each replacement tree shall be a minimum of two and a half caliper inches, and shall either be replanted within 12 months of the removal of the Specimen Tree, or within a timeframe approved by the Zoning Administrator. Performance guarantees for the associated replacement, if warranted in the opinion of the Zoning

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

Administrator, shall be established in accordance with Section 1.26. Replacement trees shall not be used to meet any other landscape requirements.

- (2) Replacement trees shall be planted on the Lot or Building Site or as applicable, the Development Parcel, where the Specimen Tree was removed; however, in cases where space on the Lot or Building Site is insufficient, the Zoning Administrator may allow mitigation through planting on a site within 1,320 feet of the Lot or Building Site. In cases where space on the Development Parcel is insufficient, the Planning Commission may allow mitigation through planting on a site within 1,320 feet of the Development Parcel.

5. Tree Protection During Construction

a. Tree Protection Fencing

All Specimen Trees in a Tree Protection Zone and the perimeter of Tree Save Areas shall be fenced in accordance with this Subsection before any Development or construction activity begins. Fencing shall extend at least one foot in distance from the edge of the tree for each inch of diameter at breast height (DBH), so that, at a minimum, each tree's Critical Root Zone is protected, but no case shall the tree fence be less than ten feet from the trunk. The Zoning Administrator shall consider existing site conditions in determining the exact location of any tree protection fencing.

- (1) All Specimen Trees in a Tree Protection Zone and the perimeter of Tree Save Areas shall be fenced in accordance with this Subsection before any Development or construction activity begins. Fencing shall extend at least one foot in distance from the edge of the tree for each inch of diameter at breast height (DBH), so that, at a minimum, each tree's Critical Root Zone is protected, but no case shall the tree fence be less than ten feet from the trunk. The Zoning Administrator shall consider existing site conditions in determining the exact location of any tree protection fencing
- (2) All fencing required by this Subsection shall be chain link fencing at least four feet in height and secured using appropriate posts spaced not more than ten feet apart. Such chain link fencing is not required to be vinyl coated.
- (3) Signs that are visible on all sides of the fenced-in area shall be installed on the tree protection fence at a rate of at least one sign for every 150 linear feet. The size of each sign must be a minimum of two feet by two feet and shall contain the following language in English and Spanish: "TREE PROTECTION ZONE: KEEP OUT. ZONA DE LA PROTECCION DEL ARBOL. NO SE PERMITE ENTRAR".
- (4) All tree protection measures shall be inspected by and approved by the Zoning Administrator prior to start of any Development or construction activities. Failure to install tree protection measures prior to the commencement of construction is a violation of this Ordinance.
- (5) The tree protection fencing shall be clearly shown on the Development Plan, Master PUD Development Plan, and site plan. No construction, grading, equipment or material storage, or any other activity shall be allowed within the fenced area except in accordance with the standards in Section 4.3.16.L.6.b.
- (6) Fencing shall be maintained until the Development or construction activities are complete.

b. Encroachments into Critical Root Zones

- (1) Encroachments within the Critical Root Zones of trees protected in accordance with this Subsection shall occur only in rare instances where no alternatives exist, such as may be required for the installation of streets, internal drives, sidewalks, or utilities.
- (2) If unauthorized encroachments occur, leading to trees being damaged during construction activities, the trees shall be replaced at a one caliper inch to one caliper inch ratio.

c. Owner's Responsibility During Development.

The owner, or if the owner is different from the developer, the developer, shall be responsible for the erection of all barriers necessary to protect any existing or installed trees from damage both during and after construction in accordance with the standards of this Subsection.

4.3.17 PRIVATE LIGHTING STANDARDS

The following standards and requirements are applicable within all Districts and Civic Districts:

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

A. Areas to be Lighted

All Parking Areas, Parking Lots, Parking Structures, and access ways within the Lot or Building Site shall be lighted.

B. Lighting Standards

1. A lighting standard shall be no event higher than 30 feet in Non-Residential Parking Areas and Parking Lots or 15 feet in other areas.
2. Additional standards may apply within a Historic District, Historic Landmark District, or with respect to a Historic Structure.

C. Illumination

1. Illumination at all Building Site Lines must meet the standards of Table 4.3.17.B (Private Lighting Standards); provided that a minimum of one foot-candle (1.0 fc) of illumination must be provided throughout all Parking Areas, Parking Lots, and Parking Structures.

TABLE 4.3.17.B (PRIVATE LIGHT STANDARDS)

District	Min./Max. Lighting Level at Frontage Line
CD-2, CD-3L & CD-3	0 – 1.0 FC
CD-4 & CD-4C	0 – 1.0 FC
CD-5 & CD-5C	1.0 - 2.0 FC

2. Lighting fixtures shall be mounted in a manner so that the cone of illumination is contained on-site and does not cross any property line of the site.
3. Lighting shall not be oriented so that it directs glare or excessive illumination onto Streets in a manner that may distract or interfere with the vision of drivers.
4. Any fixtures used to accent architectural features, landscaping, or art shall be located, aimed or shielded to minimize light spill into the night sky.
5. Use of illuminated tubing or light strings outlining or defining property lines, sales areas, roof lines, doors, windows or similar areas or features in a manner that is not primarily for safety purposes, as determined by the Zoning Administrator, is prohibited. This paragraph shall not limit the use of lights illuminating outdoor dining or gathering areas.
6. Lighting for Internal Drives is not subject to this Section 4.3.17, but must comply with the Public Lighting Standards set forth in Article 5.

D. Building Spotlights

Spotlights on Buildings shall not be used to meet the lighting requirements of this Ordinance.

ARTICLE 4: BUILDING LOT & BUILDING SITE STANDARDS

E. Limitation on Periods of Use

Outdoor recreation areas Adjacent to Residential Uses or Districts shall not be illuminated after 10 PM Sunday through Thursday, and 11 PM Friday and Saturday.

4.3.18 SIGNAGE

All signage must comply with the standards and requirements of Article 7 (Sign Standards).

Proposed Zoning Text Amendment

Additions are Underlined
Deletions are Strikethrough

§ 4.3.9.E.6 Bar, Tavern, or Nightclub

1 Bar, Tavern, or Nightclub shall be permitted in accordance with the
2 applicable Use Table, subject to the following:

- 3 (1) With the exception of nightclubs, taverns, or bars located within
4 ~~District CD-5~~the Columbia Arts District Overlay, the applicant
5 shall demonstrate that no pre-existing Place of Worship,Schools,
6 or public park is located within 500 feet of the proposed
7 nightclub or similar establishment. Within the Columbia Arts
8 District Overlay the applicant shall demonstrate that no pre-
9 existing Place of Worship, Schools, or public park is located within
10 200 feet of the proposed nightclub or similar establishment

Measurements

- 12 a. The distance shall be made from the measured in a
13 straight line from the front door of the building to the
14 front door of the church property line of the
15 proposed night club or similar establishment and
16 from the property line of any separate Parking Lots to be
17 used by the nightclub or similar establishment.
- 18 b. For public parks, said distance shall be measured in a
19 straight line from the front door of the building to the
20 closest point of the park property.
- 21 c. For schools, said distance shall be measured in a straight
22 line from the front door of the building to the front door
23 of the school.

*Adds separation
requirement from parks and
schools. Clarifies method of
measurement.*

Proposed Zoning Text Amendment

Additions are Underlined
~~Deletions are Strikethrough~~

- 24 (2) Bars, Taverns, and Nightclubs located in Character District
25 CD-5 are exempt from the separation requirements listed
26 above.
- 27 (3) No nightclub, tavern, or bar shall be located on a Lot or
28 Building Site Adjoining any property zoned CD-2, CD-3L, CD-
29 3, SD-MHP, or PUD-R~~within 500 feet of a Residentially zoned~~
30 ~~or Residentially used property.~~
- 31 (4) No outside storage ~~or activities~~ shall be located on the site.
- 32 (5) ~~Outdoor activities occupying no more than 400 square feet~~
33 ~~may be permitted by Administrative Adjustment.~~

*Modifies the distance
requirement to maintain
separation from residential
areas but allow greater
flexibility in the location of
drinking establishments.*

*Does the planning
commission prefer buffer
from Abutting or Adjoining
residential properties?*

Proposed Zoning Text Amendment

Additions are Underlined
~~Deletions are Strikethrough~~

§ 4.3.9.E.6 Home Occupation

Limited Use Standards (p. 235)

1 The following standards are intended to ensure that home
2 occupations are compatible with the residential character of
3 neighborhoods where they are located.

*Establishes a two-tiered
review of Home Occupation
permits based on the
potential impact to
neighbors*

4 (1) There are two classes of Home Occupation:

5 a. A Minor Home Occupation shall be permitted upon
6 approval of a Minor Home Occupation permit by the
7 Zoning Administrator. The Zoning Administrator shall
8 establish a process for review and issuance of permits for
9 minor home occupations.

10 b. A Major Home Occupation shall be allowed only with the
11 approval of the Board of Zoning Appeals. Such approval
12 shall follow the process of a conditional use permit. The
13 Zoning Administrator shall review such Major Home
14 Occupation requests and recommend appropriate
15 conditions of approval to the Board of Zoning Appeals.

16 (2) The Zoning Administrator may refer Minor Home
17 Occupations to the Board of Zoning Appeals upon a
18 determination that the proposed home occupation presents a
19 risk to the residential character of the neighborhood or quiet
20 enjoyment of other property owners.

*Insert cross-reference at §
8.5.10*

21 (3) If the Zoning Administrator denies a request for a Minor Home
22 Occupation, or revokes a previously issued permit, the applicant
23 may appeal the decision to the Board of Zoning Appeals. Such a
24 request shall be evaluated as a Conditional Use for a Major Home
25 Occupation permit.

26 (4) The following limitations apply to all Home Occupations:

Proposed Zoning Text Amendment

Additions are Underlined
~~Deletions are Strikethrough~~

- a. The home occupation shall be clearly incidental and secondary to the use of the property for residential purposes;
- b. A home occupation shall not be established prior to the residents conducting the home occupation taking possession of, and residing in, the dwelling;
- c. Outside storage or display of materials, merchandise, or inventory is prohibited;
- d. Exterior alteration that changes the residential character of the principal building is prohibited;
- e. No exterior building signs shall be permitted except as specifically provided in Article 7 of this ordinance;
- f. Receipt, sale or shipment to and from the premises is permitted by regular U.S. Mail and express shipping service characteristic of residential neighborhoods; large-volume, business-to-business commercial deliveries are prohibited; and
- g. The applicant shall obtain all appropriate licensure required by the State of Tennessee.

(5) The following limitations apply to Minor Home Occupations:

- a. The Home Occupation must be conducted entirely within the principal structure;
- b. The Home Occupation shall not exceed fifty percent of the total floor area of the principal building;
- c. No person other than a family member residing on the premises shall be employed as part of a minor home occupation unless such employee(s) works off-premises;
- d. There shall be no customers or clients on the premises of a minor home occupation; and

Proposed Zoning Text Amendment

Additions are Underlined
~~Deletions are Strikethrough~~

- 56 e. No commercial vehicles or trailers, other than ordinary
57 passenger vehicles; shall be permitted on premises.
- 58 (6) The following limitations apply to Major Home Occupations:
- 59 a. A Major Home Occupation may be conducted within an
60 accessory building;
- 61 b. A major home occupation may include two employees
62 who do not reside in the home;
- 63 c. Except in-home childcare licensed by the State of
64 Tennessee, a major home occupation may have no more
65 than two customers or clients on the premises at one
66 time;
- 67 d. Shipment and delivery to and from the premises are
68 prohibited between the hours of 9 pm and 7 am;
- 69 e. No employees, customers, or clients may be on the
70 premises between the hours of 9 pm and 7 am;
- 71 f. Trailers, equipment, and commercial vehicles, when
72 permitted by the Board of Zoning Appeals, must be
73 stored in the Third Layer and screened from view; and
- 74 g. The Board of Zoning Appeals may further restrict the
75 number of employees, hours of operation, deliveries,
76 and parking of commercial vehicles and equipment on
77 site.
- 78 (7) Revocation
- 79 a. The Zoning Administrator may revoke the Home
80 Occupation permit for failure to comply with these
81 limited use standards, conditions imposed by the Board
82 of Zoning Appeals, or other violations of City of Columbia
83 ordinances.

Proposed Zoning Text Amendment

Additions are Underlined
~~Deletions are Strikethrough~~

§ 9.3 Definitions

Home Occupation: any gainful occupation conducted entirely within a Dwelling ~~solely by the owners or tenant residents thereof~~ as an Accessory Use, which does not change the character of the Structure as a Residence; There are two types of Home Occupation: provided that

(1) Minor Home Occupations: gainful occupation conducted entirely within a Dwelling which does not generate traffic from employees, customers, clients, or deliveries and bears no said activity shall not occupy more than 50% of the Floor Area of the Dwelling, (2) there shall be external evidence of the accessory commercial use;

(2) Major Home Occupation: gainful occupation conducted on a residential property which

a. generates some traffic from employees, customers, clients or deliveries;

b. bears some external evidence of the accessory commercial use; or

c. occurs within an accessory structure.

~~other than an Identification Sign, (3) no goods shall be kept, and (4) no mechanical or electrical equipment shall be used except customary household equipment; and provided further that the following are not allowed as Home Occupations do not include: Clinics, Hospitals, Home Professional Office, barbershop, beauty shop, Restaurants, Kennels, Auto Repair, antique dealer, Retail sales on the premises, or loading of ammunition.~~

Updates the definition of Home Occupation to reflect new standards.

Proposed Zoning Text Amendment

Additions are Underlined
~~Deletions are Strikethrough~~

108 **Kennel:** Any ~~Structure or premises on~~place where ~~which four (4) or~~
109 ~~more dogs, cats and/or other household pets~~animals ~~over four (4)~~
110 ~~months of age~~ are kept for boarding, breeding, ~~selling,~~ grooming, or
111 training, for compensation, excluding any otherwise conforming or
112 lawfully nonconforming agricultural use, ~~however, any Structure or~~
113 ~~premises on which such animals are kept solely for Retail sale.~~ A Kennel
114 may not be a Home Occupation.

*Revises definition of Kennel
to provide clarity and
improve enforceability.*

Proposed Zoning Text Amendment

Additions are Underlined
~~Deletions are Strikethrough~~

§ 4.3.9.E.6 Tobacco, Vape, and Cannabinoid Retailers

Limited Use Standards (p. 242)

Retailers of Tobacco, Vapes, and Cannabinoids shall be permitted where
the **Building, Lot and Building Site Principal Uses Table** permits Retail
Sales subject to the following limitations:

- (1) Tobacco, Vape, and Cannabinoid retailers shall be located no less than five hundred feet from an existing Tobacco, Vape, and Cannabinoid retailer.
- (2) Tobacco, Vape, and Cannabinoid retailers shall be located no less than five hundred feet from
 - a. A School;
 - b. A public park;
 - c. A Religious Facility.
- (3) Tobacco, Vape, and Cannabinoid retailers shall be located no less than two hundred feet from any property zoned CD-2, CD-3, CD-3L, SD-MHP, or PUD-R.
- (4) Tobacco, Vape, and Cannabinoid retailers shall be located no less than fifty feet from any property used as a Single-Family or Two-Family home or Townhouse.
- ~~(2)~~(5) Required distances shall be measured from Parcel or Building Site line to Parcel or Building Site line.

Standards modeled on Murfreesboro, TN and Louisville, KY (those jurisdictions use larger exclusion radius).

Proposed Zoning Text Amendment

Additions are Underlined
Deletions are Strikethrough

§ 9.3 Definitions

Tobacco, Vape, and Cannabinoid Retailers: A retail sales operation that

- (1) Devotes at least fifty-one percent of its floor area to the display, sale, distribution, delivery, offering, furnishing, or marketing of products intended for recreational/non-prescription use including but not limited to cigarettes, e-cigarettes, smokeless tobacco, pipe tobacco, vapes, products made from cannabinoid derivative plants (e.g CBD or THC products), or other nicotine or cannabinoid delivery devices, components, products, liquid nicotine or cannabinoids, or liquid nicotine or cannabinoid containers; or
- (2) Earns at least fifty-one percent of gross sales from sale distribution, delivery, or marketing of products intended for recreational/non-prescription use including but not limited to cigarettes, e-cigarettes, smokeless tobacco, pipe tobacco, vapes, products made from cannabinoid derivative plants (e.g CBD or THC products), or other nicotine or cannabinoid delivery devices, components, products, liquid nicotine or cannabinoids, or liquid nicotine or cannabinoid containers.

*Definition based on
proportion of space
OR proportion of
sales*

Proposed Zoning Text Amendment

Additions are Underlined
 Deletions are Strikethrough

TABLE 4.3.9.A-2 BUILDING, LOT & BUILDING SITE ACCESSORY USES

ACCESSORY USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Minor Home Occupation	RPL	RPL	RPL	RPL	RPL	RPL	RPL	RPL	RPL	RPL	NP	RPL	RPL	NP
Major Home Occupation	<u>CU</u>	<u>CU</u>	<u>CU</u>	<u>CU</u>	<u>CU</u>	<u>CU</u>	<u>CU</u>	<u>CU</u>	<u>CU</u>	<u>CU</u>	NP	<u>CU</u>	<u>CU</u>	<u>NP</u>

Distinction between Minor and Major Home Occupations in Accessory Use Table. Minor Home Occupations permitted administratively; Major Home Occupations are approved by BZA.

Proposed Zoning Text Amendment

Additions are Underlined
 Deletions are Strikethrough

TABLE 4.3.9.A-1 BUILDING, LOT & BUILDING SITE PRINCIPAL USE

PRINCIPAL USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
<u>Tobacco, Vape, and Cannabinoid Retailers</u>	<u>NP</u>	<u>NP</u>	<u>NP</u>	<u>PL</u>	<u>PL</u>	<u>NP</u>	<u>PL</u>	<u>NP</u>	<u>PL</u>	<u>PL</u>	<u>NP</u>	<u>NP</u>	<u>PL</u>	<u>NP</u>

Vape and CBD retailers subject to limited use standards in mixed use districts (excluding CD-5) and prohibited in single-family residential character districts.



Q4 Zoning Text Amendment Housekeeping Corrections

Project #:	24-0476	Location:	N/A
Applicant:	Kevin C. McCarthy, AICP	Case Type(s):	Text Amendment
Staff Planner:	Kevin C. McCarthy, AICP	Proposed Use:	N/A

SUMMARY

The applicant, the Zoning Administrator, requests to amend the text of Ordinance 4400, the zoning ordinance for the City of Columbia. This is the fifth of five rounds of zoning text amendments staff has presented to the Planning Commission between December 2023 and December 2024. These changes will implement Connect Columbia, better align zoning regulations with community preferences, and calibrate the standards based on “lessons learned” during the first two years administering the Ordinance. This round of proposed amendments is detailed in the attached track changes documents. Specifically, the proposal relates the clarification of the lot width standard for the CD-3 Neighborhood Character District as well as corrections of scrivener errors and other minor formatting corrections.

- The Planning Commission is a **recommending body** for zoning text amendments. The City Council is the decision-making authority.
- The staff comments section details the proposed changes, which are provided in the agenda packet in ~~striketrough~~ and underlines.
- Planning Commission may recommend adoption of the proposed text, modify the proposal, or decline the request.
- Templates are provided at the end of the report to assist the Planning Commission in crafting properly formatted motions.

CONSISTENCY WITH CONNECT COLUMBIA

The ongoing current process of reviewing and updating the Zoning Ordinance and other regulating documents is part of the implementation of Connect Columbia, the City's comprehensive plan.

REVIEW PROCESS

Section **8.5.18** of the Zoning Ordinance directs the Planning Commission to review and make a recommendation on all proposed changes to the text of the Ordinance. The Planning Commission is the recommending body for text amendments under **§ 8.3.3.B.2** of the Zoning Ordinance.

Section **8.5.18.C** of the Zoning Ordinance requires that Planning Commission determine that the proposed changes are consistent with the comprehensive plan.

8.5.18.G of the Zoning Ordinance establishes the review criteria for approval of all changes to the text of the Ordinance:

- a. The extent to which the proposed Zoning Ordinance Amendment is consistent with the remainder of this Ordinance, including, specifically, any purpose and intent statements;*
- b. The extent to which the proposed Zoning Ordinance Amendment represents a new idea not considered in this Ordinance, or represents a revision necessitated by changing circumstances over time;*
- c. Whether or not the proposed Zoning Ordinance Amendment corrects an error in this Ordinance; and*
- d. Whether or not the proposed Zoning Ordinance Amendment revises this Ordinance to comply with state or federal statutes or case law.*

The criteria for City Council action on a Zoning Ordinance Amendment at § 8.5.18.J.4 are identical to the criteria for Planning Commission review at 8.5.18.G.3.

COMMENTARY FROM PROFESSIONAL PLANNING STAFF

The City Council adopted the current ordinance on July 14, 2022. The Zoning Ordinance implements the City's comprehensive plan, Connect Columbia. On November 8, 2023, the Planning Commission recommended adoption of a five-year update of the framework, land use, and transportation elements of Connect Columbia. The framework element of the plan directs planning staff to initiate revisions to the ordinance in order to bring it into consistency with changes to the future land use plan. It further directs staff to engage residents and property owners to solicit suggestions for further changes to the ordinance. As mentioned above, this is

the final round of zoning text amendments staff plans to present to the Planning Commission between December 2023 and December 2024.

The proposal includes the following changes:

- Removes the word “garage” from the width standard for alley-loaded CD-3 lots.
- Directs the Zoning Administrator to compile list of typos, cross-references, and other formatting corrections for consideration by the City Council.

Planning staff will present detailed commentary at the December 4, 2024 meeting of the Planning Commission. The proposal

The Planning Commission may recommend approval of the proposed text amendments, direct staff to prepare an alternative text amendment, or decline to act on the proposed changes.

SAMPLE MOTIONS

Approve:

Move to find, based on the analysis provided by city staff, that the criteria listed in section **8.5.18** of the City of Columbia Zoning Ordinance have been satisfied and recommend approval of the proposed text amendments **[may be subject to modifications proposed by the Planning Commission]**.

Deny:

Move to recommend denial of the requested text amendment having found, based on the analysis provided by city staff, that the criteria listed in section **8.5.18** of the City of Columbia Zoning Ordinance are not satisfied *[list specific reasons for denial and provide direction to staff]*.

Defer:

Move to find that there is insufficient information to decide, defer the matter to the next regularly scheduled meeting of the Planning Commission, and direct staff to provide: *[list additional information]* for review at a future meeting.

Q4 Zoning Text Amendment Limited Use Standards

Project #:	24-0475	Location:	N/A
Applicant:	Kevin C. McCarthy, AICP	Case Type(s):	Text Amendment
Staff Planner:	Kevin C. McCarthy, AICP	Proposed Use:	N/A

SUMMARY

The applicant, the Zoning Administrator, requests to amend the text of Ordinance 4400, the zoning ordinance for the City of Columbia. This is the fifth of five rounds of zoning text amendments staff has presented to the Planning Commission between December 2023 and December 2024. These changes will implement Connect Columbia, better align zoning regulations with community preferences, and calibrate the standards based on “lessons learned” during the first two years administering the Ordinance. This round of proposed amendments is detailed in the attached track changes documents. Specifically the proposal relates to the limited used standards in Article 4 as well as related definition and procedural references in Articles 9 and 8.

- The Planning Commission is a **recommending body** for zoning text amendments. The City Council is the decision-making authority.
- The staff comments section details the proposed changes, which are provided in the agenda packet in ~~striketrough~~ and underlines.
- The specific limited uses impacted by this amendment include: Home Occupations; Bars, Taverns, and Nightclubs; retailers of CBD, Vape, and Tobacco; and Short Term Rentals.
- Planning Commission may recommend adoption of the proposed text, modify the proposal, or decline the request.
- Templates are provided at the end of the report to assist the Planning Commission in crafting properly formatted motions.

CONSISTENCY WITH CONNECT COLUMBIA

The ongoing current process of reviewing and updating the Zoning Ordinance and other regulating documents is part of the implementation of Connect Columbia, the City's comprehensive plan.

REVIEW PROCESS

Section **8.5.18** of the Zoning Ordinance directs the Planning Commission to review and make a recommendation on all proposed changes to the text of the Ordinance. The Planning Commission is the recommending body for text amendments under **§ 8.3.3.B.2** of the Zoning Ordinance.

Section **8.5.18.C** of the Zoning Ordinance requires that Planning Commission determine that the proposed changes are consistent with the comprehensive plan.

8.5.18.G of the Zoning Ordinance establishes the review criteria for approval of all changes to the text of the Ordinance:

- a. The extent to which the proposed Zoning Ordinance Amendment is consistent with the remainder of this Ordinance, including, specifically, any purpose and intent statements;*
- b. The extent to which the proposed Zoning Ordinance Amendment represents a new idea not considered in this Ordinance, or represents a revision necessitated by changing circumstances over time;*
- c. Whether or not the proposed Zoning Ordinance Amendment corrects an error in this Ordinance; and*
- d. Whether or not the proposed Zoning Ordinance Amendment revises this Ordinance to comply with state or federal statutes or case law.*

The criteria for City Council action on a Zoning Ordinance Amendment at § 8.5.18.J.4 are identical to the criteria for Planning Commission review at 8.5.18.G.3.

COMMENTARY FROM PROFESSIONAL PLANNING STAFF

The City Council adopted the current ordinance on July 14, 2022. The Zoning Ordinance implements the City's comprehensive plan, Connect Columbia. On November 8, 2023, the Planning Commission recommended adoption of a five-year update of the framework, land use, and transportation elements of Connect Columbia. The framework element of the plan directs planning staff to initiate revisions to the ordinance in order to bring it into consistency with changes to the future land use plan. It further directs staff to engage residents and property owners to solicit suggestions for further changes to the ordinance. As mentioned above, this is

the final round of zoning text amendments staff plans to present to the Planning Commission between December 2023 and December 2024.

The proposal includes the following changes:

- Home Occupations
 - Distinguishes between “Major” and “Minor” home occupations;
 - Creates a process to allow major home occupations as a conditional use approved by the Board of Zoning Appeals;
 - Continues to permit minor home occupations administratively; and
 - Modifies definition of Home Occupation and Kennels.
- Bars, Taverns & Nightclubs
 - Removes 500 ft exclusion from residential property;
 - Adds exclusions around schools and parks;
 - Prohibits the use on lots and building sites next to residentially zoned property; and
 - Requires a 50 ft separation from property in single-family use regardless of zoning.
- Vape, Tobacco & Cannabinoid Retailers
 - Creates a use category for Vape, Tobacco & Cannabinoid Retailers;
 - Creates a definition for Vape, Tobacco & Cannabinoid Retailers;
 - Imposes a 500 ft separation requirement;
 - Imposes a 500 ft exclusion around schools, parks, and religious facilities; and
 - Requires 50 ft separation from residentially zoned property.
- Short Term Rental
 - Removes requirement that all Short-Term Rentals be accessory uses in owner-occupied dwellings;
 - Modifies the definition of Accessory Dwelling Unit (ADU) to allow the use of ADUs as short-term rentals;
 - Creates an administrative review and permitting process;



- Removes prohibition on short-term rentals in single-family character districts and allows them as a conditional use approved by the Board of Zoning Appeals;
- Allows short-term rentals by administrative approval in mixed use character districts and special districts;
- Requires a local point of contact for each permitted short-term rental; and
- Removes onerous parking requirements for short-term rentals.

Planning staff will present detailed commentary at the December 4, 2024 meeting of the Planning Commission. The proposal

The Planning Commission may recommend approval of the proposed text amendments, direct staff to prepare an alternative text amendment, or decline to act on the proposed changes.

SAMPLE MOTIONS

Approve:

Move to find, based on the analysis provided by city staff, that the criteria listed in section **8.5.18** of the City of Columbia Zoning Ordinance have been satisfied and recommend approval of the proposed text amendments **[may be subject to modifications proposed by the Planning Commission]**.

Deny:

Move to recommend denial of the requested text amendment having found, based on the analysis provided by city staff, that the criteria listed in section **8.5.18** of the City of Columbia Zoning Ordinance are not satisfied *[list specific reasons for denial and provide direction to staff]*.

Defer:

Move to find that there is insufficient information to decide, defer the matter to the next regularly scheduled meeting of the Planning Commission, and direct staff to provide: *[list additional information]* for review at a future meeting.



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Paul Keltner, AICP, Development Services Director pkeltner@columbiatn.gov 931-560-1560

AGENDA ITEM TITLE: 1ST CONSIDERATION ON ORDINANCE NO. 4537 - AN ORDINANCE AMENDING DEVELOPMENT SERVICES PLANNING FEE SCHEDULE FOR THE CITY OF COLUMBIA, TENNESSEE - CITYWIDE, FINANCIALLY RESPONSIBLE CITY PROVIDING EXCELLENT SERVICES.

RECOMMENDATION: Approve Ordinance 4537 on first consideration.

INFORMATION: The request is to amend the Fee Schedule for Development Services. The proposed amendments necessitate accompanying fees for the permits and processes that staff will be required to review and issue. The fees that were amended and added include a Short-Term Rental Fee of \$300 requiring Board of Zoning Appeals approval; \$150 Short Term Rental Fee requiring Administrative Approval; Small Accessory Permit fee of \$25; Circulation of Approved Final Plat Fee of \$35; and items for Annexation to notice and plan of services and resolutions to consist of an Advertising and Processing Fee of Cost. The Planning Commission recommended approval of this request with a vote of 6-0 at their December 4, 2024 meeting.

CERTIFICATION: N/A

ATTACHMENTS: Ordinance 4537; Exhibit A; DS Staff Report.

**AN ORDINANCE AMENDING DEVELOPMENT SERVICES FILING FEE
SCHEDULE FOR THE CITY OF COLUMBIA, TENNESSEE.**

WHEREAS, Section §13-7-201 of the Tennessee Code Annotated empowers the city to enact a zoning ordinance and to provide for its administration, enforcement, and amendment; and

WHEREAS, the City Council deems it necessary for the purpose of promoting the health, safety, morals and general welfare of the city to enact such an ordinance; and

WHEREAS, the City Council, pursuant to the provisions of Section §13-4-101 of the Tennessee Code Annotated has appointed a Planning Commission to recommend the appropriate regulations to be enforced therein; and

WHEREAS, on the 4th day of December, 2024, the Planning Commission reviewed and recommended specific changes, in accordance to Section 8.5.4.C.3 of the Zoning Ordinance regarding development fees. The new proposed fee schedule is attached hereto as Exhibit "A" and incorporated herein by reference. Said recommendation is being considered after a public hearing held on the 9th day of January, 2025, notice of which was published in the Daily Herald of Columbia fifteen (15) days or more prior to said meeting; and

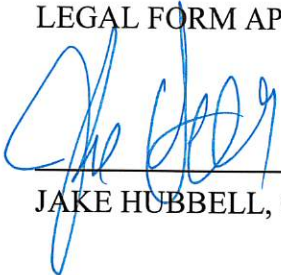
PASSED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF
COLUMBIA, TENNESSEE, this the 13th day of February, 2025.

CHARLES (CHAZ) M. MOLDER, MAYOR

ATTEST:

THAD H. JABLONSKI, CITY RECORDER

LEGAL FORM APPROVED:



JAKE HUBBELL, CITY ATTORNEY

APPROVED FOR FIRST CONSIDERATION:

ANTHONY R. MASSEY – CITY MANAGER

Passed on 1st consideration _____

Passed on 2nd consideration: _____



CITY OF
COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES

700 NORTH GARDEN STREET

COLUMBIA, TN 38401

PHONE: (931) 560-1560

FAX: (931) 560-1541

PLANNING FEE SCHEDULE*Payable upon Submission of Application**Non-refundable Except as Provided in Refund Policy***Comprehensive Plan Amendment¹**

Submittal Fee	\$ 300
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Annexation with CD-3L Base Zoning

Submittal Fee (10 acres or less); plus	\$ 300
Next 90 acres or fraction thereof; plus	\$20/acre
All over 100 acres or fraction thereof	\$3/acre

Zoning Map Amendment "Rezoning" (§8.5.19)

Submittal Fee (10 acres or less); plus	\$ 450
Next 90 acres or fraction thereof; plus	\$30/acre
All over 100 acres or fraction thereof	\$5/acre

Planned Unit Development (§8.5.21)

Preliminary Development Plan

Submittal Fee (PUD-R and PUD-MU); plus	\$ 500
PUD-R and PUD-MU; and/or	\$25/dwelling unit
PUD-MU (non-residential acreage)	\$50/acre

Final Development Plan

PUD-R	\$ 250
PUD-MU	\$ 300

Revision of a Master Plan requiring Planning Commission Approval	100% of original fee
--	----------------------

Major Site Development Plan (§8.5.6)

New Multi-Family Residential Sites, Buildings, and Additions

Submittal Fee; plus	\$ 500
Residential Units	\$10/unit

New Non-Residential and/or Mixed-Use Sites, Buildings, and Additions

Submittal Fee; plus	\$ 500
First 10,000 square feet of all floor area; plus	\$0.05/square foot
All floor area over 10,000 square feet	\$0.02/square foot

Development Plan submitted with Preliminary Plat	\$10/unit
--	-----------

Revision of Plan Requiring Planning Commission Approval (§8.5.6.D.3); plus	50% of original fee
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Renewal of Expiring Site Plan without Changes (§8.5.6.D.1-2) ²	100% of original fee
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Alternative Performance	\$500
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¹ Must be accompanied by a request for rezoning.

² Paid with building permit or site construction plan review, as applicable.

Minor Site Development Plan (§8.5.6)³

Administrative Development Plan Approval (§8.5.6.R)	\$500
Renewal of Expiring Site Plan without Changes (§8.5.6.D.1-2)	100% of original fee

Heavy Manufacturing Permit (§8.5.22)

Submittal Fee	\$300
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Board of Zoning Appeals (§8.5.16/8.5.17)

Appeal Of Planning Department Determination ⁴	\$ 300
Zoning Variance Owner-Occupied Residential	\$ 200
Zoning Variance	\$ 400
Conditional Use	\$ 300

Architectural Design Reviewe (§8.5.15)

Design Review for Planned Unit Development	\$ 150
Design Review for structures in Special Districts (SD-LI, SD-HI, SD-INT)	\$ 100
Alternative Compliance - ARC	\$500
Alternative Compliance - ZA	\$300
Design Review Appeals	\$50

Historic Zoning Commission (§8.5.13)

Non-Residential/Non-Owner-Occupied Residential/Signs	
Certificate of Appropriateness - Commission; plus	\$ 150
Certificate of Appropriateness - Administrative	\$ 75
Owner-Occupied Residential	
Certificate of Appropriateness - Commission	\$ 25
Certificate of Appropriateness - Administrative	No Charge
After the Fact Request for Certificate of Appropriateness/Multiple Reviews ⁵	\$300

Heavy Manufacturing Permit (§8.5.22)

Submittal Fee	\$ 300
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³ All fees applicable to Major Site Development Plans apply to a Minor Site Development Plans referred to the CMPC by the ZA.

⁴ Refunded if the BZA finds in favor of the applicant.

⁵ This fee applies to all requests for approval for work already completed as well as requests which follow a Stop Work order. The fee also applies to second and subsequent requests to revise previous Commission-level approvals. The Zoning Administrator may charge the regular application fee in cases of bona fide hardship.



Subdivision (§8.5.24 and SubRegs)

Minor Subdivisions	
Referred to Planning Commission Approval ⁶	\$ 500
Staff-Approved	\$ 250
Preliminary Plat (Must Accompany a Development Plan)	
Submittal Fee; plus	\$ 500
Per Lot; plus	\$ 25
Final Plat	
Submittal Fee	\$ 500
Per Lot	\$ 25
Circulation of Approved Plat (Optional)	\$35

Zoning Fees

Zoning Verification Letter Basic	\$ 50
Zoning Verification Letter Detailed / Zoning Administrator's Determination	\$ 75
Home Occupation Permit	\$ 25
Mobile Vending Permit	\$ 50
Small Accessory Permit	\$25
Receipt of Plans Conforming to PUD or Site Development Plan	\$ 100
Engineering/Planning Reinspection ⁷	\$ 50
Short Term Rental Permit ⁸	\$300
Short Term Rental Permit Administrative	\$150
Zoning Compliance - Residential ⁹	\$ 100
Zoning Compliance - Commercial/Industrial ⁴	\$ 300
Zoning Compliance - Signs ¹⁰	Lesser of 30% of project value or \$300

Public Notice¹¹

Advertising and Processing	
Items for which CMPC/ARC is the Decision Making Authority	\$70
Items for which City Council is the Decision Making Authority	\$145
Items for which BZA is the Decision Making Authority	\$70
Items for which HZC is the Decision Making Authority	\$70
Items for annexation to notice plan of services and resolution	Cost

⁶ Referred at the discretion of the Zoning Administrator or City Engineer. Fee may be reduced to \$250 at the discretion of the Zoning Administrator or City Engineer when minimal additional staff time is required.

