CITY OF COLUMBIA
TENNESSEE

AGENDA

The Development Review Committee will meet on Tuesday, May 12, 2026 at 10:00 AM in Conference Room A, Basement Level, City Hall, to consider the following:

I. Items For Review

1. Request from Shay Menges for **revision of elevations** for *The Landing at Greens Mill Final PUD Master Plan*, located at Tax Map 51 Parcel 55 off Greens Mill Road.

2. Request from Amanda Reed for **Final Plat approval with surety** of *Rock Springs Cove Phase 1A* located at Tax Map 92 Parcels 11 and 11.01 off Rock Springs Road.

3. Request from Jason Morelock for **Final PUD Master Plan approval** of *Westfield Park's group living facility,* being a portion of Tax Map 112 Parcel 3.07 off Rutherford Lane.

4. Request from M2 Group for **Preliminary Plat approval** of *Westfield Park commercial subdivision* at Tax Map 112 Parcel 3.07 off Rutherford Lane.

5. Request from M2 Group for **Final Plat approval with surety** of *Westfield Park commercial subdivision* at Tax Map 112 Parcel 3.07 off Rutherford Lane.

6. Request from M2 Group for **Final Plat approval with surety** of *Idlewild Farms Section 3,* located off Hiwassee Drive at Tax Map 89 Parcels 23.01 and 23.02.

7. Request from Gamble Collaborative Design Group for **Final PUD Master Plan approval** of *Waters Edge at Taylor Landing,* located at Tax Map 90 Parcel 7.12 off River Road and Taylor Landing.

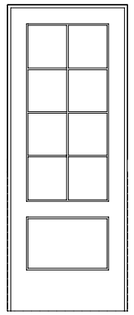
8. Request from WES Engineers & Surveyors for **revision approval** of the *McClure Farms Final PUD Master Plan / Preliminary Plat,* located off Nashville Highway at Tax Map 51 Parcel 6.

9. Request from Allen B. O'Leary for **Final Plat revision approval with surety** of five lots and three open spaces within the *McClure Farms PUD subdivision,* located at Tax Map 51 Parcel 6 off Nashville Highway.

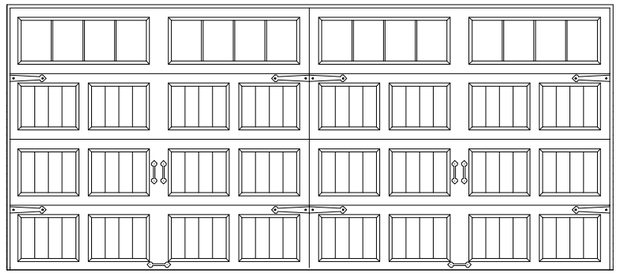
10. Request from Cole Newton for **Final Plat approval with surety** of *Reserve at Hickory Ridge Phase 2,* located off Bear Creek Pike and Red Hawk Road.

11. Request from Nick Madonia for **Preliminary Plat approval** at *1907 Shady Brook Street*, identified as Tax Map 100N Group L Parcel 5.

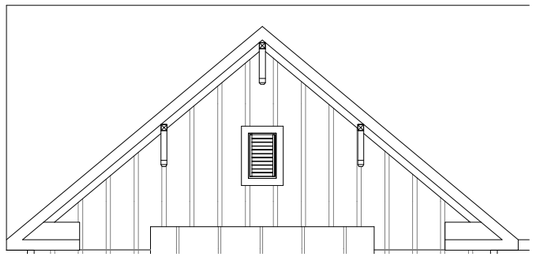
ARCHITECTURAL DETAILS



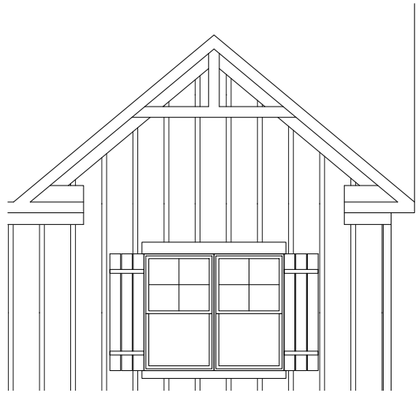
Typical 8' Front Door



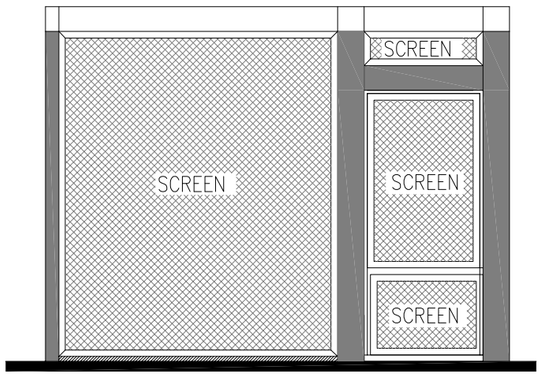
Typical Garage Door

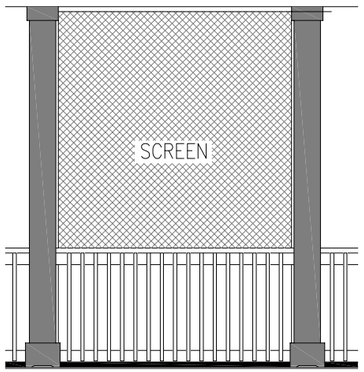


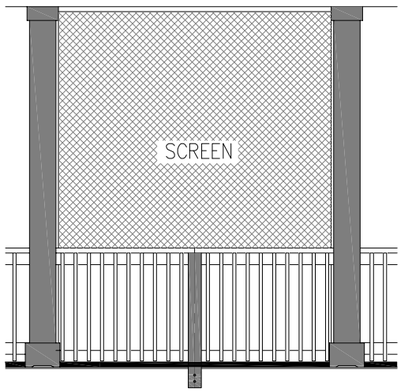
Gable Bracket Detail #3



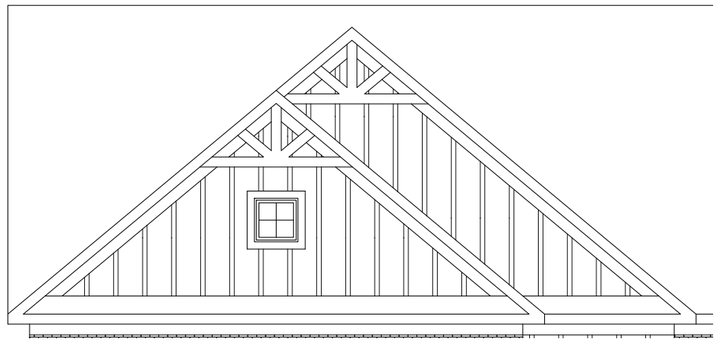
Gable Bracket Detail #2



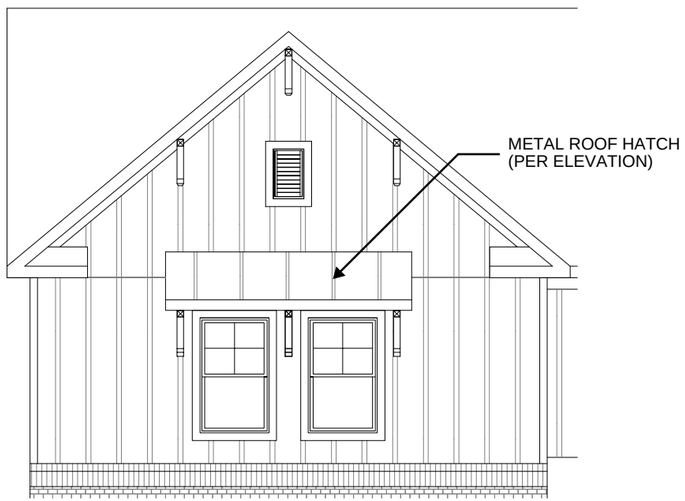




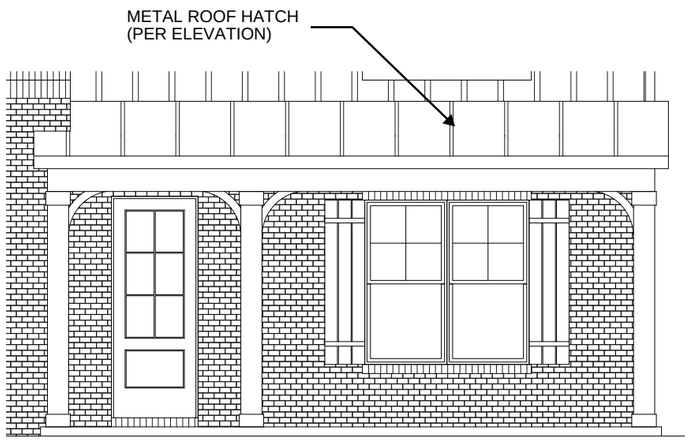
Screened Patio Details



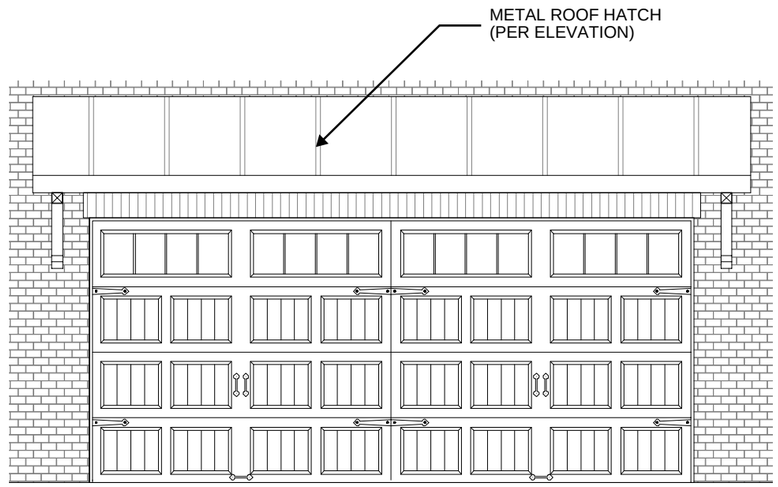
Gable Bracket Detail #1



Typical Metal Roof Canopy @ Windows



Typical Metal Roof Canopy @ Porch



Typical Metal Roof Canopy @ Garage

BROOKMONT



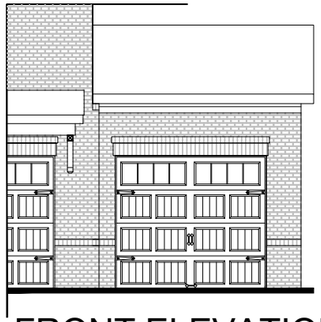
RIGHT ELEVATION

A-G



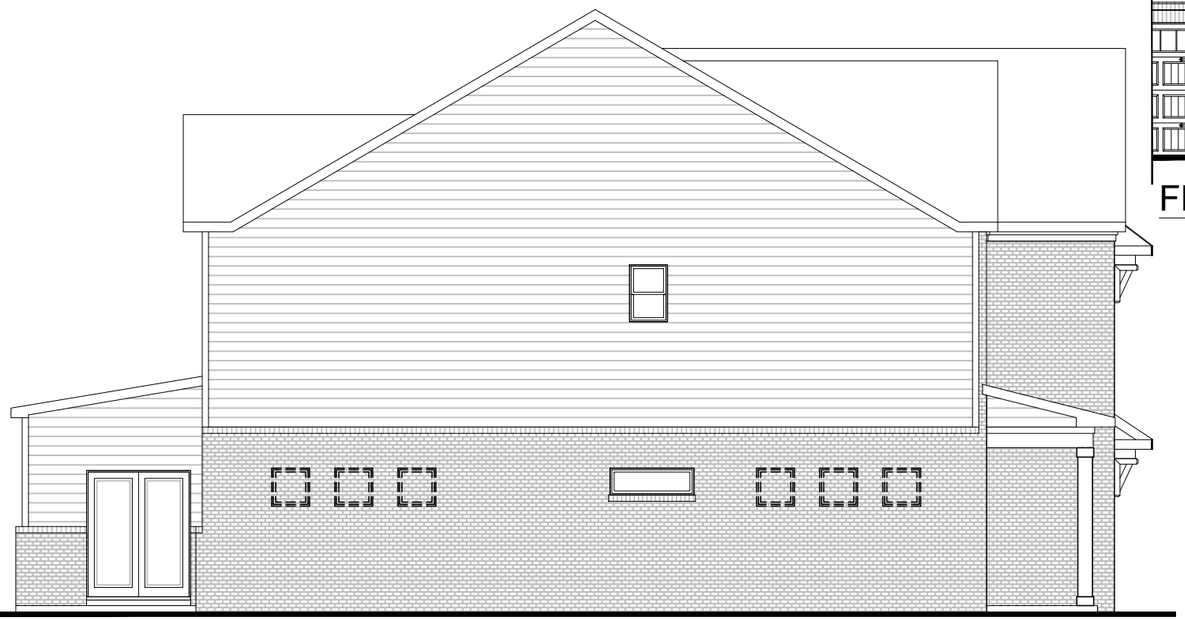
REAR ELEVATION

A-G



FRONT ELEVATION
3 CAR GARAGE

A-G



LEFT ELEVATION

A-G



FRONT ELEVATION

A-G

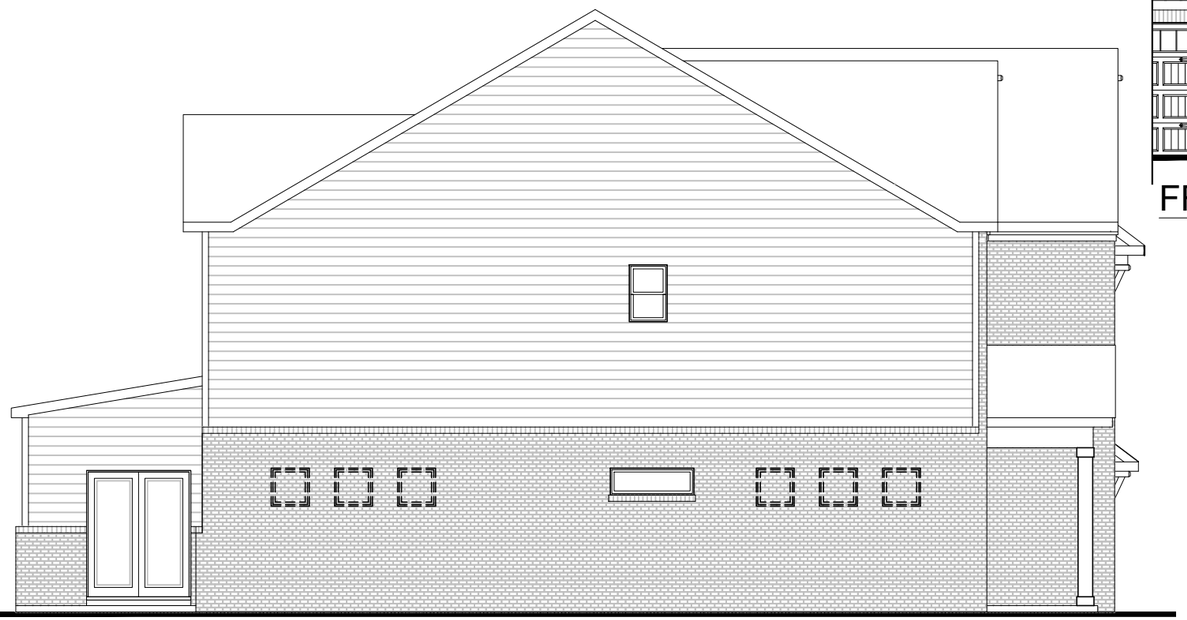
MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		783 SF
BRICK	100 %	783 SF
STONE	0 %	0 SF
SIDING	0 %	0 SF
SHAKE	0 %	0 SF
B-N-B	0 %	0 SF

BROOKMONT



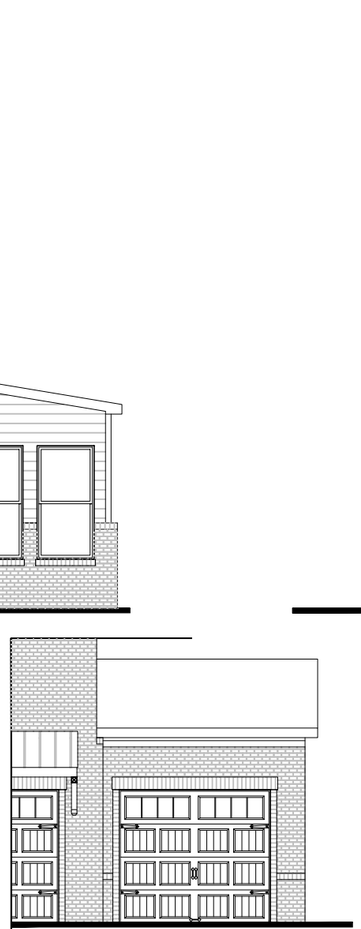
RIGHT ELEVATION

PB1-G



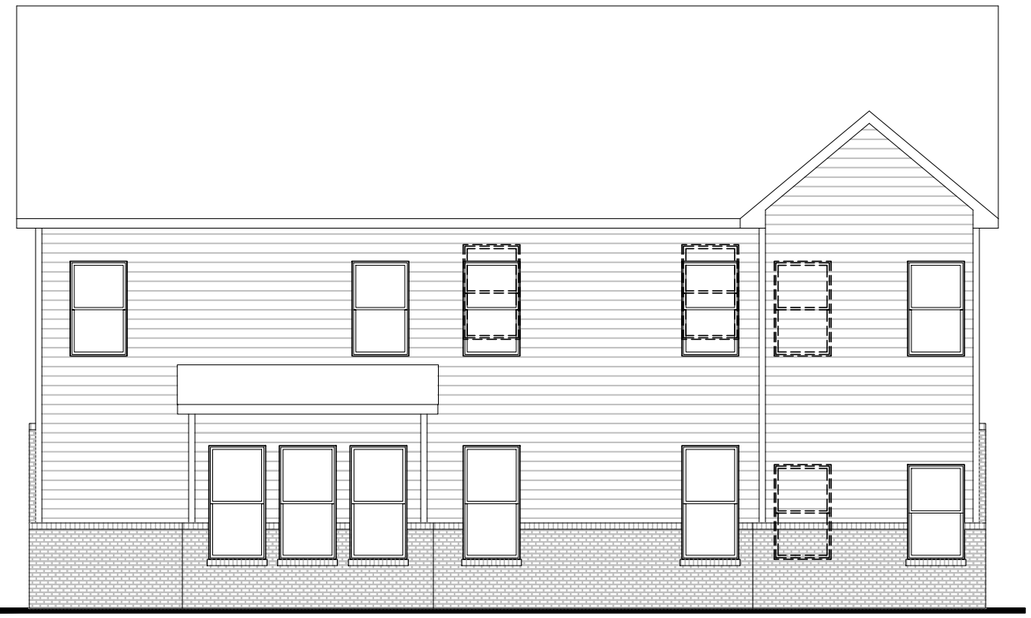
LEFT ELEVATION

PB1-G



FRONT ELEVATION
3 CAR GARAGE

PB1-G



REAR ELEVATION

PB1-G



FRONT ELEVATION

PB1-G

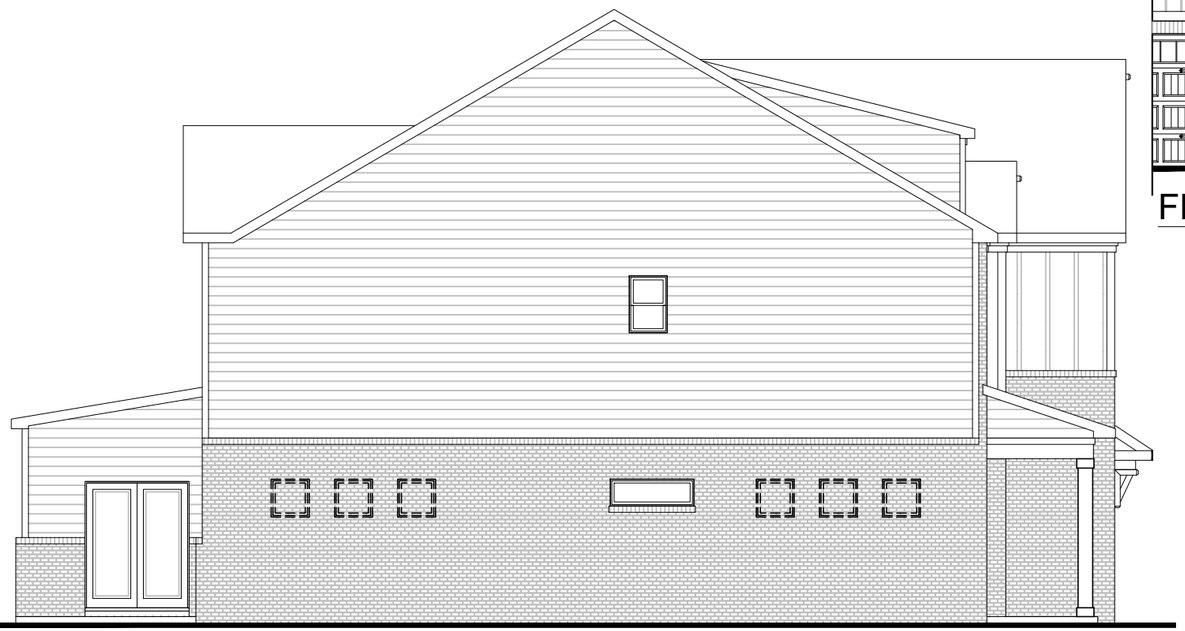
MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		774 SF
BRICK	86 %	665 SF
STONE	0 %	0 SF
SIDING	1 %	7 SF
SHAKE		
B-N-B	13 %	102 SF

BROOKMONT



RIGHT ELEVATION

PB2-G



LEFT ELEVATION

PB2-G



FRONT ELEVATION
3 CAR GARAGE

PB2-G



REAR ELEVATION

PB2-G

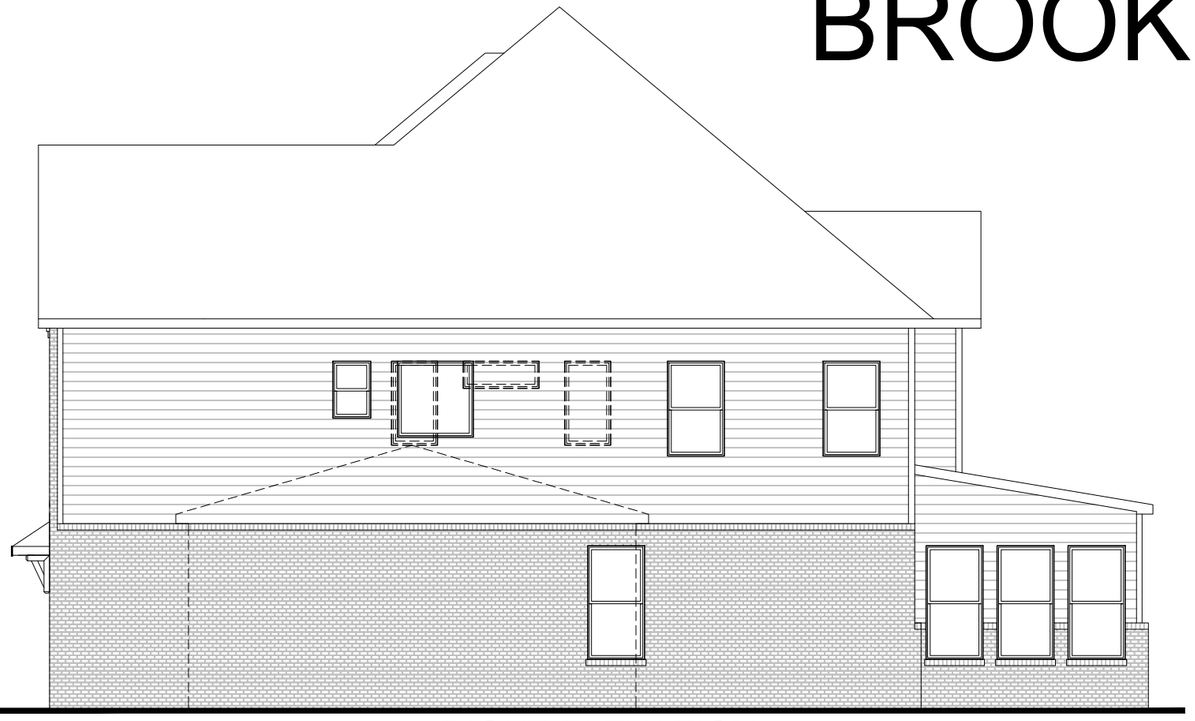


FRONT ELEVATION

PB2-G

MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		752 SF
BRICK	69 %	522 SF
STONE	0 %	0 SF
SIDING	2 %	12 SF
SHAKE	0 %	0 SF
B-N-B	29 %	218 SF

BROOKMONT



RIGHT ELEVATION

PB3-G



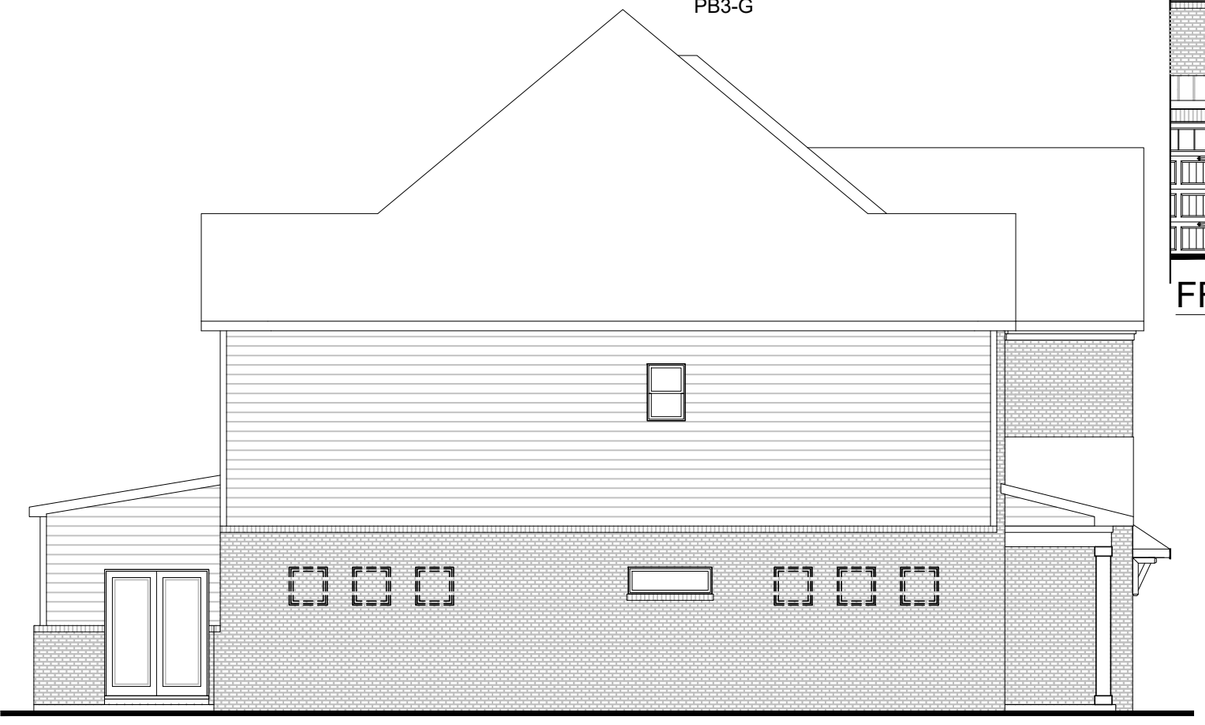
FRONT ELEVATION
3 CAR GARAGE

PB3-G



REAR ELEVATION

PB3-G



LEFT ELEVATION

PB3-G



FRONT ELEVATION

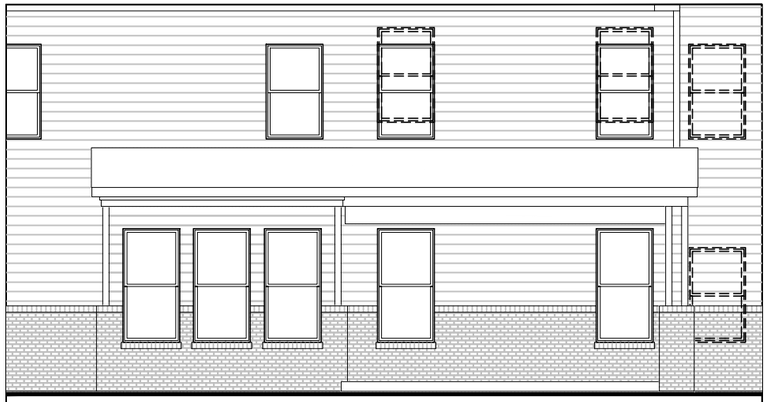
PB3-G

MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		645 SF
BRICK	81 %	520 SF
STONE	0 %	0 SF
SIDING	0 %	0 SF
SHAKE	0 %	0 SF
B-N-B	19%	125 SF

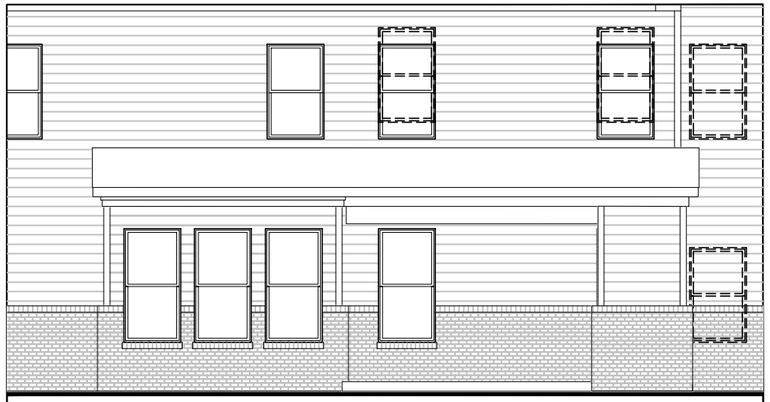
BROOKMONT



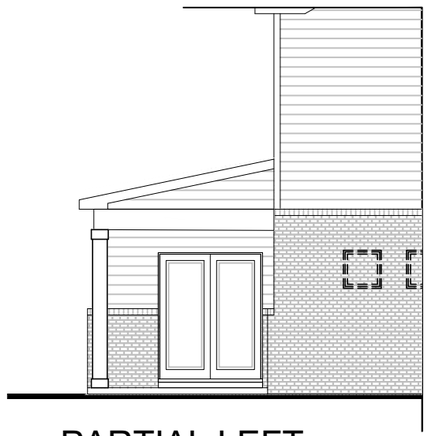
PARTIAL REAR ELEVATION
W/ OPT. COVERED PATIO



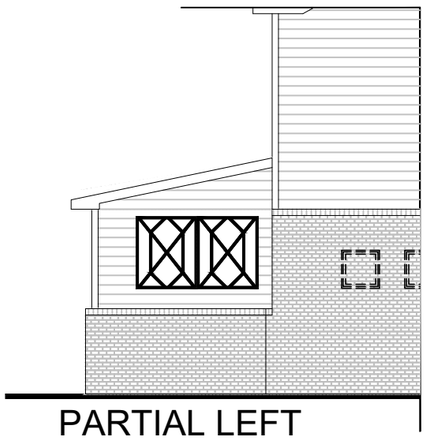
PARTIAL REAR ELEVATION
W/ OPT. COVERED PATIO
& PRIVACY WALL



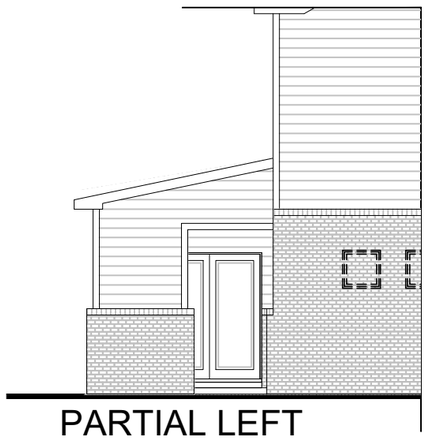
PARTIAL REAR ELEVATION
W/ OPT. COVERED PATIO
& FIREPLACE



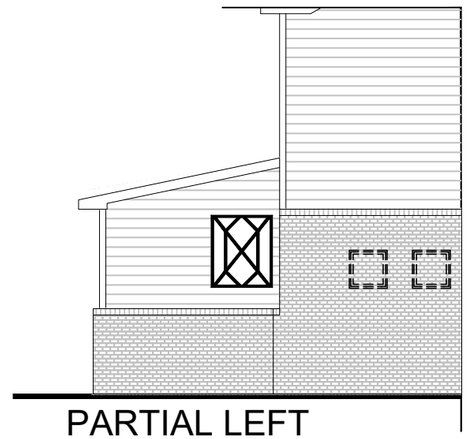
PARTIAL LEFT
ELEVATION W/
OPT. COVERED PATIO



PARTIAL LEFT
ELEVATION W/
OPT. COVERED PATIO
& PRIVACY WALL

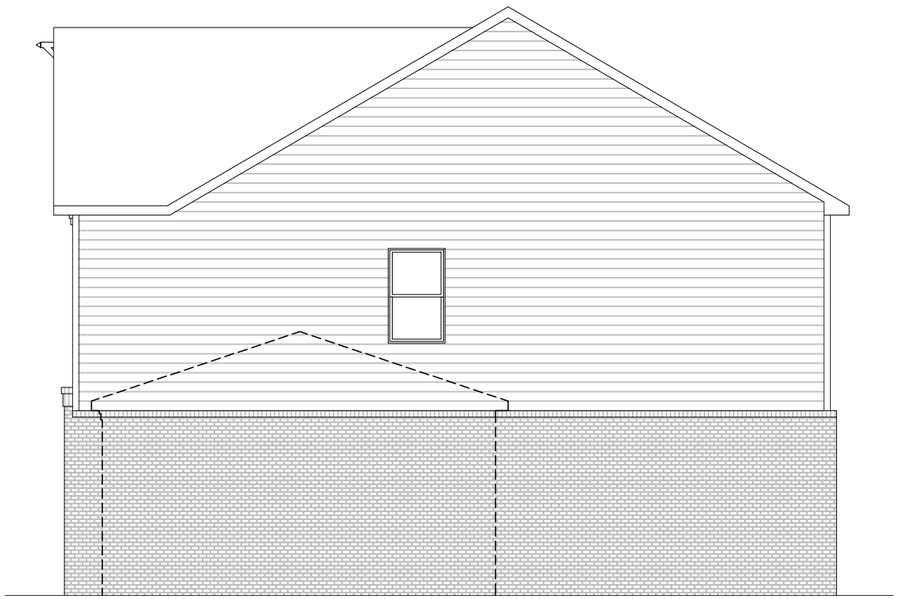


PARTIAL LEFT
ELEVATION W/
OPT. COVERED PATIO
& FIREPLACE



PARTIAL LEFT
ELEVATION W/
OPT. COVERED PATIO
FIREPLACE & PRIVACY WALL

CAMBRIDGE



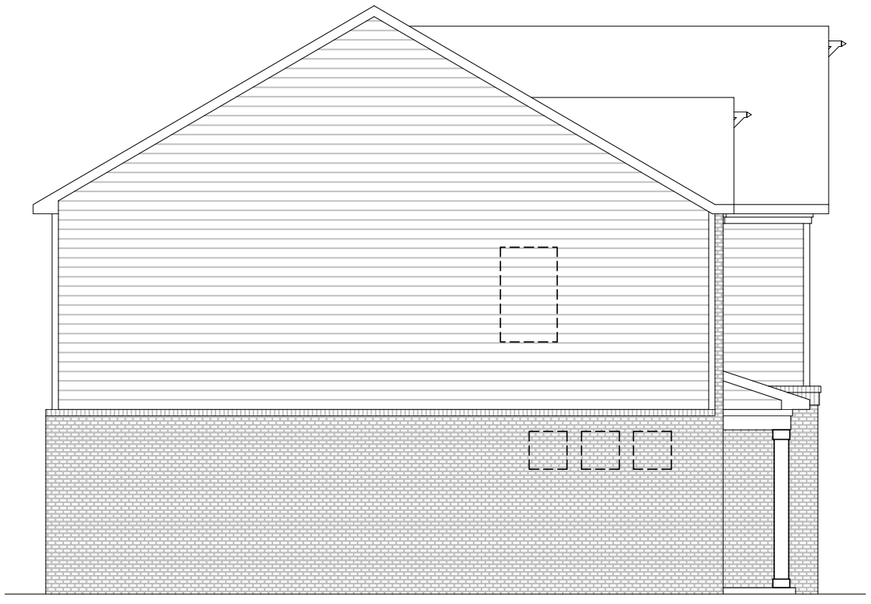
RIGHT ELEVATION

A-G



REAR ELEVATION

A-G



LEFT ELEVATION

A-G



FRONT ELEVATION

3 CAR GARAGE

A-G

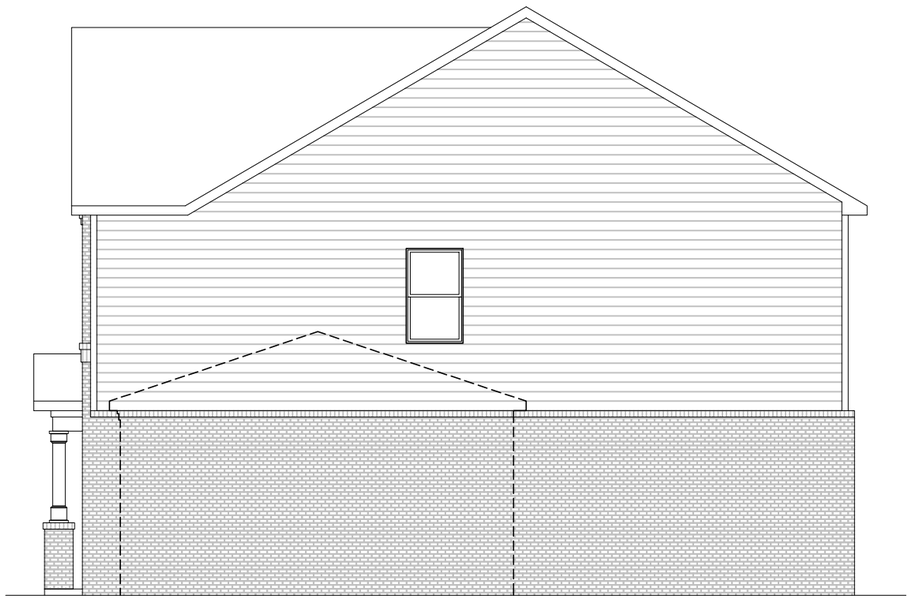


FRONT ELEVATION

A-G

MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		749 SF
BRICK		446 SF
STONE		0 SF
SIDING		237 SF
SHAKE		66 SF
B-N-B		0 SF

CAMBRIDGE



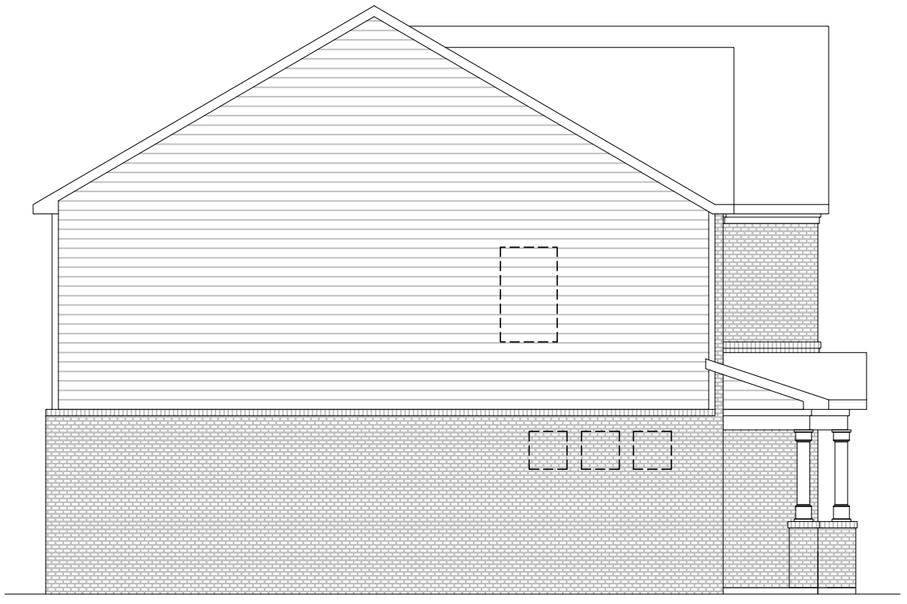
RIGHT ELEVATION

C-G



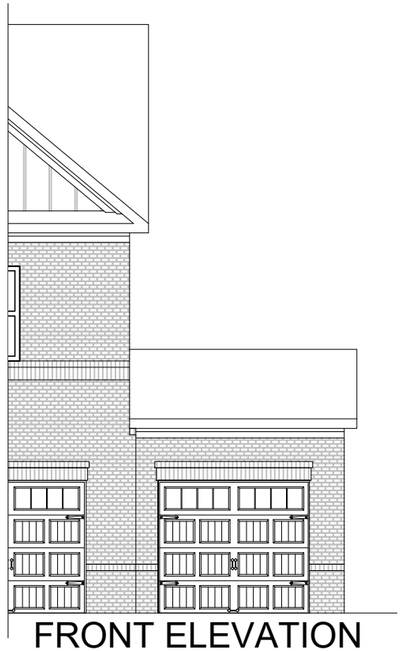
REAR ELEVATION

C-G



LEFT ELEVATION

C-G



FRONT ELEVATION
3 CAR GARAGE

C-G

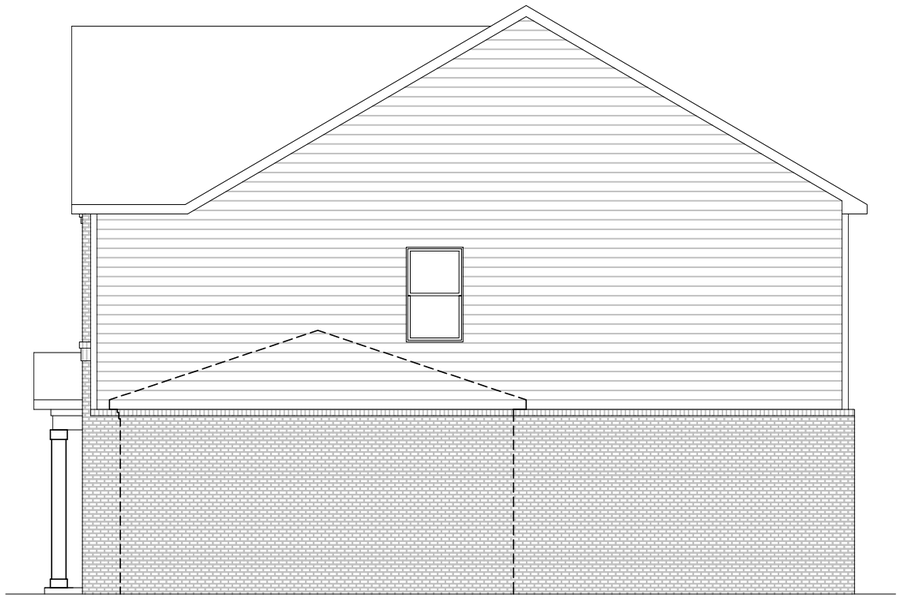


FRONT ELEVATION

C-G

MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		**725 SF**
BRICK		615 SF
STONE		0 SF
SIDING		0 SF
SHAKE		0 SF
B-N-B		110 SF

CAMBRIDGE



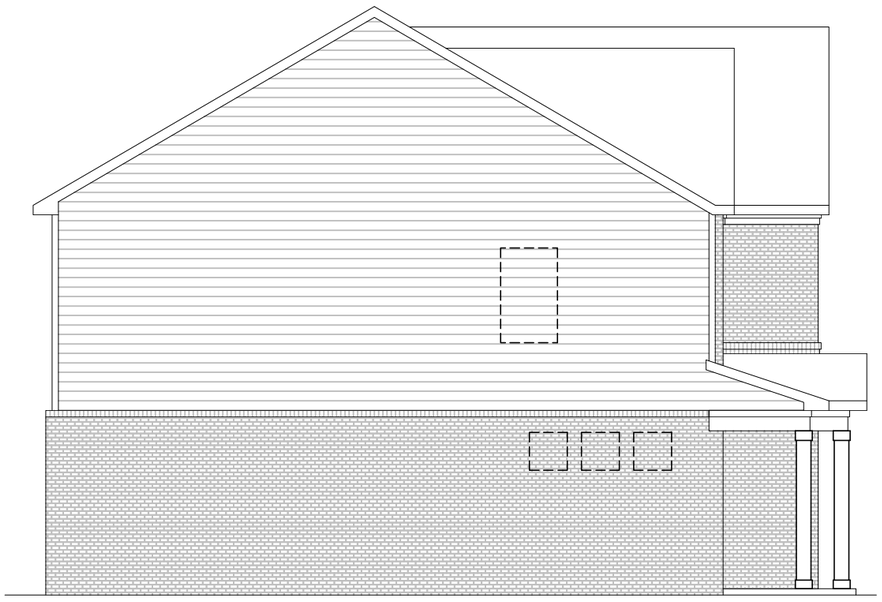
RIGHT ELEVATION

G-G



REAR ELEVATION

G-G



LEFT ELEVATION

G-G



FRONT ELEVATION

3 CAR GARAGE

G-G

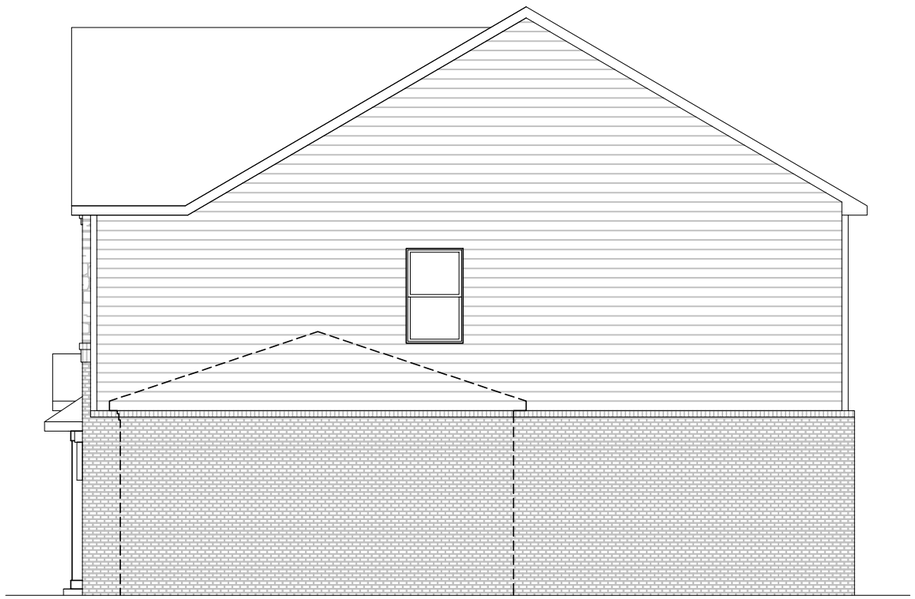


FRONT ELEVATION

G-G

MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		**727 SF**
BRICK		617 SF
STONE		0 SF
SIDING		0 SF
SHAKE		0 SF
B-N-B		110 SF

CAMBRIDGE



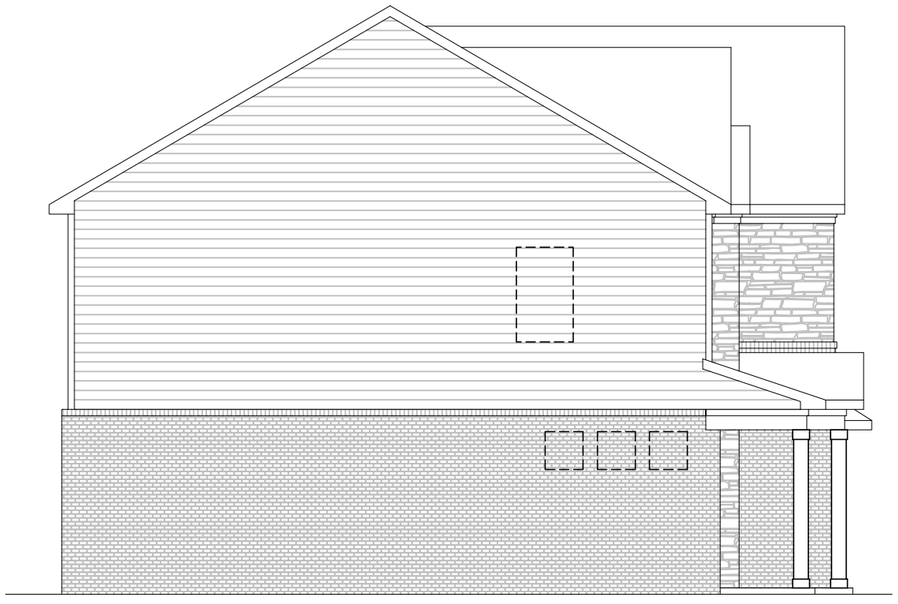
RIGHT ELEVATION

H-G



REAR ELEVATION

H-G



LEFT ELEVATION

H-G



FRONT ELEVATION
3 CAR GARAGE

H-G

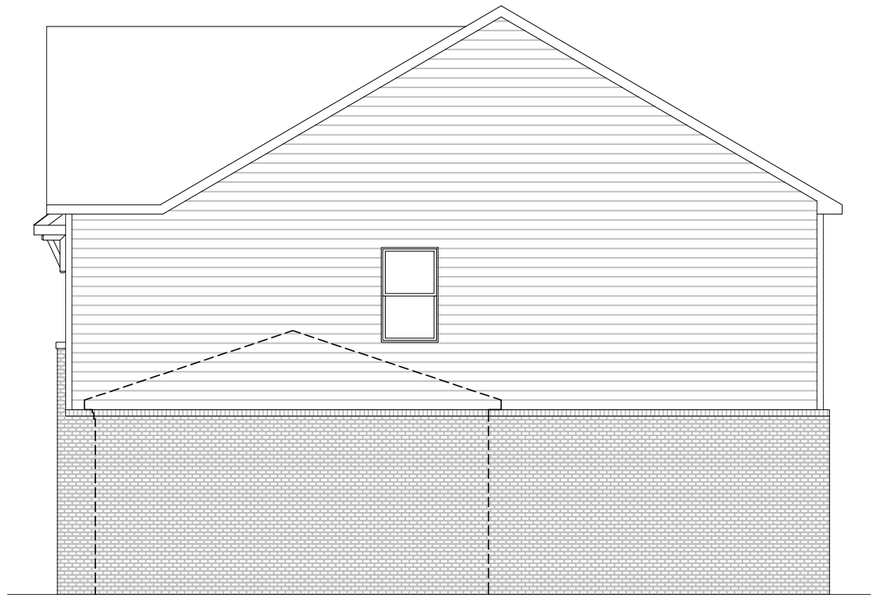


FRONT ELEVATION

H-G

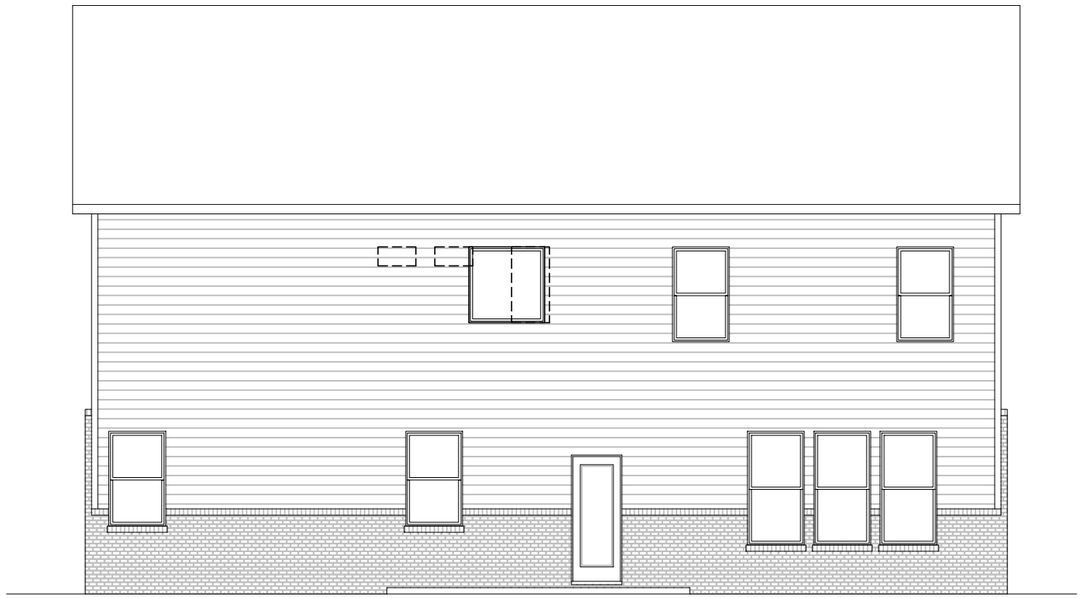
MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		753 SF
BRICK		295 SF
STONE		312 SF
SIDING		0 SF
SHAKE		146 SF
B-N-B		0 SF

CAMBRIDGE



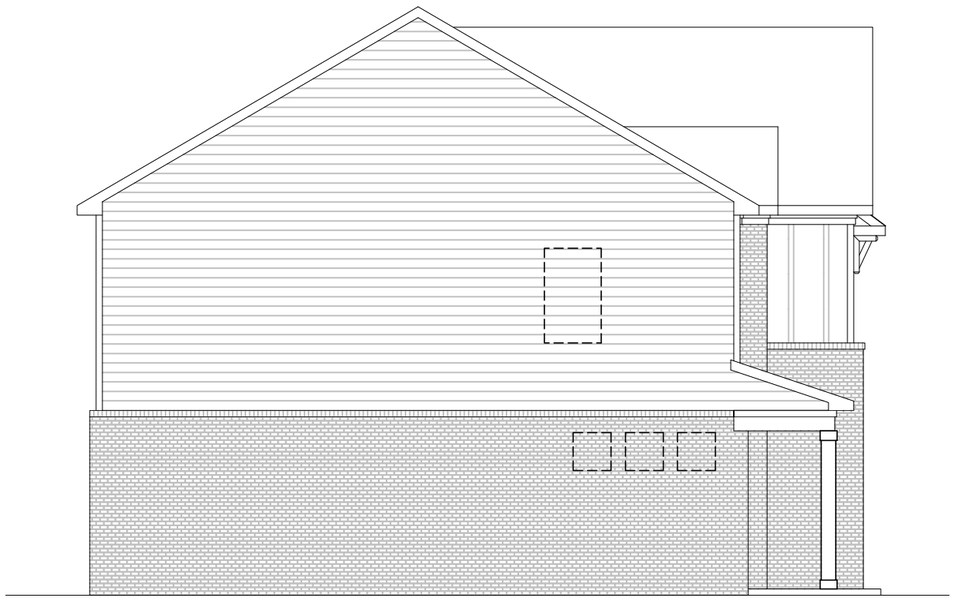
RIGHT ELEVATION

PB1-G



REAR ELEVATION

PB1-G



LEFT ELEVATION

PB1-G



FRONT ELEVATION
3 CAR GARAGE

PB1-G



FRONT ELEVATION

PB1-G

MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		**695 SF**
BRICK		401 SF
STONE		0 SF
SIDING		0 SF
SHAKE		0 SF
B-N-B		294 SF

CAMBRIDGE



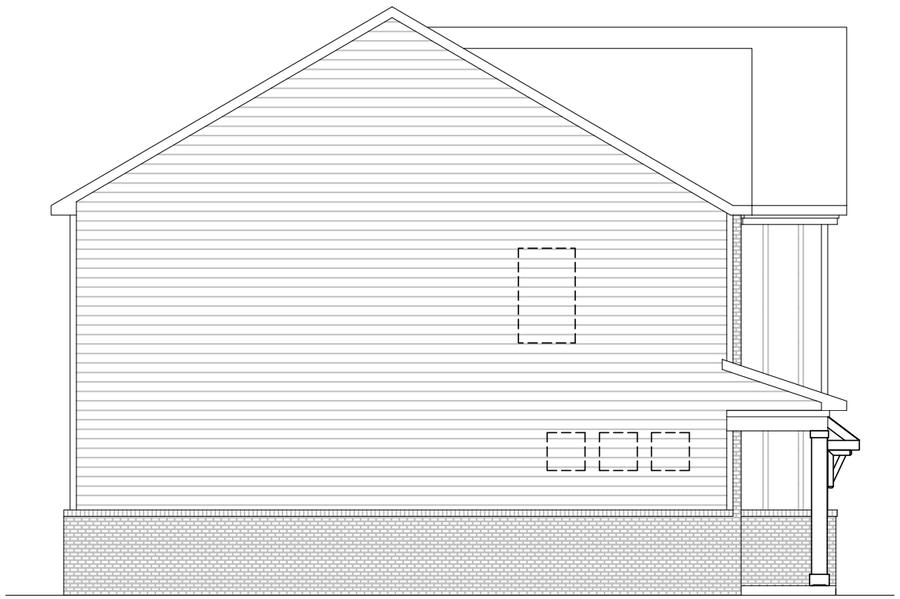
RIGHT ELEVATION

PB2-G



REAR ELEVATION

PB2-G



LEFT ELEVATION

PB2-G



FRONT ELEVATION
3 CAR GARAGE

PB2-G



FRONT ELEVATION

PB2-G

MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		658 SF
BRICK		322 SF
STONE		0 SF
SIDING		0 SF
SHAKE		0 SF
B-N-B		336 SF