⁷ If associated with Preliminary Plat, Site Plan, PUD or other PC, BZA, HZC, Design Review

⁸ Double fees for after the fact permitting after May 13, 2024.

⁹ Paid with building permit.

¹⁰ Signs which require a CoA from the ZA or HZC may be credited \$75 toward the Zoning Compliance fee, provided no revisions are necessary upon first review of the permit application.

¹¹ In addition to the initial fee, advertising and mailing fees must be paid each time an item is deferred at the applicant's request. May be waived at discretion of the Director of Development Services.



Mailing and Processing

Items for which City Council or BZA is the Decision Making Authority	\$9/adjacent parcel
Posting of Signs	
Items for which City Council, CMPC, BZA, or HZC is the Decision Making Authority	\$10

Additional Fees

Pre-application Meeting ¹²	\$ 225
Additional Fees for Multiple Technical Reviews ¹³	50% of original fee
Technology Fee	\$20

Refund Policy

All advertising and processing fees are non-refundable.

All mailing and processing fees are non-refundable.

Fees for Planning Commission items may be refunded, less a \$100 processing fee if the applicant withdraws the application at least twenty-four hours prior to the meeting of the Development Review Committee when the request is scheduled for its first technical review. Fees for Planning Commission items are non-refundable at any later point.

Fees for Board of Zoning Appeals may be refunded, less a \$50 processing fee if the applicant withdraws the application at least seven days prior to the scheduled meeting. Fees for Board of Zoning Appeals items are non-refundable at any later point.

Fees for Historic Zoning Commission items may be refunded if the applicant withdraws the application at least seven days prior to the scheduled meeting. Fees for Historic Zoning Commission items are non-refundable at any later point.

Zoning fees are non-refundable.

Abbreviations

Columbia Municipal Planning Commission (CMPC)
Architectural Design Review Commission (ARC)
Development Review Committee (DRC)
Board of Zoning Appeals (BZA)
Historic Zoning Commission (HZC)
City Council (CC)

¹² Only applies to proposed comprehensive plan amendments, zoning map or text amendments, planned unit developments, site plans approved by Planning Commission, and preliminary plats. Fee is only charged when the City Engineer, Fire Marshall, and Zoning Administrator (or their designees) are each in attendance. The fee may be waived at the discretion of the Director of Development Services. The fee may be credited to one subsequent related application for Planning Commission review received within six months of the meeting date.

¹³ Applicable to Planned Unit Developments, Site Development Plan, and Preliminary Plats which the Zoning Administrator deems noncompliant after two reviews by the Development Review Committee (DRC), and to applications referred back to the DRC due to technical deficiencies. May be waived at discretion of the Director of Development Services and/or the Planning Commission.



CITY OF
COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES

700 NORTH GARDEN STREET

COLUMBIA, TN 38401

PHONE: (931) 560-1560

FAX: (931) 560-1541

Zoning Administrator (ZA)



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Paul Keltner, AICP, Development Services Director pkeltner@columbiatn.gov 931-560-1560

AGENDA ITEM TITLE: 1ST CONSIDERATION ON ORDINANCE NO. 4538 - AN ORDINANCE AMENDING ORDINANCE NO. 4400, THE SAME BEING THE ZONING ORDINANCE FOR THE CITY OF COLUMBIA, TENNESSEE, TO INCORPORATE THE CHANGES RECOMMENDED BY THE PLANNING COMMISSION - CITYWIDE, MORE ATTRACTIVE, LIVABLE CITY.

RECOMMENDATION: Approve Ordinance 4538 on first consideration.

INFORMATION: The Department of Development Services is requesting to amend the Zoning Ordinance of Columbia, Ordinance 4400, with changes concerning Article 9: Definitions, as reviewed and recommended by the Planning Commission at the December 4th, 2024 meeting. The changes and additions to definitions include the following: Minor Home Occupation; Major Home Occupation; Kennel; Short-Term Rental Unit; Tobacco, Vape, and Cannabinoid Retailers

Approval was recommended by a vote of six to zero.

CERTIFICATION: N/A

ATTACHMENTS: Ordinance 4538; Exhibit A; Ordinance 4538 Marked Changes; DS Staff Report.

**AN ORDINANCE AMENDING ORDINANCE NO. 4400, THE SAME BEING
THE ZONING ORDINANCE OF THE CITY OF COLUMBIA, TENNESSEE
REGARDING DEFINITIONS IN ARTICLE 9 BY REPEALING SUCH ARTICLE
AND REPLACING IT WITH A NEW ARTICLE 9, DEFINITIONS.**

WHEREAS, Section §13-7-201 of the Tennessee Code Annotated empowers the city to enact a zoning ordinance and to provide for its administration, enforcement, and amendment; and

WHEREAS, the City Council deems it necessary for the purpose of promoting the health, safety, morals and general welfare of the city to enact such an ordinance; and

WHEREAS, the City Council, pursuant to the provisions of Section §13-4-101 of the Tennessee Code Annotated has appointed a Planning Commission to recommend the appropriate regulations to be enforced therein; and

WHEREAS, on the 4th day of December 2024, the Planning Commission reviewed and recommended specific changes in accordance to Section 8.5.18, to the Zoning Ordinance regarding Definitions in Article 9. As a result, Article 9 is being repealed in its entirety and replaced with a new Article 9 which is attached hereto as Exhibit A and incorporated herein. Said recommendations are being considered after a public hearing held on the 9th day of January, 2025, notice of which was published in the Daily Herald of Columbia fifteen (15) days or more prior to said meeting; and

NOW, THEREFORE, BE IT ORDAINED BY THE CITY OF COLUMBIA:

Section 1: That Ordinance number 4400, the same being the Zoning Ordinance of the City of Columbia, Tennessee is hereby amended by repealing Article 9 in its entirety and replacing such Article with a new Article 9, Definitions, which is attached hereto as Exhibit A and incorporated herein by reference;

Section 2: That pursuant to Section 8.5.18.J.4, the City Council makes the following specific findings:

- a. The extent to which the proposed Zoning Ordinance Amendment is consistent with the remainder of this Ordinance, including, specifically, any purpose and intent statements;
- b. The extent to which the proposed Zoning Ordinance Amendment represents a new idea not considered in this Ordinance, or represents a revision necessitated by changing circumstances over time;
- c. Whether or not the proposed Zoning Ordinance Amendment corrects an error in this Ordinance; and
- d. Whether or not the proposed Zoning Ordinance Amendment revises this Ordinance to comply with state or federal statutes or case law.

Section 3: That ordinances or parts of ordinances in conflict herewith are hereby repealed

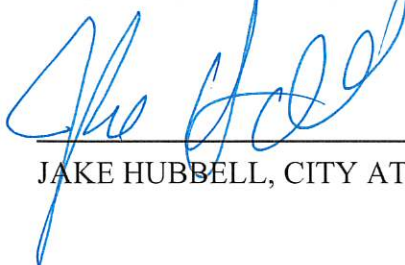
PASSED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF
COLUMBIA, TENNESSEE, this the 13th day of February 2025.

CHARLES (CHAZ) M. MOLDER, MAYOR

ATTEST:

THAD H. JABLONSKI, CITY RECORDER

LEGAL FORM APPROVED:



JAKE HUBBELL, CITY ATTORNEY

APPROVED FOR FIRST CONSIDERATION:

ANTHONY R. MASSEY – CITY MANAGER

Passed on 1st consideration _____

Passed on 2nd consideration: _____

SECTION 9.1 WORD USAGE	445
SECTION 9.2 TERMS	446
A. CAPITALIZED TERMS.....	446
B. UNDEFINED TERMS.....	446
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ARTICLE 9 DEFINITIONS

SECTION 9.1 WORD USAGE

1. The following shall be applicable to certain words used in this Ordinance and the interpretation of this Ordinance. Unless the context or natural construction of the wording clearly indicates otherwise:
2. All words used in the present tense include the future tense; all words in the plural number include the singular number and all words in the singular number include the plural number.
3. The words “must” and “shall” are mandatory.
4. The words “used” or “occupied” include the words intended, designed, maintained, or arranged to be used or occupied.
5. The particular shall control the general.
6. The word “may” is permissive.
7. In the case of any difference of meaning or implication between the text of this Ordinance and any caption or illustration, the text shall control. Where in conflict, numerical metrics shall take precedence over graphical metrics.

The word “permitted” or words “permitted as of right,” whether or not capitalized, means permitted without meeting the requirements for a Conditional Use Permit or compliance with limited use standards.

The words “conditionally permitted” or “permitted by Conditional Use Permit” mean permitted subject to the requirements for Conditional Use by special permit pursuant to Section 4.3.9.D, of this Ordinance, and all other applicable provisions.

The words “Permitted Subject to Limited Use Standards” means permitted subject to compliance with the applicable limited use standards pursuant to Section 4.3.9.D and all other applicable provisions of this Ordinance.

The word “applicant” includes any authorized agent of the applicant.

The phrase “used for” shall include the phrases “arranged for”, “designed for”, intended for”, maintained for”, and “occupied for”.

Unless the context clearly indicates to the contrary, conjunctions shall be interpreted as follows:

“and” indicates that all connected items, conditions, provisions or events shall apply.

“or” indicates that any of the connected items, provisions, or events shall apply.

“either . . . or” indicates that the connected items, conditions, provisions, or events shall apply singly but not in combination.

Unless expressly provided otherwise, all public officials, bodies, and agencies to which reference is made are those of the City.

SECTION 9.2 TERMS

A. Capitalized Terms

Certain capitalized terms used in this Ordinance are defined below or elsewhere in this Ordinance and shall be given such meanings unless the context clearly indicates or requires a different meaning.

B. Undefined Terms

Undefined terms used in this Ordinance shall have the meanings customarily assigned to them.

SECTION 9.3 DEFINED TERMS

For purposes of this Ordinance, the following terms shall have the meanings set forth below unless the context clearly indicates or requires a different meaning:

ARTICLE 9: DEFINITIONS

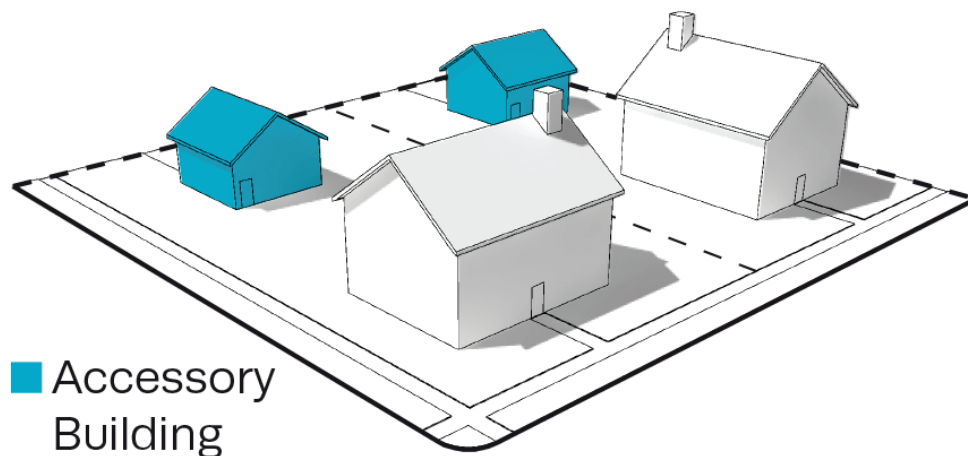
A.

Abut/Abutting: To share or sharing a common property line. For the purposes of this definition, properties across an intervening right-of-way shall not be considered abutting.

Access: As a noun, a legal and physical means of entering premises, whether by Adjacency, Easement, or otherwise; as a verb, the act of entering premises.

Accessory Building: A Building that shares a Lot or Building Site with a Principal Building and that is customarily and clearly incidental and subordinate to the Principal Building. An Accessory Building may or may not have an Accessory Unit or be occupied or devoted to one or more Accessory Uses. An Accessory Building may or may not be attached to the Principal Building. See **Illustration 9.3.A-1 (Principal Building & Accessory Building)**.

ILLUSTRATION 9.3.A-1 ACCESSORY BUILDING



Accessory Dwelling: A residential living unit on the same parcel as a single-family dwelling. The Accessory Dwelling provides complete non-transient independent living facilities for one or more persons while remaining physically subordinate and accessory to the principal residence. It may take various forms: a detached unit; a unit that is part of an accessory structure, such as a detached garage; or a unit that is part of an expanded or remodeled primary dwelling.

Accessory Use: A Use that is customarily and clearly incidental and subordinate to a Principal Use of land or a Structure and located on the same parcel of land, Lot, or Building Site as such Principal Use.

Accommodations / Lodging Uses: A Commercial Use sub-category characterized by premises available for daily or weekly renting of bedrooms or suites for periods of less than 30 days, including without limitation Bed and Breakfast, Inn, Hotel, and Motel. A Short-Term Rental Unit is not an Accommodations / Lodging Use. See **Table 4.3.9.A-1 (Building, Lot & Building Site Principal Uses)**. Private campground, hunting/fishing camp, and dude ranch, shelter for the homeless, and Recreational vehicle (RV) park are not included in Accommodations / Lodging Uses.

Actual Construction or Development: The excavation of a site and/or the systematic placement of building materials in conjunction with the Development of land or construction of a Building or other Structure.

Addition: With respect to an existing Building, any walled and roofed new construction expansion to the perimeter of a Building in which the addition is connected by a common load - bearing wall other than a fire wall or is separated by independent perimeter load – bearing walls.

Adult Day Care: As defined in the Rules of Tennessee Department of Human Services Community and Social Services.

Address Sign: A Sign type, described as such in **Table 7.1.2.B-1 (Sign Types - Summary)** and **Table 7.1.2.B-2 (Sign Types - Specific Standards)**.

Adjacent/Adjoin: Having any distance of real property boundary in common with another property, or being separated from the other property boundary by a right- of-way, Thoroughfare, Internal Drive, Alley, Easement, or Civic Space. Not synonymous with Abutting.

Administrative Adjustment: Administrative relief from a standard or requirement of this Ordinance, granted pursuant to the provisions of Article 8 (Administration, Procedure, & Enforcement) by the Zoning Administrator or other staff as specifically authorized by this Ordinance.

Adult Arcade: Any place to which the public is permitted or invited wherein coin – operated or slug – operated or electronically, electrically, or mechanically controlled still or motion picture machines, projectors or other image – producing devices are maintained to show images to five or fewer persons per machine at any one time, and where the images so displayed are distinguished or characterized by the depicting of Specified Sexual Activities or Specified Anatomical Areas.

Adult Bookstore or Adult Video Store: An establishment having as its principal Business purpose the sale or rental of books, magazines, slides, films, video cassettes, video discs, or any other form of media, which are distinguished or characterized by their emphasis on matter depicting, describing or relating to Specific Sexual Activities or Specific Anatomical Areas.

Adult Care Home: A single family residence licensed pursuant to TSA Title 68, Chapter 11, Part 2, in which twenty-four-hour residential care, including assistance with activities of daily living, is provided in a homelike environment to no more than five (5) adults who are elderly or have a disability, as defined in TSA section 68- 11-201.

Adult Day Care Facility: Premises at which care, supervision, or guidance is provided for one or more adults, whether or not the facility is operated for profit and whether or not the facility charges for services offered by it. Notwithstanding the foregoing, Adult Day Care Facility does not include:

Facilities for disabled or mentally ill Persons;

Facilities owned and operated by a local church congregation or an established religious denomination or a religious college or university which does not receive State or federal financial assistance for adult care services.

Adult Entertainment: Any conduct that presents material by books, films, slides, video cassettes, video discs, or any other media or by live presentation, or services to the patron of an establishment, which material or services are distinguished or characterized by an emphasis on matters depicting, describing engaging in, or relating to Specified Sexual Activities or Specified Anatomical Areas.

Adult Motion Picture Theater: A Building regularly used for presenting material having as a dominant theme or presenting material distinguished or characterized by an emphasis on matter depicting, describing or relating to Specified Sexual Activities or Specified Anatomical Areas, for observation by patrons therein.

Adult-Oriented Entertainment: Use whereby premises to which the public or members of the public are invited or admitted and which are so physically arranged as to provide booths, cubicles, rooms, compartments or stalls

ARTICLE 9: DEFINITIONS

separate from the common areas of the premises for the purpose of viewing Adult – Oriented Motion Pictures, or wherein an entertainer provides Adult Entertainment to a member of the public, a patron or a member, when such Adult Entertainment is held, conducted, operated or maintained for a profit, direct or indirect, including without limitation, Adult Bookstores or Adult Video Stores, Adult Motion Picture Theaters, Adult Arcades, Adult Theaters or Cabarets. any Adult Entertainment studio or any premises physically arranged and used as such, whether advertised or represented as an adult entertainment studio, rap studio, exotic dance studio, encounter studio, sensitivity studio, modeling studio or any other term of like import.

Agricultural Uses: Sub-category of Agricultural and Extractive Use category characterized by Uses that create or preserve areas intended primarily for the raising of animals and crops, and the secondary industries associated with agricultural production.

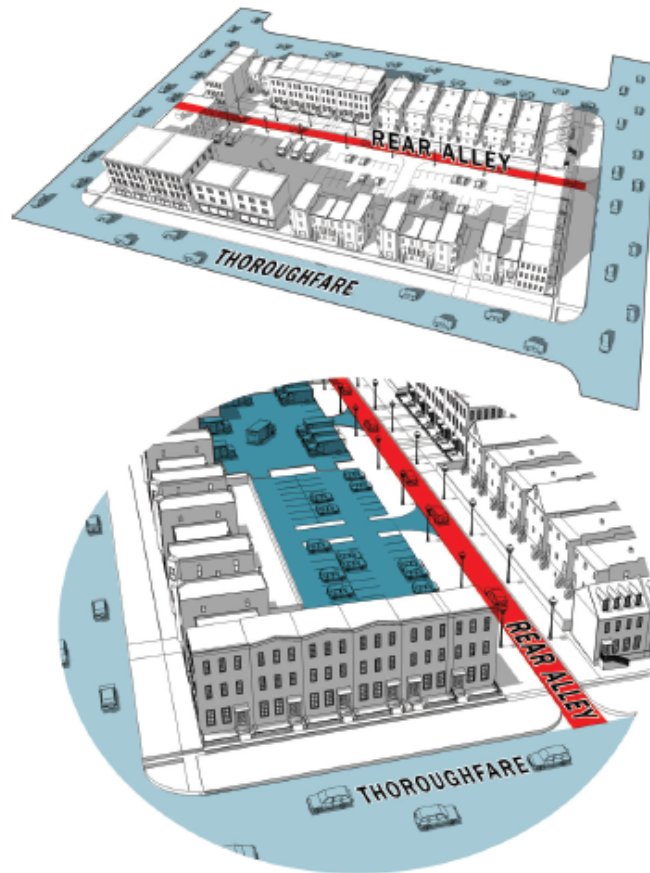
Agricultural and Extractive Uses: (1) collectively, Agricultural Uses and Extractive Uses; (2) a collective reference to Uses in the following sub- Categories: Agricultural Uses and Extractive Uses, as listed in **Table 4.3.9.A-1 (Building, Lot & Building Site Principal Uses)** **Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses)**, and **Table 4.3.9.A-1 (Building, Lot & Building Site Temporary Uses)**.

Alcoholic Beverage: Any fermented liquor, such as wine, beer, or distilled spirit, which contains ethyl alcohol (ethanol) as an intoxicating agent.

Alcoholic Beverage Retail Sales: An establishment engaged in the Retail sale of Alcoholic Beverages for off-premises consumption.

Alley: Generally, a vehicular way, which is not intended for general traffic circulation, which affords secondary access to Abutting property, and which may or may not be dedicated to public use. An Alley is not a Thoroughfare or an Internal Drive. See **Illustration 9.3.A-2 (Alley)**. See also Rear Alley.

ILLUSTRATION 9.3.A-2 ALLEY



Alteration / Alter: As applied to a Structure, an Addition or a change, rearrangement, or modification in the structural members or elements or the exit facilities, or in any element of the Private Frontage, the Facade or any other exterior architectural feature, including without limitation erection, construction, reconstruction, or removal; any diminution; any enlargement, whether by extending on a side or by increasing in height; moving from one location or position to another; increasing the Floor Area; expending an amount more than 50% of the fair market value; or increasing the fair market value by more than 50%. Alteration does not include Ordinary Maintenance or Repair. The term Alter, in its various modes and tenses and its participial form, refers to the making of an Alteration.

Alternative Tower Structure: As related to Wireless Communication Facilities, trees, clock towers, bell steeples, light poles, water tanks and similar alternative – design mounting structures that camouflage or conceal the presence of antennas or towers.

Antenna: Any exterior apparatus designed for telephonic, radio or television communications through the sending and/or receiving of electromagnetic waves.

Applicant: The owner, lessee, or contract vendee of the subject premises, or other person or entity authorized to make application to a Decision-Making Authority or administrative Person pursuant to this Ordinance.

ARTICLE 9: DEFINITIONS

Arcade: A Private Frontage type, which is conventional for Retail / Personal Service / Repair / Artistic / Artisan Use, wherein a colonnade supporting habitable space in one or more upper levels overlaps the Sidewalk, while the Façade at the first level remains at the Frontage Line. See **Table 4.3.7.A (Private Frontage Types)**.

Area of Special Flood Hazard: As defined in Section 6.12.2. Also, may be referred to as “Special Flood Hazard Area”.

Artisan Establishment: Any Structure, premises, or establishment in or on which articles of artistic quality or effect or handmade workmanship are produced with or without Retail sales of such articles. Examples of activities that may be conducted in an Artisan Establishment are candle making, furniture making, glass blowing, weaving, pottery making, woodworking, sculpting, painting, and tailoring.

Art or Photography Studio: Premises accommodating the creation of works of art or photography, with or with the exhibition or sale of such works.

Artist Studio Space: Space used for the creation, production, rehearsal, or teaching of any performance, visual, or literary art or craft, including but not limited to painting, drawing, graphic design, photography, video, film, sculpture, pottery, written works of fiction or nonfiction, whether for live or recorded, including music, dance, and theater, and accessory sales of such art.

Assisted Living Apartment: Multiple unit Residential premises for elderly, infirm, or disabled residents, in which housekeeping, meals, and other assistance are available to residents.

Attached: An enclosure having continuing walls, roof and floor.

Attached Dwelling: Residential premises characterized by two or more Dwelling Units being incorporated into a single Structure or attached Structures, specifically being Apartments, the Residence portion of a Live/Work Building, Mixed Use Building, or Flex Building, Multifamily Dwellings, Two-Family Dwellings, Duplexes, Rowhouses, Large Multi-family Buildings and Small Multi-Family Buildings.

Attic: The interior part of a Building contained within a pitched roof structure. See **Illustration 9.3.A-3(Attic)**.

ILLUSTRATION 9.3.A-3 ATTIC



Avenue (AV): A Thoroughfare or Internal Drive of high vehicular capacity and low to moderate speed, acting as a short distance connector between urban centers, and sometimes equipped with a landscaped median, described as such in **Table 4.3.8.A (Thoroughfare Types - Summary)** and **Table 4.3.8.B (Thoroughfare Assemblies and Standards)**.

Awning Sign: The Sign Type described as such in **Table 7.1.2.B-1 (Sign Types - Summary)** and **Table 7.1.2.B-2 (Sign Types - Specific Standards)**.

ARTICLE 9: DEFINITIONS

B.

Bakery: Premises at which cakes, cookies, bread, pastries, tarts, and/or other baked goods are made, whether or not such items are sold at Retail.

Band Sign: The Sign Type described as such in **Tables 7.1.2.B-1 (Sign Types - Summary)** and **7.1.2.B-2 (Sign Types - Specific Standards)**.

Bar or Tavern: An establishment serving Alcoholic Beverages to be consumed on the premises.

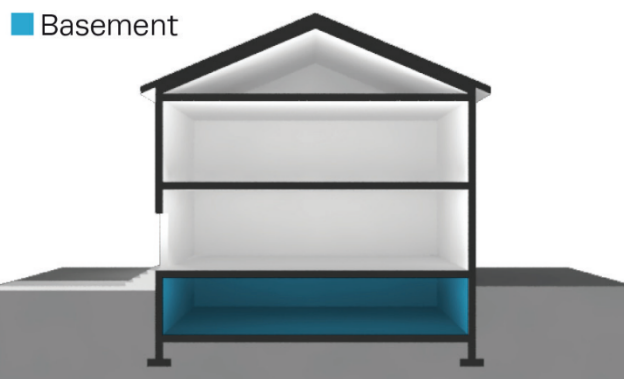
Base: The structural elements, design features, and materials associated with the part of a building that meets the ground and visually differentiates it from the Middle, typically a Knee Wall or Foundation Cladding.



Base Flood Elevation: As defined in Section 6.12.2.

Basement: A portion of a Building having more than half (1/2) of its clear floor- to- ceiling height below the average finished grade of the ground. See **Illustration 9.3.B-1 (Basement)**.

ILLUSTRATION 9.3.B-1 BASEMENT



Bed and Breakfast: An Accommodations / Lodging Use characterized by 1 to 5 bedrooms of an owner-occupied Building or Accessory Building being offered to paying guests for overnight Lodging with breakfast. A Short- Term Rental Unit is not a Bed and Breakfast.

Bicycle Lane (BL): A dedicated lane for cycling within a moderate-speed vehicular Thoroughfare, demarcated by striping. See **Table 5.2.4.B (Bikeway Types)**.

Bicycle Locker: A fully enclosed space for one bicycle, accessible only to the owner or operator of the bicycle. It protects the entire bicycle, its components and accessories from theft and inclement weather. Bicycle lockers may be pre-manufactured or may be designed for individual sites.

Bicycle Rack: A stationary object to which the bicycle user can lock the frame and one or both wheels of a bicycle with a user-provided U-shaped lock or cable, and which is either anchored to an immovable surface or is heavy enough that it cannot be easily moved.

Bicycle Route (BR): A Thoroughfare that is suitable for the shared use of bicycles and automobiles moving at low speeds. See **Table 5.2.4.B (Bikeway Types)**.

Bikeway Stub: A nonpermanent, dead-end Bikeway within a public right-of-way or a public access easement which extends to the boundary of an Adjacent property. Stubs allow the continuation of Bikeways in conjunction with development on adjacent property.

Bicycle Trail (BT): A bicycle way running independently of a vehicular Thoroughfare. See **Table 5.2.4.B (Bikeway Types)**.

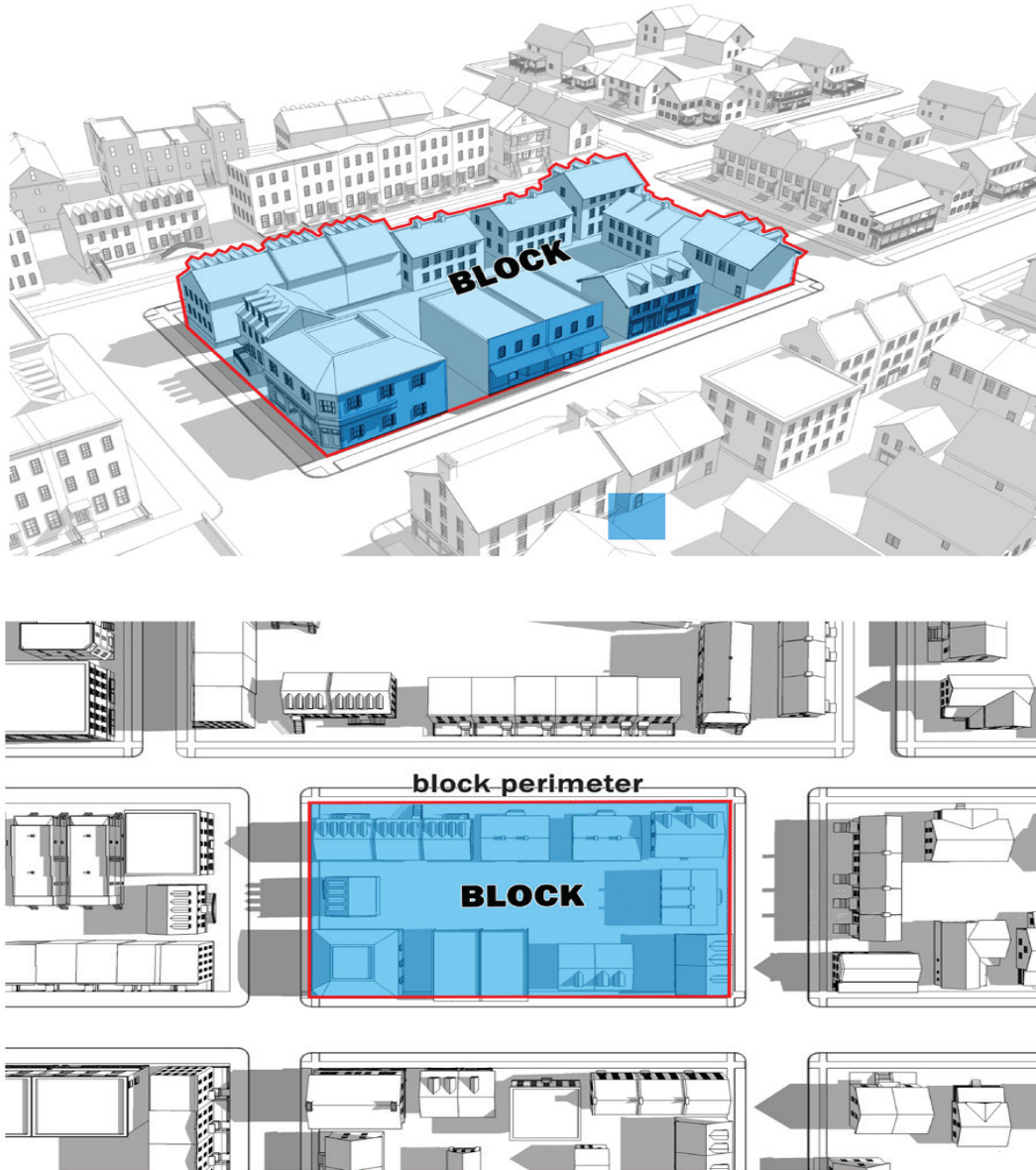
Billboard: A Sign intended for viewing from extended distances, which is mounted on one or two poles. A Pylon Sign is not a Billboard.

Blade Sign: The Sign Type described as such in **Table 7.1.2.B-1 (Sign Types - Summary)** and **Table 7.1.2.B-2 (Sign Types - Specific Standards)**.

Block: The aggregate of Lots, Building Sites, Passages, Civic Spaces and Rear Alleys, circumscribed by Thoroughfares or Internal Drives, or where applicable, circumscribed by Thoroughfares, Internal Drives, Civic Space, and/or waterbodies. See **Illustration 9.3.B-2 (Block)**.

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ILLUSTRATION 9.3.B-2 BLOCK



Block Face: The aggregate of all Building Facades on one side of a Block.

Board or Board of Appeals: The Board of Zoning Appeals of the City.

Boat - Related Uses: The term referring collectively to Boat Body Shop, Maintenance, Repair, or Cleaning, Boat Dock, Boat Sales, Rental, Leasing, or Chartering, Boat Ramp, Boat Rack, Boat Slip, Boat Slip Sales or Leasing, and Boat Storage.

Boat Body Shop, Maintenance, Repair, Cleaning, or Service: A Structure, premises, or establishment in or on which watercraft are maintained, repaired, serviced, and/ or cleaned, including without limitation, incidental storage for fewer than sixty (60) days of watercraft that are being maintained, repaired, serviced, and/or cleaned. This term does not include boat building or Boat Storage.

Boat Dock: A Structure extending into or upon a waterway or water feature, which provides access to the water for the launching and retrieving of watercraft.

Boat Rack: A storage slip for a boat in a dry stack storage facility.

Boat Ramp: An inclined area providing access to the water for the launching and retrieving of watercraft.

Boat Sales, Rental, Leasing, or Chartering: A Structure, premises, or establishment in, on, or from which watercraft are available for sale, rental, leasing, or chartering.

Boat Slip: A docking space alongside a pier, wharf or mooring dolphins in which a waterborne boat may be moored. For purposes of this Ordinance and in the absence of an authorized quantity of Boat Slips by State or federal regulating agencies, a Boat Slip shall be a minimum length of 25 feet for side mooring and 15 feet for stern moorings.

Boat Storage: A Structure, premises, or establishment in or on which watercraft are stored. This term does not include boat building or Boat Body Shop, Maintenance, Repair or Cleaning.

Breakaway Wall: As defined in Section 6.12.2.

Brewery: An establishment that is primarily used for the manufacture of beer. Such establishment may sell beer for on-site consumption or for off- site distribution in accordance with applicable state and local regulations.

Brewpub: A Use or establishment that is primarily engaged in the sale and service of food for on- premises consumption and that also brews beer for on-site consumption in accordance with applicable state and local regulations.

Buffer: A specified land area, located parallel to and within the outer perimeter of a Lot, Building Site, or parcel of land and extending to the Lot, Building Site, or parcel boundary line, together with the planting and landscaping required on the land. A Buffer may also contain, or be required to contain, a barrier such as a fence or wall, or combination thereof, where additional Screening is necessary to achieve the desired level of buffering between various Uses. The term “Buffer” is not synonymous with the term “Setback Area or Yard” or the term “Stormwater Management Area.”

Building: Any Structure, other than a Parking Structure, having a roof supported by columns or by Walls and intended for the shelter, housing, enclosure, or storage of Persons or property.

Building Element: Any component or part of a Building.

Building Official: The City Chief Building Official or designee.

Building Site: A parcel of land that has not been subdivided as a separate Lot, but which is designated by an applicant as a Building Site to be separately built on in a Development Plan or Master PUD Development Plan, site plan, permit application, or plat, and which accommodates, or is available to accommodate, a Principal Building. See **Illustration 9.3.L-4 (Lot / Building Site)**. See also “Lot”, “Lot or Building Site of Record”, and “Zoning Lot or Building Site”.

Building Systems Business: Establishment that installs, services, maintains, and/or repairs Building systems, such as heating, ventilation, air conditioning, electrical, and plumbing contractors.

ARTICLE 9: DEFINITIONS

Business: Operation of or engagement in for-profit activities and endeavors, including without limitation Commercial and Industrial activities and endeavors.

Business Office: Premises available for any function of a Business. Examples are advertising office, Business management, consulting, data processing, collection agency, real estate or insurance agent, sales office, travel agency, Business incubator, TV or radio studio, Utility office, and conference center.

Business, Trade, or Vocational School: An Education Use providing education or training in Business, commerce, language, or other similar activity or occupational pursuit, and not otherwise defined as a Home Occupation, College, or University.

C.

Canopy Tree: A tree that has an expected height at maturity greater than 40 feet and which produces significant shade because it has a crown that is oval, round, vase-shaped, or umbrella-shaped.

Canteen Truck: A Mobile Vending Apparatus used to serve pre-cooked products to workers at various locations where other food service options are unavailable or impractical (e.g. construction site). Service is often from the Right-of-Way.

Cap: The structural elements, design features, and materials associated with the top floor or top edge of the building to differentiate it from the middle and create a visual end to the building, typically a parapet, cornice or eaves line.



Catering Service: An establishment that prepares and provides food and related services to off-premises locations.

Catering Events Establishment: Any Non-Residential room, place, or space where food and beverages are available for consumption, that is regularly leased or hired out for functions, occasions, or events, to which the general public is not invited or admitted and wherein music or entertainment may be provided.

Cemetery: Land used or intended to be used for the burial of the dead and dedicated for purposes of containing graves, tombs, and funeral urns, including when located or operated in conjunction with and within the boundaries of the Cemetery, columbarium's, crematoriums, mausoleums, and mortuaries.

Central Sewage Collection and Treatment System: A wastewater collection and/or treatment system owned and operated by a public or quasi – public organization and approved by all appropriate licensing and oversight agencies. This term shall not be construed to include any type of privately owned and operated individual disposal system such as private septic or other similar systems.

Certificate of Appropriateness: A certificate issued by the Historic Zoning Commission indicating its approval of plans for Alteration, Construction, removal, or demolition of a Historic Structure or Structure within a Historic District or Historic Landmark District.

Certificate of Completion: A certificate issued with respect to a submission pursuant to this Ordinance, which certifies that such submission is complete in accordance with the applicable requirements under this Ordinance.

Certificate of Compliance: A certificate issued with respect to a submission pursuant to this Ordinance, which certifies that such submission complies with the applicable requirements under this Ordinance.

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Certificate of Economic Hardship: A certificate issued pursuant to Section 8.5.14, which evidences a determination that an Economic Hardship exists with respect to remedying a Condition of Neglect related to a Historic Property, which certificate authorizes such Alteration, Construction, removal, or demolition even though a Certificate of Appropriateness therefor has previously been denied.

Certificate of Occupancy: A written permit, which is required before occupying or commencing to use any Building, Lot, Building Site, or other parcel of land.

Character District: One of several areas on a Zoning Map to which certain Character District Development, Lot or Building Site, Building, Development Parcel standards are applied. See **Tables 4.3.1-A - 4.3.1.G (District Standards Character Districts)**.

Child Care Facility: Premises at which care, supervision, or guidance is provided for a minor child who is not related by blood, marriage, or adoption to the owner or operator of the facility, whether or not the facility is operated for profit and whether or not the facility charges for services offered by it. Notwithstanding the foregoing, Childcare Facility does not include:

An educational facility, whether private or public, which operates solely for educational purposes in Grades K or above;

Kindergarten programs for five-year-olds;

Children's Day Camps;

School vacation or school holiday day camps for children operating in distinct sessions running less than three weeks per session;

Summer resident camps for children;

Bible schools normally conducted during vacation periods;

Facilities for disabled or mentally ill Persons;

Facilities owned and operated by a local church congregation or an established religious denomination or a religious college or university which does not receive State or federal financial assistance for childcare services.

Children's Day Camp: Premises at which activities are offered to school-aged children in a social setting and the children return home in the evenings.

City: The City of Columbia, Tennessee.

City Code: The municipal code of the City, as the same may be amended and in effect from time to time.

City Council: The City Council of the City.

Civic Uses: (1) not-for-profit Uses dedicated to arts, charitable, philanthropic, culture, Education or Recreation, government, transit, or Parking purposes; (2) a collective reference to the Uses listed under the heading "Civic Uses" in **Table 4.3.9.1-A (Building, Lot, & Building Site Principal Use)**, **Table 4.3.9.1-B (Building, Lot, & Building Site Accessory Use)**, and **Table 4.3.9.1- C (Building, Lot, & Building Site Temporary Use)**.

Civic Building: A medium- to large-sized attached or detached Principal Building type, which is operated by a not-for-profit organization or governmental entity, is dedicated to Civic activities, and is designed to stand apart from its surroundings due to the specialized nature of its Civic purpose. Examples include but are not limited to Auditoriums, Conference / Convention / Exhibition Centers, Libraries, Places of Assembly, Courthouses, centers of government, Performing Arts Venues, and Museums. Civic Buildings are often the most prominently sited and architecturally significant Buildings in a community. See **Table 4.3.8.A (Principal Building Types)** and **Table 4.3.8.B (Principal Building Types - Specific Standards)**.

Civic Space: An outdoor area dedicated for Civic Use, which meets the applicable standards of this Ordinance. See **Table 5.3.3-A (Civic Space Types - Summary)** and **Table 5.3.3-B (Civic Space Types - Specific Standards)**.

Civic District: An area on the Official Zoning Map designated for Civic Building(s) and/or Civic Space(s).

Civil Support: Use category collectively referring to the Uses listed as such in **Table 4.3.9.A-1 (Building, Lot & Building Site Principal Uses)**.

Clinic: A Medical Clinic or Dental Clinic.

College or University: An educational institution that offers courses of general or specialized study leading to a degree.

Commercial Uses: The Use category, which is a collective reference to the Uses in the following Use sub-Categories, as listed in **Table 4.3.9.A-1 (Building, Lot & Building Site Principal Uses)**:

Accommodations / Lodging, Day Care (non-Civic), Educational Facilities (non-Civic), Indoor Recreation, (Commercial), Group Assembly, Outdoor Recreation (Commercial), Commercial Parking (Commercial), Restaurant, Retail / Personal Service / Repair / Art / Artisan, Self-Service Storage, Boat-Related Uses, Motor Vehicle-Related Uses, Manufactured Home Sales, and Wholesale Sales.

Commercial Building: A small- to medium-sized attached or detached non-Residential Building Type, typically designed to facilitate pedestrian-oriented Retail/ Personal Service / Repair / Art / Artisan Uses and Office Uses. See **Table 4.3.8.A (Principal Building Types Summary)** and **Table 4.3.8.B (Principal Building Types - Specific Standards)**.

Commercial Indoor Athletic Training Facility: Business establishment providing indoor facilities designed and used for active participatory athletic activities or training, including but not limited to personal strength and fitness training, gymnasiums, skating rinks, swimming pools, and tennis courts. Specifically excluded are Health Clubs, Day Spas, and Sports Venues.

Commercial Parking: A Parking Lot or Parking Structure operated as a for-profit endeavor.

Common Destination: An area of focused community activity, usually defining the approximate center of a Pedestrian Shed. It may include without limitation one or more of the following: a Civic Space, a Civic Building, a Commercial center, or a transit station, and may act as the social center of a neighborhood.

Common Open Space: A parcel or parcels of land and/or an area of water within a development site designated, designed, and intended for use or enjoyment of the occupants of the Development site. Common Open Space may contain such complementary Structures and Improvements as are necessary and appropriate for the benefit and enjoyment of the occupants of such Development site

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Common Yard: A planted Frontage wherein the Facade is set back substantially from the Frontage Line, and the Front Yard so created remains unfenced and is visually continuous with Abutting yards, supporting a common landscape. See **Table 4.3.7.A (Private Frontage Types)**.

Communications Equipment: Equipment used for communication, transmission or reception by Business, governmental, or other public or quasi-public users, including without limitation cellular towers. This does not include communication equipment for amateur radio operators licensed by the Federal Communications Commission that are exempt from local zoning restrictions.

Communication Services: An establishment primarily engaged in the provision of broadcasting and other information relay services accomplished through the use of electronic and telephonic mechanisms, including without limitation, Radio or Television Broadcasting Studio, News Syndicates, Video or Audio Studio, Telecommunication Service Center, and Telegraph Service Center.

Communications Tower: A tower of any size that supports Communications Equipment, transmission or reception by Commercial, governmental, or other public or quasi-public users, including without limitation cellular towers. This does not include communication towers for amateur radio operators licensed by the Federal Communications Commission that are exempt from local zoning restrictions or communications towers under 100 feet in height used solely for educational communications purposes.

Community Garden: A private or public Civic Space type for the cultivation of fruits, flowers, vegetables, or ornamental plants by more than one person or family, described as such in **Table 5.3.3.A (Civic Space Types-Summary)** and **Table 5.3.3.B (Civic Space - Specific Standards)**.

Community Service: Sub-category of the Civic Uses category, being Uses of a public, non-profit, or charitable nature providing ongoing education, training, or counseling to the general public on a regular basis, without a Residential component, including without limitation, Civic Building, club or lodge (Civic), food distribution center (Civic), gallery (Civic), Parking Lot or Parking Structure (Civic), Philanthropic Institution, Place of Assembly, post office, neighborhood arts center (Civic), recreation facility (Civic), Senior Center (Civic), Sports Venue (Civic), transit shelter, transit station, transit terminal with or without vehicle storage or maintenance, and union hall.

Completely Enclosed: Refers to a Building or other Structure having a roof, separated on all sides from adjacent open areas, by exterior walls or Party Walls, pierced only by windows or entrance and exit doors normally provided for persons, goods or vehicles.

Comprehensive Plan: The general plan of the City of Columbia as adopted according to T.C.A. § 13-4-201 through 203, also referred to as Connect Columbia. The Comprehensive Plan includes all text and maps of Connect Columbia as well as any ancillary special area plans.

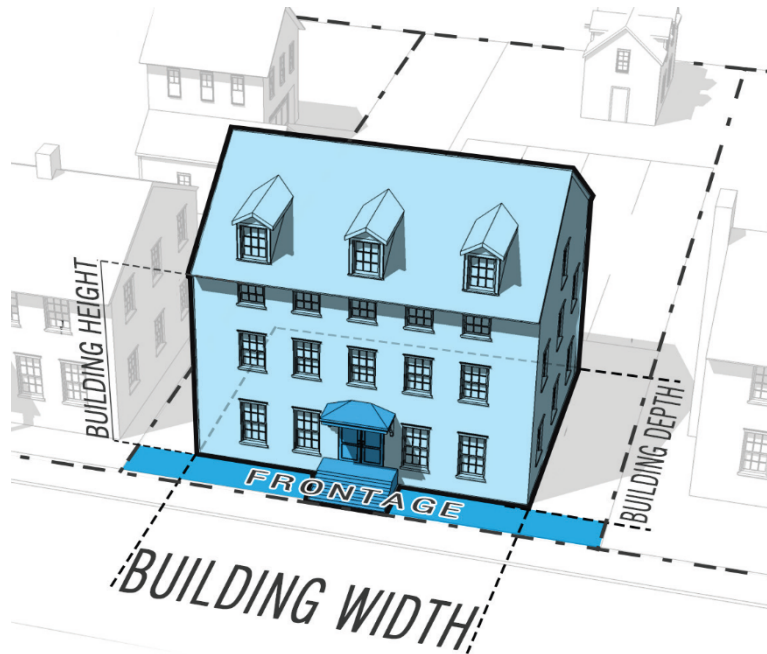
Conditional Use: A Use that would not be appropriate generally or without restriction throughout the applicable District, but which, if controlled as to number, area, location, or relation to the neighborhood, would promote the public health, safety, welfare, morals, order, comfort, convenience, appearance, prosperity, or general welfare. Conditional Uses are subject to all such controls and to approval by the Board of Zoning Appeals. For purposes of the administration of this Ordinance, Conditional Uses shall be construed as synonymous with special exceptions, as controlled by TCA Section 13 – 7 – 206.

Conditional Use Permit: A permit issued pursuant to Section 8.5.16.C.

Conditions of Neglect: As defined in Section 8.5.14.C.1.

Configuration: With respect to a Building, its form, including its Massing, Private Frontage, Width, and Height. See Illustration 9.3.C-1 (Configuration).

ILLUSTRATION 9.3.C-1 CONFIGURATION



Conference / Convention / Exhibition Center: Premises that accommodate conferences, exhibitions, meetings, seminars, training sessions, and other similar gatherings.

Construction: The act of adding an Addition to an existing Structure or the erection of a new Structure.

Construction Business: An establishment engaged in any Business involving activities generally referred to general contracting, construction trades, building, or Development.

Continuum of Care Facility: A facility providing one or any combination of assisted living, nursing home, or skilled nursing for the elderly or other individuals incapacitated in some manner for medical reasons, as determined and licensed and/or certified by the Tennessee Department of Health, Board of Licensing Health Care Facilities. Included in this definition are homes for the aged, as defined by TCA Sections 68-11-201. Continuum of Care Facilities may include a small amount of age-restricted independent living as part of the overall continuum of care.

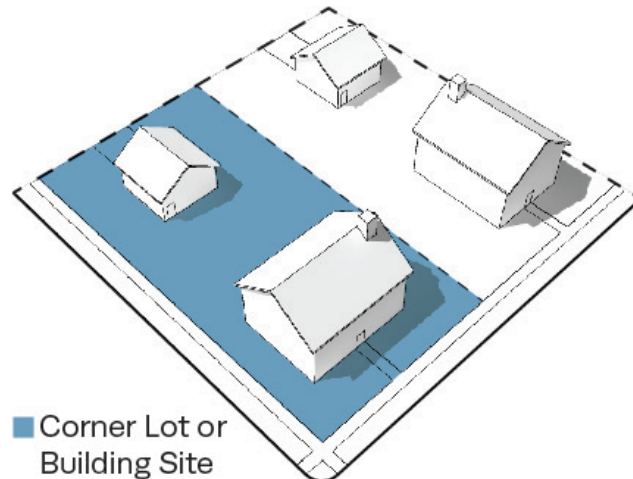
Contractor Materials Sales: The sale of building materials at wholesale without Outdoor Storage.

Convenience Store: An establishment primarily engaged in the provision of frequently or recurrently needed goods for household consumption, such as prepackaged food and beverages, newspapers, and limited household supplies, to customers who generally purchase only a few items. Convenience stores shall not include fuel pumps or the selling of fuel for motor vehicles.

Corner Lot or Building Site: A Lot or Building Site type of which at least two Abutting sides Abut Thoroughfares, Internal Drives, Pedestrian Ways, Civic Spaces, or other public places. See Illustration 9.3.C-2 (Corner Lot or Building Site).

ILLUSTRATION 9.3.C-2 CORNER LOT OR BUILDING SITE

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Corridor: A lineal geographic system incorporating a Thoroughfare, Internal Drive, Greenway, or other Civic Space.

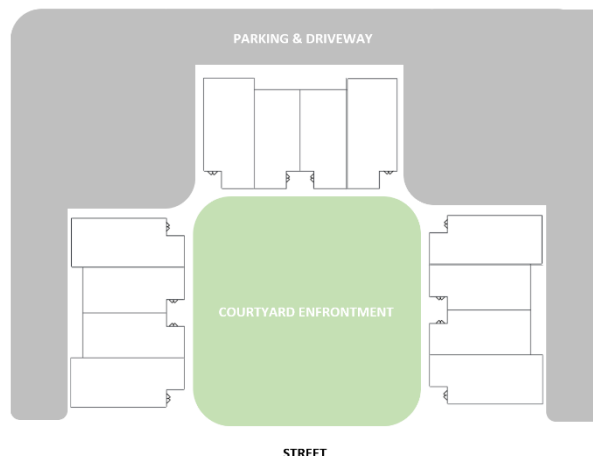
Cosmetic Reconditioning: Incidental repair and refinishing of a vehicle, limited to plastic and trim parts, including bumpers, moldings, mirrors, headlight lenses, and the restoration of alloy wheels. Vehicle side panels may also be refinished when a bumper scrape carries onto a fender. Cosmetic Reconditioning shall not include painting of a complete vehicle, or use of traditional collision repair equipment, such as a frame machine, weld, or unibody straightening machine.

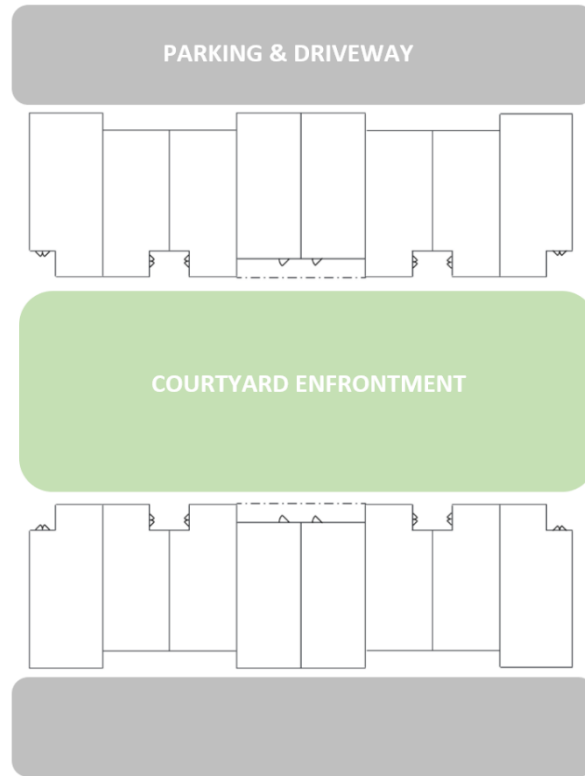
Counseling Service: An establishment providing counseling, guidance, or similar services to persons requiring rehabilitative or vocational assistance. This term includes job training and placement services.

Court: An open unoccupied space, other than a Setback Area or Yard, on the same Lot or Building Site with a Building or group of Buildings, which is bounded on two or more sides by such Building or Buildings.

Courthouse: A Building in which courts of law are held.

Courtyard Enfrontment: Where permitted in **Table 4.3.1**, the arrangement of buildings, typically Townhomes, facing a parklike area that enfronts a Thoroughfare or Internal Drive on at least one side with a minimum frontage width of fifty (50) feet.





Crisis Counseling Center: Premises from which Persons who have experienced a traumatic event are provided short-term counseling to assist in coping with the event.

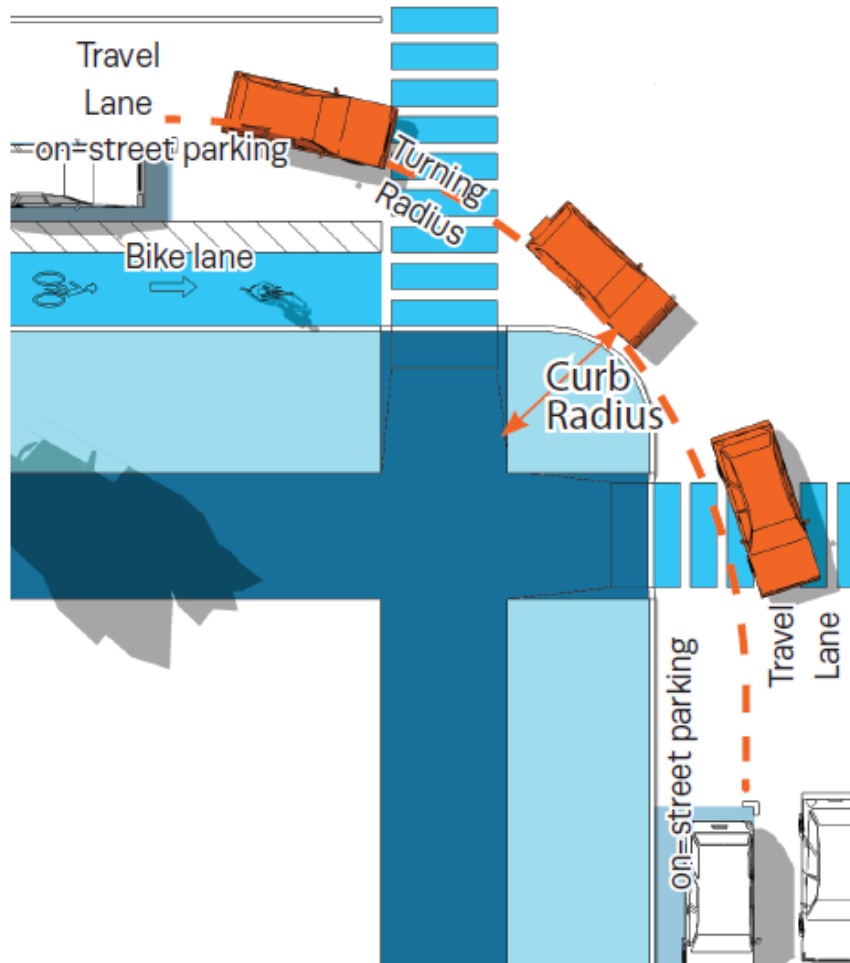
Critical Root Zone: With respect to a tree, a circular area measured outward from the tree trunk, representing the essential area of the roots that must be maintained for the tree’s survival. The Critical Root Zone is measured one foot of radial distance for every inch of tree at diameter at breast height, with a minimum of ten feet.

Cross Block Passage: A minimum 10-foot-wide pedestrian access reserved between Buildings.

Curb: The edge of the vehicular pavement that may be either raised or flush with a Swale to the extent allowed by this Ordinance. It usually incorporates or is associated with the drainage system. See **Table 4.3.8.A (Thoroughfare Types - Summary)** and **Table 4.3.8.B (Thoroughfare Assemblies and Standards)**.

Curb Radius: The radius of the curb at an intersection. See **Illustration 9.3.C-3 (Curb Radius)**.

ILLUSTRATION 9.3.C-3 CURB RADIUS



D.

Data Processing or Storage Services: Establishments primarily involved in the compiling, storage, and maintenance of documents, records, and other types of information in digital form utilizing a main frame computer.

Day Care Center or Facility: A place other than an occupied Dwelling, which for a payment, fee, or grant provides care, protection, and supervision for more than 5 children or adults on a regular basis away from their primary Residence for fewer than 18 hours each day (although the facility may be open 24 hours each day), with no overnight accommodations. Those receiving care are not all related to each other by blood or marriage and are not legal wards or foster children of the attendant adults. A Day Care Center or Facility must meet all applicable State and County requirements for standards, licensing, and inspections.

Examples are Adult Day Care program, Child Care Center, Nursery School, Preschool, and Latch-key Program.

Decision-Making Authority: Any City administrative Person, legislative or quasi-legislative body, or appellate body authorized to make decisions under this Ordinance, including without limitation, the Zoning Administrator, the Planning Commission, the Board of Zoning Appeals and the City Council.

Deck: A covered or uncovered horizontal, platform-like Structure similar to a floor, which is constructed outdoors of wood, composite wood, or vinyl material, is capable of supporting weight, and may be connected or unconnected to a Building.

Demolition: Any act or process that destroys in part or in whole a Historic Structure or a landmark or a Structure within a Historic District or Historic Landmark District.

Demolition by Neglect: The existence of any one or more Conditions of Neglect with respect to a Historic Property.

Density: The intensity of Development within a standard measure of land area. The maximum Density established for a District is not a guarantee that such Density may be obtained, nor shall the inability of a Development to achieve the stated maximum Density be considered sufficient justification for a Variance or Administrative Adjustment or otherwise adjusting other Density or other requirements.

Dental Office / Dental Clinic: An Office or other premises for the private practice of dental care professionals licensed by the State, wherein a majority of patient encounters involve dental examination, diagnosis, treatment, surgical procedures, preventive care, restorative care, cosmetic care, and/or emergency care on an outpatient basis.

Dental Lab or Laboratory: Premises or establishment at which products to assist in the provision of oral health care by a licensed dentist are made, such as crowns, bridges, dentures, dental implants, and therapeutic and orthodontic devices.

Design Guideline: As related to a Historic District, Historic Landmark District, or Structure in a Historic District or Historic Landmark District, a standard of appropriate activity that will preserve the historic and architectural character of such Structure or district.

Designed for Residential Use: A Building or part thereof which was originally designed for Residential Use.

Develop/Development: (1) commencing, making or planning for man-made changes to land, Structures, or other real property, including without limitation, re-development, clearing, excavation, grading, filling, Construction, re-Construction, Alteration, demolition, modification, subdivision or re-subdivision, installation of infrastructure, mining, dredging, paving, drilling, and storage of materials, whether such changes are horizontal, vertical, or

ARTICLE 9: DEFINITIONS

subterranean, but excluding agricultural and gardening activities and Ordinary Maintenance and Repair; (2) the resulting changes to such land, Structures, or other real property; and (3) with respect to a specific plan of development or development project, such development or project.

Development Parcel: A parcel of land:

which, either alone or together with one or more other parcels under a common Development scheme, program or plan, is ten (10) or more gross acres;

with respect to the Development of which any new Thoroughfare, Internal Drive, or extension or change of the design of any existing Thoroughfare or Internal Drive is required or will be made or proposed; or

with respect to which any District assignment or any Thoroughfare or Internal Drive or alignment thereof is proposed to be made or changed by a Zoning Map or Zoning Map amendment.

Development Area Per Dwelling Unit: The measurement of Density for Residential Development, which term refers to the number of Dwelling Units per unit of land area, subject to adjustment for Lot or Building Site Area Remainder as follows:

if an amount of Lot or Building Site Area not allocated to a Dwelling Unit is less than that required for one such Dwelling, the remaining Lot or Building Site Area may be used to satisfy Lot or Building Site Area requirements if it represents at least 75% of the total area required for a Dwelling Unit; provided, however, that the project shall comply with all other applicable regulations including without limitation access, Setbacks, Setback Areas, and Yards.

Development Plan: A Site Development Plan or Sketch Development Plan, as described in Section 8.5.6. See also “Master PUD Development Plan”.

Development Permit: Any permit or approval issued or granted pursuant to this Ordinance.

Deviation: Alternative Compliance with design standards, Alternative Performance, the customized standards of a Planned Unit Development, Administrative Adjustment, or a Variance.

Directory Sign: The Sign type described as such in **Table 7.1.2.B-1 (Sign Types - Summary)** and **Table 7.1.2.B-2 (Sign Types - Specific Standards)**.

Distillery: An establishment which is primarily used for the manufacture of alcoholic spirits in accordance with applicable state and local regulations.

Distribution: The movement of goods including the storage of goods awaiting movement.

Distribution Facility: Premises used for Distribution.

District: A Character District, Special District, PUD District, or Civic District; when capitalized and not accompanied by the word “Historic”, the word “District” specifically excludes any Local Historic Districts. See also “Zoning District”.

Dooryard: A Private Frontage type intended for ground floor Residential Use, wherein the Façade is set back a small distance and the Frontage Line is defined by a low Wall, decorative Fence or hedge, creating a small raised, sunken, or at-grade Dooryard consisting of a front garden or patio. The Dooryard shall not be used for public circulation along a Thoroughfare. See **Table 4.3.7.A (Private Frontage Types)**.

Double-Wide Manufactured Home: (1) A single detached dwelling constructed primarily off-site, designed to be transported on a flat-bed truck or Trailer in 2 or more sections to be attached on site. As used in this Ordinance, Double-Wide Manufactured Home does not include Manufactured Homes constructed as a single self-contained unit and mounted on a single chassis. (2) A Double-Wide Manufactured Home, shall be considered a Single-Family Dwelling and shall be subject to all standards and regulations applicable to Single-Family Dwellings, as provided by this Ordinance.

Drive: A Thoroughfare or Internal Drive along the boundary between an urbanized and a natural condition, usually along a waterfront, Park, or promontory, with one side having the urban character of a Street, with Sidewalk and Buildings, and the other having the qualities of a Road or Parkway with naturalistic planting and rural details. See **Table 5.3.3.F (Thoroughfare / Internal Drives Types – Summary)** and **Table 5.3.3.G (Thoroughfare / Internal Drive Assemblies and Standards)**.

Drive Aisle: A vehicular accessway that serves and is within a Parking Area, Parking Lot, or Parking Structure. A Drive Aisle is not a Thoroughfare, Internal Drive, or Driveway.

Drive-Through: Any accommodation designed or used for the transaction of Business wherein the patrons may avail themselves of the services or products of an establishment while remaining in their vehicles, whether or not patrons are also able to obtain services or products inside of a Structure.

Driveway: For Houses, Duplexes, and Townhomes, an area for parking and vehicular access conforming to the standards of Table 4.3.1. For all other Lots and Building Sites, a vehicular accessway within a Lot or Building Site to provide access only from a Thoroughfare or Internal Drive to a Parking Area, Parking Lot, Garage, Parking Structure, or Building entrance, but not designed to provide space within the First Layer or Second Layer for vehicular Parking additional to the minimum space required for such access.

Duplex: A small- to medium- sized Building, other than a Manufactured Home, situated on a single or two Abutting small- to medium- sized Lot(s) or Building Site(s) with an Edgeyard or Sideyard, which either is (a) attached to another Building of the same type, each of which consists of a separate Dwelling Unit with a separate entrance or (b) contains two Dwelling Units, each of which has a separate entrance. In each case, the entrance of at least one of the Dwelling Units must face a Thoroughfare, Internal Drive, or Civic Space. Dwelling Units may be side-by-side, front- to-back, or over-and-under. See **Table 4.3.8.A (Principal Building Types Summary)** and **Table 4.3.8.B (Principal Building Types - Specific Standards)**.

Dwelling / Dwelling Unit: A Building or portion thereof designed or used exclusively as Residential quarters for one or more Families living independently of each other, which includes separate complete sleeping, cooking, eating, and sanitation facilities for each such Family, and occupied for a monthly or longer basis. The term shall not be deemed to include Hotel, Extended Stay Hotel, Motel, Boarding or Rooming House, or any Transient living accommodations.

ARTICLE 9: DEFINITIONS

E.

Easement: Privilege or right of use, access or enjoyment granted on, above, under or across a particular tract of land by the landowner to another Person.

Economic Hardship: An economic burden imposed upon the owner, which is unduly excessive and prevents a realization of a reasonable rate of return upon the value of his property.

Edgeyard: A Yard type that results from a Building being set back from its Lot or Building Site boundaries at the front, rear, and both sides.

Education or Educational: A Use category characterized by the process of receiving or giving instruction. See Table 4.3.9.A-1 (Building, Lot & Building Site Principal Use).

Educational Facility: Public and private (including charter or religious) schools at the pre-school, kindergarten, primary, intermediate, or secondary school levels; colleges, universities, community colleges, graduate and professional schools, nursing, dental, and medical schools, seminaries, and other post-secondary institutions of higher learning that offer courses of general or specialized study leading to a degree, usually in a campus setting. The following are not Educational Facilities: dance, art, music, or photographic studios or classrooms (see Retail Sales and Personal Service), driving schools other than truck driving schools (see Retail Sales and Personal Service), and Martial Arts schools (see Retail Sales and Service).

Effective Date: The date on which this Ordinance was adopted by the city Council.

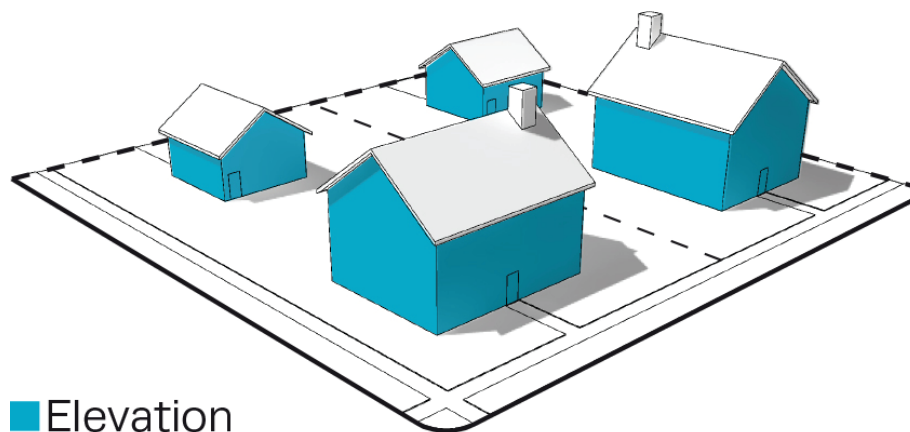
Effective Turning Radius: The measurement of the inside Turning Radius, taking parked cars into account.

Electronic Message Board: A panel or screen with the capability to display electronically programmed variable messages.

Elementary School: A public, private or parochial school offering instruction between Kindergarten and Grade 4 in the branches of learning and study required to be taught in the public schools of Tennessee.

Elevation: As related to the exterior walls of a Building, one that is not along a Frontage Line; when not capitalized, “elevation” means the height above a given level or a drawing or design that represents an object or Structure as being projected geometrically on a vertical plane parallel to one of its sides, as the context indicates. See also Facade. See Illustration 9.3.F-5 (Frontage and Lot or Building Site Lines) and Illustration 9.3.E-1 (Elevation).

ILLUSTRATION 9.3.E-1 ELEVATION



Encroach: to break the plane of a vertical or horizontal regulatory limit with a structural element, so that it extends into a Setback, Setback Area, or Yard or into the Public Frontage, or above a height limit.

Encroachment: Any structural element that breaks the plane of a vertical or horizontal regulatory limit, extending into a Setback, Setback Area, or Yard or into the Public Frontage, or above a height limit.

Enfront: To place an element along a Frontage, as in “porches Enfront the Thoroughfare.”

Exempt Wireless Communications Tower: Communication tower used by amateur radio operators licensed by the FCC that are exempt from local zoning restrictions or communications towers under 100 feet in height used solely for educational communications purposes.

Exempt Sign: A Sign listed in Section 7.1.10 that does not require a Sign Permit.

Existing Local Codes: All City laws, codes, and ordinances in effect on the Effective Date.

Extended Stay Hotel: A Building or part of a Building, containing six (6) or more guest rooms or suites, offering temporary residence for compensation and specifically constructed, licensed, and/or maintained, all or in part, for non-Transient extended stays and/or stays longer than 30 days, regardless of the presence of leases for shorter periods of time. An Extended Stay Hotel is not a Hotel, Motel, Bed and Breakfast, Inn or Short-Term Rental Unit.

Exterior Architectural Appearance: The architectural character and general composition of the exterior of a Structure, including but not limited to the kind, color, and texture of the building materials and the type, design, and character of all windows, doors, light fixtures, Signs, and appurtenant elements.

Extractive Uses: Sub-category of Agricultural and Extractive Uses Category characterized by Uses in which minerals or other solids or liquids are extracted from the earth, including without limitation, chemical fertilizer and non-metallic mineral mining, clay, ceramic, and refractory mineral mining, coal mining, crude petroleum and natural gas production field, metal ore and mineral mining, sand, stone, and gravel quarrying.

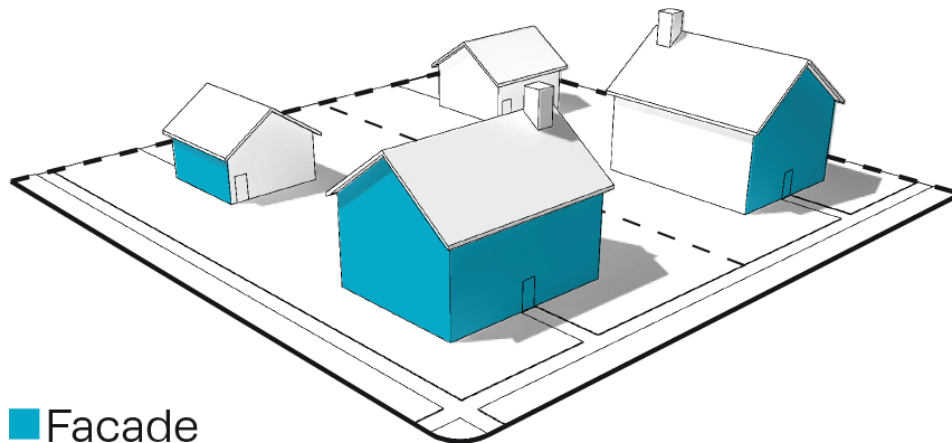
ARTICLE 9: DEFINITIONS

F.

FAA: Federal Aviation Administration.

Facade: the exterior Wall of a Building that is set along a Frontage Line. See **Illustration 9.3.F-1 (Facade)**. See also “Elevation”.

ILLUSTRATION 9.3.F-1 FACADE



Family: (1) one or two Persons and their children by birth, adoption, foster care, or guardianship or (2) any number of related or unrelated Persons living together in a single, more or less permanent and stable rather than Transient living arrangement as a not-for-profit housekeeping unit, which is the functional and factual equivalent of a traditional family, including without limitation a group headed by a householder caring for a reasonable number of children as one would be likely to find in a traditional family; provided that the criteria “stable rather than Transient living arrangement” shall not be applied in cases where handicapped persons are affected.

Family Day Care: A facility which provides day care and supervision services for up to 18 hours per day for no more than 12 recipients at any one time, without overnight accommodations, by a provider of such services who is not related to such recipients, which provider has received and maintains in full force and effect all necessary State approvals and licenses. Those receiving care are not all related to each other by blood or marriage and are not legal wards or foster children of the attendants.

Farm and Construction Equipment: Equipment used in the conduct of farming or construction activities.

Farmer’s Market: An open-air area, without or without a Structure, used for the Retail sale of fresh fruits, vegetables, nuts, grains, eggs, flowers, herbs, or plants. A Roadside Stand is not a Farmer’s Market.

FCC: Federal Communication Commission.

Fence:

- (1) As a Private Frontage type, a Frontage wherein the Facade is set back from the Frontage Line, and the Front Setback Area, Front Yard, or Street Yard so created is separated from the Public Frontage by a Fence. See **Table 4.3.7.A (Private Frontage Types)**;
- (2) As a Structure, a device erected to serve as an architectural element, landscape element, Screen, Streetscreen, or physical barrier.