CAMBRIDGE



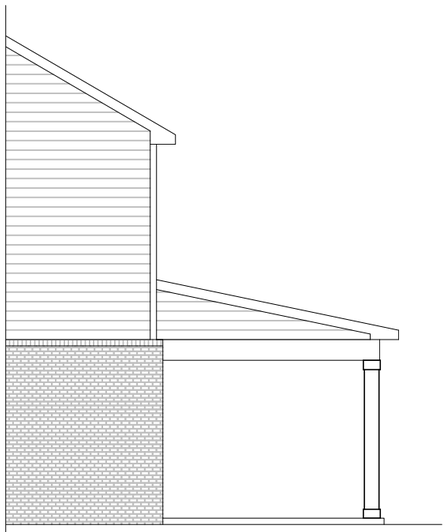
REAR ELEVATION
W/ OPT. COVERED PATIO



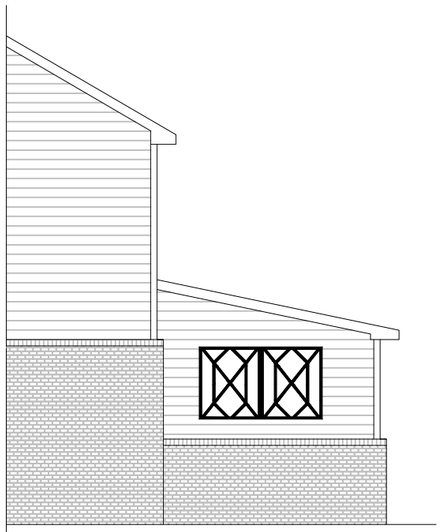
REAR ELEVATION
W/ OPT. COVERED PATIO
& PRIVACY WALL



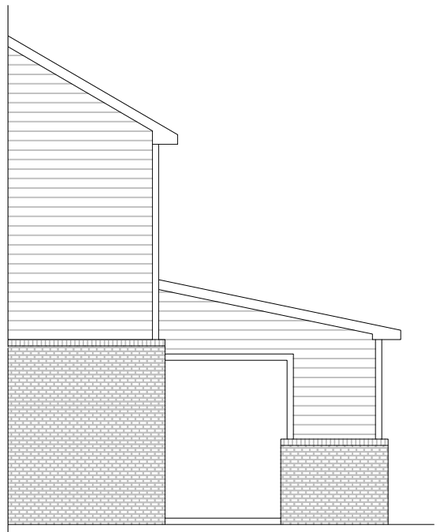
REAR ELEVATION
W/ OPT. COVERED PATIO
& FIREPLACE



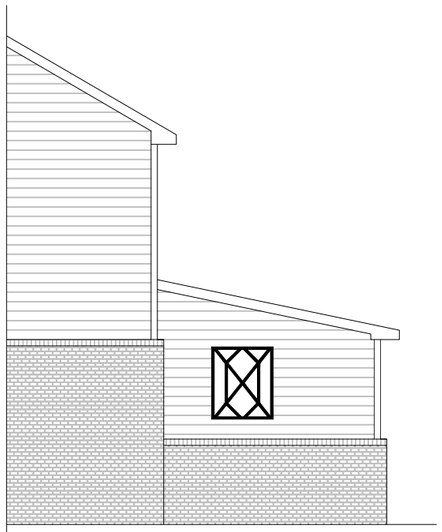
PARTIAL RIGHT ELEVATION
W/ OPT. COVERED PATIO



PARTIAL RIGHT ELEVATION
W/ OPT. COVERED PATIO
& PRIVACY WALL

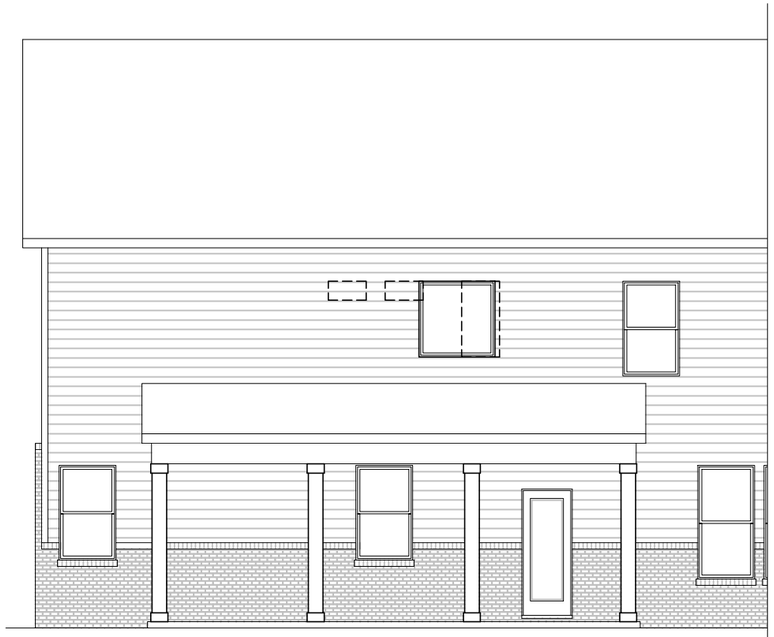


PARTIAL RIGHT ELEVATION
W/ OPT. COVERED PATIO
& FIREPLACE

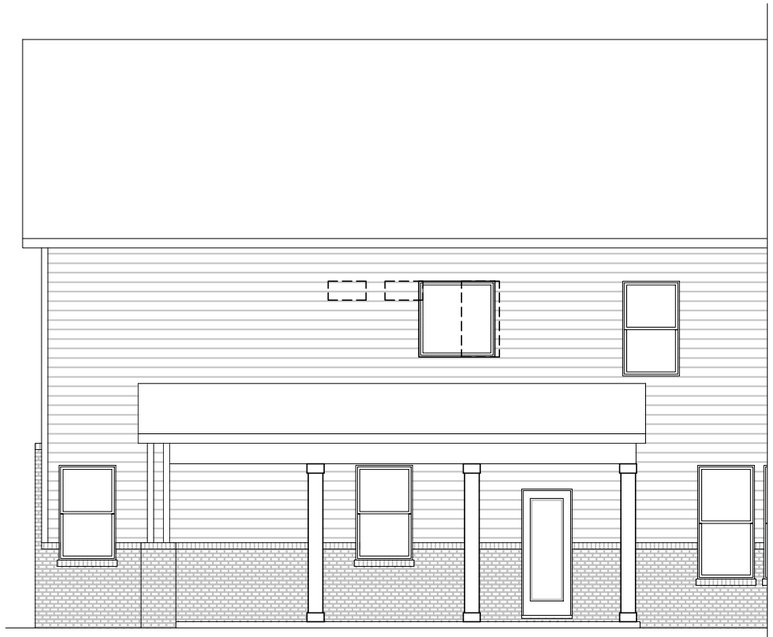


PARTIAL RIGHT ELEVATION
W/ OPT. COVERED PATIO
FIREPLACE & PRIVACY WALL

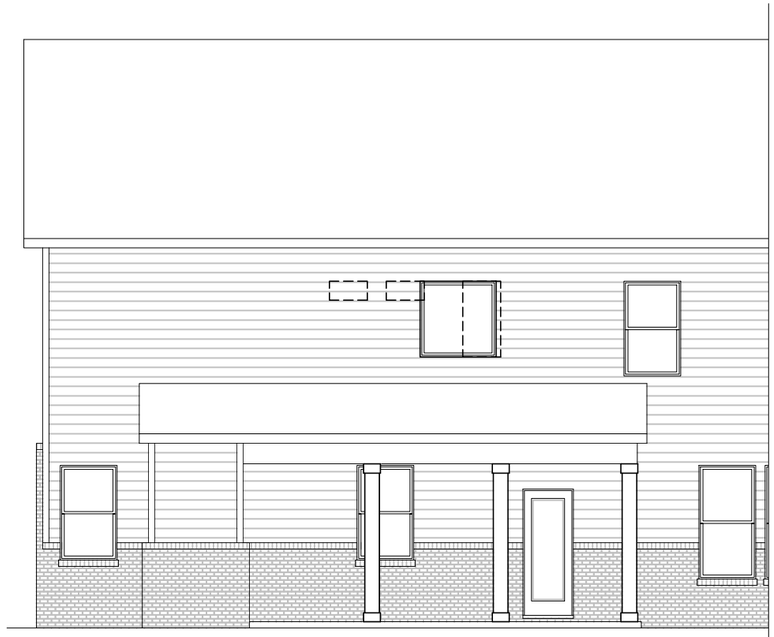
CAMBRIDGE



REAR ELEVATION
W/ OPT. EXTENDED
COVERED PATIO

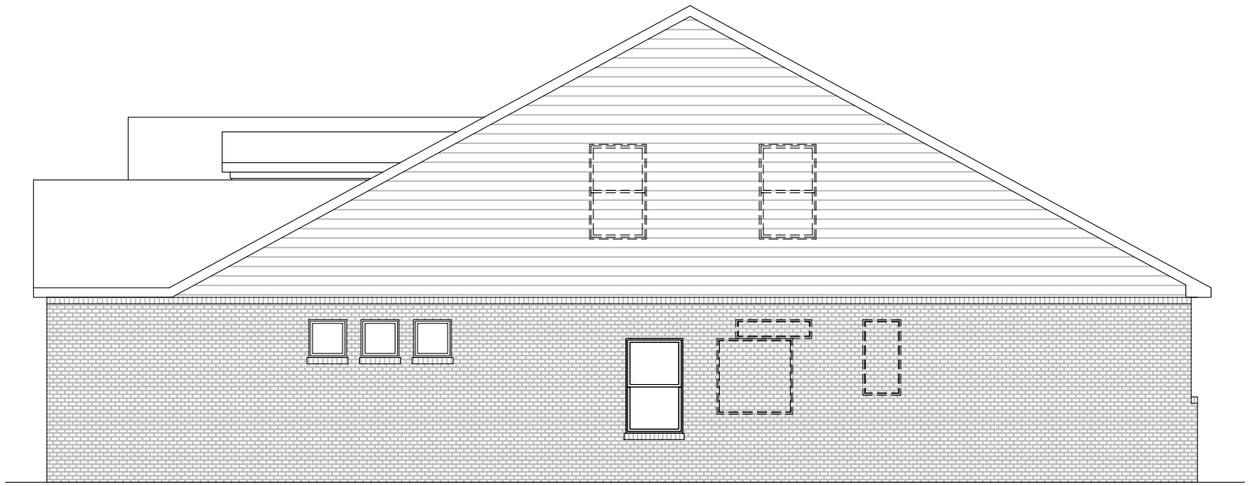


REAR ELEVATION
W/ OPT. EXT. COVERED PATIO
& PRIVACY WALL



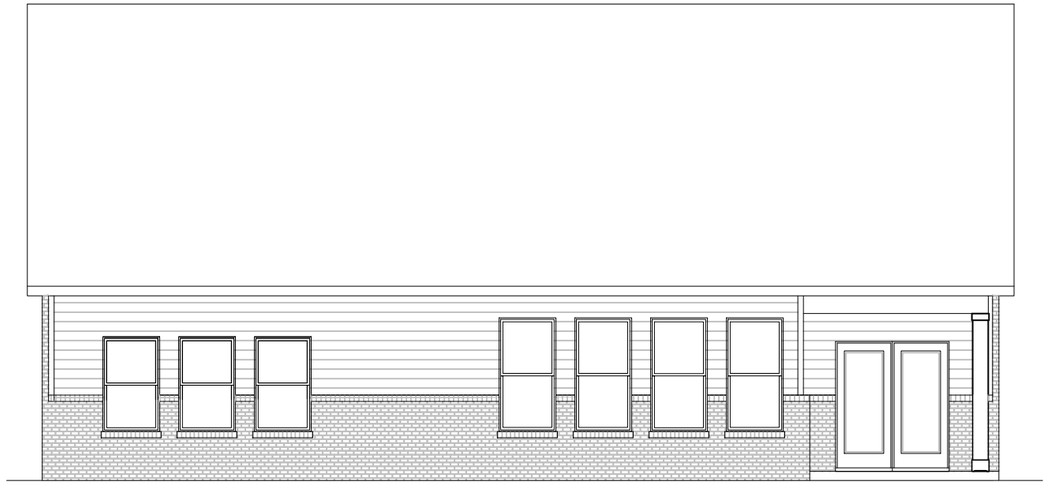
REAR ELEVATION
W/ OPT. EXT. COVERED PATIO
& FIREPLACE

KINGSTON



RIGHT ELEVATION

A-G



REAR ELEVATION

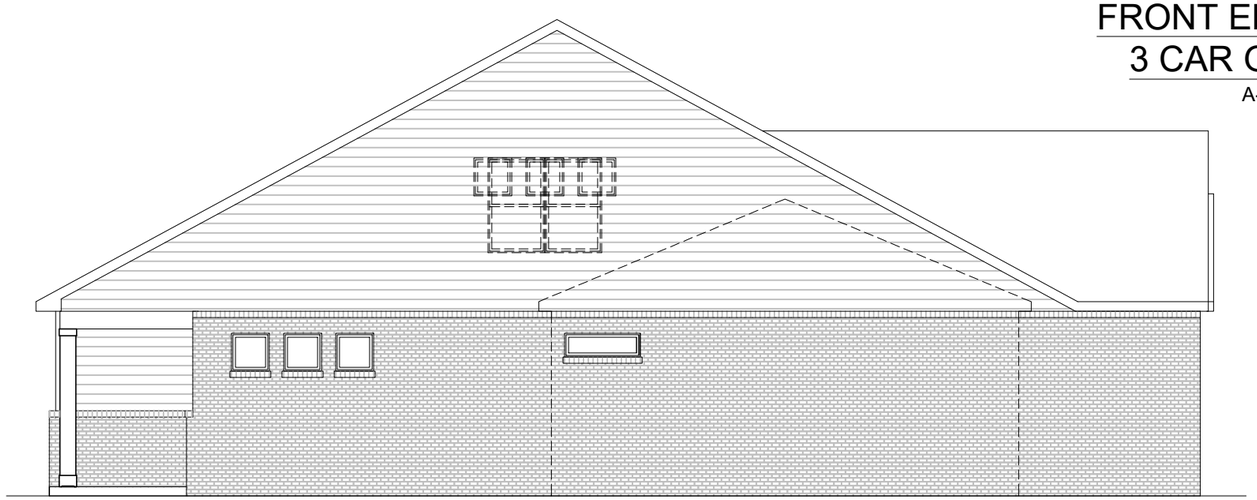
A-G



FRONT ELEVATION
3 CAR GARAGE

A-G

FRONT ELEV TOTAL SF		454 SF
BRICK	81 %	370 SF
STONE	0 %	0 SF
SIDING	3 %	12 SF
SHAKE	0 %	0 SF
B-N-B	16 %	72 SF



LEFT ELEVATION

A-G



FRONT ELEVATION

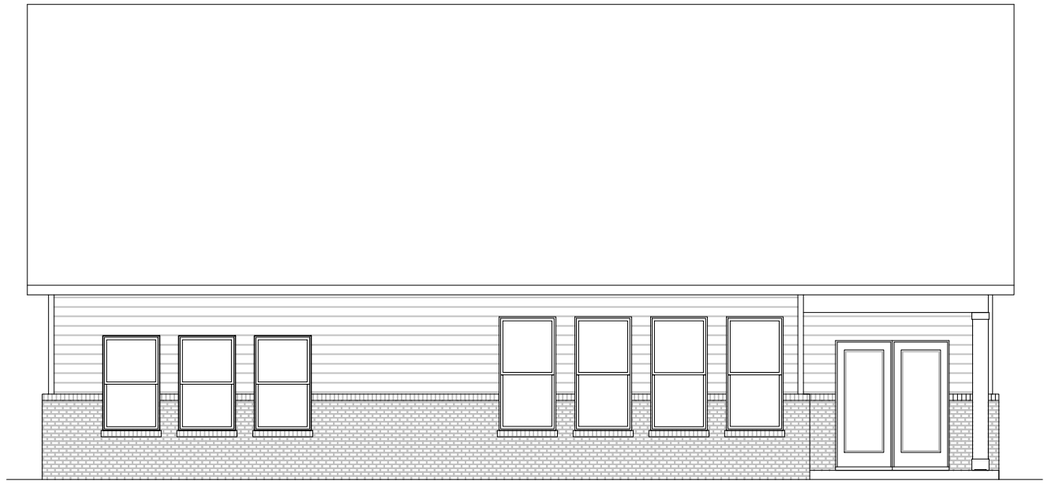
A-G

KINGSTON



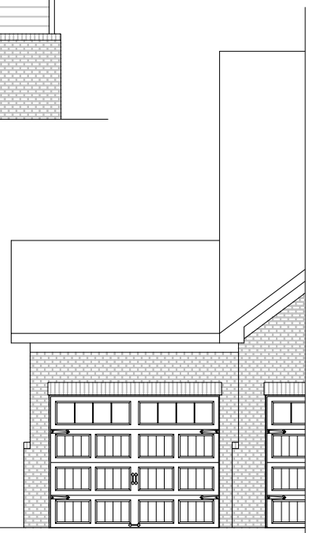
RIGHT ELEVATION

B-G



REAR ELEVATION

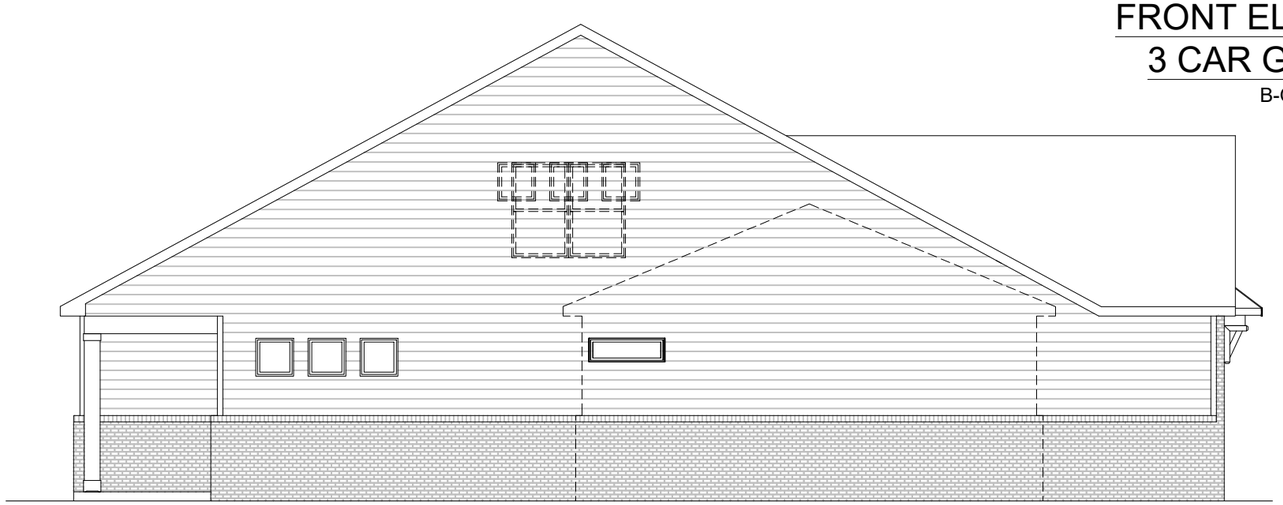
B-G



FRONT ELEVATION
3 CAR GARAGE

B-G

FRONT ELEV TOTAL SF		388 SF
BRICK	75 %	292 SF
STONE	0 %	0 SF
SIDING	0 %	0 SF
SHAKE	0 %	0 SF
B-N-B	25 %	96 SF



LEFT ELEVATION

B-G



FRONT ELEVATION

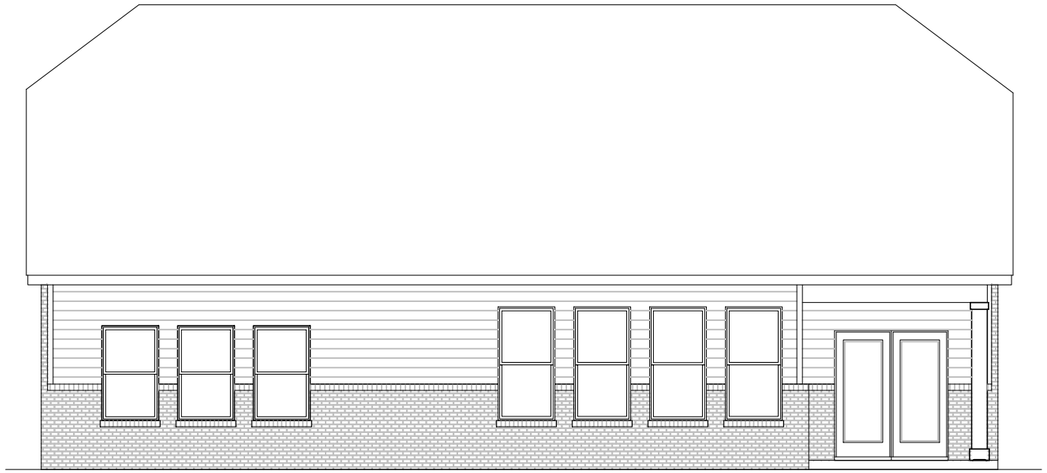
B-G

KINGSTON



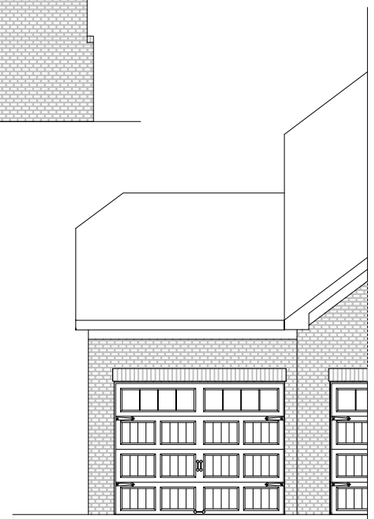
RIGHT ELEVATION

PB1-G



REAR ELEVATION

PB1-G

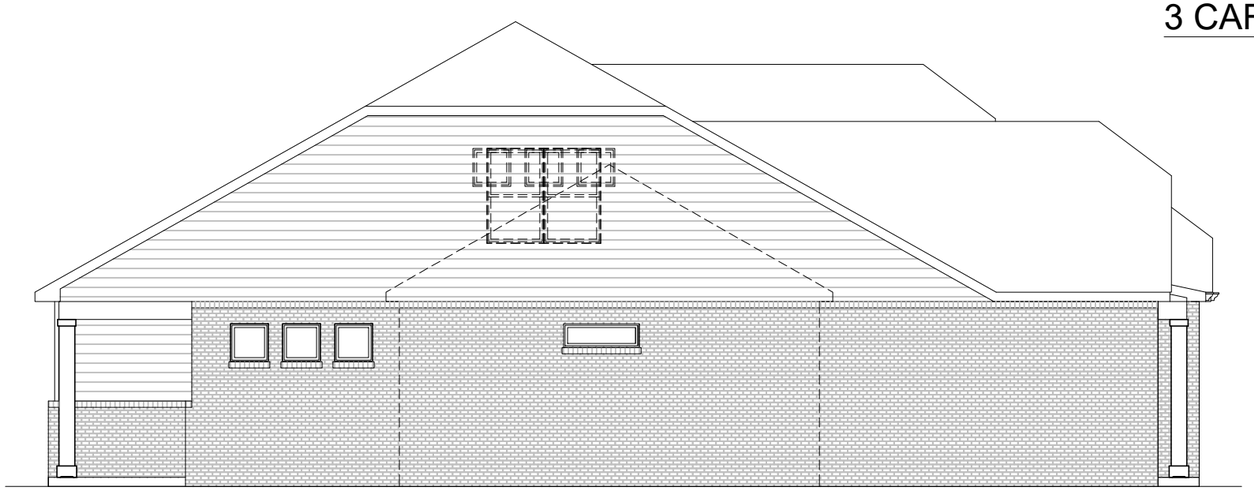


FRONT ELEVATION

3 CAR GARAGE

PB1-G

FRONT ELEV TOTAL SF		599 SF
BRICK	54 %	325 SF
STONE	0 %	0 SF
SIDING	0 %	0 SF
SHAKE	0 %	0 SF
B-N-B	46 %	274 SF



LEFT ELEVATION

PB1-G



FRONT ELEVATION

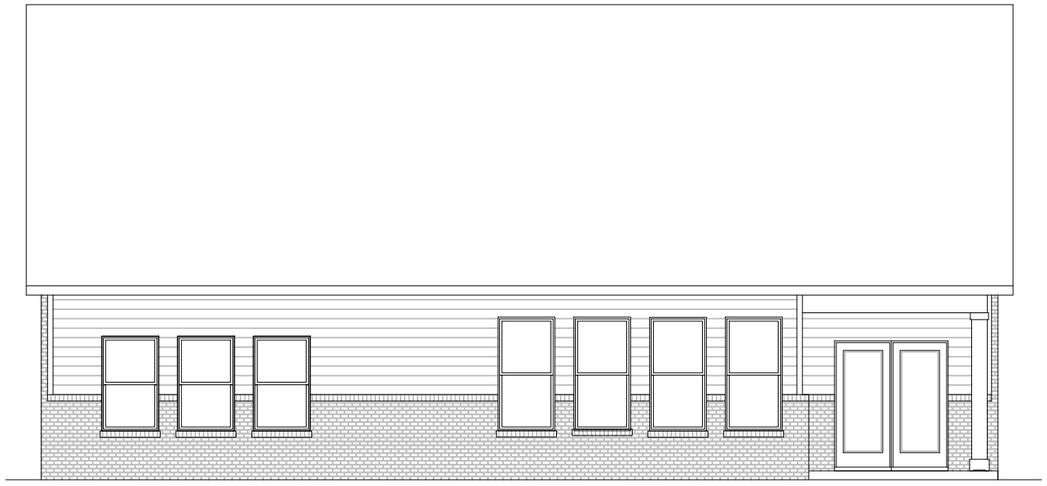
PB1-G

KINGSTON



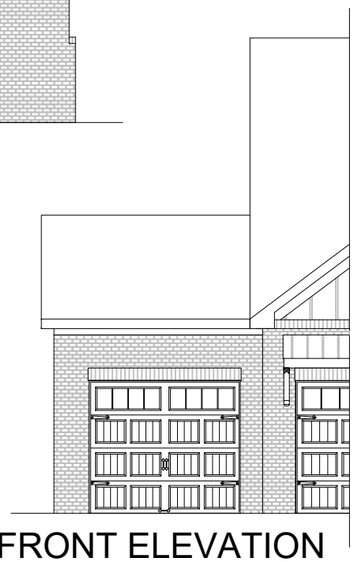
RIGHT ELEVATION

PB2-G



REAR ELEVATION

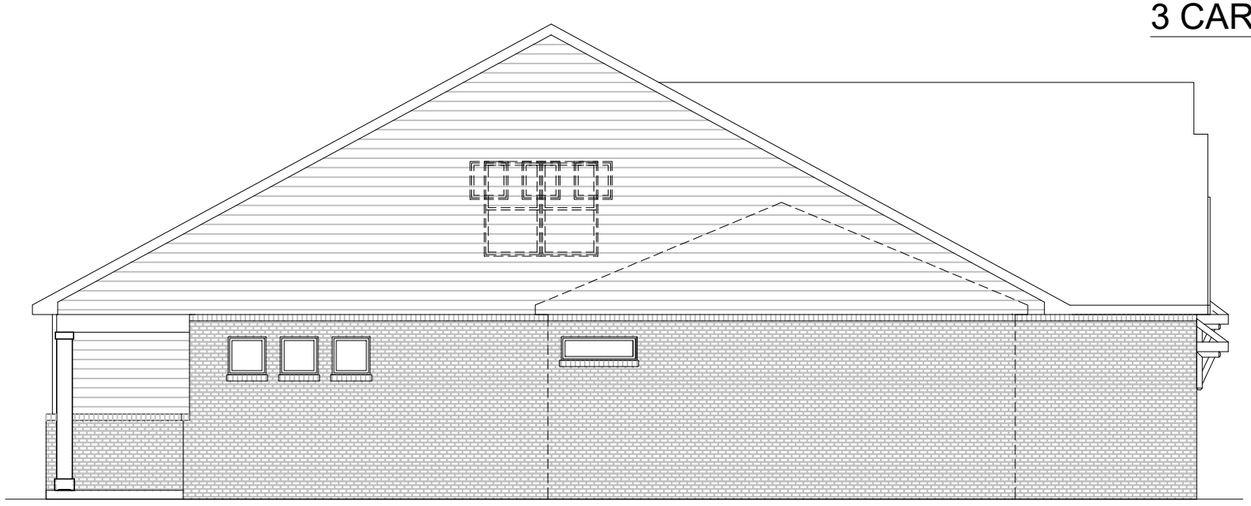
PB2-G



FRONT ELEVATION
3 CAR GARAGE

PB2-G

FRONT ELEV TOTAL SF		423 SF
BRICK	64 %	271 SF
STONE	0 %	0 SF
SIDING	0 %	0 SF
SHAKE	0 %	0 SF
B-N-B	36 %	152 SF



LEFT ELEVATION

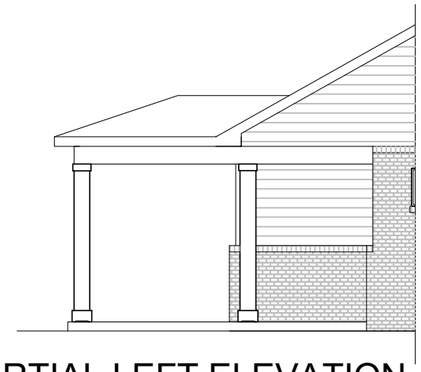
PB2-G



FRONT ELEVATION

PB2-G

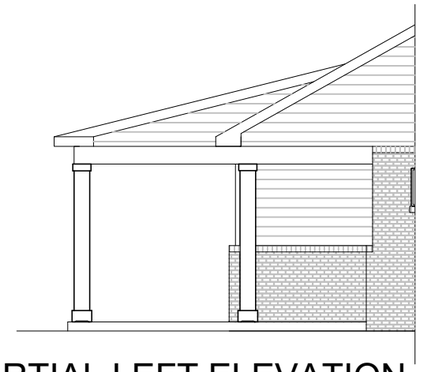
KINGSTON



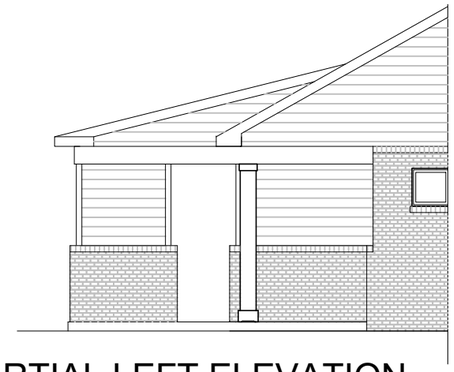
PARTIAL LEFT ELEVATION
W/ OPT. COVERED PATIO
EXTENSION I



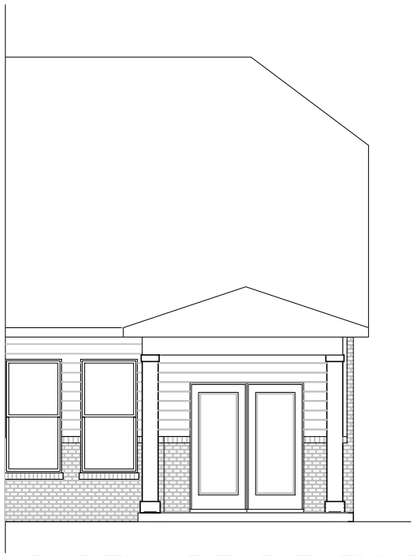
PARTIAL LEFT ELEVATION
W/ OPT. COVERED PATIO
EXTENSION I & FIREPLACE



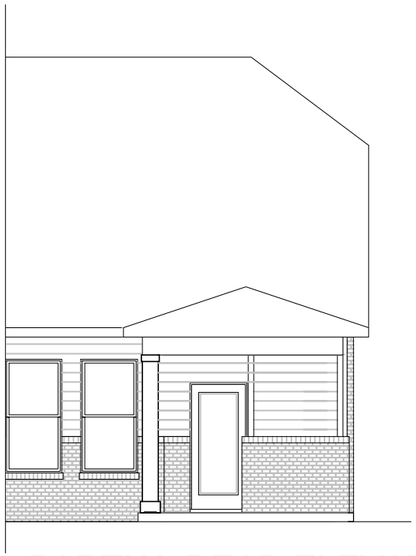
PARTIAL LEFT ELEVATION
W/ OPT. COVERED PATIO
EXTENSION II



PARTIAL LEFT ELEVATION
W/ OPT. COVERED PATIO
EXTENSION II & FIREPLACE



PARTIAL REAR ELEVATION
W/ OPT. COVERED PATIO
EXTENSION I



PARTIAL REAR ELEVATION
W/ OPT. COVERED PATIO
EXTENSION I & FIREPLACE

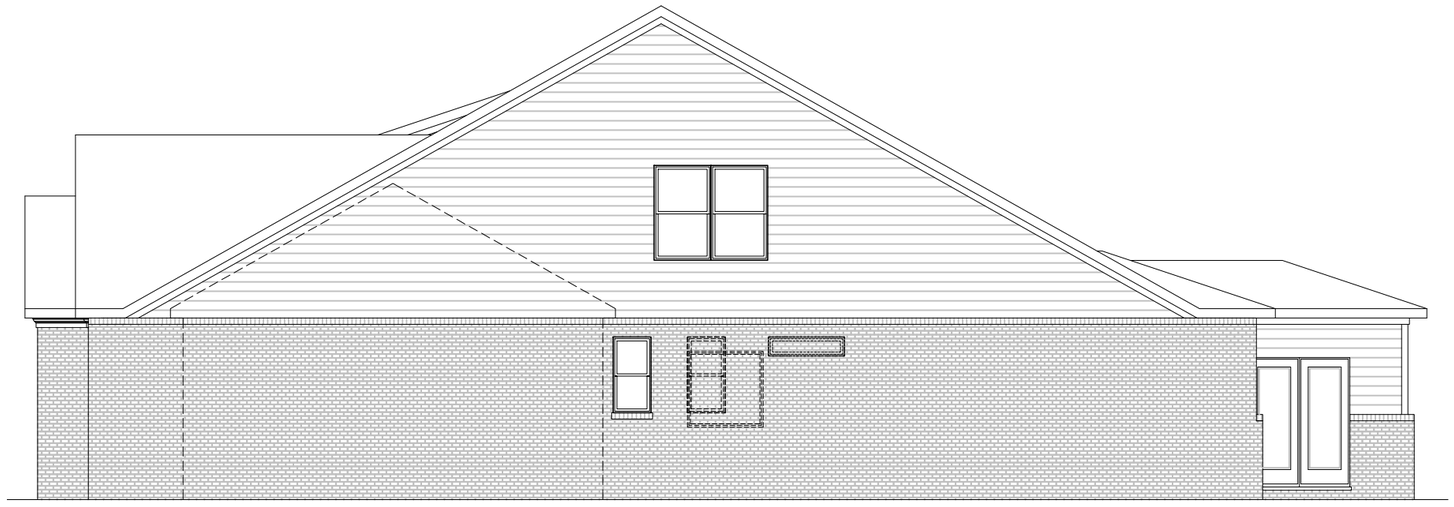


PARTIAL REAR ELEVATION
W/ OPT. COVERED PATIO
EXTENSION II



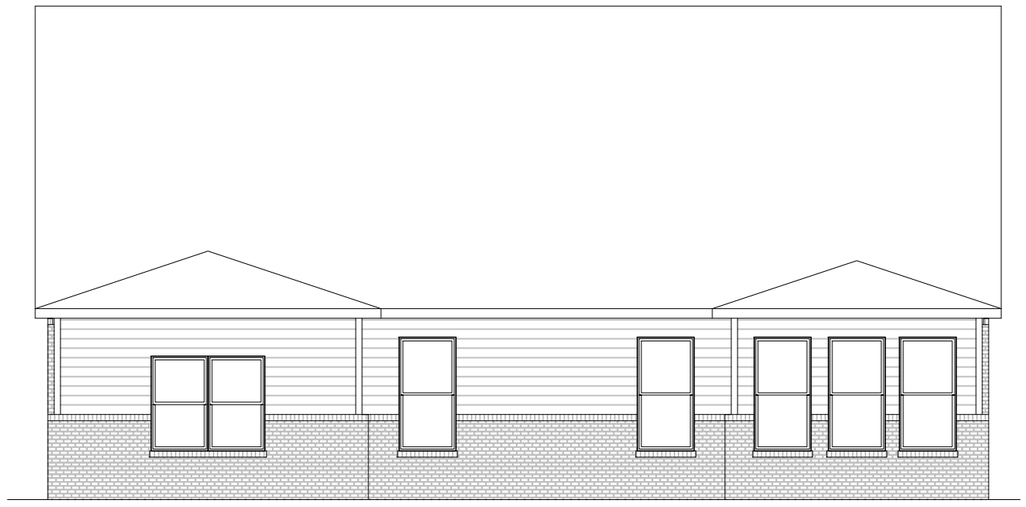
PARTIAL REAR ELEVATION
W/ OPT. COVERED PATIO
EXTENSION II & FIREPLACE

NOAH



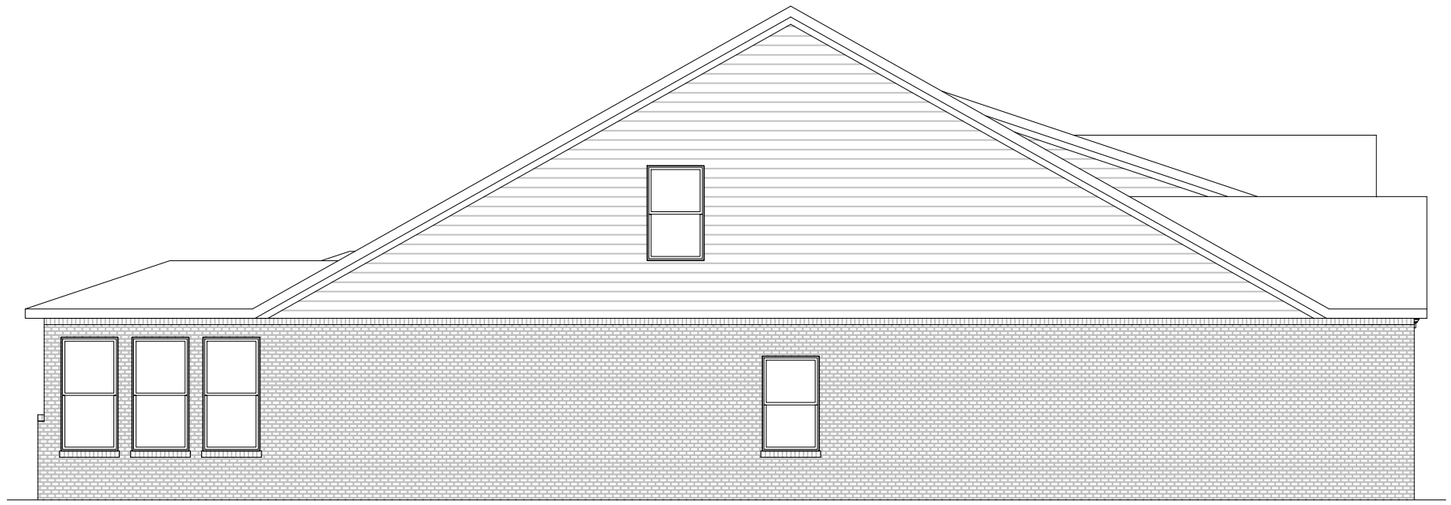
RIGHT ELEVATION

E-G



REAR ELEVATION

E-G



LEFT ELEVATION

E-G



FRONT ELEVATION

E-G

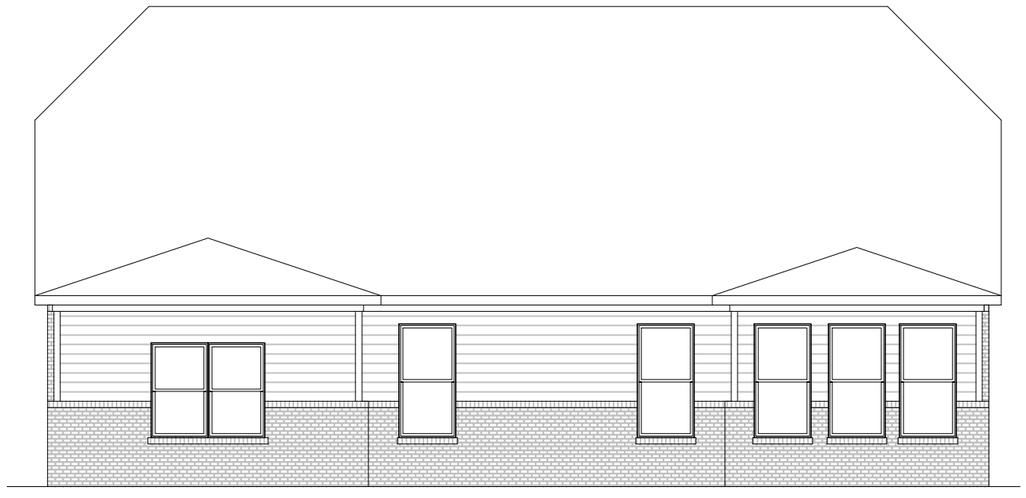
MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		**293 SF**
BRICK		238 SF
STONE		0 SF
SIDING		0 SF
SHAKE		55 SF
B-N-B		0 SF

NOAH



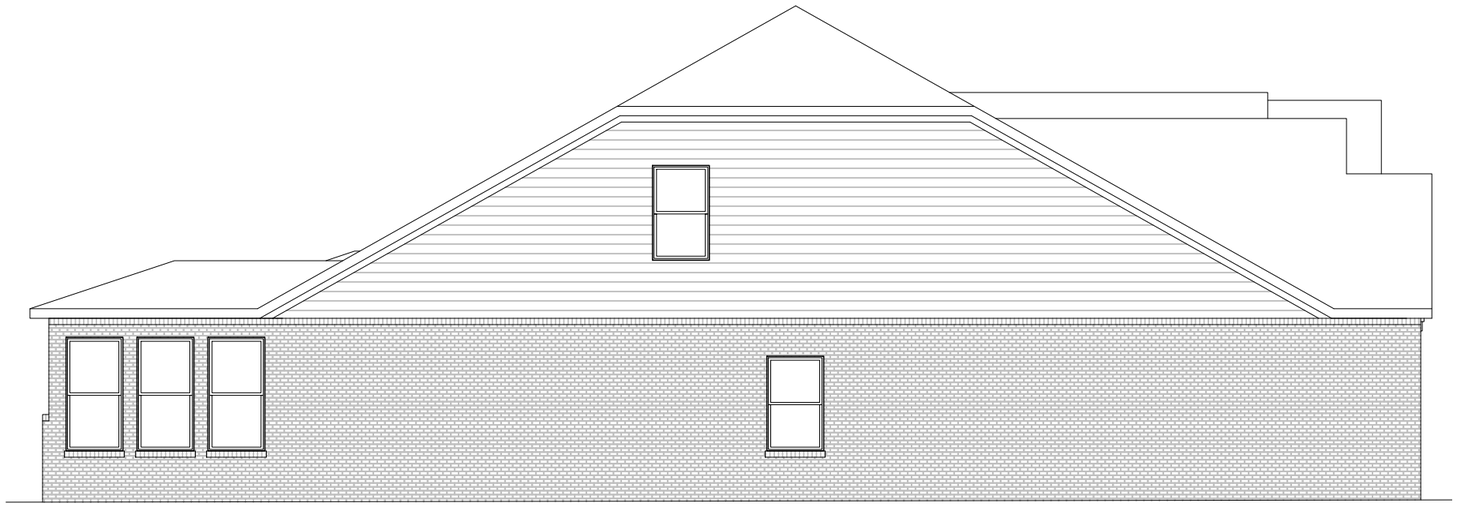
RIGHT ELEVATION

I-G



REAR ELEVATION

I-G



LEFT ELEVATION

I-G



FRONT ELEVATION

I-G

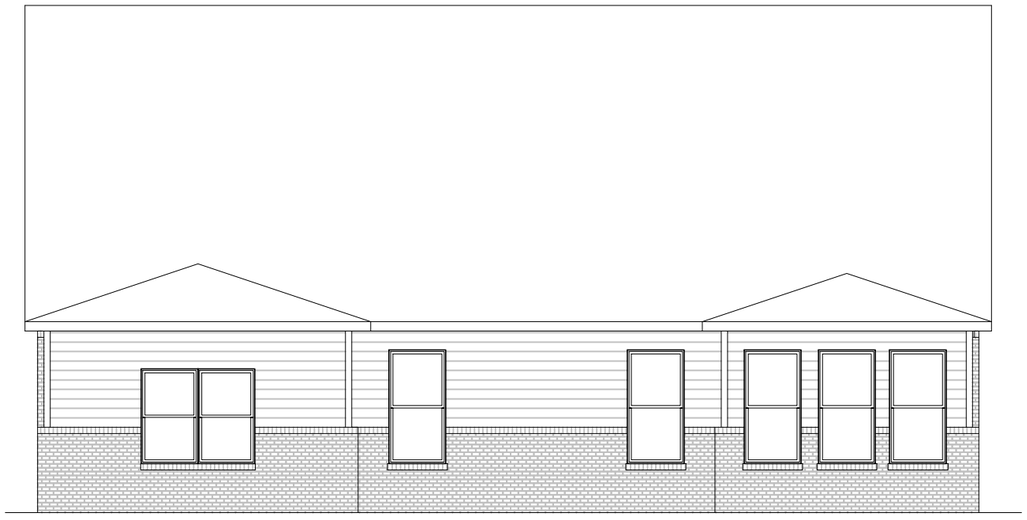
MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		371 SF
BRICK		341 SF
STONE		0 SF
SIDING		0 SF
SHAKE		30 SF
B-N-B		0 SF

NOAH



RIGHT ELEVATION

PB2-G



REAR ELEVATION

PB2-G



LEFT ELEVATION

PB2-G



FRONT ELEVATION

PB2-G

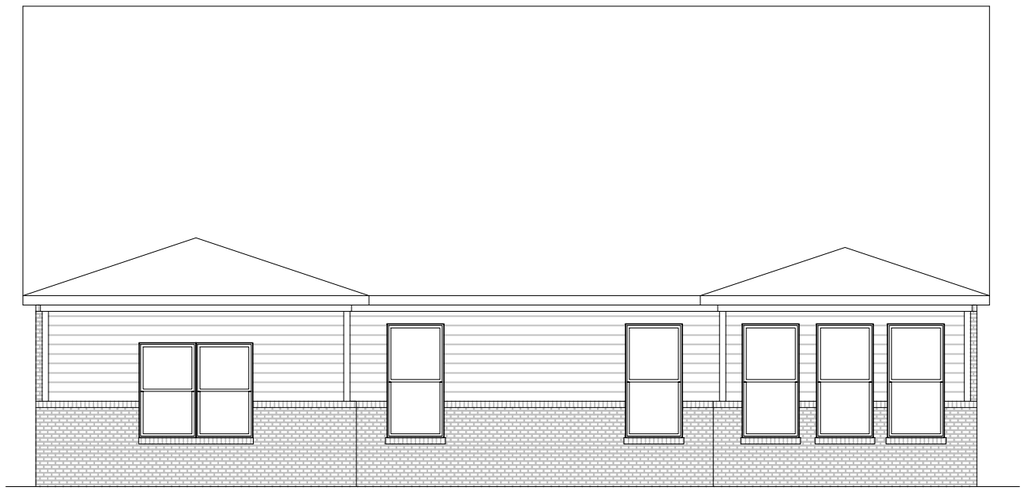
MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		371 SF
BRICK		246 SF
STONE		0 SF
SIDING		0 SF
SHAKE		0 SF
B-N-B		125 SF

NOAH



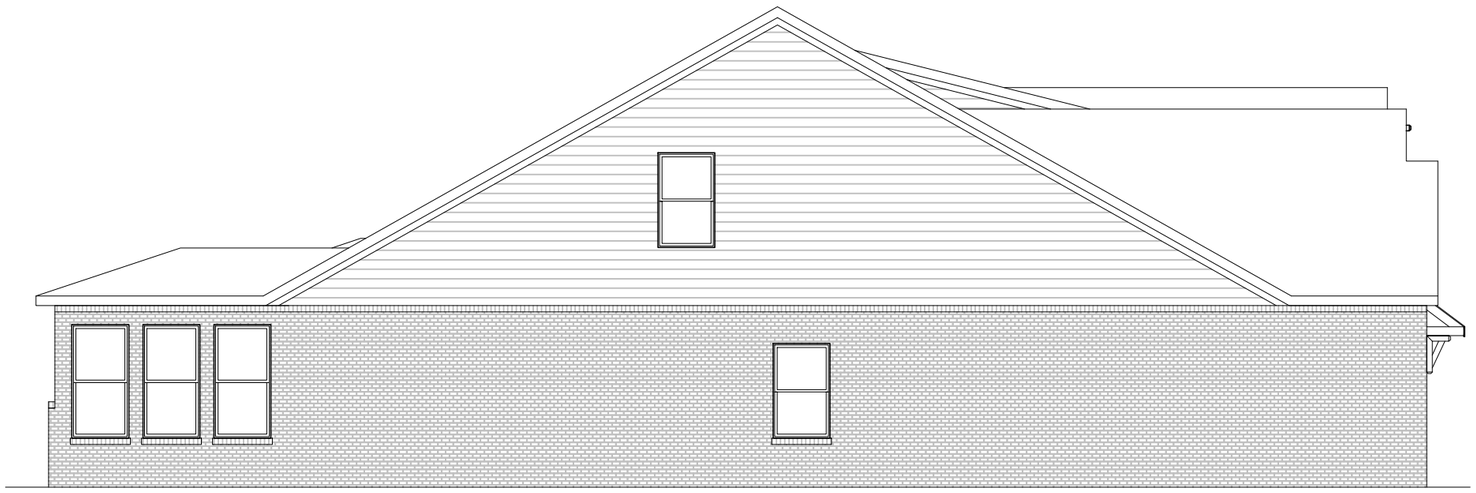
RIGHT ELEVATION

PB3-G



REAR ELEVATION

PB3-G



LEFT ELEVATION

PB3-G

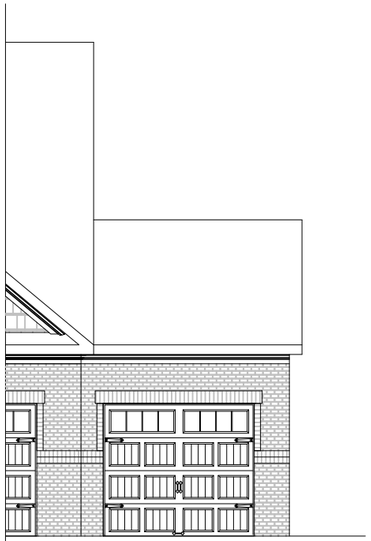


FRONT ELEVATION

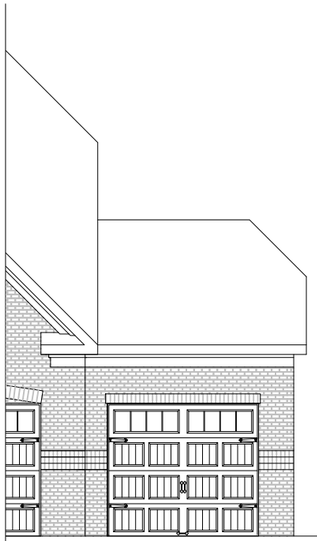
PB3-G

MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		431 SF
BRICK		354 SF
STONE		0 SF
SIDING		0 SF
SHAKE		0 SF
B-N-B		77 SF

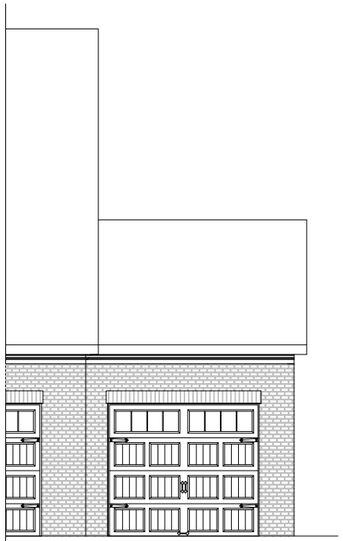
NOAH



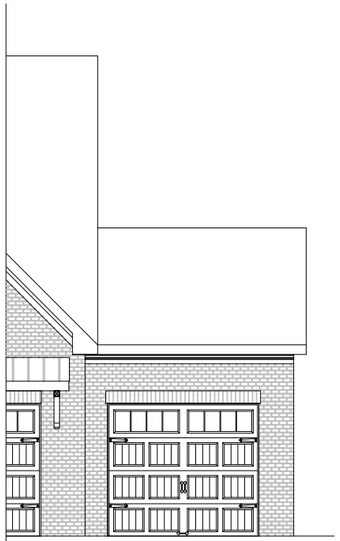
FRONT ELEVATION
3 CAR GARAGE
E-G



FRONT ELEVATION
3 CAR GARAGE
I-G



FRONT ELEVATION
3 CAR GARAGE
PB2-G

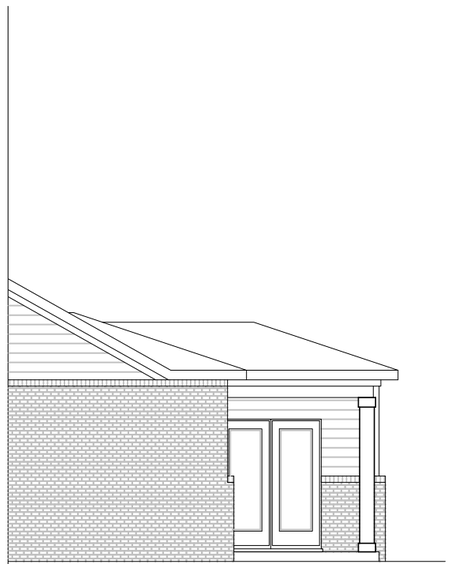


FRONT ELEVATION
3 CAR GARAGE
PB3-G

NOAH



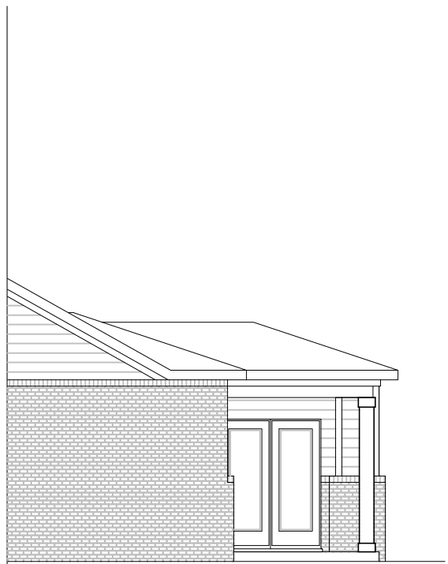
REAR ELEVATION
W/ OPT. COVERED PATIO



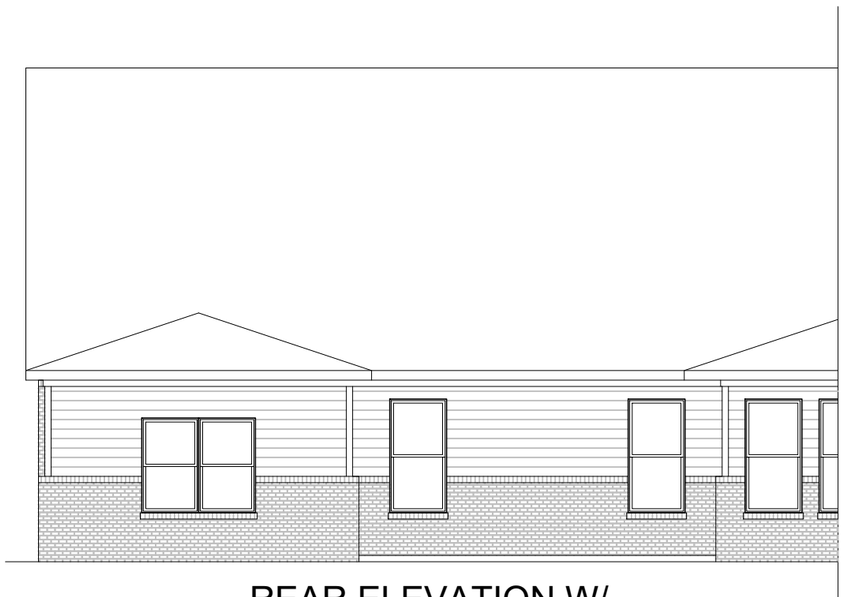
RIGHT ELEVATION
W/ OPT. COVERED PATIO



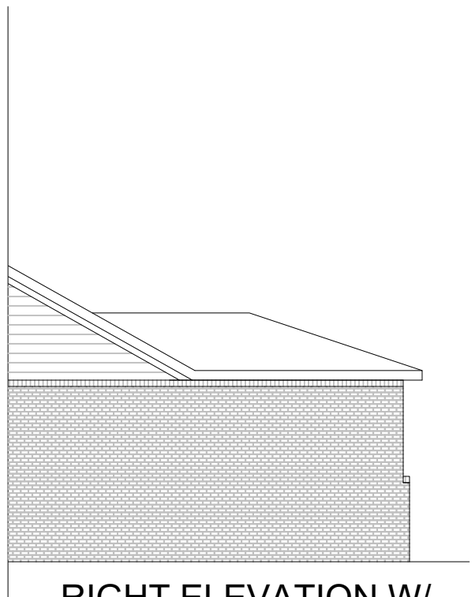
REAR ELEVATION
W/ OPT. COVERED PATIO
& FIREPLACE



RIGHT ELEVATION
W/ OPT. COVERED PATIO
& FIREPLACE



REAR ELEVATION W/
EXT. PRIMARY SUITE

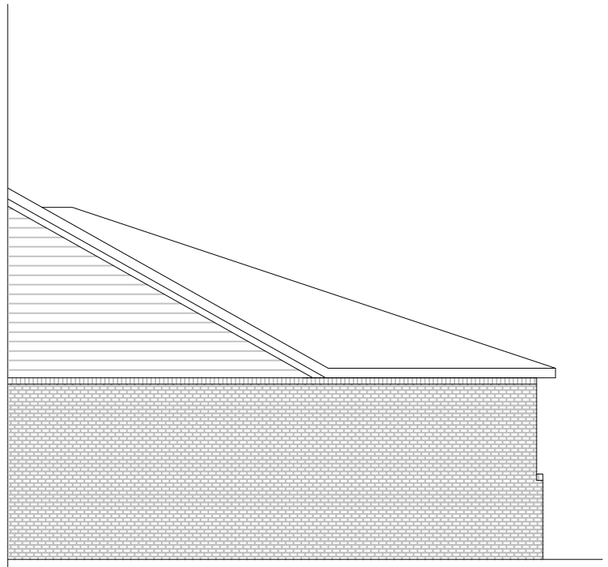


RIGHT ELEVATION W/
EXT. PRIMARY SUITE

NOAH

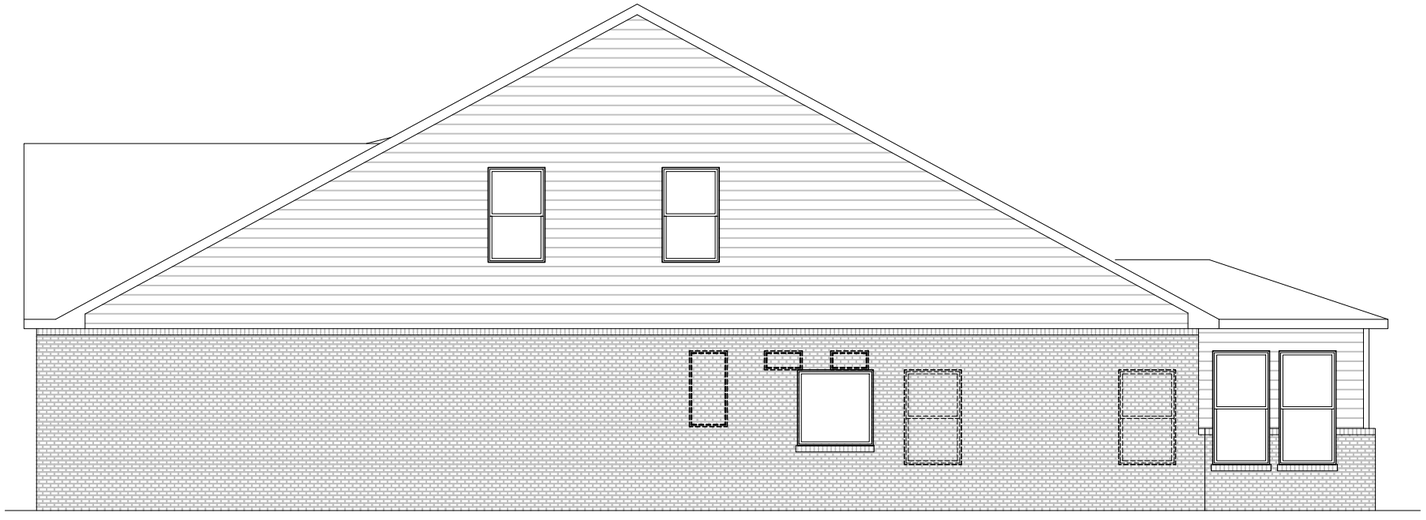


REAR ELEVATION W/ OPT. COVERED PATIO
& EXT. PRIMARY SUITE



RIGHT ELEVATION
W/ OPT. COVERED PATIO &
EXT. PRIMARY SUITE

NOBLE



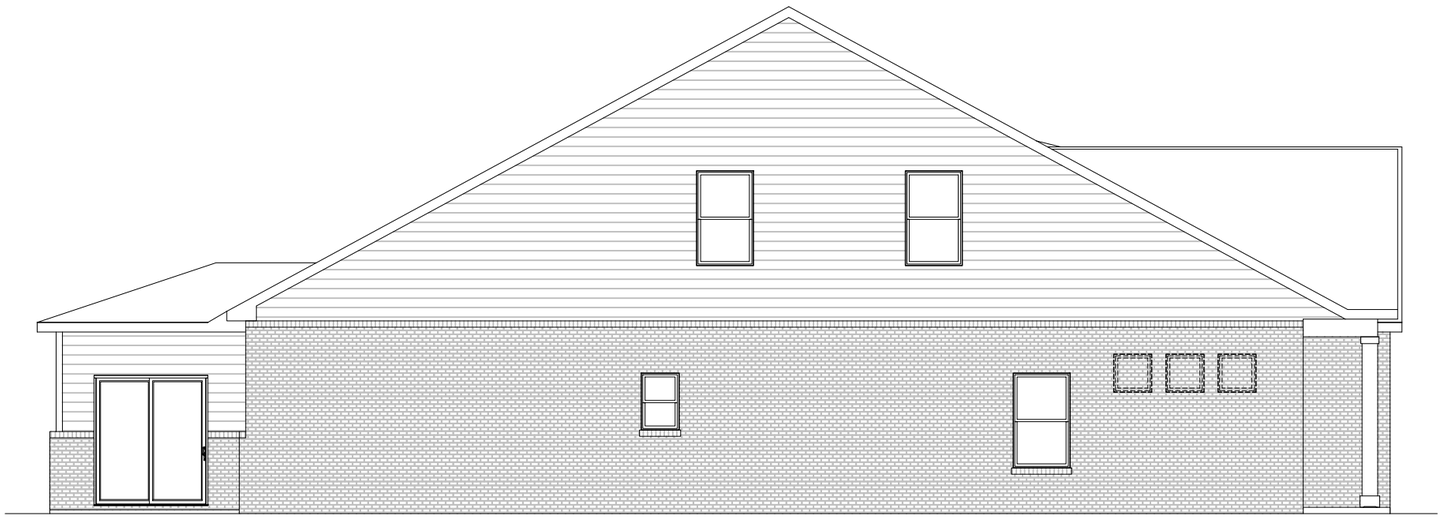
RIGHT ELEVATION

A-G



REAR ELEVATION

A-G



LEFT ELEVATION

A-G



FRONT ELEVATION

A-G

MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		360 SF
BRICK		213 SF
STONE		0 SF
SIDING		0 SF
SHAKE		0 SF
B-N-B		147 SF