Final Plat: As defined in City Subdivision Regulation Section 2.3.

Financial Institution: An establishment that is regulated by the Federal Deposit Insurance Corporation (FDIC) and/or Tennessee Department of Financial Institutions and provides a variety of financial services, generally including banks, credit unions, and mortgage companies.

Financial Services: A Business, other than a Financial Institution or Non-Banking Financial Institution, characterized by the provision of financial, investment, and/or similar services.

Finished Grade: The elevation of the completed surfaces of lawns, walks and Thoroughfares and Internal Drives Adjoining a Building wall at that point along such wall. See **Illustration 9.3.F-3 (Finished Grade)**.

ILLUSTRATION 9.3.F-3 FINISHED GRADE



Fire / EMS Station: Premises accommodating operations of fire-fighting and emergency medical personnel and other members of staff.

First Layer: See “Layer”.

Flex Building: A large footprint Principal Building type designed to accommodate either a single Use or a vertical or horizontal mix of Uses. See **Table 4.3.8.A (Principal Building Types- Summary)** and **Table 4.3.8.B (Principal Building Types - Specific Standards)**.

Flood: As defined in Section 6.12.2.

Floodplain: As defined in Section 6.12.2.

Flood Fringe Overlay District: An area designated as such on the Official Zoning Map.

Floodplain District: As defined in Section 6.12.2.

Floodway Overlay District: An area designated as such on the Official Zoning Map.

Floor Area: The total of the gross horizontal areas of all floors, including usable Basements and cellars, below the roof and within the outer surface of the main walls of Buildings or the center lines of Party Walls separating such Buildings or portions thereof, or within lines drawn parallel to and two feet within the roof line of any Building or portion thereof without walls, but excluding the following:

Areas used for off – street Parking spaces or loading berths and Driveways and maneuvering relating thereto where required by this Ordinance

In the case of Non-Residential facilities: arcades, porticoes, and similar open areas which are accessible to the general public, and which are not designed or used as sales, display, storage, service, or production areas.

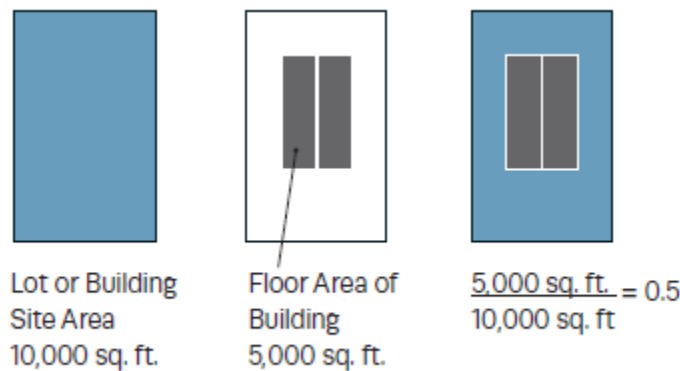
Floor Area Ratio ("FAR") or Floor-to-Area Ratio: A measurement of Non-Residential land use intensity, being the ratio of Building Floor Area- to -Lot or Building Site Area. FAR is determined by dividing (1) the aggregate Floor Area of the several floors and mezzanine areas of all Buildings on a Lot or Building Site by (2) the Lot or Building Site Area, as follows:

$$\frac{\text{Aggregate Floor Area}}{\text{Lot or Building Site Area}} = \text{Floor Area Ratio}$$

For example:

a Building containing 20,000 square feet of Floor Area on a Lot or Building Site that has a Lot or Building Site Area of 10,000 square feet has a Floor Area Ratio of 2.0; and

similarly, a Floor Area Ratio of .5:1 would mean that the Floor Area of the Building is 50% of the Lot or Building Site Area of the Lot or Building Site on which the Building is located.



Food Distribution Center: Premises operated for Civic purposes, with or without a Structure, from which edible goods are distributed to the public, with or without compensation.

Food Processing: Use characterized by processing and packaging of edible goods and beverages for consumption off of the premises.

Food Truck: A Mobile Vending Apparatus which qualifies as a vehicle or tow-behind trailer under TCA § 55-1-101-126 from which edible food products and beverage are cooked, prepared, assembled and offered for sale to the general public for immediate consumption. A food truck is not a Mobile Kitchen.

Food Truck Court: A parcel of land where two or more Mobile Vendors congregate to offer food and beverage for sale to the public as the principal use of the site, where permitted by **Table 4.3.9.A-1**. This definition shall not be

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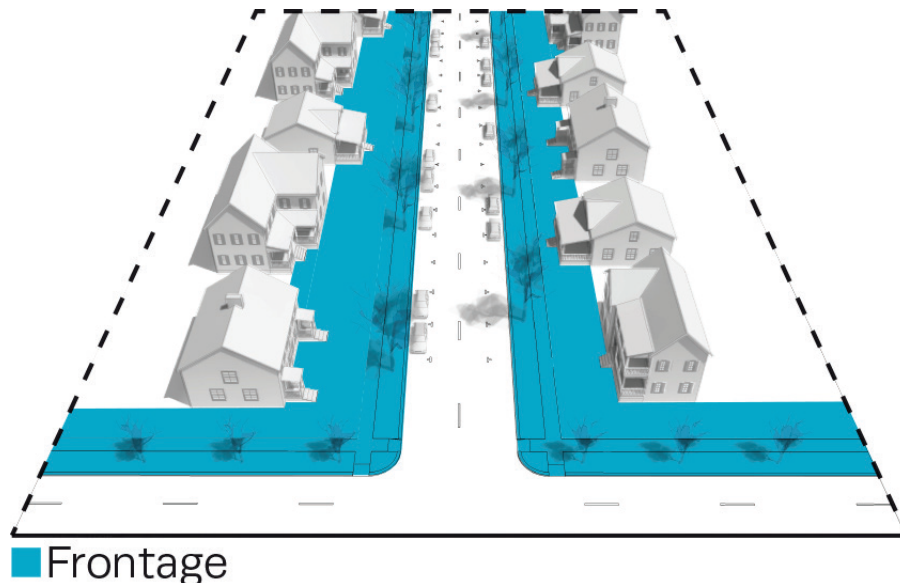
interpreted to include a congregation of mobile food vendors as an accessory use or temporary use, where permitted by **Table 4.3.9.A-2** and **4.3.9.A-3**.

Forecourt: A Private Frontage type wherein a portion of the Facade is close to the Frontage Line and the central portion is set back, creating a gathering space for residents or additional shopping or restaurant seating area within Retail / Personal Service / Repair / Art / Artisan Use areas. This type should be used sparingly and may be used in conjunction with other Private Frontage types. See **Table 4.3.7.A (Private Frontage Types)**.

Freestanding Sign: Any Sign supported by Structures or supports that are anchored in the ground and that are independent of any Building or other Structure.

Frontage: The area between a Building Facade and a Path, Passage, waterbody, Civic Space, or the curb (or if there is no curb, the edge) of the Vehicular Lanes of a Thoroughfare or Internal Drive having Vehicular Lanes, inclusive of the built and planted components of such area. Frontage is divided into Private Frontage and Public Frontage. See **Illustration 9.3.F-5 (Frontages and Lot or Building Site Lines)**, **Table 5.2.2.G-1 (Thoroughfare & Internal Drive Assemblies and Standards)**, and **Table 4.3.7.A (Private Frontage Types)**. Corner Lots and Building Sites have two Frontages, a Principal Frontage and a Secondary Frontage. See **Illustration 9.3.F-4 (Principal Frontage and Secondary Frontage)**.

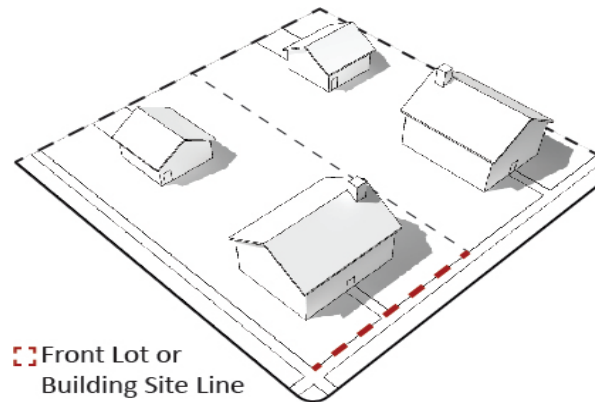
ILLUSTRATION 9.3.F-4 PRINCIPAL FRONTAGE AND SECONDARY FRONTAGE



Frontage Line: The common line that separates the Private Frontage from the Public Frontage, typically at the Front Lot or Building Site Line in cases where the entire Public Frontage is with the public right-of-way. See **Illustration 9.3.F-5 (Frontages and Lot or Building Site Lines)**. On a Corner Lot or Building Site, there are two Frontage Lines.

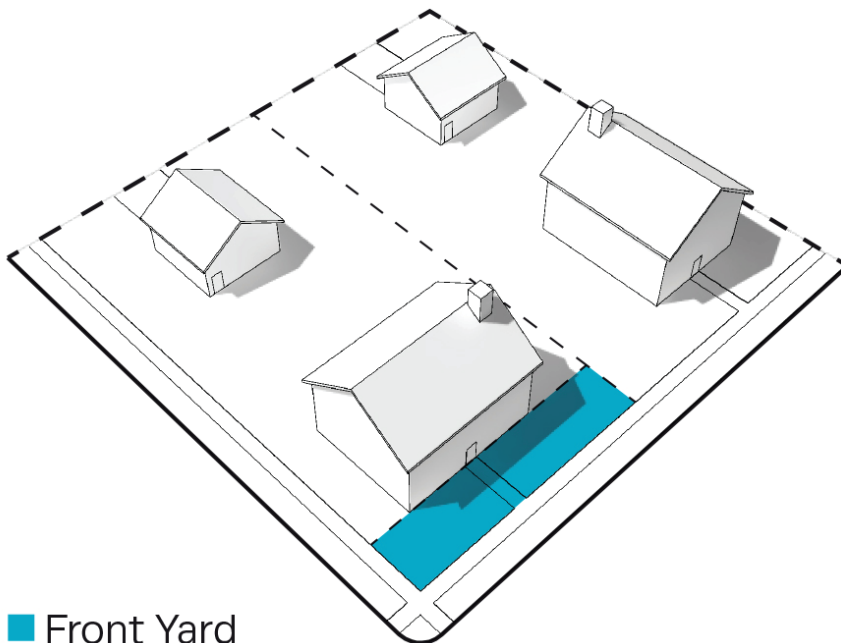
Front Lot or Building Site Line: The boundary at the front of a Lot or Building Site along the Thoroughfare right-of-way or Internal Drive. See **Illustration 9.3.F-5 (Frontages and Lot or Building Site Lines)**.

ILLUSTRATION 9.3.F-5 FRONTAGES AND LOT OR BUILDING SITE LINES



Front Setback Area or Yard: A portion of a Lot or Building Site that is situated between (1) the nearest roofed portion of the Principal Building or of any Accessory Building on the Lot or Building Site and (2) the Front Lot or Building Site Line, extending the full width of the Lot or Building Site, from Side Lot or Building Site Line to Side Lot or Building Site Line. See **Illustration 9.3.F-6 (Front Yard)**. Sometimes referred to as “Street Yard”.

ILLUSTRATION 9.3.F-6 FRONT (STREET) SETBACK AREA OR YARD



Full Value: With respect to a Nonconforming Structure or a Structure used for a Nonconforming Use, the Full Value of a Structure shall be determined by subtracting

- (1) the estimated value of the foundation as provided by the owner’s engineer and approved by the City Engineer
- from (2) the current assessed value of the Structure.

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$$\text{Current Assessed Value of Structure} - \text{Estimated Value of Foundation} = \text{Full Value}$$

Functional Classification: The categorization of Thoroughfares and Internal Drives within the transportation element of Connect Columbia and the Access Management Ordinance which represents the progressive trade-off between access and movement within the regional transportation system. The rubric includes Principal Arterials, Minor Arterials, Collectors, Major Local Streets, and Minor Local Streets.

Funeral Services: A Use characterized by an establishment engaged in undertaking services such as preparing the human or animal dead for burial and arranging and managing funerals, including without limitation, Funeral Home, Mortuary, Cemetery, and Crematorium.

Future Land Use Character Area: The general classification of land identified in the future land use element of Connect Columbia, the comprehensive plan. The comprehensive plan indicates the community's preference for general land use categories and desirable intensity of development corresponding to each future land use character area. Connect Columbia also describes the typical aesthetic and material qualities which provide distinctive character to each area. Each future land use character area corresponds to one or more Character Areas or Special Districts as provided in Article 3. The use, bulk, and design standards of this ordinance, when applied to specific properties, implement the general future land use character area designations. The Planning Commission shall determine the pace of implementation through the process of zoning map amendments (rezoning) described in Article 8.

G.

Gallery: (1) With respect to the Frontage, the Private Frontage type conventional for Retail / Personal Service/ Repair / Art / Artisan Use, wherein the Facade is aligned close to the Frontage Line with an attached cantilevered shed or lightweight colonnade overlapping the Sidewalk (see **Table 4.3.7.A (Private Frontage Types)**); (2) with respect to the Use of premises or part thereof, the collection and/or exhibition, and often the sale, of works of art, photography, objects of permanent value, or artisan or cultural items.

Garage: An enclosed, detached Building, or an enclosed extension of a Principal Building, used for the storage of one or more motor vehicles on a Lot or Building Site as an Accessory Use, provided that no Business, occupation or service is conducted for profit therein.

Governmental Facility: Governmental Offices and storage and other facilities for the operation of local, state, or federal government. Examples are Courthouses, correctional facilities, jails, prisons, emergency services, paramedic, fire department, and law enforcement facilities, and post offices. Educational Facility, Maintenance Facility, Civic Spaces and Open Areas, solid or liquid waste transfer or composting and Utility Facilities are not Governmental Facilities.

Green: A type of Civic Space for unstructured recreation, spatially defined by landscaping rather than Buildings, described as such in **Table 5.3.3.A (Civic Space Types- Summary)** and **Table 5.3.3.B (Civic Space - Specific Standards)**.

Gross: As related to an area of land, that which is inclusive of all land uses, Thoroughfares, Internal Drives, and other public areas located within a development site.

Ground Floor Elevation: The distance between the top of the fronting Sidewalk and the top of the finished ground floor.

Group Assembly: Sub-category of the Commercial Use category, characterized by people congregating regularly for participation in or holding meetings, workshops, lectures, civic activities, religious services, performances, and other similar activities, including Buildings, facilities, and venues in which such functions and activities are held.

Group Care Home or Family Boarding Home: A Group Care Home or a Family Boarding Home, as those terms are defined under the Rules of the Tennessee Department of Children's Services Social Service Division, Chapter 0250-4-2, which is licensed by the State under 0250-4- 2-.01 of said Chapter.

Group Care Facility: Shared living quarters (without separate kitchen or bathroom facilities for each room or unit) for nine (9) or more persons with physical or mental impairments that substantially limit one or more of such person's major life activities, provided that such arrangements do not meet the definition of Household Living. A Group Care Facility is not a Group Home for Persons with Disabilities.

Group Day Care: Synonymous with Family Day Care.

Group Home for Persons with Disabilities: Any home in which eight (8) or fewer unrelated "persons with disabilities" as defined in TSA section 13-24-101 reside, which may include three (3) additional persons acting as support staff or guardians, who need not be related to each other or to any of the persons with disabilities residing in the home.

Group Living: Sub-category within the Residential Uses category, characterized by Residential occupancy of a Structure by a group of people, which does not meet the definition of Household Living. Tenancy is usually arranged

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on a monthly or longer basis. Generally, Structures for Group Living have a common eating area for Residents, and the Residents may receive care, training, or treatment. Examples include but are not limited to Adult Care Home, Group Home for Persons with Disabilities, and Group Care Home or Family Boarding Home.

H.

Health Care Institution: Subcategory within the Institutional Use category, characterized by an establishment providing medical or surgical care to patients. Some uses may offer overnight care.

Nursing or medical schools not accessory to a Hospital (see Educational Facilities) and Urgent Care or Emergency Medical Clinic Offices (see Offices) are not Health Care Institutions.

Health Club: Premises that contain one or more of the following types of athletic facilities: swimming pool, racquetball courts, squash courts, exercise rooms, weight rooms, gymnasium or similar facilities available exclusively to members and their guests.

Heavy Industrial: The sub-category of Industrial Uses characterized by and collectively referring to factory production and industrial yards; research and development activities without light fabrication and assembly operations; limited industrial/manufacturing activities; Industrial Businesses, the sale of heavy equipment, Uses involving storage or use of highly flammable, toxic matter or explosive materials, or of Hazardous Materials; Uses that generate pollution, dust, odor, heat, glare, or vibration beyond the walls of such enclosed Building or any light or glare beyond the boundaries of the land on which the Building is situated; any activity or Use that (1) is detrimental to the environment, (2) poses any danger or hazard of fire or explosion or other physical hazard, (3) causes, disseminates, or discharges any material, dust, smoke, gas, fumes, odor, noise, vibration beyond the Lot or Building Site on which the Building is situated, (4) involves any Outside Storage, (5) results in any unusual traffic hazard or congestion, or (6) for which any water, air, or other environmental or pollution license or permit is required; as more specifically listed under such sub- category in **Table 4.3.9.1-A (Building, Lot, & Building Site Principal Use)**.

Not included in this sub-category are animal waste processing (see Waste-Related Service); Repair and service of Motor Vehicles, motorcycles, Recreational Vehicles, boats, or light and medium trucks (see Vehicle Sales and Service); in-store sales, lease, or rental of consumer, household, or business goods (see Retail Sales and Service).

Height: (1) as related to a Structure other than a Tower, the vertical dimension of the Structure, described as applicable, (a) in number of Stories of the Structure or (b) by the distance between (i) the average Finished Grade, as measured at the outside corners of the Structure, and (ii) the highest point of such Structure on the roof surface; excluding in each case (i) Attics under 14 feet in height at their tallest point; (ii) raised Basements; and (iii) masts, belfries, clock towers, spires, steeples, chimneys, chimney flues, flagpoles, silos, water tanks, elevator or stair bulkheads, water tanks, cooling towers, Exempt Communications Towers, or parapet walls not more than four feet (4') high. See **Illustration 9.3.H-1 (Height- Building)**.

ILLUSTRATION 9.3.H-1 HEIGHT - BUILDING



(2) as related to a Tower, the distance measured from ground level to the highest point on the Tower, even if said highest point is an Antenna.

Heritage Tree: A tree of any species listed under “Canopy Trees” in **Table 4.3.16.D-1 (Native Plants of the Tennessee Valley)** having with a trunk caliper of 24” or greater, measured 3 feet from the base of the trunk.

High School: Premises at which education is provided for students from Grade 9 through Grade 12.

Highway: A rural or suburban Thoroughfare or Internal Drive of high vehicular speed and capacity, described as such in **Table 5.3.3.F (Thoroughfare / Internal Drives Types – Summary)** and **Table 5.3.3.G (Thoroughfare / Internal Drive Assemblies and Standards)**.

Historic District: A geographically definable area which possesses a significant individual Structure or a concentration, linkage or continuity of sites, Buildings, Structures, or objects which are united by past events or aesthetically by plan or physical development, which meets one (1) or more of the following criteria:

It is associated with an event which has made a significant contribution to local, state or national history;

It includes Structures associated with the lives of persons significant in local, state or national history;

It contains Structures or groups of Structures which embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction;

It has yielded or may be likely to yield archaeological information important in history or prehistory; or

It is listed in the National Register of Historic Places.

Historic Landmark: A property, Building, district, object, site, or Structure that has outstanding historical significance and is designated as such pursuant to this Ordinance.

Historic Property: The term used as a collective reference to designated Historic Structures, Historic Landmarks, and Historic Districts, together with properties therein identified as “contributing” or “pivotal” in a designated Historic District.

Historic Structure: Any Structure that is:

listed individually in the National Register of Historic Places maintained by the Department of the Interior or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historical district or a district preliminary determined by the Secretary to qualify as a registered Historic District;

individually listed on the state inventory of historic places and determined as eligible by states with historic preservation programs which have been approved by the Secretary of the Interior; or

individually listed on a local inventory of historic places and determined as eligible by communities with historic preservation programs which have been certified either:

by an approved state program as determined by the Secretary of the Interior; or

directly by the Secretary of the Interior.

Home Occupation: Any gainful occupation conducted entirely within a Dwelling solely by the owners- or tenant-residents thereof as an Accessory Use, which does not change the character of the Structure as a Residence; There are two types of Home Occupations;

- (1) Minor Home Occupations: gainful occupation conducted entirely within a Dwelling which does not generate traffic from employees, customers, clients, or deliveries and bears no external evidence of the accessory commercial use;
- (2) Major Home Occupation: gainful occupation conducted on a residential property which
 - a. generates some traffic from employees, customers, clients or deliveries;
 - b. bears some external evidence of the accessory commercial use; or
 - c. occurs within an accessory structure.

Home Occupations do not include: Clinics, Hospitals, Restaurants, Kennels, Auto Repair, or loading of ammunition.

Horticulture and Landscaping Services: Landscaping, tree, plant, lawn, and/or other landscape material installation, care, maintenance, and removal, and other similar services, together with associated equipment and machinery directed toward the care of trees, plants, or lawns.

Hospice: The provision of palliative care and emotional support to the terminally ill so that quality of life is maintained and family members may be active participants in care.

Hospital: Premises used for the diagnosis, medical treatment, or similar care of human ailments including without limitation: the term "Hospital" shall be deemed to include (1) psychiatric and substance abuse facilities, ambulatory care, outpatient services, diagnostic and treatment centers, Clinics, Rehabilitation Facilities, Medical Laboratories, Hospices, teaching facilities, and meeting areas associated with and on the same premises as the Hospital, and (2) Accessory Uses such as dining and housing for patients' Families and guests, staff members, nurses, interns, resident physicians and their immediate families, and maintenance, service and parking facilities. The term "Hospital" shall not be deemed to include (3) Offices of doctors, dentists, chiropractors, or nurse practitioners, sanitariums, Nursing Homes, Long Term premises used for the diagnosis, medical treatment, or similar care of human ailments including without limitation: the term "Hospital" shall be deemed to include (1) psychiatric and

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substance abuse facilities, ambulatory care, outpatient services, diagnostic and treatment centers, Clinics, Rehabilitation Facilities, Medical Laboratories, Hospices, teaching facilities, and meeting areas associated with and on the same premises as the Hospital, and (2) Accessory Uses such as dining and housing for patients' Families and guests, staff members, nurses, interns, resident physicians and their immediate families, and maintenance, service and parking facilities. The term "Hospital" shall not be deemed to include (3) Offices of doctors, dentists, chiropractors, or nurse practitioners, sanitariums, Nursing Homes, Long Term Care Facilities, Rehabilitation Facilities, psychiatric and substance abuse facilities, ambulatory care, outpatient services, diagnostic and treatment centers, Clinics, Rehabilitation Facilities, Medical Laboratories, Hospices, teaching facilities, or meeting areas not associated with and on the same premises as the Hospital, or (2) Accessory Uses such as dining and housing for patients' families and guests, staff members, nurses, interns, resident physicians and their immediate families, and maintenance, service and parking facilities not on the same premises and associated with Hospital.

Hostel: An establishment that provides inexpensive food and lodging for a specific group of people, such as students, workers, or travelers.

Hotel: A Business that offers to Transients, on a daily or weekly basis for compensation, sleeping accommodations accessible from interior hallways, whether or not such Business also includes dining facilities. Not synonymous with Motel, motor court, tourist court, auto court, motor lodge, or similar facilities. Neither a Hotel nor a room therein is a Short-Term Rental Unit.

House: A Building Type that was designed as a Single- Family Detached Dwelling on a medium or large Lot or Building Site with an Edgeyard, often shared with an Accessory Building in the rear, described as such in **Table 4.3.8.A (Principal Building Types)** and **Table 4.3.8.B (Principal Building Types - Specific Standards)**.

Household Living: The sub-Category of Uses designated as such in **Table 4.3.9.1-A (Building, Lot, & Building Site Principal Uses)**, characterized by permanent, non- Transient Residential activities that involve the occupancy of a Residential Dwelling Unit. A Short-Term Rental Unit is not a Household Living Use.

House Trailer: Any Trailer designed to be used for living purposes with its wheels, roller or skids in place.

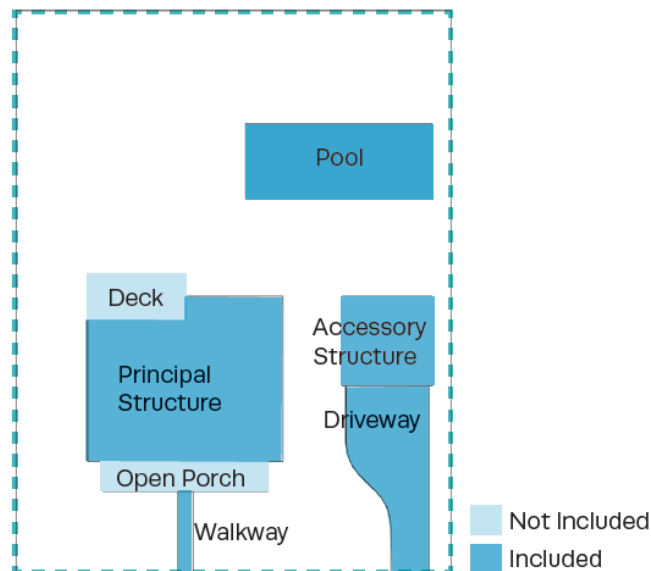
I.

Ice Cream Truck: Are motorized vehicles from which the operator vends only pre-packaged frozen dairy or frozen water-based food products. Service is often from the Right-of-Way.

Identification Sign: A Sign that directs attention to a Business, profession, or Building with Multi-Family Residential Dwelling Units, which is conducted upon the same Lot, Building Site, or Development Site where such Sign is located.

Impervious Surface Coverage: That portion of a Lot, Building Site, or Development site, as applicable, covered with Buildings, asphalt, or concrete paving or hard-packed, prepared, graveled surfaces that prevent or restrict absorption of rain or surface water into the ground. If a Lot, Building Site, or Development site, as applicable, is located in more than one District, the Impervious Surface Coverage shall be separately computed for each District and no Impervious Surface Coverage may be transferred between Districts. See **Illustration 9.3.I-1 Impervious Surface Coverage**.

ILLUSTRATION 9.3.I-1 IMPERVIOUS SURFACE COVERAGE



Impound Yard: A facility that provides temporary outdoor storage for: (1) mechanically operable/drivable, licensed vehicles that are to be claimed by titleholders or their agents; and/or (2) wrecked motor vehicles awaiting insurance adjustments and transport to repair shops. This term excludes: Scrap and Salvage Yards / Services; Junkyard; Towing Facilities; Motor Vehicle Storage; or accessory storage of inoperable vehicles.

Improvement: Any man-made change of land, a Lot, a Building Site, or Development site, or a change to or creation of a Structure.

Independent Living Apartment: A multiple Dwelling Unit accommodation that provides Residential quarters for Persons over a specified age who do not require skilled nursing care, health care, or assistance with daily activities, such as assistance with eating, dressing, ambulation, medication, bathing, or toileting.

Indoor Recreation: Use characterized by generally Commercial, for-profit Uses, varying in size, providing daily or regularly scheduled entertainment-oriented activities in an indoor setting, including without limitation bowling

ARTICLE 9: DEFINITIONS

alley, game arcade, pool hall, skating rink, gymnastic facility, indoor sports academy, Indoor firing range, membership club or lodge, and movie or other theater, but excluding Adult-Oriented Entertainment, Bar, Tavern, Nightclub, athletic, tennis, swim or Health Club (see Retail Sales and Service) and outdoor entertainment (see Outdoor Recreation).

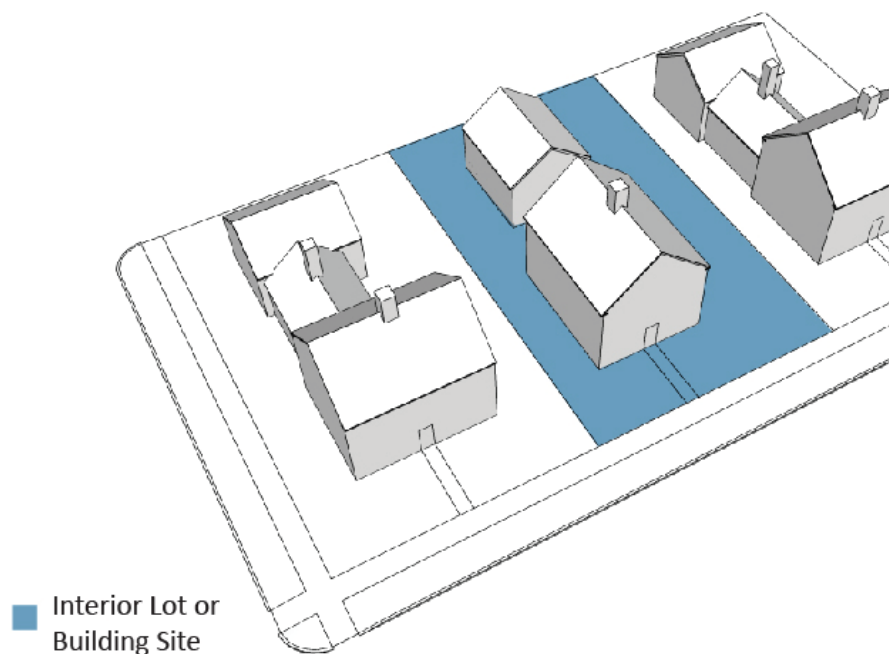
Industrial Uses: (1) a Use category characterized by manufacturing, re-manufacturing, processing, fabricating, creating, producing, packaging, converting, altering, assembling, handling, storing, stockpiling, sorting, recycling, treating, disposing of, wholesaling, warehousing, and distributing materials, products, or information, research and development, trucking, shipping, and transportation Business, repairing and maintaining commercial machinery or equipment, and waste management; (2) Industrial Uses is the Use category, which is a collective reference to Uses in the following Use sub-Categories, as listed in **Table 4.3.9.A-1 (Building, Lot & Building Site Principal Uses)** **Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses)**, and **Table 4.3.9.A-3 (Temporary Uses)**: Heavy Industrial, Light Industrial, Warehouse and Freight Movement, and Waste-Related Service.

Information Services: Enterprises and organizations whose purpose is to produce and process information and to develop the infrastructure and delivery mechanisms to distribute information.

Inn: An owner-occupied Lodging Use, offering 6 to 12 bedrooms, which may serve breakfast to guests. See **Table 4.3.9.A-1 (Building, Lot & Building Site Principal Uses)**. Neither a Bed and Breakfast nor a Short-Term Rental Unit is an Inn.

Interior Lot or Building Site: A Lot or Building Site type other than a Corner Lot or Building Site. See **Illustration 9.3.I-2 (Interior Lot or Building Site)**.

ILLUSTRATION 9.3.I-2 INTERIOR LOT OR BUILDING SITE



K.

Kennel: Any place where dogs, cats and/or other animals are kept for boarding, breeding, grooming, or training for compensation excluding any otherwise conforming or lawfully nonconforming agricultural use. A Kennel may not be a Home Occupation.

Kindergarten: Premises accommodating a program that prepares children for first grade.

Knee Wall: As used in the Façade standards of this Ordinance, a low-wall that is incorporated into the Façade of a building beginning at grade and extending upward at least twelve (12) inches but not more than twenty-four (24) inches. Glazing is typically located above the Knee Wall.

Internal Drive: A curbed pedestrian and vehicular access way, for commercial and industrial land uses within a Lot, Building Site, or Development Parcel that connects to a Thoroughfare or another Internal Drive, and provides access and circulation to or through such Lot, Building Site, or Development Parcel and the Building(s) and Parking accommodations thereon. An Internal Drive is required to meet the Thoroughfare and Internal Drive assemblies and standards for the applicable District.

Inverted Crown: Surface shaping of an Alley, Thoroughfare, or Internal Drive having the low point in the middle, causing surface runoff to flow down the center.

Junk Vehicle: A vehicle which does not lawfully display a current license plate and which is partially dismantled or wrecked, or cannot operate under its own power.

Junkyard: Any land or Structure or part thereof used for the collection, storage or sale of wastepaper, rags, scrap metal or other scrap or discarded material or for the collecting, dismantling, storage or salvage of machinery or vehicles not in running condition or for the sale of the parts thereof.

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L

Laboratory: A place where scientific studies are conducted, including testing, research, or analysis of a medical, chemical, physical, biological, mechanical, or electronic nature.

Landholder: The legal or beneficial owner or owners of all the land proposed to be included in a Planned Unit Development. The holder of an option or contract to purchase, a lessee having a remaining term of not less than 50 years in duration, or other person having an enforceable proprietary interest may be considered a “landholder” for the purpose of this Ordinance.

Landscaping: (1) live materials such as grass, ground cover, shrubs, vines, hedges and trees, or durable natural material such as crushed stone, wood chips, rock and weathered wood; or (2) the activity of installing or maintaining such materials.

Land Use Plans: As defined in Section 8.5.20.A.

Large Multi-Family Building: Principal Building type that incorporates seven (7) or more side-by-side and/ or horizontally stacked Dwelling Units, typically with one or more shared entries. See **Table 4.3.8.A (Principal Building Types)** and **Table 4.3.8.B (Principal Building Types - Specific Standards)**.

Large Projecting Sign: The Sign Type described as such in **Table 7.1.2.B-1 (Sign Types - Summary)** and **Table 7.1.2.B-2 (Sign Types - Specific Standards)**.

Laundromat: An establishment with machines for the washing and drying of clothes and garments.

Layer: A range of depth of a Lot or Building Site within which certain elements are permitted. There are three Layers within each Lot or Building Site, as follows:

First Layer: that portion of a Lot or Building Site bounded by

the Side Lot or Building Site Lines,

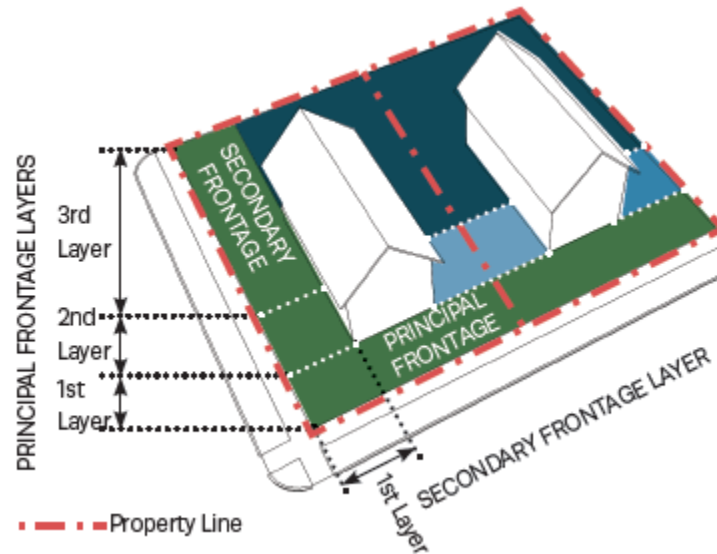
the Frontage Line, and

the Facade of the Principal Structure, or, on a Secondary Frontage, a Building Elevation.

Second Layer: that portion of a Lot or Building Site directly behind the First Layer and extending twenty (20) feet into the lot parallel to the Principal Frontage.

that Third Layer: that portion of a Lot or Building Site that is not within the First and Second Layer and is least visible from the Thoroughfare.

ILLUSTRATION 9.3.L-5 LAYERS



Library: A Building or part thereof containing collections of books, periodicals, and/or other media for Persons to read, borrow, or refer to.