NOBLE



RIGHT ELEVATION

B-G



REAR ELEVATION

B-G



LEFT ELEVATION

B-G



FRONT ELEVATION

B-G

MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		368 SF
BRICK		227 SF
STONE		0 SF
SIDING		0 SF
SHAKE		0 SF
B-N-B		141 SF

NOBLE



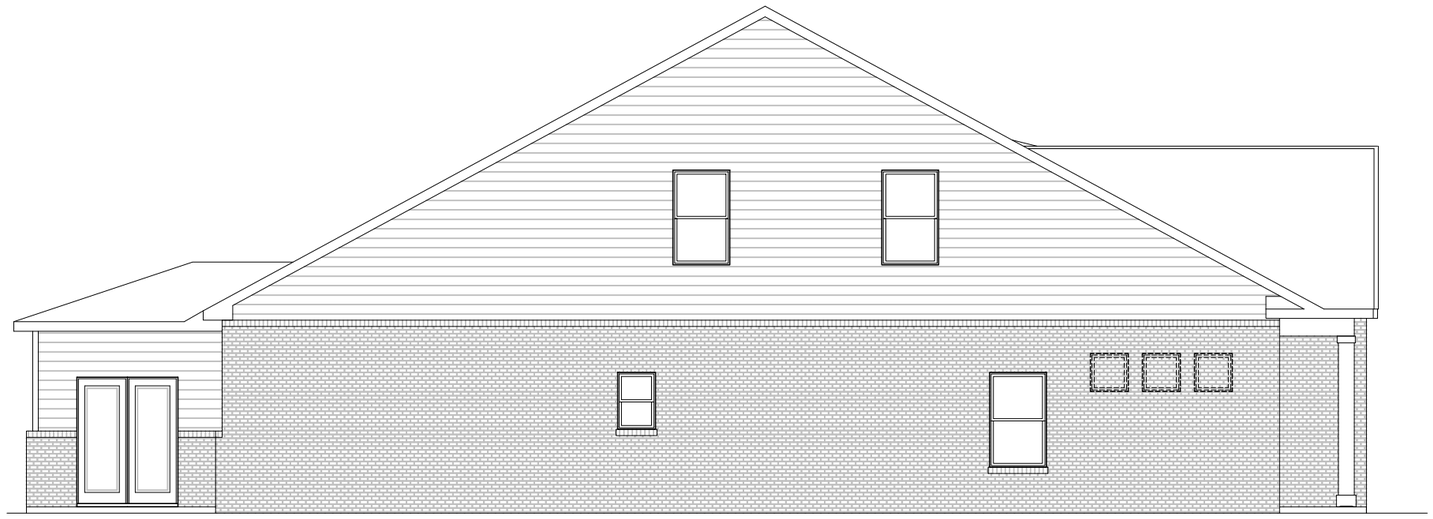
RIGHT ELEVATION

PB1-G



REAR ELEVATION

PB1-G



LEFT ELEVATION

PB1-G



FRONT ELEVATION

PB1-G

MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		360 SF
BRICK		213 SF
STONE		0 SF
SIDING		0 SF
SHAKE		0 SF
B-N-B		147 SF

NOBLE



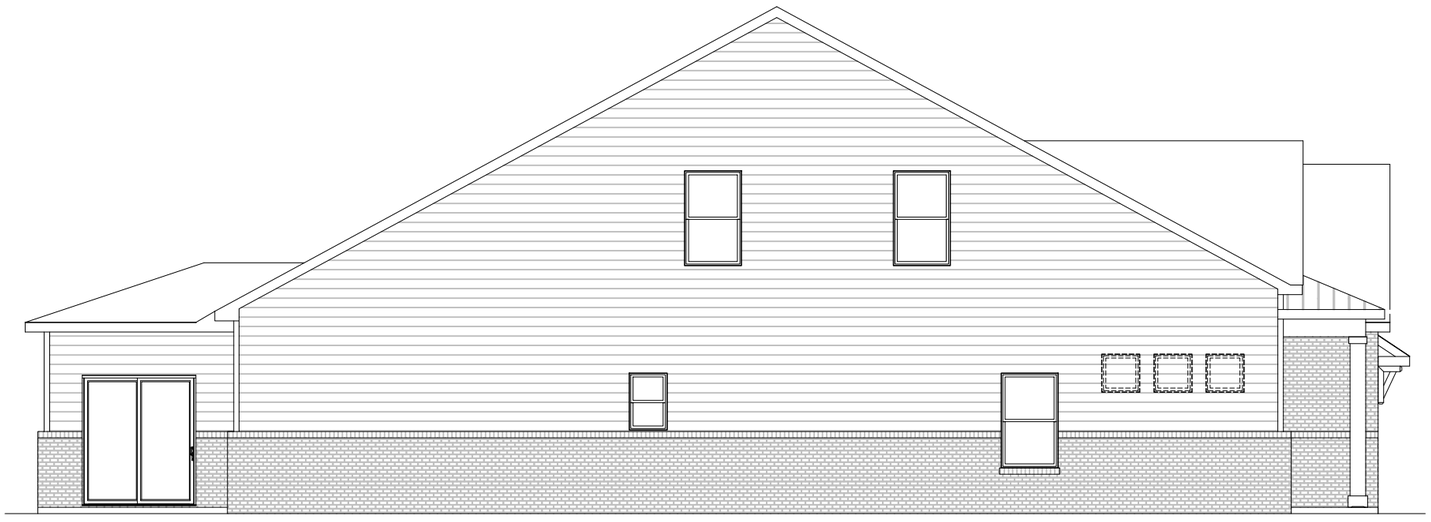
RIGHT ELEVATION

PB2-G



REAR ELEVATION

PB2-G



LEFT ELEVATION

PB2-G



FRONT ELEVATION

PB2-G

MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		**379 SF**
BRICK		233 SF
STONE		0 SF
SIDING		0 SF
SHAKE		0 SF
B-N-B		146 SF

NOBLE



REAR ELEVATION W/
OPT. COVERED PATIO
EXTENSION 1



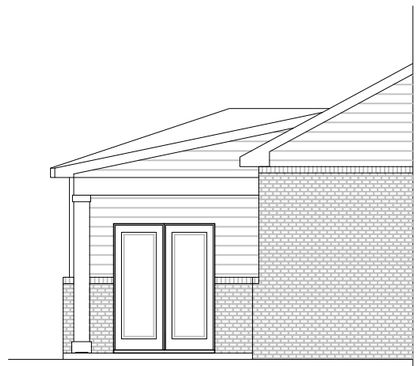
REAR ELEVATION W/ OPT.
COVERED PATIO
EXTENSION 1 W/ FIREPLACE



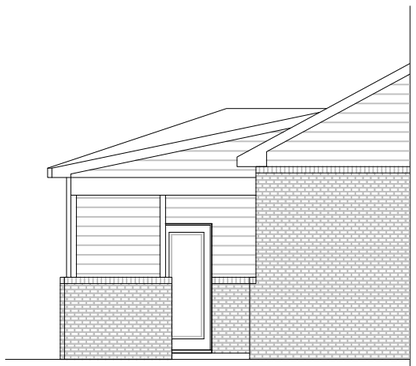
REAR ELEVATION W/ OPT.
COVERED PATIO EXTENSION 2



REAR ELEVATION W/ OPT.
COVERED PATIO EXTENSION 2

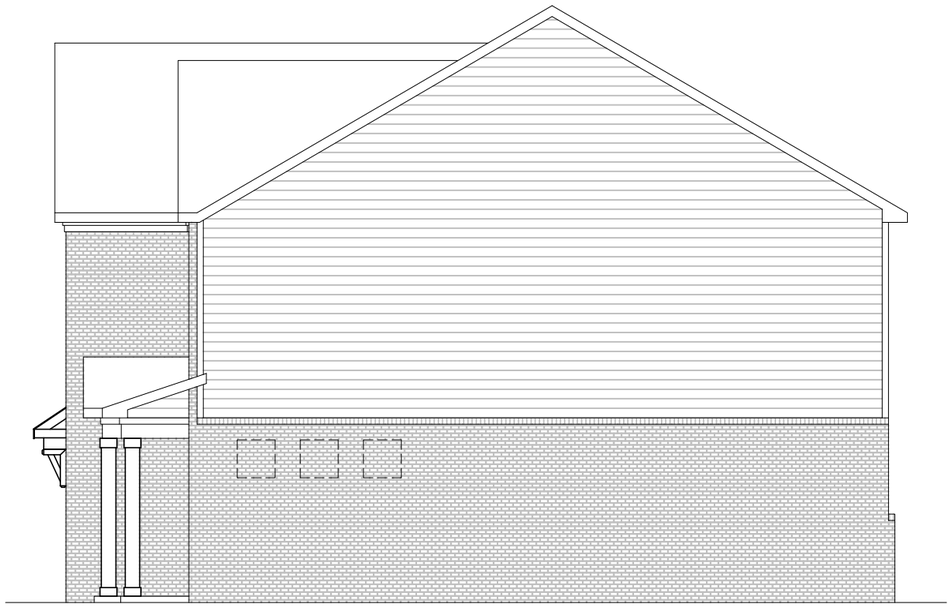


LEFT ELEVATION W/
OPT. COVERED PATIO
EXTENSION 1 & 2



LEFT ELEVATION W/
OPT. COVERED PATIO
EXTENSION 1 & 2 W/
FIREPLACE

ROSEWOOD



RIGHT ELEVATION

A-G



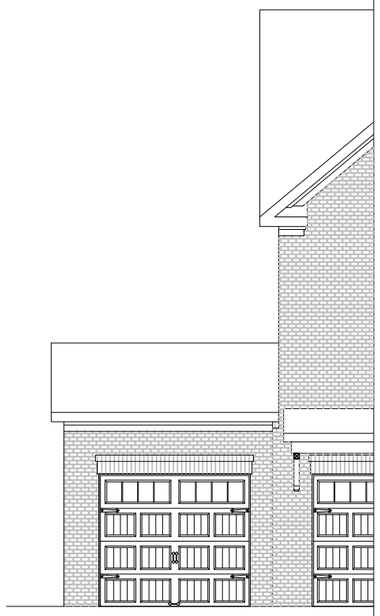
REAR ELEVATION

A-G



LEFT ELEVATION

A-G



FRONT ELEVATION
3 CAR GARAGE

A-G

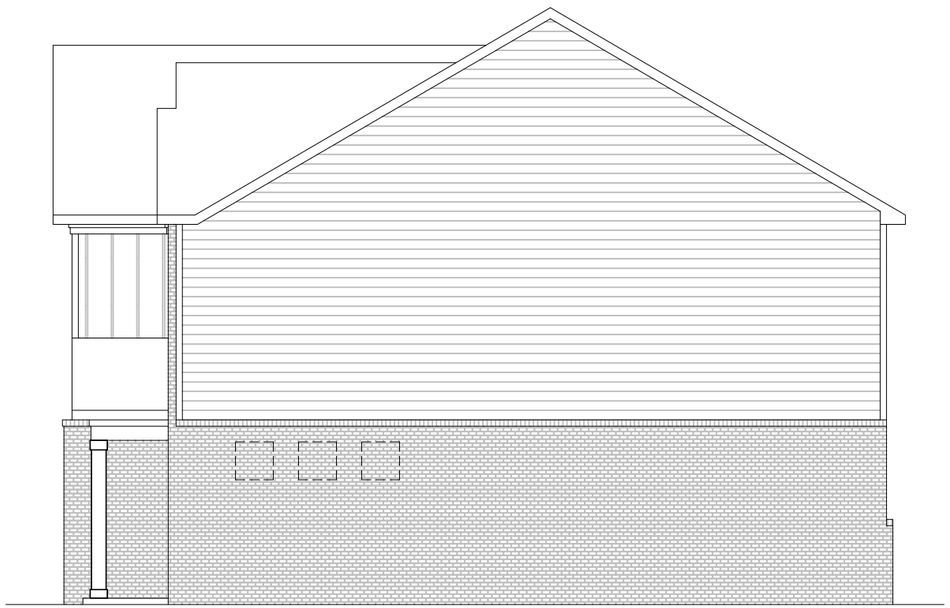


FRONT ELEVATION

A-G

MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		763 SF
BRICK		719 SF
STONE		0 SF
SIDING		0 SF
SHAKE		44 SF
B-N-B		0 SF

ROSEWOOD



RIGHT ELEVATION

D-G



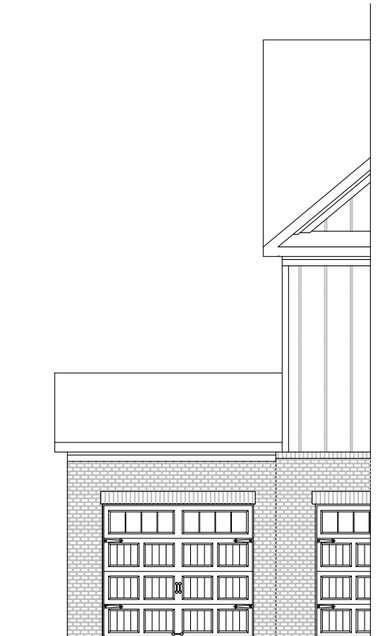
REAR ELEVATION

D-G



LEFT ELEVATION

D-G



FRONT ELEVATION
3 CAR GARAGE

D-G

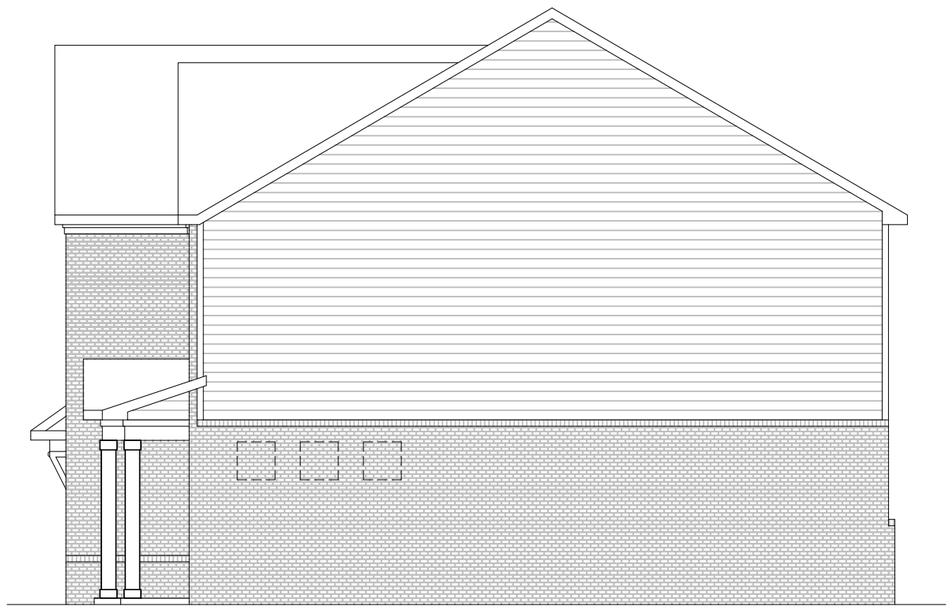


FRONT ELEVATION

D-G

MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		698 SF
BRICK		462 SF
STONE		0 SF
SIDING		0 SF
SHAKE		0 SF
B-N-B		236 SF

ROSEWOOD



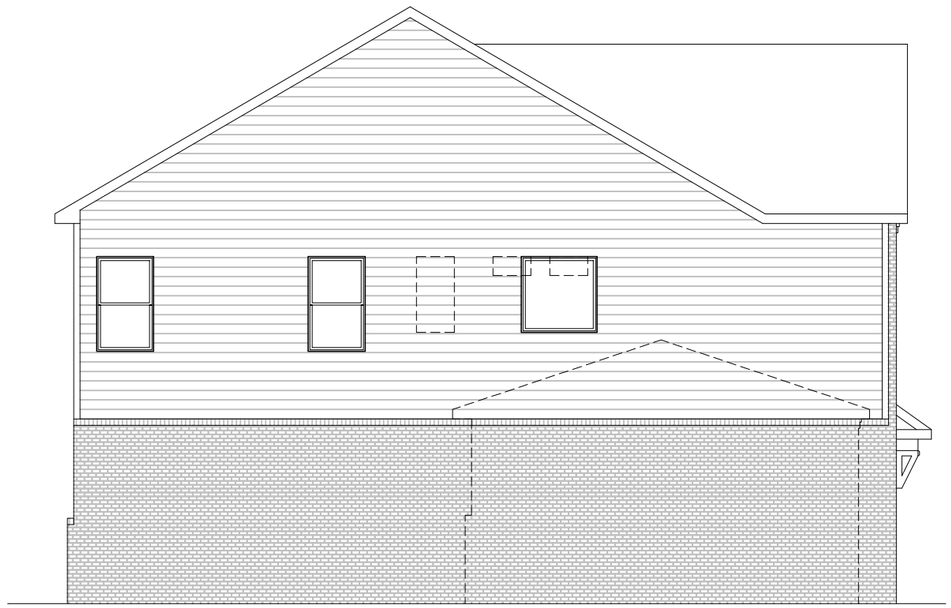
RIGHT ELEVATION

E-G



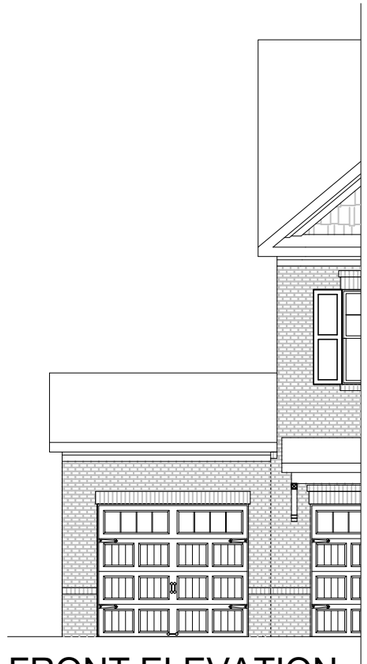
REAR ELEVATION

E-G



LEFT ELEVATION

E-G



FRONT ELEVATION

3 CAR GARAGE

E-G

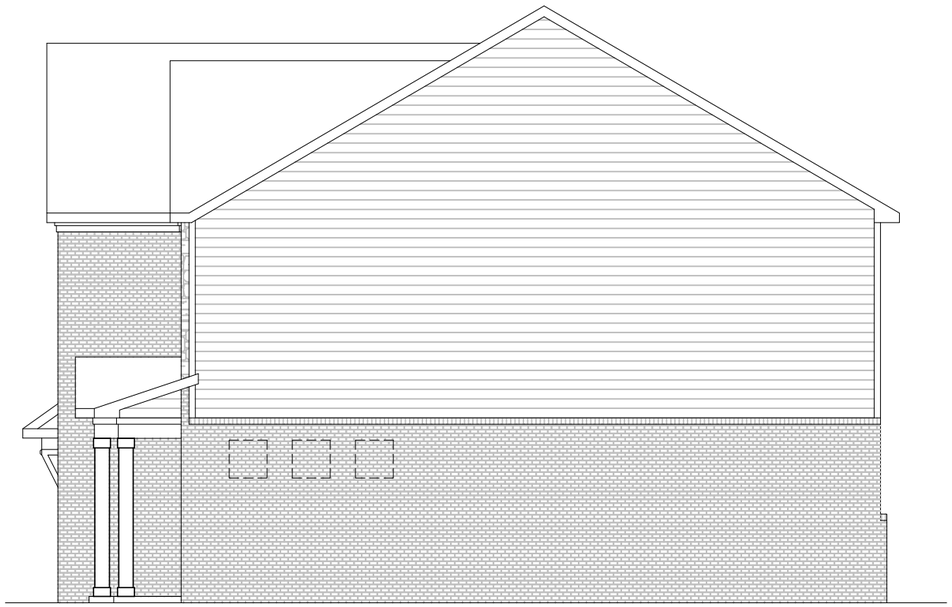


FRONT ELEVATION

E-G

MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		**691 SF**
BRICK		588 SF
STONE		0 SF
SIDING		0 SF
SHAKE		103 SF
B-N-B		0 SF

ROSEWOOD



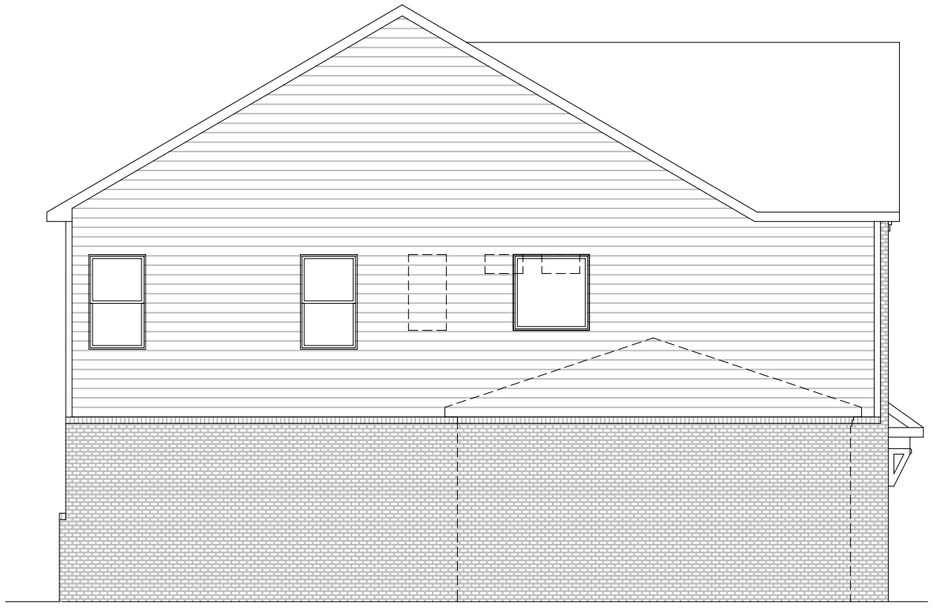
RIGHT ELEVATION

I-G



REAR ELEVATION

I-G



LEFT ELEVATION

I-G



FRONT ELEVATION
3 CAR GARAGE

I-G



FRONT ELEVATION

I-G

MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		976 SF
BRICK		400 SF
STONE		192 SF
SIDING		0 SF
SHAKE		98 SF
B-N-B		286 SF

ROSEWOOD



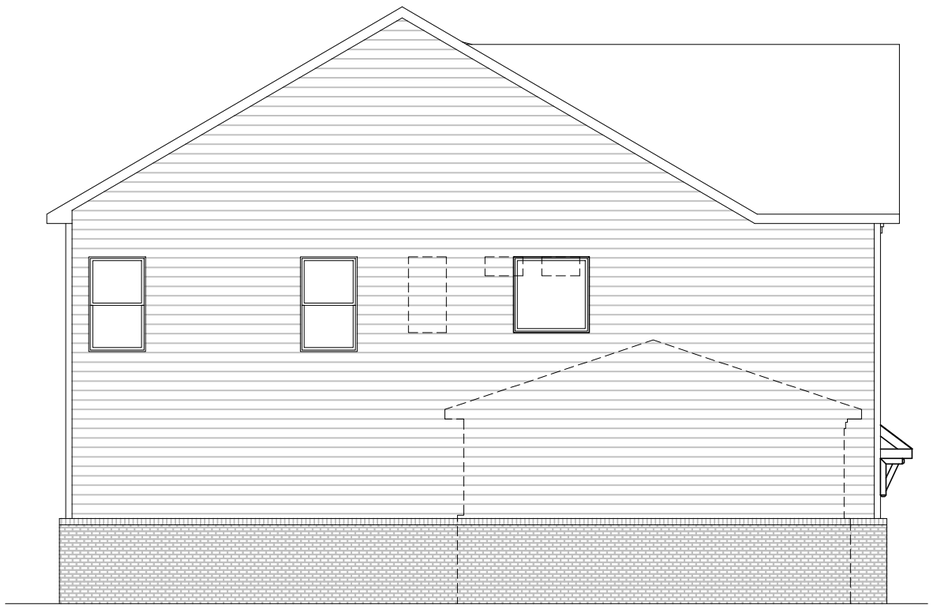
RIGHT ELEVATION

PB2-G



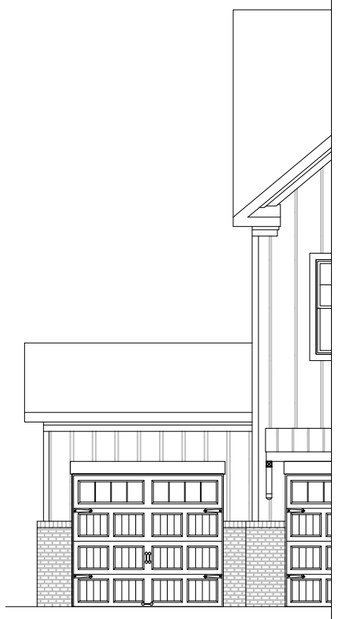
REAR ELEVATION

PB2-G



LEFT ELEVATION

PB2-G



FRONT ELEVATION
3 CAR GARAGE

PB2-G

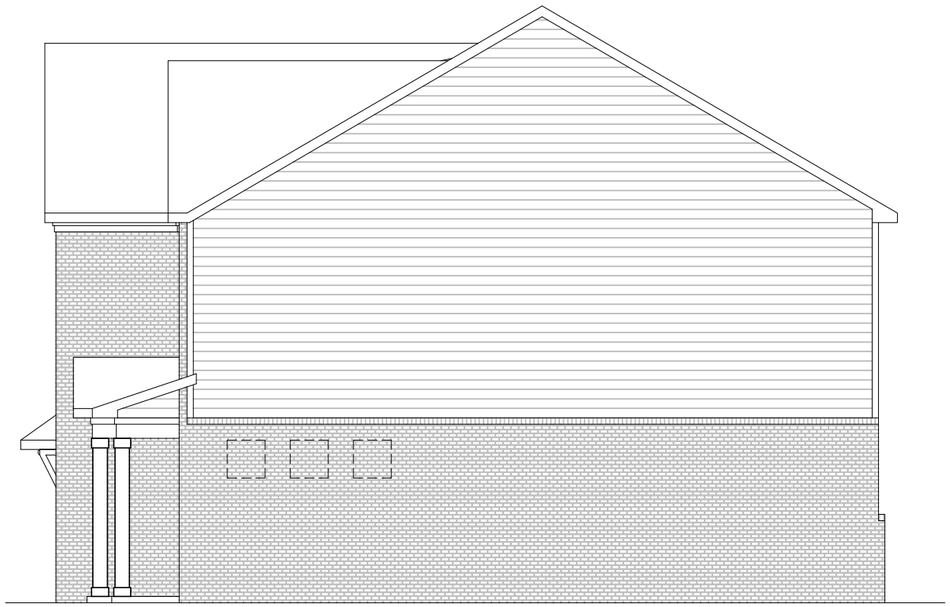


FRONT ELEVATION

PB2-G

MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		577 SF
BRICK		291 SF
STONE		0 SF
SIDING		0 SF
SHAKE		0 SF
B-N-B		286 SF

ROSEWOOD



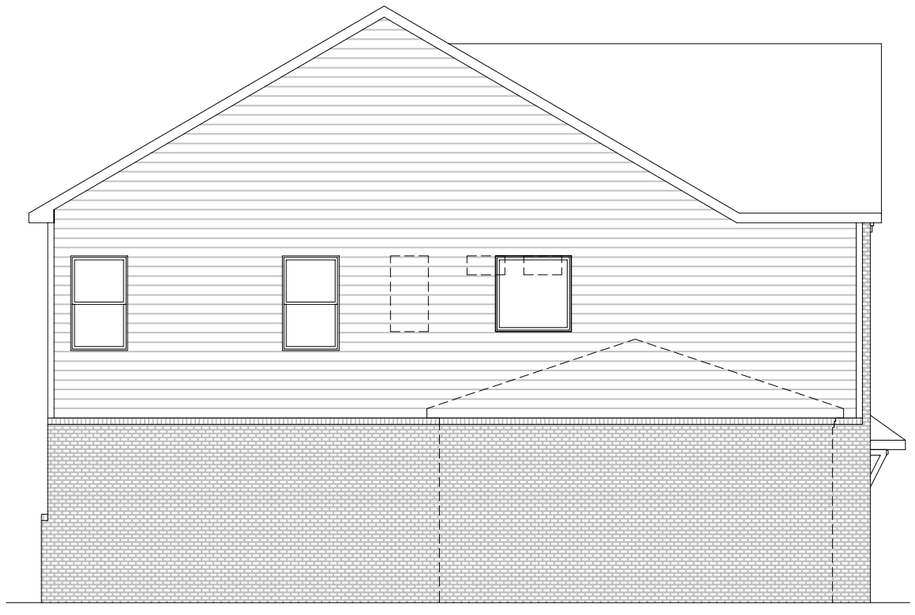
RIGHT ELEVATION

PB3-G



REAR ELEVATION

PB3-G



LEFT ELEVATION

PB3-G



FRONT ELEVATION
3 CAR GARAGE

PB3-G



FRONT ELEVATION

PB3-G

MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		**592 SF**
BRICK		452 SF
STONE		0 SF
SIDING		0 SF
SHAKE		0 SF
B-N-B		140 SF

ROSEWOOD



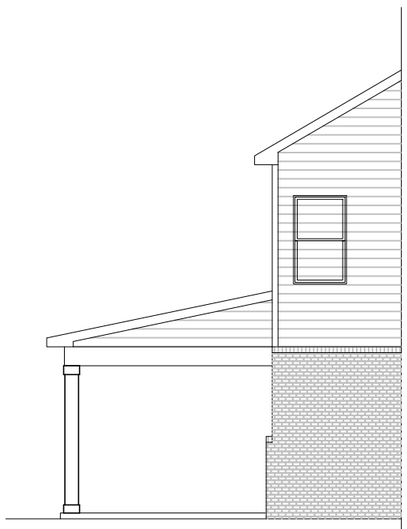
REAR ELEVATION
W/ OPT. COVERED PATIO



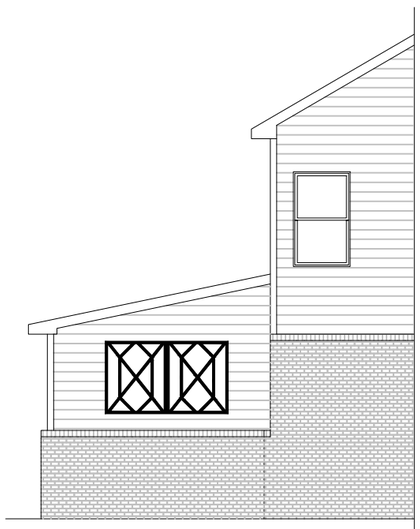
REAR ELEVATION
W/ OPT. COVERED PATIO
& PRIVACY WALL



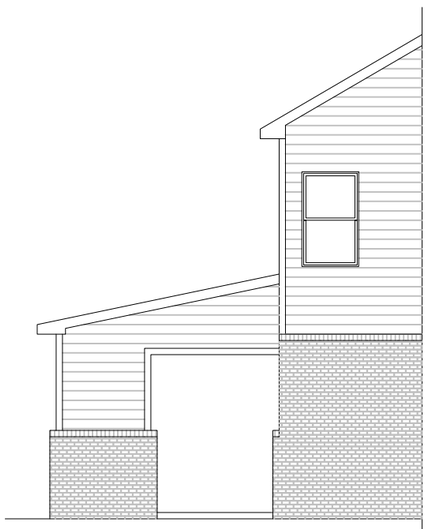
REAR ELEVATION
W/ OPT. COVERED PATIO
& FIREPLACE



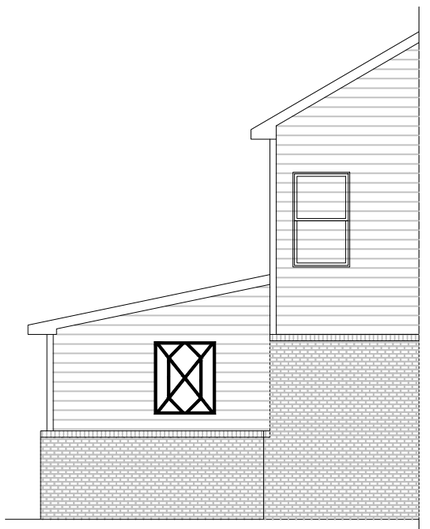
PARTIAL LEFT ELEVATION
W/ OPT. COVERED PATIO



PARTIAL LEFT ELEVATION
W/ OPT. COVERED PATIO
& PRIVACY WALL



PARTIAL LEFT ELEVATION
W/ OPT. COVERED PATIO
& FIREPLACE



PARTIAL LEFT ELEVATION
W/ OPT. COVERED PATIO
FIREPLACE & PRIVACY WALL

ROSEWOOD



REAR ELEVATION W/ OPT.
EXTENDED COVERED PATIO

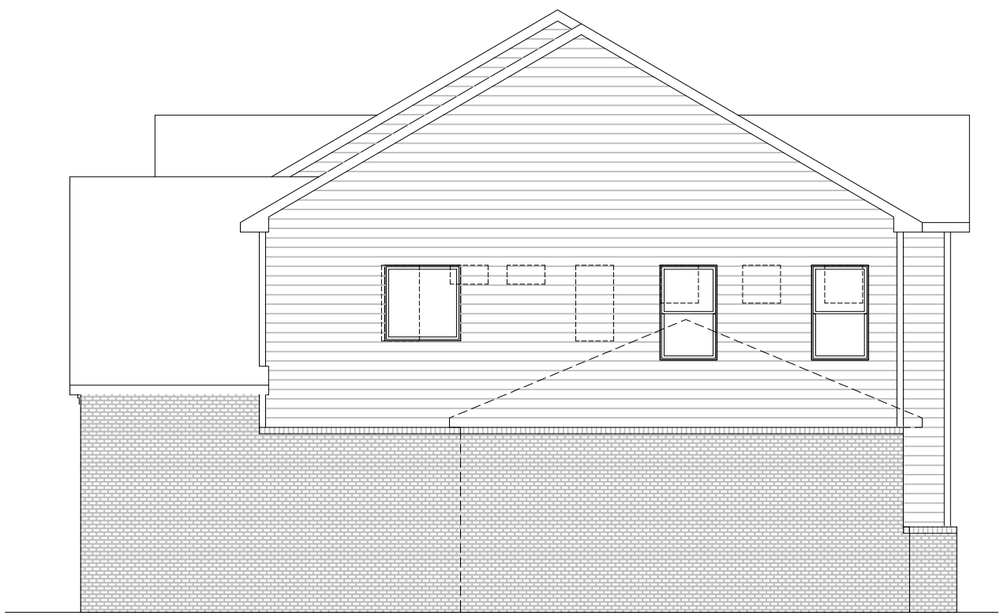


REAR ELEVATION W/ OPT.
EXTENDED COVERED PATIO
& PRIVACY WALL



REAR ELEVATION W/ OPT.
EXTENDED COVERED PATIO
& FIREPLACE

TURNBRIDGE



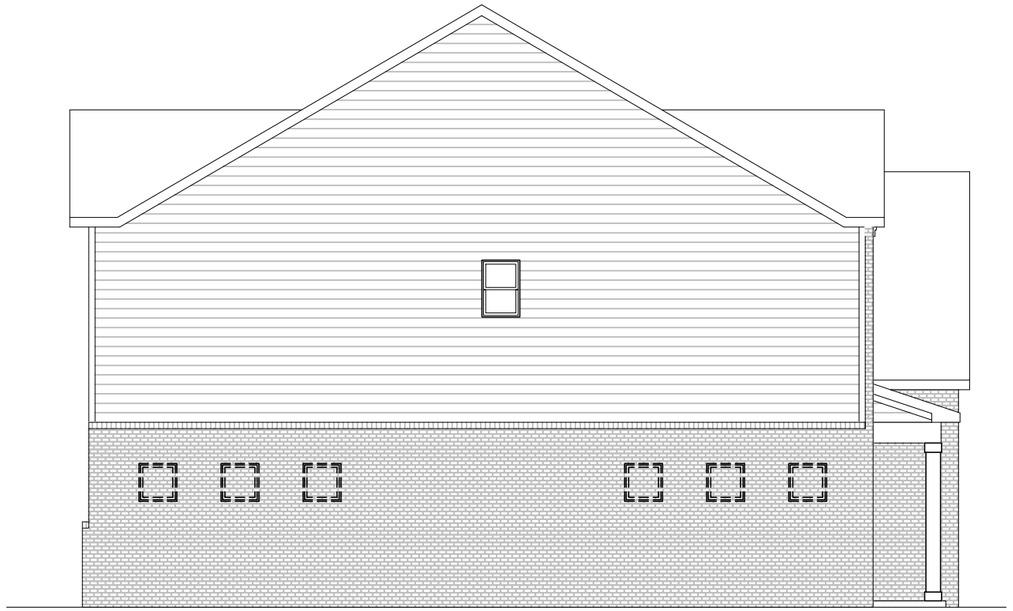
RIGHT ELEVATION

B-G



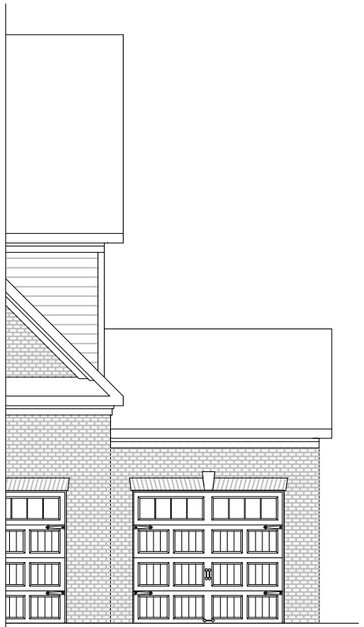
REAR ELEVATION

B-G



LEFT ELEVATION

B-G



FRONT ELEVATION

3 CAR GARAGE

B-G

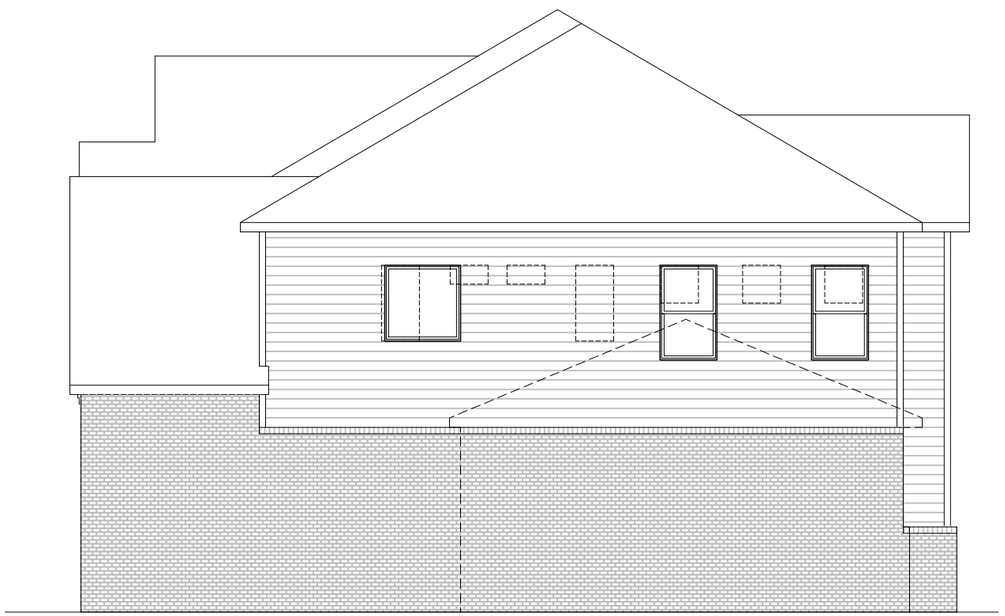


FRONT ELEVATION

B-G

MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		554 SF
BRICK	78 %	432 SF
STONE	0 %	0 SF
SIDING	22 %	122 SF
SHAKE	0 %	0 SF
B-N-B	0 %	0 SF

TURNBRIDGE



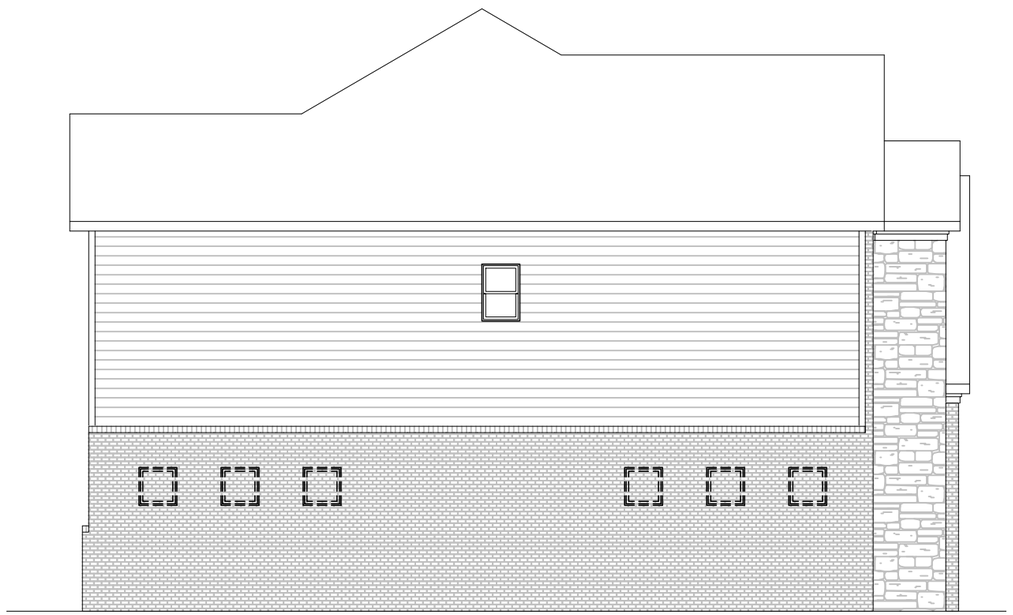
RIGHT ELEVATION

D-G



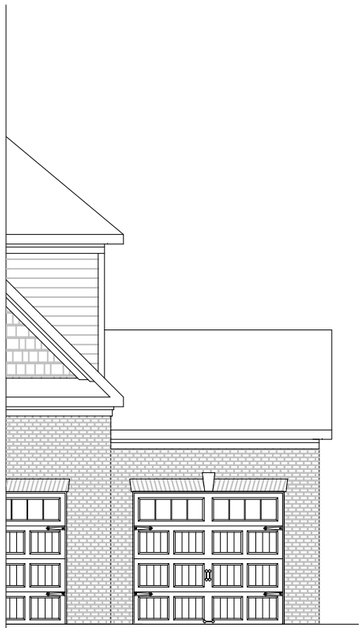
REAR ELEVATION

D-G



LEFT ELEVATION

D-G



FRONT ELEVATION

3 CAR GARAGE

D-G

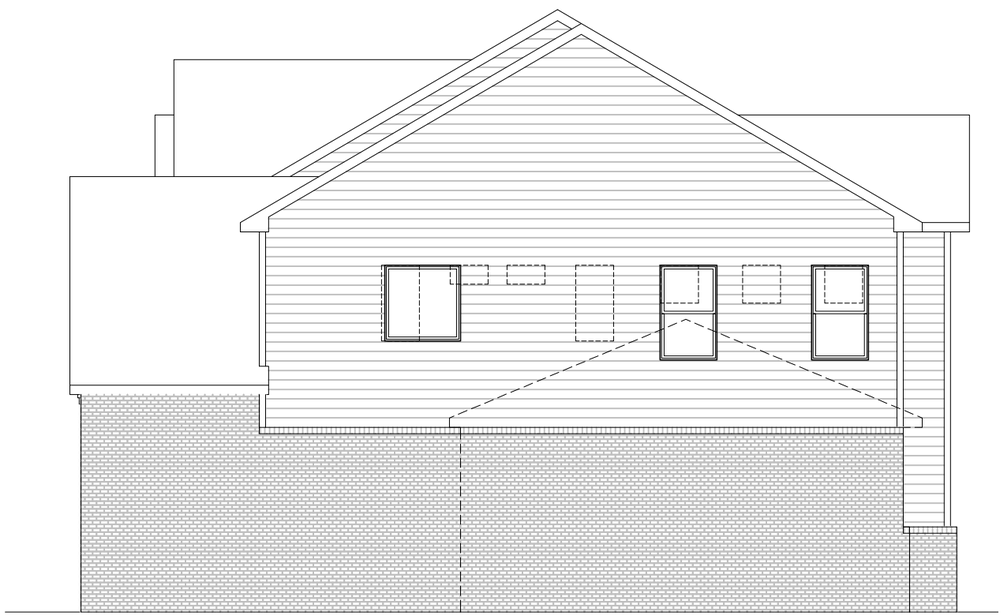


FRONT ELEVATION

D-G

MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		703 SF
BRICK	54 %	383 SF
STONE	26 %	184 SF
SIDING	5 %	36 SF
SHAKE	14 %	100 SF
B-N-B	0 %	0 SF

TURNBRIDGE



RIGHT ELEVATION

E-G



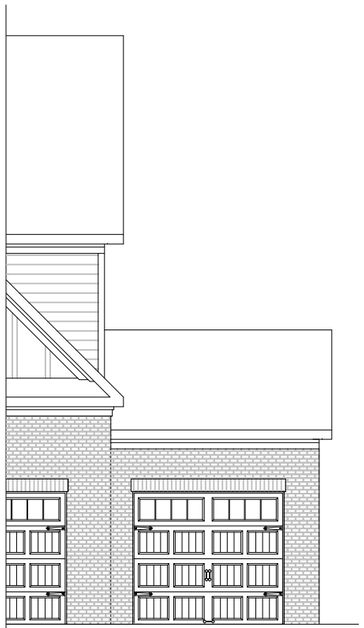
REAR ELEVATION

E-G



LEFT ELEVATION

E-G



FRONT ELEVATION
3 CAR GARAGE

E-G

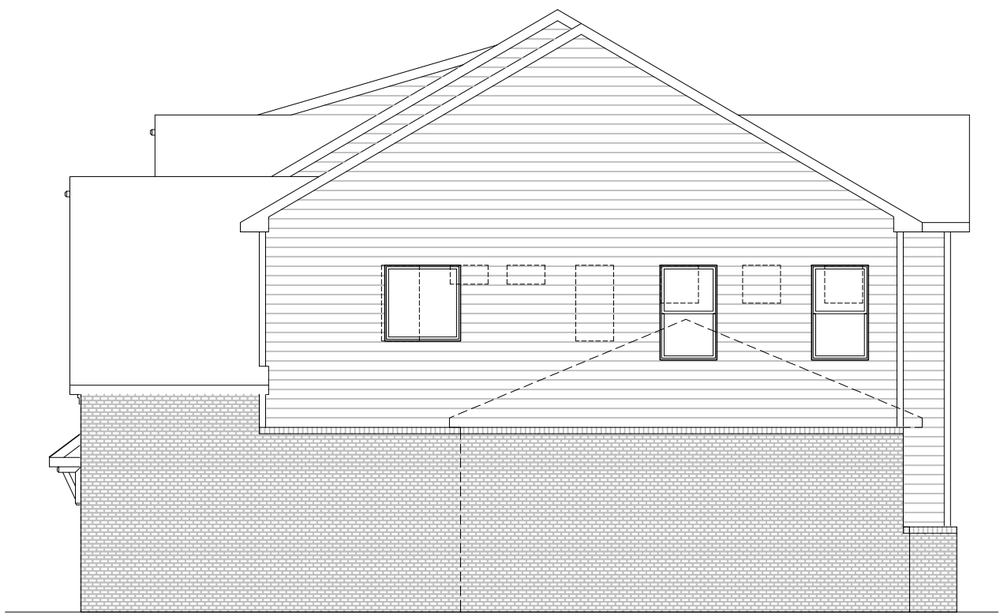


FRONT ELEVATION

E-G

MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		661 SF
BRICK	85 %	562 SF
STONE	0 %	0 SF
SIDING	6 %	42 SF
SHAKE	0 %	0 SF
B-N-B	9 %	57 SF

TURNBRIDGE



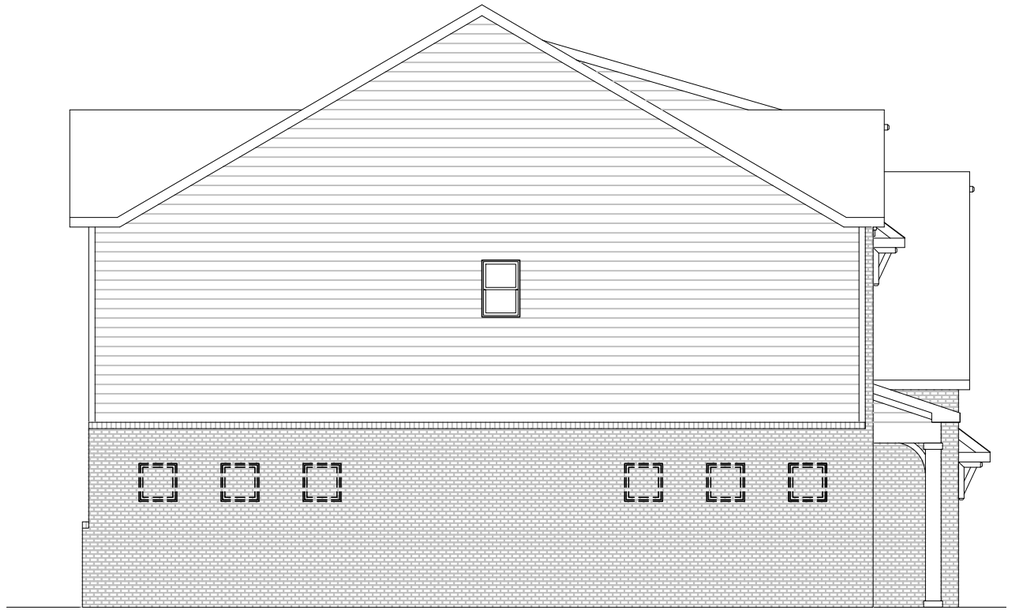
RIGHT ELEVATION

PB2-G



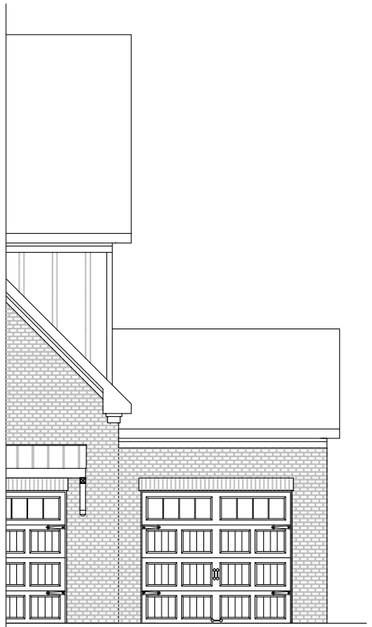
REAR ELEVATION

PB2-G



LEFT ELEVATION

PB2-G



FRONT ELEVATION
3 CAR GARAGE

PB2-G

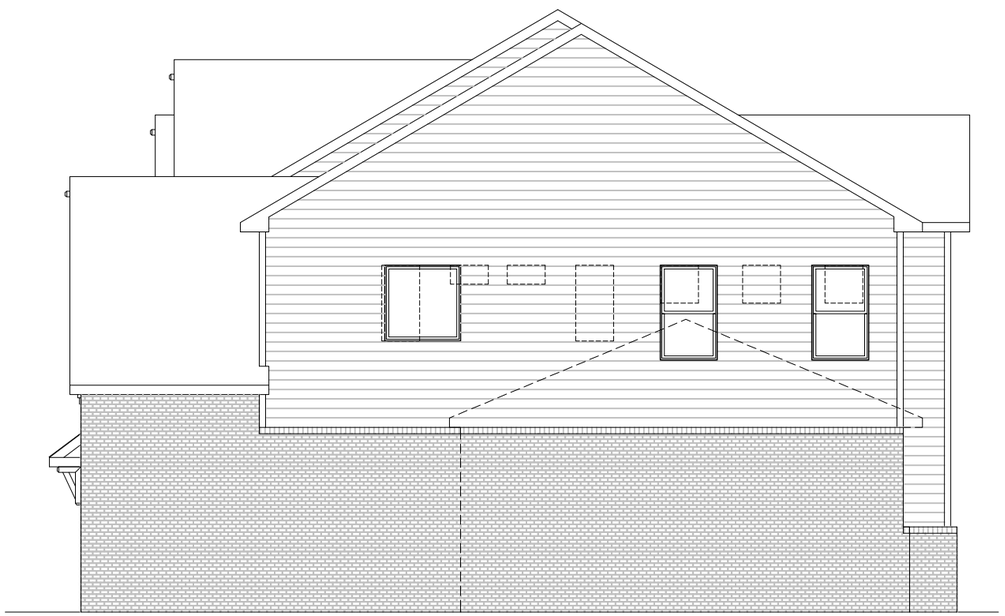


FRONT ELEVATION

PB2-G

MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		770 SF
BRICK	94 %	723 SF
STONE	0 %	0 SF
SIDING	1 %	7 SF
SHAKE	0 %	0 SF
B-N-B	5 %	40 SF

TURNBRIDGE



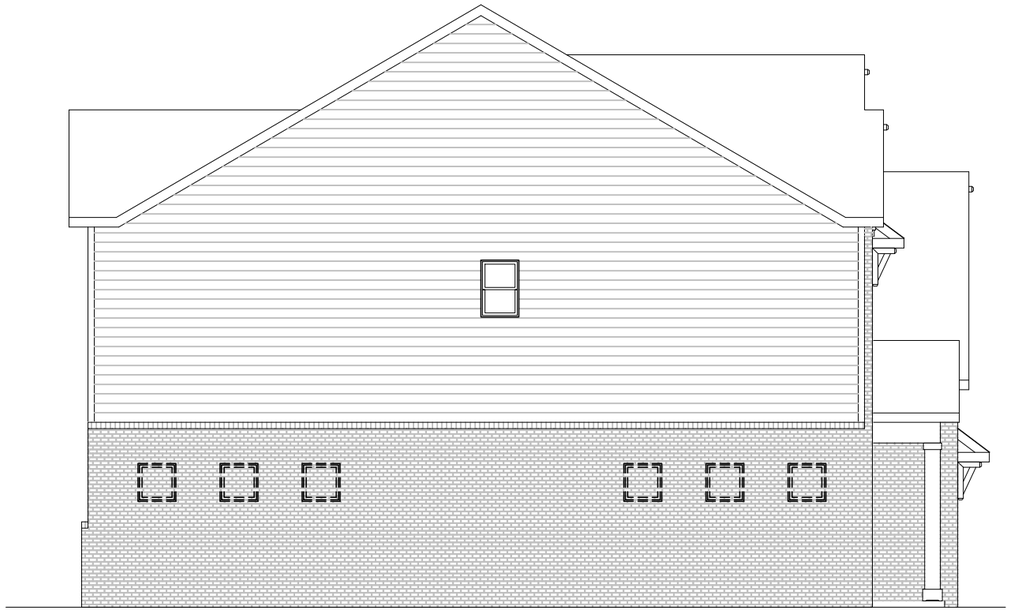
RIGHT ELEVATION

PB3-G



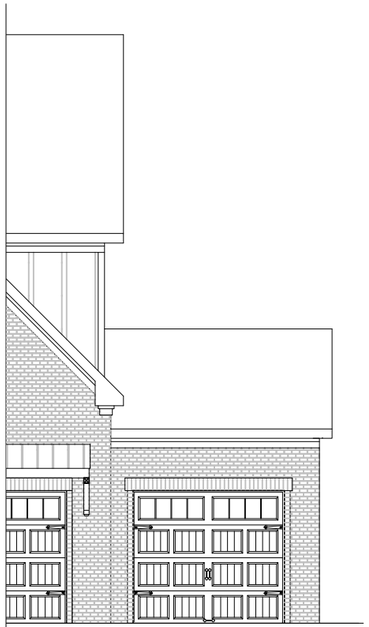
REAR ELEVATION

PB3-G



LEFT ELEVATION

PB3-G



FRONT ELEVATION
3 CAR GARAGE

PB3-G



FRONT ELEVATION

PB3-G

MASONRY PERCENTAGES		
FRONT ELEV TOTAL SF		551 SF
BRICK	89 %	490 SF
STONE	0 %	0 SF
SIDING	0 %	0 SF
SHAKE	0 %	0 SF
B-N-B	11 %	61 SF

TURNBRIDGE



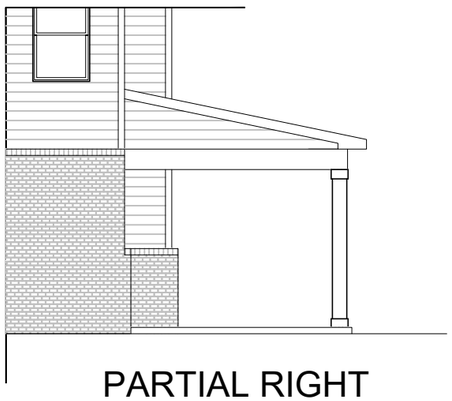
PARTIAL REAR ELEVATION
W/ OPT. COVERED PATIO



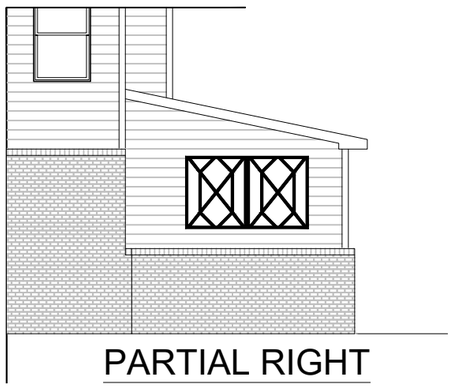
PARTIAL REAR ELEVATION
W/ OPT. COVERED PATIO
& PRIVACY WALL



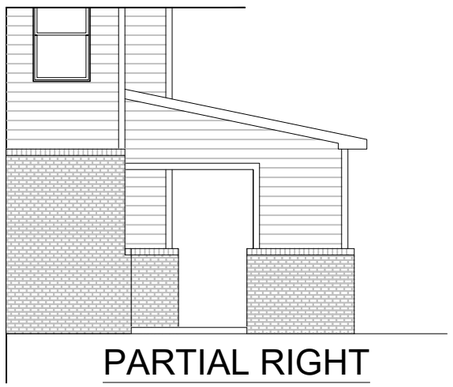
PARTIAL REAR ELEVATION
W/ OPT. COVERED PATIO
& FIREPLACE



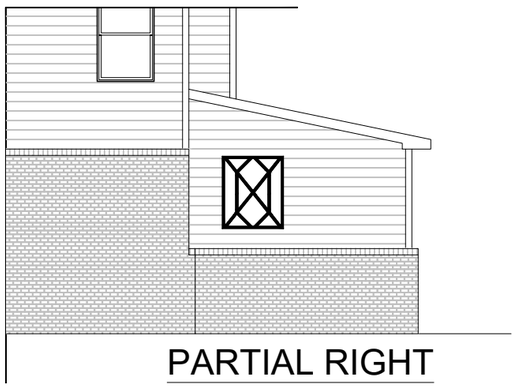
PARTIAL RIGHT
ELEVATION W/
OPT. COVERED PATIO



PARTIAL RIGHT
ELEVATION W/
OPT. COVERED PATIO
& PRIVACY WALL

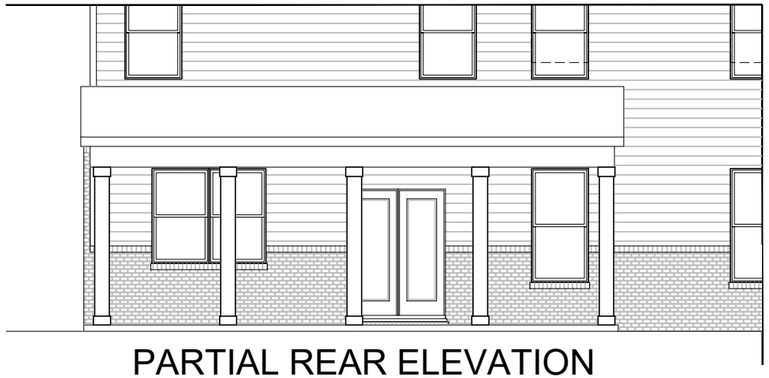


PARTIAL RIGHT
ELEVATION W/
OPT. COVERED PATIO
& FIREPLACE

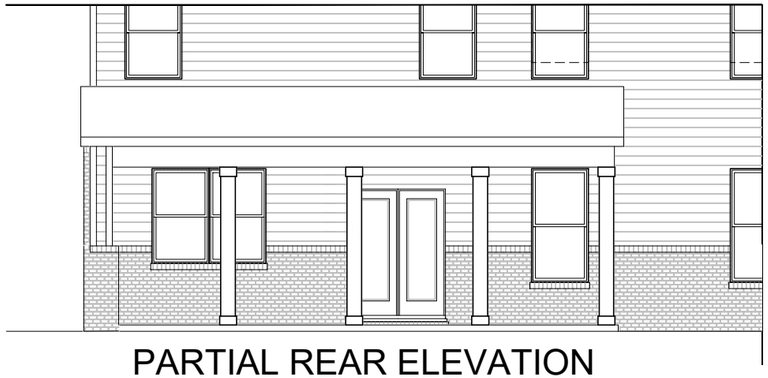


PARTIAL RIGHT
ELEVATION W/
OPT. COVERED PATIO
FIREPLACE & PRIVACY WALL

TURNBRIDGE



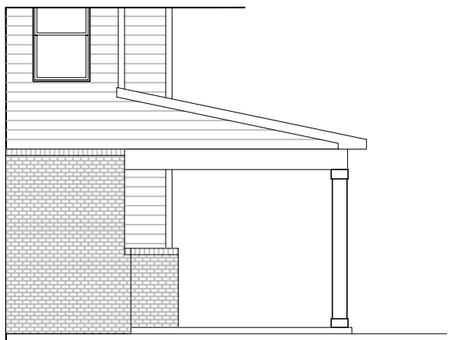
PARTIAL REAR ELEVATION
W/ OPT. EXTENDED
COVERED PATIO



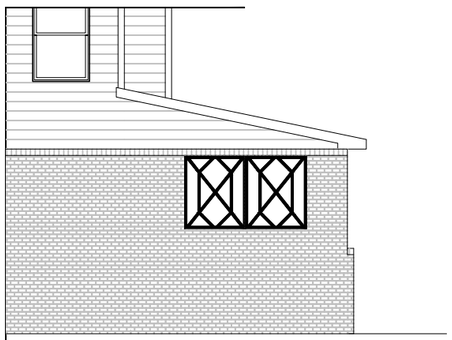
PARTIAL REAR ELEVATION
W/ OPT. EXTENDED COVERED
PATIO & PRIVACY WALL



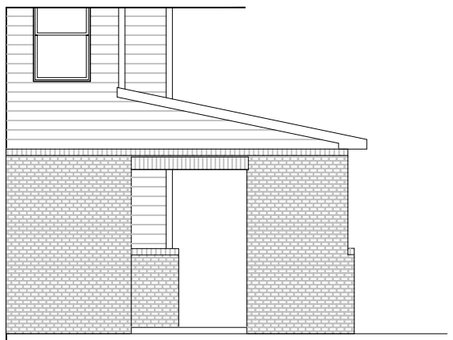
PARTIAL REAR ELEVATION W/
OPT. EXTENDED COVERED
PATIO & FIREPLACE



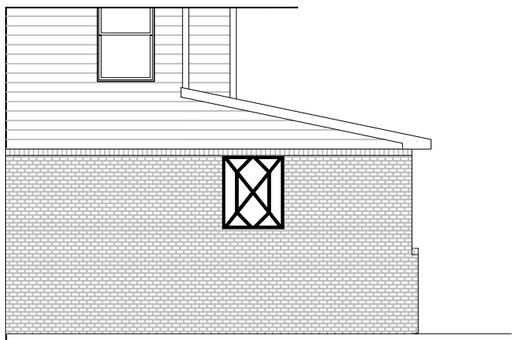
PARTIAL RIGHT
ELEVATION W/
OPT. EXTENDED
COVERED PATIO



PARTIAL RIGHT
ELEVATION W/
OPT. EXTENDED
COVERED PATIO
& PRIVACY WALL

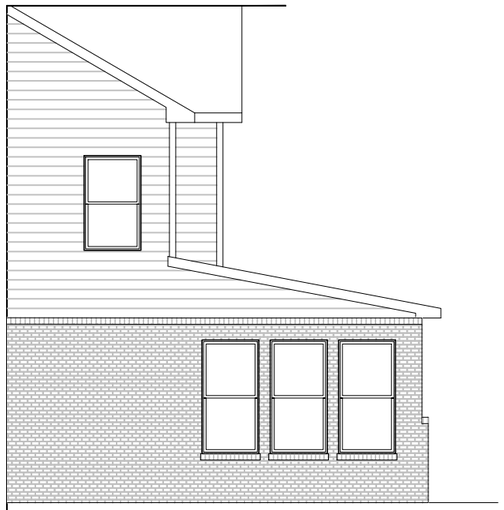


PARTIAL RIGHT
ELEVATION W/
OPT. EXTENDED
COVERED PATIO
& FIREPLACE



PARTIAL RIGHT
ELEVATION W/
OPT. EXTENDED
COVERED PATIO
FIREPLACE &
PRIVACY WALL

TURNBRIDGE



PARTIAL RIGHT
ELEVATION W/
OPT. KEEPING ROOM



PARTIAL REAR
ELEVATION W/
OPT. KEEPING ROOM

CITY OF COLUMBIA TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

Preliminary Plat, Site Development Plan, and PUD Checklist

Development: The Landing at Greens Mill

This checklist shall be completed, and included with the submittal documents. If the submittal does not contain a completed checklist, it shall be deemed incomplete. All below listed items shall be included in the submittal documents and plans, as well as any further information required by the City of Columbia to evaluate compliance and to perform a full and complete review. See Zoning Ordinance Article 8 and Subdivision Regulations.

General

- ☒ Name of development
- ☒ Contact info for the owner and licensed design professional(s) preparing plan: name, address, email, phone
- ☐ Plan sealed by a design professional licensed in the State of Tennessee.
- ☐ North Arrow, legend, and site vicinity map
- ☐ Graphic Scale: between 1 in. = 10 ft. and 1 in. =100 ft.
- ☐ Survey stamped by a State of Tennessee Licensed Professional Land Surveyor, with all project boundaries including bearings and angles to the nearest hundredth, utilities, and existing streets and rights-of-way.
- ☐ Note referencing Tennessee State Plane Coordinate System, NAD 83 Datum
- ☐ All property boundaries, existing easements, and encumbrances
- ☐ Parcel identification, owner, and deed and plat references of adjoining properties
- ☐ Proposed phasing and timetable for all phases of development
- ☐ Traffic Impact Study, as required.
- ☐ The substance of all existing and proposed covenants, easements, or other restrictions.

Lots and Land-Use

- ☐ The size of total property to be developed in square feet and acres
- ☐ Lot numbers of all proposed lots, with dimensions, locations, and square footage
- ☐ A tabulation of the land area to be devoted to various uses and activities and overall densities.
- ☐ Typical lot layout depicting proposed setbacks, yards, and easements, where applicable

Structures

- ☐ Location and approximate dimensions of all existing and proposed structures.
- ☐ Location of all earth retaining structures, with approximate top and bottom of wall elevations.
- ☐ Existing and intended use of all buildings and structures on site, including the number of dwelling units and density, where applicable
- ☐ Location, type, and size of proposed signs
- ☐ Approximate height, bulk, and the utilization of structures including activities and the number of living units.

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Grading, Drainage, and Storm

- ❑ Existing conditions and contours at vertical intervals of not more than two (2) feet
- ❑ General proposed contours at vertical intervals of not more than two (2) feet
- ❑ FEMA Special Flood Hazard Area (SFHA), 100-year Floodplain (F-P), and Floodway (F-W) boundaries with elevations and the exact location of the nearest benchmark. Indicate the Flood Insurance Rate Map (FIRM) panel number, its effective date, and flood insurance zones
- ❑ Location and dimension of aquatic buffer zones
- ❑ General layout of the proposed storm drainage system including surface and subsurface drainage systems, areas for detention, and water quality devices.
- ❑ Identification of all critical lots

Streets, Parking, and Pedestrian Elements

- ❑ Proposed street and alley rights-of-way, typical sections, widths, classification, names, and proposed ownership and maintenance responsibility
- ❑ Proposed connections to existing and proposed streets (including classification) located outside the development
- ❑ Proposed improvements as identified in the Traffic Impact Study, as required
- ❑ Existing and proposed sidewalks, trails, and other pedestrian elements
- ❑ Existing and proposed on-street and off-street parking and loading areas
- ❑ Summary of all provided and required parking

Landscaping, Open Space, and Amenities

- ❑ Natural features on site including, but not limited to, wetlands, streams, ponds, springs, sinkholes, wells, rock outcroppings, excessive slopes, and forested areas
- ❑ Landscaped areas and buffers with details on proposed plantings, existing vegetation, and other features.
- ❑ The location and size of all common open space, parkland dedications, and dedications and reservations of land for public uses.
- ❑ Any amenity features and structures for private or public benefit.
- ❑ Location, dimension, and materials of fences and walls
- ❑ Tree Canopy retention

Utilities

- ❑ General layout and location of existing and proposed utilities and utility features including, but not limited to potable water, fire hydrants, sanitary sewer, storm sewer, and power and communication facilities.
- ❑ Acknowledgement from water, sewer, and power utility providers that the proposed development may be adequately served with existing infrastructure, or if improvements are required to adequately serve the development, a general statement of the improvements.

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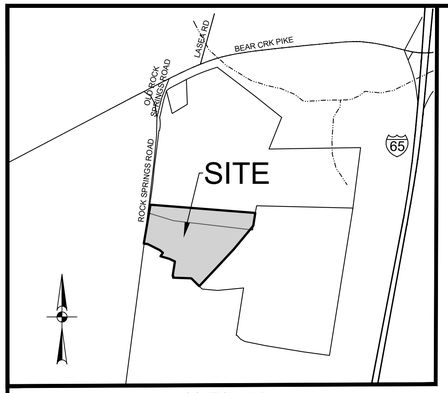
PUD Specific Items

- ☒ List of all deviations from PUD Standards requested
- ☐ The nature of the landholder's interest in the land proposed to be developed and a written statement of concurrence from all parties having a beneficial interest in the affected property.
- ☐ Location and approximate dimensions of all existing and proposed structures including approximate height, bulk, and the utilization of structures including activities and the number of living units. Include architectural renderings of all proposed structures with materials listed.
- ☐ The substance of covenants, grants of easements or other restrictions to be imposed upon the use of the land, buildings and structures including proposed easements for public utilities on the property or documentation of off-site easements.
- ☐ Exterior lighting plan.

If the application is deemed incomplete by the Zoning Administrator, a written request shall be made within ten days after the original submittal, for further information. In such case the application shall be held in abeyance until deemed complete for final review. No plan shall be formally presented for Planning Commission action until such plan is found complete, compliant with City standards, and ready for review.

Checklist Completed By:

Shay		
Print Name	Signature	Date



LOCATION MAP
NOT TO SCALE

PROPERTY MAP REFERENCE

BEING A PORTION OF PARCEL NUMBERS 011.01 AND 011.02 AS SHOWN ON MAURY COUNTY PROPERTY MAP NUMBER 092.

DEED REFERENCE

MAP 092, PARCEL 011.01
BEING A PORTION OF THE SAME PROPERTY CONVEYED TO CASTLEROCK COMMUNITIES TENNESSEE, LLC OF RECORD IN BOOK R3002, PAGE 67, REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE.

MAP 092, PARCEL 011.02
BEING A PORTION OF THE SAME PROPERTY CONVEYED TO CASTLEROCK COMMUNITIES TENNESSEE, LLC OF RECORD IN BOOK R3002, PAGE 61, REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE.

GENERAL NOTES

1. THE PURPOSE OF THIS PLAT IS TO CREATE 31 SINGLE FAMILY LOTS AND 3 OPEN SPACE LOTS AND TO DEDICATE RIGHT-OF-WAY.
2. BEARINGS SHOWN HEREON ARE BASED ON THE TENNESSEE COORDINATE SYSTEM OF 1983.
3. THIS SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. ABOVE GRADE AND UNDERGROUND UTILITIES SHOWN WERE TAKEN FROM VISIBLE APPURTENANCES AT THE SITE, PUBLIC RECORDS AND/OR MAPS PREPARED BY OTHERS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THEREFORE, RELIANCE UPON THE TYPE, SIZE AND LOCATION OF UTILITIES SHOWN SHOULD BE DONE SO WITH THIS CIRCUMSTANCE CONSIDERED. DETAILED VERIFICATION OF EXISTENCE, LOCATION AND DEPTH SHOULD ALSO BE MADE PRIOR TO ANY DECISION RELATIVE THERETO IS MADE. AVAILABILITY AND COST OF SERVICE SHOULD BE CONFIRMED WITH THE APPROPRIATE UTILITY COMPANY. IN TENNESSEE IT IS A REQUIREMENT, PER "THE UNDERGROUND UTILITY DAMAGE PREVENTION ACT", THAT ANYONE WHO ENGAGES IN EXCAVATION MUST NOTIFY ALL KNOWN UNDERGROUND UTILITY OWNERS, NO LESS THAN (3) THREE OR MORE THAN (10) TEN WORKING DAYS PRIOR TO THE DATE OF THEIR INTENT TO EXCAVATE AND ALSO TO AVOID ANY POSSIBLE HAZARD OR CONFLICT. TENNESSEE ONE CALL 811.
4. THIS PROPERTY IS CURRENTLY ZONED CD-3 NEIGHBORHOOD DISTRICT.
5. BY SCALED MAP LOCATION AND GRAPHIC PLOTTING ONLY, THIS PROPERTY LIES WITHIN FLOOD ZONE X, AS DESIGNATED ON CURRENT FEDERAL EMERGENCY MANAGEMENT AGENCY MAP NO. 47119C0195E. WITH AN EFFECTIVE REVISED DATE OF APRIL 16, 2007 WHICH MAKES UP A PART OF THE NATIONAL FLOOD INSURANCE ADMINISTRATION REPORT; COMMUNITY NO. 470123 PANEL NO. 0195, SUFFIX E WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PREMISES IS SITUATED. SAID MAP DEFINES ZONE "X" UNDER "OTHER AREAS" AS AN AREA DETERMINED TO BE OUTSIDE THE 2% ANNUAL FLOODPLAIN. SAID MAP STATES PANEL NOT PRINTED.
6. ALL ROADS TO BE PUBLIC RIGHT OF WAY AND MAINTAINED BY THE CITY.
7. ALL OPEN SPACE TO BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
8. ALL OPEN SPACE TO BE DESIGNATED AS A PUBLIC UTILITY AND DRAINAGE EASEMENT.
9. LIGHTING AT ALL BUILDING SITE LINES WILL NOT EXCEED 1.0 FOOT CANDLE AND ON-SITE OUTDOOR LIGHTING WILL CONFORM TO THE STANDARDS OF 4.3.17B OF THE ZONING ORDINANCE (TO BE CONFIRMED AT BUILDING PERMIT.)
10. THE STORMWATER MAINTENANCE AGREEMENT IS RECORDED IN BOOK _____, PAGE _____, REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE.

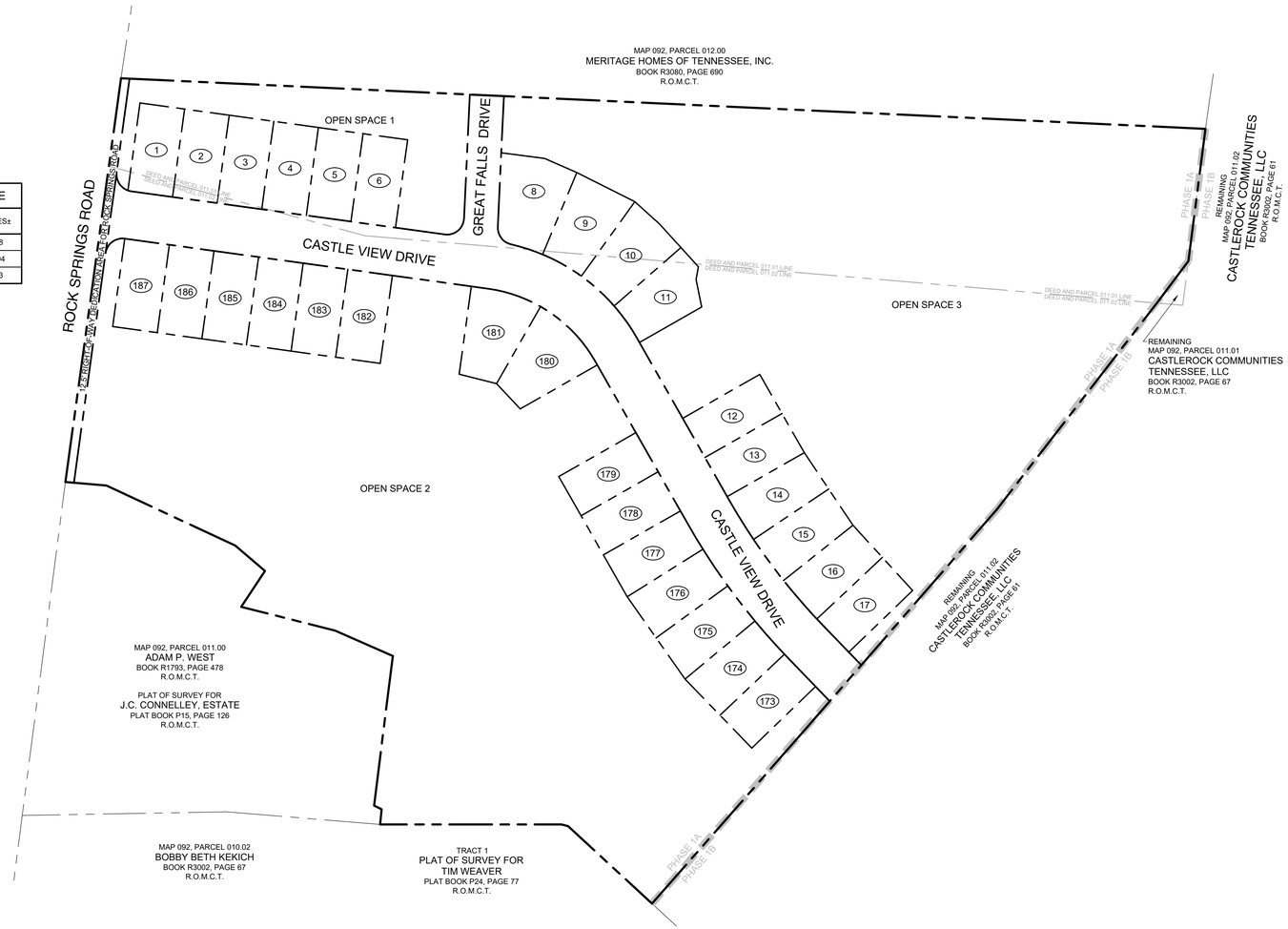
LOT AREA TABLE

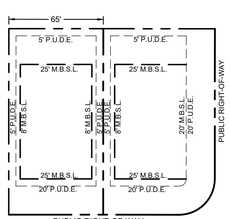
LOT	SQ.FT.±	ACRES±
1	8579	0.20
2	8580	0.20
3	8580	0.20
4	8580	0.20
5	8580	0.20
6	8580	0.20
8	12050	0.28
9	10431	0.24
10	10539	0.24
11	9425	0.22
12	8580	0.20
13	8580	0.20
14	9074	0.21
15	9117	0.21
16	9090	0.21
17	8715	0.20
173	8629	0.20
174	9098	0.21
175	9084	0.21
176	9006	0.21
177	8834	0.20
178	8580	0.20
179	8580	0.20
180	11329	0.26
181	10745	0.25
182	8580	0.20
183	8580	0.20
184	8580	0.20
185	8580	0.20
186	8580	0.20
187	8580	0.20

*LOT 7 INTENTIONALLY OMITTED

OPEN SPACE TABLE

OPEN SPACE	SQ.FT.±	ACRES±
1	42504	0.98
2	437297	10.04
3	402032	9.23





SINGLE FAMILY
TYPICAL LOT DETAIL
UNLESS SHOWN OTHERWISE
(NOT TO SCALE)

*BUILDING STANDARDS MUST MEET THE CD-3 REQUIREMENTS AS OUTLINED IN THE ZONING ORDINANCE.

LEGEND

R.O.M.C.T.	REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE
(123)	LOT NUMBER

811 Know what's below. Call before you dig.

SURVEYOR
PAPE-DAWSON
BRIAN SCHLADER, RLS #3483
315 WOODLAND ST.
NASHVILLE, TN 37206
(615) 244-8591
BRIAN.SCHLADER@PAPE-DAWSON.COM

OWNER/DEVELOPER
CASTLEROCK COMMUNITIES
381 RIVERSIDE DR., SUITE 300
FRANKLIN, TN 37064
PATRICK CAREY
(615) 580-8680
pcarey@c-rock.com

SITE DATA TABLE

LOT AREA	= 6.48 ACRES±
OPEN SPACE AREA	= 20.25 ACRES±
RIGHT-OF-WAY AREA (FOR ROCK SPRINGS ROAD)	= 0.17 ACRES±
RIGHT-OF-WAY AREA (INTERNAL)	= 2.48 ACRES±
TOTAL SITE AREA	= 29.38 ACRES±

BRIAN SCHLADER
REGISTERED LAND SURVEYOR
TENNESSEE NO. 3483
04/20/2026

RECORDER'S INFORMATION

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (WE) HEREBY CERTIFY THAT I AM (WE ARE) THE OWNER(S) OF THE PROPERTY SHOWN AND DESCRIBED HEREON AS EVIDENCED IN DEED BOOK R3002, PAGE 61, & BOOK R3002, PAGE 67, MAURY COUNTY REGISTER'S OFFICE AND ADOPT THIS FINAL SUBDIVISION PLAT OR THE PROPERTY AS SHOWN HEREON AND DEDICATE ALL PUBLIC WAYS AND EASEMENTS AS NOTED WITH MY (OUR) FREE CONSENT.

OWNER(S) _____ DATE _____

TITLE (IF ACTION FOR CORPORATION OR PARTNERSHIP)

CERTIFICATE OF ACCURACY

I (WE) HEREBY CERTIFY THAT TO THE BEST OF MY (OUR) KNOWLEDGE AND BELIEF THIS IS A TRUE AND ACCURATE SURVEY OF THE PROPERTY SHOWN HEREON; THAT THIS IS A CATEGORY "I" LAND SURVEY AS DEFINED IN TITLE 62, CHAPTER 18, TENNESSEE CODE ANNOTATED, AND THAT THE RATIO OF PRECISION IS GREATER THAN OR EQUAL TO 1:10000.

PAPE-DAWSON

Brian Schlader 04/20/2026
BRIAN SCHLADER, RLS NUMBER 3483 DATE

CERTIFICATE OF THE APPROVAL OF WATER SYSTEM

I HEREBY CERTIFY THAT THE WATER SYSTEM(S) OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAS/HAVE BEEN INSTALLED IN ACCORDANCE WITH CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS, OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

NAME _____ DATE _____

TITLE _____ AUTHORIZING AGENCY

CERTIFICATE OF APPROVAL OF STREETS, DRAINAGE, AND UTILITIES

I HEREBY CERTIFY THAT THE STREETS, DRAINAGE, AND UTILITIES OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAVE BEEN INSTALLED IN ACCORDANCE WITH CITY SPECIFICATIONS, OR A PERFORMANCE SURETY IN THE AMOUNT OF $_____ FOR STREETS AND DRAINAGE HAS BEEN POSTED WITH THE CITY OF COLUMBIA, TENNESSEE, TO ASSURE COMPLETION OF SUCH IMPROVEMENTS.

CITY ENGINEER _____ DATE _____
COLUMBIA, TENNESSEE

CERTIFICATE OF APPROVAL FOR RECORDING

I HEREBY CERTIFY THAT THE FINAL SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE CITY OF COLUMBIA SUBDIVISION REGULATIONS, WITH THE EXCEPTION OF SUCH VARIANCES, IF ANY, AS NOTED IN THE MINUTES OF THE COLUMBIA MUNICIPAL PLANNING COMMISSION, AND THAT IT HAS BEEN APPROVED FOR RECORDING IN THE OFFICE OF THE MAURY COUNTY REGISTER OF DEEDS.

PLANNING DIRECTOR _____ DATE _____
COLUMBIA, TENNESSEE

CERTIFICATE OF SUBDIVISION NAME AND STREET NAMES

SUBDIVISION NAME AND STREET NAMES APPROVED BY THE CITY ENGINEERING DEPARTMENT AND BY E-911 MAURY COUNTY.

MAURY COUNTY E-911 _____ DATE _____

CERTIFICATE OF SANITARY SEWER SYSTEM

I HEREBY CERTIFY THAT THE SANITARY SEWER SYSTEM OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAS BEEN INSTALLED IN ACCORDANCE WITH THE CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS, OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

DIRECTOR OF WASTEWATER DEPARTMENT _____ DATE _____
COLUMBIA, TENNESSEE

CERTIFICATE OF COMPLIANCE

I HEREBY CERTIFY THAT THE FINAL SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE CITY OF COLUMBIA SUBDIVISION REGULATIONS AND OTHER ADOPTED ORDINANCES AND POLICIES.

CITY ENGINEER _____ DATE _____
COLUMBIA, TENNESSEE

FINAL SUBDIVISION PLAT

ROCK SPRINGS COVE
PHASE 1A
LOTS 1-6, 8-17, 173-187 AND OPEN SPACES 1-3

4TH CIVIL DISTRICT OF MAURY COUNTY,
CITY OF COLUMBIA, TENNESSEE

DATE: APRIL 20, 2026
SCALE: 1" = 100'
JOB NUMBER: 21000139-000 (21-0389)

PAPE-DAWSON
315 WOODLAND STREET P.O. BOX 60070 I NASHVILLE, TN 37206 I 615.244.8591

G:\21-0389\1-SURVEY\FINAL PLAT\PHASE 1A\21-0389 PHASE 1A FINAL PLAT.DWG
Plotted by: Brandon Hollis on 4/20/2026 12:03 PM - Last Saved by: brandon.hollis on 4/20/2026 12:03 PM

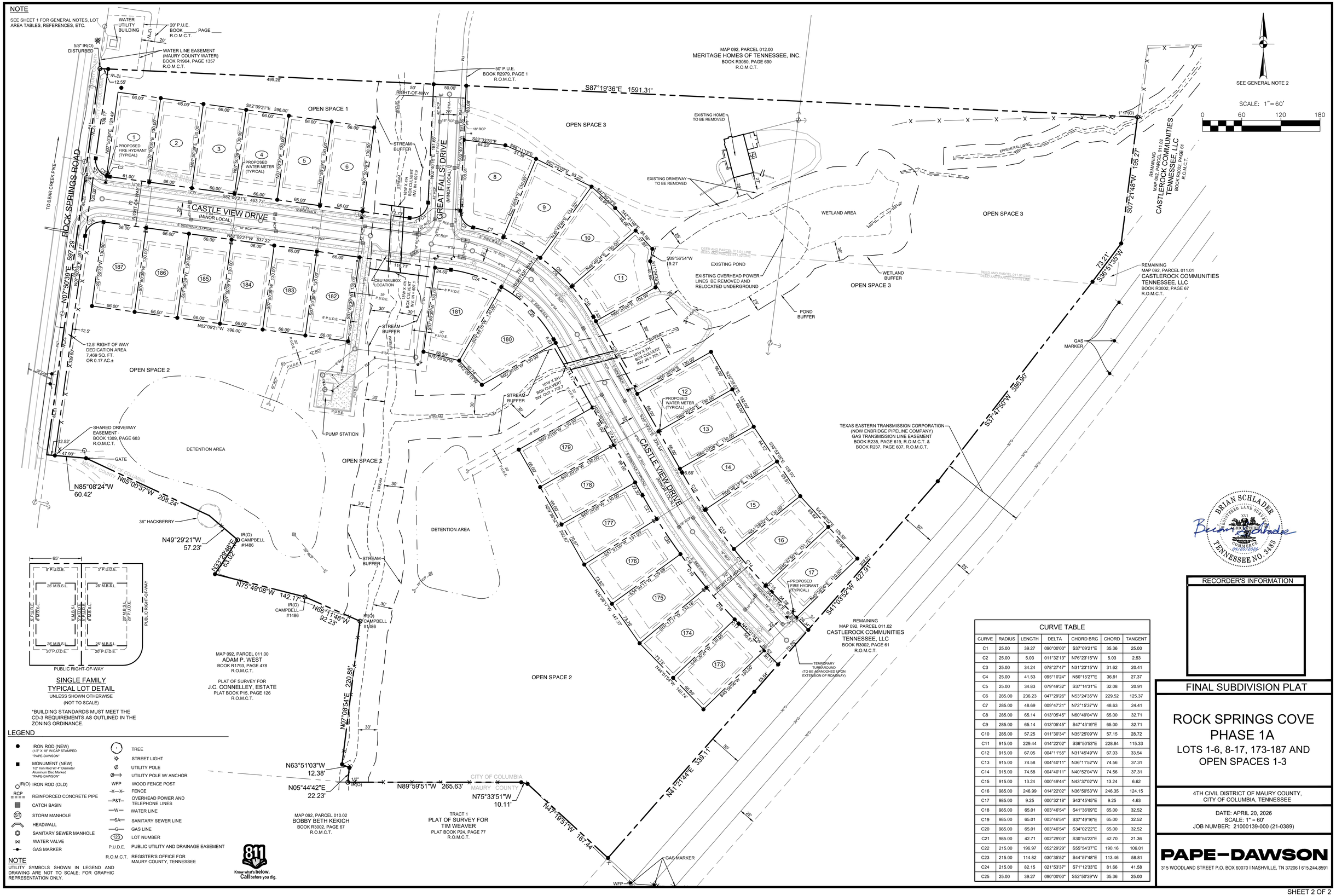
NOTE

SEE SHEET 1 FOR GENERAL NOTES, LOT AREA TABLES, REFERENCES, ETC.

SEE GENERAL NOTE 2

SCALE: 1"=60'

0 60 120 180


WATER UTILITY BUILDING
20' P.U.E. BOOK ____, PAGE ____ R.O.M.C.T.
5/8" IR(O) DISTURBED
WATER LINE EASEMENT (MAURY COUNTY WATER) BOOK R1964, PAGE 1357 R.O.M.C.T.
50' P.U.E. BOOK R2979, PAGE 1 R.O.M.C.T.
MAP 092, PARCEL 012.00 MERITAGE HOMES OF TENNESSEE, INC. BOOK R3080, PAGE 690 R.O.M.C.T.
S87°19'36"E 1591.31'
1" IR(O)
ROCK SPRINGS ROAD
CASTLE VIEW DRIVE (MINOR LOCAL)
GREAT FALLS DRIVE (MINOR LOCAL)
TO BEAR CREEK PIKE
OPEN SPACE 1
OPEN SPACE 2
OPEN SPACE 3
DETENTION AREA
PROPOSED FIRE HYDRANT (TYPICAL)
PROPOSED WATER METER (TYPICAL)
STREAM BUFFER
EXISTING HOME TO BE REMOVED
EXISTING DRIVEWAY TO BE REMOVED
EXISTING POND
EXISTING OVERHEAD POWER LINES BE REMOVED AND RELOCATED UNDERGROUND
WETLAND AREA
WETLAND BUFFER
POND BUFFER
EPHEMERAL (DRY)
DEED AND PARCEL 011.01 LINE PER ADJOINER'S DEED
DEED AND PARCEL 011.01 LINE PER ADJOINER'S PARCEL 011.02 LINE
REMAINING MAP 092, PARCEL 011.02 CASTLEROCK COMMUNITIES TENNESSEE, LLC BOOK R3002, PAGE 61 R.O.M.C.T.
REMAINING MAP 092, PARCEL 011.01 CASTLEROCK COMMUNITIES TENNESSEE, LLC BOOK R3002, PAGE 67 R.O.M.C.T.
S07°21'48"W 195.27'
S36°51'35"W 73.21'
GAS MARKER
TEXAS EASTERN TRANSMISSION CORPORATION (NOW ENBRIDGE PIPELINE COMPANY) GAS TRANSMISSION LINE EASEMENT BOOK R235, PAGE 619, R.O.M.C.T. & BOOK R237, PAGE 607, R.O.M.C.T.
S37°47'50"W 386.90'
S41°03'52"W 427.91'
TEMPORARY TURNAROUND (TO BE ABANDONED UPON EXTENSION OF ROADWAY)
N07°50'39"E 597.29'
S82°09'21"E 396.00'
N82°09'21"W 537.22'
N82°09'21"W 396.00'
N07°50'39"E 129.49'
N07°50'39"E 136.17'
S82°33'50"E 64.23'
S66°11'41"E 51.35'
S82°33'50"E 85.23'
S41°26'09"E 46.68'
S47°21'19"E 84.88'
S09°56'54"W 19.21'
S82°09'21"E 463.73'
N82°09'21"W 537.22'
N07°50'39"E 130.00'
S07°50'39"W 130.00'
N07°50'39"E 150.00'
S07°50'39"W 150.00'
N07°50'39"E 190.00'
S07°50'39"W 190.00'
N07°50'39"E 130.00'
S07°50'39"W 130.00'
N07°50'39"E 130.00'
S07°50'39"W 130.00'
N82°09'21"W 396.00'
N07°50'39"E 130.00'
S07°50'39"W 130.00'
N07°50'39"E 130.00'
S07°50'39"W 130.00'
N07°50'39"E 130.00'
S07°50'39"W 130

Appendix B: Subdivision Development Agreement

This DEVELOPMENT AGREEMENT is made and entered into on this

16th day of April, 20 26,
between THE CITY OF COLUMBIA, TENNESSEE, (hereinafter the "CITY"), and

Castlerock Communities, the DEVELOPER (hereinafter the "DEVELOPER") named on the Addendum to this Agreement attached hereto and by this reference made a part hereof (hereinafter the "ADDENDUM").

WITNESSETH:

WHEREAS, the DEVELOPER desires to develop the property described on the ADDENDUM (hereinafter the "PROJECT"); and,

WHEREAS, the Development Plan of the PROJECT has been approved by the Columbia Municipal Planning Commission (hereinafter the "CMPC") on the

23rd day of June, 20 23,
pursuant to Tennessee Code Annotated Title 13, Chapter 4, and the Subdivision Regulations of Columbia, Tennessee (hereinafter the "SUBDIVISION REGULATIONS"); and,

WHEREAS, the DEVELOPER is the owner of the PROJECT and has authority to engage in such development; and,

WHEREAS, the DEVELOPER desires to develop and improve said PROJECT; and,

WHEREAS, in order to provide for the health, safety, and welfare of future residents of the PROJECT, it will be necessary for certain improvements to the CITY'S utility systems, public infrastructure, and common areas to be constructed within and to serve the PROJECT including but not be limited to roads, bridges, sidewalks, pedestrian facilities, stormwater facilities, street signs, markings, signals, street lighting, recreation and park facilities, landscaping, and the like (hereinafter the "IMPROVEMENTS"); and,

WHEREAS, in order for the IMPROVEMENTS to be fully integrated with the utility systems and public infrastructure of the CITY and to function in a satisfactory manner, the DEVELOPER has agreed to construct, in accordance with the Subdivision Regulations and other rules, regulations, and ordinances of the CITY, the IMPROVEMENTS in said PROJECT and extend utilities to the PROJECT at their own cost; and,

WHEREAS, the CITY is willing to accept the dedication of the streets, utilities, and other improvements as determined in the Development Plan of the PROJECT, subject to the City of Columbia City Council approval by resolution, and subject to the applicant's compliance with all requirements in this agreement and applicable existing laws of the CITY of Columbia and the State of Tennessee,

NOW, THEREFORE, it is agreed and understood as follows:

B1 General Conditions

B1.1 Construction Costs

The DEVELOPER shall pay for all material and labor necessary to install and complete the roads, sidewalks, sewers, utilities, and other facilities in accordance with this agreement.

B1.2 City Ordinances, Rules and Regulations

All currently existing CITY ordinances, rules and regulations, and the Subdivision Regulations adopted by the CMPC are made a part of this agreement. In the event of a conflict between the terms of this agreement and a CITY ordinance, the ordinance shall prevail. In the event of a conflict between the terms of this agreement and the Subdivision Regulations, the Subdivision Regulations shall prevail. All work done under this agreement is to be performed in accordance with plans and specifications approved by the City and made a part, hereof.

B1.3 Fees

Review fees, inspection fees, and other amounts established by the CITY shall be paid prior to any review of the plans. If the DEVELOPER fails to install the facilities in accordance with the terms of this Agreement, no portion of the review fees, inspection fees, or other amounts paid to the CITY shall be refundable to the DEVELOPER.

B1.4 Inspection

The CITY shall have a continuous right to inspect the work and facilities to assure that the work and facilities are in accordance with the Subdivision Regulations, approved Construction Plans, and other rules, regulations, and ordinances of the CITY.

B1.5 Right of Entry

The CITY shall have the right, in case of breach of the Performance Agreement, to enter upon any property of the DEVELOPER and take all necessary actions to complete the work and obligations not completed.

B1.6 Easements

The DEVELOPER shall obtain and dedicate to the CITY or cause to be dedicated to the CITY, either by dedication on the plat or by easement deed, in either case in a form acceptable to the CITY, permanent easements of such widths as required by the CITY and noted on the Plans. The DEVELOPER further agrees to grant the necessary easements and rights-of-way across the DEVELOPER's properties without expense to the CITY and waive any claim for damages.

B1.7 Stormwater Maintenance Agreement

If the PROJECT includes any detention or retention ponds, common drainage ditches, water quality facilities, or stormwater facilities outside of the CITY rights-of-way, the DEVELOPER will submit a Stormwater Maintenance Agreement, to be filed with and recorded with the Final Plat.

B1.8 Attorney Fees and Other Expenses

The DEVELOPER shall pay all reasonable costs and expenses incurred by the CITY in enforcing or completing this agreement. The DEVELOPER shall pay all costs and expenses, including the CITY'S attorney fees, of any legal proceedings brought by the CITY against the DEVELOPER seeking remedies for the DEVELOPER'S failure to perform any of its obligations hereunder, whether or not any proceedings are prosecuted to judgment.

B1.9 Agreement Not Assignable

No third party shall obtain any benefits or rights under this agreement nor shall the rights or duties be assigned by either party.

B1.10 Revocation and Interpretation

This agreement shall bind the DEVELOPER when executed by the DEVELOPER and may not be revoked by the DEVELOPER without permission of the CITY, even if the agreement has not been executed by the CITY, or does not bind CITY, for other reasons. This agreement shall be interpreted in accordance with Tennessee law and may only be enforced in the Chancery Court or Circuit Court or Court of competent jurisdiction of Maury County, Tennessee, and Tennessee Appellate Courts.

B1.11 No Oral Agreement

This agreement may not be orally amended and supersedes all prior negotiations, commitments, or understandings.

B1.12 Separability

If any portion of this agreement is held to be unenforceable, the CITY shall have the right to determine whether the remainder of the agreement shall remain in effect, or whether the agreement shall be void and all rights of the DEVELOPER pursuant to this agreement terminated.

B 1.13 Transferability

The DEVELOPER agrees to not transfer the property on which this PROJECT is to be located without first providing the CITY with written notice. The transferee shall provide the CITY an Assumption Agreement of this Agreement, whereby the transferee agrees to perform the IMPROVEMENTS required under this agreement and to provide a performance surety. The DEVELOPER understands that if the DEVELOPER transfers said property without providing the notice of transfer and Assumption Agreement as required herein, they will be in breach of this agreement and in violation of the Subdivision Regulations.

B1.14 Indemnity

The DEVELOPER shall indemnify and hold the CITY harmless from all loss, costs, expenses, liability, money damages, penalties, or claims arising out of any work covered by this agreement, including any attorney fees incurred by the CITY in connection therewith. Inspection of the IMPROVEMENTS by an authorized representative of the CITY shall not constitute a waiver by the CITY of any defect or of any of the DEVELOPER'S obligations hereunder.

B1.15 Binding Effect

This agreement shall be binding upon the DEVELOPER and the DEVELEPOR's heirs, administrators, executors, assigns, and any other successors in interest.

B1.16 Entire Agreement

This document contains the entire agreement between the parties, and there are no collateral understandings or agreements between them. No variations or alterations of the terms of this agreement shall be binding upon either of the parties, unless the same be reduced to writing and made an amendment to this agreement.

B1.17 Headings

Paragraph titles and headings contained herein are inserted for convenience only and shall not be deemed a part of the agreement and in no way shall define, limit, extend, or describe the scope or intent of any provision, hereof.

B2 Performance Surety

At the time of execution of this agreement, the DEVELOPER shall provide the CITY a performance surety, in an amount determined by the City Engineer for the IMPROVEMENTS and other items specified by the Construction Plans, plats, and plans approved by the CMPC. This performance surety shall secure performance of all obligations of the DEVELOPER under this agreement. The performance surety shall meet all requirements established in Chapter 4: Performance Agreement of the Subdivision Regulations and secure full compliance with all terms and conditions of this agreement. The performance surety may be called for failure to comply with the provisions of this agreement in whole or in part according to the terms of the performance surety. The performance surety will not be released, except and until there has been full compliance with this agreement.

B3 Construction

B3.1 Construction Plans

The DEVELOPER shall submit to the CITY, Construction Plans describing in reasonable detail all utility systems, all storm water management systems, all street systems, pedestrian facilities, and all IMPROVEMENTS. The Construction Plans shall be designed according to the Engineering Standards and Specifications, all other codes and ordinances enforced by the City, and sound engineering judgment. The design of all utility systems shall follow the State of Tennessee and utility provider design criteria and specifications. In the event of a disagreement as to compliance with or interpretation of the Construction Plans and the CITY'S specifications, the decision of the CITY shall be final and binding on the DEVELOPER. The Construction Plans shall be prepared by a design professional licensed by the State of Tennessee to design all systems and shall bear the seal, signature, date, and license number of the professional preparing the Construction Plans.

B3.2 Commencement of Construction

Construction of IMPROVEMENTS may not begin until the following events have occurred:

A. The Preliminary Plat has been approved by the CMPC;
B. The Construction Plans are approved by the CITY;
C. The Tennessee Department of Environment and Conservation has approved the applicable portions of the Plans and has confirmed its approval to the CITY and/or DEVELOPER in writing;
D. The CITY shall have received an appropriately executed Development Agreement; and
E. The DEVELOPER shall give the CITY notice of commencement of construction, in writing at least one (1) working day prior to commencement.

B3.3 Site Grading

The DEVELOPER, hereby, agrees to construct all site grading to comply with the approved Construction Plans, including the approved Erosion Control Plan for the PROJECT and to comply with the Engineering Standards and Specifications, Stormwater Ordinance, and all other codes and ordinances enforced by the CITY.

B3.4 Storm Water Management Systems

The DEVELOPER shall be responsible for all storm water management work made necessary by the development of this PROJECT. It is understood and agreed that the CITY in its proprietary function is not and could not be expected to oversee, supervise, or direct the construction of all drainage improvements, and the excavation incident thereto. Neither is the CITY vested with the original design responsibility nor the means to formally survey elevations or the locations of improvements at every stage of the construction process. The CITY is vested with the right of periodic inspections, stop work order, and final approval as a measure of secondary or subsequent enforcement. The DEVELOPER has and shall retain the responsibility to properly anticipate, survey, design and construct the subdivision storm water improvements and give full assurance that same shall not adversely affect the flow or quality of surface water from or upon any property. In providing technical assistance, plan and design review, the CITY does not and shall not relieve or accept any liability from the DEVELOPER.

B3.5 Street Construction

The DEVELOPER, hereby, agrees to construct and improve the streets shown on the Construction Plans to comply with the CITY's specifications and to the satisfaction and approval of the City Engineer by grading, draining, subgrade preparation, base preparation, curbing, signage, striping, signalization, sidewalk installation, and paving with the required preparation, amounts, and types of material. The DEVELOPER further agrees to pay the cost of all engineering, inspection and laboratory cost incidental to the construction of subdivision streets including but not limited to material and density testing. The DEVELOPER further agrees to make all necessary adjustments to manholes and valve boxes to meet finished surface grade and to repair subsurface or base material, as required, in areas directed by the CITY Engineer, prior to application of final surface.

B3.6 Time Period for Construction

The DEVELOPER agrees to be bound to complete, within three (3) years of commencement of construction, all IMPROVEMENTS shown on the plat and plans and all things required by this agreement.

The DEVELOPER further agrees that if due to unforeseen circumstances, he is unable to complete all work included in this agreement within the time specified above, but desires to complete said agreement to the satisfaction of the CITY, the DEVELOPER shall submit a written request for extension of the agreement period to the CITY at least sixty (60) days prior to the expiration of the existing agreement period, specifying the reason for the DEVELOPER's failure to complete the work as agreed and a prospective date for such completion. The DEVELOPER further agrees that if the performance surety executed to secure the value of the work to be performed under this agreement, due to inflation or rising costs, is determined to be inadequate by the City Engineer to secure the cost of said IMPROVEMENTS at the time an extension is sought, the DEVELOPER will provide the additional security to bring the performance surety amount in line with current cost projections as made by the CITY. The DEVELOPER understands that the DEVELOPER's failure to follow the extension procedure constitutes a breach of this agreement and places the DEVELOPER in violation of the Subdivision Regulations. The DEVELOPER further understands, that should the DEVELOPER fail to complete any part of the work outlined in this agreement in a good and workmanlike manner as approved, the CITY shall reserve the right to withhold and withdraw all building permits within the PROJECT until all items of this Agreement have been fulfilled by the DEVELOPER.

B3.7 Off-Site Improvements

The DEVELOPER shall construct any and all off-site facilities that may be required to serve the PROJECT. Unless specifically noted in the Construction Plans and made a part of separate agreement with the CITY, the CITY shall not be required to reimburse the DEVELOPER for construction of off-site improvements.

B3.9 Inspection and Compliance

After construction begins, the CITY shall provide on-site construction inspection as the CITY deems necessary to ensure that all work is performed and completed in accordance with the Construction Plans, CITY specifications, and the contents of this agreement. In the event of a disagreement as to compliance with or interpretation of the Construction Plans and the CITY'S specifications, the decision of the CITY shall be final and binding on the DEVELOPER. If the DEVELOPER fails to construct in accordance with the approved Construction Plans or to comply with the CITY'S specifications, the CITY may issue a stop-work order and DEVELOPER, hereby, agrees to be bound by such order.

B3.10 Testing

The DEVELOPER agrees to pay the cost of all engineering, inspection, and laboratory cost incidental to construction of the streets, sidewalks, utilities, sewers, compacted fill material, and other facilities included within this agreement. Such testing includes, but is not limited to, material and density testing.

B3.11 Scrap Removal

The DEVELOPER agrees to comply with all local, state, and federal rules and regulations regarding waste material and debris disposal.

B3.12 Traffic Control

The DEVELOPER, hereby, agrees to prepare a traffic control/detour plan where required and shall submit said plan to the CITY for review and approval. All traffic control and safety devices, including

signs, lane markings, and barriers necessitated by construction activity undertaken pursuant to this agreement shall be installed and maintained by the DEVELOPER. All traffic control devices shall meet the standards and be installed in accordance with the latest edition of the Manual on Uniform Traffic Control Devices for Streets and Highways, published by the United States Department of Transportation.

B3.13 Temporary Facilities

The DEVELOPER shall provide all temporary facilities including but not limited to utilities and roadways, that are determined by the CITY to be required in connection with or as a result of interruption of service or access that occurs as a consequence of construction activity associated with the work covered by this agreement. Such temporary services shall in all regards and at all points in time be adequate to assure emergency access and adequate fire flows.

B4 Acceptance of Improvements

B4.1 Completion of Improvements

At such time as the improvements have been constructed and installed, in accordance with the Constructions Plans and specifications, required testing and inspections completed and found satisfactory, and all clean-up and cover-up has been done to the satisfaction the City Engineer, a letter requesting preliminary acceptance of the PROJECT will be provided by the DEVELOPER. Formal acceptance shall follow the procedure established in the Subdivision Regulations.

The DEVELOPER agrees the DEVELOPER shall have no claim, direct or implied, in the title or ownership of the IMPROVEMENTS specified in this agreement when the IMPROVEMENTS are complete and thereafter accepted by the CITY. The DEVELOPER will be responsible for construction failures and defects in PROJECT prior to final acceptance. During this period, it shall remain the responsibility of the DEVELOPER to correct and cure these defects and failures.

B4.2 As-Built Drawings and Post-Completion Items

The DEVELOPER agrees to furnish to the CITY as-built plans, on a reproducible, stable media, of the sanitary sewer, storm water management, water mains and service system, and streets within the subdivision before the CITY shall accept the subdivision.

B4.3 Acceptance of Facilities

Upon final acceptance of all or part of the IMPROVEMENTS in the PROJECT, then those IMPROVEMENTS shall become the property of the CITY free from all claims from any person or entity without the necessity of any further writing, agreement, or deed. The DEVELOPER further agrees that any facilities placed within a public or platted right-of-way or dedicated public easement are irrevocably dedicated to the public use without any right of reimbursement or compensation of any kind.

B4.4 Failure to Install

In the event the DEVELOPER fails to install the facilities in accordance with the terms of this agreement, the CITY may, in its sole discretion, elect to accept all or a portion of the IMPROVEMENTS in the PROJECT. Should the CITY choose to accept all or a portion of these IMPROVEMENTS, the CITY shall become the sole owner of these facilities. The CITY may give notice of acceptance by writing delivered to the DEVELOPER or recorded in the Register's Office of Maury County, Tennessee. No further writing or deed shall be required.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed in multiple originals by persons properly authorized so, to do on or as of the day and year first given.

Rock Springs Cove - Phase 1A PROJECT	
Completed by the Developer	*Completed by the City*
Castlerock Communities DEVELOPER NAME	
Patrick Carey AUTHORIZED AGENT NAME	CITY ENGINEER
Patrick Carey SIGNATURE	SIGNATURE
04/16/2026 DATE	DATE
381 Riverside Drive, STE 300 STREET	
Franklin, Tennessee 37064 CITY, STATE, ZIP	
615-580-8680 PHONE	
Pcarey@c-rock.com EMAIL	
Attest	*Attest*
Lakisha Winters ATTEST NAME	ATTEST NAME
Lakisha Winters ATTEST SIGNATURE	ATTEST SIGNATURE
04/16/2026 DATE	DATE

Know what's below. Call before you dig.

SITE DEVELOPMENT PLANS FOR:
MORNING POINTE
RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401
PARCEL ID: 112 00307 000

OWNER
CBP, LLC
700 NORTH MAIN STREET
COLUMBIA, TENNESSEE 38401

CONTACT: ANDY CRICHTON
931-398-5533
acrichton@athensinc.com

DEVELOPER
MORNING POINTE SENIOR LIVING
2050 UNION PLACE
COLUMBIA, TENNESSEE 38401

CONTACT: FRANKLIN FARROW
423-322-3446
ffarrow@ihpllc.com

CIVIL ENGINEER
FULMER LUCAS ENGINEERING, LLC
2002 RICHARD JONES ROAD - SUITE B200
NASHVILLE, TENNESSEE 37215

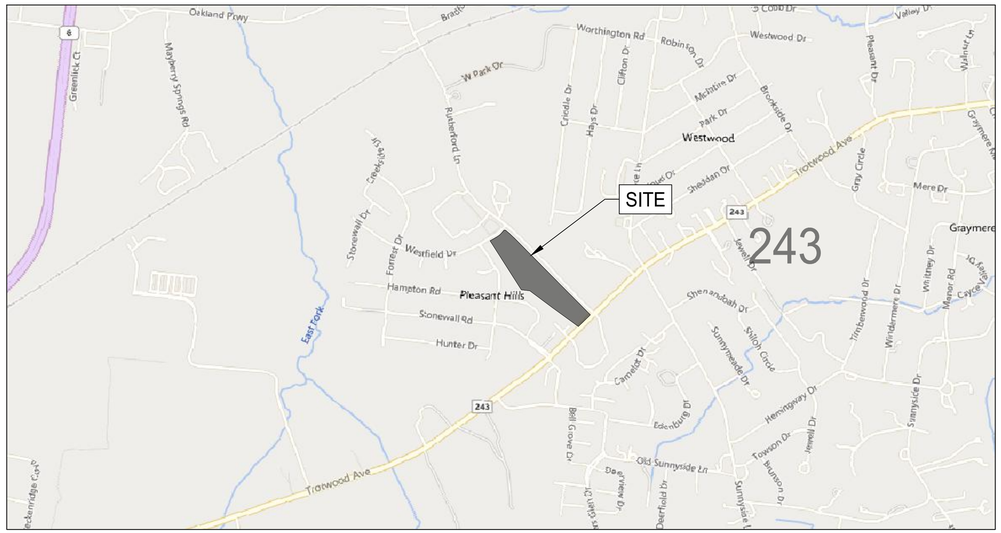
CONTACT: JASON MORELOCK
615-516-8477
jason@fulmerlucas.com

LAND SURVEYOR
M2 GROUP, LLC
1881 GENERAL GEORGE PATTON DRIVE, SUITE 107
FRANKLIN, TENNESSEE 37067

CONTACT: STEPHEN VANDER HORST
931-623-8913
stephen@m2groupllc.com

ARCHITECT
NEUHOFF TAYLOR ARCHITECTS, AIA
699 DALLAS ROAD
CHATTANOOGA, TN 37405

CONTACT: RANDALL TAYLOR
423-265-3272
Randall.Taylor@neuhofftaylor.com



VICINITY MAP
SCALE: 1"=1000'

Sheet List Table	
Sheet Number	Sheet Title
C0.0	COVER SHEET
SV-01	TOPOGRAPHIC SURVEY
C0.1	GENERAL NOTES
C0.2	SITE DEMOLITION PLAN
C0.3	INITIAL ESPC PLAN
C0.4	INTERMEDIATE EPSC PLAN
C0.5	FINAL EPSC PLAN
C1.0	SITE LAYOUT PLAN
C2.0	SITE GRADING PLAN
C2.1	SITE DRAINAGE PLAN
C2.2	OFF-SITE IMPROVEMENTS
C3.0	SITE UTILITY PLAN
C4.0	SITE DETAILS
C4.1	SITE DETAILS
C4.2	SITE DETAILS
C4.3	SITE DETAILS
C4.4	SITE DETAILS
C4.5	SITE DETAILS
C4.6	SITE DETAILS
C4.7	SITE DETAILS
C4.8	SITE DETAILS
C4.9	SITE DETAILS
L1.0	TREE PRESERVATION PLAN
L1.1	LANDSCAPE PLAN
L1.2	LANDSCAPE DETAILS
EP1.0	PHOTOMETRICS PLAN - ELECTRICAL
A1	BUILDING 1 FLOOR PLAN
A1	BUILDING 2 FLOOR PLAN
A2	BUILDING 1 ELEVATIONS
A2	BUILDING 2 ELEVATIONS
A7.2	EXTERIOR SIGNS

SURVEY INFO
PROVIDED BY: M2 GROUP, LLC
DATUM: TENNESSEE STATE PLANE (NAD83 & NAVD 88)

FULMER LUCAS
2002 RICHARD JONES RD - SUITE B200
NASHVILLE, TENNESSEE 37215
INFO@FULMERLUCAS.COM - (615) 345-3770

JASON C. MORELOCK — REGISTERED — AGRICULTURE — No. 109803 — STATE OF TENNESSEE
04/01/2026

SITE DEVELOPMENT PLANS FOR:
MORNING POINTE
RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401

DR.	DATE	DESCRIPTION
JEL	04/20/2026	FINAL PUD MASTER PLAN

COVER SHEET

C0.0

1421-01 MORNING POINTE

Monday, April 20, 2026
I:\1421_Morning Pointe\01 - Columbia\02 - Cad\Sheets\1421-01_Cover Sheet.dwg

Xref: \XXXX-XX_24X36 Title_NCS.dwg

LEGAL DESCRIPTION (PER TITLE COMMITMENT)

THE LAND REFERRED TO HEREIN BELOW IN SITUATED IN THE COUNTY OF MAURY, STATE OF TENNESSEE, AND DESCRIBED AS FOLLOWS:

TRACT III:

PARCEL NO. 1:

BOUNDED ON THE NORTH BY L AND N RAILROAD AND RUTHERFORD LANE; EAST BY CRIDDLE MEADOWS SUBDIVISION AND DR. DAN GRAY; SOUTH BY MT. PLEASANT PIKE OR U.S. NO. 43 HIGHWAY, PLEASANT HILLS SUBDIVISION, J.A. MORGAN AND OTHERS; WEST BY RIDLEY BROTHERS. BEGINNING AT AN IRON PIN IN THE EAST LINE OF RIDLEY BROTHERS TRACT AT THE SOUTHWEST CORNER OF THE HEREIN DESCRIBED TRACT: THENCE WITH RIDLEY BROTHERS AND GENERALLY FOLLOWING A FENCE NORTH 5 DEGREES 16 MINUTES EAST, 1,127.65 FEET TO AN IRON PIN; THENCE WITH SAME NORTH 87 DEGREES 32 MINUTES WEST, 946.15 FEET TO AN IRON PIN; THENCE WITH SAME NORTH 0 DEGREES 50 MINUTES EAST, 359.97 FEET TO A SPIKE IN THE CENTER LINE OF L AND N RAILROAD; THENCE FOLLOWING A STAKED LINE WITH IRON PINS ALONG CENTER LINE OF L AND N RAILROAD AS FOLLOWS: NORTH 53 DEGREES 29 MINUTES EAST, 2,326.46 FEET, NORTH 56 DEGREES 09 MINUTES EAST, 352.0 FEET; NORTH 59 DEGREES 31 MINUTES EAST, 326.96 FEET; NORTH 62 DEGREES 32 MINUTES EAST, 264.30 FEET; NORTH 65 DEGREES 18 MINUTES EAST, 278.60 FEET; NORTH 67 DEGREES 39 MINUTES EAST, 221.60 FEET TO AN IRON PIN; THENCE LEAVING RAILROAD AND GENERALLY FOLLOWING A FENCE ALONG THE SOUTH MARGIN OF RUTHERFORD LANE SOUTH 87 DEGREES 27 MINUTES EAST, 916.74 FEET TO AN IRON PIN; THENCE WITH SAME SOUTH 86 DEGREES 19 MINUTES EAST, 149.18 FEET TO A STAKE; THENCE WITH THE WEST LINE OF CRIDDLE MEADOWS SUBDIVISION SOUTH 4 DEGREES 04 MINUTES WEST, 2,743.39 FEET TO AN IRON PIN; THENCE WITH THE SOUTH LINE OF CRIDDLE MEADOWS SUBDIVISION SOUTH 85 DEGREES 56 MINUTES EAST, 400.0 FEET TO AN IRON PIN; THENCE WITH SAME SOUTH 84 DEGREES 29 MINUTES EAST, 221.98 FEET TO AN IRON PIN; THENCE WITH DR. DAN GRAY SOUTH 13 DEGREES 46 MINUTES EAST, 24.80 FEET TO AN IRON PIN; THENCE WITH SAME SOUTH 55 DEGREES 24 MINUTES WEST, 95.22 FEET TO AN IRON PIN; THENCE WITH SAME SOUTH 42 DEGREES 15 MINUTES EAST, 93.35 FEET TO AN IRON PIN; THENCE WITH SAME SOUTH 24 DEGREES 43 MINUTES EAST, 99.95 FEET TO AN IRON PIN; THENCE WITH SAME SOUTH 55 DEGREES 50 MINUTES WEST, 178.04 FEET TO AN IRON PIN; THENCE WITH SAME SOUTH 39 DEGREES 27 MINUTES EAST, 820.80 FEET TO AN IRON PIN; THENCE WITH THE NORTH MARGIN OF MT. PLEASANT PIKE SOUTH 42 DEGREES 32 MINUTES WEST, 506.57 FEET TO AN IRON PIN; THENCE WITH J. A. MORGAN AND OTHERS NORTH 58 DEGREES 05 MINUTES WEST, 424.19 FEET TO AN IRON PIN; THENCE WITH SAME AND WITH PLEASANT HILLS SUBDIVISION NORTH 57 DEGREES 35 MINUTES WEST, 418.17 FEET TO AN IRON PIN; THENCE WITH PLEASANT HILLS SUBDIVISION NORTH 88 DEGREES 01 MINUTES WEST, 680.26 FEET TO AN IRON PIN; THENCE WITH SAME NORTH 88 DEGREES 21 MINUTES WEST, 514.0 FEET TO AN IRON PIN; THENCE WITH SAME NORTH 88 DEGREES 01 MINUTES WEST, 308.0 FEET TO AN IRON PIN; THENCE WITH SAME NORTH 87 DEGREES 37 MINUTES WEST, 431.0 FEET TO AN IRON PIN; THENCE WITH PROPOSED PLEASANT HILLS SUBDIVISION, SECTION 4; AND J. A. MORGAN AND OTHERS NORTH 87 DEGREES 23 MINUTES WEST, 919.68 FEET TO AN IRON PIN; THENCE WITH J. A. MORGAN AND OTHERS NORTH 86 DEGREES 26 MINUTES WEST, 310.82 FEET TO THE POINT OF BEGINNING.