Light Industrial: the sub-category of the Industrial Uses Category characterized by and collectively referring to fabrication, creation, processing, production, packaging, converting, altering, assembling, handling, storage, treatment, distribution, disposal, creation, assemblage, processing, or production, and/or treating, designing, fitting, compounding, repairing, assembling, testing, storing, warehousing, selling at wholesale, distributing or transferring, and/or repair, of or from natural, man- made, products or other goods, raw, secondary, partially completed or completed materials, components, products, by-products, goods, materials, or information, and wholesaling of industrial, Business, or consumer machinery, equipment, which activity is:

conducted solely within an enclosed Building,

is not detrimental to the environment; does not pose any danger or hazard of fire or explosion or other physical hazard;

does not generate, cause, disseminate, or discharge any pollution, material, dust, smoke, gas, fumes, odor, noise, heat, light, glare, or vibration beyond the Building Site on which the Building is situated;

does not involve any Outside Storage;

will not result in any unusual traffic hazard or congestion;

does not require any water, air, or other environmental or pollution license or permit is required; and

does not involve storage or use of highly flammable, toxic matter or explosive materials, or of Hazardous Materials;

Not included in the Light Industrial Uses sub-category are:

Heavy Industrial Uses;

Manufacture and production of goods from composting organic material (see Waste-Related Service);

Outdoor storage yard (see Warehousing and Freight Movement);

Sale or rental of machinery, equipment, heavy trucks, building materials, special trade tools, welding supplies, machine parts, electrical supplies, janitorial supplies, restaurant equipment, and store fixtures (see Wholesale Sales); or

Small-scale catering establishments (see Restaurants).

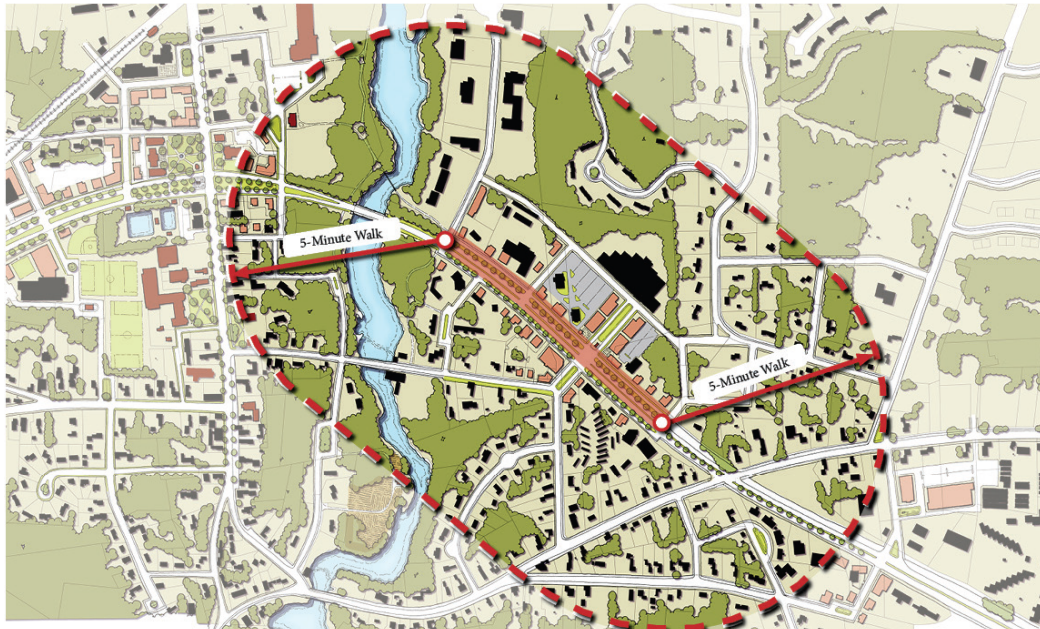
See **Table 4.3.9.A-1 (Building, Lot & Building Site Principal Uses)**.

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Lightwell: A Private Frontage type that is a below-grade entrance or recess designed to allow light into basements. See **Table 4.3.7.A (Private Frontage Types)**.

Linear Pedestrian Shed: A Pedestrian Shed that is elongated along an important Corridor. A Linear Pedestrian Shed extends approximately 1/4 mile from each side of the Corridor. The resulting area is oblong. See **Illustration 9.3.L-1 (Linear Pedestrian Shed)**.

ILLUSTRATION 9.3.L-1 LINEAR PEDESTRIAN SHED



Liner Building: A Building that is a least 20 feet deep measured from the Façade, which masks a Parking Area, Parking Lot, or a Parking Structure from the Frontage. See **Illustration 9.3.L-2 (Liner Building)**.

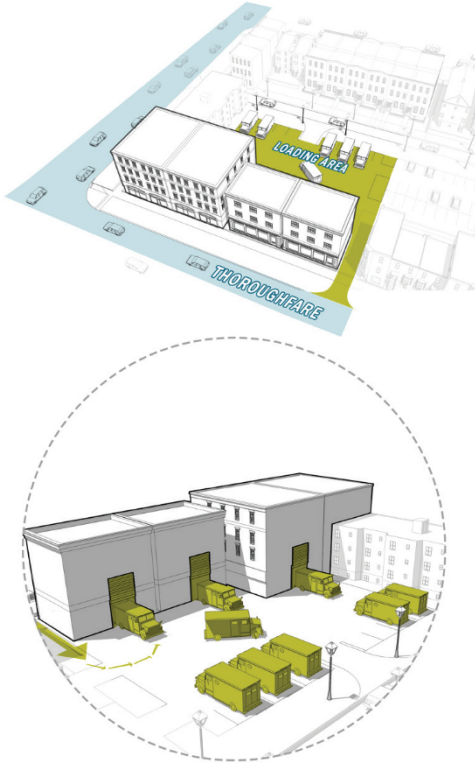
ILLUSTRATION 9.3.L-2 LINER BUILDING

Live / Work Building: A small- to medium-sized attached or detached Principal Building type, which includes a flexible space for Commercial Use and an internally connected Residential Dwelling Unit above and/or behind the flexible space. See **Table 4.3.8.A (Principal Building Types)** and **Table 4.3.8.B (Principal Building Types - Specific Standards)**.

Living Room: A room designed for general living purposes in a Dwelling Unit. Every Dwelling Unit shall be deemed to have a Living Room.

Loading Area: An area on a Lot or rear Building Site with a Building or along the Thoroughfare or Internal Drive Abutting such Lot or rear Building Site, used for temporary parking of Commercial vehicles while loading or unloading goods. See **Illustration 9.3.L-3 (Loading Area)**.

ILLUSTRATION 9.3.L-3 LOADING AREA



Loading Space: A space within a Loading Area that meets the design and dimensional requirements of Section 4.3.14.

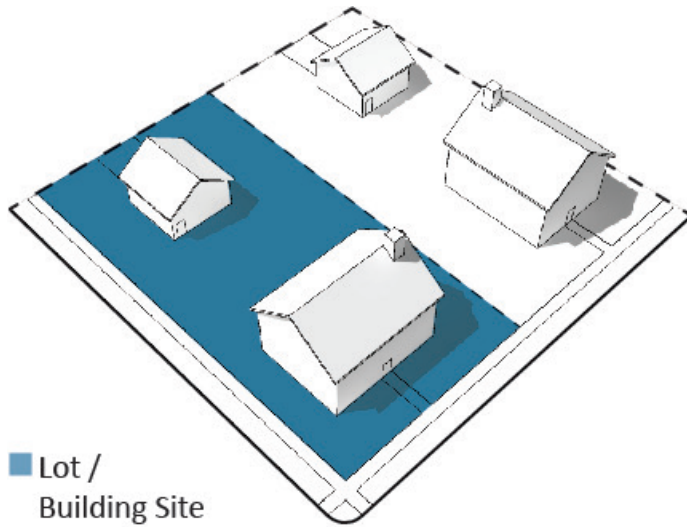
Long Term Care Facility: Premises at which living accommodations, bed care, boarding, in-patient service, and/or nursing or other medical care are provided for aged, infirm, disabled persons, persons or who are afflicted with or convalescing from any disease or ailment, or other persons requiring regular medical attention.

Long Term Care Facility does not include Rehabilitation Centers, Assisted Living Apartments, or facilities that provide surgical or emergency medical services, care for alcoholism, drug addiction, substance abuse, mental disease other than dementia, or communicable disease.

Lot: A parcel, plot, tract, or piece of land identified on and established by plat, subdivision, or as otherwise permitted by law, and recorded in the official records of the Maury County Register of Deeds, to be separately owned, used, Developed, or built on. See **Illustration 9.3.L-4 (Lot / Building Site)**. See also “Building Site”, “Lot or Building Site of Record” and “Zoning Lot or Building Site”.

ILLUSTRATION 9.3.L-4 LOT / BUILDING SITE

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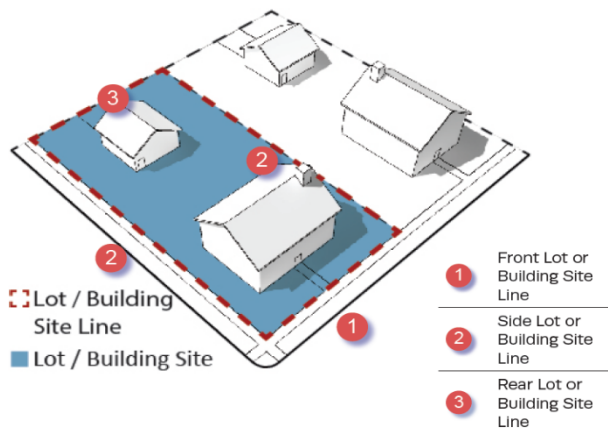


Lot or Building Site Area: The total horizontal area included within the Lot or Building Site Lines.

Lot or Building Site Depth: The shortest horizontal distance between the Front Lot or Building Site Line and Rear Lot or Building Site Line of a Lot or Building Site.

Lot or Building Site Line: Any boundary line of a Lot or Building Site. See **Illustration 9.3.L-6 (Lot or Building Site Line)**.

ILLUSTRATION 9.3.L-6 LOT OR BUILDING SITE LINE

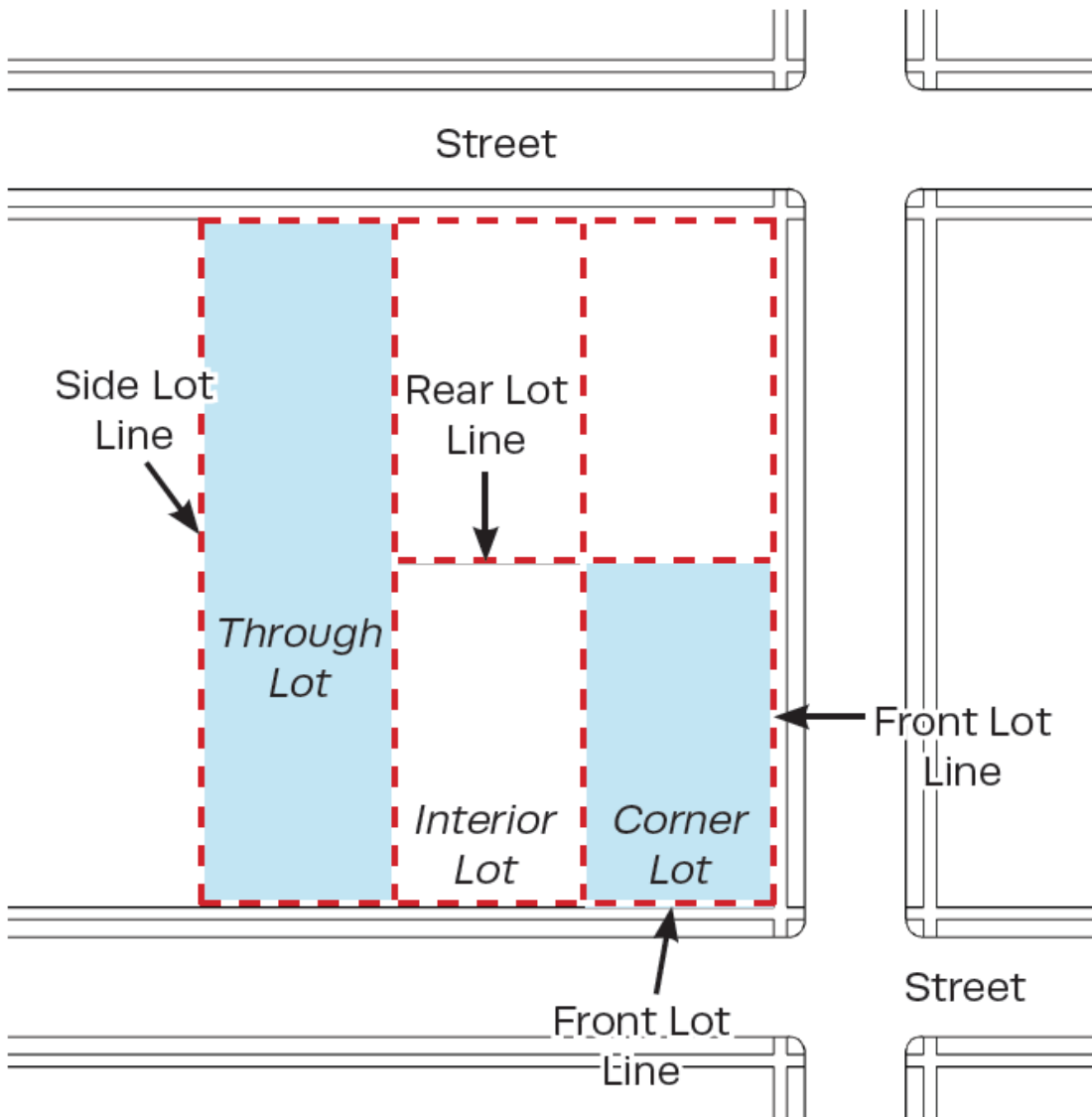


Lot or Building Site Width: The length of the Principal Frontage Line of a Lot or Building Site.

Lot or Building Site of Record: A Lot or Building Site, as applicable, which is part of a subdivision or other plat recorded in the office of the Maury County Register of Deeds, or a Lot or parcel described by metes and bounds, the description of which has been so recorded.

Lot or Building Site Type: The classification of a Lot or Building Site, as shown in the following diagram:

ILLUSTRATION 9.3.L-7 LOT OR BUILDING SITE TYPES



ARTICLE 9: DEFINITIONS

M.

Machine Shop: Premises at which mechanical items are made or repaired using machinery or equipment.

Main Civic Space: The primary outdoor gathering place within a Development Parcel. The Main Civic Space may be associated with an important Civic Building.

Manufactured Home: A detached one family dwelling constructed as a single self-contained unit and mounted on a single chassis transportable after fabrication on its own wheels or detachable wheels with all the following characteristics as prescribed in Section 68-126-202, (4), (6) and (7) of TCA:

Designed for long term occupancy, and containing sleeping accommodations, a flush toilet, a tub or shower bath, and kitchen facilities with plumbing and electrical connections provided for attachment to outside systems.

Arriving at the site where it is to be occupied as a dwelling complete, including major appliances and furniture, and ready for occupancy except for minor and incidental unpacking and assembly operations, location of foundation supports, connections to utilities and the like.

Manufactured Home dwellings do not include camping Trailers, commercial mobile Structures, motor homes, recreational vehicles, travel Trailers, truck campers or similar units designed to provide temporary living quarters.

Manufactured Home- Class A: A Structure manufactured before June 15, 1976, that is not constructed in accordance with the National Manufactured Home Construction and Safety Standards Act of 1974, as amended (42 U.S.C. § 5401 et seq.). It is a Structure that is transportable in one or more sections that in the traveling mode is eight body-feet or more in width and 40 body-feet or more in length, or, when erected on site, is 320 or more square feet and that is built on a chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities and includes any associated plumbing, heating, air conditioning and electrical systems.

Manufactured Home Park or Subdivision: An area, tract, site, or parcel (or contiguous parcels) of land divided into two or more Manufactured Home Sites for rent or sale and associated Lots or Building Sites and Buildings necessary to support the Residential occupancy of Manufactured Homes.

Manufactured Home Sales: A subcategory of the Commercial Use category, characterized by the offer for sale or lease and the sale or lease of Manufactured Homes.

Manufactured Home Site: A designated area within a Manufactured Home Park for the exclusive use of the occupants of a single home.

Manufactured Home Stand: That part of an individual Manufactured Home Site which has been reserved for the placement of the Manufactured Home.

Marina: Any of the following: (1) lock harbor facility; (2) any facility which provides fueling, pump-out, maintenance or repair services; or (3) any facility which has permanent docking space for three (3) or more Boat Slips (4) any water area with a Structure that is used for docking or otherwise mooring Vessels and constructed to provide temporary or permanent docking space for more than ten Vessels; or (5) a dry stack facility.

Marquee Sign: The Sign Type described as such in **Table 7.1.2.B-1 (Sign Types - Summary)** and **Table 7.1.2.B-2 (Sign Types - Specific Standards)**.

Massage Studio: An establishment at which manual manipulation of muscle, connective tissue, tendons, and/or ligaments is provided to enhance a Person's health and well-being.

Massing: The overall shape or arrangement of the Bulk or volume of a Building.

Medical Office / Medical Clinic / Outpatient Clinic / Dental Office: An Office or other premises for the private practice of health care or dental professionals licensed by the State, wherein a majority of patient encounters involve examination, diagnosis, treatment, or surgical procedures on an outpatient basis not extending beyond a 24-hour period.

Medical Laboratory: A facility where testing or observation of clinical specimens from which information about the health of a patient can be obtained in order to provide diagnosis, treatment, and/or prevention of disease.

Meeting Hall: A Building that provides accommodations as a Place of Assembly.

Middle: As used in the Façade standards of this Ordinance, all of the Façade which is visually defined by the Base and Cap of the building.

Middle School: Premises at which Education is provided for children from Grade 5 through Grade 8.

Mid-Rise Building: an attached or detached Principal Building Type of 4 Stories, which may provide a vertical and/or horizontal mix of Uses, typically designed to facilitate pedestrian-oriented Retail / Personal Service/ Repair / Art / Artisan, Accommodation / Lodging, or Office Uses on the ground floor, with upper floors typically designed for Residential or Office Uses. See **Table 4.3.8.A (Principal Building Types)** and **Table 4.3.8.B (Principal Building Types - Specific Standards)**.

Mixed Use: Multiple Uses within the same Building or on the same Lot or Building Site through superimposition or Adjacency, or in multiple Buildings or on multiple Lots or Building Sites by Adjacency or proximity.

Mixed-Use Building: A typically attached Principal Building Type, which provides a vertical and/or horizontal mix of Uses typically designed to facilitate pedestrian-oriented Retail / Personal Service / Repair / Art / Artisan, Accommodations / Lodging, or Office Uses on the ground floor, with upper floors typically designed for Residential or Office Uses. See **Table 4.3.8.A (Principal Building Types)** and **Table 4.3.8.B (Principal Building Types - Specific Standards)**.

Mobile Vending: Any temporary activity which includes preparation, assembly, or display of items with the intent to sell such items to the general public (excluding produce stands).

Mobile Vending Apparatus: Any vehicle, trailer, cart, table, tent or other equipment utilized for Mobile Vending.

Monument Sign: The Sign Type described as such in **Table 7.1.2.B-1 (Sign Types - Summary)** and **Table 7.1.2.B-1 (Sign Types - Specific Standards)**.

Motel: An establishment where short-term Accommodation / Lodging in guest rooms is offered for compensation and one or more rooms are accessed by exterior doors opening directly to exterior Parking accommodations, passageways, or the outdoors. Neither a Hotel, Extended Stay Hotel, or unit therein, nor a Short- Term Rental Unit is a Motel.

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Motor Vehicle: Every vehicle that is self-propelled by a motor, which can be licensed and registered to be driven on public streets, roads or rights-of-ways, and every vehicle that is propelled by electric power obtained from overhead trolley wires, but not operated upon rails.

Examples are passenger vehicles, trucks, motorcycles and other consumer motor vehicles, and motorized Recreational Vehicles.

This term does not include Boats or other watercraft, non-motorized Recreational Vehicles, Manufactured Homes, or Farm and Construction Equipment.

Motor Vehicle Body Shop: Premises or a portion of premises used for the adjustment, painting, replacement of parts, or body repair of Motor Vehicles.

Motor Vehicle Maintenance, Repair, Fuel Sales, Service, or Cleaning: A Structure, premises, or establishment in or on which Motor Vehicles are maintained, repaired, serviced, re-fueled, and/or cleaned, including without limitation, incidental storage for fewer than sixty (60) days of Motor Vehicles that are being maintained, repaired, serviced, and/or cleaned.

Examples are car wash, full vehicle service including alignment shop, auto upholstery shop, towing service, limited vehicle service including auto detailing, auto repair, battery sales and installation, fuel sales, quick lubrication facilities, and tire services.

This term does not include Parking Lots, Parking Structures, Motor Vehicle Storage, Motor Vehicle Body Shop, Motor Vehicle Parts Sales, or Convenience Store with Gasoline Sales (see Retail Sales and Service).

Motor Vehicle Parts Sales: A Structure, premises, or establishment in, from, or on which Motor Vehicle parts other than tires are sold, either at Retail or Wholesale.

Motor Vehicle - Related Sales and Service: Motor Vehicle Body Shop, Motor Vehicle Maintenance, Repair, Service, Fuel Sales, or Cleaning, Motor Vehicle Parts Sales, Motor Vehicle Sales, Rental, or Leasing, and Motor Vehicle Storage.

Motor Vehicle - Related Uses: The term collectively referring to Motor Vehicle Body Shop, Motor Vehicle Maintenance, Repair, Fuel Sales, Service, or Cleaning, Motor Vehicle Parts Sales, Motor Vehicle Sales, Rental, or Leasing, and Motor Vehicle Storage. See **Table 4.3.9.A-1 (Building, Lot & Building Site Principal Uses)**.

Motor Vehicle Sales, Rental, or Leasing: A Structure, premises, or establishment in or on which Motor Vehicles are sold, rented, leased, or chartered, including incidental storage, maintenance, and servicing as an Accessory Use.

Motor Vehicle Storage: Long- or short-term storage of operating Motor Vehicles. This term excludes Parking Lots, Parking Structures, Impound Yards, Towing Facilities, and any dismantling, Scrap and Salvage Yards/Service, or Junkyards.

Multi-Family Building: A Large Multi-Family Building or a Small Multi-Family Building. See **Table 4.3.8.A (Principal Building Types)** and **Table 4.3.8.B (Principal Building Types - Specific Standards)**.

Multi-Family Dwelling: A Building containing three (3) or more Dwelling Units, including without limitation Residential condominiums, cooperatives, Independent Living Apartments and other Apartments, Large Multi-Family Buildings, and Small Multi-Family Buildings.

Museum: A Use characterized by the display, preservation, collection, curation, and/or exhibit of objects of community and cultural interest in one or more of the arts and sciences.

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N.

Neighborhood Street: The Thoroughfare or Internal Drive type described as such in **Table 5.3.3.F (Thoroughfare/ Internal Drives Types – Summary)** and **Table 5.3.3.G (Thoroughfare / Internal Drive Assemblies and Standards)**.

Neon Tube Illuminated Sign: A Sign with a light source supplied by a neon tube, which is bent to form letters, symbols or other shapes.

Net Site Area: All developable land within a site including Thoroughfares and Internal Drives, but excluding land allocated as Civic Space or Civic District.

Nightclub: An establishment for nighttime entertainment, typically serving Alcoholic Beverages for consumption on site and offering music, dancing, or other entertainment. Adult-Oriented Entertainment is excluded from the term “Nightclub”.

Non-Banking Financial Institution: A Financial Institution that is not regulated by the Federal Deposit Insurance Corporation (FDIC) and is governed by T.C.A Title 45 Chapters 15, 17, and 18, including without limitation, Pawn Shops, title loan lenders, cash advance Lenders, and check cashing establishments and other Short-Term Lenders.

Nonconforming Improvement: Any Improvement, or part thereof, that legally existed at the Effective Date of this Ordinance or any amendment of this Ordinance or the Zoning Map affecting such Improvement, but upon such Effective Date does not conform to this Ordinance;

Nonconforming Lot or Building Site: Any Lot or Building Site, or part thereof, that legally existed at the Effective Date of this Ordinance or any amendment of this Ordinance or the Zoning Map affecting such Lot or Building Site, but upon such Effective Date does not conform to this Ordinance.

Nonconforming Sign: A Sign that legally existed at the Effective Date of this Ordinance or any amendment of this Ordinance or the Zoning Map affecting such Sign but upon such Effective Date does not conform to this Ordinance.

Nonconforming Structure: A Structure that legally existed at the Effective Date of this Ordinance or any amendment of this Ordinance or the Zoning Map affecting such Structure, but upon such Effective Date does not conform to this Ordinance.

Nonconforming Use: Any Use of land, of a Structure, or of an Improvement, or part thereof, that legally existed at the Effective Date of this Ordinance or any amendment of this Ordinance or the Zoning Map affecting such Use, but upon such Effective Date does not conform to this Ordinance.

Nonconformity: A Nonconforming Lot or Building Site, Nonconforming Structure, Nonconforming Sign, Nonconforming Improvement, or Nonconforming Use.

Non-Hazardous Waste Treatment or Disposal: Facilities for receiving, sorting, treatment, or disposal of nonhazardous solid waste, including waste transfer stations, compost dumps, and combustors, incinerators, and cogeneration plants, and the collection and hauling of nonhazardous waste incidental to the treatment or disposal operations.

Non-Motor Vehicle or –Boat Body Shop Maintenance/ Cleaning / Repair / Service: A Structure, premises, or establishment in or on which goods other than Motor Vehicles or Boats are maintained, repaired, serviced, and/ or cleaned. This term does not include Parking or Outdoor Storage.

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Non-Motor Vehicle or –Boat Rental / Leasing: A Structure, premises, or establishment in or on which goods other than Motor Vehicles or Boats are rented or leased. This term does not include Parking or Outdoor Storage.

Non-Profit Office: Premises available for any function of a not-for-profit organization.

Nursery School: See “Pre-School”.

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O.

Occupancy: The Principal Use of a Lot, Building Site, or Structure for the performance of a function or operation by a Person.

Office Uses: (1) a Use category characterized by premises available for the transaction of Commercial, governmental, professional, medical, dental, not-for profit, or financial services, but excluding Retail / Personal Service / Repair/ Art / Artisan Uses, Light Industrial Uses, and Heavy Industrial Uses; or (2) Office Uses is the Use category, which is a collective reference to Uses in the following Use sub-Categories, as listed in **Table 4.3.9.A-1 (Building, Lot & Building Site Principal Uses)** **4.3.9.A-2 (Building, Lot & Building Site Accessory Uses)**, and **Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses)**:

Business / Government / Non-Profit Offices (excluding Civic Uses), Medical / Dental Offices, Professional Offices, and Other Offices Not Listed;

Office Building: A Building in which space is made available for Office Use. Office Building is not a Building Type.

Office Front: A Private Frontage type wherein the Facade is aligned close to or at the Frontage Line with the Building entrance at or above Sidewalk grade. This type is conventional for Office Use. It may have a substantial glazing on the Facade. See **Table 4.3.7.A (Private Frontage Types)**.

Off-Premises Sign: A Sign the owner or lessee of which is not the owner or lessee of the premises on which such Sign is located.

Open Air Market: A Farmer's Market, a Roadside Stand, or an Outdoor Market.

Open Space: Use characterized by large expanses of land.

Ordinance or Zoning Ordinance: This City of Columbia, Tennessee Zoning Ordinance, as the same may be amended and in effect from time to time.

Ordinary Maintenance and Repair: (1) keeping a Lot or Building Site , parcel, or Structure in good condition through ongoing minor intervention, undertaken from time to time, in a manner that does not change its external appearance except through the elimination of the usual and expected effects of weathering; (2) strengthening or restoring any portion of a Structure or Improvement to a safe condition, provided no material enlargement results; (3) repairing or replacing interior walls, fixtures, wiring or plumbing; or (4) repaving Driveways, private Thoroughfares, Internal Drives, and Parking and loading accommodations, (5) replacing exterior windows and siding, and (6) painting exterior Structures and fixtures. Ordinary Maintenance and Repair does not constitute Development, Construction or building for the purposes of this Ordinance.

Outbuilding: Synonymous with "Accessory Building".

Outdoor Display Case: The Sign Type described as such in **Table 7.1.2.B-1 (Sign Types - Summary)** and **Table 7.1.2.B-2 (Sign Types - Specific Standards)**.

Outdoor Market: An open-air area, without or without a Structure, used for the Retail sale of goods other than fresh fruits, vegetables, nuts, grains, eggs, flowers, herbs, or plants.

Outdoor Recreation: Commercial uses, varying in size, providing daily or regularly scheduled recreation or entertainment-oriented activities. Such activities may take place outdoors or within a Structure.

Athletic, tennis, swim, or Health Club (see Retail Sales and Service), botanical garden, nature preserve (see Parks and Open Areas), and Indoor Recreational Facility (see Indoor Recreation) are excluded from Outdoor Recreation.

Outdoor Storage: One or more assemblages, collections, stacks, or stockpiles of vehicles, equipment, goods, materials, tanks, or other items in any area other than within a Building, including without limitation, parked operative or non-operative vehicles or equipment.

ARTICLE 9: DEFINITIONS

P.

Parcel Services: Providing for-profit package and message routing, distribution, and delivery services.

Park: As a noun, a Civic Space type that is a natural preserve available for unstructured recreation, described as such in **Table 5.3.3.A (Civic Space Types - Summary)** and **Table 5.3.3.B (Civic Space - Specific Standards)**; as a verb, to stop and disengage a Motor Vehicle and leave it unoccupied.

Parking: (1) an accommodation designed for the of stopping and disengagement of a Motor Vehicle and leaving it unoccupied; or (2) the act of stopping and disengaging a Motor Vehicle and leaving it unoccupied.

Parking Area: An off-street, ground-level open area within a Lot or Building Site for Parking vehicles as an Accessory Use incidental to a Principal Use of a Lot or Building Site or a Principal Building on a Lot or Building Site. Not synonymous with Parking Lot.

Parking Lot: An off-street, ground-level open area within a Lot or Building Site for Parking vehicles as a Principal Use for which a fee may or may not be charged. Not synonymous with Parking Area. Parking Lot does not include Bus barn (see Warehouse and Freight Movement) or sale or servicing of vehicles (see Vehicle Sales and Service).

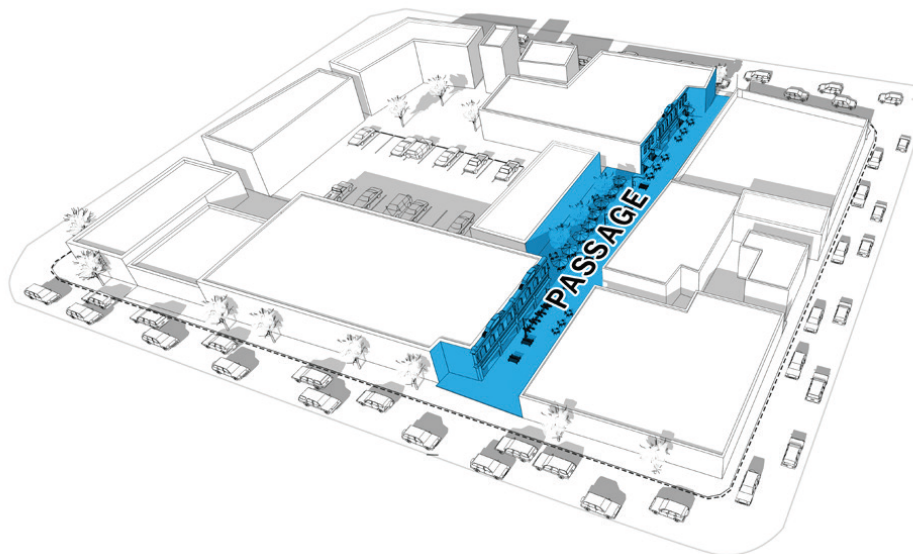
Parking Space: An area required or provided for Parking a vehicle, meeting the requirements of Section 4.3.12.

Parking Structure: A vertical or vertical and subterranean Improvement other than a Garage, containing one or more levels of vehicular Parking above grade. A Parking Structure may not be used for Motor Vehicle Body Shop, Maintenance Repair, Service or Cleaning.

Party Wall: A Wall on an Interior Lot or Building Site Line, used or adopted for joint service between two or more Buildings; such walls shall fully comply with fire and all other provisions and standards established for such walls in the Standard Building Code.

Passage (PS): A pedestrian connector, open or roofed, that passes between Buildings to provide shortcuts through long Blocks and connect rear parking areas to Frontages. See **Illustration 9.3.P-1 (Passage)**.

ILLUSTRATION 9.3.P-1 PASSAGE



Passive Recreation: Outdoor recreational activities, such as nature observation, hiking, and canoeing or kayaking, which require a minimum of facilities or Development and which have minimal environmental impact on the recreational site.

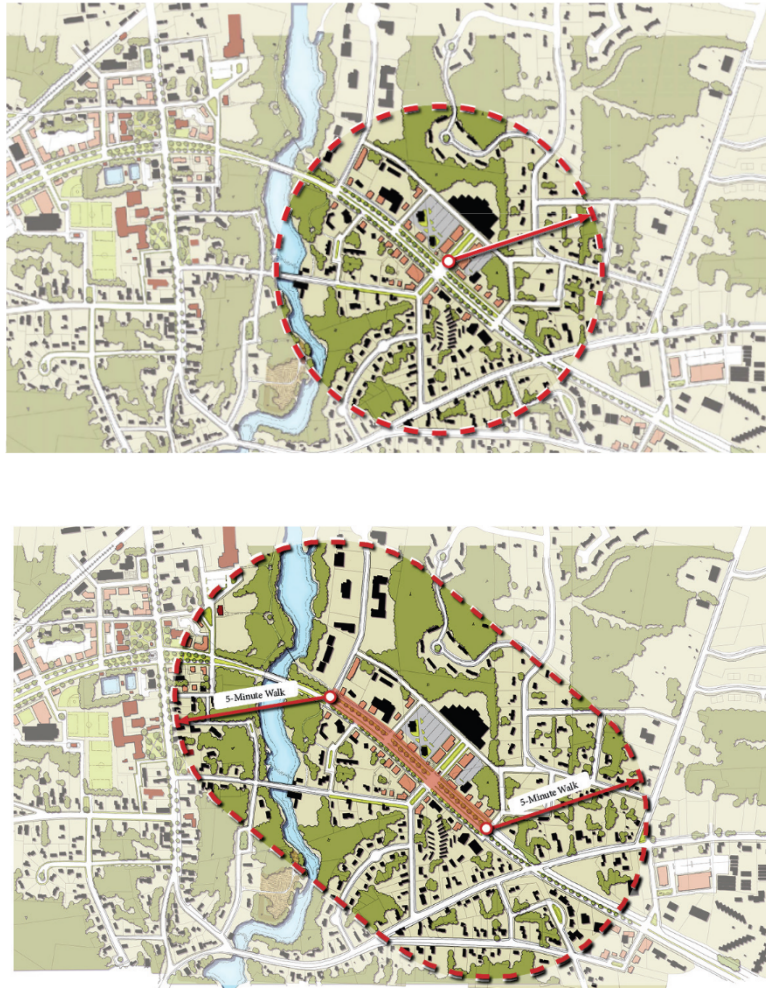
Path (PT): A pedestrian way traversing an open greenspace with a minimum area of 5,000 square feet, with landscape matching contiguous Civic Space, connecting directly with the Sidewalk network.

Pawnshop: A Business that lends money based upon the security of pledged goods left in pawn, or that is in the Business of purchasing tangible personal property to be left in pawn on the condition that it may redeemed or repurchased by the seller for a fixed price within a fixed period of time. See also, Short-Term Lender.

Pedestrian Shed: An area of a size approximately equal to the average distance comfortably walked by pedestrians and approximately centered on a Common Destination. There are two types of Pedestrian Sheds: Standard Pedestrian Sheds and Linear Pedestrian Sheds. See “Standard Pedestrian Shed” or “Linear Pedestrian Shed”. See **Illustration 9.3.P-2 (Pedestrian Sheds)**.

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ILLUSTRATION 9.3.P-2 PEDESTRIAN SHEDS



Performance Guarantee: As defined in Section 1.26.

Performing Arts Venue: A site, with or without a Structure, intended for the presentation of performing arts, such as dance, music, and theatre.

Performing Arts Studio: An establishment that provides instruction in one or more of the performance arts, such as dance, music, and theatre.

Person: An individual, firm, partnership, corporation, company, association, organization, joint stock association, proprietorship, trust, body politic, or other legal entity, or and includes a trustee, receiver, assignee, administrator, executor, guardian, or other representative.