THERE IS A TVA POWER LINE HAVING A 250 RIGHT-OF-WAY ACROSS THE EAST PORTION OF THE ABOVE DESCRIBED TRACT. THERE IS A 100-FOOT CHARTERED RAILROAD RIGHT-OF- WAY ON THIS TRACT ALONG THE RAILROAD LINE.

PARCEL NO. 2:

BOUNDED ON THE NORTH BY RAYMOND MCMEEN AND TOM BURT; C. C. PINCKNEY; W. CLYDE BAKER AND RUTHERFORD LANE; EAST AND SOUTH BY L AND N RAILROAD AND WEST BY RIDLEY BROTHERS. BEGINNING AT AN IRON PIN IN MCMEEN AND BURT'S SOUTH LINE; SAID POINT BEING THE NORTHWEST CORNER OF THE HEREIN DESCRIBED TRACT; THENCE WITH MCMEEN AND BURT FARM, C. C. PINCKNEY AND W. CLYDE BAKER GENERALLY FOLLOWING A FENCE SOUTH 87 DEGREES 52 MINUTES EAST, 1079.03 FEET TO AN IRON PIN; THENCE WITH BAKER GENERALLY FOLLOWING A FENCE SOUTH 85 DEGREES 57 MINUTES EAST, 400.23 FEET TO AN IRON PIN; THENCE WITH SAME SOUTH 85 DEGREES 46 MINUTES EAST, 371.10 FEET TO AN IRON PIN; THENCE WITH SAME NORTH 5 DEGREES 29 MINUTES EAST, 342.33 FEET TO AN IRON PIN; THENCE WITH SAME SOUTH 87 DEGREES 35 MINUTES EAST, 504.44 FEET TO AN IRON PIN; THENCE WITH SAME SOUTH 88 DEGREES 15 MINUTES EAST, 300.05 FEET TO AN IRON PIN; THENCE WITH THE SOUTH MARGIN OF RUTHERFORD LANE SOUTH 89 DEGREES 17 MINUTES EAST, 1,160.19 FEET TO AN IRON PIN; THENCE WITH SAME SOUTH 87 DEGREES 27 MINUTES EAST, 13.46 FEET TO AN IRON PIN IN CENTER LINE OF L AND N RAILROAD; THENCE WITH THE CENTER LINE OF L AND N RAILROAD FOLLOWING A STAKED LINE WITH IRON PINS AS FOLLOWS: SOUTH 67 DEGREES 39 MINUTES WEST, 221.60 FEET; SOUTH 65 DEGREES 18 MINUTES WEST, 278.60 FEET; SOUTH 62 DEGREES 32 MINUTES WEST, 264.30 FEET; SOUTH 59 DEGREES 31 MINUTES WEST, 326.96 FEET; SOUTH 56 DEGREES 09 MINUTES WEST, 252.0 FEET; SOUTH 53 DEGREES 29 MINUTES WEST, 2,305.30 FEET; THENCE LEAVING RAILROAD AND WITH RIDLEY BROTHERS GENERALLY FOLLOWING A FENCE AS FOLLOWS: NORTH 20 DEGREES 46 MINUTES WEST, 328.63 FEET TO AN IRON PIN; NORTH 32 DEGREES 52 MINUTES WEST, 326.42 FEET TO AN IRON PIN; NORTH 23 DEGREES 49 MINUTES WEST, 428.85 FEET TO AN IRON PIN; NORTH 17 DEGREES 02 MINUTES WEST, 922.55 FEET TO THE POINT OF BEGINNING, THERE IS A 100-FOOT CHARTERED RIGHT-OF-WAY ON THIS TRACT ALONG THE RAILROAD LINE.

TRACT IV:

LOCATED IN THE NINTH (9TH) CIVIL DISTRICT OF MAURY COUNTY, TENNESSEE, NEAR THE INTERSECTION OF WEST PARK DRIVE AND THE L AND N RAILROAD. BOUNDED ON THE NORTH BY L AND N RAILROAD; EAST BY WEST PARK DRIVE; SOUTH AND WEST BY A. D. CRICHTON AND OTHERS, AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A SPIKE IN THE CENTER OF L AND N RAILROAD, SAID POINT IS ALSO IN THE WEST MARGIN OF WEST PARK DRIVE; SAID POINT IS IN THE NORTHEAST CORNER OF THE HEREIN DESCRIBED TRACT; THENCE WITH THE WEST MARGIN OF WEST PARK DRIVE SOUTH 34 DEGREES 10 MINUTES EAST, 517.77 FEET TO AN IRON PIN AT POINT OF CURVE; THENCE ON A CHORD TO A 5 DEGREES 11 MINUTES CURVE HAVING A CENTRAL ANGLE OF 22 DEGREES 09 MINUTES FEET SOUTH 30 DEGREES 56 MINUTES EAST, 125.0 FEET TO AN IRON PIN; THENCE WITH A. D. CRICHTON AND OTHERS SOUTH 53 DEGREES 29 MINUTES WEST, 644.71 FEET TO AN IRON PIN; THENCE WITH SAME NORTH 36 DEGREES 31 MINUTES WEST, 660.91 FEET TO A SPIKE IN THE CENTER OF L AND N RAILROAD; THENCE WITH L AND N RAILROAD NORTH 53 DEGREES 29 MINUTES EAST, 287.17 FEET TO A SPIKE; THENCE WITH SAME ON A CHORD TO A 1 DEGREES CURVE NORTH 56 DEGREES 04 MINUTES EAST 352.0 FEET TO A SPIKE; THENCE WITH SAME ON A CHORD TO CURVE NORTH 57 DEGREES 57 MINUTES EAST, 39.21 FEET TO THE POINT OF BEGINNING.

TRACT V:

THIS IS A TRACT OR PARCEL OF LAND LOCATED IN THE NINTH CIVIL DISTRICT OF MAURY COUNTY, TENNESSEE BOUNDED ON THE NORTH BY DON CRICHTON AND OTHERS; EAST BY PROPOSED NEW ROAD; SOUTH AND WEST BY DON CRICHTON AND OTHERS AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT AN IRON PIN IN THE WEST MARGIN OF NEW PROPOSED ROAD AT THE SOUTHWEST CORNER OF THE HEREIN DESCRIBED TRACT, SAID POINT BEING NORTH 48 DEGREES 53 MINUTES WEST, 1,473.45 FEET FROM THE NORTH MARGIN OF U. S. HIGHWAY NO. 43 OR MT. PLEASANT PIKE, SAID POINT IN NORTH MARGIN OF HIGHWAY IS SOUTH 41 DEGREES 57 MINUTES WEST, 236.16 FEET FROM THE MOST SOUTHERLY SOUTHWEST CORNER OF THE DON CRICHTON AND OTHERS FARM; THENCE WITH DON CRICHTON AND OTHERS SOUTH 56 DEGREES 07 MINUTES WEST, 255.0 FEET TO AN IRON PIN; THENCE WITH SAME, NORTH 48 DEGREES 53 MINUTES WEST, 175.0 FEET TO AN IRON PIN, THENCE WITH SAME NORTH 56 DEGREES 07 MINUTES EAST, 246.70 FEET TO AN IRON PIN; THENCE WITH THE WEST MARGIN OF THE NEW PROPOSED ROAD ON A 4 DEGREES 07 MINUTES CURVE HAVING A CENTRAL ANGLE OF 9 DEGREES 54 MINUTES A DISTANCE ON CURVE OF 149.30 FEET TO P.C. OF CURVE; THENCE WITH SAME ON A TANGENT SOUTH 48 DEGREES 53 MINUTES EAST, 28.0 FEET TO THE POINT OF BEGINNING.

TRACT VI:

ANY PORTION OF OLD RUTHERFORD LANE THAT BOUNDS SAID PROPERTY OWNED BY ANDREW D. CRICHTON, JOHN B. JEWELL, III, AND JAMES W. JEWELL, UP TO THE CENTERLINE OF SAID LANE.

FIRST PARTY ALSO QUITCLAIMS ANY AND ALL RIGHTS IN AND TO OLD RUTHERFORD LANE ACQUIRED BY VIRTUE OF THE FOREGOING DEED OR OTHERWISE.

INCLUDED IN THE FOREGOING DESCRIPTION, BUT EXPRESSLY EXCLUDED THEREFROM, IS PROPERTY CONVEYED BY THE FOLLOWING; ALL OF RECORD IN THE REGISTER'S OFFICE OF MAURY COUNTY, TENNESSEE.

1. ALL LOTS IN WESTFIELD SUBDIVISION, SECTIONS 1, 2,3, 4, AND 4A, WITH THE EXCEPTION OF LOT 114 WESTFIELD SUBDIVISION, SECTION 4 AS SHOWN ON PLAT OF RECORD IN PLAT BOOK 8, PAGE 21, REGISTER'S OFFICE OF MAURY COUNTY, TENNESSEE.
2. DEED TO THE INDUSTRIAL DEVELOPMENT BOARD OF MAURY COUNTY, TENNESSEE IN BOOK 563, PAGE 204;
3. DEED TO MAURY COUNTY, TENNESSEE IN BOOK 591, PAGE 180;
4. DEED TO HERMAN L. LEWIS IN BOOK 607, PAGE 512;
5. DEED TO COLCO, INC., A TENNESSEE CORPORATION IN BOOK 655, PAGE 709;
6. DEED TO RICHARD A. BRICKNER AND WIFE, JUDITH BRICKNER, AS TENANTS IN THE ENTIRETY IN BOOK 675, PAGE 50;
7. DEED TO MAURY COUNTY, TENNESSEE IN BOOK 675, PAGE 354;
8. DEED TO GAITHER FRIERSON GARY IN BOOK 679, PAGE 508;
9. DEED TO STEVEN G. HALL IN BOOK 711, PAGE 531;
10. DEED TO MAURY COUNTY BOARD OF EDUCATION IN BOOK 803, PAGE 174;
11. DEED TO DAVID L. SCHWAB AND JOHN G. MITCHELL, AS EQUAL TENANTS IN COMMON IN BOOK 1114, PAGE 276;
12. DEED EUGENE L. HELLER IN BOOK 1145, PAGE 580; AND
13. DEED TO MAURY COUNTY, STATE OF TENNESSEE IN BOOK R2839, PAGE 368.

BEING PART OF THE SAME PROPERTY CONVEYED TO CBP, LLC, A TENNESSEE LIMITED LIABILITY COMPANY, BY DEED FROM CRICHTON WELTON PARTNERS, G.P., A TENNESSEE GENERAL PARTNERSHIP, OF RECORD IN BOOK R2895, PAGE 1276, IN THE REGISTER'S OFFICE OF MAURY COUNTY, TENNESSEE.

LEGAL DESCRIPTION (PER SURVEY)

LOCATED IN THE 9TH CIVIL DISTRICT OF MAURY COUNTY, TENNESSEE, BEING A PORTION OF THE CBP, LLC PROPERTY, AS REFERENCED IN RECORD BOOK 2895, PAGE 829 OF THE REGISTER'S OFFICE OF MAURY COUNTY, TENNESSEE (ROMCT) AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT AN IRON REBAR (SET), ON THE EASTERLY RIGHT-OF-WAY LINE OF WESTFIELD DRIVE AND THE NORTHEASTERLY CORNER OF LOT 1, WESTFIELD ESTATES, SECTION 1 PROPERTY, PLAT BOOK 7, PAGE 34 (ROMCT), HAVING A TENNESSEE STATE PLANE COORDINATE VALUE OF NORTH: 460,158.17 US FEET, EAST: 1,640,747.93 US FEET (NAD83, 2011);

THENCE, WITH WESTFIELD DRIVE, THE FOLLOWING FOUR (4) CALLS:
1. NORTH 60° 15' 34" EAST 105.85 FEET TO AN IRON PIPE (FOUND);
2. ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 282.23 FEET, AN ARC LENGTH OF 108.50 FEET, AND A CHORD BEARING OF NORTH 49° 15' 42" EAST 107.83 FEET TO AN IRON PIPE (FOUND);
3. NORTH 36° 46' 42" EAST 18.65 FEET TO AN IRON PIPE (FOUND);
4. ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 25.00 FEET, AN ARC LENGTH OF 42.59 FEET, AND A CHORD BEARING OF NORTH 80° 41' 30" EAST 37.63 FEET TO AN IRON PIPE (FOUND) IN THE WESTERLY RIGHT-OF-WAY OF RUTHERFORD LANE;

THENCE, WITH RUTHERFORD LANE, THE FOLLOWING TWO (2) CALLS:
1. ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 1392.39 FEET, AN ARC LENGTH OF 157.80 FEET, AND A CHORD BEARING OF SOUTH 47° 58' 28" EAST 157.71 FEET TO AN IRON REBAR (SET);
2. SOUTH 44° 43' 40" EAST 834.17 FEET TO AN IRON REBAR (SET) BEING IN THE CENTERLINE OF A 150' TVA EASEMENT;

THENCE, SEVERING CBP, LLC, SOUTH 08° 07' 07" WEST 383.66 FEET TO AN IRON PIPE (FOUND) BEING THE NORTHEAST CORNER OF THE ALPHEUS S. WEIDNER III PROPERTY, RECORD BOOK 2482, PAGE 1271 (ROMCT);

THENCE, WITH WEIDNER AND THE NORTHERLY LINE OF PLEASANT HILLS, SECTION 1, PLAT BOOK 4, PAGE 63 (ROMCT), THE FOLLOWING TWO (2) CALLS:
1. NORTH 53° 16' 46" WEST 395.79 FEET TO AN IRON REBAR (FOUND);
2. NORTH 83° 51 15" WEST 118.06 FEET TO THE SOUTHEAST CORNER OF LOT 6 OF SAID WESTFIELD ESTATES, SECTION 1;

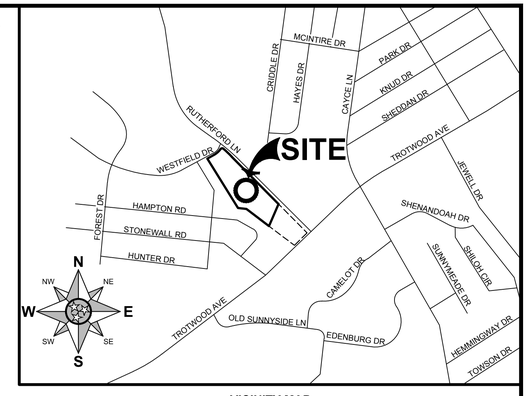
THENCE WITH WESTFIELD ESTATES, NORTH 32° 33 34" WEST 812.55 FEET TO THE POINT OF BEGINNING, CONTAINING IN ALL 9.13 ACRES, MORE OR LESS.

GENERAL NOTES:

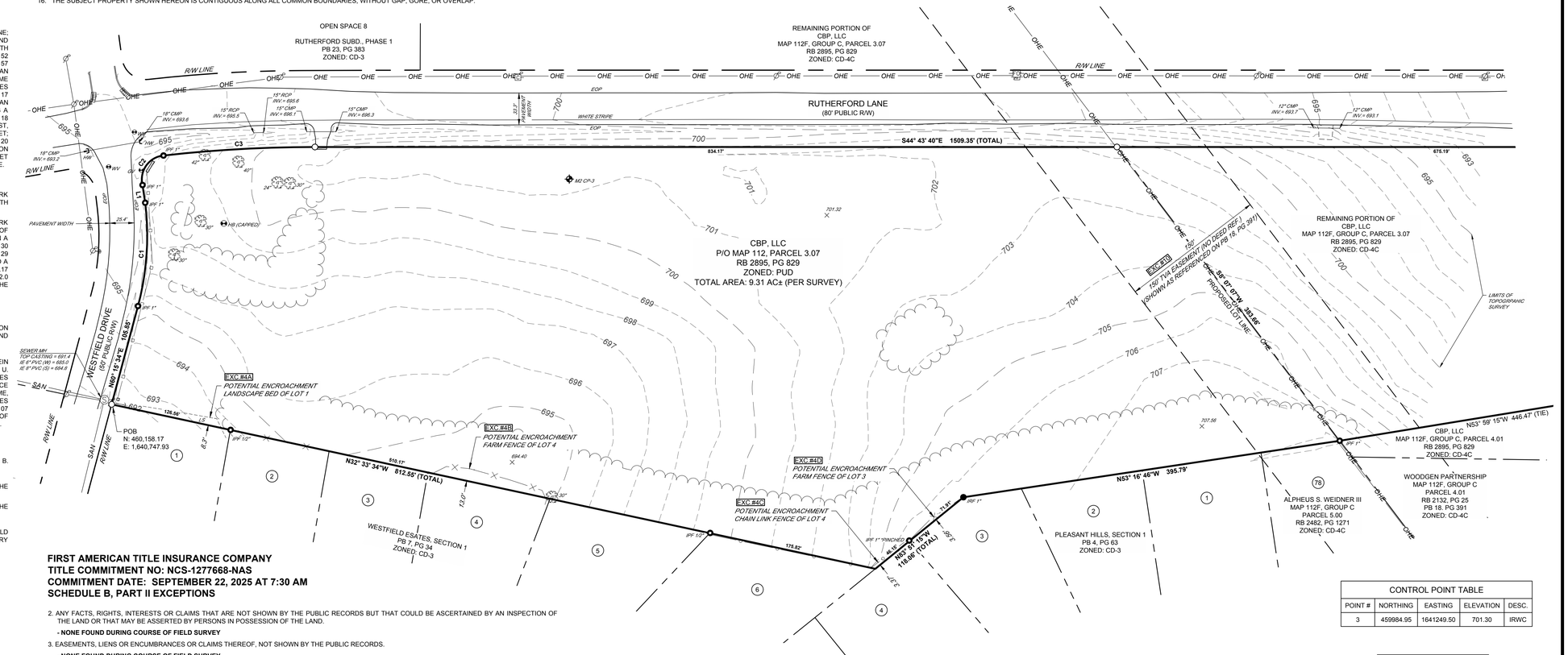
1. BEARINGS ARE BASED ON THE TENNESSEE STATE PLANE COORDINATE SYSTEM (NAD83, 2011).
2. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88, GEOID 18). CONTOURS ARE SHOWN AT 1-FOOT INTERVALS.
3. THE PROPERTY SHOWN HEREON IS THE SAME PROPERTY AS REFERENCED IN THE FIRST AMERICAN TITLE INSURANCE COMPANY, TITLE COMMITMENT NO. NAS-1277668-NAS.
4. THE FIELD SURVEY WAS COMPLETED ON SEPTEMBER 11, 2025.
5. THIS SURVEY WAS PREPARED USING THE TITLE COMMITMENT, AS REFERENCED HEREON, ALONG WITH CURRENT DEEDS AND PLATS OF RECORD.
6. ALL DEED BOOK AND PLAT REFERENCES PERTAIN TO THE REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE.
7. ADJOINING PROPERTY LINES SHOWN WERE PLOTTED FROM INFORMATION TAKEN FROM EITHER DEED DESCRIPTION, RECORD PLATS, OR TAX MAPS.
8. PROPERTY CORNERS SET THIS SURVEY ARE 18" #4 REBAR WITH ORANGE PLASTIC CAP STAMPED "M2 GROUP", 18" #5 REBAR WITH YELLOW PLASTIC CAP STAMPED "M2 GROUP, LLC", OR PK NAIL WITH STAINLESS STEEL WASHER STAMPED "M2 GROUP, LLC", UNLESS NOTED OTHERWISE.
9. UTILITIES SHOWN HEREON WERE COMPILED FROM VISIBLE STRUCTURES AT THE SITE, INFORMATION FROM PLANS, AND PHYSICAL MARKINGS AND COMBINED TO DEVELOP A VIEW OF THE UNDERGROUND UTILITIES. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY, AND RELIABLY DEPICTED. IN ADDITION, IN SOME JURISDICTIONS, 811 OR OTHER SIMILAR UTILITY LOCATE REQUESTS FROM SURVEYORS MAY BE IGNORED OR RESULT IN AN INCOMPLETE RESPONSE. THIS SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THIS SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. VERIFICATION OF EXISTENCE, LOCATIONS, AND DEPTH SHOULD BE MADE BEFORE CONDUCTING ANY EXCAVATION IN THE VICINITY OF THE UTILITY.
10. THE PROPERTY SHOWN HEREON IS LOCATED IN A FLOOD HAZARD ZONE "X" (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN) ACCORDING TO F.I.R.M. MAP "MAURY COUNTY, TENNESSEE" PANEL 280 OF 440, MAP NUMBER 47119C0280E, EFFECTIVE APRIL 16, 2007.
11. THE SUBJECT PROPERTY IS CURRENTLY ZONED "PUD" (PLANNED UNIT DEVELOPMENT) , BASED ON THE OFFICIAL ZONING MAP FOR CITY OF COLUMBIA, TENNESSEE. A CURRENT ZONING REPORT AND/OR ZONING LETTER HAS NOT BEEN PROVIDED TO THE SURVEYOR. THE MINIMUM BUILDING SETBACK REQUIREMENTS FOR "PUD" ZONING SHOULD BE CONFIRMED WITH THE CONTROLLING JURISDICTION.
13. THE SUBJECT PROPERTY HAS DIRECT AND CONTIGUOUS ACCESS TO RUTHERFORD LANE, A 80-FOOT PUBLIC RIGHT-OF-WAY, TROTWOOD AVENUE, A 60-FOOT PUBLIC RIGHT-OF-WAY, AND WESTFIELD DRIVE, A 50-FOOT PUBLIC RIGHT-OF-WAY.
14. THERE WAS NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS OBSERVED DURING THE COURSE OF FIELD SURVEY.
15. NO EVIDENCE OF PROPOSED CHANGES IN THE STREET RIGHT OF WAY LINES, OR OF RECENT STREET OR SIDEWALK CONSTRUCTION, OR REPAIRS, WAS OBSERVED DURING THE COURSE OF FIELD SURVEY.
16. THE SUBJECT PROPERTY SHOWN HEREON IS CONTIGUOUS ALONG ALL COMMON BOUNDARIES, WITHOUT GAP, GORE, OR OVERLAP.

LEGEND:

	EXISTING PROPERTY LINE	HB	HOSE BIB
	EXISTING RIGHT-OF-WAY		SANITARY SEWER MANHOLE
	EXISTING ADJACENT PROPERTY LINE		CURB INLET
	EXISTING EASEMENT		INLET (SQUARE)
MBSL	MINIMUM BUILDING SETBACK LINE	GV	GAS BOX (GAS VALVE)
700	EXISTING INDEX CONTOUR		HIGH TENSION TOWER
	EXISTING INTERMEDIATE CONTOUR		POWER POLE
	EXISTING FARM FENCE		GUY WIRE
	EXISTING WOOD FENCE		TRAFFIC PULL BOX
	EXISTING CHAIN-LINK FENCE		COMMUNICATION PEDESTAL
SAN	EXISTING SANITARY SEWER LINE		FIBER OPTIC PULL BOX
W	EXISTING WATER LINE		TREE, DECIDUOUS
OHE	EXISTING OVERHEAD ELECTRIC	700.00	EXISTING SPOT ELEVATION
	EXISTING TREELINE	(POI)	POINT OF INSERTION
	IRON REBAR FOUND (IRF)	HW	HEADWALL
	IRON PIPE FOUND (IPF)	LS	LANDSCAPE BED
	IRON REBAR SET W/CAP (IRS)	EOP	EDGE OF PAVEMENT
	BENCHMARK / SURVEY CONTROL	1	LOT NUMBER
WV	WATER VALVE	EXC. #3	SCHEDULE B PART II EXCEPTION
	FIRE HYDRANT		



VICINITY MAP
SCALE: 1"=1000'



FIRST AMERICAN TITLE INSURANCE COMPANY
TITLE COMMITMENT NO: NCS-1277668-NAS
COMMITMENT DATE: SEPTEMBER 22, 2025 AT 7:30 AM
SCHEDULE B, PART II EXCEPTIONS

2. ANY FACTS, RIGHTS, INTERESTS OR CLAIMS THAT ARE NOT SHOWN BY THE PUBLIC RECORDS BUT THAT COULD BE ASCERTAINED BY AN INSPECTION OF THE LAND OR THAT MAY BE ASSERTED BY PERSONS IN POSSESSION OF THE LAND.
   - NONE FOUND DURING COURSE OF FIELD SURVEY
3. EASEMENTS, LIENS OR ENCUMBRANCES OR CLAIMS THEREOF, NOT SHOWN BY THE PUBLIC RECORDS.
   - NONE FOUND DURING COURSE OF FIELD SURVEY
4. ANY ENCROACHMENT, ENCUMBRANCE, VIOLATION, VARIATION, OR ADVERSE CIRCUMSTANCE AFFECTING THE TITLE THAT WOULD BE DISCLOSED BY AN ACCURATE AND COMPLETE LAND SURVEY OF THE LAND AND NOT SHOWN BY THE PUBLIC RECORDS.
   (A) - ENCROACHMENT OF LANDSCAPE BED FROM LOT 1, WESTFIELD ESTATES, SECT. 1, AS SHOWN AND NOTED HEREON
   (B) - ENCROACHMENT OF FARM FENCE FROM LOT 4, WESTFIELD ESTATES, SECT. 1, AS SHOWN AND NOTED HEREON
   (C) - ENCROACHMENT OF CHAIN LINK FENCE FROM LOT 4, PLEASANT HILLS, SECT. 1, AS SHOWN AND NOTED HEREON
   (D) - ENCROACHMENT OF FARM FENCE FROM LOT 3, PLEASANT HILLS, SECT. 1, AS SHOWN AND NOTED HEREON
10. ALL MATTERS SHOWN ON PLAT(S) OF RECORD IN BOOK 8, PAGE 21; PLAT BOOK P18, PAGE 379; AND PLAT BOOK P23, PAGE 348, IN THE REGISTER'S OFFICE OF MAURY COUNTY, TENNESSEE.
   - PLAT BOOK 8, PAGE 21 AND PLAT BOOK 23, PAGE 348, DO NOT AFFECT THE SUBJECT PROPERTY
   - PLAT BOOK 18, PAGE 379, REFERENCES A 150' TVA OVERHEAD POWER LINE EASEMENT THAT DOES AFFECT THE SUBJECT PROPERTY AS SHOWN AND NOTED HEREON
   - PLAT BOOK 18, PAGE 391, IS NOT LISTED IN EXCEPTION ABOVE, BUT DOES REFERENCE SAME 150' TVA OVERHEAD POWER LINE EASEMENT THAT DOES AFFECT THE SUBJECT PROPERTY AS SHOWN AND NOTED HEREON
11. RIGHT OF WAY AND LIFE ESTATE CONTAINED IN DEED OF RECORDED IN BOOK 595, PAGE 486, IN THE REGISTER'S OFFICE OF MAURY COUNTY, TENNESSEE.
   - DOES NOT AFFECT THE SUBJECT PROPERTY
12. TERMS AND PROVISIONS OF RIGHT OF WAY OR EASEMENT, BY AND BETWEEN THOMAS J. BURT AND RAYMOND MCMEEN AND CITY OF COLUMBIA, TENNESSEE, A MUNICIPAL CORPORATION, OF RECORD IN BOOK 609, PAGE 309, IN THE REGISTER'S OFFICE OF MAURY COUNTY, TENNESSEE.
   - DOES NOT AFFECT THE SUBJECT PROPERTY
13. TERMS AND PROVISIONS OF RIGHT-OF-WAY OR EASEMENT, BY AND BETWEEN ANDREW DON CRICHTON, JAMES W. JEWELL AND JOHN B. JEWELL, III AND CITY OF COLUMBIA, ITS SUCCESSORS AND ASSIGNS, OF RECORD IN BOOK R1924, PAGE 1092, IN THE REGISTER'S OFFICE OF MAURY COUNTY, TENNESSEE.
   - DOES NOT AFFECT THE SUBJECT PROPERTY
15. TERMS AND PROVISIONS OF GRADING AND CONSTRUCTION EASEMENT AGREEMENT, BY AND BETWEEN WELTON INVESTMENTS, LLC, A TENNESSEE LIMITED LIABILITY COMPANY AND COLUMBIA RETAIL PARTNERS, A TENNESSEE GENERAL PARTNERSHIP, OF RECORD IN BOOK R2113, PAGE 557, IN THE REGISTER'S OFFICE OF MAURY COUNTY, TENNESSEE.
   - DOES NOT AFFECT THE SUBJECT PROPERTY
17. TERMS AND PROVISIONS OF SANITARY SEWER EASEMENT, BY AND BETWEEN CBP, LLC, A TENNESSEE LIMITED LIABILITY COMPANY AND CITY OF COLUMBIA, STATE OF TENNESSEE, ITS SUCCESSORS AND ASSIGNS, OF RECORD IN BOOK R2931, PAGE 1096, IN THE REGISTER'S OFFICE OF MAURY COUNTY, TENNESSEE.
   - DOES NOT AFFECT THE SUBJECT PROPERTY
20. RIGHTS OF THE RAILROAD COMPANY TO EXPAND ITS RIGHT OF WAY TO ITS FULL CHARTER WIDTH.
   - DOES NOT AFFECT THE SUBJECT PROPERTY

CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESC.
3	459984.95	1641249.50	701.30	IRWC

LINE TABLE		
LINE #	LENGTH	DIRECTION
L1	18.65	N36° 46' 42"E

CURVE TABLE				
CURVE #	LENGTH	RADIUS	CHORD BRNG	CHORD LENGTH
C1	108.50	282.23	N49° 15' 42"E	107.83
C2	42.59	25.00	N80° 41' 30"E	37.63
C3	157.80	1392.39	S47° 58' 28"E	157.71

GPS SURVEY DATA INFORMATION:

- TYPE OF GPS SURVEY: RTK
- POSITIONAL ACCURACY: 0.07 FEET
- DATUM/EPOCH: NAD83 (2011) EPOCH 2010.00
- PUBLISHED/FIXED CONTROL USED: TGRN
- GEOID MODEL: GEOID 18
- COMBINED GRID SCALE FACTOR: 0.9999285106
- UNITS: (US FEET)(GRID)



SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THE INFORMATION SHOWN HEREON IS TRUE AND ACCURATE TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF. THE SURVEY SHOWN HEREON REPRESENTS A CATEGORY I SURVEY, HAVING A LINEAR ERROR OF CLOSURE WHICH IS EQUAL TO OR LESS THAN 1 FOOT PER 10,000 FEET OF LAND (1:10,000). THIS SURVEY WAS MADE IN COMPLIANCE WITH THE CURRENT TENNESSEE MINIMUM STANDARDS OF PRACTICE.

60' 0 60' 120'
GRAPHIC SCALE

REVISION #	DATE	DESCRIPTION

BOUNDARY & TOPOGRAPHIC SURVEY
P/O MAP 112, PARCEL 3.07
RUTHERFORD LANE
CITY OF COLUMBIA
9TH CIVIL DISTRICT
MAURY COUNTY, TENNESSEE

DATE :	OCTOBER 22, 2025	DRAWN BY :	PMK
PROJECT NUMBER :	25-215	CHECKED BY :	EDC

M2 GROUP
P.O. BOX 2543
BRENTWOOD, TN 37024-2543
615-656-0257 / M2GROUPLLC.COM

SHEET NUMBER: **SV-01**

25-215_RUTHERFORD LN_SV.DWG / Monday, November 17, 2025 10:47:37 AM

Know what's **below.**
Call before you dig.

GENERAL NOTES:

1. GENERAL CONTRACTOR (GC) IS TO CONFORM TO ALL LOCAL CODES AND OBTAIN ALL PERMITS PRIOR TO BEGINNING WORK.
2. GC SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES. GC SHALL TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN. REPAIR ALL CONTRACTOR CAUSED DAMAGE ACCORDING TO LOCAL STANDARDS AND AT THE CONTRACTOR'S EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY.
3. GC SHALL EXERCISE EXTREME CAUTION WHEN WORKING IN THE VICINITY OF UNDERGROUND OR OVERHEAD ELECTRICAL WIRES AND SERVICES. IF AT ANY TIME IN THE PURSUIT OF THIS WORK, THE CONTRACTOR MUST WORK IN CLOSE PROXIMITY OF ELECTRICAL WIRES, THE ELECTRICAL COMPANY SHALL BE CONTACTED PRIOR TO SUCH WORK AND THE PROPER SAFETY MEASURES TAKEN.
4. IN EASEMENTS AND RIGHTS-OF-WAY, GC SHALL PROTECT AND RESTORE SAID PROPERTY TO A CONDITION SIMILAR OR EQUAL TO THAT EXISTING AT THE COMMENCEMENT OF CONSTRUCTION, EXCEPT WHERE NOTED.
5. GC IS TO PHOTOGRAPH ALL EXISTING CONDITIONS PRIOR TO INITIATING CONSTRUCTION.
6. CLEAR THE ENTIRE CONSTRUCTION AREA OF ALL WEEDS, BUSHES, TREES NOTED FOR REMOVAL OR WITHIN GRADING BOUNDARY, STUMPS, ASPHALT, CONCRETE, CURBS AND OTHER PROTRUDING OBSTRUCTIONS NOT DESIGNATED TO REMAIN.
7. ALL MATERIALS NOT TO REMAIN ARE TO BE DISPOSED OF OFF SITE AT A PROPERLY PERMITTED LOCATION.
8. GC IS RESPONSIBLE FOR CLEANING AND MAINTAINING HAUL ROUTES AND CONTROLLING DUST. CLEANING SHOULD BE CONTINUOUS DURING ACTIVE WORK.
9. GC IS RESPONSIBLE FOR ALL NECESSARY EROSION CONTROL TO KEEP SEDIMENT ON SITE, EVEN IF IT IS NOT DIRECTLY SHOWN ON THE PLANS. ANY EROSION CONTROL NEEDED NOT SHOWN ON THE PLANS SHALL BE MARKED ON THE PLANS.
10. GC SHALL NOT DISTURB EXISTING CONDITIONS OUTSIDE OF THE PROJECT PROPERTY UNLESS SHOWN ON THE PLANS OR WITH PERMISSION OF THE PROPERTY OWNER. ANY UNAUTHORIZED DAMAGES SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
11. ALL CURB AND GUTTER TO BE DEMOLISHED SHALL BE REMOVED TO THE NEAREST JOINT. CONTRACTOR TO FIELD VERIFY LIMITS AS JOINTS ARE NOT SHOWN ON THE PLANS.

DEMOLITION NOTES:

1. CLEARING LIMITS SHALL BE PHYSICALLY MARKED IN THE FIELD BY THE CONTRACTOR.
2. NO TREES SHALL BE REMOVED, NOR VEGETATION DISTURBED BEYOND THE LIMITS OF CONSTRUCTION WITHOUT THE EXPRESS WRITTEN APPROVAL OF THE OWNER'S REPRESENTATIVE.
3. TREE PROTECTION FENCING SHALL BE IN ACCORDANCE WITH GALLATIN STANDARDS AND DETAILED DRAWINGS. DO NOT OPERATE OR STORE EQUIPMENT, NOR HANDLE OR STORE MATERIALS WITHIN THE DRIP LINES OF THE TREES SHOWN TO REMAIN.
4. PROTECTION OF EXISTING TREES AND VEGETATION: PROTECT EXISTING TREES AND OTHER VEGETATION INDICATED TO REMAIN IN PLACE AGAINST UNNECESSARY CUTTING, BREAKING OR SKINNING OF ROOTS, SKINNING OR BRUISING OF BARK, SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIALS OR EXCAVATED MATERIALS WITHIN DRIP LINE, EXCESS FOOT OR VEHICULAR TRAFFIC, OR PARKING OF VEHICLES WITHIN DRIP LINE. PROVIDE TEMPORARY GUARDS TO PROTECT TREES AND VEGETATION TO BE LEFT STANDING.
5. ALL DEMOLITION WASTE AND CONSTRUCTION DEBRIS, OTHER THAN TOPSOIL, SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE DESIGNATED AND SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF OFFSITE IN A STATE APPROVED WASTE SITE AND IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN. REPAIR DAMAGE ACCORDING TO THE APPROPRIATE UTILITY COMPANY STANDARDS AND AT THE CONTRACTOR'S EXPENSE.
6. ALL UTILITY DISCONNECTION, REMOVAL, RELOCATION, CUTTING, CAPPING AND/OR ABANDONMENT SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY / AGENCY. UTILITY CONTACTS ARE LISTED ON THE COVER SHEET.
7. THE BURNING OF CLEARED MATERIAL AND DEBRIS SHALL NOT BE ALLOWED UNLESS CONTRACTOR OBTAINS PRIOR WRITTEN AUTHORIZATION FROM THE LOCAL AUTHORITIES.
8. EROSION & SEDIMENT CONTROL MEASURES AROUND AREAS OF DEMOLITION SHALL BE PROPERLY INSTALLED AND FUNCTION PROPERLY PRIOR TO INITIALIZATION OF DEMOLITION ACTIVITIES.
9. HAZARDOUS MATERIALS ARE NOT EXPECTED, IF FOUND ON SITE, SUCH MATERIALS SHALL BE REMOVED BY A LICENSED HAZARDOUS MATERIALS CONTRACTOR. CONTRACTOR SHALL NOTIFY OWNER IMMEDIATELY IF HAZARDOUS MATERIALS ARE ENCOUNTERED.
10. CONTRACTOR SHALL ADHERE TO ALL LOCAL, STATE, FEDERAL AND OSHA REGULATIONS DURING ALL DEMOLITION ACTIVITIES.
11. CONTRACTOR SHALL PROTECT ALL CORNER PINS, MONUMENTS, PROPERTY CORNERS AND BENCHMARKS DURING DEMOLITION ACTIVITIES. IF DISTURBED, CONTRACTOR SHALL HAVE DISTURBED ITEMS RESET BY A LICENSED SURVEYOR AT NO ADDITIONAL COST TO THE OWNER.
12. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES, STRUCTURES, AND FEATURES TO REMAIN. ANY ITEMS TO REMAIN THAT HAVE BEEN DISTURBED OR DAMAGED AS A RESULT OF CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT CONTRACTOR'S EXPENSE.
13. ANY UTILITY AND STRUCTURE REMOVAL, RELOCATION, CUTTING, CAPPING AND/OR ABANDONMENT SHALL BE COORDINATED AND PROPERLY DOCUMENTED BY A CERTIFIED PROFESSIONAL, WHEN APPLICABLE, WITH THE APPROPRIATE UTILITY COMPANY, MUNICIPALITY AND/OR AGENCY. DEMOLITION OF REGULATED ITEMS MAY INCLUDE, BUT ARE NOT LIMITED TO WELLS, ASBESTOS, UNDER GROUND STORAGE TANKS, SEPTIC TANKS AND ELECTRIC TRANSFORMERS. DEMOLITION CONTRACTOR SHALL REFER TO ANY ENVIRONMENTAL STUDIES FOR DEMOLITION RECOMMENDATIONS AND GUIDANCE. AVAILABLE ENVIRONMENTAL STUDIES MAY INCLUDE, BUT ARE NOT LIMITED TO PHASE I ESA, PHASE II ESA, WETLAND AND STREAM DELINEATION AND ASBESTOS SURVEY. ALL APPLICABLE ENVIRONMENTAL STUDIES SHALL BE MADE AVAILABLE UPON REQUEST.
14. THE CONTRACTOR SHALL USE SUITABLE METHODS TO CONTROL DUST AND DIRT CAUSED BY THE DEMOLITION ACTIVITIES.

SITE LAYOUT NOTES:

1. CONTRACTOR SHALL CHECK ALL FINISHED GRADES AND DIMENSION IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK.
2. THE CONTRACTOR SHALL CONFORM TO ALL LOCAL CODES AND OBTAIN ALL PERMITS PRIOR TO BEGINNING WORK.
3. PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING PAVEMENT AND NEW PAVEMENT. FIELD ADJUSTMENT OF FINAL GRADES MAYBE NECESSARY. INSTALL ALL UTILITIES PRIOR TO INSTALLATION OF FINAL PAVEMENT.
4. CONCRETE WALKS AND PADS SHALL HAVE A BROOM FINISH. ALL CONCRETE SHALL BE CLASS "A" (4,000 PSI) UNLESS OTHERWISE NOTED.
5. ALL DAMAGE TO EXISTING ASPHALT PAVEMENT TO REMAIN WHICH RESULTS FROM NEW CONSTRUCTION SHALL BE REPLACED WITH LIKE MATERIALS AT THE CONTRACTOR'S EXPENSE.
6. DIMENSIONS ARE TO THE FACE OF CURBS, EDGE OF CONCRETE, OR TO THE FACE OF BUILDING, UNLESS OTHERWISE NOTED.
7. ALL CURB TURNOUT, EDGE OF PAVEMENT, AND STRIPING RADII ARE FOUR FEET (4') UNLESS OTHERWISE NOTED.
8. CONTRACTOR TO VERIFY ALL REQUIRED CLEARANCES FROM OVERHEAD POWER LINES PRIOR TO THE START OF CONSTRUCTION.
9. CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN THE USE OF EQUIPMENT IN AND AROUND OVERHEAD OR UNDERGROUND ELECTRICAL WIRES AND SERVICES. IF AT ANY TIME IN THE PURSUIT OF THIS WORK , THE CONTRACTOR MUST WORK IN CLOSE PROXIMITY OF THE ABOVE NOTED WIRES, THE ELECTRICAL COMPANY SHALL BE CONTACTED PRIOR TO SUCH WORK AND THE PROPER SAFETY MEASURES MUST BE TAKEN.
10. IN EASEMENTS AND RIGHTS-OF-WAYS, CONTRACTOR SHALL PROTECT AND RESTORE SAID PROPERTY TO A CONDITION SIMILAR OR EQUAL TO THAT EXISTING AT THE COMMENCEMENT OF CONSTRUCTION, EXCEPT AS NOTED.
11. THE CONTRACTOR SHALL COMPLY WITH ALL PERTINENT PROVISIONS OF THE "MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION" ISSUED BY AGC OF AMERICA, INC. AND THE "SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION' ISSUED BY THE U.S. DEPARTMENT OF LABOR.
12. TRAFFIC CONTROL, IF REQUIRED, SHALL BE PROVIDED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
13. IN THE EVENT OF ANY DISCREPANCY AND/OR ERROR FOUND IN THE DRAWINGS, OR IF PROBLEMS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL BE REQUIRED TO NOTIFY THE ENGINEER IN WRITING BEFORE PROCEEDING WITH THE WORK. IF THE ENGINEER IS NOT NOTIFIED, THE CONTRACTOR SHALL TAKE RESPONSIBILITY FOR THE COST OF ANY REVISION.
14. BUILDING CONTROL POINTS, GRADE AND OFFSET STAKES ARE TO BE SET BY THE CONTRACTOR.
15. PROVIDE 24" TAPER ON ENDS OF ALL CURBS THAT TERMINATE.
16. ALL CURB RAMPS IN THE PUBLIC ROW ARE TO RECEIVE DETECTABLE WARNINGS PER LOCAL MUNICIPALITY.
17. ALL BUILDINGS WITHIN 10' OF THE BIORETENTION AREA ARE TO BE WATERPROOFED. SEE ARCHITECTURAL PLANS.
18. ALL SITE RETAINING WALLS SHALL BE DESIGNED BY OTHERS.
19. INSTALL CONCRETE JOINTS WHERE SHOWN ON DETAILS. ALIGN ON WALLS, BUILDINGS, RADII, ETC. EVENLY SPACE BETWEEN ELEMENTS AS SHOWN. PROVIDE EXPANSION JOINTS BETWEEN CONCRETE PAVEMENT AND ALL VERTICAL ELEMENTS SUCH AS WALLS, CURBS, ETC.
20. ALL LANDSCAPE ISLANDS SHALL BE MOUNDED WITH TOPSOIL 4" ABOVE THE CURB LINE TO PROMOTE POSITIVE DRAINAGE.
21. SAW CUT LINES SHALL BE DONE IN A STRAIGHT NEAT LINE A MINIMUM OF 18" FROM THE EXISTING EDGE OF PAVEMENT.
22. ALL PAVEMENT MARKINGS SHALL BE 4" WIDE UNLESS OTHERWISE NOTED. ALL PAVEMENT MARKINGS WITHIN THE RIGHT-OF-WAY SHALL BE THERMOPLASTIC AND COMPLY WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) LATEST EDITION. RIGHT-OF-WAY SIGNAGE TO ALSO COMPLY WITH M.U.T.C.D. ON SITE PAVEMENT MARKINGS SHALL BE WHITE PAINT UNLESS NOTED OTHERWISE.

TRAFFIC CONTROL NOTES:

1. THESE TRAFFIC CONTROL PLANS DO NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF INSTALLING TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
2. CONSTRUCTION SIGNING SHOWN IN THESE PLANS IS THE SERVE AS GUIDANCE ONLY. OTHER SIGNS MAY BE REQUIRED DURING VARIOUS PHASES OF CONSTRUCTION.
3. NO TRAFFIC SHALL BE DETOURED OR ROADWAY CLOSED, ABANDONED, OR REMOVED WITHOUT THE PRIOR APPROVAL OF THE CITY.
4. THE ADVANCE WARNING SIGNS ARE TO BE PLACED PRIOR TO CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL PROJECT IS COMPLETE.
5. CONTRACTOR IS TO COVER ALL CONFLICTING SIGNS DURING CONSTRUCTION.
6. THE CONTRACTOR IS TO COORDINATE ALL LANE CLOSURES WITH THE CITY ENGINEER.G

GRADING PLAN NOTES:

1. ALL PIPES UNDER EXISTING PAVED AREAS SHALL BE BACKFILLED TO TOP OF SUBGRADE WITH CRUSHED STONE UNLESS PUBLIC WORKS SPECIFICATIONS REQUIRE FLOWABLE FILL.
2. CONTRACTOR TO VERIFY ALL EXISTING UTILITY ELEVATIONS AND GRADES PRIOR TO BEGINNING WORK. NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES FROM THE PLANS.
3. CONTOUR LINES AND SPOT ELEVATIONS ARE THE RESULT OF DETAILED ENGINEERING GRADING DESIGN AND REFLECT A PLANNED INTENT WITH REGARD TO DRAINAGE AND MOVEMENT OF MATERIALS. SHOULD THE CONTRACTOR HAVE ANY QUESTIONS OF THE INTENT OR ANY PROBLEMS WITH CONTINUITY OF GRADES, THE ENGINEER SHOULD BE CONTACTED IMMEDIATELY PRIOR TO BEGINNING WORK.
4. NO TREES ARE TO BE REMOVED AND/OR VEGETATION DISTURBED EXCEPT AS NECESSARY FOR GRADING PURPOSES AND ONLY AS APPROVED BY OWNER'S REPRESENTATIVE.
5. TOPSOIL IS TO BE STRIPPED FROM ALL CUT AND FILL AREAS. IF POSSIBLE, STOCKPILE AND REDISTRIBUTE A MINIMUM OF 6" OF TOPSOIL OVER FINISHED LANDSCAPED AREAS UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN.
6. FILL MATERIAL REQUIRED SHALL BE PLACED UNDER THE SUPERVISION OF A GEOTECHNICAL TESTING FIRM AND BE BORROWED AT THE CONTRACTOR'S EXPENSE.
7. ALL GRADED AREAS, INCLUDING SLOPES, ARE TO BE SODDED OR MULCHED AND SEEDED WITHIN 14 DAYS AFTER GRADING IS SUSPENDED OR COMPLETED.
8. ALL SLOPES EQUAL TO OR GREATER THAN 3:1 MUST BE STABILIZED WITHIN 7 DAYS AFTER GRADING IS SUSPENDED OR COMPLETED.
9. GRADING OPERATIONS ARE NOT TO BEGIN UNTIL EROSION CONTROL HAS BEEN INSTALLED AS SHOWN ON DRAWINGS, INSPECTED BY METRO STORMWATER DEPARTMENT, AND THE GRADING PERMIT HAS BEEN ISSUED.
10. SILT BARRIERS SHALL BE CLEANED OF ACCUMULATED SEDIMENT OR REPLACED WHEN APPROXIMATELY 33% FILLED WITH SEDIMENT OR DIRECTED BY THE EROSION CONTROL SPECIALIST.
11. ALL DIMENSIONS AND LOCATIONS OF TEMPORARY EROSION CONTROL DEVICES SHALL BE SUBJECT TO ADJUSTMENT AS DESIGNATED BY THE OWNER'S REPRESENTATIVE.
12. WHEN THE TEMPORARY EROSION CONTROL DEVICES ARE NO LONGER NEEDED FOR THE INTENDED PURPOSE IN THE OPINION OF THE DESIGNATED SITE EROSION CONTROL SPECIALIST, THEY MAY BE REMOVED.
13. THE CONTRACTOR SHALL PROVIDE THE NECESSARY PROTECTION FOR TREES TO REMAIN IN ACCORDANCE WITH CITY SPECIFICATIONS. DO NOT OPERATE OR STORE HEAVY EQUIPMENT NOR HANDLE OR STORE MATERIALS WITHIN THE DRIP LINES OF TREES TO REMAIN.
14. IF NEEDED, CONTRACTOR SHALL PROVIDE AN AREA FOR CONCRETE WASH DOWN AND EQUIPMENT FUELING IN ACCORDANCE WITH METRO STORMWATER BMP CP-10 AND CP-13. CONTRACTOR TO COORDINATE EXACT LOCATION WITH NPDES DEPARTMENT DURING PRE-CONSTRUCTION MEETING.
15. PRIOR TO FINAL ACCEPTANCE AND INSPECTION, SEDIMENT MUST BE REMOVED ALL NEW AND EXISTING STRUCTURES AND WATER QUALITY SYSTEMS.
16. CONTRACTOR TO CONTACT ENGINEER PRIOR TO INSTALLATION OF ALL STORMWATER AND UNDERGROUND UTILITY INFRASTRUCTURE ASSOCIATED WITH THE PROJECT IN ORDER TO DETERMINE REQUIRED AS-BUILT INFORMATION.
17. CONTRACTOR IS TO ALLOW 30 DAYS FOR THE ENGINEER TO SUBMIT SUCH DETERMINATION TO THE STORMWATER DEPARTMENT FOR THEIR APPROVAL PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
18. GC IS TO PHOTOGRAPH INSTALLATION OF ALL WATER QUALITY INFRASTRUCTURE.

EROSION & SEDIMENT CONTROL NOTES:

1. ALL PERIMETER MEASURES MUST BE IN PLACE BEFORE GRADING.
2. ALL STOCKPILES ARE TO BE CONTAINED ON THE PROJECT PROPERTY UNLESS WRITTEN PERMISSION IS GIVEN BY THE ADJACENT PROPERTY OWNER. INSTALL SILT FENCE AT THE BASE OF ANY STOCKPILES.
3. ALL GRADED SLOPES 3:1 OR STEEPER AND DITCH BOTTOMS SHALL RECEIVE PROPER EROSION CONTROL BLANKETS/MATTING OR SOD.
4. ALL FIELD ADJUSTMENT OF EROSION CONTROL MEASURES SHALL BE NOTED ON THE PLANS KEPT IN THE JOB TRAILER.
5. WHEN THE TEMPORARY EROSION CONTROL DEVICES ARE NO LONGER NEEDED FOR THE INTENDED PURPOSE IN THE OPINION OF THE DESIGNATED SITE EROSION CONTROL SPECIALIST, THEY MAY BE REMOVED.
6. CONTRACTOR TO PROVIDE AN AREA FOR CONCRETE WASH DOWN AND EQUIPMENT FUELING IN ACCORDANCE WITH METRO CP-10 AND CP-13, RESPECTIVELY. CONTRACTOR TO COORDINATE EXACT LOCATION WITH NPDES DEPARTMENT DURING PRECONSTRUCTION MEETING. CONTROL OF OTHER SITE WASTES SUCH AS DISCARDED BUILDING MATERIALS, CHEMICALS, LITTER, AND SANITARY WASTES THAT MAY CAUSE ADVERSE IMPACTS TO WATER QUALITY IS ALSO REQUIRED BY THE GRADING PERMITTEE. LOCATION OF AND/OR NOTES REFERRING TO THESE BMP'S SHALL BE SHOWN ON THE EPSC PLAN.
7. ALL DISTURBED AREAS ARE TO BE PERMANENTLY STABILIZED PER THE LANDSCAPE PLAN. ALL AREAS NOT OTHERWISE RECEIVING SOD OR OTHER PLANTING SHALL RECEIVE SEED AND STRAW PER THE SPECIFICATIONS INCLUDED WITHIN TENNESSEE EROSION AND SEDIMENT CONTROL HANDBOOK.
8. ALL GRADED AREAS, INCLUDING SLOPES, ARE TO BE SODDED OR MULCHED AND SEEDED WITHIN 14 DAYS AFTER GRADING IS SUSPENDED OR COMPLETED.
9. ALL SLOPES EQUAL TO OR GREATER THAN 3:1 MUST BE STABILIZED WITHIN 7 DAYS AFTER GRADING IS SUSPENDED OR COMPLETED.
10. GRADING OPERATIONS ARE NOT TO BEGIN UNTIL EROSION CONTROL HAS BEEN INSTALLED AS SHOWN ON DRAWINGS, INSPECTED BY METRO STORMWATER DEPARTMENT, AND THE GRADING PERMIT HAS BEEN ISSUED.
11. SILT BARRIERS SHALL BE CLEANED OF ACCUMULATED SEDIMENT OR REPLACED WHEN APPROXIMATELY 33% FILLED WITH SEDIMENT OR DIRECTED BY THE EROSION CONTROL SPECIALIST.
12. THE CONTRACTOR SHALL PROVIDE THE NECESSARY PROTECTION FOR TREES TO REMAIN IN ACCORDANCE WITH CITY SPECIFICATIONS. DO NOT OPERATE OR STORE HEAVY EQUIPMENT NOR HANDLE OR STORE MATERIALS WITHIN THE DRIP LINES OF TREES TO REMAIN.
13. PRIOR TO FINAL ACCEPTANCE AND INSPECTION, SEDIMENT MUST BE REMOVED FROM ALL NEW AND EXISTING STRUCTURES AND WATER QUALITY SYSTEMS.
14. TDEC NOTICE OF TERMINATION (NOT) TO BE SUBMITTED ONLINE BY THE GENERAL CONTRACTOR UPON COMPLETION OF SITE WORK. GENERAL CONTRACTOR MUST HAVE A TDEC 'MY FORMS SYSTEM' ACCOUNT ON https://forms.tdec.tn.gov/ IN ORDER TO FILE THE NOT.

UTILITY NOTES:

1. ALL PIPES UNDER EXISTING PAVED AREAS SHALL BE BACKFILLED TO TOP OF SUBGRADE WITH CRUSHED STONE UNLESS PUBLIC WORKS SPECIFICATIONS REQUIRE FLOWABLE FILL.
2. WHERE SEWER LINES PASS OVER OR WITHIN 2.5' OF WATER MAINS, THE SEWER SHALL BE ENCASED IN CONCRETE.
3. ALL PAVED AREAS SHALL BE CONSTRUCTED TO SUBGRADE AND ALL PROPOSED FILLS SHALL BE MADE AND COMPACTED PRIOR TO CONSTRUCTION OF SANITARY SEWERS.
4. PROPOSED SEWER LINES INSTALLED WITHIN NATURAL EARTH MAY BE SDR 35 PVC. PROPOSED SEWER LINES INSTALLED WITHIN FILL MUST BE DUCTILE IRON PIPE.
5. THE CONTRACTOR IS RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL BENDS, JOINTS, AND FITTINGS REQUIRED TO CONSTRUCT UTILITIES.
6. THE CONTRACTOR SHALL VERIFY THE EXISTING INVERT ELEVATIONS OF SANITARY SEWERS PRIOR TO CONSTRUCTION.
7. ALL WATER METERS WILL BE PURCHASED FROM COLUMBIA POWER & WATER SYSTEMS.
8. A MINIMUM OF 3' OF GROUND COVER SHALL BE MAINTAINED OVER ALL PROPOSED SANITARY SEWER MAINS.
9. SEE MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATIONS OF SEWER CONNECTIONS, WATER CONNECTIONS, AND GAS CONNECTIONS. THE UTILITY CONTRACTOR IS TO INSTALL PROPOSED UTILITIES TO WITHIN 5' OF THE BUILDING LINE. A LICENSED SPRINKLER CONTRACTOR MUST INSTALL SPRINKLER SYSTEM PIPING FROM POINT OF SERVICE, IF APPLICABLE.
10. ALL UTILITY INSTALLATION IS TO BE DONE IN ACCORDANCE WITH THE LOCAL STANDARDS OR OTHER APPLICABLE CODES.
11. GC SHALL REVIEW COLUMBIA POWER & WATER SYSTEMS SPECIFICATIONS PRIOR TO INITIATING WORK.
12. CURRENT SERVICE TO EXISTING STRUCTURES SHALL NOT BE INTERRUPTED WITHOUT ADVANCED WRITTEN PERMISSION FROM THE OWNER.
13. CONTRACTOR SHALL BID AND PERFORM THE WORK IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL CODES AND THE REQUIREMENTS OF THE LOCAL UTILITY COMPANIES.
14. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND INVERT OF ALL EXISTING UTILITIES AND STORM DRAINAGE. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN. REPAIR TO CONTRACTOR-CAUSED DAMAGE ACCORDING TO LOCAL STANDARDS AND AT THE CONTRACTOR'S EXPENSE. CONTRACTOR TO COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY.

ABBREVIATIONS WITHIN CONSTRUCTION PLANS:

TYP	TYPICAL
REF	REFERENCE
PUDE	PUBLIC UTILITY AND DRAINAGE EASEMENT
TDOT	TENNESSEE DEPARTMENT OF TRANSPORTATION
CPWS	COLUMBIA POWER & WATER SYSTEMS
TVA	TENNESSEE VALLEY AUTHORITY
DIA	DIAMETER
NTS	NOT TO SCALE
UG	UNDERGROUND
SAN	SANITARY SEWER
WTR	WATER
PVC	POLYVINYL CHLORIDE
DIP	DUCTILE IRON
RCP	REINFORCED CONCRETE PIPE
HP	POLYPROPYLENE PIPE
EPSC	EROSION PREVENTION AND SEDIMENT CONTROL
NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
SPCC	SPILL PREVENTION, CONTROL AND COUNTERMEASURES
EP	EDGE OF PAVEMENT
FC	FACE OF CURB
FOG	FACE OF GUTTER
OC	ON CENTER
LP	LOW POINT
HP	HIGH POINT
EX	EXISTING
CONT	CONTINUOUS
MBSL	MINIMUM BUILDING SETBACK LINE

SURVEY INFO
PROVIDED BY: M2 GROUP, LLC
DATUM: TENNESSEE STATE PLANE (NAD83 & NAVD 88)

FULMER LUCAS
2002 RICHARD JONES RD - SUITE B200
NASHVILLE, TENNESSEE 37215
INFO@FULMERLUCAS.COM - (615) 345-3770

JASON C. MORELOCK
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 108603
STATE OF TENNESSEE
04/20/2026

SITE DEVELOPMENT PLANS FOR:
MORNING POINTE
RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401

DR.	DATE	DESCRIPTION
JEL	04/20/2026	FINAL PUD MASTER PLAN

GENERAL NOTES

C0.1

1421-01 MORNING POINTE

Monday, April 20, 2026
Z:\1421_Morning Pointe\01 - Columbia\02 - Cad\Sheets\1421-01_Cover Sheet.dwg

Xref ..\XXXX-XX_24X36 Title_NCS.dwg

811 Know what's below. Call before you dig.

SITE DEMOLITION KEYNOTES:

1. SAW CUT (AS NEEDED) AND REMOVE EXISTING ASPHALT PAVEMENT TO SUBGRADE IN PREAPARATION FOR INSTALLATION OF CURB & GUTTER SHOWN ON SHEET C1.0. (BACKFILL CAVITY WITH DENSE GRADE AGGREGATE AND COMPACT).
2. REMOVE EXISTING WOODEN FENCE AND STONE COLUMNS (INCLUDING FOUNDATION).
3. REMOVE EXISTING WESTFIELD SIGN AND FOUNDATION.
4. REMOVE EXISTING TREES TO LIMITS SHOWN.
5. REMOVE EXISTING STORM DRAINS AND PIPES (CONTRACTOR SHALL MAINTAIN PROPER DRAINAGE THROUGHOUT ALL PHASES OF CONSTRUCTION).
6. EXISTING TREES ARE TO REMAIN AND BE PROTECTED THROUGHOUT CONSTRUCTION
7. ALL UNDERGROUND UTILITY SERVICES NOT ADDRESSED ON THIS DEMOLITION PLAN OR ADDITIONAL SERVICES FOUND DURING DEMOLITION THAT ARE WITHIN THE LIMITS OF CONSTRUCTION ARE TO BE REMOVED COMPLETELY UNLESS UTILITY WILL REMAIN IN SERVICE AFTER COMPLETION OF DEMOLITION. FOUND UTILITIES TO REMAIN WILL BE RELOCATED AS NEEDED. (COORDINATE ANY UTILITY REMOVAL/RELOCATION WITH THE APPROPRIATE UTILITY COMPANIES PRIOR TO REMOVAL/RELOCATION AND/OR TURN OFF.
8. ANY ITEMS NOT SPECIFICALLY ADDRESSED IN THESE DEMOLITION NOTES ARE TO REMOVED UNLESS DIRECTED OTHERWISE BY THE DEVELOPER.
9. EXISTING UTILITY TO REMAIN AND BE PROTECTED THROUGHOUT CONSTRUCTION.

LEGEND

- IRON ROD (OLD)
- BENCHMARK
- CATCH BASIN
- FIRE HYDRANT
- SEWER MANHOLE
- EXISTING TREE
- WV WATER VALVE
- WM WATER METER
- IRON ROD (NEW)
- UTILITY POLE

MAP REFERENCE:

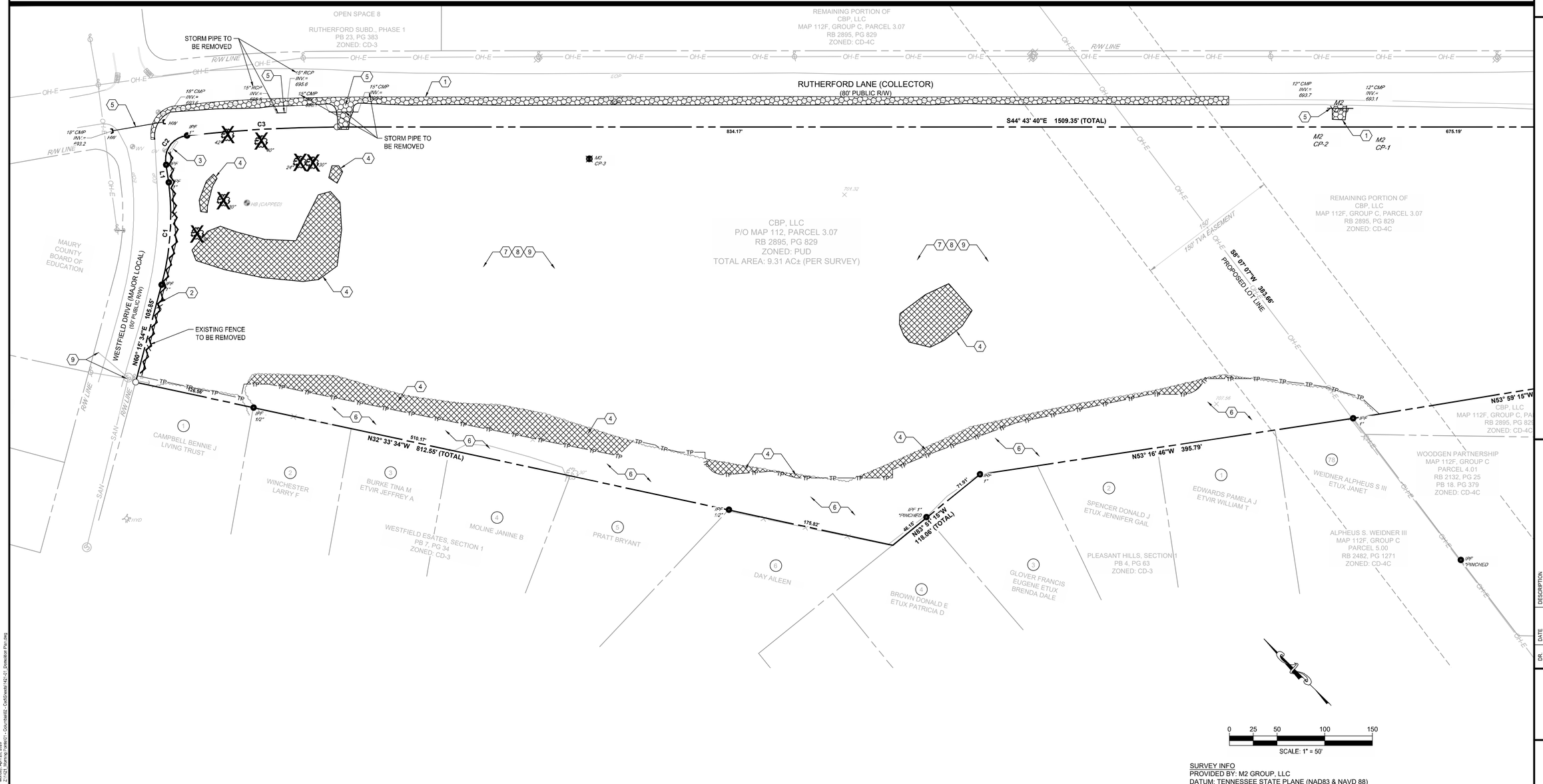
PARCEL IS FOR SUBJECT PROPERTY IS A PORTION OF PARCEL ID 112 00307 000 ON MAURY COUNTY PROPERTY MAP.

SITE DEMOLITION LEGEND:

- PAVEMENT, PAVEMENT STRIPING, SIDEWALKS, CURBS, RAMPS, AND ISLANDS TO BE REMOVED
- BUILDING DEMOLITION
- UTILITY LINE TO BE REMOVED
- UTILITY STRUCTURE TO BE REMOVED
- TREE TO BE REMOVED
- SIGN OR BOLLARD TO BE REMOVED
- TREE PROTECTION FENCING
- FENCE TO BE REMOVED

REFERENCE:

1. SEE SHEET C0.1 FOR GENERAL NOTES AND DEMOLITION NOTES.
2. EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION WAS OBTAINED FROM A BOUNDARY AND TOPOGRAPHIC SURVEY BY M2 GROUP, LLC. DATED OCTOBER 22, 2025.
3. THE PROPERTY SHOWN HEREON IS LOCATED IN A FLOOD HAZARD ZONE "X" (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN) ACCORDING TO PANEL "MAURY COUNTY, TENNESSEE" PANEL 280 OF 440, MAP NUMBER "47119C0280E", EFFECTIVE APRIL 16, 2007.



SURVEY INFO
PROVIDED BY: M2 GROUP, LLC
DATUM: TENNESSEE STATE PLANE (NAD83 & NAVD 88)

FULMER LUCAS
2002 RICHARD JONES RD - SUITE B200
NASHVILLE, TENNESSEE 37215
INFO@FULMERLUCAS.COM - (615) 345-3770

JASON C. MOREIN — REGISTERED ENGINEER — AGRICULTURE — No. 109805 — STATE OF TENNESSEE — 4/20/2026

SITE DEVELOPMENT PLANS FOR:
MORNING POINTE
RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401

DR.	DATE	DESCRIPTION
JEL	04-20-2026	FINAL PUD MASTER PLAN

SITE DEMOLITION PLAN

C0.2

1421-01 MORNING POINTE

Monday, April 20, 2026
11:12:39 AM CDT
K:\Civil 3D Projects\1421 - Columbia\02 Civil\Sheets\1421-01 Demolition Plan.dwg

Know what's below. Call before you dig.

TENNESSEE CONSTRUCTION GENERAL PERMIT NOTICE OF COVERAGE (NOC) CERTIFICATION:

2.I HEREBY CERTIFY THAT THIS PROJECT WILL REQUIRE COVERAGE UNDER A TENNESSEE CONSTRUCTION GENERAL PERMIT. THE TOTAL DISTURBED AREA IS: ±9.60 AC.

CHECK ALL THAT APPLY: THIS SITE DISCHARGES INTO WATERS IDENTIFIED BY TDEC AS:

☒ IMPAIRED FOR SILTATION ☒ IMPAIRED FOR HABITAT ALTERATION ☒ EXCEPTIONAL

SIGNATURE:_____ DATE: 04/20/2026

CIRCLE ONE: DEVELOPER (PROJECT ENGINEER) OTHER _____

NOTE: ONCE SITE IS STABILIZED FOR U&O RELEASE ALL REMAINING ESPC MEASURES SHOULD BE REMOVED AND DISPOSED OF IN A PROPER MANNER

REFERENCE:

1. SEE SHEET C0.1 FOR GENERAL NOTES AND EROSION & SEDIMENT CONTROL NOTES.
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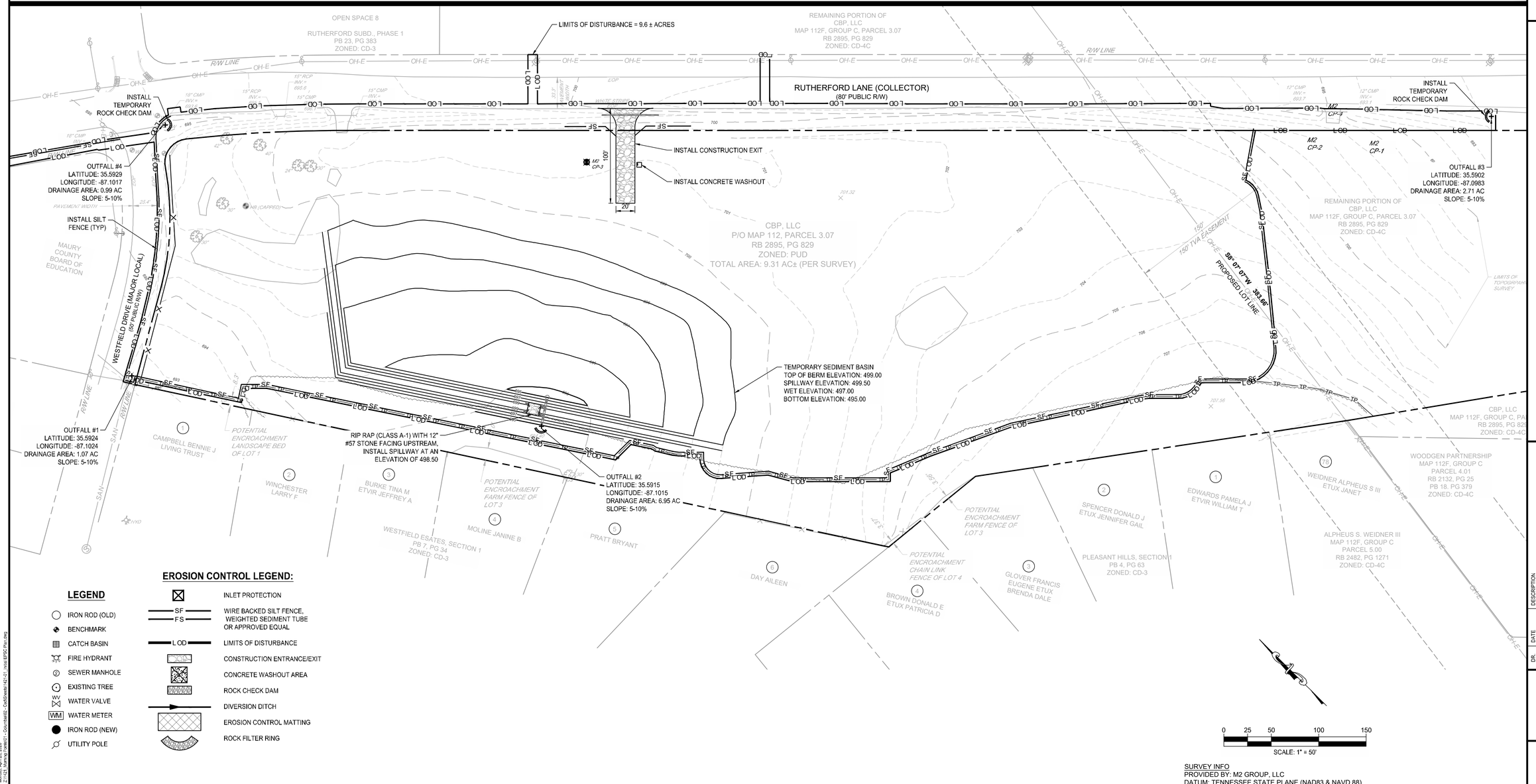

EROSION CONTROL LEGEND:

LEGEND

- IRON ROD (OLD)
- BENCHMARK
- CATCH BASIN
- FIRE HYDRANT
- SEWER MANHOLE
- EXISTING TREE
- WATER VALVE
- WATER METER
- IRON ROD (NEW)
- UTILITY POLE

- INLET PROTECTION
- SF / FS — WIRE BACKED SILT FENCE, WEIGHTED SEDIMENT TUBE OR APPROVED EQUAL
- LOD — LIMITS OF DISTURBANCE
- CONSTRUCTION ENTRANCE/EXIT
- CONCRETE WASHOUT AREA
- ROCK CHECK DAM
- DIVERSION DITCH
- EROSION CONTROL MATTING
- ROCK FILTER RING

SURVEY INFO
PROVIDED BY: M2 GROUP, LLC
DATUM: TENNESSEE STATE PLANE (NAD83 & NAVD 88)

FULMER LUCAS
2002 RICHARD JONES RD - SUITE B200
NASHVILLE, TENNESSEE 37215
INFO@FULMERLUCAS.COM - (615) 345-3770

JASON C. MOREIN — REGISTERED ENGINEER — AGRICULTURE — No. 109805 — STATE OF TENNESSEE — 4/20/2026

SITE DEVELOPMENT PLANS FOR:
MORNING POINTE
RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401

DR.	DATE	DESCRIPTION
JEL	04/20/2026	FINAL PUD MASTER PLAN

INITIAL ESPC PLAN

C0.3

1421-01 MORNING POINTE

Monday, April 20, 2026
11:15 AM by JEL (User01) - C:\Users\JEL\OneDrive - Civil3\Projects\1421-01 | Initial ESPC Plan.dwg

811 Know what's below. Call before you dig.

TENNESSEE CONSTRUCTION GENERAL PERMIT NOTICE OF COVERAGE (NOC) CERTIFICATION:

2.I HEREBY CERTIFY THAT THIS PROJECT WILL REQUIRE COVERAGE UNDER A TENNESSEE CONSTRUCTION GENERAL PERMIT. THE TOTAL DISTURBED AREA IS: ±9.60 AC.

CHECK ALL THAT APPLY: THIS SITE DISCHARGES INTO WATERS IDENTIFIED BY TDEC AS:

IMPAIRED FOR SILTATION ☒ IMPAIRED FOR HABITAT ALTERATION ☒ EXCEPTIONAL

SIGNATURE:_____ DATE: 04/20/2026

CIRCLE ONE: DEVELOPER (PROJECT ENGINEER) OTHER _____

NOTE: ONCE SITE IS STABILIZED FOR U&O RELEASE ALL REMAINING ESPC MEASURES SHOULD BE REMOVED AND DISPOSED OF IN A PROPER MANNER

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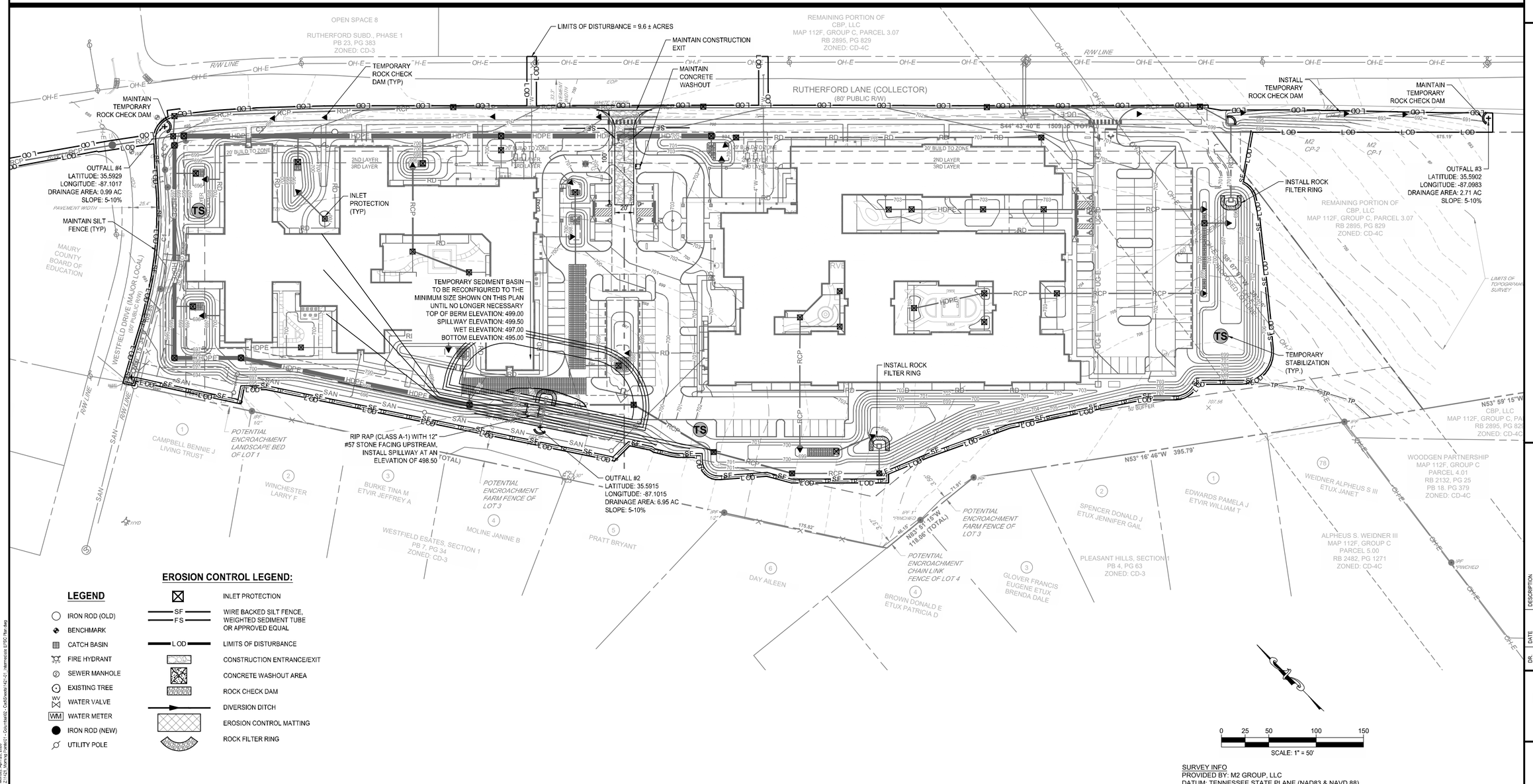

EROSION CONTROL LEGEND:

LEGEND

- IRON ROD (OLD)
- BENCHMARK
- CATCH BASIN
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- CONCRETE WASHOUT AREA
- ROCK CHECK DAM
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- EROSION CONTROL MATTING
- ROCK FILTER RING

SURVEY INFO
PROVIDED BY: M2 GROUP, LLC
DATUM: TENNESSEE STATE PLANE (NAD83 & NAVD 88)

FULMER LUCAS
2002 RICHARD JONES RD - SUITE B200
NASHVILLE, TENNESSEE 37215
INFO@FULMERLUCAS.COM - (615) 345-3770

JASON C. MOREIN — REGISTERED ENGINEER — AGRICULTURE — No. 109855 — STATE OF TENNESSEE — 4/21/2026

SITE DEVELOPMENT PLANS FOR:
MORNING POINTE
RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401

DR.	DATE	DESCRIPTION
JEL	04/20/2026	FINAL PUD MASTER PLAN

INTERMEDIATE EPSC PLAN

C0.4

1421-01 MORNING POINTE

Updated: April 20, 2026
10:19:00 AM by jlewis
N:\Projects\1421-01 - Columbia\02 - Civil\Sheets\1421-01 - Intermediate EPSC Plan.dwg

Know what's **below.** **Call** before you dig.

TENNESSEE CONSTRUCTION GENERAL PERMIT NOTICE OF COVERAGE (NOC) CERTIFICATION:

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SIGNATURE:_____ DATE: 04/20/2026

CIRCLE ONE: DEVELOPER (PROJECT ENGINEER) OTHER _____

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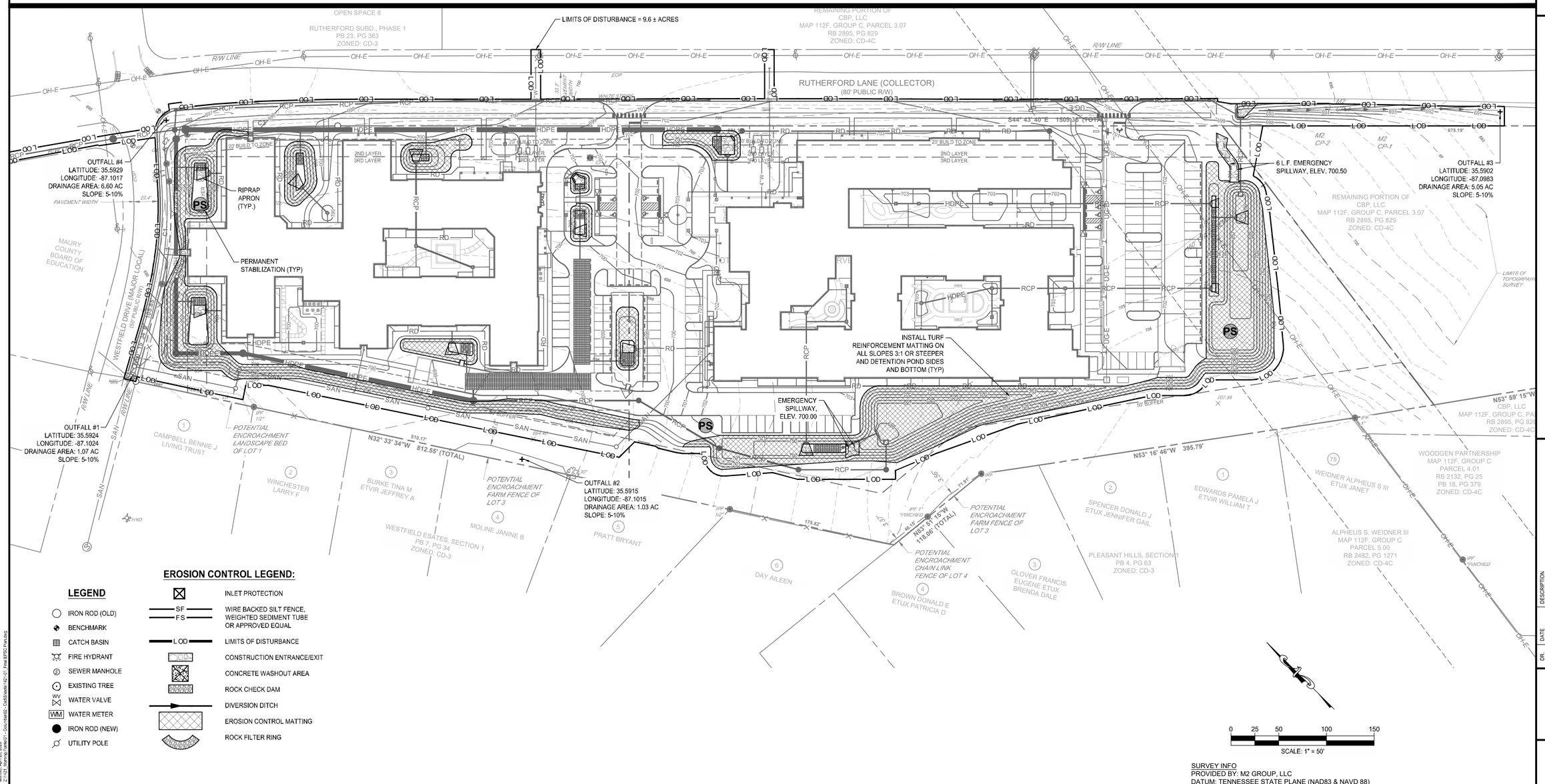

EROSION CONTROL LEGEND:

LEGEND

- IRON ROD (OLD)
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- CONCRETE WASHOUT AREA
- ROCK CHECK DAM
- DIVERSION DITCH
- EROSION CONTROL MATTING
- ROCK FILTER RING

SURVEY INFO
PROVIDED BY: M2 GROUP, LLC
DATUM: TENNESSEE STATE PLANE (NAD83 & NAVD 88)

FULMER LUCAS
2002 RICHARD JONES RD - SUITE B200
NASHVILLE, TENNESSEE 37215
INFO@FULMERLUCAS.COM - (615) 345-3770

JASON C. MOREIN — REGISTERED LANDSCAPE ARCHITECT — AGRICULTURE — No. 109855 — STATE OF TENNESSEE — 04/20/2026

SITE DEVELOPMENT PLANS FOR:
MORNING POINTE
RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401

DR.	DATE	DESCRIPTION
JEL	04/20/2026	FINAL PUD MASTER PLAN

FINAL EPSC PLAN

C0.5

1421-01 MORNING POINTE

Mon, Apr 20, 2026
N:\Projects\1421-01 - Columbia\02 - Civil\Sheets\1421-01 Final EPSC Plan.dwg

Know what's **below.**
Call before you dig.

KEY NOTES:

1. HEAVY DUTY ASPHALT PAVEMENT
2. LIGHT DUTY ASPHALT PAVEMENT
3. CONCRETE PAVEMENT
4. CONCRETE SIDEWALK
5. INTEGRAL CONCRETE CURB AND SIDEWALK
6. CONCRETE DRIVEWAY APRON
7. CONCRETE POST CURB
8. CONCRETE RIBBON CURB
9. CITY OF COLUMBIA COLLECTOR PAVEMENT
10. CITY OF COLUMBIA 6-30 CURB & GUTTER

KEY NOTES:

11. CITY OF COLUMBIA CONCRETE SIDEWALK
12. PARALLEL ACCESSIBLE RAMP WITH WITH DETECTABLE WARNING SURFACE
13. ACCESSIBLE PARKING SIGN (VAN ACCESSIBLE AS REQUIRED) & SYMBOL (TYP. FOR ALL ACCESSIBLE PARKING SPACES)
14. PARKING WHEELSTOP
15. DETECTABLE WARNING SURFACE
16. TAPER CONCRETE CURB
17. FLUSH CONCRETE SIDEWALK AT PAVEMENT FOR ACCESSIBILITY
18. FLUSH CONCRETE SIDEWALK AT PAVEMENT FOR DRAINAGE PURPOSES
19. 4" SINGLE PAINTED SOLID WHITE LINE
20. 4" WIDE PAINTED WHITE STRIPES, 3' O.C. @ 45°
21. INDICATES NUMBER OF PARKING SPACES PER BAY
22. TIE PROPOSED ASPHALT PAVEMENT TO EXISTING

KEY NOTES:

23. EXISTING ASPHALT PAVEMENT TO REMAIN
24. DUMPSTER ENCLOSURE (SEE ARCHITECTURAL PLANS)
25. WHITE TRAFFIC ARROW (THERMOPLASTIC)
26. 4" SINGLE SOLID WHITE LINE (THERMOPLASTIC)
27. 24" WIDE WHITE CROSSWALK (STRIPES @ 4" O.C.) (THERMOPLASTIC)
28. 24" WIDE WHITE STOP BAR (THERMOPLASTIC)
29. CONCRETE SIDEWALK WITH LANDINGS AND HANDRAILS (SEE ARCHITECTURAL PLANS)
30. 3' WIDE CONCRETE CURB CUT WITH DRAINAGE FLUME
31. GENERATOR PAD LOCATION
32. ELECTRICAL TRANSFORMER LOCATION
33. STAIRS (SEE THIS PLAN FOR RISER AND TREAD DIMENSION) SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR STAIR DETAILS
34. R1-1 30" x 30" STOP SIGN

KEY NOTES:

35. MONUMENT SIGN (BY OTHERS)
36. DROP OFF SIGN (BY OTHERS)
37. DELIVERIES/OVERFLOW PARKING (BY OTHERS)
38. 30" HIGH DECORATIVE ALUMINUM FENCE WITH 36" HIGH BRICK COLUMNS (SEE LANDSCAPE PLANS)
39. UTILITY TRENCH PAVEMENT REPAIR
40. FLAGPOLE (BY OTHERS)
41. DRAIN AT SIDEWALK

DEVIATIONS FROM STANDARDS:

TABLE 4.3.1-M

FRONTAGE BUILDOUT FOR BUILDING 2 IS 54.1%

ALL WINDOWS AND/OR DOORS ARE NOT SPACED <20' APART

MAXIMUM BUILDING SITE WIDTH OF 180' IS EXCEEDED

BUILDING 1: 612' (SINGLE BUILDING SITE)

BUILDING 2: 465' (SINGLE BUILDING SITE)

TABLE 4.3.12.B

PARKING: EXCEEDS 150% OF MINIMUM PARKING REQUESTED (63 ADDITIONAL SPACES REQUESTED TO ACCOMODATE STAFFING OVERLAP DURING SHIFT CHANGE)

FRONTAGE CALCULATION:

BUILDING 1

OVERALL FRONTAGE:	601'
(INCLUDES TVA EASEMENT)	
BUILDING WITHIN BUILD TO ZONE:	269'
STREET SCREEN PROVIDED:	86'
TOTAL FRONTAGE LENGTH:	355'
TOTAL PERCENTAGE PROVIDED:	61.6%
TOTAL PERCENTAGE REQUIRED:	60%

BUILDING 2

OVERALL FRONTAGE:	453'
BUILDING WITHIN BUILD TO ZONE:	102'
STREET SCREEN PROVIDED:	143'
TOTAL FRONTAGE LENGTH:	245'
TOTAL PERCENTAGE PROVIDED:	54.1%
TOTAL PERCENTAGE REQUIRED:	60%

TRAFFIC IMPACT:

PER THE 12TH GENERATION OF THE TRIP GENERATION MANUAL, THIS PROJECT CLASSIFIED AS LAND USE CODE 254 (ASSISTED LIVING) WITH 151 BEDS WILL CREATE 29 AM PEAK HOUR TRIPS AND 36 PM PEAK HOUR TRIPS.

SITE DATA TABLE:

SITE DATA

DEVELOPMENT:	MORNING POINTE
ADDRESS:	RUTHERFORD LANE @ WESTFIELD DRIVE
CITY:	COLUMBIA
COUNTY:	MAURY
STATE:	TENNESSEE
REGISTERS OFFICE REFERENCE:	RECORD BOOK 2895, PAGE 829
* LOT AREA (EXISTING):	560,245 S.F. OR 12.86 ACRES
* LOT AREA (PROPOSED):	159,534 S.F. OR 3.66 ACRES
* LOT AREA (PROPOSED):	273,687 S.F. OR 6.28 ACRES
* LOT AREA (PROPOSED):	126,819 S.F. OR 2.91 ACRES
CIVIL DISTRICT:	9TH
TAX MAP:	112
GROUP:	N/A
PARCEL:	3.07
MINIMUM FRONT SETBACK (PRINCIPAL):	0 - 20 FEET
MINIMUM FRONT SETBACK (SECONDARY):	0 - 20 FEET
MINIMUM SIDE SETBACK:	SEE PLAN
MINIMUM REAR SETBACK:	35 FEET

ZONING CLASSIFICATION

JURISDICTION:	CITY OF COLUMBIA
ZONING:	PUD (PLANNED UNIT DEVELOPMENT)
PROPOSED USE:	LONG TERM CARE FACILITY
PROPOSED SPECIFIC USE:	MEMORY CARE AND ASSISTED LIVING

PHASING

BUILDING 1:	2026-2027
BUILDING 2:	2028-2029

LOT OCCUPATION

LOT BUILDING SITE WIDTH (180' MAX.):	SEE DEVIATION FROM STANDARDS
FRONTAGE BUILDOUT (60% MIN.):	SEE DEVIATION FROM STANDARDS AND FRONTAGE CALCULATIONS
LOT/BUILDING SITE AREA:	NOT REGULATED
IMPERVIOUS SURFACE COVERAGE (100% MAX.)	213,778 SF (0.52 OR 52.1%)

BUILDING INFORMATION

SQUARE FOOTAGE:	111,000 S.F. (TOTAL)
BUILDING HEIGHT:	ONE-STORY

PARKING SUMMARY

REQUIRED PARKING (LONG TERM CARE FACILITY)	
1 SPACE PER 3 BEDS	(1 SPACE / 3 BEDS) * 151 BEDS = 51 SPACES
PROVIDED PARKING	
STANDARD PARKING	137 SPACES
ACCESSIBLE PARKING	8 SPACES
TOTAL PARKING REQUIRED	145 SPACES

ENGINEER

FULMER LUCAS ENGINEERING, LLC
2002 RICHARD JONES ROAD, SUITE B200
NASHVILLE, TN 37215
PHONE: (615) 300-6486
CONTACT: JASON MORELOCK

DEVELOPER

MORNING POINTE SENIOR LIVING
2050 UNION PLACE
COLUMBIA, TN 38401
PHONE: (423) 322-3446
CONTACT: FRANKLIN FARROW

* NOTE:

THE PROPERTY WILL BE SUBDIVIDED THROUGH THE FINAL PLAT PROCESS. A SEPARATE APPLICATION WILL BE SUBMITTED TO THE PLANNING DEPARTMENT TO RUN CONCURRENTLY WITH THE FINAL PUD MATER PLAN APPLICATION.

PAVING LEGEND

- HEAVY DUTY ASPHALT
- LIGHT DUTY ASPHALT
- SIDEWALK SECTION
- HEAVY DUTY CONCRETE
- UTILITY TRENCH PAVEMENT REPAIR
- COLLECTOR PAVEMENT

REFERENCE:

1. SEE SHEET C0.1 FOR GENERAL NOTES, SITE LAYOUT NOTES AND CITY OF COLUMBIA NOTES.
2. EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION WAS OBTAINED FROM A BOUNDARY & TOPOGRAPHIC SURVEY BY M2 GROUP , LLC DATED OCTOBER 22, 2025.
3. THE PROPERTY DESCRIBED HEREON DOES NOT LIE WITHIN A FLOOD HAZARD AREA IN ACCORDANCE WITH "INSURANCE RATE MAP PANEL NUMBER "47119C0286E", DATED: APRIL 16, 2007, ZONE "X".

FULMER LUCAS
2002 RICHARD JONES RD - SUITE B200
NASHVILLE, TENNESSEE 37215
INFO@FULMERLUCAS.COM - (615) 345-3770

JASON C. MORELOCK — REGISTERED ENGINEER — AGRICULTURE — STATE OF TENNESSEE — No. 109605 — 10/29/2025

SITE DEVELOPMENT PLANS FOR:
MORNING POINTE
RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401

DR.	DATE	DESCRIPTION
JEL	04/20/2026	FINAL PUD MASTER PLAN

SITE LAYOUT PLAN

C1.0

1421-01 MORNING POINTE

Page 74 of 815

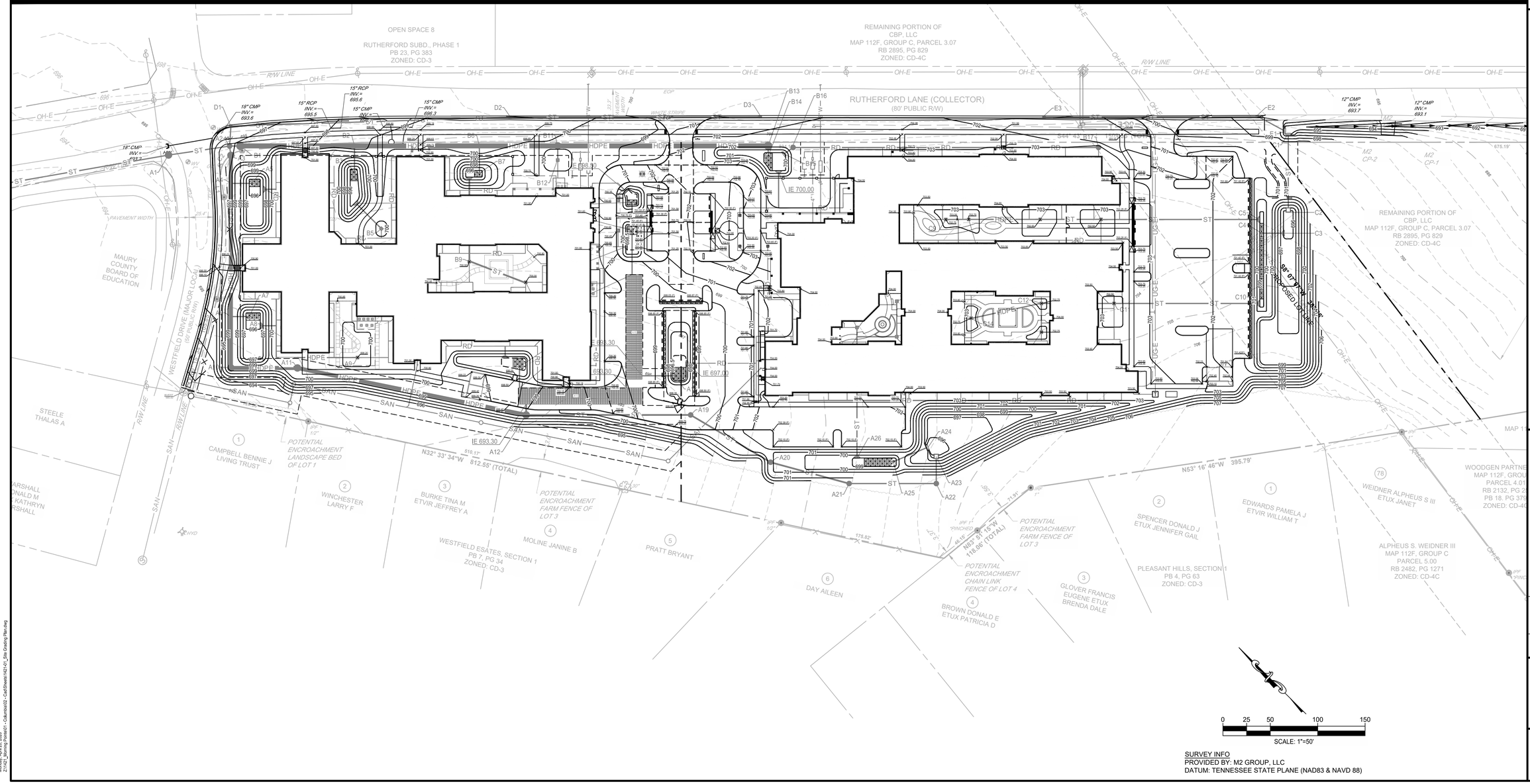
Modified: April 20, 2026
Xref: Xrefs Overlay1 - Columbia\02 - Civil\Sheets\1421-01 Site Layout Plan.dwg

811
Know what's below.
Call before you dig.

REFERENCE:
1. SEE SHEET C0.1 FOR GENERAL NOTES AND GRADING PLAN NOTES.
2. EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION WAS OBTAINED FROM A BOUNDARY AND TOPOGRAPHIC SURVEY BY M2 GROUP, LLC, DATED OCTOBER 22, 2025.
3. THE PROPERTY SHOWN HEREON IS LOCATED IN A FLOOD HAZARD ZONE "X" (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN) ACCORDING TO PANEL "MAURY COUNTY, TENNESSEE" PANEL 280 OF 440, MAP NUMBER "47119C0280E", EFFECTIVE APRIL 16, 2007.

LEGEND

DW	DOMESTIC WATER SERVICE
G	GAS SERVICE
SAN	SANITARY SEWER SERVICE
OH-E	OVERHEAD ELECTRIC SERVICE
OH-T	OVERHEAD TELEPHONE SERVICE
UD	PERVIOUS PAVEMENT UNDERDRAIN
RD	ROOF DRAIN TRUNK LINE
	STORM PIPE (SEE PLANS FOR MATERIAL)
562	EXISTING CONTOUR
562	PROPOSED CONTOUR
	DRIVEWAY CENTERLINE
	PROPERTY LINE
S	SANITARY SEWER MANHOLE
ST	STORM SEWER MANHOLE
	CURB INLET
	CATCH BASIN
	NYLOPLAST DRAIN BASIN
	ELECTRIC/COMMUNICATION POLE
XXX.XX / XXX.XX	TOP OF CURB SPOT ELEVATION / BOTTOM OF CURB SPOT ELEVATION
TW:XXX.XX / BW:XXX.XX	RETAINING WALL / TOP OF WALL / FINISHED GRADE AT BOTTOM OF WALL
XXX.XX (MEFG)	MEET EXISTING GRADE
XXX.XX	SPOT ELEVATION
XXX.XX	EXISTING SPOT ELEVATION
XXX.XX (F)	FLUSH SPOT ELEVATION
	DIVERSION DITCH



SURVEY INFO
PROVIDED BY: M2 GROUP, LLC
DATUM: TENNESSEE STATE PLANE (NAD83 & NAVD 88)

FULMER LUCAS
2002 RICHARD JONES RD - SUITE B200
NASHVILLE, TENNESSEE 37215
INFO@FULMERLUCAS.COM - (615) 345-3770

SITE DEVELOPMENT PLANS FOR:
MORNING POINTE
RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401

DR.	DATE	DESCRIPTION
JEL	04/20/2026	FINAL PUD MASTER PLAN

SITE GRADING PLAN

C2.0

1421-01 MORNING POINTE

Know what's **below.**
Call before you dig.

LEGEND

- DW — DOMESTIC WATER SERVICE
- G — GAS SERVICE
- SAN — SANITARY SEWER SERVICE
- OH-E — OVERHEAD ELECTRIC SERVICE
- OH-T — OVERHEAD TELEPHONE SERVICE
- UD — PERVIOUS PAVEMENT UNDERDRAIN
- RD — ROOF DRAIN TRUNK LINE
- STORM PIPE (SEE PLANS FOR MATERIAL).
- 562 — EXISTING CONTOUR
- 562 — PROPOSED CONTOUR
- DRIVEWAY CENTERLINE
- PROPERTY LINE
- (S) SANITARY SEWER MANHOLE
- (ST) STORM SEWER MANHOLE
- CURB INLET
- CATCH BASIN
- NYLOPLAST DRAIN BASIN
- ELECTRIC/COMMUNICATION POLE
- XXX.XX / XXX.XX — TOP OF CURB SPOT ELEVATION / BOTTOM OF CURB SPOT ELEVATION
- TW:XXX.XX / BW:XXX.XX — RETAINING WALL: TOP OF WALL / FINISHED GRADE AT BOTTOM OF WALL
- XXX.XX ME — MEET EXISTING GRADE
- XXX.XX — SPOT ELEVATION
- *XXX.XX* — EXISTING SPOT ELEVATION
- XXX.XX F — FLUSH SPOT ELEVATION

REFERENCE:

1. SEE SHEET C0.1 FOR GENERAL NOTES AND GRADING PLAN NOTES.
2. EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION WAS OBTAINED FROM A BOUNDARY AND TOPOGRAPHIC SURVEY BY M2 GROUP, LLC, DATED OCTOBER 22, 2025.
3. THE PROPERTY SHOWN HEREON IS LOCATED IN A FLOOD HAZARD ZONE "X" (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN) ACCORDING TO PANEL "MAURY COUNTY, TENNESSEE" PANEL 280 OF 440, MAP NUMBER "47119C0280E", EFFECTIVE APRIL 16, 2007.

STORM STRUCTURES TABLE

STRUCTURE	TYPE	TOP CASTING	INVERT
A1	EXISTING MANHOLE	695.00	690.07
A2	PROPOSED MANHOLE	695.90	690.40
A3	PROPOSED MANHOLE	696.00	690.46
A4	BLIND CONNECTION	697.50	690.61
A5	30" NYLOPLAST BASIN	696.50	693.00
A6	BLIND CONNECTION	699.30	691.33
A7	30" NYLOPLAST BASIN	696.50	693.00
A8	15" CONCRETE HEADWALL	N/A	696.00
A9	PROPOSED YARD DRAIN	699.20	696.70
A10	PROPOSED MANHOLE	699.30	691.60
A11	PROPOSED MANHOLE	700.50	691.95
A12	PROPOSED MANHOLE	699.10	693.19
A13	RTANK DETENTION	VARIES	693.30
A14	30" NYLOPLAST BASIN	698.00	694.50
A15	RTANK DETENTION	VARIES	693.30
A16	30" NYLOPLAST BASIN	697.00	693.50
A17	30" NYLOPLAST BASIN	699.00	695.35
A18	30" NYLOPLAST BASIN	699.00	695.50
A19	PROPOSED MANHOLE	699.25	694.06
A20	PROPOSED MANHOLE	701.50	694.56
A21	PROPOSED MANHOLE	701.00	694.99
A22	PROPOSED MANHOLE	703.60	695.46
A23	OUTLET CONTROL STR	698.00	695.60
A24	15" CONCRETE HEADWALL	N/A	695.81
A25	30" NYLOPLAST BASIN	699.50	696.00
A26	15" CONCRETE HEADWALL	N/A	699.00
A27	BLIND CONNECTION	703.50	699.65
A28	PROPOSED YARD DRAIN	703.00	699.69
A29	PROPOSED YARD DRAIN	703.00	699.85
A30	PROPOSED YARD DRAIN	703.00	700.04
B1	PROPOSED MANHOLE	696.25	690.46
B2	BLIND CONNECTION	699.80	691.06
B3	30" NYLOPLAST BASIN	696.50	693.00

STORM STRUCTURES TABLE

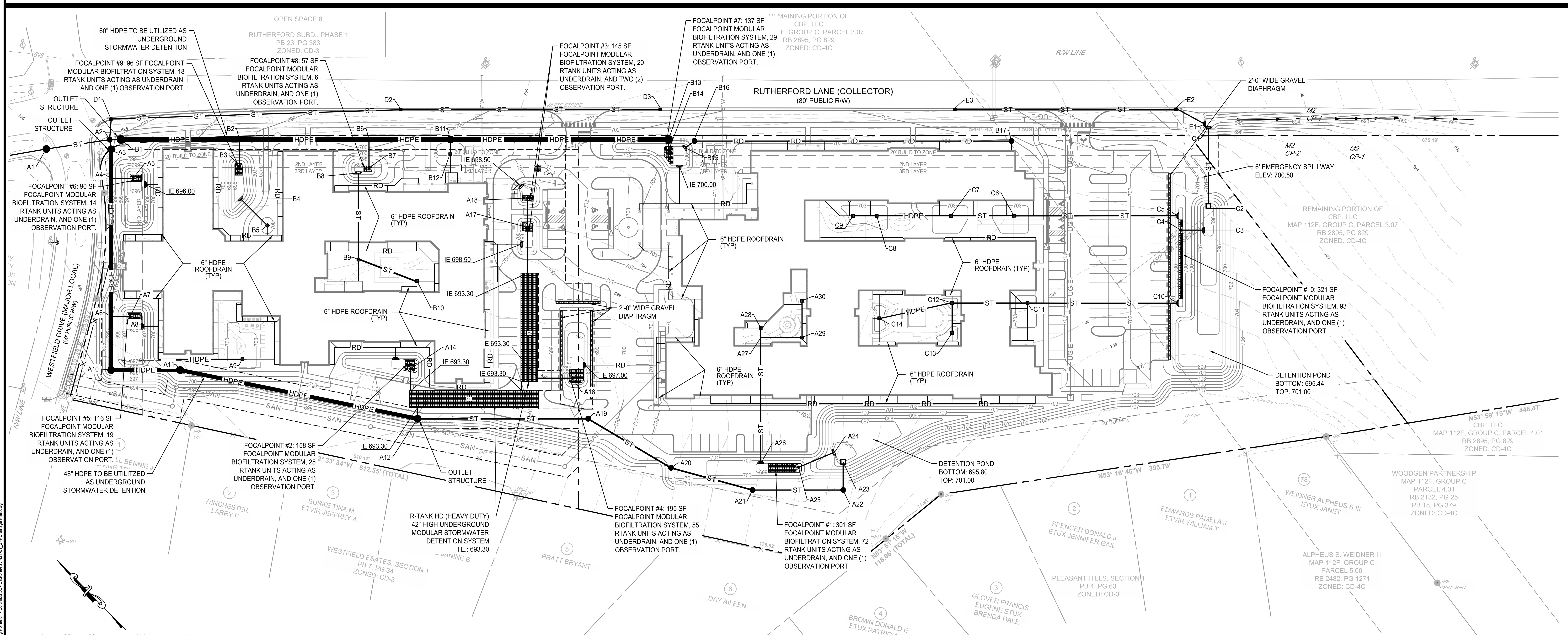
STRUCTURE	TYPE	TOP CASTING	INVERT
B4	15" CONCRETE HEADWALL	N/A	696.00
B5	PROPOSED YARD DRAIN	699.50	696.19
B6	BLIND CONNECTION	699.80	691.72
B7	30" NYLOPLAST BASIN	696.50	693.00
B8	15" CONCRETE HEADWALL	N/A	696.00
B9	PROPOSED YARD DRAIN	700.00	696.45
B10	PROPOSED YARD DRAIN	700.00	696.77
B11	PROPOSED MANHOLE	700.50	692.14
B12	PROPOSED YARD DRAIN	699.50	696.00
B13	PROPOSED MANHOLE	702.10	693.25
B14	30" NYLOPLAST BASIN	700.50	697.00
B15	15" CONCRETE HEADWALL	N/A	700.00
B16	PROPOSED MANHOLE	702.25	700.07
B17	PROPOSED MANHOLE	703.50	701.69
C1	15" CONCRETE HEADWALL	N/A	695.00
C2	OUTLET CONTROL STR	698.00	695.44
C3	15" CONCRETE HEADWALL	N/A	695.88
C4	30" NYLOPLAST BASIN	699.50	696.00
C5	15" CONCRETE HEADWALL	N/A	699.00
C6	PROPOSED YARD DRAIN	702.50	699.84
C7	PROPOSED YARD DRAIN	702.50	700.17
C8	PROPOSED YARD DRAIN	702.75	700.55
C9	PROPOSED YARD DRAIN	702.75	700.68
C10	15" CONCRETE HEADWALL	N/A	699.00
C11	PROPOSED YARD DRAIN	702.50	699.77
C12	PROPOSED YARD DRAIN	702.75	700.16
C13	PROPOSED YARD DRAIN	702.75	700.32
C14	PROPOSED YARD DRAIN	702.75	700.54
D1	PROPOSED CURB INLET	696.00	690.60
D2	PROPOSED CURB INLET	698.90	694.10
D3	PROPOSED CURB INLET	701.18	697.50
E1	15" CONCRETE HEADWALL	N/A	694.00
E2	PROPOSED CURB INLET	698.00	694.50
E3	PROPOSED CURB INLET	701.40	697.50

STORM PIPES TABLE

PIPE	SIZE & MATERIAL	LENGTH (FT)	SLOPE
A2-A1	24" RCP	66	0.5%
A3-A2	18" RCP	10	0.6%
A4-A3	48" HDPE	30	0.5%
A5-A4	15" RCP	21	11.4%
A6-A4	48" HDPE	141	0.5%
A7-A6	15" RCP	18	9.3%
A9-A8	12" RCP	30	0.5%
A10-A6	48" HDPE	54	0.5%
A11-A10	48" HDPE	70	0.5%
A12-A11	48" HDPE	246	0.5%
A13-A12	24" RCP	11	1.0%
A14-A13	12" RCP	21	5.7%
A15-A13	18" RCP	9	0.0%
A16-A15	18" RCP	34	0.6%
A17-A15	12" RCP	45	4.6%
A18-A17	12" RCP	27	0.6%
A19-A18	15" RCP	173	0.5%
A20-A19	15" RCP	98	0.5%
A21-A20	15" RCP	86	0.5%
A22-A21	15" RCP	92	0.5%
A23-A22	15" RCP	27	0.5%
A25-A24	15" RCP	150	0.5%
A27-A26	15" RCP	127	0.5%
A28-A27	15" RCP	8	0.5%
A29-A27	15" RCP	41	0.5%
A30-A29	15" RCP	34	0.6%
B1-A1	15" RCP	120	0.6%
B2-B1	60" HDPE	120	0.5%

STORM PIPES TABLE

PIPE	SIZE & MATERIAL	LENGTH (FT)	SLOPE
B3-B2	12" RCP	26	7.5%
B5-B4	12" RCP	36	0.5%
B6-B2	60" HDPE	132	0.5%
B7-B6	12" RCP	28	4.6%
B9-B8	12" RCP	87	0.5%
B10-B9	12" RCP	61	0.5%
B11-B6	60" HDPE	83	0.5%
B12-B11	12" RCP	14	27.6%
B13-B11	60" HDPE	222	0.5%
B14-B13	12" RCP	10	37.5%
B16-B15	10" HDPE	12	0.6%
B17-B16	10" HDPE	322	0.5%
C2-C1	18" RCP	120	0.5%
C4-C3	18" RCP	22	0.5%
C6-C5	15" RCP	165	0.5%
C7-C6	12" RCP	61	0.5%
C8-C7	12" RCP	72	0.5%
C9-C8	12" RCP	21	0.6%
C11-C10	15" RCP	151	0.5%
C12-C11	15" RCP	74	0.5%
C13-C12	15" RCP	27	0.6%
C14-C12	15" RCP	73	0.5%
D1-A2	18" RCP	20	1.0%
D2-D1	15" RCP	292	1.2%
D3-D2	15" RCP	261	1.3%
E2-E1	12" RCP	46	1.1%
E3-E2	12" RCP	223	1.4%



SURVEY INFO
PROVIDED BY: M2 GROUP, LLC
DATUM: TENNESSEE STATE PLANE (NAD83 & NAVD 88)

FULMER LUCAS
2002 RICHARD JONES RD - SUITE B200
NASHVILLE, TENNESSEE 37215
INFO@FULMERLUCAS.COM - (615) 345-3770

JASON C. MORELOCK — REGISTERED ENGINEER — STATE OF TENNESSEE — No. 108803 — 04/20/2026

SITE DEVELOPMENT PLANS FOR:
MORNING POINTE
RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401

DR.	DATE	DESCRIPTION
JEL	04/20/2026	FINAL PUD MASTER PLAN

SITE DRAINAGE PLAN

C2.1

1421-01 MORNING POINTE

Monday, April 20, 2026
Z:\1421_Morning Pointe\01 - Columbia\02 - Cad\Sheets\1421-01_Site Drainage Plan.dwg

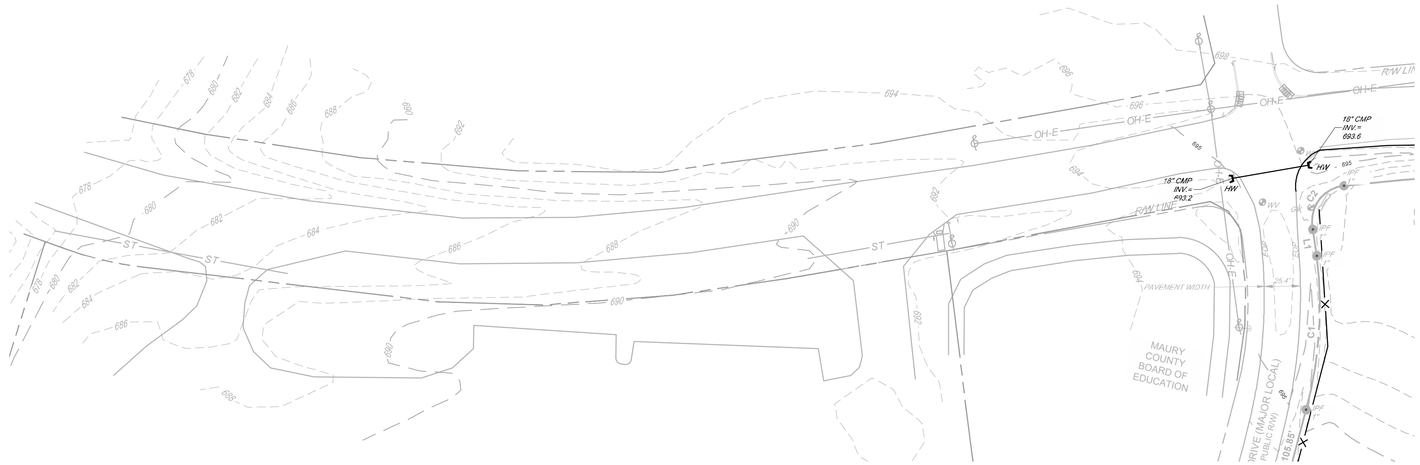
811
Know what's below.
Call before you dig.

LEGEND

- DW — DOMESTIC WATER SERVICE
- G — GAS SERVICE
- SAN — SANITARY SEWER SERVICE
- OH-E — OVERHEAD ELECTRIC SERVICE
- OH-T — OVERHEAD TELEPHONE SERVICE
- UD — PERVIOUS PAVEMENT UNDERDRAIN
- RD — ROOF DRAIN TRUNK LINE
- STORM PIPE (SEE PLANS FOR MATERIAL)
- 562 — EXISTING CONTOUR
- 562 — PROPOSED CONTOUR
- DRIVEWAY CENTERLINE
- PROPERTY LINE
- (S) — SANITARY SEWER MANHOLE
- (ST) — STORM SEWER MANHOLE
- CURB INLET
- CATCH BASIN
- NYLOPLAST DRAIN BASIN
- ELECTRIC/COMMUNICATION POLE
- XXX.XX / XXX.XX — TOP OF CURB SPOT ELEVATION / BOTTOM OF CURB SPOT ELEVATION
- TW:XXX.XX / BW:XXX.XX — RETAINING WALL, TOP OF WALL, FINISHED GRADE AT BOTTOM OF WALL
- XXX.XX (MEFG) — MEET EXISTING GRADE
- XXX.XX — SPOT ELEVATION
- XXX.XX — EXISTING SPOT ELEVATION
- XXX.XX (F) — FLUSH SPOT ELEVATION
- DIVERSION DITCH
- INLET PROTECTION
- SF / FS — WIRE BACKED SILT FENCE, WEIGHTED SEDIMENT TUBE OR APPROVED EQUAL
- LOD — LIMITS OF DISTURBANCE
- CONSTRUCTION ENTRANCE/EXIT
- CONCRETE WASHOUT AREA
- ROCK CHECK DAM
- DIVERSION DITCH
- EROSION CONTROL MATTING
- ROCK FILTER RING

REFERENCE:

1. SEE SHEET C0.1 FOR GENERAL NOTES AND DEMOLITION NOTES.
2. EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION WAS OBTAINED FROM A BOUNDARY & TOPOGRAPHIC SURVEY BY M2 GROUP, LLC DATED OCTOBER 22, 2025.
3. THE PROPERTY DESCRIBED HEREON DOES NOT LIE WITHIN A FLOOD HAZARD AREA IN ACCORDANCE WITH "INSURANCE RATE MAP PANEL NUMBER "47119C0280E", DATED: APRIL 16, 2007, ZONE "X".