Plot plan: A graphic depiction, drawn to an appropriate scale, indicating the dimensions of the lot or parcel which is the subject of an application for a zoning district amendment or special use permit including a legal description of such lot or parcel and the location of the lot or parcel in relation to adjacent street right-of-way.

Day Care / Personal Care Facilities (Civic): Civic Use sub-category characterized by non-Residential care for adults, children, or families, which does not meet the definition of Household Living or Group Living.

Day Care / Personal Care Facilities (Commercial): Commercial Use sub-category characterized by non-Residential care for adults, children, or families, which does not meet the definition of Household Living or Group Living.

Personal Improvement Education: An establishment primarily engaged in the provision of information or instruction relating to a particular subject or hobby.

Personal Services: Uses in which a service is provided to or for a customer for compensation, in which the Person providing such service deals directly with the consumer, which Uses may or may not include the Retail sale of goods related to the services provided.

Excluded from Personal Services are Motor Vehicle - Related Uses, services provided by a medical or dental professional, and Adult-Oriented Entertainment.

Pharmacy: An establishment having a primary function of dispensing prescription drugs and medications and whose stock-in-trade may or may not include other merchandise.

Place of Assembly: A Building, room, or space that is occupied or arranged for occupation by the public for recreational, amusement, social, sports, or similar purposes.

Place of Worship: A Building, room, or space that is occupied or arranged for occupation for religious, spiritual, recreational, or similar purposes.

Placement: With respect to a Building, the manner in which the Building is situated on the Lot or Building Site. See “Layers”, Illustration 9.3.L-5 (Layers); see also “Setback”, and “Yard” and Illustration 9.3.S-2 (Setbacks and Yards).

Plan: A Development Plan, Master PUD Development Plan, site plan, Landscape Plan, Sign Plan, or any other plan submitted or prepared pursuant to this Ordinance.

Planned Unit Development: See Section 8.5.21.

Planned Unit Development District: One of the several Districts listed as such in Section 3.7.C. See also Section 8.5.21.

Planning Commission: The Planning Commission of the City.

Planning Director: The City Director of Planning and Development.

Planter: The element of the Public Frontage that accommodates trees along Thoroughfares and Internal Drives, whether continuous or individual.

Plaque Sign: The Sign Type described as such in Table 7.1.2.B-1 (Sign Types - Summary) and Table 7.1.2.B-2 (Sign Types - Specific Standards).

Playground: A Civic Space type, described as such in Table 5.3.3.A (Civic Space Types - Summary) and Table 5.3.3.B (Civic Space - Specific Standards).

Plaza: A Civic Space type described as such in Table 5.3.3.A (Civic Space Types - Summary) and Table 5.3.3.B (Civic Space - Specific Standards).

Police Station: Premises accommodating operations of law enforcement officers and other members of staff.

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Porch: A Private Frontage type, having a planted Frontage, the Facade is set back from the Frontage Line, and an attached exterior covered area large enough to accommodate outdoor furniture and/or gathering, which is permitted to Encroach into the Front Setback, Setback Area, or Street Yard. This may be used with or without a Fence to maintain Thoroughfare spatial definition. A Stoop is not a Porch. See **Table 4.3.7.A (Private Frontage Types)**.

Porch Sign: The Sign Type described as such in **Table 7.1.2.B-1 (Sign Types - Summary)** and **Table 7.1.2.B-2 (Sign Types - Specific Standards)**.

Portable Sign: A Sign the principal supporting Structure of which is intended, by design and construction, to be used by resting upon the ground for support and may be easily moved or relocated. Portable Signs include, but are not limited to, Signs mounted on a Trailer, wheeled carrier, or other non-motorized mobile structure, with wheels or with wheels removed.

Post Office: Premises operated by or under contract for the United States Postal Service at which letters, parcels, packages or other mail may be received, deposited, processed, sorted, and/or handled and/or postage may be purchased.

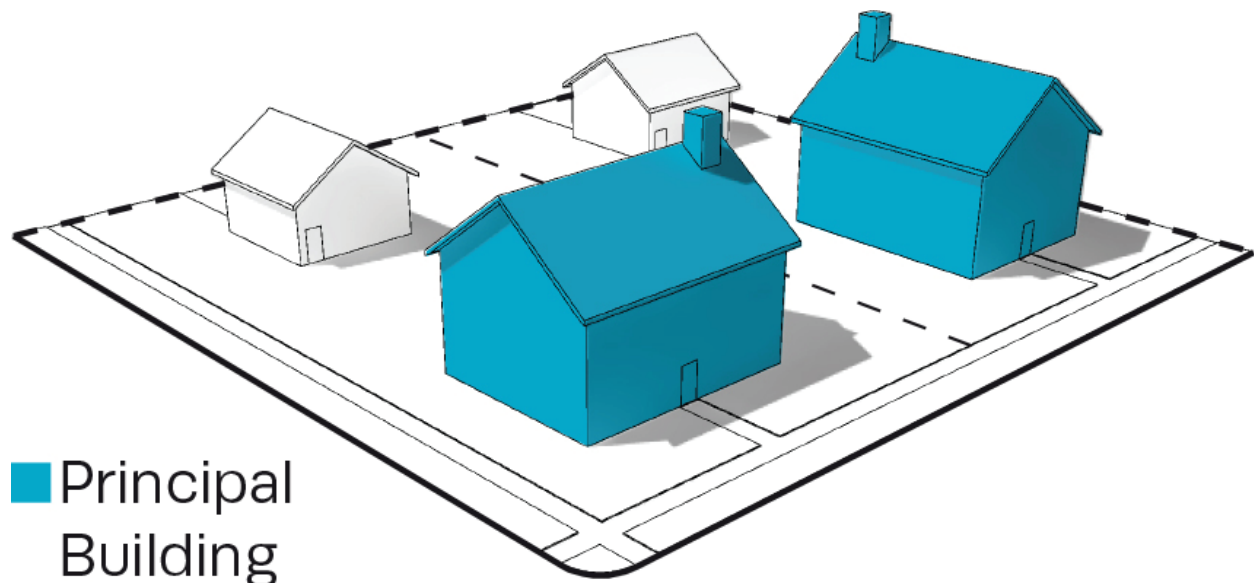
Post Sign: The Sign Type described as such in **Table 7.1.2.B-1 (Sign Types - Summary)** and **Table 7.1.2.B-2 (Sign Types - Specific Standards)**

Pre-School: A school, licensed by the State, with an accredited training program and staffed with certified teachers, providing day time care or instruction for two (2) or more children between the ages of two (2) and five (5) years old. Synonymous with Nursery School.

Preliminary Plat: As defined in City Subdivision Regulation Section 2.2.

Principal Building: the main Building on a Lot or Building Site, located toward the Frontage, in which is conducted a Principal Use of such Lot or Building Site. See **Illustration 9.3.P-3 (Principal Building)**.

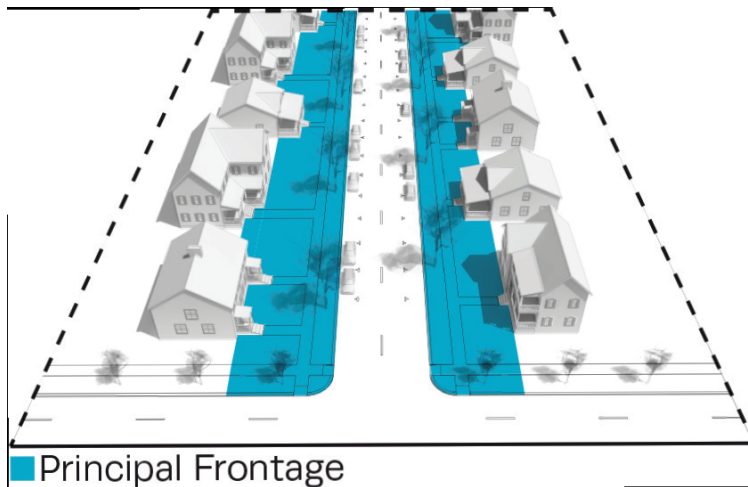
ILLUSTRATION 9.3.P-3 PRINCIPAL BUILDING



Principal Entrance: The main point of access for pedestrians into a Building; the Main Entrance. A building may have more than one Principal Entrance.

Principal Frontage: With respect to: (a) Corner Lots or Building Sites, the Frontage designated to bear the address and Principal Entrance to the Building, and the measure of minimum Lot or Building Site Width; and (b) non-Corner Lots or Building Sites, the Frontage. See “Frontage”. See **Illustration 9.3.P-4 (Principal Frontage)**.

ILLUSTRATION 9.3.P-4 PRINCIPAL FRONTAGE

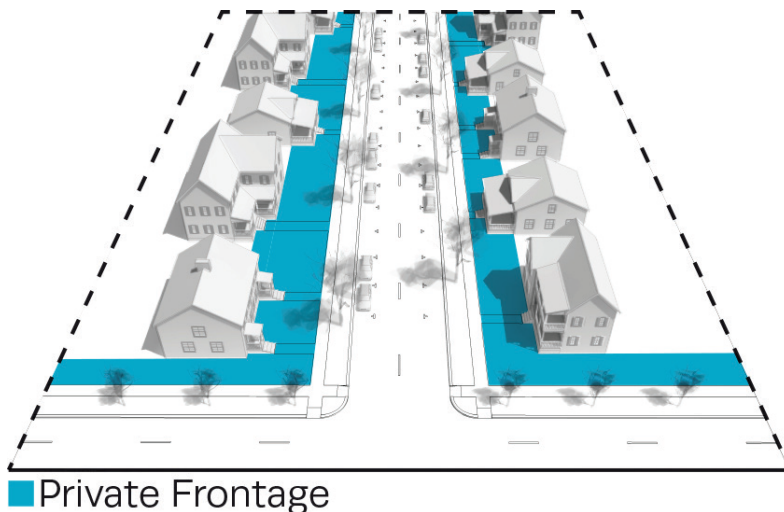


Principal Use: The primary or predominant Use of a Lot, Building Site, or Structure.

Printing Services Shop: Retail premises in which photocopying, scanning, short-run printing, and related services are provided.

Private Frontage: The privately held area between the Frontage Line and the Facade of the Principal Building. See **Illustration 9.3.P-5 (Private Frontage)**; see also **Table 4.3.7.A (Private Frontage Types)**, and **Illustration 9.3.F-5 (Frontage & Lot or Building Site Lines)**.

ILLUSTRATION 9.3.P-5 PRIVATE FRONTAGE



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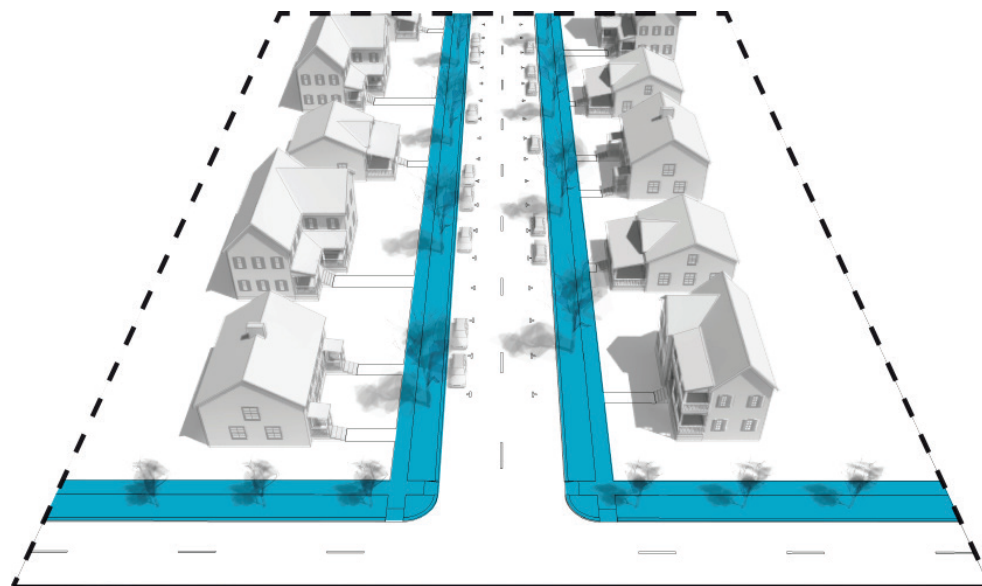
Public Frontage: The area between the Frontage Line and:

the curb (or if there is no curb, the edge) of the Vehicular Lanes in the case of a Lot or Building Site that Enfronts a Thoroughfare or Internal Drive having Vehicular Lanes, or

the Enfronting Civic Space, Path, Passage, waterbody, or Driveway in the case of a Lot or Building Site that Enfronts a Civic Space, Path, Passage, waterbody, or Driveway.

See **Illustration 9.3.P-6 (Public Frontage)**; see also **Table 5.2.2.G-1 (Thoroughfare Assemblies & Standards)**; and **Illustration 9.3.F-5 (Frontage & Lot or Building Site Lines)**

ILLUSTRATION 9.3.P-6 PUBLIC FRONTAGE



Public Frontage

Pushcart: A mobile vending apparatus which may be moved without assistance of a motor from which merchandise or food is stored and prepared with the intent to sell to the public.

Professional Office: Use sub-category of Office Uses category characterized by premises in or from which professional or consulting services in the fields of law, architecture, planning, design, engineering, accounting, bookkeeping, and similar professions are conducted. This term does not include “Medical Office”, “Dental Office”, or “Clinic”.

Project Boundary Buffer: A Buffer located along the boundary of a development.

Public Art: Art in any media that has been planned and executed with the intention of being staged in or viewed from the physical public domain, usually outside and accessible to all.

Public Meeting: A duly convened meeting of a Decision- Making Authority as contemplated under applicable state law, including public meetings, public hearings, workshops, and site visits.

Publishing: The Business of issuing software, Internet content, or newspapers, books, or other printed textual or graphical material for sale or distribution to the public.

Pylon Sign: The Sign Type described as such in **Table 7.1.2.B-1 (Sign Types - Summary)** and **Table 7.1.2.B-1 (Sign Types - Specific Standards)**.

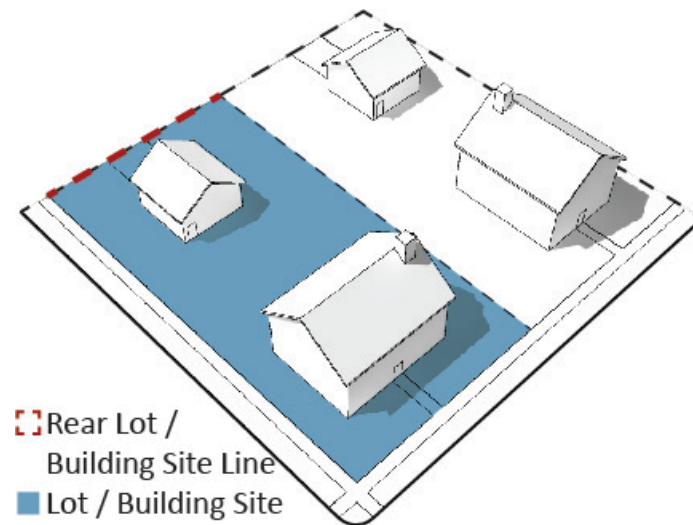
ARTICLE 9: DEFINITIONS

R.

Rail Equipment Storage / Repair: Use involving premises for storing or repairing locomotives, rail cars, or other rail vehicles.

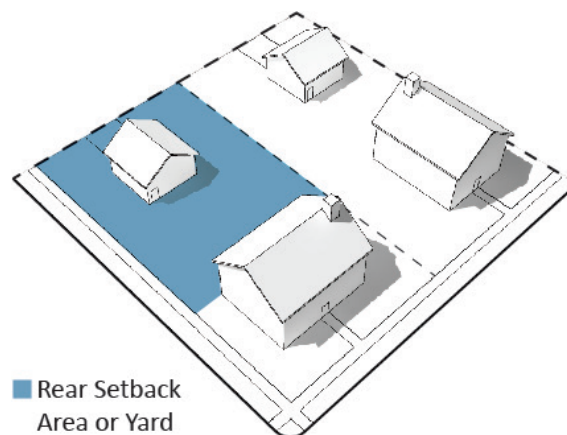
Rear Lot or Building Site Line: The Lot or Building Site Line opposite the Front Lot or Building Site Line. See Illustration 9.3.R-1 (Rear Lot or Building Site Line).

ILLUSTRATION 9.3.R-2 REAR SETBACK AREA OR REAR YARD



Rear Setback Area or Yard: A portion of a Lot or Building Site that is situated between (1) the nearest roofed portion of the Principal Building or of any Accessory Building on the Lot or Building Site and (2) the Rear Lot or Building Site Line, extending the full width of the Lot or Building Site, from Side Lot or Building Site Line to Side Lot or Building Site Line. See Illustration 9.3.R-2 (Rear Setback Area or Yard).

ILLUSTRATION 9.3.R-1 REAR LOT OR BUILDING SITE LINE



Recreation: Use characterized by activities for personal enjoyment or entertainment during a Person's discretionary time.

Recreation Facility: Premises accommodating Indoor Recreation and/or Entertainment and/or Outdoor Recreation and/or Entertainment. A Recreation Facility may be Civic or non-Civic.

Recreational Vehicle: a vehicle which is:

built on a single chassis;

four hundred (400) square feet or less when measured at the largest horizontal projection;

designed to be self – propelled or permanently towable by a light duty truck: and

designed primarily for use as a non – permanent dwelling but as temporary living quarters for recreational, camping, vacation, travel, or seasonal use. The term includes camping Trailer, motor home, travel Trailer, and truck campers.

Recreational Vehicle does not include Manufactured Homes.

Recreation and Entertainment, Indoor: Participatory and spectator-oriented Recreation activities conducted within an enclosed Building, including without limitation billiard rooms, bowling centers, ice- or roller-skating rinks, Shooting Ranges, Theater, and arcades.

Recreation and Entertainment, Outdoor: Participatory and spectator-oriented Recreation activities conducted in open, partially enclosed, or screened facilities, including without limitation amusement parks, fairgrounds, golf courses and driving ranges, and go-cart tracks.

Recycling Collection Facility: A facility used for the collection and transfer, but not the actual processing, of any of the following recyclable materials: glass, paper, plastic, cans, or other source-separated, non-decayable materials. Recyclable materials at a Recycling Collection Facility must not include motor oil, chemicals, household appliances, tires, automobiles, automobile parts, or decayable materials.

Rehabilitation Facility: A facility operated for the primary purpose of assisting in the rehabilitation of individuals through an integrated program of medical, psychological, physical, occupational, substance, social, or vocational evaluation and services under competent professional supervision.

Religious Facilities: Facilities used by a non-profit group or institution for organized religious services, meetings, assembly, practice, activities, and supporting uses.

Examples are Places of Worship, church, mosque, synagogue, temple, monastery, convent, retreat center or any permanent or temporary Structure providing regular, organized religious worship of any denomination and religious education incidental thereto. A property tax exemption for a religious group or institution obtained pursuant to state law shall constitute prima facie evidence of a Religious Facilities Use.

Athletic, tennis, swim or Health Club (see Retail Sales and Service), Educational Uses, Day Care facilities, for distribution or production of products, including printed matter, for groups other than immediate membership, public neighborhood arts center or similar community facility (see Community Service), community center, revival or gospel tent, senior center (see Community Service), Social service facility (see Social Service Institution), and Treatment center, transient lodging, or shelter for the homeless (see Social Service Institutions) are not included in this Use Category.

Required Yard or Setback Area: A Yard or Setback Area required by this Ordinance, which is open and unobstructed from 30 inches above the general ground level of the graded lot upward to the sky except as

ARTICLE 9: DEFINITIONS

permitted in Section 4.3.10 and no part of which is included as part of a Setback, Setback Area, or Yard for any other Building.

Research Laboratory: premises that contain research, development, and testing laboratories that do not involve the mass manufacture, fabrication, processing, or sale of products. Such Uses must not be detrimental to the environment through the release of dust, smoke, fumes, odor, noise, or vibration and must not create an unsafe risk of fire or explosion given the location of the use, the Building in which it is located, and the nature of the surrounding Uses and Structures.

Residence: A Building or part of a Building containing one or more Dwelling Units or Rooming Units, including Single – Family or Two – Family Dwellings, Multi-Family Dwellings, Boarding Houses, Rooming Houses, or residence-apartment hotels. Residences shall not include:

Transient accommodations, such as Transient hotels, Motels, or similar establishments;

Dormitories, fraternity or sorority houses, monasteries, or convents, or similar establishments containing Group Living or sleeping accommodations;

Nurses' residences, sanitariums, nursing homes, convalescent homes, rest homes, or other sleeping or living accommodations in community facility buildings or portions of buildings used for community facilities; or

In any Building with a mix of Uses, the part of the Building used for any Non-Residential Uses, except Uses accessory to Residential Uses.

Residential: Pertaining to premises available for long-term, non-Transient human habitation.

Residential Building: Any Building or part thereof utilized solely for Residential Use and Accessory Uses.

Residential Uses: (1) a Use category characterized by premises available for long-term non-Transient human habitation; (2) Residential Uses is the Use category, which is a collective reference to the following Use sub-Categories, as listed in **Table 4.3.9.A-1 (Building, Lot & Building Site Principal Uses)**, **Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses)**, and **Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses)**: Household Living and Group Living.

Restaurant: An establishment engaged in preparing, serving, and selling food at Retail for on- or off- premises consumption. Bars, Taverns, and Nightclubs are not Restaurants.

Restricted-Access Bicycle Enclosure: A locked area containing within it one bicycle rack space for each bicycle to be accommodated, and accessible only to the owners or operators of the bicycles parked within it.

Retail: Use characterized by selling, renting, or leasing new or used goods in person, on-line, or by mail-in transactions dealing directly with the consumer of such goods.

Retail / Personal Service / Repair / Arts / Artisan:

Use sub-category of the Commercial Uses category characterized by selling, renting, or leasing new or used goods in person, on-line, or by mail-in transactions dealing directly with the consumer of such goods, providing personal services or repair services to the general public, and art-related and artisan-related establishments. See **Table**

4.3.9.A-1 (Building, Lot & Building Site Principal Uses), Table 4.3.9.A-2 (Building, Lot & Building Site Accessory Uses), and Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses).

Examples of Retail Uses included in the Retail / Personal Service / Repair / Arts / Artisan sub-category are Convenience Store (with or without petroleum sales), selling, renting or leasing Alcoholic Beverages, antiques, appliances, art supplies, baked goods, bicycles, books, cameras, carpet and floor coverings, crafts, clothing, computers, dry goods, electronic equipment, fabric, flowers, furniture, garden supplies, gasoline, gifts, groceries, hardware, home improvement goods, household products, jewelry, medical supplies, musical instruments, Open Air Market, outdoor farmers market, pets, pet supplies, pharmaceuticals, picture frames, plants, printed materials, produce, sporting goods, stationery, tobacco and related products, vehicle parts, and videos, and Brewpubs, Tasting Rooms, Retail Food Sales with or without on-premises preparation or processing, Retail Membership Clubs, and Warehouse Retail.

Examples of Personal Service Uses included in the Retail/ Personal Service / Repair / Arts / Artisan sub-category are art, music, dance, or photographic gallery or studio, athletic, tennis, swim or Health Club, mailing or package delivery service, dry-cleaning or laundry drop-off facility, Laundromat, funeral home or mortuary, hair, nail, tanning, massage therapy and personal care service, photocopy, blueprint, and quick-sign service, photo finishing psychic or medium, security service, tailor, milliner, upholsterer, taxi or ride-share dispatch center, taxidermist, veterinary clinic, animal hospital, or Kennel, and urgent care or emergency medical office.

Examples of Repair Uses included in the Retail / Personal / Service / Repair / Arts / Artisan sub-category are appliance, bicycle, canvas, clock, computer, gun, jewelry, musical instrument, office equipment, radio, shoe, television or watch repair, and locksmith.

Examples of Arts-Related Uses included in the Retail / Personal Service / Repair / Arts / Artisan sub-category are the non-Residential portion of Artist Live/Work Space, Artist Studio Space, arts-related educational facility, crafts-related retail store, non-Civic art museum/gallery, sale of art and art supplies.

Examples of Artisan-Related Uses included in the Retail / Personal Service / Repair / Arts / Artisan sub-category are Artisan Establishments, candle making, furniture making, glass blowing, weaving, pottery making, woodworking, sculpting, painting, and tailoring.

The following are excluded from the Retail / Personal Service / Repair / Arts / Artisan sub-category:

Adult Video Stores (see Indoor Recreation), any Use that is potentially dangerous, noxious or offensive to neighboring Uses or those who pass on public ways by reason of smoke, odor, noise, glare, fumes, gas, vibration, threat of fire or explosion, emission of particulate matter, interference with radio, television reception, radiation or any other likely cause (see Heavy Industrial), Motor Vehicle- and Boat- Related Uses, Crematorium (see Light Industrial), Large-scale catering (see Light Industrial), laundry or dry-cleaning plant (see Light Industrial), Restaurant (see Restaurants), Sale, lease, or rental of machinery, Farm and Construction Equipment, or other equipment, building materials, special trade tools, welding supplies, machine parts, electrical supplies, janitorial supplies, restaurant equipment, and store fixtures (see Wholesale Trade).

Retail Food Sales: The sale of food for off-premises consumption, excluding Restaurants.

Retail Membership Club: A discount Retail establishment that sells merchandise to its members.

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Rezoning: A change in the district boundaries or district classifications of the zoning map pursuant to Section 8.5.19. For the purposes of this Ordinance, rezoning also includes the initial zoning of a property that occurs with annexation.

Right-of-Way Line: A line contiguous with a Lot or Building Site Line, dividing a Lot or Building Site from an Abutting Thoroughfare or Internal Drive.

Road (RD): A local, rural and suburban Thoroughfare or Internal Drive of low-to-moderate vehicular speed and capacity, described as such in **Table 5.3.3.F (Thoroughfare / Internal Drives Types – Summary)** and **Table 5.3.3.G (Thoroughfare / Internal Drive Assemblies and Standards)**.

Roadside Stand: A small open-air Structure for the Retail sale of produce or other goods grown or produced on the property where the Roadside Stand is located. Roadside Stand does not include Farmer’s Markets or Outdoor Markets.

Rooming House: A Residential type in a private Dwelling in which at least three (3) but not more than six (6) rooms are offered for rent, payable in money and/ or other consideration, whether or not table board is furnished to roomers, and in which no Transient guests are accommodated and no Restaurant is maintained for service to any Persons who are not residents of the Rooming House.

Rooming Unit: A unit of Residential occupancy.

Rowhouse: A Townhouse Building Type described as such in **Table 4.3.8.B (Principal Building Types)**.

S.

School: Business or Trade School, College / University, High School, Middle School, Pre-School or Nursery School, Primary or Elementary School, or Secondary School.

School, Primary or Elementary: See “Primary or Elementary School”.

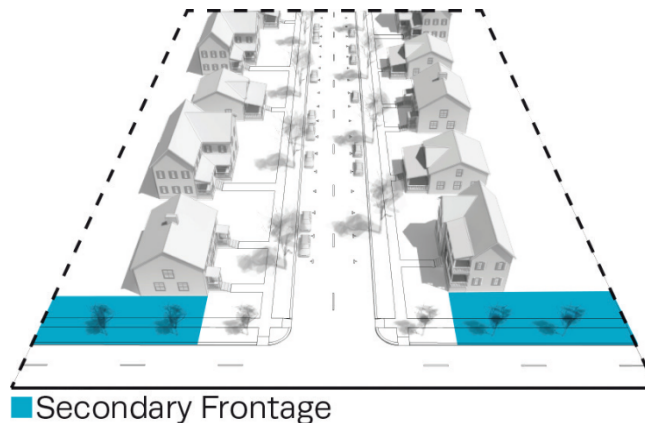
School, Secondary: See “Secondary School”.

Scrap or Salvage Yard / Service: A Use, other than an Impound Yard or Towing Facility, in which an establishment is engaged primarily in the sale, storage, assembling, dismantling, sorting, distributing, or other processing of scrap, used equipment, mechanical components, or waste materials, including a Junkyard.

Screen/Screening: (1) used as a verb, to block an item or condition from view from a vantage point in accordance with the requirements of this Ordinance by interposition of a Building, Building Element, Wall or Fence constructed of an opaque material, or an evergreen hedge; or (2) used as a noun, a Building, Building Element, Wall or Fence constructed of an opaque material or an evergreen hedge, which blocks an item or condition from view from a vantage point, as required by this Ordinance. Not synonymous with Streetscreen.

Secondary Frontage: on Corner Lots or Building Sites, the Frontage that is not the Principal Frontage. See Illustration 9.3.S-1 (Secondary Frontage).

ILLUSTRATION 9.3.S-1 SECONDARY FRONTAGE



Second Layer: See “Layer”.

Secondary School: A public, private, or parochial school offering instruction at the Middle School and /or High School levels in the branches of learning and study required to be taught in the public schools of the state.

Self-Service Storage Facility: premises at which customers rent separate storage units within a Building designed to allow private access by the customer for storing or removing personal property.

Examples are mini-warehouse, multi-story enclosed storage facility, and storage garage.

The following are not Self-Service Storage Facilities:

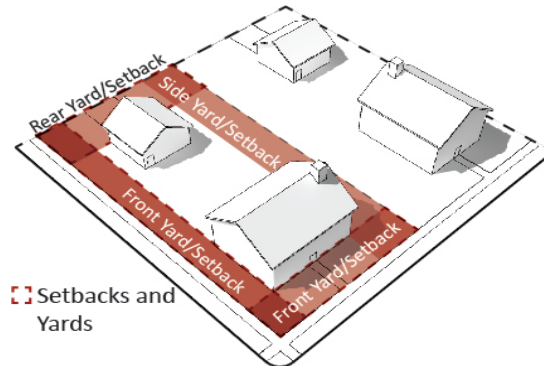
Rental of light or medium trucks, storage area used for Manufacturing use, storage area used for sales, service, and repair operations, and transfer and storage Business where there are no individual storage areas or where employees are the primary movers of the goods to be stored or transferred.

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Septic Equipment Installation, Service, or Cleaning: establishments that install, pump, or service septic tanks and cesspools, or that rent or service portable toilets.

Setback or Setback Area: The portion of a Lot or Building Site measured from a Lot or Building Site Line to a Building Facade or Elevation, which area is maintained clear of permanent Structures, with the exception of permitted Encroachments allowed pursuant to **Tables 4.3.1-A -4.3.1.-U (District Standards)**. See **Illustration 9.3.S-2 (Setbacks)**. See also, “Yard”.

ILLUSTRATION 9.3.S-2 SETBACKS AND YARDS



Sewage Lines: Lines for the movement, distribution, or collection of sewage.

Sewage Facility: Utility facilities for the movement, receipt, treatment, and disposal of sewage.

Shared Parking: Parking spaces shared by two or more uses that are in proximity to one another and the parking area, and that have different operational characteristics such that utilization of the parking spaces by one use will not generally overlap with the utilization of the parking spaces by the other use(s). Shared parking on private property must be supported by binding agreement.

Shared Parking Factor: An accounting for Parking spaces that are available to more than one Principal Use. See **Table 4.3.12.B-2 (Shared Parking Factor)**.

Shooting or Firing Range: A specialized facility within a Building, which accommodates firearms training, practice, and qualification.

Shopfront: A Private Frontage Type conventional for Retail / Personal Service / Repair / Art / Artisan Use, wherein the Facade is aligned close to or at the Frontage

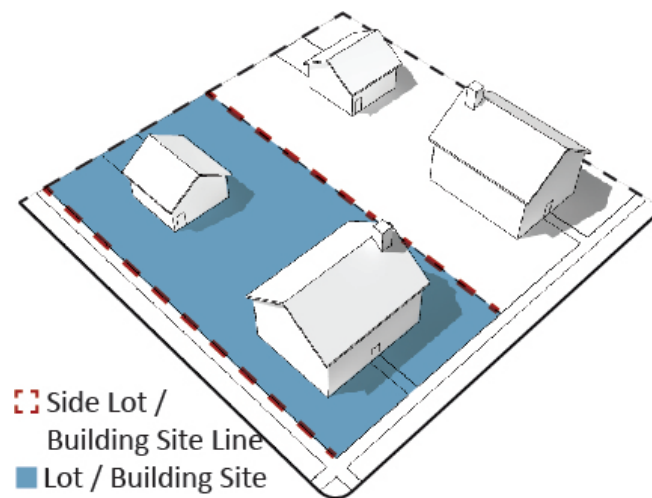
Line with the Building entrance at Sidewalk grade. This Frontage has substantial glazing at the Sidewalk level and may include an awning overlapping the Sidewalk. See **Table 4.3.7.A (Private Frontage Types)**.

Short-Term Lender: A Business or Use that regularly (1) accepts checks from a borrower drawn on the borrower’s account to be presented for payment at a later date and that charges a fee for the service or (2) extends short-term non-purchase money loans secured by titles to motor vehicles. The term does not include Financial Institutions. See also, Non-Banking Financial Institution.

Short-Term Rental Unit: A Dwelling Unit in a Building originally used or designed to be used as an abode or home of a person, family, or household in either a portion of a single-family house, or an individual Dwelling Unit in a two-family Dwelling, townhouse, or multi-family Building having no more than 6 Dwelling Units, which Short-Term Rental Unit is rented wholly or partially for a period of less than thirty (30) continuous days occupancy for a fee; specifically excluding however a “hotel” as defined in TSA section 68-14-302 or a “bed and breakfast establishment” or a “bed and breakfast homestay” as those terms are defined in TSA section 68-14-502, all as contemplated in TSA section 13-7-602. A Hotel, Extended Stay Hotel, Motel, Bed and Breakfast, or Inn is not a Short-Term Rental Unit.

Side Lot or Building Site Line: Any Lot or Building Site Line that is not a Front Lot or Building Site Line or a Rear Lot or Building Site Line. See **Illustration 9.3.S-3 (Side Lot Line)**.

ILLUSTRATION 9.3.S-3 SIDE LOT OR BUILDING SITE LINE



Side Setback, Setback Area or Yard: The portion of a Lot or Building Site that is situated between (1) the nearest roofed portion of the Building or of any Accessory Building on a Lot or Building Site and (2) the Side Lot or Building Site Line, and extending through from the Front Setback Area or Yard or from the Front Lot or Building Site Line where no Front Setback Area or Yard exists to the Rear Setback Area or Yard or to the Rear Lot or Building Site Line where no Rear Setback Area or Yard exists. See **Illustration 9.1.S-2 (Setbacks and Yards)**.

Side Setback Area or Yard Width: The dimension of a Side Setback Area or Yard, measured in such a manner that the Yard is a strip of the minimum width required by the applicable District standards, with its inner edge parallel with the Side Lot or Building Site Line.

Sidewalk: The paved section of the Public Frontage dedicated exclusively to pedestrian activity. See **Illustration 9.3.S-4 (Sidewalk)**.

ILLUSTRATION 9.3.S-4 SIDEWALK

ARTICLE 9: DEFINITIONS



Sidewalk Sign: The Sign Type described as such in **Table 7.1.2.B-1 (Sign Types - Summary)** and **Table 7.1.2.B-2 (Sign Types - Specific Standards)**.

Sign: Any name, number, symbol, identification, description, direction, declaration, demonstration, display, representation, illustration, insignia, instruction, directive, information, illustration, object, graphic, device, display, visual communication, material, Structure or device, or part thereof, in view of the general public, whether permanent, temporary, portable, or affixed, composed of lettered, or pictorial, or graphical matter or upon which lettered or pictorial, or graphical matter is used, that announces, directs attention to, names, gives notice of, informs, advertises, or promotes an ideology, position, interest, cause, object, project, product, place, activity, person, institution, organization, or Business; provided that the term “Sign” shall not be deemed to include any badge or insignia of any government agency or any civic, charitable, religious, patriotic, fraternal or similar organization, Public Art, or any directional sign erected and maintained pursuant to law.

Single-Family Detached Dwelling: A Dwelling Unit, other than a Manufactured Housing Unit, for exclusive occupancy for one only Family, situated on a Lot or Building Site with no other Dwelling Units and not attached to any other Dwelling Unit.

Single - Family Dwelling: A Dwelling Unit shall be considered a Single-Family Dwelling only if permanent occupants are limited to one of the following categories:

One individual or

Any number of persons constituting a “Family”.