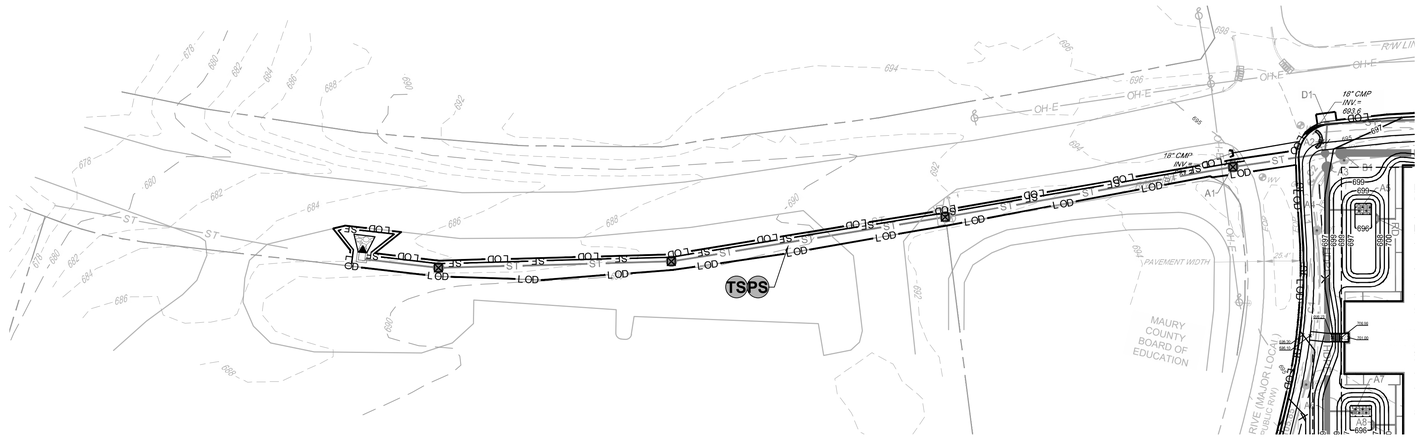


0 10 20 40 60
SCALE: 1"=40'

EXISTING CONDITIONS PLAN

REFERENCE:

1. SEE SHEET C0.1 FOR GENERAL NOTES AND GRADING PLAN NOTES.
2. EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION WAS OBTAINED FROM A BOUNDARY & TOPOGRAPHIC SURVEY BY M2 GROUP, LLC DATED OCTOBER 22, 2025.
3. THE PROPERTY DESCRIBED HEREON DOES NOT LIE WITHIN A FLOOD HAZARD AREA IN ACCORDANCE WITH "INSURANCE RATE MAP PANEL NUMBER "47119C0280E", DATED: APRIL 16, 2007, ZONE "X".

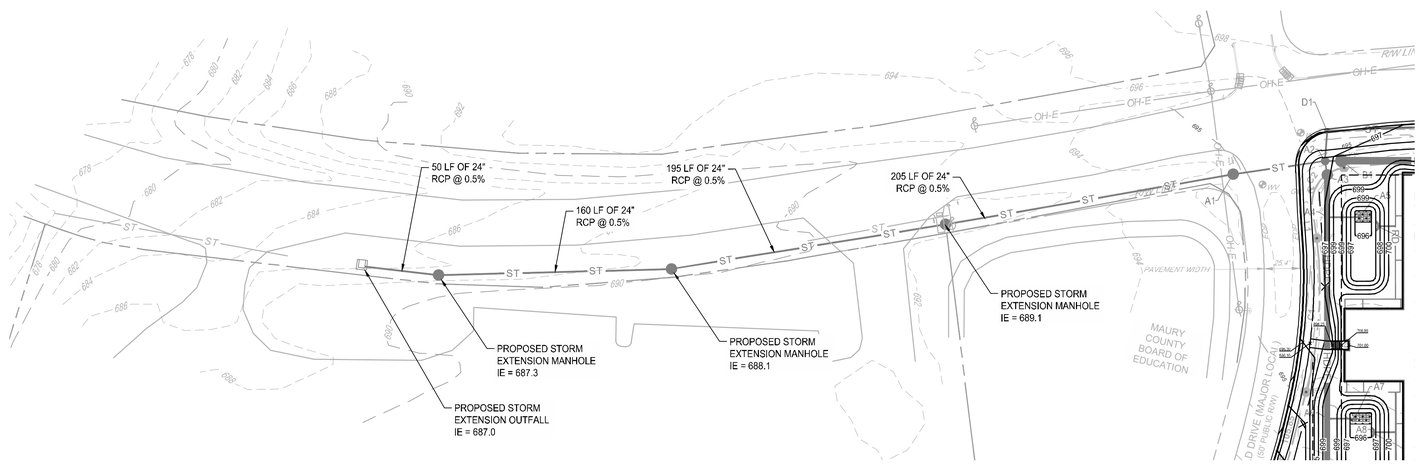


0 10 20 40 60
SCALE: 1"=40'

OFF-SITE EROSION CONTROL PLAN

REFERENCE:

1. SEE SHEET C0.1 FOR GENERAL NOTES AND EROSION & SEDIMENT CONTROL NOTES.
2. EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION WAS OBTAINED FROM A BOUNDARY & TOPOGRAPHIC SURVEY BY M2 GROUP, LLC DATED OCTOBER 22, 2025.
3. THE PROPERTY DESCRIBED HEREON DOES NOT LIE WITHIN A FLOOD HAZARD AREA IN ACCORDANCE WITH "INSURANCE RATE MAP PANEL NUMBER "47119C0280E", DATED: APRIL 16, 2007, ZONE "X".



0 10 20 40 60
SCALE: 1"=40'

OFF-SITE GRADING & DRAINAGE PLAN

SURVEY INFO
PROVIDED BY: M2 GROUP, LLC
DATUM: TENNESSEE STATE PLANE (NAD83 & NAVD 88)

FULMER LUCAS
2002 RICHARD JONES RD - SUITE B200
NASHVILLE, TENNESSEE 37215
INFO@FULMERLUCAS.COM - (615) 345-3770

JASON C. MORELL — REGISTERED — AGRICULTURE — No. 109803 — STATE OF TENNESSEE
4/20/2026

SITE DEVELOPMENT PLANS FOR:
MORNING POINTE
RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401

DR.	DATE	DESCRIPTION
JEL	04/20/2026	FINAL PUD MASTER PLAN

OFF-SITE IMPROVEMENTS

C2.2

1421-01 MORNING POINTE

Updated: April 20, 2026
By: Jason Morell
Z:\1421 Morning Pointe\01 - Columbia\02 - Civil\Sheets\1421-01 - Offsite Grading Plan.dwg

Know what's **below.**
Call before you dig.

KEYNOTES:

1. POINT OF CONNECTION - SANITARY SEWER
I.E. = 685.00
(COORDINATE WITH CPWS PRIOR TO INSTALLATION)
2. CONNECT TO EXISTING MANHOLE BY MACHINE CORING, INSTALL KOR-N-SEAL BOOT CONNECTOR
3. INSTALL 8" SDR 26 PVC SANITARY SEWER MAIN @ 0.5% MINIMUM SLOPE (PER CPWS SPECS)
4. INSTALL SANITARY SEWER MANHOLE, (PER CPWS SPECS)
T.C. = 692.84
I.E. (IN) = 685.33, I.E. (OUT) = 685.13
5. INSTALL SANITARY SEWER MANHOLE, (PER CPWS SPECS)
T.C. = 693.80 (+/-)
I.E. (IN) = 686.61, I.E. (OUT) = 685.41
6. INSTALL SANITARY SEWER MANHOLE, (PER CPWS SPECS)
T.C. = 698.25
I.E. (IN) = 687.01, I.E. (OUT) = 686.81
7. INSTALL SANITARY SEWER MANHOLE, (PER CPWS SPECS)
T.C. = 695.20 (+/-)
I.E. (IN) = 689.23, I.E. (OUT) = 689.03
8. INSTALL SANITARY SEWER MANHOLE, (PER CPWS SPECS)
T.C. = 695.80 (+/-)
I.E. (IN) = 691.45, I.E. (OUT) = 691.25
9. INSTALL 8" x 6" WYE CONNECTION (PER CPWS SPECS)

KEYNOTES:

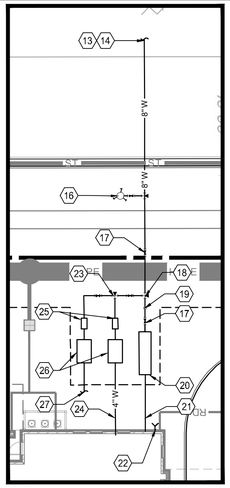
10. INSTALL 6" SDR 26 PVC @ 2.0% MIN. SLOPE
11. INSTALL TWO-WAY SEWER CLEANOUT ADJACENT TO THE BUILDING WHERE SHOWN (TYP. @ ALL SEWER LEADS TO BUILDINGS). REFER TO PLUMBING PLANS FOR ALL SEWER LINES WITHIN 5' OF THE BUILDING FOOTPRINT. (PER CPWS SPECS)
12. INSTALL TRAFFIC BEARING SEWER CLEANOUT (PER CPWS SPECS)
13. POINT OF CONNECTION - WATER (COORDINATE WITH CPWS PRIOR TO INSTALLATION)
14. INSTALL 8" x 6" MJ TAPPING SLEEVE (MUELLER H-615 OR APPROVED EQUAL), 6" GATE VALVE & BOX AND CONCRETE KISKER (PER CPWS SPECS)
15. INSTALL 8" PRESSURE CLASS 350 DUCTILE IRON WATER PIPE (PER CPWS SPECS)
16. INSTALL (PER CPWS SPECS):
1 - 8" x 6" MJ TEE
1 - 6" GATE VALVE W/ BOX
1 - FIRE HYDRANT ASSEMBLY
2 - CONCRETE KICKER
17. INSTALL 8" GATE VALVE W/ BOX (PER CPWS SPECS)
18. INSTALL (PER CPWS SPECS):
1 - 8" x 2" MJ TEE W/ CONCRETE KICKER
2 - 8" GATE VALVE W/ BOX
1 - 2" GATE VALVE W/ BOX
19. INSTALL 8"x6" REDUCER (PER CPWS SPECS)
20. INSTALL 6" AMES M300 DDCVA IN ABOVE GROUND HEATED ENCLOSURE (SAFE-T-COVER 600-AL ENCLOSURE W/ SINGLE PHASE 120V/2000W HCH2000-120 SLAB MOUNT HEATING SYSTEM ON 6" CONCRETE SLAB (PER CPWS AND MANUFACTURER SPECS)
21. INSTALL 6" PRESSURE CLASS 350 DUCTILE IRON WATER PIPE (PER CPWS SPECS)
22. BUILDING MOUNTED FDC (SEE FIRE PROTECTION PLANS)
23. INSTALL 2" x 2" MJ TEE W/ CONCRETE KICKER (PER CPWS SPECS)

KEYNOTES:

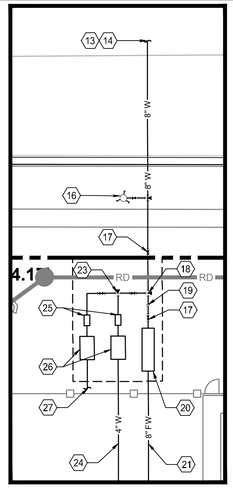
24. INSTALL 2" TYPE "K" COPPER WATER SERVICE (MIN. 36" COVER) (PER CPWS SPECS)
25. INSTALL 2" WATER METER IN PRECAST CONCRETE METER BOX (PER CPWS SPECS)
26. 1 - 2" RPBP (AMES 4000B) IN ABOVE GROUND HEATED ENCLOSURE ON CONCRETE PAD (PER CPWS SPECS) (CONTRACTOR TO ENSURE POWER IS PROVIDED TO ENCLOSURE FOR HEAT)
27. PLUG & MARK IRRIGATION LINE FOR CONTINUATION BY IRRIGATION CONTRACTOR
28. EXISTING RISER POLE TO REMAIN
29. POINT OF CONNECTION - PHONE/DATA, CABLE, ELECTRICAL SERVICE (COORDINATE WITH UTILITY PROVIDER PRIOR TO INSTALLATION)
30. CONTRACTOR TO INSTALL RIGID GALVANIZED CONDUITS TO 10' UP RISER POLE FROM GRADE. CAP ONE CONDUIT IN A PERMANENT MANNER. OTHER CONDUIT SHALL BE EXTENDED TO REQUIRED HEIGHT BY CPWS. CONTRACTOR SHALL FURNISH ALL EXPOSED CONDUITS, WHICH SHALL BE RIGID GALVANIZED CONDUIT. INSTALL RIGID GALVANIZED CONDUIT APPROX. 6" OFF RISER POLE. CPWS WILL FURNISH AND INSTALL PRIMARY CONDUCTORS IN COMPLETED CONDUITS.
31. CONTRACTOR TO PROVIDE AND INSTALL RIGID GALVANIZED METAL RADIUS SWEEP ELBOW AT RISER POLE BASE, CONTINUE FROM GRADE APPROX. 10' UP RISER POLE WITH RIGID GALVANIZED STEEL CONDUIT, INSTALL RIGID GALVANIZED CONDUIT APPROX. 6" OFF RISER POLE.
32. ELECTRICAL PULLBOX (PER CPWS SPECS)
33. PROPOSED DUAL 4" ELECTRICAL GRADE PVC CONDUITS FOR PRIMARY ELECTRICAL SERVICE (36" MINIMUM COVER). CONTRACTOR TO PROVIDE AND INSTALL A TRENCH AND PVC CONDUIT W. PULL STRING FROM THE POLE TO THE TRANSFORMER PER CPWS SPECS.
34. CONTRACTOR TO PROVIDE AND INSTALL RIGID GALVANIZED METAL RADIUS SWEEP ELBOW AT TRANSFORMER
35. PROPOSED ELECTRICAL TRANSFORMER LOCATION (PAD BY GC, TRANSFORMER SET BY CPWS)

KEYNOTES:

36. UNDERGROUND ELECTRIC SECONDARY THREE PHASE SERVICE. CONTRACTOR TO PROVIDE AND INSTALL A TRENCH, (2) 4" SCHEDULE 40 ELECTRICAL GRADE PVC CONDUIT W/ PULL STRING AND CONDUCTOR WIRE PER CPWS SPECS.
37. CONTRACTOR TO PROVIDE AND INSTALL (2) 4" SCH 40 PVC CONDUITS W/ PULL TAPE FOR PHONE/DATA SERVICE FROM 6" ABOVE GRADE AT RISER POLE TO 3/4" PLYWOOD BOARD INSIDE BUILDING, PROVIDE 1-30" SWEEP UP TO PLYWOOD BOARD WITH #6 GROUND WIRE AND GROUND BAR. (AT&T TO PROVIDE AND PULL PHONE/DATA WIRE). INSTALL IN SAME TRENCH AS ELECTRICAL CONDUITS WITH CPWS REQUIRED VERTICAL AND HORIZONTAL SEPARATION. CONDUIT TO ROUTE AROUND ELECTRICAL TRANSFORMER PAD LOCATION WITH CPWS REQUIRED SEPARATION.
38. CONTRACTOR TO PROVIDE AND INSTALL (1) 4" SCHEDULE 40 PVC CONDUIT WITH PULL TAPE FOR CABLE SERVICE FROM POINT OF CONNECTION TO BUILDING (CABLE PROVIDER TO PROVIDE AND PULL CABLE). INSTALL IN SAME TRENCH AS ELECTRICAL CONDUITS WITH CPWS REQUIRED VERTICAL AND HORIZONTAL SEPARATION. CONDUIT TO ROUTE AROUND ELECTRICAL TRANSFORMER PAD LOCATION WITH CPWS REQUIRED SEPARATION.
39. PHONE/DATA PULL BOX (PER UTILITY COMPANY SPECS)



WATER INSET #1
SCALE: 1" = 20'



WATER INSET #2
SCALE: 1" = 20'

REFERENCE:

1. SEE SHEET C0.1 FOR GENERAL NOTES AND UTILITY NOTES.
2. EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION WAS OBTAINED FROM A BOUNDARY AND TOPOGRAPHIC SURVEY BY M2 GROUP, LLC, DATED OCTOBER 22, 2025.
3. THE PROPERTY SHOWN HEREON IS LOCATED IN A FLOOD HAZARD ZONE "X" (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN) ACCORDING TO F.I.R.M. PANEL "MAURY COUNTY, TENNESSEE" PANEL 280 OF 440, MAP NUMBER "47119C0280E", EFFECTIVE APRIL 16, 2007.

LEGEND

- DW — DOMESTIC WATER SERVICE
- G — GAS SERVICE
- SAN — SANITARY SEWER SERVICE
- OH-E — OVERHEAD ELECTRIC SERVICE
- OH-T — OVERHEAD TELEPHONE SERVICE
- UD — PERVIOUS PAVEMENT UNDERDRAIN
- RD — ROOF DRAIN TRUNK LINE
- STORM PIPE (SEE PLANS FOR MATERIAL).
- 562 — EXISTING CONTOUR
- 562 — PROPOSED CONTOUR
- DRIVEWAY CENTERLINE
- PROPERTY LINE
- S — SANITARY SEWER MANHOLE
- ST — STORM SEWER MANHOLE
- CURB INLET
- CATCH BASIN
- NYLOPLAST DRAIN BASIN
- ELECTRIC/COMMUNICATION POLE

FULMER LUCAS
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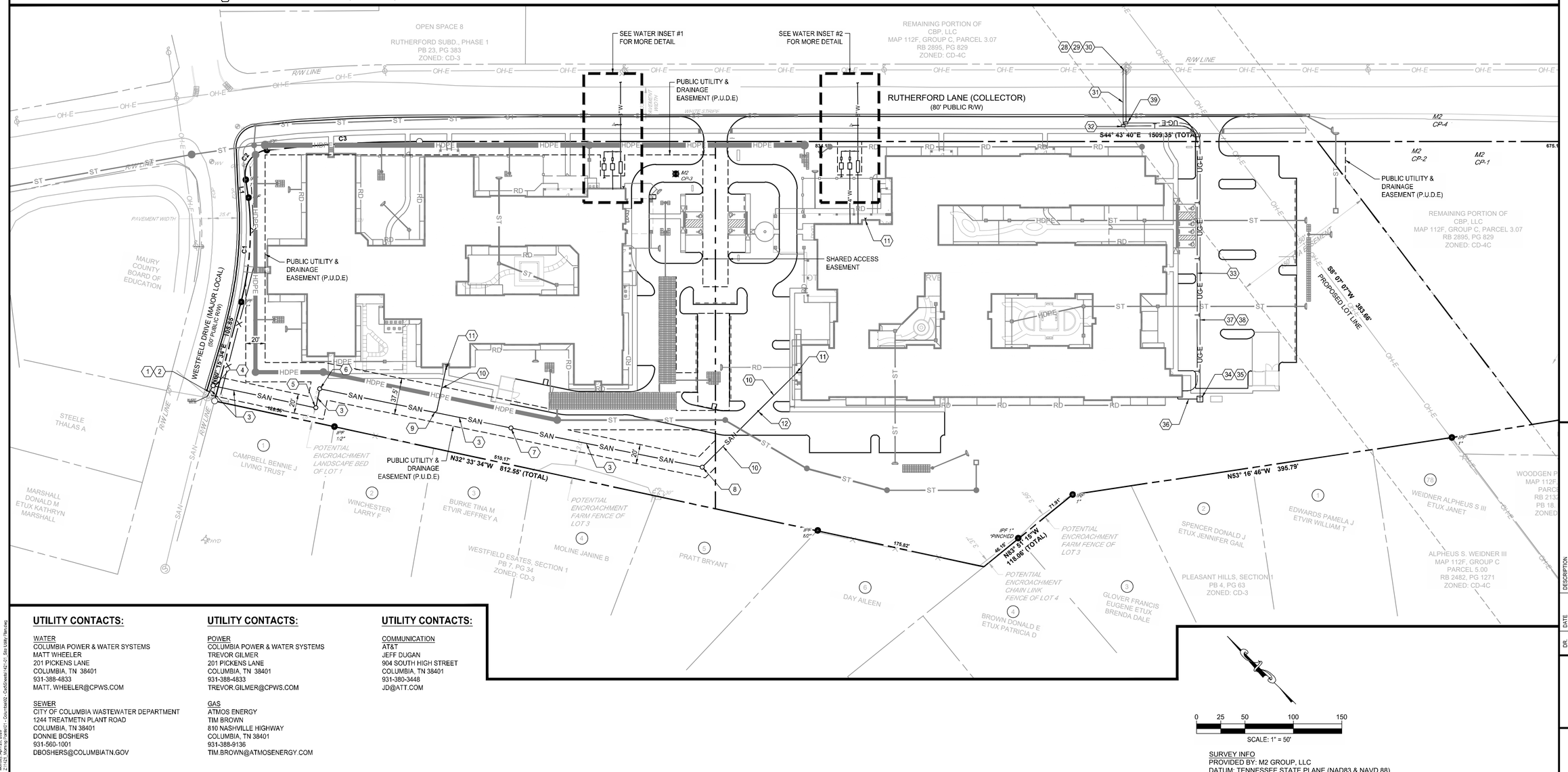
JASON C. MOREIN
REGISTERED ENGINEER
AGRICULTURE
No. 109691
STATE OF TENNESSEE
4/20/2026



0 25 50 100 150
SCALE: 1" = 50'

SURVEY INFO
PROVIDED BY: M2 GROUP, LLC
DATUM: TENNESSEE STATE PLANE (NAD83 & NAVD 88)

UTILITY CONTACTS:

WATER
COLUMBIA POWER & WATER SYSTEMS
MATT WHEELER
201 PICKENS LANE
COLUMBIA, TN 38401
931-388-4833
MATT. WHEELER@CPWS.COM

SEWER
CITY OF COLUMBIA WASTEWATER DEPARTMENT
1244 TREATMETN PLANT ROAD
COLUMBIA, TN 38401
DONNIE BOSHERS
931-560-1001
DBOSHERS@COLUMBIATN.GOV

UTILITY CONTACTS:

POWER
COLUMBIA POWER & WATER SYSTEMS
TREVOR GILMER
201 PICKENS LANE
COLUMBIA, TN 38401
931-388-4833
TREVOR.GILMER@CPWS.COM

GAS
ATMOS ENERGY
TIM BROWN
810 NASHVILLE HIGHWAY
COLUMBIA, TN 38401
931-388-9136
TIM.BROWN@ATMOSENERGY.COM

UTILITY CONTACTS:

COMMUNICATION
AT&T
JEFF DUGAN
904 SOUTH HIGH STREET
COLUMBIA, TN 38401
931-380-3448
JD@ATT.COM

SITE DEVELOPMENT PLANS FOR:
MORNING POINTE
RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401

DR.	DATE	DESCRIPTION
JEL	04/20/2026	FINAL PUD MASTER PLAN

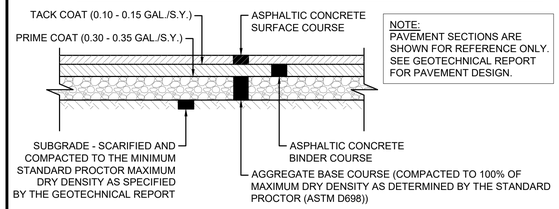
SITE UTILITY PLAN

C3.0

1421-01 MORNING POINTE

Monday, April 20, 2026
11:53:40 AM CDT
I:\2021\1421-01 - Columbia\02 - Civil\Sheets\1421-01 - Site Utility Plan.dwg

FLEXIBLE PAVEMENT RECOMMENDATIONS			
MATERIALS	HEAVY DUTY ASPHALT PAVEMENT SECTION THICKNESS (INCHES)	LIGHT DUTY ASPHALT PAVEMENT SECTION THICKNESS (INCHES)	TENNESSEE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS
ASPHALTIC CONCRETE SURFACE COURSE	X = 1 1/2"	X = 1 1/2"	SECTION 411, SECTION E
ASPHALTIC CONCRETE BINDER COURSE	Y = 2"	Y = 2"	SECTION 307, SECTION B
AGGREGATE BASE COURSE	Z = 8"	Z = 6"	SECTION 903 CLASS A, GRADING D
COMPACTION DENSITY REQUIREMENTS BY MARSHALL METHOD SECTION 407.			

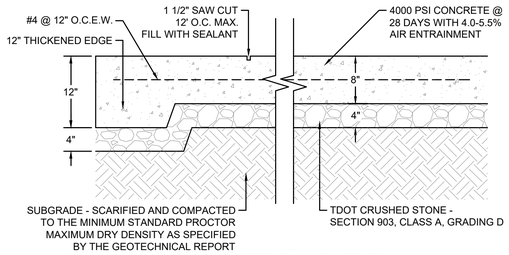


NOTE:
PAVEMENT SECTIONS ARE SHOWN FOR REFERENCE ONLY. SEE GEOTECHNICAL REPORT FOR PAVEMENT DESIGN.

ASPHALT PAVEMENT
NOT TO SCALE

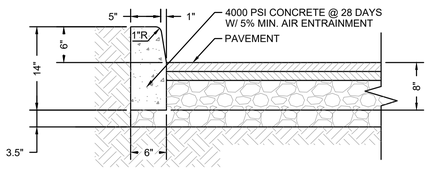
NOTES:
1. MATERIALS AND CONSTRUCTION PROCEDURES SHALL BE IN ACCORDANCE WITH THE TDOT STANDARD SPECIFICATIONS, SECTION 501 FOR CONCRETE, AND SECTION 303 FOR BASE COURSE.
2. REFER TO DETAILS ON THIS SHEET FOR JOINT SPACING AND CONSTRUCTION.
3. EXPANSION JOINTS ARE TO BE SPACED 25' TO 30' APART DEPENDING ON TRANSVERSE JOINT MARKINGS.

NOTE:
PAVEMENT SECTIONS ARE SHOWN FOR REFERENCE ONLY. SEE GEOTECHNICAL REPORT FOR PAVEMENT DESIGN.

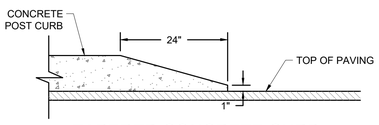


CONCRETE PAVEMENT
NOT TO SCALE

NOTES:
1. CURBING SHALL BE CONSTRUCTED IN 10 FOOT LENGTHS.
2. PREFORMED 3/4" EXPANSION JOINTS SHALL BE EQUALLY SPACED AT 50' O.C. (MAX). EXPANSION JOINTS SHALL ALSO BE PLACED AT TANGENT POINTS AND BETWEEN CURBS & RIGID OBJECTS.
3. EQUALLY SPACE ¾" CONTRACTION JOINTS AT 10' O.C. (MAX.) BETWEEN EXPANSION JOINTS.
4. PRIOR TO BACKFILLING, PREVENT WATER FROM PONDING BEHIND CURBS.
5. THE CONCRETE SHALL MEET THE REQUIREMENTS OF ASTM C94, 4,000 PSI WITH FIBER MESH ADDED.
6. THE FINISHED CURB WILL BE COATED WITH A CURING COMPOUND DESIGNED TO SEAL THE SURFACE AND FORM A MEMBRANE TO RETARD WATER LOSS.

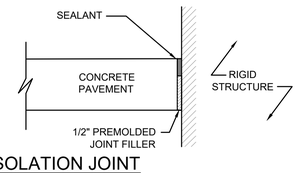


CONCRETE POST CURB
NOT TO SCALE

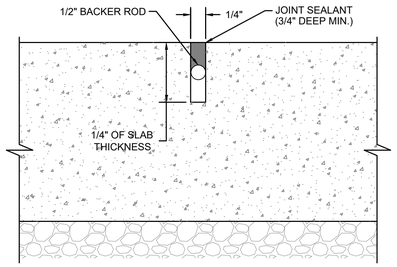


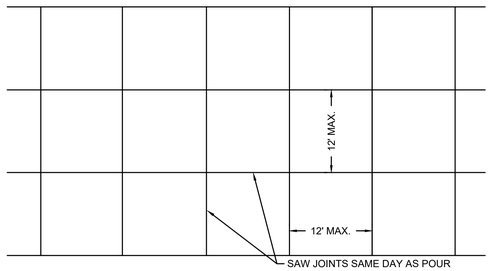
TAPERED CONCRETE CURB
NOT TO SCALE

NOTE:
PROVIDE ISOLATION JOINT WHERE CONCRETE SIDEWALK OR PAVEMENT ABUTS A RIGID STRUCTURE.



ISOLATION JOINT
NOT TO SCALE

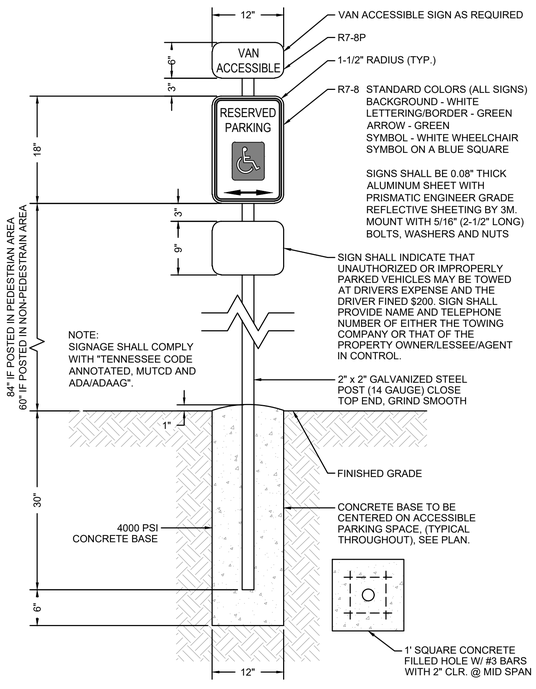




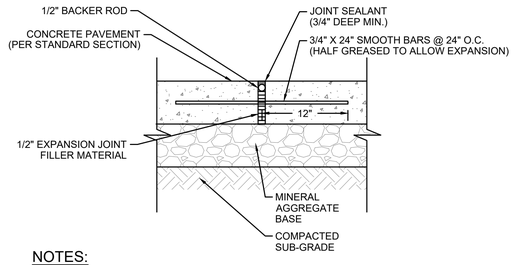
PLAN VIEW

NOTES:
1. INSTALL SAW CUT JOINTS WITHIN 24 HOURS OF FINISHING CONCRETE.

CONCRETE PAVEMENT SAW CUT JOINT
NOT TO SCALE

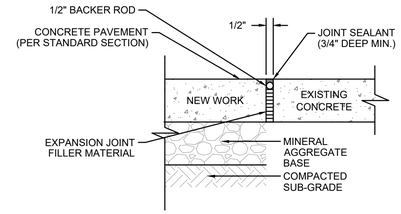


EXTERIOR ACCESSIBLE PARKING SIGN & SYMBOL
NOT TO SCALE



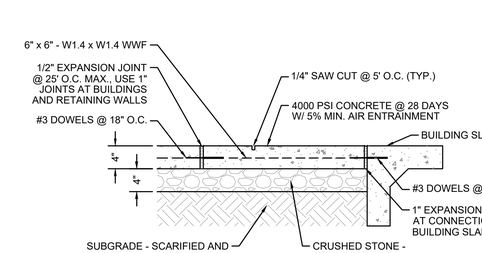
NOTES:
1. INSTALL CONSTRUCTION JOINTS WHEN CONTINUOUS POUR OPERATIONS ARE SUSPENDED FOR MORE THAN 30 MINUTES.

CONCRETE PAVEMENT CONSTRUCTION JOINT
NOT TO SCALE

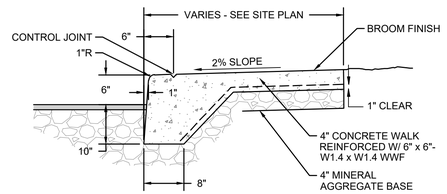


NOTES:
1. INSTALL EXPANSION JOINTS @ 20' O.C. IN EACH DIRECTION AND AGAINST ASPHALT PAVEMENT AND STRUCTURES.

CONCRETE PAVEMENT EXPANSION JOINT
NOT TO SCALE



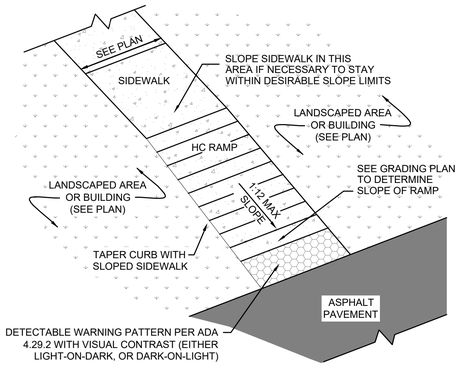
CONCRETE SIDEWALK
NOT TO SCALE



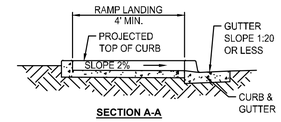
NOTES:
1. PROVIDE CONTROL JOINTS SPACED EVERY 5 FEET AND EXPANSION JOINTS EVERY 25 FEET.

INTEGRAL CONCRETE CURB AND SIDEWALK
NOT TO SCALE

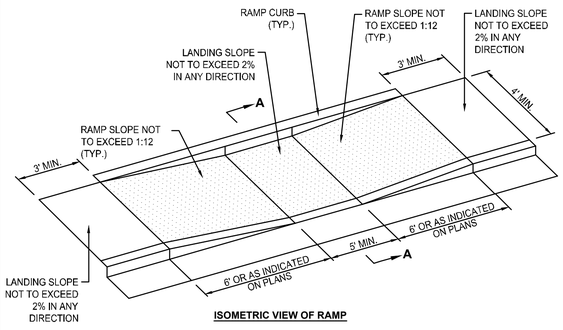
NOTES:
1. ALL WORK PERFORMED BY THE CONTRACTOR SHALL COMPLY THE PERTINENT PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT.
2. CROSS SLOPE OF THE RAMP SHALL NOT EXCEED 1:50.
3. SURFACE TEXTURE OF THE RAMP SHALL BE STABLE, FIRM AND SLIP RESISTANT. THE SURFACE SHALL BE COARSE BROOMED FINISH TRANSVERSE TO THE SLOPE OF THE RAMP.



PARALLEL ACCESSIBLE RAMP (SCENARIO #1)
NOT TO SCALE



SECTION A-A



ISOMETRIC VIEW OF RAMP

NOTES:
1. ACCESSIBLE RAMP CONSTRUCTION SHALL CONFORM TO ALL FEDERAL, STATE AND CITY CODES AND SPECIFICATIONS.
2. SURFACES SHALL MEET THE GUIDELINES OF THE ADA STANDARDS FOR ACCESSIBILITY, APPENDIX A, PART 36.
3. THE SLOPE OF THE GUTTER MUST NOT EXCEED 1:20 ADJACENT TO THE RAMP.
4. CROSS SLOPE OF THE RAMP SHALL NOT EXCEED 1:50.

PARALLEL ACCESSIBLE RAMP (SCENARIO #2)
NOT TO SCALE

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JASON C. MOREIN — REGISTERED ENGINEER — AGRICULTURE — No. 109605 — STATE OF TENNESSEE

SITE DEVELOPMENT PLANS FOR:
MORNING POINTE
RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401

DR.	DATE	DESCRIPTION
JEL	04/20/2026	FINAL PUD MASTER PLAN

SITE DETAILS

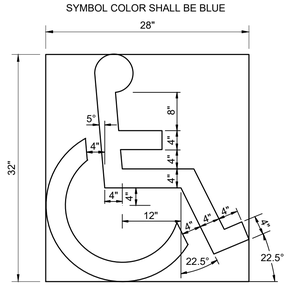
C4.0

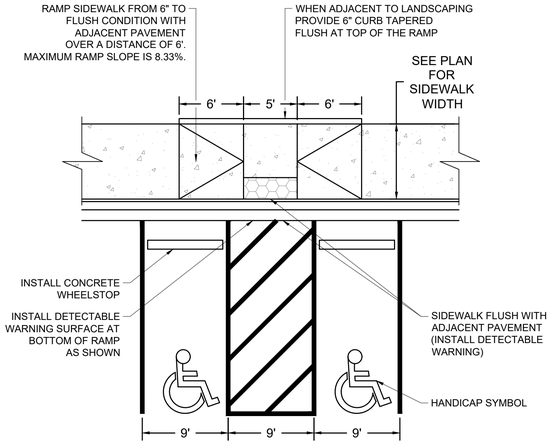
1421-01 MORNING POINTE

Updated: Apr 20, 2026
Z:\Projects\1421-01 - Columbia\02 - Civil\Sheets\1421-01 Site Details.dwg

NOTES:

1. ALL WORK PERFORMED BY THE CONTRACTOR SHALL COMPLY THE PERTINENT PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT.
2. CROSS SLOPE OF THE RAMP SHALL NOT EXCEED 1:50.
3. SURFACE TEXTURE OF THE RAMP SHALL BE STABLE, FIRM AND SLIP RESISTANT. THE SURFACE SHALL BE COARSE BROOMED FINISH TRANSVERSE TO THE SLOPE OF THE RAMP.
4. MAXIMUM SLOPE OF 2% IN ANY DIRECTION WITHIN ADA PARKING SPACES.
5. REFER TO SITE PLAN FOR EXACT LAYOUT.

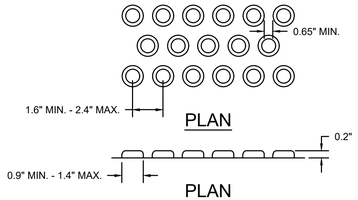




ADA PARKING DETAILS
NOT TO SCALE

NOTES:

1. DETECTABLE WARNING SURFACE IS REQUIRED AT ALL SIDEWALK RAMPS AT BOUNDARY WITH ADJACENT PAVEMENT.
2. TRUNCATED DOMES IN A DETECTABLE WARNING SURFACE SHALL HAVE A BASE DIAMETER OF 0.9 INCHES MINIMUM TO 1.4 INCHES MAXIMUM, A TOP DIAMETER OF 50 PERCENT OF THE BASE DIAMETER MINIMUM TO 65 PERCENT OF THE
3. BASE DIAMETER MAXIMUM, AND A HEIGHT OF 0.2 INCHES.
4. TRUNCATED DOMES IN A DETECTABLE WARNING SURFACE SHALL HAVE A CENTER-TO-CENTER SPACING OF 1.6 INCHES MINIMUM AND 2.4 INCHES MAXIMUM, AND A BASE-TO-BASE SPACING OF (0.65 IN MINIMUM, MEASURED BETWEEN THE MOST ADJACENT DOMES.
5. DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH ADJACENT GUTTER, STREET OR HIGHWAY, OR WALKWAY SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT.
6. DETECTABLE WARNING SURFACES SHALL EXTEND 24 INCHES MINIMUM IN THE DIRECTION OF TRAVEL AND THE FULL WIDTH OF THE CURB RAMP (EXCLUSIVE OF FLARES), THE LANDING, OR THE BLENDED TRANSITION.
7. REFER TO FLARED HANDICAP RAMP DETAIL AND PARALLEL HANDICAP RAMP DETAIL FOR PLACEMENT OF DETECTABLE WARNING SURFACE.



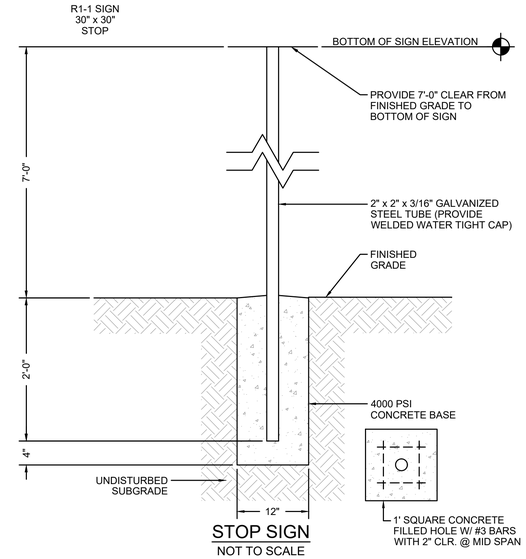
DETECTABLE WARNING SURFACE
NOT TO SCALE

COLORS:
LEGEND - WHITE (RETROFELCTIVE)
BACKGROUND - RED (RETROFLECTIVE)

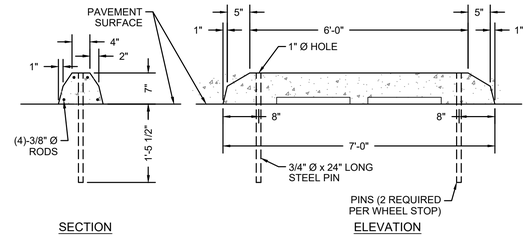


NOTES:

1. SET POSTS IN CONCRETE TO A MINIMUM DEPTH OF 24". SIGN PANELS SHALL BE 0.100 ALUMINUM WITH RAISED OR SILKSCREEN COPY.
2. FOR POST MOUNTING, USE NON-CORROSIVE 3/8" MACHINE BOLTS W/ WASHERS, 2 PER SIGN; OR IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
3. ALL SIGNAGE IS TO BE INSTALLED WITH THE BOTTOM EDGE OF THE LOWEST SIGN AT LEAST 60" ABOVE FINISHED GRADE, WHERE NO PEDESTRIAN TRAFFIC IS POSSIBLE.
4. ALL SIGNAGE IS TO BE INSTALLED WITH THE BOTTOM EDGE OF THE LOWEST SIGN AT LEAST 84", WHERE PEDESTRIAN TRAFFIC IS POSSIBLE.

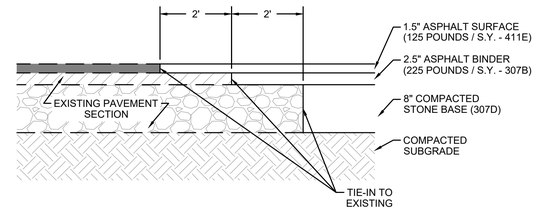


STOP SIGN
NOT TO SCALE

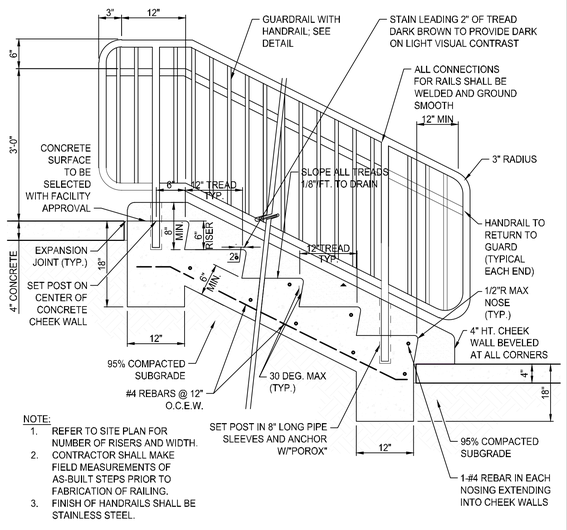


NOTES:
1. RECESS PINS BELOW TOP OF WHEEL STOP 1/2".

CONCRETE WHEELSTOP
NOT TO SCALE

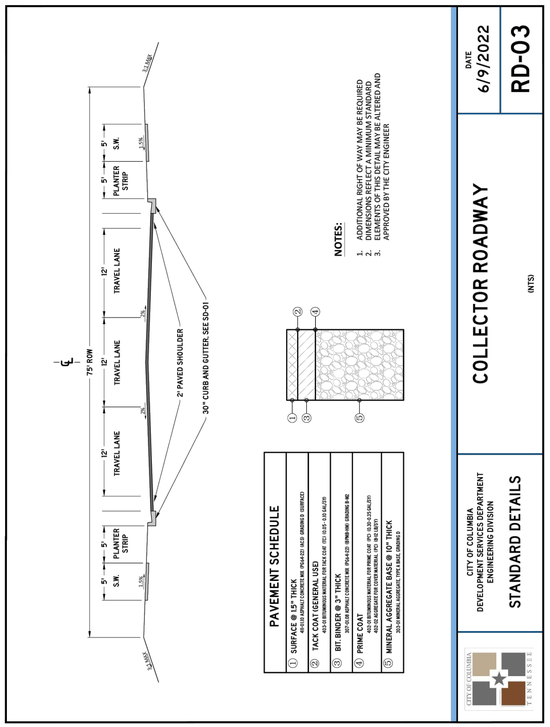


ASPHALT PAVEMENT TIE-IN TO EXISTING
NOT TO SCALE



NOTE:
1. REFER TO SITE PLAN FOR NUMBER OF RISERS AND WIDTH.
2. CONTRACTOR SHALL MAKE FIELD MEASUREMENTS OF AS-BUILT STEPS PRIOR TO FABRICATION OF RAILING.
3. FINISH OF HANDRAILS SHALL BE STAINLESS STEEL.

CONCRETE STEPS AND HANDRAIL
NOT TO SCALE

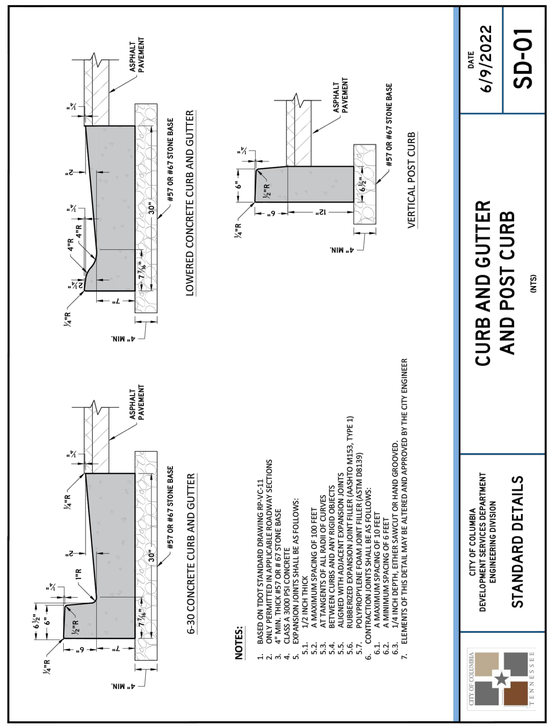


CITY OF COLUMBIA
DEVELOPMENT SERVICES DEPARTMENT
ENGINEERING DIVISION

COLLECTOR ROADWAY
STANDARD DETAILS
(NTS)

DATE 6/9/2022
RD-03

COLUMBIA COLLECTOR ROADWAY
NOT TO SCALE



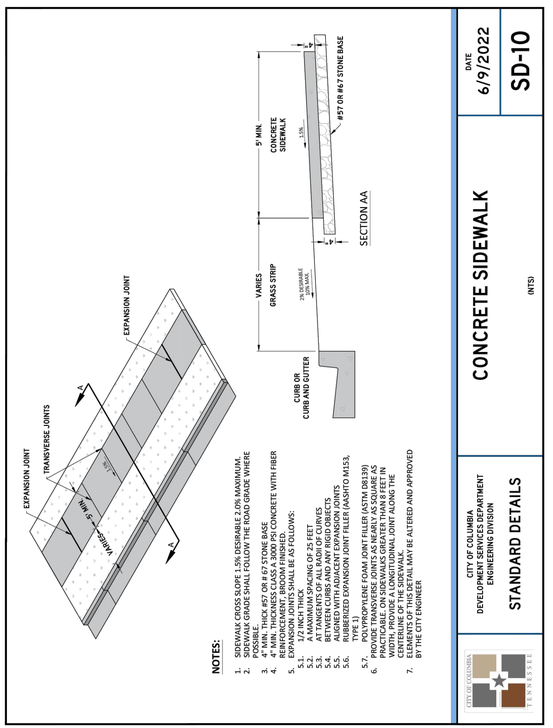
NOTES:
1. BASED ON TDOT STANDARD DRAWING RP-VC-11
2. CURB & GUTTER SHALL BE CONSTRUCTED IN SECTIONS
3. 4" MIN. THICK #57 OR #67 STONE BASE
4. CONCRETE SHALL BE CLASS A, 3000 PSI CONCRETE
5. EXPANSION JOINTS SHALL BE AS FOLLOWS:
   5.1. 1/2 INCH THICK
   5.2. A MAXIMUM SPACING OF 100 FEET
   5.3. AT TANGENTS OF ALL RADII OF CURVES
   5.4. BETWEEN CURBS AND ANY RIGID OBJECTS
   5.5. ALIGNED WITH ADJACENT EXPANSION JOINTS
   5.6. RUBBERIZED EXPANSION JOINT FILLER (AASHTO M153, TYPE 1)
6. CONTRACTION JOINTS SHALL BE AS FOLLOWS:
   6.1. A MAXIMUM SPACING OF 10 FEET
   6.2. A MINIMUM SPACING OF 6 FEET
   6.3. POLYPROPYLENE FOAM JOINT FILLER (ASTM D8139)
   6.4. CONSTRUCTED AS SAWED OR HAND GROOVED.
   6.5. ALIGNED WITH ADJACENT CONTRACTION JOINTS
7. ELEMENTS OF THIS DETAIL MAY BE ALTERED AND APPROVED BY THE CITY ENGINEER

CITY OF COLUMBIA
DEVELOPMENT SERVICES DEPARTMENT
ENGINEERING DIVISION

CURB AND GUTTER AND POST CURB
STANDARD DETAILS
(NTS)

DATE 6/9/2022
SD-01

COLUMBIA CURB AND GUTTER AND POST CURB
NOT TO SCALE



NOTES:
1. SIDEWALK CROSS SLOPE 1.5% DESIRABLE 2.0% MAXIMUM.
2. SIDEWALK GRADE SHALL FOLLOW THE ROAD GRADE WHERE PRACTICAL.
3. 4" MIN. THICK #57 OR #67 STONE BASE
4. CONCRETE SHALL BE CLASS A, 3000 PSI CONCRETE WITH FIBER REINFORCEMENT, BROOM FINISH
5. EXPANSION JOINTS SHALL BE AS FOLLOWS:
   5.1. 1/2 INCH THICK
   5.2. A MAXIMUM SPACING OF 25 FEET
   5.3. AT TANGENTS OF ALL RADII OF CURVES
   5.4. BETWEEN CURBS AND ANY RIGID OBJECTS
   5.5. ALIGNED WITH ADJACENT EXPANSION JOINTS
   5.6. RUBBERIZED EXPANSION JOINT FILLER (AASHTO M153, TYPE 1)
   5.7. POLYPROPYLENE FOAM JOINT FILLER (ASTM D8139)
6. PROVIDE TRANSVERSE JOINTS AS NEARLY AS SQUARE AS PRACTICABLE AND AT SAME INTERVAL AS CURB & GUTTER WIDTH, PROVIDE A LONGITUDINAL JOINT ALONG THE CENTERLINE OF THE SIDEWALK
7. ELEMENTS OF THIS DETAIL MAY BE ALTERED AND APPROVED BY THE CITY ENGINEER

CITY OF COLUMBIA
DEVELOPMENT SERVICES DEPARTMENT
ENGINEERING DIVISION

CONCRETE SIDEWALK
STANDARD DETAILS
(NTS)

DATE 6/9/2022
SD-10

COLUMBIA CONCRETE SIDEWALK
NOT TO SCALE

FULMER LUCAS
2002 RICHARD JONES RD - SUITE B200
NASHVILLE, TENNESSEE 37215
INFO@FULMERLUCAS.COM - (615) 345-3770

JASON C. MOREIN
REGISTERED
No. 109605
AGRICULTURE
STATE OF TENNESSEE

SITE DEVELOPMENT PLANS FOR:
MORNING POINTE
RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401

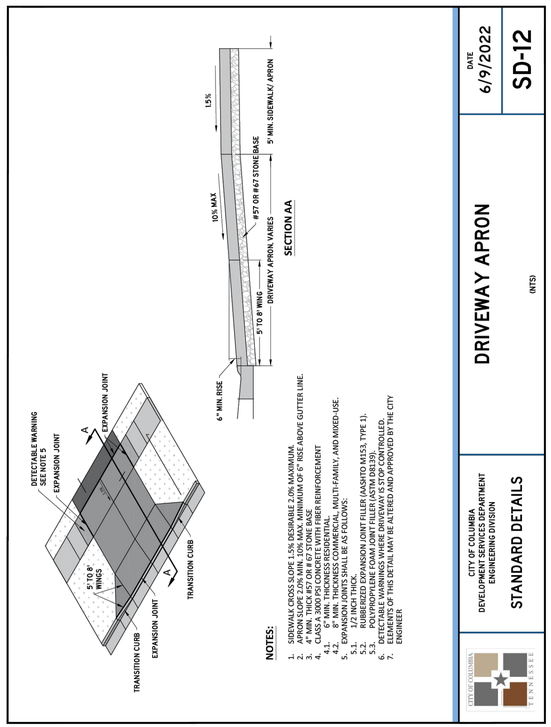
DR.	DATE	DESCRIPTION
JEL	04/20/2026	FINAL PUD MASTER PLAN

SITE DETAILS

C4.1

1421-01 MORNING POINTE

Monday, April 20, 2026
U:\21 Projects\1421-01 - Columbia\02 - Civil\Sheets\1421-01 - Site Details.dwg



NOTES:

1. SIDEWALK CROSS SLOPE 1.5% DESIRABLE 2.0% MAXIMUM.
2. APRON SLOPE 2.0% MIN. 10% MAX. MINIMUM OF 6" RISE ABOVE GUTTER LINE.
3. 4" THICK CLASS A 3000 PSI CONCRETE BASE.
4. CLASS A 3000 PSI CONCRETE WITH FIBER REINFORCEMENT
   4.1. 6" MIN. THICKNESS COMMERCIAL
   4.2. 4" MIN. THICKNESS RESIDENTIAL, MULTI-FAMILY, AND MIXED-USE.
5. EXPANSION JOINTS SHALL BE AS FOLLOWS:
   5.1. PREMOLDED JOINT FILLER
   5.2. RUBBERIZED EXPANSION JOINT FILLER (AASHTO M153, TYPE 1).
   5.3. POLYPROPYLENE FOAM JOINT FILLER (ASTM D8139).
6. DETECTABLE WARNING SURFACE SHALL BE INSTALLED AS SPECIFIED.
7. ELEMENTS OF THIS DETAIL MAY BE ALTERED AND APPROVED BY THE CITY ENGINEER

DATE 6/9/2022 | SD-12

DRIVEWAY APRON (NTS)

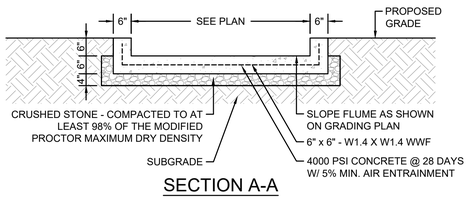
CITY OF COLUMBIA
DEVELOPMENT SERVICES DEPARTMENT
ENGINEERING DIVISION

STANDARD DETAILS

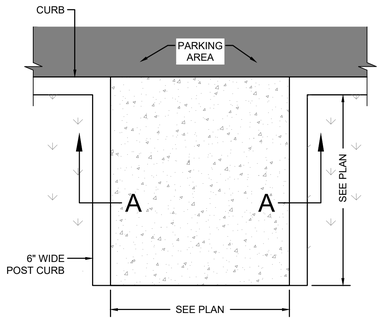
COLUMBIA COLLECTOR ROADWAY
NOT TO SCALE

NOTES:

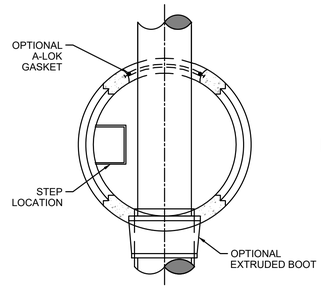
1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY AND TDOT STANDARD SPECIFICATIONS.
2. ALL EXPOSED CONCRETE EDGES SHALL HAVE A 1/2" RADIUS TOOLED JOINT.
3. SUBGRADE TO BE COMPACTED TO AT LEAST 98% OF STANDARD PROCTOR MAXIMUM LABORATORY DRY DENSITY.



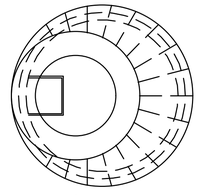
SECTION A-A



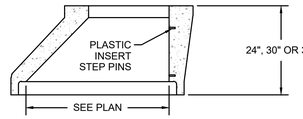
CONCRETE CURB CUT
NOT TO SCALE



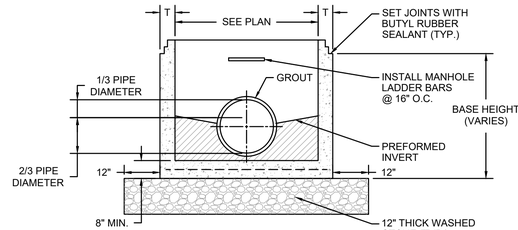
TOP VIEW



TOP VIEW

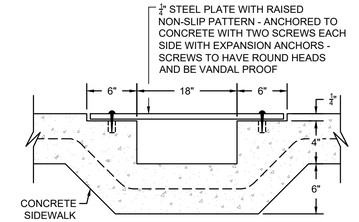


MANHOLE RISER



MANHOLE BASE

STORM MANHOLE
NOT TO SCALE



DRAIN AT SIDEWALKS
NOT TO SCALE

NOTES:

1. ALL MATERIAL, DESIGN, MANFACTURING, PHYSICAL TEST REQUIREMENTS, FINISH MARKING, INSPECTION, REJECTION AND REPAIRS TO MEET / OR EXCEED SPECIFICATIONS FOR PRECAST-REINFORCED CONCRETE MANHOLE SECTIONS". PER ASTM C-478 (LATEST REVISION).
2. MANHOLE SECTIONS TO BE TONGUE AND GROOVED.
3. BENCHES MUST BE PROVIDED IN ALL STORM MANHOLES.
4. USE JOHN BOUCHARD & SON'S CO. 1150, OR APPROVED EQUAL.
5. CASTINGS SHALL BE FURNISHED WITH MANUFACTURERS' STANDARD ASPHALT COATING.
6. GRATE AND STRUCTURE MUST MEET HEAVY DUTY TRAFFIC RATING (H20).
7. CONCRETE = MIN. 4000 PSI AT 28 DAYS.
8. REINFORCEMENT = MIN. 0.14 SQ. IN./SQ. FT., GRADE 60 BARS.
9. VERTICAL MANHOLE STEPS SHALL BE CONSISTENTLY SPACED AND SHALL COMPLY WITH OSHA (SUBPART D) "FIXED LADDERS" (SECTION 1910-27) AND/OR ASTM C-478.
10. INSTALL LADDER BAR @ 16" O.C. FRAME AND GRATE SHALL BE STAMPED WITH "NO DUMPING...DRAINS TO RIVER" OR CITY/COUNTY APPROVED EQUAL.

FULMER LUCAS
2002 RICHARD JONES RD - SUITE B200
NASHVILLE, TENNESSEE 37215
INFO@FULMERLUCAS.COM - (615) 345-3770

JASON C. MOREIN
REGISTERED ENGINEER
No. 109605
AGRICULTURE
CIVIL
STATE OF TENNESSEE

SITE DEVELOPMENT PLANS FOR:
MORNING POINTE
RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401

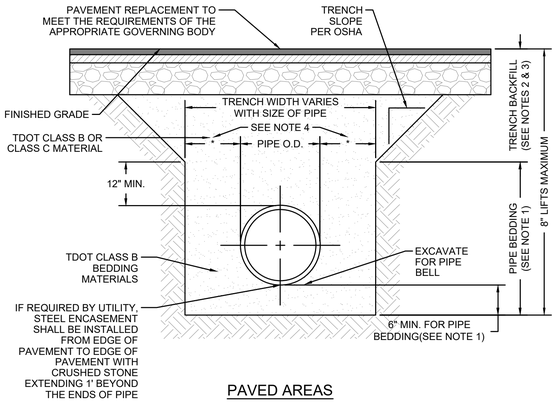
DR.	DATE	DESCRIPTION
JEL	04/20/2026	FINAL PUD MASTER PLAN

SITE DETAILS

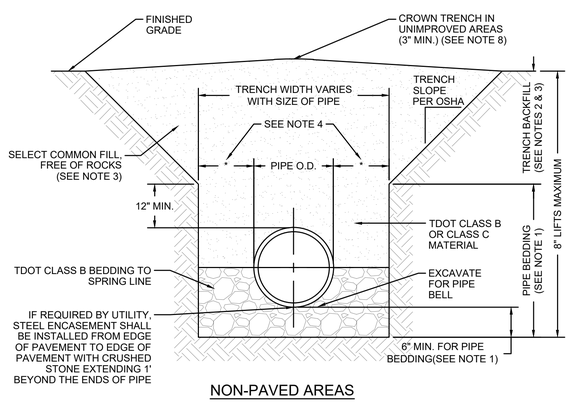
C4.2

1421-01 MORNING POINTE

SIEVE ANALYSIS CHART					
CRUSHED STONE ASTM D-448, NUMBER 67		SAND		SELECT NATIVE MATERIAL	
NOMINAL SIZE	% PASSING	NOMINAL SIZE	% PASSING	NOMINAL SIZE	% PASSING
1"	100	1"	100	1"	100
3/4"	90 - 100	#4	60 - 100	#4	40 - 100
3/8"	20 - 55	#200	0 - 5	#200	0 - 50
#4	0 - 10	MAXIMUM P.I. = 5			
#8	0 - 5	MAXIMUM L.L. = 30		MAXIMUM P.I. = 12	



PAVED AREAS



NON-PAVED AREAS

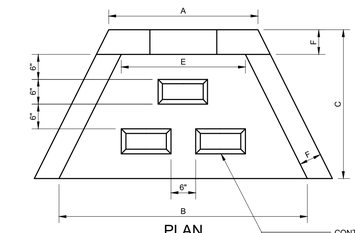
TYPICAL STORM BEDDING
NOT TO SCALE

NOTES:

1. PIPE BEDDING: TDOT CLASS B BEDDING COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: TDOT CLASS B OR CLASS C MATERIAL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. TRENCH BACKFILL UTILIZING SELECT COMMON FILL SHALL BE IN ACCORDANCE WITH TDOT SPECIFICATIONS.
4. (*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. SHEETING AND BRACING SHALL BE USED IN ACCORDANCE WITH CURRENT TRENCHING REGULATIONS AND WHERE UNSAFE CONDITIONS EXIST.
8. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH CITY OR TENNESSEE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.