For purposes of this definition, the following are not considered to be Single-Family Residences:

Boarding Houses.

Apartment houses.

Dwelling Units in which more than two rooms are rented to unrelated tenants.

Structures or portions of Structures which are designed or constructed for any of the above purposes; and such Structures and Uses of Structures are explicitly prohibited in each Residential District unless otherwise specifically permitted. Notwithstanding the foregoing, “Single-Family Residence” may include a Dwelling Unit which includes separate quarters for persons who are related by blood, marriage or adoption to the primary occupants, provided such quarters are connected by interior passageways to the other portions of the dwelling unit, and are not rented to any unrelated tenants or otherwise used in

violation of this Ordinance If more than one meter is installed for the same type of household utility service, it will be presumed that Structure is not being used as a Single- Family Residence.

Notwithstanding any other provisions to the contrary, subject to the City Manager's approval, and for such periods of time as the City Manager deems reasonable and necessary, a Single-Family Residence may include, on a temporary basis, one or more persons, not related to the primary occupants, who have been dislocated from their permanent residence due to an officially recognized local, regional or national emergency. A report shall be provided to advise the City Council, Planning Commission, and Development Services Department of any such situations approved by the City Manager.

Single Ownership: A proprietary interest of a Landholder as defined herein.

Site Development Plan: A map required by Section 8.5.6.H, which indicates the intended Development of a parcel of land and which meets the standards and requirements of, and is prepared in accordance with, Section 8.5.6.H and other applicable provisions of this Ordinance.

Small Multi-Family Building: Principal Building type that incorporates between three (3) and six (6) side-by-side and/or horizontally stacked Dwelling Units, typically with one or more shared entries. See **Table 4.3.8.A (Principal Building Types)** and **Table 4.3.8.B (Principal Building Types - Specific Standards)**.

Social or Civic Club or Lodge: A Use characterized by a Structure and/or land owned by or leased to one or more Social or Civic Organizations for meeting, recreational, or social purposes primarily by their members and their guests.

Social or Civic Organization: A private non-profit group, association, organization, club, establishment, brotherhood, membership, or other similar group providing meeting, recreational, social, fraternal, youth, or similar activities or facilities primarily for its members and guests; excluding, however any type of Residential facility such as fraternity or sorority houses.

Solid Waste Facility: Premises, appurtenances and Improvements used for treating, storing, or disposing of solid waste, whether publicly or privately owned or operated. A Solid Waste Facility may consist of several treatment, storage, or disposal operational units, including, but not limited to, one or more landfills, surface impoundments, or combination thereof.

Special District: An area which, due to its intrinsic size, Use, Configuration, cannot conform to the requirements and standards of one or more of the applicable Character Districts or Civic District as specified in this Ordinance.

Special Exception: Synonymous with Conditional Use.

Special Requirements: provisions of Section 2.2 and Section 5.7 and/or the associated designations on the Zoning Map for those provisions.

Specified Anatomical Areas: Less than completely and opaquely covered human genitals, pubic region, buttock, and female breast below a point immediately above the top of the areola. Also, human male genitals in a discernibly turgid state, even if completely and opaquely covered.

Specified Sexual Activities: Human genitals in a state of sexual stimulation or arousal; acts of human masturbation, sexual intercourse or sodomy; fondling or other erotic touching of human genitals, pubic region, buttock or female breast.

ARTICLE 9: DEFINITIONS

Specimen Tree: Any Canopy Tree with a diameter of 24 inches or greater measured at diameter breast height (DBH) 4.5 ft.

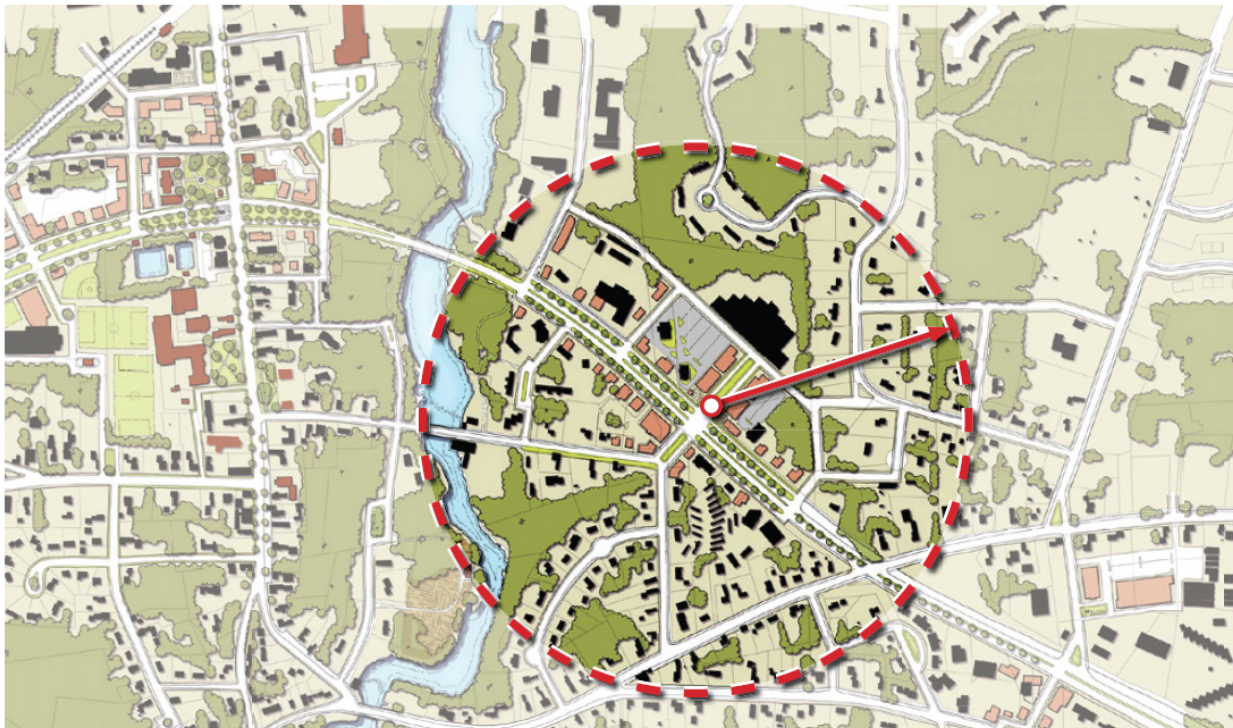
Sports Field: A Civic Space type that accommodates the play of athletic endeavors, described as such in **Table 5.3.3.A (Civic Space Types - Summary)** and **Table 5.3.3.B (Civic Space - Specific Standards)**; excluding Sports Venues. May include associated Structures.

Sports Venue: Premises at which athletic events are presented.

Square: A Civic Space type described as such in **Table 5.3.3.A (Civic Space Types - Summary)** and **Table 5.3.3.B (Civic Space - Specific Standards)**.

Standard Pedestrian Shed: A Pedestrian Shed that is an average 1/4-mile radius or 1320 feet, about the distance of a five-minute walk at a leisurely pace. See "Pedestrian Shed". See **Illustration 9.3.S-5 (Standard Pedestrian Shed)**.

ILLUSTRATION 9.3.S-5 STANDARD PEDESTRIAN SHED

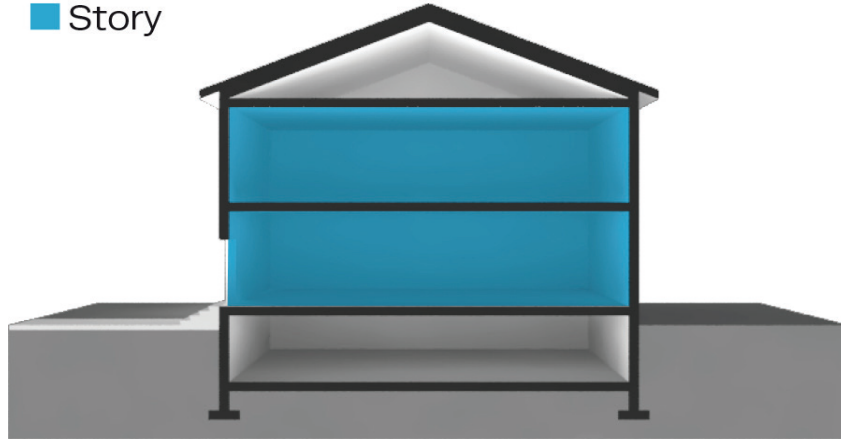


Stoop: A Private Frontage type wherein the Facade is aligned close to the Frontage Line with the first Story elevated from the Sidewalk for privacy. An exterior stair and landing provides access to the entrance. This type is recommended for ground-floor Residential Use. See **Table 4.3.7.A (Private Frontage Types)**.

Story: A habitable level within a Building, being that portion included between the surface of any floor and the surface of the floor next above it; if there is no floor above it, then the space between the floor and the ceiling next above it; excluding an Attic or a raised Basement. See **Illustration 9.3.S-6 (Story)**.

ILLUSTRATION 9.3.S-6 STORY

■ Story



Street (ST): A local urban Thoroughfare or Internal Drive of low speed and capacity, which meets the standards and requirements for such Thoroughfare type as set forth in and as described as such **Table 5.3.3.F (Thoroughfare / Internal Drive Types - Summary)** and **Table 5.3.3.G (Thoroughfare / Internal Drive Assemblies & Standards)**. When not capitalized, the term “street” means any public way not within a Lot or Building Site on which vehicles travel.

Streetscape: Street lights, trees, planting accommodations and Sidewalk along a Thoroughfare or Internal Drive.

Streetscreen: A type of Screen situated along a Frontage Line, or along the same plane as a Façade, and consisting of a planted evergreen hedge or freestanding Wall constructed of brick or stucco over masonry, which blocks the view of Parking, equipment, or other item or condition from the Frontage, provides privacy to a Side Yard, or strengthens the spatial definition of the public realm.

Street Setback, Setback Area, or Yard: Synonymous with Front Setback, Setback Area, or Yard.

Street Setback, Setback Area, or Yard Depth: the dimension of a Street Setback, Setback Area, or Yard that is measured as follows:

The depth of a Street Setback, Setback Area, or Yard shall be measured at right angles to a straight line joining the foremost points of the Side Lot or Building Site Lines; provided that in the case of rounded property corners at Thoroughfare or Internal Drive intersections, the foremost point of the Side Lot or Building Site Lines shall be the point at which the Side Lot or Building Site Lines and Front Lot or Building Site Lines would have met without such rounding.

Synonymous with Front Setback, Setback, or Yard Depth.

Structure: Anything constructed, installed, or erected, the use of which requires a permanent location on the ground or attachment to something having a permanent location on the ground, regardless whether the same is horizontal or vertical. The word “Structure” includes Buildings and other Improvements and all parts thereof.

Swimming Pool: A constructed basin or Structure for swimming and aquatic recreation, excluding plastic, canvas or rubber pools temporarily erected upon the ground and holding less than 300 gallons of water.

ARTICLE 9: DEFINITIONS

T.

Tasting Room: An establishment or portion of an establishment that allows customers to taste samples of beer, alcoholic spirits, or vinous beverages. In addition to such products, a Tasting Room may include the Retail sale of related items, marketing events, special events, entertainment, and/or food sales.

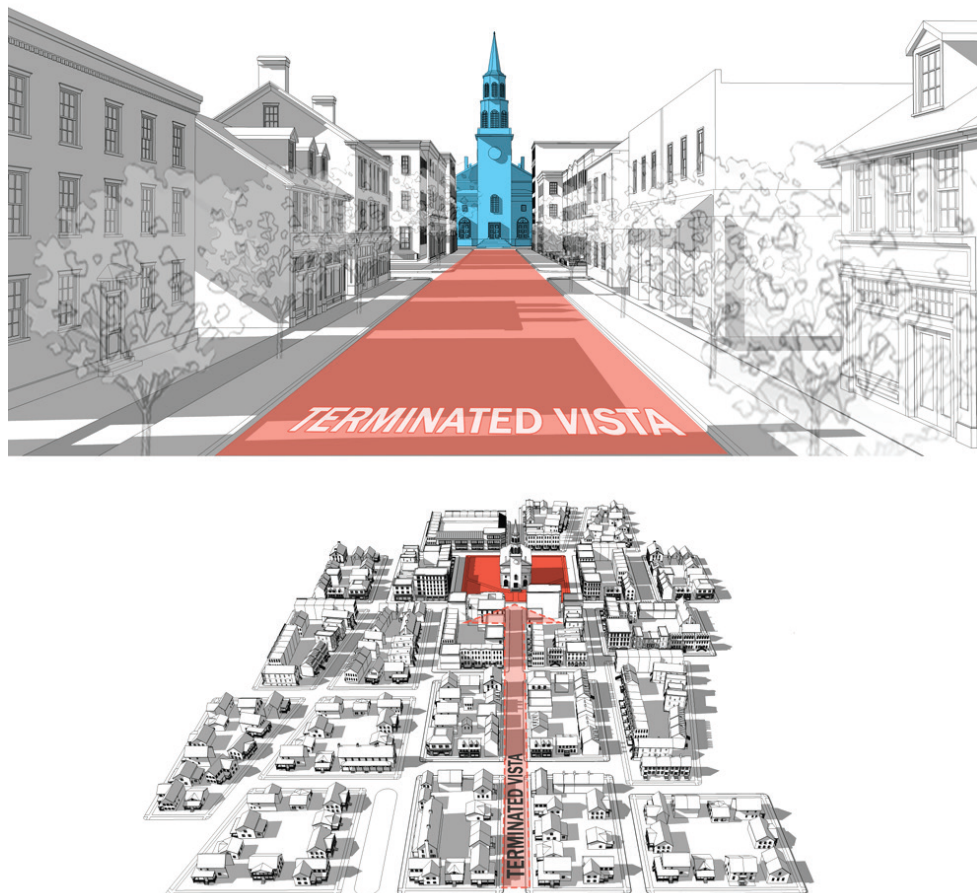
TCA: Tennessee Code Annotated.

Temporary Sign: Any Sign which is not permanently installed, mounted, or placed. Signs of the types described in **Table 7.1.2.B-1 (Summary of Sign Types)** and **Table 7.1.2.B-2 (Sign Types - Specific Standards)** are not Temporary Signs.

Temporary Use: Use of premises for fewer than 60 days or such other period as may be specifically provided in this Ordinance, and permitted by right, by conditional use, or subject to limited use standards under Section 4.3.9G in accordance with **Table 4.3.9.A-3 (Building, Lot & Building Site Temporary Uses)**, for which a Temporary Use Permit has been issued and is in effect.

Terminated Vista: A location at the axial conclusion of a Thoroughfare or Internal Drive. A Building located at a Terminated Vista location designated on a Zoning Map is required to be designed in response to the axis. See **Illustration 9.3.T-1 (Terminated Vista)**.

ILLUSTRATION 9.3.T-1 TERMINATED VISTA



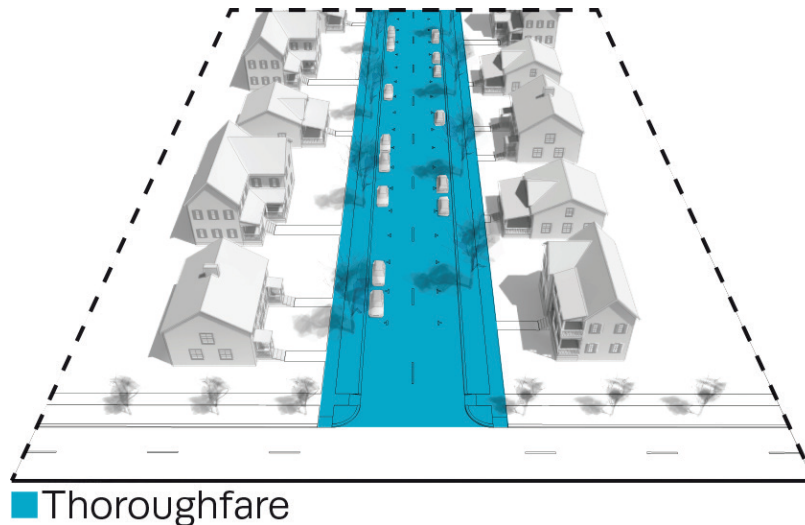
Terrace/Lightwell: A Private Frontage type wherein the Facade is set back from the Frontage Line by an elevated landing and a sunken Lightwell. This type buffers Residential Uses from urban Sidewalks with the first Story elevated from the Sidewalk for privacy, and may allow for activation of space below grade. An exterior stair and landing provides access to the entrance. This type is recommended for ground-floor Residential Use. See **Table 4.3.7.A (Private Frontage Types)**.

Theater: A Building or part of a Building devoted to the showing of motion pictures, or theatrical or performing arts productions, as a Principal Use.

Third Layer: See “Layer”.

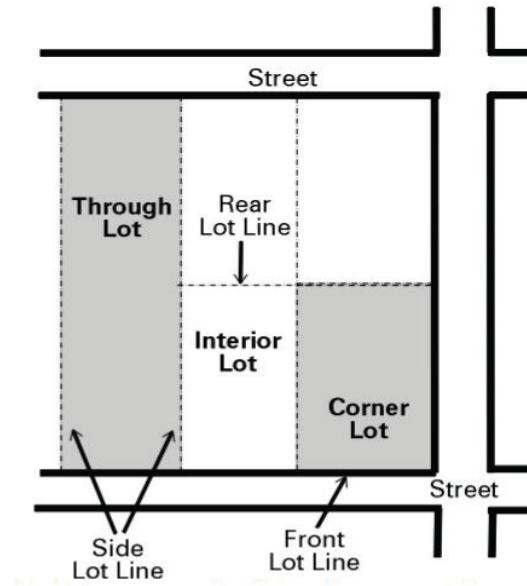
Thoroughfare: A way, whether public or private, open for common and general use by vehicular and/or pedestrian traffic and to provide access to Lots or Building Sites and Civic Spaces, consisting of Vehicular Lanes and the Public Frontage. See **Illustration 9.3.T-2 (Thoroughfare)**. See also **Table 5.3.3.F (Thoroughfare / Internal Drive Types Summary)** and **Table 5.3.3.G-1 (Thoroughfare / Internal Drive Assemblies and Standards)**. See also “Internal Drive”.

ILLUSTRATION 9.3.T-2 THOROUGHFARE



Through Lot or Building Site: A Lot or Building Site type that extends through from Thoroughfare or Internal Drive to Thoroughfare or Internal Drive.

ILLUSTRATION 9.3.T-3 THROUGH LOT / BUILDING SITE



Tire Sales: A Structure, premises, or establishment in or on which tires are sold, installed, and/or repaired.

Tobacco, Vape, and Cannabinoid Retailers: A retail sales operation that

- (1) Devotes at least fifty-one percent of its floor area to the display, sale, distribution, delivery, offering, furnishing, or marketing of products intended for recreational/non-prescription use including but not limited to cigarettes, e-cigarettes, smokeless tobacco, pipe tobacco, vapes, products made from cannabinoid derivative plants (e.g CBD or THC products), or other nicotine or cannabinoid delivery devices, components, products, liquid nicotine or cannabinoids, or liquid nicotine or cannabinoid containers; or
- (2) Earns at least fifty-one percent of gross sales from sale distribution, delivery, or marketing of products intended for recreational/non-prescription use including but not limited to cigarettes, e-cigarettes, smokeless tobacco, pipe tobacco, vapes, products made from cannabinoid derivative plants (e.g CBD or THC products), or other nicotine or cannabinoid delivery devices, components, products, liquid nicotine or cannabinoids, or liquid nicotine or cannabinoid containers.

Tower: With respect to communications equipment, any Structure that is designed and constructed primarily for the purpose of supporting one or more antennas, including self – supporting lattice towers, guy towers or monopole towers. The term includes radio and television transmission towers, microwave towers, common carrier towers, cellular telephone towers, alternative tower structures and the like.

Towing Facility: An establishment that provides vehicle towing services and accessory temporary outdoor storage for the vehicles it tows, which shall only include: (1) mechanically operable/drivable, licensed vehicles that are to be claimed by titleholders or their agents; and/or (2) wrecked motor vehicles awaiting insurance adjustments and transport to repair shops.

The term “Towing Facility” excludes: automotive services that have a tow truck on-site; Salvage or Scrap Yard / Service; Junkyards, Impound Yards; Motor Vehicle storage; and storage of inoperable vehicles.

Townhouse: The Building Type described as such in **Table 4.3.8.B (Principal Building Types)**.

Trailer: An unpowered, portable, or mobile vehicle designed to be designed to be towed by a Motor Vehicle.

Transient: As a noun, a Person who is staying in a place for fewer than thirty (30) days; as an adjective or adverb, a duration of fewer than thirty (30) days.

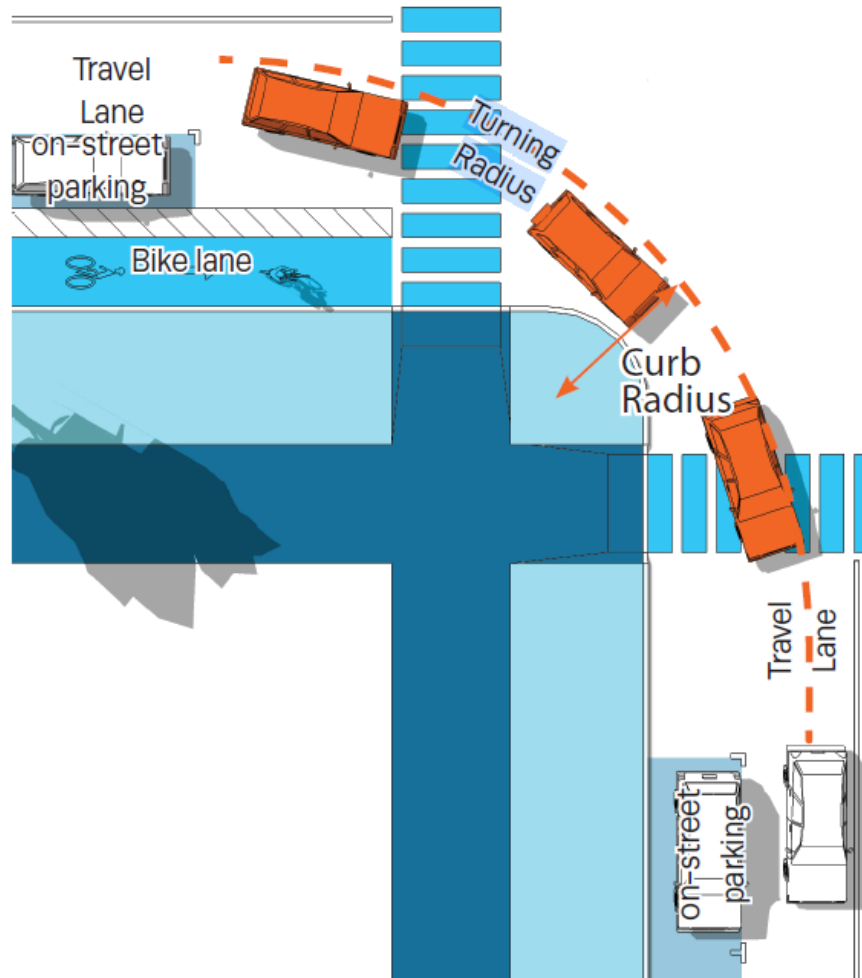
Transit Shelter: Accommodation providing shelter from the elements for waiting transit riders, excluding a Transit Station or Terminal.

Transit Station or Terminal: A facility or area at which train, rapid transit, light rail, bus, or other mass transit modality service regularly stops to load or unload passengers.

Tree Removal: Cutting down, digging up, destroying, clearing, or otherwise taking a tree from the location in which it is growing; inflicting damage to the root system; girdling; storing materials, soil compaction, changing the natural grade above or below the root system or around the trunk; inflicting damage that permits fungus infection or pest infestation; excessive pruning; excessive thinning; excessive paving with concrete, asphalt or other impervious material in such proximity as to be harmful to the tree; excessive grading; or any act of intentional or reckless damage to a tree. Without limiting the foregoing, excessive pruning or thinning shall include pruning or thinning more than 25% of the leaf surface on both the lateral branch and the overall foliage of a mature tree and pruning or thinning that does not allow 1/2 of the foliage of a mature tree to remain evenly distributed in the lower 2/3rds of the crown and individual limbs; and excessive paving or grading shall include paving or grading over any part of the Critical Root Zone of a tree.

Turning Radius: the inside radius of the Vehicular Lanes available for a vehicle to make a turn, accounting for the presence of parking, bike lanes, medians or other features. **See Illustration 9.3.C-3 (Curb Radius). Table 5.2.2.G-1 (Thoroughfare Assemblies & Standards) and Illustration 9.3.T-4 (Turning Radius). See also Curb Radius.**

ILLUSTRATION 9.3.T-4 TURNING RADIUS



Two-Family Detached Dwelling: Separate Residential premises for only two Families within a Building, whether both Dwelling Units are on a single Lot or Building Site or Abutting Lots or Building Sites. A Duplex is a specific Building Type that may accommodate a Two-Family Detached Dwelling, but the terms are not synonymous.

U.

Usable Floor Area: The Floor Area within a Building, less the area of space used for utilities or storage.

$$\begin{array}{rcl} \text{Floor Area} & \text{Space Used For} & \text{Useable} \\ \text{Within Building} & \text{Utilities or Storage} & \text{Floor Area} \\ - & & = \end{array}$$

Utility(ies): (1) As a Uses category under this Ordinance, the Uses category involving uses, activities, and equipment involved with the providing electricity, gas, water, sewage, telephone, cable, or other similar publicly regulated service, such category of Uses including without limitation Utility Lines, Utility Distribution / Substation / Switching Facility, and Utility Pumping Station (See **Table 4.3.9.A-1 (Building, Lot & Building Site Principal Use)**); (2) as a service, electricity, gas, water, sewage, telephone, cable, wireless communications, or other similar publicly regulated service provided by a Utility Provider.

Unified Control of a Landholder: With respect to a Planned Unit Development, control by a single Person of all land to be developed within the overall Planned Unit Development site.

Use: A specific function, activity, or purpose accommodated by or intended to be accommodated by land, a Lot, Building Site, or a Structure, or for which land, Lot, Building Site, or Structure is designed, arranged, intended, occupied or maintained. See **Table 4.3.9.A-1 (Building, Lot & Building Site Principal Use)** and **Table 4.3.9.A-2 Building, Lot & Building Site Accessory Uses**).

Utility Distribution / Substation / Switching Facility: Facility used for Utility distribution, including systems, and equipment used for such purposes.

Utility Facility: Premises used by a Utility Provider relative to providing a Utility service, including without limitation a Utility Pumping Station, a Utility Distribution / Substation/ Switching Facility, a water tower or tank, a Water Treatment / Supply Facility, a water or wastewater pump station, a water reclamation facility, a Sewage Facility, a Utility Generation Facility, a Wireless Communications Facility, a Communications Tower, or other facility used to provide a Utility service, excluding, however, Utility Lines.

Maintenance yard or Building (see Light Industrial Service), Utility office (see Office), TV and radio studio (see Office), and Reservoir or water supply (see Civic Space and Open Space) are not included in this Use Category.

Utility Generation Facility: Facility used for electric or gas power generation (except hydroelectric and nuclear), control and transmission. This definition includes systems that facilitate the sale of gas or electricity via power distribution systems operated by others, and gas or electric power transmission systems such as transmission towers, pipes or lines, and transformer stations, but does not include Utility Distribution / Substations / Switching Facilities.

Utility Line: A line used in providing a Utility service.

Utility Provider: A public or private entity or other Person engaged in generating, transmitting, distributing, or providing a Utility service.

Utility Pumping Station: A facility at which water, sewage, or other Utility fluids are pumped from one place to another.

Utility Transmission Line: Line used for the movement of high-powered electricity or high-pressure gas.

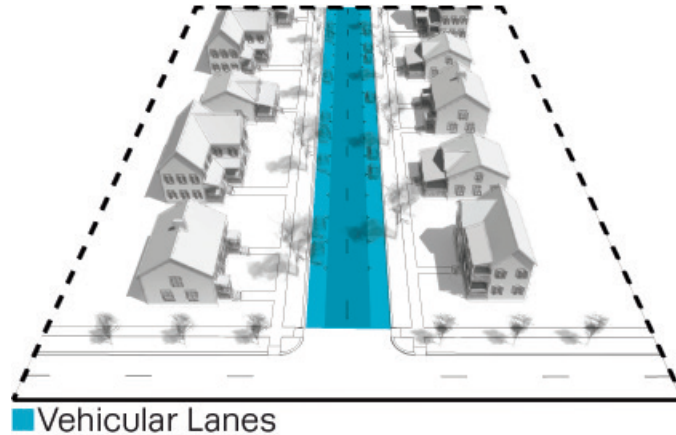
ARTICLE 9: DEFINITIONS

V.

Variance: Relief granted by the Board of Zoning Appeals from a standard or requirement of this Ordinance, which is specifically provided for in this Ordinance or granted pursuant to the provisions of Article 8 (Administration, Procedure, & Enforcement).

Vehicular Lane: An area of a Thoroughfare or Internal Drive for parked or moving vehicles. See **Illustration 9.3.V-1 (Vehicular Lane)**.

ILLUSTRATION 9.3.V-1 VEHICULAR LANE



Vessel: A Boat, yacht, ship, canoe, kayak, paddle board, jet-ski, or other recreational watercraft.

Veterinary Office, Clinic, or Hospital: Premises or an establishment offering Veterinary Services for animals.

Veterinary Services: Health or medical care provided to animals by a licensed veterinarian.

W.

Wall: A vertical Structure that (1) supports a Structure or (2) encloses or separates an area of land.

Wall Sign: The Sign Type described as such in **Table 7.1.2.B-1 (Sign Types - Summary)** and **Table 7.1.2.B-2 (Sign Types - Specific Standards)**.

Warehouse Retail: A Retail establishment that has limited customer amenities and service and sells goods at discounted prices.

Warehousing: The indoor storage of goods, not including storage in Self-Service Storage facilities.

Warehouse: Premises used for Warehousing, not including Self-Service Storage facilities.

Warehouse and Freight Movement: Use sub-category of the Industrial Category characterized by the storage or movement of goods.

Not included in this sub-category are bulk storage of flammable liquids (see Heavy Industrial), Self-Storage Facilities, Mini-warehouse, multi-story enclosed storage facility, storage garages (see Self-Service Storage), Solid or liquid waste transfer, or composting (see Waste- Related Service).

Waste-Related Service: Use sub-category of Industrial Use category characterized by Uses that receive solid or liquid wastes from others for transfer to another location and Uses involving collection of sanitary wastes or manufacture or production of goods or energy from the composting of organic material.

Not included in this sub-category are:

Stockpiling of sand, gravel, or other aggregate materials (see Warehouse and Freight Movement).

Water Treatment / Supply Facility: facilities for the treatment and supply of potable, irrigation, or industrial water supply.

Wholesale Sales: the sale, lease, or rent of goods in large quantities primarily to industrial, institutional, and commercial business customers, which goods may or may not be resold at Retail by such customers.

Retail Sales, Personal Service, Repair, Arts, and Artisan Use, in-store sales, lease, or rental of consumer, household, or business goods, Warehousing or Freight Movement (see Warehouse and Freight Movement), and Warehouse or Wholesale Club (see Retail Sales and Service) are not included in Wholesale Sales.

Window Sign: The Sign Type described as such in **Table 7.1.2.B-1 (Sign Types - Summary)** and **Table 7.1.2.B-2 (Sign Types - Specific Standards)**.

Winery: An establishment which is primarily used for the manufacture of vinous beverages in accordance with applicable state and local regulations.

Wireless Communications Facility: Any facility for the receiving or transmitting of wireless signals for commercial purposes. As used herein the term shall include any necessary support structure, connection cables and equipment buildings as well as towers or monopoles.

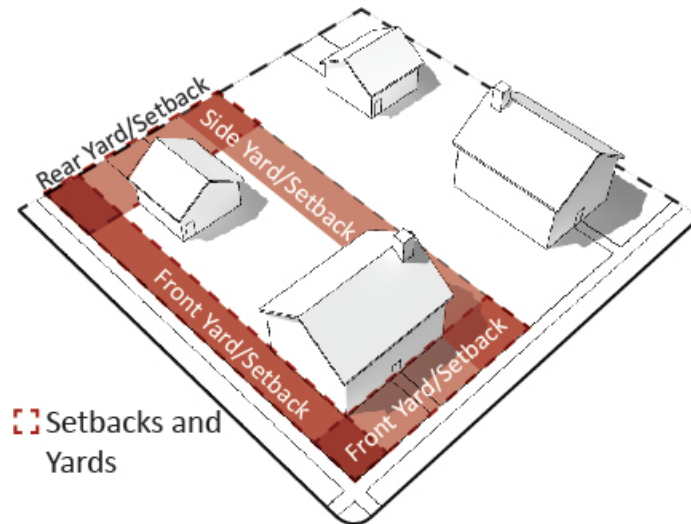
Woodworking Shop: Premises at which wooden articles are made or repaired.

ARTICLE 9: DEFINITIONS

Y.

Yard or Setback Area: An open area within a Lot or Building Site on which there is a Building. Setback Areas or Yards are described by their positions within the Lot or Building Site, and their area is calculated as the shortest horizontal distance from a Lot or Building Site Line to the nearest foundation wall supporting Building on the Lot or Building Site. See “Front Setback, Setback Area, or Yard”, “Street Setback, Setback Area, or Yard”, “Rear Setback, Setback Area, or Yard”, and “Side Setback, Setback Area, or Yard”. See **Illustration 9.3.R-1 (Setback Areas or Yards)**.

ILLUSTRATION 9.3.R-1 YARD / SETBACK AREAS



Z.

Zoning Administrator: The City Planner or other person designated to administer the provisions of Zoning Ordinance as described in Article 8.

Zoning Change: The Effective Date of any applicable Zoning Map Amendment (Rezoning) or of any applicable amendment of this Ordinance.

Zoning District: A Character District, Special District, Planned Unit Development District, or Civic District.

Zoning Map: The map or set of maps, which show the Districts, Thoroughfares and Internal Drives, and Special Requirements if any, of areas subject to, or proposed to be subject to, regulation by this Ordinance. The Zoning Map approved by the City Council, as the same may be amended from time to time, constitutes the Official Zoning Map of the City.

Zoning Permit: A permit required to Develop, construct, reconstruct, Improve, Alter, or use any Structure, Lot or Building Site.

REMAINDER OF PAGE

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Proposed Zoning Text Amendment

Additions are Underlined
Deletions are Strikethrough

§ 9.3 Definitions

Home Occupation: any gainful occupation conducted entirely within a Dwelling solely by the owners- or tenant residents thereof as an Accessory Use, which does not change the character of the Structure as a Residence; There are two types of Home Occupation: provided that

(1) Minor Home Occupations: gainful occupation conducted entirely within a Dwelling which does not generate traffic from employees, customers, clients, or deliveries and bears no said activity shall not occupy more than 50% of the Floor Area of the Dwelling, (2) there shall be external evidence of the accessory commercial use;

(2) Major Home Occupation: gainful occupation conducted on a residential property which

a. generates some traffic from employees, customers, clients or deliveries;

b. bears some external evidence of the accessory commercial use; or

c. occurs within an accessory structure.

~~other than an Identification Sign, (3) no goods shall be kept, and (4) no mechanical or electrical equipment shall be used except customary household equipment; and provided further that the following are not allowed as Home Occupations~~ do not include: Clinics, Hospitals, Home Professional Office, barbershop, beauty shop, Restaurants, Kennels, Auto Repair, antique dealer, Retail sales on the premises, or loading of ammunition.

Updates the definition of Home Occupation to reflect new standards.

Proposed Zoning Text Amendment

Additions are Underlined
Deletions are Strikethrough

Kennel: Any ~~Structure or premises on place where~~ which four (4) or more dogs, cats and/or other ~~household pets~~ animals over four (4) months of age are kept for boarding, breeding, ~~selling~~, grooming, or training, for compensation, excluding any otherwise conforming or lawfully nonconforming agricultural use., ~~however, any Structure or premises on which such animals are kept solely for Retail sale. A Kennel may not be a Home Occupation.~~

Revises definition of Kennel to provide clarity and improve enforceability.

Short-Term Rental Unit: A Dwelling Unit ~~in a Building originally used or designed to be used as an abode or home of a person, family, or household in either a portion of a single family house, or an individual Dwelling Unit in a two-family Dwelling, Townhouse, or multi-family Building having no more than 6 Dwelling Units, or Accessory Dwelling Unit~~ which ~~Short-Term Rental Unit~~ is rented wholly or partially for a period of less than thirty (30) continuous days occupancy for a fee; specifically excluding however a “hotel” as defined in TCA section 68-14-302 or a “bed and breakfast establishment” or a “bed and breakfast homestay” as those terms are defined in TCA section 68-14-502, all as contemplated in TSA section 13-7-602. A Hotel, Extended Stay Hotel, Motel, Bed and Breakfast, or Inn is not a Short-Term Rental Unit.

Tobacco, Vape, and Cannabinoid Retailers: A retail sales operation that

- (1) Devotes at least fifty-one percent of its floor area to the display, sale, distribution, delivery, offering, furnishing, or marketing of products intended for recreational/non-prescription use including but not limited to cigarettes, e-cigarettes, smokeless tobacco, pipe tobacco, vapes, products made from cannabinoid derivative plants (e.g CBD or THC products), or other nicotine or cannabinoid delivery devices, components, products, liquid nicotine or cannabinoids, or liquid nicotine or cannabinoid containers; or

*Definition based on proportion of space
OR proportion of sales*

Proposed Zoning Text Amendment

Additions are Underlined
Deletions are Strikethrough

- (2) Earns at least fifty-one percent of gross sales from sale
distribution, delivery, or marketing of products intended for
recreational/non-prescription use including but not limited to
cigarettes, e-cigarettes, smokeless tobacco, pipe tobacco, vapes,
products made from cannabinoid derivative plants (e.g CBD or
THC products), or other nicotine or cannabinoid delivery devices,
components, products, liquid nicotine or cannabinoids, or liquid
nicotine or cannabinoid containers.

Q4 Zoning Text Amendment Limited Use Standards

Project #:	24-0475	Location:	N/A
Applicant:	Kevin C. McCarthy, AICP	Case Type(s):	Text Amendment
Staff Planner:	Kevin C. McCarthy, AICP	Proposed Use:	N/A

SUMMARY

The applicant, the Zoning Administrator, requests to amend the text of Ordinance 4400, the zoning ordinance for the City of Columbia. This is the fifth of five rounds of zoning text amendments staff has presented to the Planning Commission between December 2023 and December 2024. These changes will implement Connect Columbia, better align zoning regulations with community preferences, and calibrate the standards based on “lessons learned” during the first two years administering the Ordinance. This round of proposed amendments is detailed in the attached track changes documents. Specifically the proposal relates to the limited used standards in Article 4 as well as related definition and procedural references in Articles 9 and 8.

- The Planning Commission is a **recommending body** for zoning text amendments. The City Council is the decision-making authority.
- The staff comments section details the proposed changes, which are provided in the agenda packet in ~~strikethrough~~ and underlines.
- The specific limited uses impacted by this amendment include: Home Occupations; Bars, Taverns, and Nightclubs; retailers of CBD, Vape, and Tobacco; and Short Term Rentals.
- Planning Commission may recommend adoption of the proposed text, modify the proposal, or decline the request.
- Templates are provided at the end of the report to assist the Planning Commission in crafting properly formatted motions.

CONSISTENCY WITH CONNECT COLUMBIA

The ongoing current process of reviewing and updating the Zoning Ordinance and other regulating documents is part of the implementation of Connect Columbia, the City's comprehensive plan.

REVIEW PROCESS

Section **8.5.18** of the Zoning Ordinance directs the Planning Commission to review and make a recommendation on all proposed changes to the text of the Ordinance. The Planning Commission is the recommending body for text amendments under **§ 8.3.3.B.2** of the Zoning Ordinance.

Section **8.5.18.C** of the Zoning Ordinance requires that Planning Commission determine that the proposed changes are consistent with the comprehensive plan.

8.5.18.G of the Zoning Ordinance establishes the review criteria for approval of all changes to the text of the Ordinance:

- a. The extent to which the proposed Zoning Ordinance Amendment is consistent with the remainder of this Ordinance, including, specifically, any purpose and intent statements;*
- b. The extent to which the proposed Zoning Ordinance Amendment represents a new idea not considered in this Ordinance, or represents a revision necessitated by changing circumstances over time;*
- c. Whether or not the proposed Zoning Ordinance Amendment corrects an error in this Ordinance; and*
- d. Whether or not the proposed Zoning Ordinance Amendment revises this Ordinance to comply with state or federal statutes or case law.*

The criteria for City Council action on a Zoning Ordinance Amendment at § 8.5.18.J.4 are identical to the criteria for Planning Commission review at 8.5.18.G.3.

COMMENTARY FROM PROFESSIONAL PLANNING STAFF

The City Council adopted the current ordinance on July 14, 2022. The Zoning Ordinance implements the City's comprehensive plan, Connect Columbia. On November 8, 2023, the Planning Commission recommended adoption of a five-year update of the framework, land use, and transportation elements of Connect Columbia. The framework element of the plan directs planning staff to initiate revisions to the ordinance in order to bring it into consistency with changes to the future land use plan. It further directs staff to engage residents and property owners to solicit suggestions for further changes to the ordinance. As mentioned above, this is

the final round of zoning text amendments staff plans to present to the Planning Commission between December 2023 and December 2024.

The proposal includes the following changes:

- Home Occupations
 - Distinguishes between “Major” and “Minor” home occupations;
 - Creates a process to allow major home occupations as a conditional use approved by the Board of Zoning Appeals;
 - Continues to permit minor home occupations administratively; and
 - Modifies definition of Home Occupation and Kennels.
- Bars, Taverns & Nightclubs
 - Removes 500 ft exclusion from residential property;
 - Adds exclusions around schools and parks;
 - Prohibits the use on lots and building sites next to residentially zoned property; and
 - Requires a 50 ft separation from property in single-family use regardless of zoning.
- Vape, Tobacco & Cannabinoid Retailers
 - Creates a use category for Vape, Tobacco & Cannabinoid Retailers;
 - Creates a definition for Vape, Tobacco & Cannabinoid Retailers;
 - Imposes a 500 ft separation requirement;
 - Imposes a 500 ft exclusion around schools, parks, and religious facilities; and
 - Requires 50 ft separation from residentially zoned property.
- Short Term Rental
 - Removes requirement that all Short-Term Rentals be accessory uses in owner-occupied dwellings;
 - Modifies the definition of Accessory Dwelling Unit (ADU) to allow the use of ADUs as short-term rentals;
 - Creates an administrative review and permitting process;

- Removes prohibition on short-term rentals in single-family character districts and allows them as a conditional use approved by the Board of Zoning Appeals;
- Allows short-term rentals by administrative approval in mixed use character districts and special districts;
- Requires a local point of contact for each permitted short-term rental; and
- Removes onerous parking requirements for short-term rentals.

Planning staff will present detailed commentary at the December 4, 2024 meeting of the Planning Commission. The proposal

The Planning Commission may recommend approval of the proposed text amendments, direct staff to prepare an alternative text amendment, or decline to act on the proposed changes.

SAMPLE MOTIONS

Approve:

Move to find, based on the analysis provided by city staff, that the criteria listed in section **8.5.18** of the City of Columbia Zoning Ordinance have been satisfied and recommend approval of the proposed text amendments **[may be subject to modifications proposed by the Planning Commission]**.

Deny:

Move to recommend denial of the requested text amendment having found, based on the analysis provided by city staff, that the criteria listed in section **8.5.18** of the City of Columbia Zoning Ordinance are not satisfied *[list specific reasons for denial and provide direction to staff]*.

Defer:

Move to find that there is insufficient information to decide, defer the matter to the next regularly scheduled meeting of the Planning Commission, and direct staff to provide: *[list additional information]* for review at a future meeting.



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Thad H. Jablonski, Assistant City Manager/CFO, tjablonski@columbiatn.gov, (931) 560-1559

AGENDA ITEM TITLE: 1ST CONSIDERATION OF ORDINANCE NO. 4540 – AN ORDINANCE TO AMEND THE FISCAL YEAR 2024-2025 BUDGET ORDINANCE NO. 4503, AS AMENDED, PROVIDING FOR REVISIONS TO THE GENERAL, CAPITAL PROJECTS, GRANTS AND WASTEWATER FUNDS AND THE DATE OF MARCH 13, 2025 AS THE DATE OF PUBLIC HEARING

RECOMMENDATION: Approve Ordinance No. 4540 on first consideration and establish the date of March 13, 2025 as the date of Public Hearing.

INFORMATION: The proposed ordinance is the third amendment to the FY 2025 Appropriation Ordinance, impacting the Capital Projects, Grants, Wastewater and General Fund Departments.

Within this budget amendment, the following items are included:

- Rebudget/transfer \$4,377,973.21 from General to Capital Projects,
- Budget transfer/expenses for Cap Projects totaling \$4,377,973.21,
- Budget Army Core flood mapping study at \$142,500 and Intersection Study at Country Club/Union totaling \$5,500.
- Budget FY 2024 funds due for JAG grant to closeout totaling \$1,915.22,
- Budget Anonymous Donations totaling \$2,245.95 and \$812.19 and Office of Emergency Management incident funding totaling \$648.43,
- Budget capital projects including \$4.3 million for Muletown Rec acquisition, Public Works Building improvements totaling \$69,723.21 and tourism computer equipment totaling \$8,250,
- Reclassify Tourism Enhancement Grant project funds totaling \$75,000,
- Budget \$865,156.88 for 2024 G.O. Bonds interest related to new debt issued for the new WWTP project.

A detailed schedule of items included within this budget amendment is attached. This amendment increases the City's total budget for FY 2025 by \$9,787,225 to \$216,240,103.

ATTACHMENTS: Staff Report, Ordinance No. 4540, Supporting Documents, Budget Summary.

AN ORDINANCE TO AMEND THE FISCAL YEAR 2024-2025 BUDGET ORDINANCE
NO. 4503, AS AMENDED, PROVIDING FOR REVISIONS TO THE GENERAL,
CAPITAL PROJECTS, GRANTS AND WASTEWATER FUNDS

BE IT ORDAINED BY THE CITY OF COLUMBIA, TENNESSEE:

Section 1: That Ordinance No. 4503, as amended, the same being the
Appropriation Ordinance for the City of Columbia for the Fiscal Year July 1, 2024 through
June 30, 2025, be amended. That the total budget appropriation for the fiscal year be
increased from \$206,452,877 to \$216,240,103, an increase of \$9,787,225.

Section 2: That the budget appropriations shall be revised as follows:

General Government total of \$19,195,730 be amended to \$23,721,703, an increase of
\$4,525,973.

Fire total of \$9,438,913 be amended to \$9,442,619, an increase of \$3,707.

Capital Projects total of \$17,539,827 be amended to \$21,917,801, an increase of
\$4,377,973.

Grants total of \$11,689,053 be amended to \$11,703,468, an increase of \$14,415.

Wastewater total of \$113,831,134 be amended to \$114,696,291, an increase of
\$865,157.

ALL OTHER APPROPRIATIONS REMAIN THE SAME.

Section 3: This ordinance is enacted pursuant to and in compliance and conformity
with Article 9, Section 9 of the Charter of the City of Columbia, with Notice of Public Hearing
published on the 16th day of February, 2025, and it shall be executed and construed consistent
with said charter and laws of the State of Tennessee.

Section 4: That all ordinances or parts of ordinances in conflict herewith are hereby repealed.

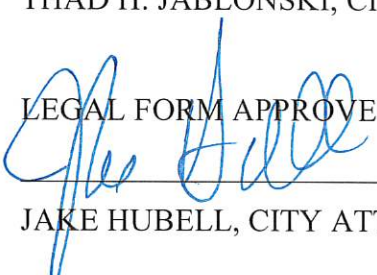
PASSED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF COLUMBIA, TENNESSEE, THIS THE ____ DAY OF MARCH, 2025.

CHARLES (CHAZ) M. MOLDER, MAYOR

ATTEST:

THAD H. JABLONSKI, CITY RECORDER

LEGAL FORM APPROVED:



JAKE HUBELL, CITY ATTORNEY

APPROVED FOR FIRST CONSIDERATION:

ANTHONY R. MASSEY, CITY MANAGER

Passed on 1st Consideration: _____

Passed on 2nd Consideration: _____

Summary of Appropriation Amendment #1
1st Consideration - February 13th (2/13/25)

General Government

Budget Army Core flood mapping study	\$	142,500.00
Intersection Study at Country Club/Union		5,500.00
Budget transfer to Capital Projects		4,377,973.21

Total General Government \$ 4,525,973.21

Fire

Budget Anonymous Donation		2,245.95
Budget Anonymous Donation		812.19
OEM Incident Number 0202407-3237		648.43

Total Fire \$ 3,706.57

TOTAL GENERAL FUND \$ 4,529,679.78

Capital Projects

Funds for Muletown Rec acquisition	\$	4,300,000.00
Public Works Building Expansion - Rack Storage		14,223.21
Public Works Building Expansion - Magnetic door lock installation		6,300.00
Public Works Building Expansion - Rental Equipment		12,200.00
Public Works Building Expansion - Automated Gate and fence relocation		7,000.00
Public Works Building Expansion - Spray Foam		30,000.00
Computer for Marketing Dept.		8,250.00

Total Capital Projects \$ 4,377,973.21

Grants

Reclass \$75,000 to Parks for Blueway design from Tourism		75,000.00
Reclass \$75,000 from Tourism to Parks for Blueway design		(75,000.00)
Budget FY 2024 funds due for JAG grant to closeout		1,915.22
THSO Grant - Training Props Needed for Medical Training		12,500.00

Total Grants \$ 14,415.22

Wastewater (Sewer) Fund

2024 GO Sewer Bond interest payment		865,156.88
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Total Wastewater (Sewer) Fund \$ 865,156.88

Total Increase - All Funds (First Consideration)	\$	9,787,225.09
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CITY OF COLUMBIA
FY 2025 APPROPRIATION AMENDMENT #3
Second Consideration 2/13/25

1) Budget transfer to capital projects

Increase Revenues

11037110 \$ 4,369,723.21 Prior Year Revenue

Decrease Expenditures

11041950-OC800 \$ 8,250.00 General Govt - Tourism - Reserves

Increase Expenditures

11041900-OC766 \$ 4,377,973.21 General Govt - Transfer to Cap Proj

2) Budget transfer and expenses for Capital Projects

Increase Revenues

31137940 \$ 4,377,973.21 Transfer From General Fund

Increase Expenditures

31144480-OC920 \$ 4,300,000.00 Capital - Columbia Aquatics & Recreation Complex - Buildings
31143110-OC920 \$ 14,223.21 Capital - Public Works - Buildings
31143110-OC920 \$ 6,300.00 Capital - Public Works - Buildings
31143110-OC920 \$ 12,200.00 Capital - Public Works - Buildings
31143110-OC920 \$ 7,000.00 Capital - Public Works - Buildings
31143110-OC920 \$ 30,000.00 Capital - Public Works - Buildings
31141950-OC948 \$ 8,250.00 Capital - Tourism - Computers
 \$ 4,377,973.21 Total

3) Budget funds for General Government

Increase Revenues

11037110 \$ 148,000.00 Prior Year Revenue

Increase Expenditures

11041900-OC290 \$ 142,500.00 General Government - Misc. - Other Services
11041900-OC250 \$ 5,500.00 General Government - Misc. - Professional Services

4) Budget funds for FY 2024 JAG Grant expenses

Increase Revenues

322-33203 \$ 1,915.22 2021 JAG Grant

Increase Expenditures

32242140-OC320	\$	1,915.22	Grant - 2021 JAG Grant - Operating Supplies
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5) Budget fire donations and EOM funds recovered**Increase Revenues**

11036720	\$	3,058.14	Donations
11034225	\$	648.43	Fire & EMA Services Char
	\$	3,706.57	Total

Increase Expenditures

11042220-OC321	\$	2,245.95	Fire - Suppression - Controlled Asset
11042220-OC320	\$	812.19	Fire - Suppression - Maintenance and Repair Auto
11042260-OC800	\$	648.43	Fire - Emergency Management - Reserves
	\$	3,706.57	Total

6) Budget THSO Grant project expenditures**Increase Revenues**

322-33208	\$	12,500.00	Highway Safety Grant
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Increase Expenditures

32242147-OC320	\$	12,500.00	Grant - Police - Highway Safety - Operating Supplies
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7) Reclassify expenditures related to Blueway grant project**Decrease Expenditures**

32241950-OC937	\$	75,000.00	Grants - Tourism - Tourism Enhancement Grant
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Increase Expenditures

32244410-OC920	\$	75,000.00	Grants - Parks - Tourism Enhancement Grant
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8) Budget Wastewater 2024 Bond interest payment**Increase Revenues**

41237110	\$	865,156.88	Prior Year Revenue
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Increase Expenditures

41252227-OC631	\$	865,156.88	Wastewater - 2024 GO Bonds Interest
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FY 2025 Budget Summary - AA#3

2/13/2025						
		SERVICES &		CAPITAL	DEBT	AA#3
Departments	PERSONNEL	SUPPLIES	TRANSFERS	OUTLAY	SERVICE	FY 2025
City Council	\$99,124	\$376,900	\$0	\$0	\$0	\$476,024
Legal Services	\$63,863	\$217,100	\$0	\$0	\$0	\$280,963
Management Info Systems	\$391,664	\$395,455	\$0	\$0	\$0	\$787,119
City Manager	\$540,785	\$301,888	\$0	\$0	\$0	\$842,673
Finance & City Recorder	\$1,139,889	\$60,398	\$0	\$0	\$0	\$1,200,287
Human Resources	\$302,056	\$33,988	\$0	\$0	\$0	\$336,044
General City Admin	\$1,646,479	\$6,365,785	\$15,709,438	\$0	\$0	\$23,721,703
Police	\$9,875,522	\$1,740,228	\$0	\$0	\$0	\$11,615,750
Fire	\$8,657,295	\$785,325	\$0	\$0	\$0	\$9,442,619
Streets & Maintenance	\$3,464,871	\$755,973	\$0	\$0	\$0	\$4,220,844
Development Services	\$2,239,950	\$427,020	\$0	\$0	\$0	\$2,666,970
Parks & Recreation	\$2,893,120	\$920,238	\$0	\$0	\$0	\$3,813,358
Total General Fund	\$31,314,618	\$12,380,298	\$15,709,438	\$0	\$0	\$59,404,354
State Street Aid Fund	\$0	\$2,107,885	\$0	\$209,271	\$0	\$2,317,156
N&V Chief's Fund	\$0	\$140,000	\$0	\$0	\$0	\$140,000
Street & Transportation Fund	\$0	\$80,000	\$0	\$0	\$0	\$80,000
Drug Fund	\$0	\$81,053	\$40,000	\$58,305	\$0	\$179,358
Solid Waste (Sanitation) Fund	\$1,925,173	\$2,383,346	\$76,063	\$0	\$0	\$4,384,582
Debt Service Fund	\$0	\$0	\$0	\$0	\$1,417,094	\$1,417,094
Capital Projects Fund	\$0	\$500,000	\$895,063	\$20,522,738	\$0	\$21,917,801
Grants Fund	\$533,736	\$1,269,531	\$0	\$9,900,201	\$0	\$11,703,468
Wastewater (Sewer) Fund	\$4,156,208	\$6,012,011	\$0	\$99,502,556	\$5,025,516	\$114,696,291
Grand Total	\$37,929,735	\$24,954,124	\$16,720,564	\$130,193,071	\$6,442,610	\$216,240,103

**AN ORDINANCE AMENDING ORDINANCE NO. 4400, THE SAME BEING
THE ZONING ORDINANCE OF THE CITY OF COLUMBIA, TENNESSEE BY
AMENDING STANDARDS FOR SHORT TERM RENTAL USE WITHIN
ARTICLE 4 AND ARTICLE 9**

WHEREAS, Section §13-7-201 of the Tennessee Code Annotated empowers the city to enact a zoning ordinance and to provide for its administration, enforcement, and amendment; and

WHEREAS, the City Council deems it necessary for the purpose of promoting the health, safety, morals and general welfare of the city to enact such an ordinance; and

WHEREAS, the City Council, pursuant to the provisions of Section §13-4-101 of the Tennessee Code Annotated has appointed a Planning Commission to recommend the appropriate regulations to be enforced therein; and

WHEREAS, on the 4th day of December 2024, and on the 12th day of February 2025, the Planning Commission reviewed and recommended specific changes in accordance to Section 8.5.18, to the Zoning Ordinance regarding Short Term Rental use within Article 4 and Article 9.

WHEREAS, the text within Zoning Ordinance 4400 Article 4.3.9.E.6.kk is being repealed and replaced with the following language:

“**Short-Term Rental Units** shall be permitted in accordance with the applicable Use Table, subject to the following:

(1) Permit Required

(a) No dwelling unit, accessory dwelling unit, or portion thereof shall be offered for rent as a Short-Term Rental unless the Zoning Administrator has first issued a short-term rental permit to the owner.

(b) Where the Building, Lot and Building Site Principal Uses Table identifies the principal use of a dwelling as a Short-Term Rental as permitted subject to limited use standards (PL), a Short-Term Rental may be established upon approval of a Short-Term Rental permit by the Zoning Administrator. The Zoning Administrator shall establish a process for review and issuance of permits for Short Term Rentals.

(c) Where the **Building, Lot and Building Site Principal Uses Table** identifies the principal use of a dwelling as a Short-Term Rental as a Conditional Use (CU), a Short-Term Rental may be established only upon approval by the Board of Zoning Appeals. Such approval shall follow the process established at Section 8.5.16. The Zoning Administrator shall review such Short-Term Rental requests and recommend appropriate conditions of approval to the Board

of Zoning Appeals. The Zoning Administrator shall issue a Short-Term Rental Permit only upon approval by the Board. The permit shall be subject to any unique conditions imposed by the Board. Conditional Use approval shall expire one year from date of issuance of the subsequent permit. The Board may authorize the Zoning Administrator to extend this time and renew the associated Short-Term Rental Permit, provided the operator adheres to all conditions of approval.

(d) Where the **Building, Lot and Building Site Accessory Uses Table** identifies accessory use of a dwelling, portion of a dwelling, or an accessory dwelling unit as permitted subject to limited use standards (PL), a Short-Term Rental may be established upon approval of a Short-Term Rental permit by the Zoning Administrator.

(e) If the Zoning Administrator denies a request for a Short-Term Rental permit, or revokes a previously issued permit, the applicant may appeal the decision to the Board of Zoning Appeals. Such a request shall be evaluated as a Conditional Use.

(f) A Short-Term Rental Permit shall expire one year from the date of issuance. Failure to renew the permit shall constitute a cessation of the Short-Term Rental and immediate change of use to Household Living.

(g) A Short-Term Rental Permit is granted to a specific operator for a specific dwelling unit or portion thereof and may not be sold or otherwise transferred. Changes in the ownership will result in revocation of the Short-Term Rental permit. A new Short-Term Rental Permit is required when the dwelling unit is sold or conveyed.

(2) Short Term Rental Local Point of Contact Designation

(a) The owner of a short-Term Rental shall designate a permanent local point of contact for each short-term rental property.

(b) If the owner is a natural person, the owner may serve as the local point of contact. Alternatively, the owner may designate another natural person over the age of eighteen as the short-term rental point of contact.

(c) Where Short-Term Rental is the principal use of a dwelling, the name and telephone number of the local point of contact shall be conspicuously posted where it can be seen by guests and law enforcement.

(d) The short-term rental local point of contact must be available to be contacted by the City at all times

(e) Failure of the local contact person to be available at all times for contact by the City constitutes an instance of non-compliance which may result in revocation of the Short-Term Rental permit

(f) When the local point of contact is notified by phone or email that the guests at a short-term rental are violating City ordinances or policies, the local contact person shall communicate with the owner, and the owner shall immediately commence remedial action and cause the violation to cease.

(3) Short-Term Rental operators shall provide a parking plan demonstrating sufficient parking for guests.

(a) Where Short-Term Rental is the principal use of the dwelling, the minimum number of parking spaces shall be equivalent to that required by **Table 4.3.12.B-1 Vehicular Parking Requirements** for a Single-Family Detached Dwelling.

- (b) Where Short-Term Rental is the accessory use of dwelling, portion of the dwelling, or accessory dwelling unit, the minimum number of parking spaces shall be equivalent to that required by **Table 4.3.12.B-1 Vehicular Parking Requirements** for the principal use, plus one.
- (4) Events are not permitted in conjunction with a short-term rental use. Examples of events include, but are not limited to, weddings, receptions, anniversaries, private parties, banquets, and business seminars.
- (5) External alterations or site improvements that change the residential character of the Lot or Building Site upon which a Short-Term Rental is located are prohibited.
- (6) Short-Term Rental properties must meet all applicable requirements of the state and local building, fire safety, and property maintenance codes.
- (7) Short-Term Rental operators and their guests shall comply with the laws of the state of Tennessee and all ordinances of the City of Columbia.
- (8) The Zoning Administrator may revoke a Short-Term rental permit for violations of these standards, violation of any City of Columbia Ordinances, or failure to adhere to conditions of approval imposed by the Board of Zoning Appeals.”

WHEREAS, Zoning Ordinance 4400 Table 4.3.9.A-2 Building, Lot and Building Site Accessory Use shall be amended to reflect the following allowance of conditional use (CU), Permitted Limited (PL) and Not Permitted (NP):

ACCESSORY USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Short-Term Rental Unit	CU	CU	CU	PL	PL	PL	PL	PL	PL	PL	NP	CU	CU	NP

WHEREAS, Zoning Ordinance 4400 Table 4.3.9.A-1 Building, Lot and Building Site Principal Use shall be amended to reflect the following allowance of conditional use (CU), Permitted Limited (PL) and Not Permitted (NP):

PRINCIPAL USE	CD-2	CD-3 L	CD-3	CD-4	CD-4C	CD-5	CD - 5C	SD-MHP	SD-INT	SD-LI	SD-HI	PUD - R	PUD-MU	CV
Short-Term Rental Unit	CU	CU	CU	PL	PL	PL	PL	CU	PL	PL	NP	CU	CU	NP

WHEREAS, Zoning Ordinance 4400 Table 4.3.12.B-1 Vehicular Parking Requirements for the Principal Use “Short-Term Rental Unit” shall be removed.

WHEREAS, Zoning Ordinance 4400 Article 4.3.9.E.6.a Accessory Dwelling the following language shall be removed: “An Accessory Dwelling Unit may not be used for Transient accommodations or as a Short-Term Rental Unit.”

WHEREAS, Zoning Ordinance 4400 Article 9.3 Definitions the term Short-Term Rental Unit shall be repealed and replaced with the following language:

“Short-Term Rental Unit: A Dwelling Unit or Accessory Dwelling Unit which is rented wholly or partially for a period of less than thirty (30) continuous days occupancy for a fee; specifically excluding however a “hotel” as defined in TSA section 68-14-302 or a “bed and breakfast establishment” or a “bed and breakfast homestay” as those terms are defined in TSA section 68-14-502, all as contemplated in TSA section 13-7-602. A Hotel, Extended Stay Hotel, Motel, Bed and Breakfast, or Inn is not a Short-Term Rental Unit.”

WHEREAS, said recommendations are being considered after a public hearing held on the 13th day of February, 2025, notice of which was published in the Daily Herald of Columbia fifteen (15) days or more prior to said meeting; and

NOW, THEREFORE, BE IT ORDAINED BY THE CITY OF COLUMBIA:

Section 1: That Ordinance number 4400, the same being the Zoning Ordinance of the City of Columbia, Tennessee is hereby amended being incorporated herein by reference;

Section 2: That pursuant to Section 8.5.18.J.4, the City Council makes the following specific findings:

- a. The extent to which the proposed Zoning Ordinance Amendment is consistent with the remainder of this Ordinance, including, specifically, any purpose and intent statements;
- b. The extent to which the proposed Zoning Ordinance Amendment represents a new idea not considered in this Ordinance, or represents a revision necessitated by changing circumstances over time;
- c. Whether or not the proposed Zoning Ordinance Amendment corrects an error in this Ordinance; and
- d. Whether or not the proposed Zoning Ordinance Amendment revises this Ordinance to comply with state or federal statutes or case law.

Section 3: That ordinances or parts of ordinances in conflict herewith are hereby repealed

PASSED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF
COLUMBIA, TENNESSEE, this the 13th day of March, 2025.

CHARLES (CHAZ) M. MOLDER, MAYOR

ATTEST:

THAD H. JABLONSKI, CITY RECORDER

LEGAL FORM APPROVED:

JAKE HUBBELL, CITY ATTORNEY

APPROVED FOR FIRST CONSIDERATION:

ANTHONY R. MASSEY – CITY MANAGER

Passed on 1st consideration _____

Passed on 2nd consideration: _____



CITY OF COLUMBIA TENNESSEE
CITY COUNCIL
STAFF REPORT

STAFF REPORT CONTACT INFORMATION

Paul Keltner, AICP, Development Services Director pkeltner@columbiatn.gov 931-560-1560

AGENDA ITEM TITLE: 1ST CONSIDERATION ON ORDINANCE 4541 - AN ORDINANCE AMENDING ORDINANCE NO. 4400, THE SAME BEING THE ZONING ORDINANCE OF THE CITY OF COLUMBIA, TENNESSEE BY AMENDING STANDARDS FOR SHORT TERM RENTAL USE WITHIN ARTICLE 4 AND ARTICLE 9 - CITYWIDE, MORE ATTRACTIVE, LIVABLE CITY.

RECOMMENDATION: Approve Ordinance 4541 on first consideration.

INFORMATION: The Department of Development Services is requesting to amend the Article 4 of Zoning Ordinance 4400. The proposed amendments include Uses, Limitations and Standards regarding Short Term Rentals. The Planning Commission recommended approval of this request with a vote of 6-0 at their December 4, 2024 meeting with the conditions from the Planning Commission recommending:

- Modification of the Planning Fee Schedule for Short Rentals requiring Conditional Use Approval with the Board of Zoning Appeals to be \$300 with staff approval of Short-Term Rentals being \$150.

City Council took this matter into consideration on January 9, 2025 and referred the item back to Planning Commission for further review and recommendation at the February 12, 2025 meeting.

CERTIFICATION: N/A

ATTACHMENTS: Ordinance 4541, DS Staff Report.



Q4 Zoning Text Amendment Limited Use Standards

Project #:	24-0475	Location:	N/A
Applicant:	Kevin C. McCarthy, AICP	Case Type(s):	Text Amendment
Staff Planner:	Kevin C. McCarthy, AICP	Proposed Use:	N/A

SUMMARY

The applicant, the Zoning Administrator, requests to amend the text of Ordinance 4400, the zoning ordinance for the City of Columbia. This is the fifth of five rounds of zoning text amendments staff has presented to the Planning Commission between December 2023 and December 2024. These changes will implement Connect Columbia, better align zoning regulations with community preferences, and calibrate the standards based on “lessons learned” during the first two years administering the Ordinance. This round of proposed amendments is detailed in the attached track changes documents. Specifically the proposal relates to the limited used standards in Article 4 as well as related definition and procedural references in Articles 9 and 8.

- The Planning Commission is a **recommending body** for zoning text amendments. The City Council is the decision-making authority.
- The staff comments section details the proposed changes, which are provided in the agenda packet in ~~striketrough~~ and underlines.
- The specific limited uses impacted by this amendment include: Home Occupations; Bars, Taverns, and Nightclubs; retailers of CBD, Vape, and Tobacco; and Short Term Rentals.
- Planning Commission may recommend adoption of the proposed text, modify the proposal, or decline the request.
- Templates are provided at the end of the report to assist the Planning Commission in crafting properly formatted motions.

CONSISTENCY WITH CONNECT COLUMBIA

The ongoing current process of reviewing and updating the Zoning Ordinance and other regulating documents is part of the implementation of Connect Columbia, the City's comprehensive plan.

REVIEW PROCESS

Section **8.5.18** of the Zoning Ordinance directs the Planning Commission to review and make a recommendation on all proposed changes to the text of the Ordinance. The Planning Commission is the recommending body for text amendments under **§ 8.3.3.B.2** of the Zoning Ordinance.

Section **8.5.18.C** of the Zoning Ordinance requires that Planning Commission determine that the proposed changes are consistent with the comprehensive plan.

8.5.18.G of the Zoning Ordinance establishes the review criteria for approval of all changes to the text of the Ordinance:

- a. The extent to which the proposed Zoning Ordinance Amendment is consistent with the remainder of this Ordinance, including, specifically, any purpose and intent statements;*
- b. The extent to which the proposed Zoning Ordinance Amendment represents a new idea not considered in this Ordinance, or represents a revision necessitated by changing circumstances over time;*
- c. Whether or not the proposed Zoning Ordinance Amendment corrects an error in this Ordinance; and*
- d. Whether or not the proposed Zoning Ordinance Amendment revises this Ordinance to comply with state or federal statutes or case law.*

The criteria for City Council action on a Zoning Ordinance Amendment at § 8.5.18.J.4 are identical to the criteria for Planning Commission review at 8.5.18.G.3.

COMMENTARY FROM PROFESSIONAL PLANNING STAFF

The City Council adopted the current ordinance on July 14, 2022. The Zoning Ordinance implements the City's comprehensive plan, Connect Columbia. On November 8, 2023, the Planning Commission recommended adoption of a five-year update of the framework, land use, and transportation elements of Connect Columbia. The framework element of the plan directs planning staff to initiate revisions to the ordinance in order to bring it into consistency with changes to the future land use plan. It further directs staff to engage residents and property owners to solicit suggestions for further changes to the ordinance. As mentioned above, this is

the final round of zoning text amendments staff plans to present to the Planning Commission between December 2023 and December 2024.

The proposal includes the following changes:

- Home Occupations
 - Distinguishes between “Major” and “Minor” home occupations;
 - Creates a process to allow major home occupations as a conditional use approved by the Board of Zoning Appeals;
 - Continues to permit minor home occupations administratively; and
 - Modifies definition of Home Occupation and Kennels.
- Bars, Taverns & Nightclubs
 - Removes 500 ft exclusion from residential property;
 - Adds exclusions around schools and parks;
 - Prohibits the use on lots and building sites next to residentially zoned property; and
 - Requires a 50 ft separation from property in single-family use regardless of zoning.
- Vape, Tobacco & Cannabinoid Retailers
 - Creates a use category for Vape, Tobacco & Cannabinoid Retailers;
 - Creates a definition for Vape, Tobacco & Cannabinoid Retailers;
 - Imposes a 500 ft separation requirement;
 - Imposes a 500 ft exclusion around schools, parks, and religious facilities; and
 - Requires 50 ft separation from residentially zoned property.
- Short Term Rental
 - Removes requirement that all Short-Term Rentals be accessory uses in owner-occupied dwellings;
 - Modifies the definition of Accessory Dwelling Unit (ADU) to allow the use of ADUs as short-term rentals;
 - Creates an administrative review and permitting process;



- Removes prohibition on short-term rentals in single-family character districts and allows them as a conditional use approved by the Board of Zoning Appeals;
- Allows short-term rentals by administrative approval in mixed use character districts and special districts;
- Requires a local point of contact for each permitted short-term rental; and
- Removes onerous parking requirements for short-term rentals.

Planning staff will present detailed commentary at the December 4, 2024 meeting of the Planning Commission. The proposal

The Planning Commission may recommend approval of the proposed text amendments, direct staff to prepare an alternative text amendment, or decline to act on the proposed changes.

SAMPLE MOTIONS

Approve:

Move to find, based on the analysis provided by city staff, that the criteria listed in section **8.5.18** of the City of Columbia Zoning Ordinance have been satisfied and recommend approval of the proposed text amendments **[may be subject to modifications proposed by the Planning Commission]**.

Deny:

Move to recommend denial of the requested text amendment having found, based on the analysis provided by city staff, that the criteria listed in section **8.5.18** of the City of Columbia Zoning Ordinance are not satisfied *[list specific reasons for denial and provide direction to staff]*.

Defer:

Move to find that there is insufficient information to decide, defer the matter to the next regularly scheduled meeting of the Planning Commission, and direct staff to provide: *[list additional information]* for review at a future meeting.