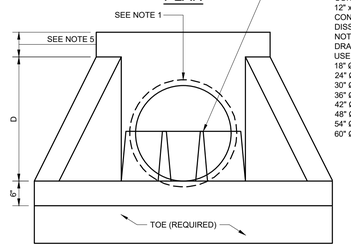
NOTES:

1. CONCRETE: 4000 PSI AT 28 DAYS.
2. REINFORCED WITH NO. 4 BARS 10" C/C EACH WAY WITH WINGS AND TOE SLAB DOWELED TO HEADWALL WITH NO. 5 BARS.
3. 3/4" CHAMFER ON ALL EXPOSED EDGES.
4. CONTRACTOR TO PLACE ANY ADDITIONAL FILL MATERIAL NEEDED TO BRING FINISHED GRADE TO WITHIN 0" - 2" OF THE TOP OF THE HEADWALL.
5. 0" FOR AW HEADWALL
   6" FOR BW & CW HEADWALL
   6" TO 27" FOR DW HEADWALL

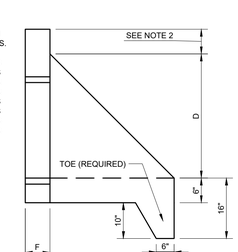


PLAN

TABLE OF DIMENSIONS				
PIPE SIZE	AW 12"-15"-18"	BW 24"	CW 30"-36"-42"	DW 48"-54"-60"
A	32"	48"	80"	97.25"
B	48"	72"	102"	120"
C	30"	44"	54"	56"
D	26"	36"	54"	60"
E	24"	36"	64"	83"
F	6"	8"	8"	8"
MAX. OPENING	26"	32"	55"	78"
WT / LB	1.380	3.100	8.100	11.400



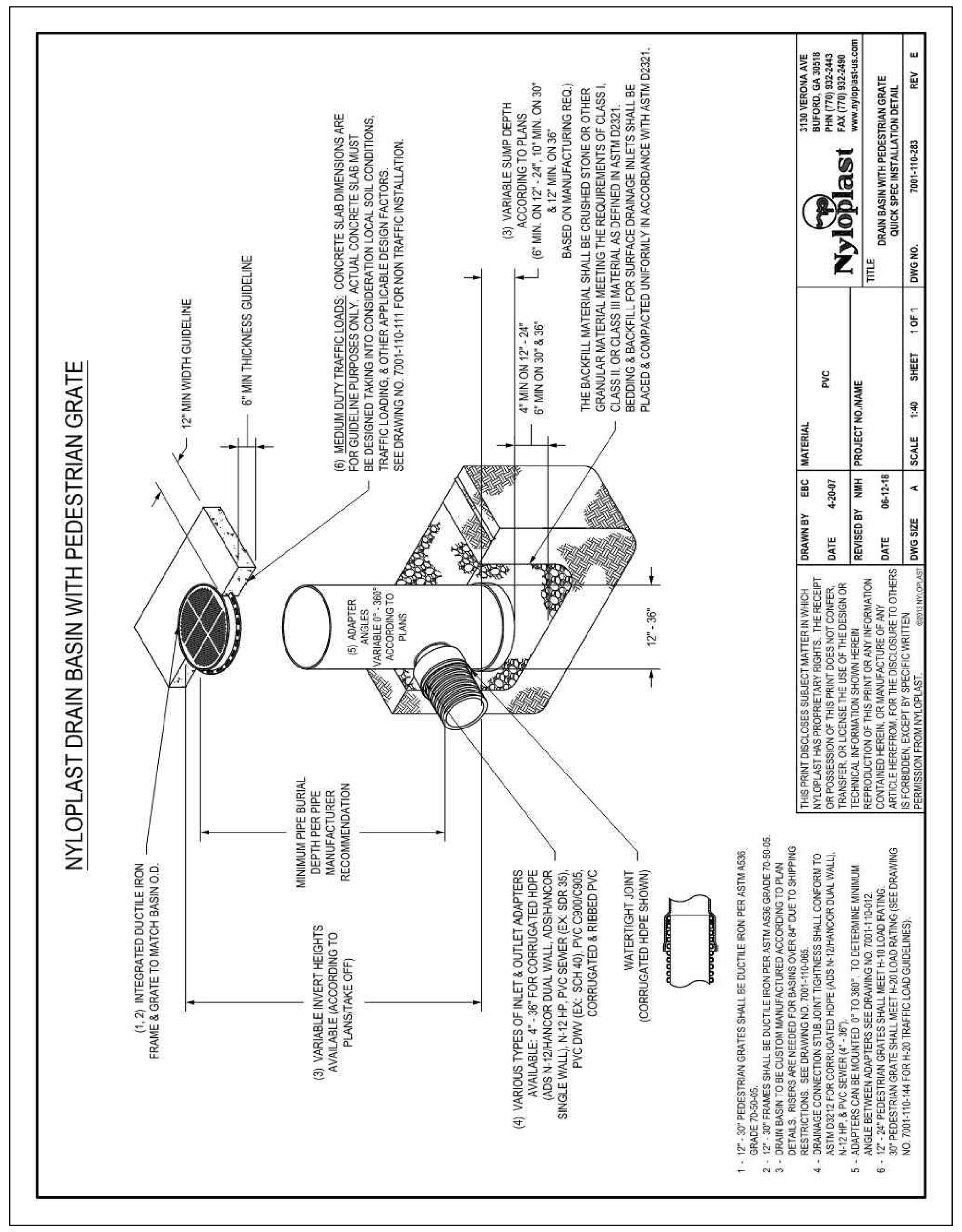
FRONT ELEVATION



SIDE ELEVATION

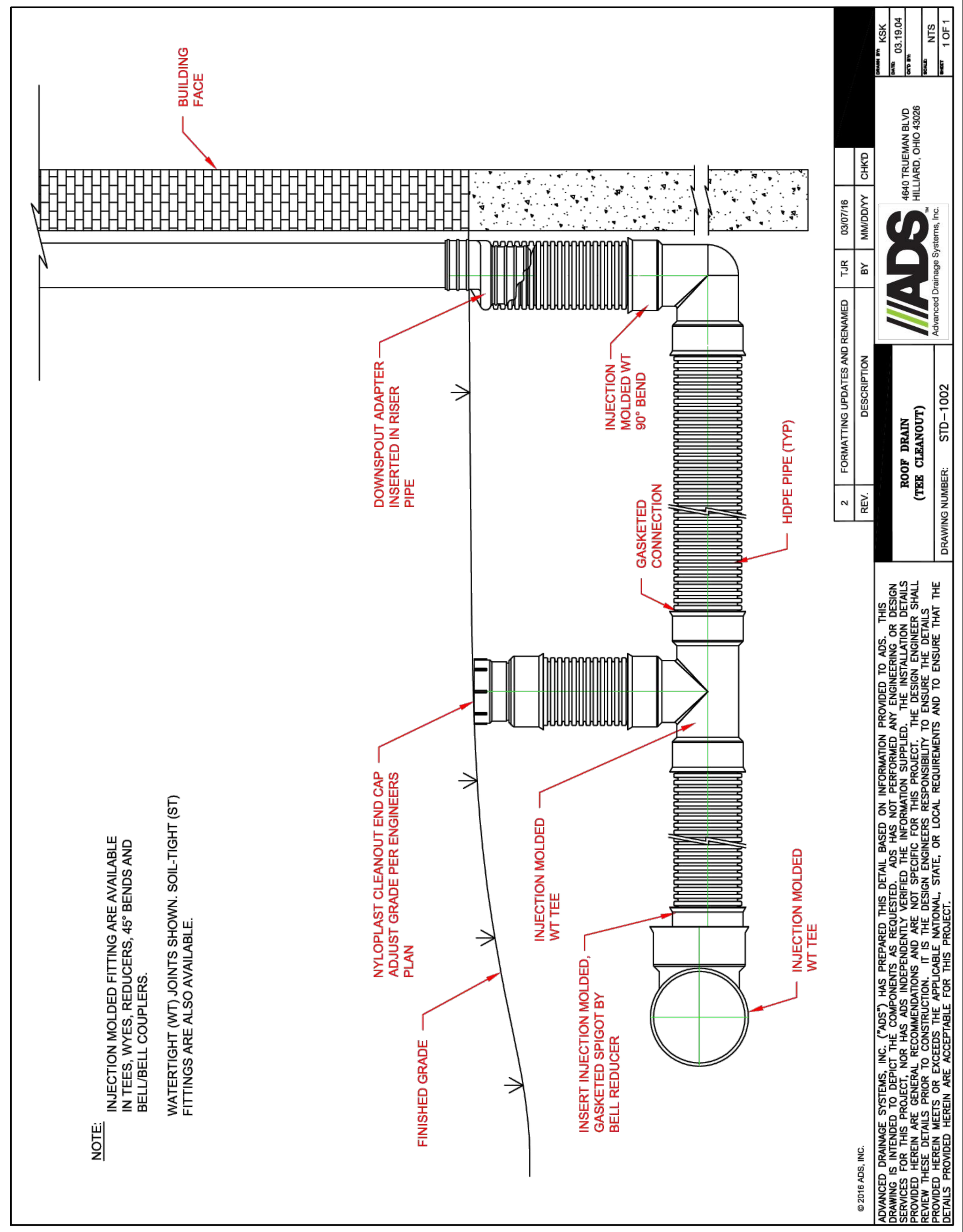
CONCRETE HEADWALL
NOT TO SCALE

Updated: Apr 20, 2026
Z:\1421-01 Morning Pointe\01 - Columbia\02 - Civil\Sheets\1421-01 Site Details.dwg



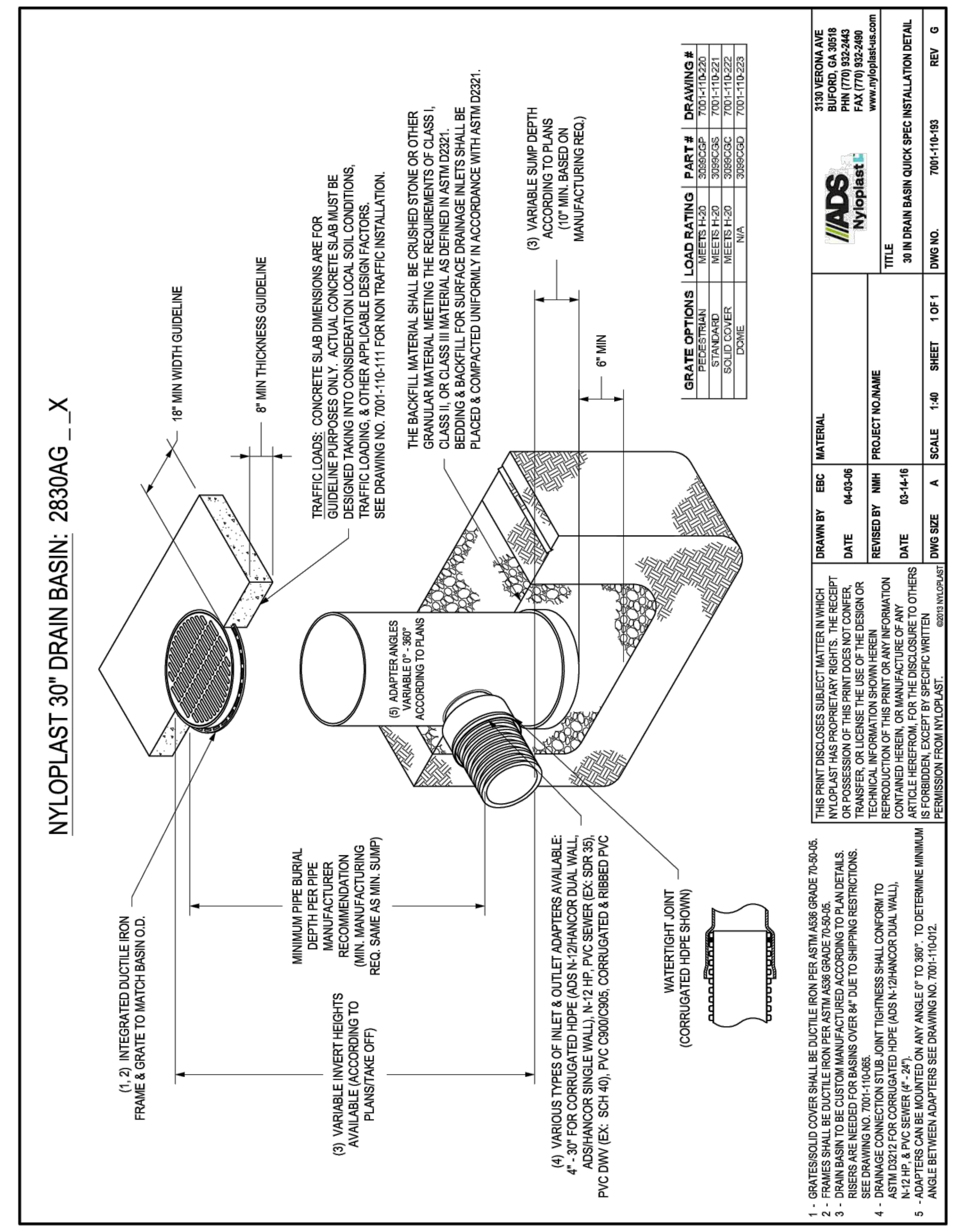
NYLOPLAST YARD DRAIN (NON-PAVED AREAS)

NOT TO SCALE



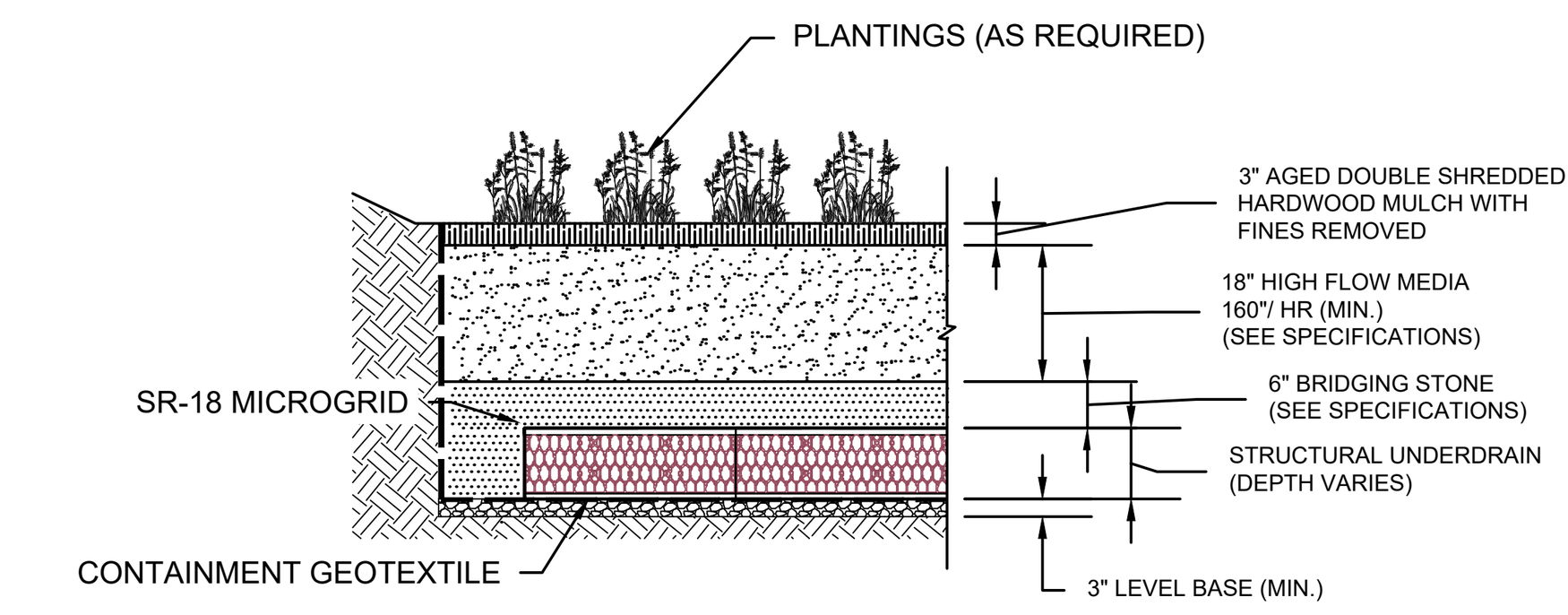
FOCAL POINT OVERFLOW STRUCTURES

NOT TO SCALE



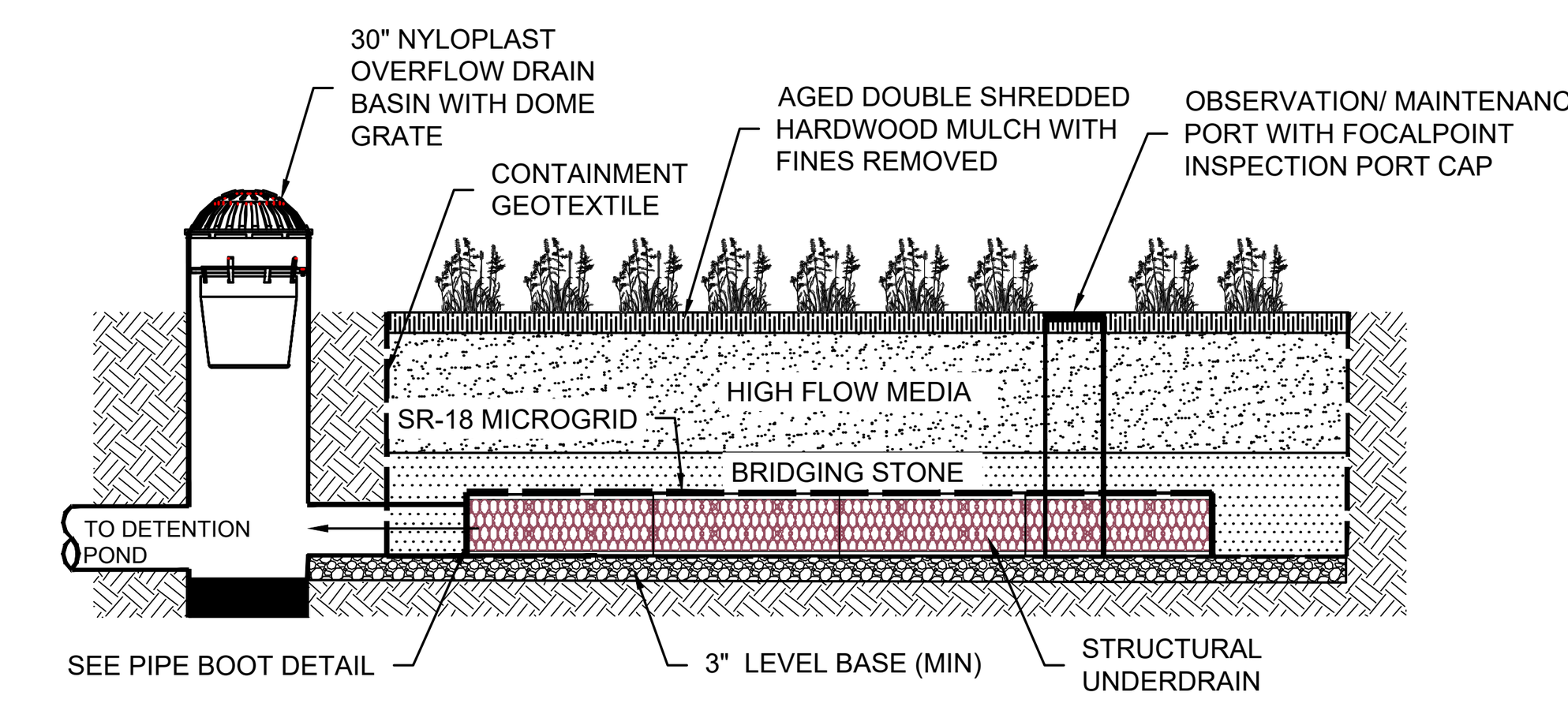
FOCAL POINT OVERFLOW STRUCTURES

NOT TO SCALE



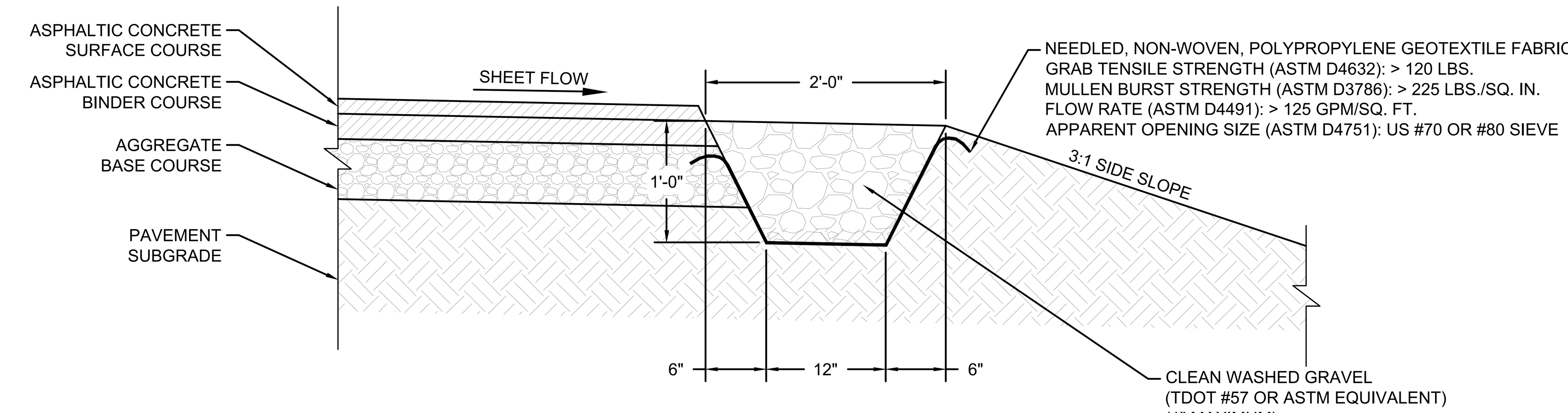
FOCAL POINT CROSS SECTION

NOT TO SCALE



FOCAL POINT SECTION X-X

NOT TO SCALE



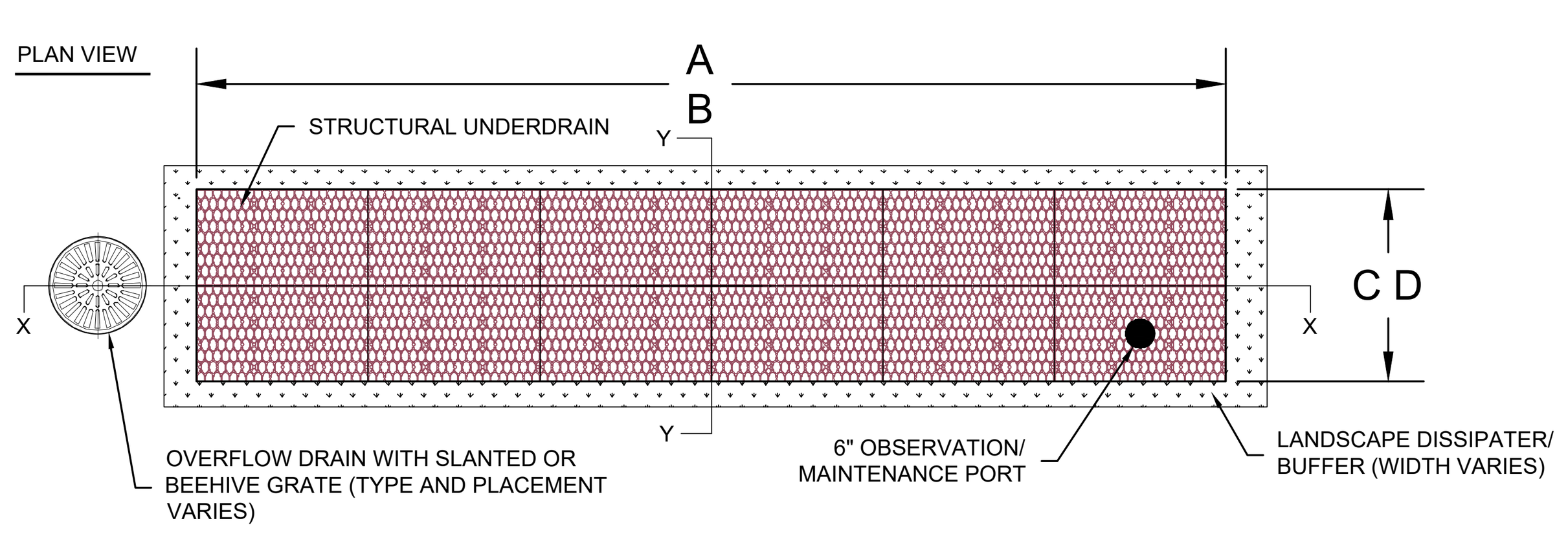
GRAVEL DIAPHRAGM

NOT TO SCALE

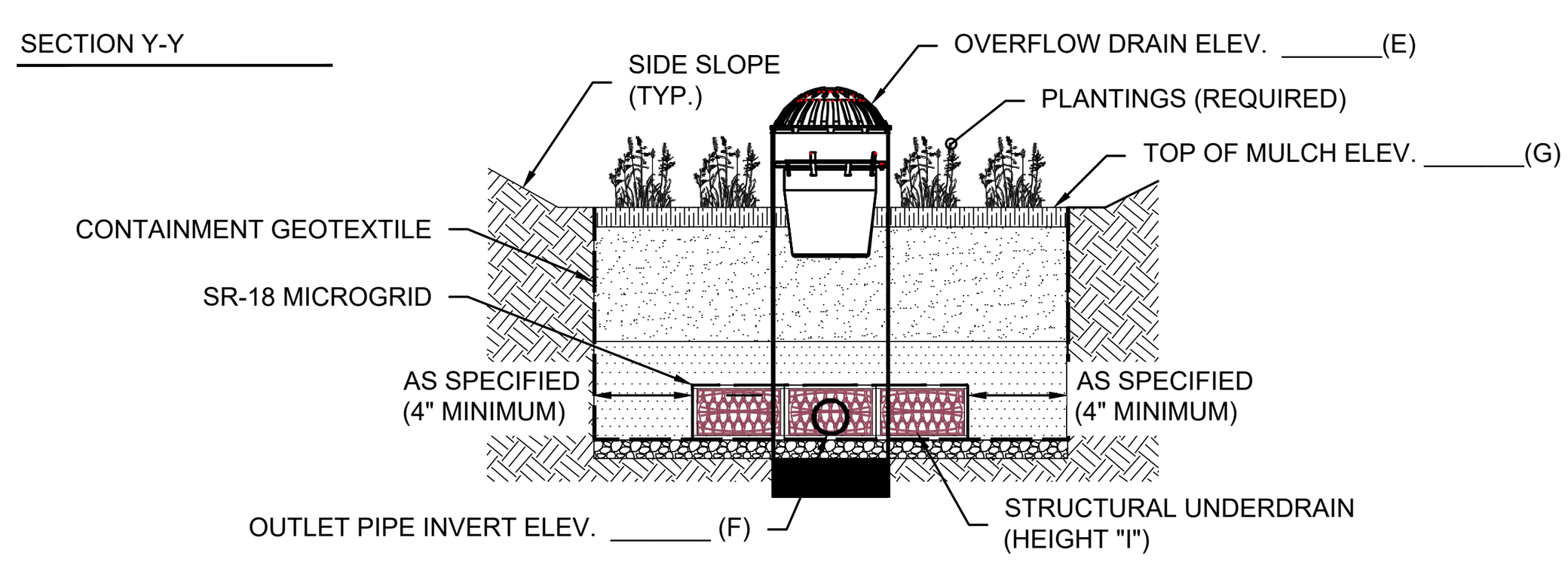
FOCALPOINT HPMBS CONSTRUCTION GUIDE

		MODULE 1	MODULE 2	MODULE 3	MODULE 4	MODULE 5	MODULE 6	MODULE 7	MODULE 8	MODULE 9	MODULE 10
A	FOCALPOINT LENGTH	VARIES (MAX. ~39')	VARIES (MAX. ~39')	VARIES (MAX. ~39')	VARIES (MAX. ~39')	VARIES (MAX. ~39')	VARIES (MAX. ~39')	VARIES (MAX. ~39')	VARIES (MAX. ~39')	VARIES (MAX. ~39')	VARIES (MAX. ~39')
B	# UNDERDRAIN LONG	VARIES (MAX. 15)	VARIES (MAX. 15)	VARIES (MAX. 15)	VARIES (MAX. 15)	VARIES (MAX. 15)	VARIES (MAX. 15)	VARIES (MAX. 15)	VARIES (MAX. 15)	VARIES (MAX. 15)	VARIES (MAX. 15)
C	FOCALPOINT WIDTH	VARIES (MAX. ~17')	VARIES (MAX. ~17')	VARIES (MAX. ~17')	VARIES (MAX. ~17')	VARIES (MAX. ~17')	VARIES (MAX. ~17')	VARIES (MAX. ~17')	VARIES (MAX. ~17')	VARIES (MAX. ~17')	VARIES (MAX. ~17')
D	# UNDERDRAIN WIDE	VARIES (MAX. 12)	VARIES (MAX. 12)	VARIES (MAX. 12)	VARIES (MAX. 12)	VARIES (MAX. 12)	VARIES (MAX. 12)	VARIES (MAX. 12)	VARIES (MAX. 12)	VARIES (MAX. 12)	VARIES (MAX. 12)
E	OVERFLOW ELEVATION	563.5	563.5	563.5	563.5	563.5	563.5	563.5	563.5	563.5	563.5
F	OUTLET PIPE INVERT ELEV.	560.0	560.0	560.0	560.0	560.0	560.0	560.0	560.0	560.0	560.0
G	TOP OF MULCH	563.0	563.0	563.0	563.0	563.0	563.0	563.0	563.0	563.0	563.0
H	TOP OF GABION (OPTIONAL)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
I	UNDERDRAIN HEIGHT	9.45"	9.45"	9.45"	9.45"	9.45"	9.45"	9.45"	9.45"	9.45"	9.45"

PLAN VIEW



SECTION Y-Y



FOCALPOINT HPMBS PERFORMANCE SPECIFICATION:

HIGH PERFORMANCE MEDIA

- HIGH PERFORMANCE MEDIA MUST MEET A MINIMUM OF 160" PER HOUR INFILTRATION RATE.
- HIGH PERFORMANCE MEDIA MUST BE NJDEP CERTIFIED FOR 80% TSS.

HIGH PERFORMANCE STRUCTURAL UNDERDRAIN

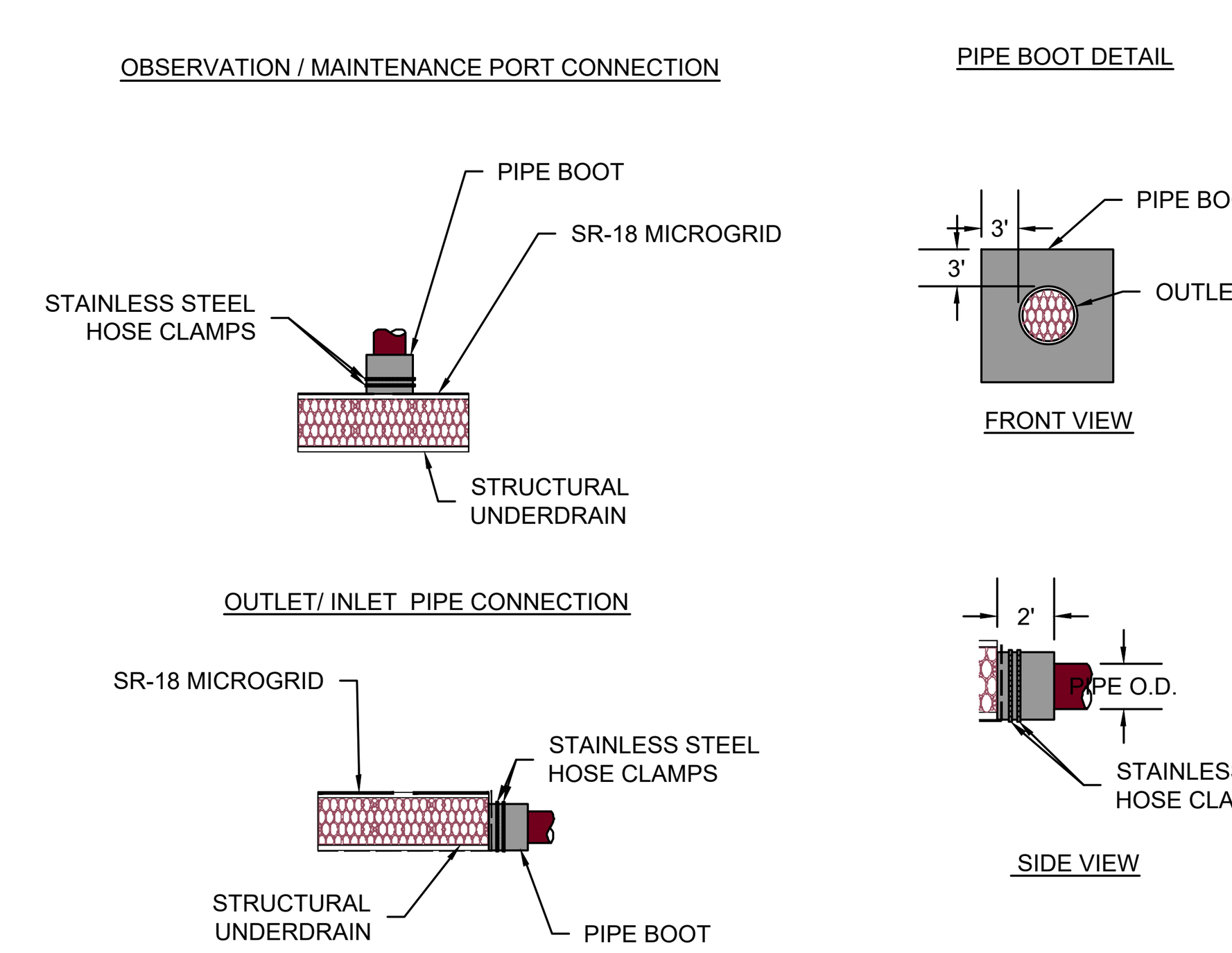
- MUST HAVE A MINIMUM OF 19 SQUARE INCHES OF ORIFICE OPENING PER SQUARE FOOT.
- MUST MEET HS-20 LOADING REQUIREMENTS.
- MUST BE MODULAR IN NATURE AND ASSEMBLED ON SITE.
- MUST HAVE MINIMUM 90% INTERIOR VOID SPACE.

PLANT COMPONENT

- SUPPLIER SHALL PROVIDE LIST OF ACCEPTABLE PLANTS
- IF PLANTS ARE NOT INCLUDED IN THE LANDSCAPE CONTRACT/PLANS, SITE CONTRACTOR SHALL PROVIDE PLANTS.
- PLANTS SHALL BE INSTALLED AT THE TIME THE SYSTEM IS COMMISSIONED FOR USE. PLANTING OUTSIDE THIS TIME REQUIRES APPROVAL BY THE ENGINEER/LANDSCAPE ARCHITECT OF RECORD.
- SEE FOCALPOINT INSTALLATION GUIDE FOR PLANT SPACING, PLANTING PROCEDURES ETC.

FOCAL POINT CONSTRUCTION GUIDE

NOT TO SCALE

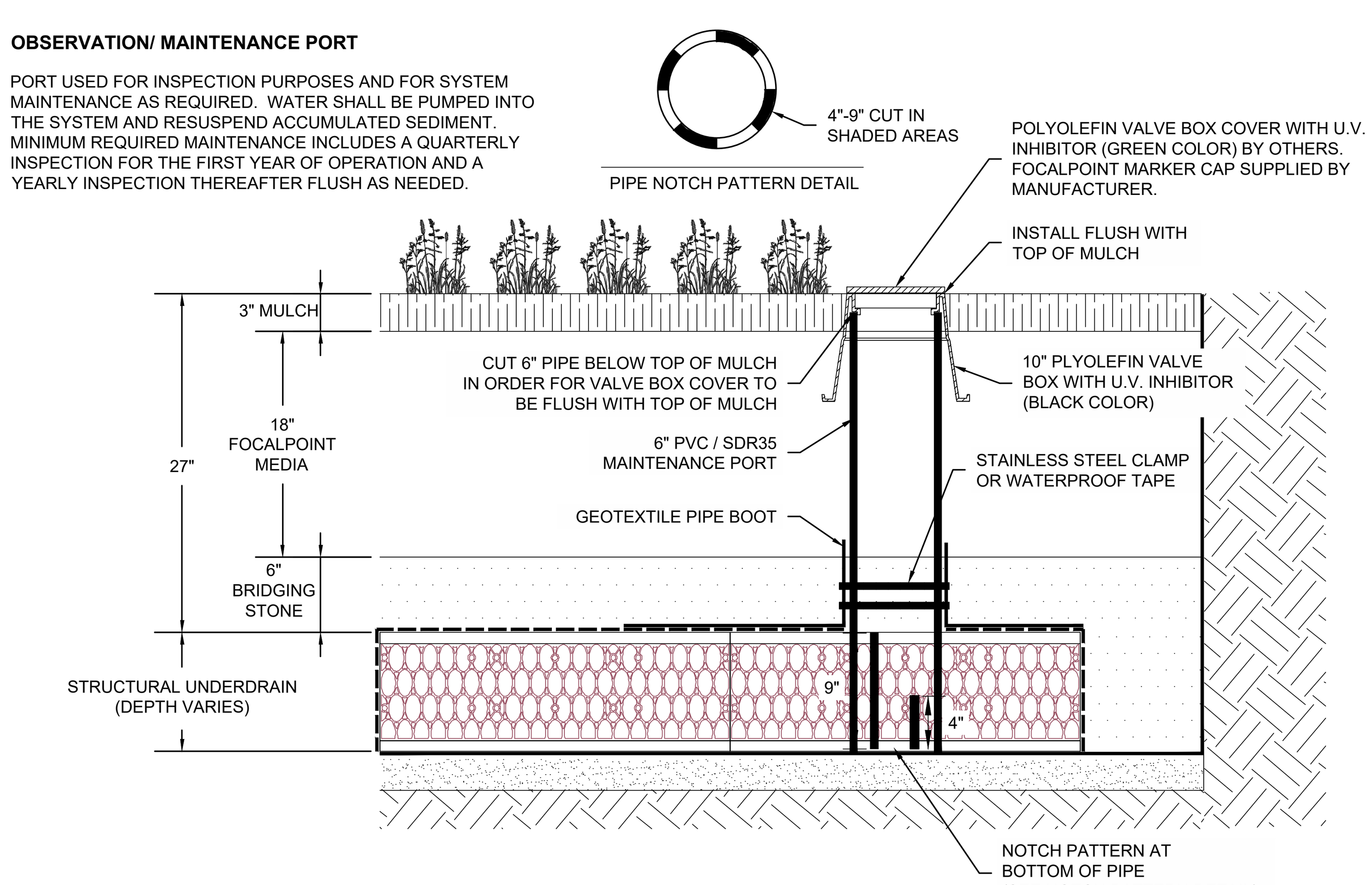


FOCAL POINT PIPE CONNECTIONS

NOT TO SCALE

OBSERVATION/ MAINTENANCE PORT

PORT USED FOR INSPECTION PURPOSES AND FOR SYSTEM MAINTENANCE AS REQUIRED. WATER SHALL BE PUMPED INTO THE SYSTEM AND RESUSPEND ACCUMULATED SEDIMENT. MINIMUM REQUIRED MAINTENANCE INCLUDES A QUARTERLY INSPECTION FOR THE FIRST YEAR OF OPERATION AND A YEARLY INSPECTION THEREAFTER FLUSH AS NEEDED.



FOCAL POINT OBSERVATION PORT CONNECTION

NOT TO SCALE

FULMER LUCAS
2002 RICHARD JONES RD - SUITE B200
NASHVILLE, TENNESSEE 37215
INFO@FULMERLUCAS.COM - (615) 345-3770

JASON C. MORELOCK REGISTERED ENGINEER AGRICULTURE COMMERCE No. 108803 STATE OF TENNESSEE 04/20/2026

SITE DEVELOPMENT PLANS FOR:

MORNING POINTE

RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401

DR.	DATE	DESCRIPTION
JEL	04/20/2026	FINAL PUD MASTER PLAN

SITE DETAILS

C4.3

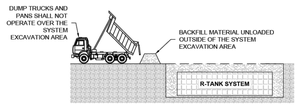
1421-01 MORNING POINTE

Monday, April 20, 2026
Z:\1421_Morning Pointe\01 - Columbia\02 - Cad\Sheets\1421-01_Site Details.dwg

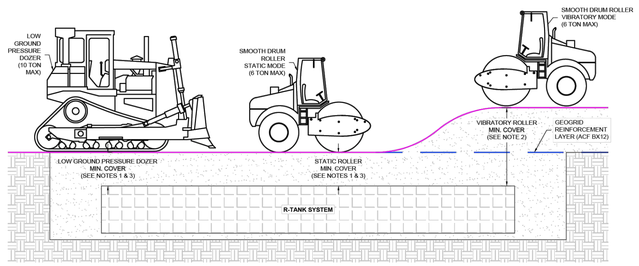
R-TANK CONSTRUCTION EQUIPMENT RECOMMENDATIONS

UNIT TYPE	COMPRESSION STRENGTH	10 TON LOW GROUND PRESSURE DOZER MIN. COVER	6 TON SMOOTH DRUM STATIC ROLLER MIN. COVER	6 TON SMOOTH DRUM VIBRATORY ROLLER MIN. COVER
HD	33.0 PSI	12" (SEE NOTE 1, 2 & 3)	12" (SEE NOTE 1, 2 & 3)	24" (SEE NOTE 2)
SD	42.0 PSI	12" (SEE NOTE 1, 2 & 3)	12" (SEE NOTE 1, 2 & 3)	24" (SEE NOTE 2)
MD	64.0 PSI	12" (SEE NOTE 1, 2 & 3)	12" (SEE NOTE 1, 2 & 3)	24" (SEE NOTE 2)

NOTES:
1. FOLLOWING PLACEMENT OF SIDE BACKFILL, A UNIFORM 12" LIFT OF THE FREELY DRAINING MATERIAL (SPEC SECTION 2.03 B1) SHALL BE PLACED OVER THE R-TANK AND LIGHTLY COMPACTED USING A WALK-BEHIND TRENCH ROLLER. ALTERNATELY, A ROLLER (MAXIMUM GROSS VEHICLE WEIGHT OF 6 TONS) MAY BE USED. ROLLER MUST REMAIN IN STATIC MODE UNTIL A MINIMUM OF 24" OF COVER HAS BEEN PLACED OVER THE MODULES. SHEEP FOOT ROLLERS SHOULD NOT BE USED. **SPEC SECTION 3.05 A5**
2. AFTER THE GEOGRID IS INSTALLED OVER THE INITIAL LAYER, THE GRADED AGGREGATE BASE MATERIALS CAN BE PUSHED OUT (MAX MACHINE SIZE IS 10 TON LGP DOZER OR SMALLER) IN A SINGLE LIFT AND STATIC ROLLED BY A MACHINE WITH A MAX GROSS VEHICLE WEIGHT OF 6 TONS. ROLLER MUST REMAIN IN STATIC MODE UNTIL A MINIMUM OF 24" OF COVER HAS BEEN PLACED OVER THE MODULES. SHEEP FOOT ROLLERS SHOULD NOT BE USED. SPEC SECTION 3.05 A5
2. ONLY LOW PRESSURE TIRE OR TRACK VEHICLES (LESS THAN 7 PSI AND OPERATING WEIGHT OF LESS THAN 20,000 LBS) SHALL BE OPERATED OVER THE R-TANK SYSTEM DURING CONSTRUCTION. **SPEC SECTION 3.05 A5**
3. DUMP TRUCKS AND PANS SHALL NOT BE OPERATED WITHIN THE R-TANK SYSTEM AT ANY TIME. WHERE NECESSARY, THE HEAVY EQUIPMENT SHOULD UNLOAD IN AN AREA ADJACENT TO THE R-TANK SYSTEM AND THE MATERIAL SHOULD BE MOVED OVER THE SYSTEM WITH TRACKED EQUIPMENT. **SPEC SECTION 3.05 A5**
4. ENSURE THAT ALL UNRELATED CONSTRUCTION TRAFFIC IS KEPT AWAY FROM THE LIMITS OF EXCAVATION UNTIL THE PROJECT IS COMPLETE AND FINAL SURFACE MATERIALS ARE IN PLACE. NO NON-INSTALLATION RELATED LOADING SHOULD BE ALLOWED OVER THE R-TANK SYSTEM UNTIL THE FINAL DESIGN SECTION HAS BEEN CONSTRUCTED (INCLUDING PAVEMENT). **SPEC SECTION 3.05 B**
5. SEE R-TANK INSTALLATION GUIDE OR CONTACT YOUR LOCAL FERGUSON REPRESENTATIVE FOR ADDITIONAL INFORMATION.



DUMP TRUCK DETAIL



FERGUSON WATERWORKS
FOR ADDITIONAL INFORMATION PLEASE VISIT: www.fergusongss.com

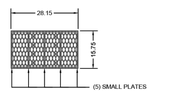
R-TANK$^{HD, SD, MD}$ CONSTRUCTION EQUIPMENT (TRAFFIC) DETAIL

DRAWN BY	JKD
DATE	5/27/2025
SHEET NO.	1 of 1

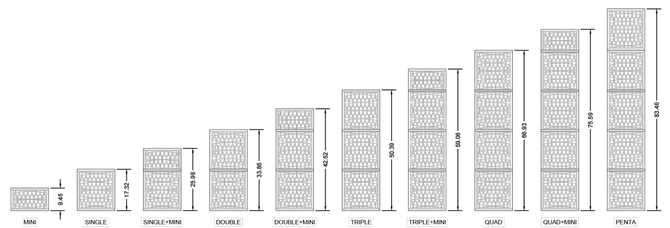
R-TANK HD UNIT INFORMATION

UNIT TYPE	WIDTH	LENGTH	HEIGHT	STORAGE VOLUME	WEIGHT
MINI	15.75"	28.15"	9.45"	2.30 CF	10.90 LBS.
SINGLE	15.75"	28.15"	17.32"	4.22 CF	17.30 LBS.
SINGLE+MINI	15.75"	28.15"	25.98"	6.33 CF	25.90 LBS.
DOUBLE	15.75"	28.15"	33.86"	8.25 CF	32.30 LBS.
DOUBLE+MINI	15.75"	28.15"	42.52"	10.36 CF	41.00 LBS.
TRIPLE	15.75"	28.15"	50.39"	12.28 CF	47.40 LBS.
TRIPLE+MINI	15.75"	28.15"	59.06"	14.39 CF	56.00 LBS.
QUAD	15.75"	28.15"	66.93"	16.31 CF	62.40 LBS.
QUAD+MINI	15.75"	28.15"	75.59"	18.42 CF	63.80 LBS.
PENTA	15.75"	28.15"	83.46"	20.34 CF	69.30 LBS.

NOTES:
1. R-TANK HD HAS AN INTERNAL VOID SPACE OF 95% AND A SURFACE AREA VOID OF 90%.
2. R-TANK HD HAS A MAXIMUM COMPRESSION STRENGTH OF 33.4 PSI, (MODULE ONLY).
3. R-TANK HD IS MADE FROM 100% RECYCLED POLYPROPYLENE.
4. R-TANK HD IS COMPRISED OF 5 SMALL WALLS PER UNITS.



TOP VIEW



FERGUSON WATERWORKS
FOR ADDITIONAL INFORMATION PLEASE VISIT: www.fergusongss.com

R-TANK^{HD} MODULE DETAIL

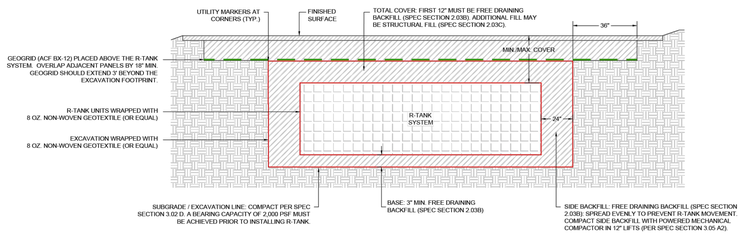
DRAWN BY	JKD
DATE	8/29/2024
SHEET NO.	1 of 1

NOTES:
1. INSTALLATIONS PER THIS DETAIL MEET GUIDELINES OF HL-93 LOADING PER THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.
2. FOR INFILTRATION APPLICATIONS, UNCOMPACTED FREE DRAINING BACKFILL (SPEC SECTION 2.03A) TO PROVIDE A LEVEL BASE. SURFACE MUST BE SMOOTH, FREE OF LUMPS OR DEBRIS, AND EXTEND 2' BEYOND R-TANK FOOTPRINT. THE ENGINEER OF RECORD IS RESPONSIBLE FOR ASSESSING THE BEARING CAPACITY OF THE SUBGRADE, AND BASE.
3. FOR INSTALLATIONS IN LANDSCAPED AREAS, THE INSTALLATION OF TREES IS PROHIBITED ABOVE THE R-TANK UNITS. PLEASE CONTACT YOUR LOCAL FERGUSON WATERWORKS REPRESENTATIVE FOR MORE INFORMATION.
4. THE R-TANK SYSTEM IS NOT DESIGNED TO SUPPORT LOADS FROM BUILDINGS OR STRUCTURES. THEREFORE, THE ENGINEER OF RECORD MUST COORDINATE WITH THE PROPER DISCIPLINES TO ENSURE NO STRUCTURAL LOADS ARE IMPARTED UPON THE SYSTEM AND ANY INFILTRATION FROM THE SYSTEM HAS BEEN ACCOUNTED FOR IN THE FOUNDATION DESIGN.

R-TANK UNIT LOAD RATING

UNIT TYPE	COMPRESSION STRENGTH	HS-20 MIN. COVER*	HS-25 MIN. COVER*	MAX. COVER*
HD	33.0 PSI	20"	24"	6.99'
SD	42.0 PSI	18"	21"	9.99'
MD	64.0 PSI	15"	18"	9.99'
UD	134.0 PSI	12"	15"	6.99'

* MINIMUM AND MAXIMUM COVER ARE MEASURED FROM THE TOP OF THE R-TANK UNIT TO THE TOP OF THE FINISHED SURFACE.



FERGUSON WATERWORKS
FOR ADDITIONAL INFORMATION PLEASE VISIT: www.fergusongss.com

R-TANK$^{HD, SD, MD, UD}$ VEHICULAR LOAD (HS-20 / HS-25) SECTION DETAIL

DRAWN BY	JKS
DATE	5/27/2025
SHEET NO.	1 of 1

FULMER LUCAS
2002 RICHARD JONES RD - SUITE B200
NASHVILLE, TENNESSEE 37215
INFO@FULMERLUCAS.COM - (615) 345-3770

JASON C. MOREIN — REGISTERED ENGINEER — AGRICULTURE — No. 109855 — STATE OF TENNESSEE

SITE DEVELOPMENT PLANS FOR:
MORNING POINTE
RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401

DR.	DATE	DESCRIPTION
JEL	04-20-2026	FINAL PUD MASTER PLAN

SITE DETAILS

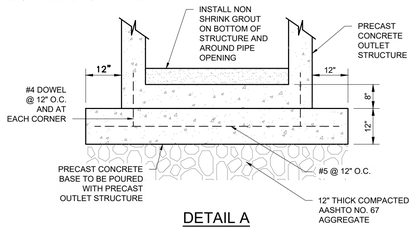
C4.4

1421-01 MORNING POINTE

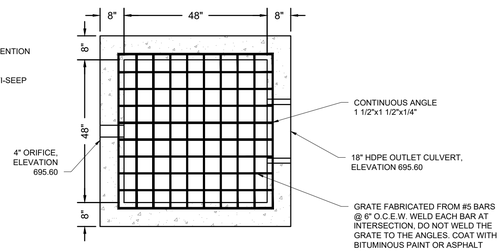
Monday, April 20, 2026
11:12:2 AM CDT by JEL
N:\1421 Morning Pointe\01 - Columbia\02 Civil\Sheets\1421-01 Site Details.dwg

NOTES:

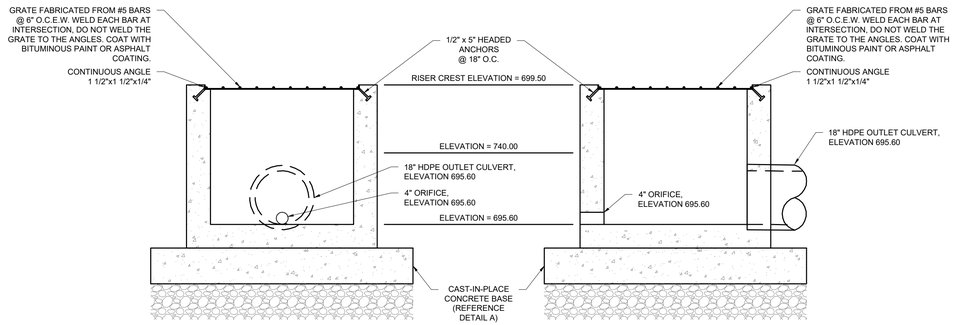
1. ALL CONCRETE SHALL BE CLASS A CONCRETE, 4000 PSI, 5% AIR ENTRAINED.
2. INLET JOINTS TO BE SEALED WITH 1" DIAMETER FLEXIBLE BUTYL RUBBER JOINT SEALANT, USE 1/2" DIAMETER FOR FRAME AND GRATE.
3. LIFTING HOLES TO BE POINTED WITH NON-SHRINK GROUT, AND LEFT WATERTIGHT, NEAT AND SMOOTH.
4. COAT WITH BITUMINOUS PAINT OR ASPHALT COATING.
5. CONTRACTOR SHALL REFER TO DETENTION POND BERM WITH OUTLET STRUCTURE DETAIL ON THIS SHEET FOR DETAILS OF DETENTION POND BERM.
6. CONTRACTOR SHALL REFER TO DETENTION POND OUTLET STRUCTURE TRASH RACK DETAIL, COMPACTION KEY DETAIL AND ANTI-SEEP COLLAR DETAIL FOR DETAILS OF THESE ITEMS ON THIS SHEET.



DETAIL A



TOP VIEW

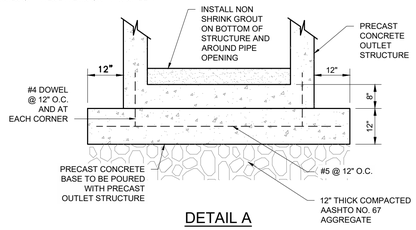


SIDE VIEW FRONT VIEW

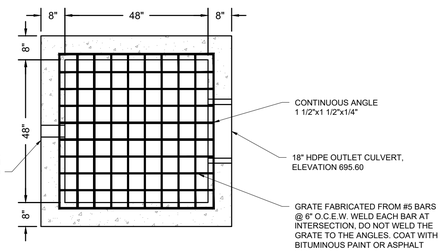
DETENTION AREA #1 OUTLET STRUCTURE
NOT TO SCALE

NOTES:

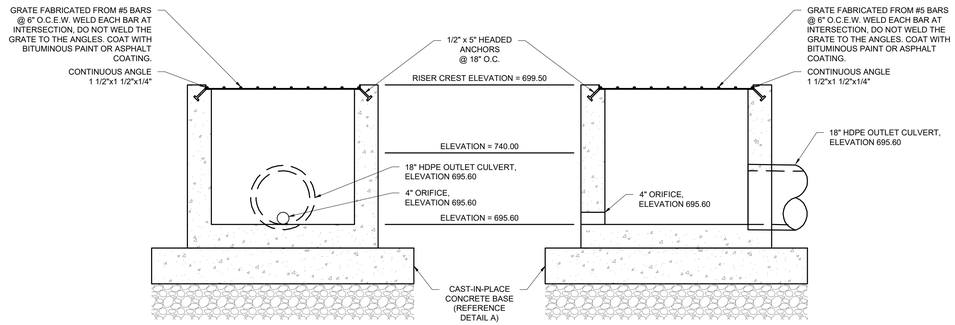
1. ALL CONCRETE SHALL BE CLASS A CONCRETE, 4000 PSI, 5% AIR ENTRAINED.
2. INLET JOINTS TO BE SEALED WITH 1" DIAMETER FLEXIBLE BUTYL RUBBER JOINT SEALANT, USE 1/2" DIAMETER FOR FRAME AND GRATE.
3. LIFTING HOLES TO BE POINTED WITH NON-SHRINK GROUT, AND LEFT WATERTIGHT, NEAT AND SMOOTH.
4. COAT WITH BITUMINOUS PAINT OR ASPHALT COATING.
5. CONTRACTOR SHALL REFER TO DETENTION POND BERM WITH OUTLET STRUCTURE DETAIL ON THIS SHEET FOR DETAILS OF DETENTION POND BERM.
6. CONTRACTOR SHALL REFER TO DETENTION POND OUTLET STRUCTURE TRASH RACK DETAIL, COMPACTION KEY DETAIL AND ANTI-SEEP COLLAR DETAIL FOR DETAILS OF THESE ITEMS ON THIS SHEET.



DETAIL A



TOP VIEW

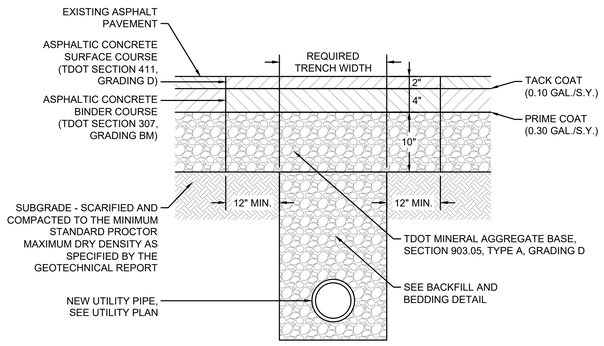


SIDE VIEW FRONT VIEW

DETENTION AREA #1 OUTLET STRUCTURE
NOT TO SCALE

NOTES:

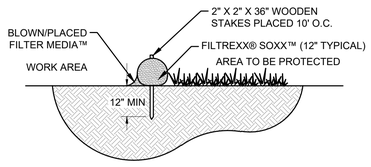
1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF SPRING HILL AND TDOT STANDARD SPECIFICATIONS.
2. EDGE OF EXISTING PAVEMENT TO BE TRIMMED A MINIMUM OF 12" BEYOND EACH SIDE OF TRENCH WIDTH TO OBTAIN NEAT LINES. COLD MIX TO BE PLACED AS A TEMPORARY SURFACE WITHIN 48 HOURS OF MAKING ROAD CROSSING.
3. A MINIMUM OF TWO INCHES OF ASPHALTIC CONCRETE BINDER ("B MODIFIED) SHALL BE REQUIRED FOR ALL PAVEMENT REPAIRS. AN ADDITIONAL TWO INCHES SHALL BE PLACED WHEN DIRECTED BY THE CITY OF SPRING HILL.
4. ALL LATERAL STREET CUTS MUST BE COVERED WITH STEEL PLATES OF SUFFICIENT THICKNESS TO SPAN THE CUT WITHOUT NOTICEABLE DEFLECTION. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL ROAD CUT PERMITS PRIOR TO CONSTRUCTION.
5. CONTRACTOR TO REINSTALL ALL STRIPING, PAVEMENT MARKERS, SIGNAL LOOPS, ETC. AFFECTED BY PAVEMENT REPLACEMENT.
6. ROAD SHALL BE REPAIRED PER CITY OF SPRING HILL MAJOR THOROUGHFARE PLAN AND AS DIRECTED BY THE CITY.



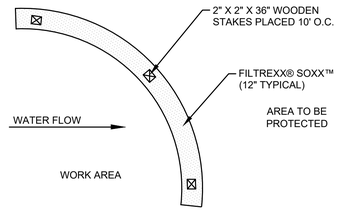
UTILITY TRENCH PAVEMENT REPAIR
NOT TO SCALE

NOTES:

1. ALL MATERIAL TO MEET FILTREXX® SPECIFICATIONS.
2. FILTER MEDIA™ FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY THE EROSION CONTROL SPECIALIST.
4. FILTER SOCK IS ALLOWED TO BE USED IN ROCKY AREAS IN LIEU OF SILT FENCE.



SECTIONAL VIEW
NOT TO SCALE



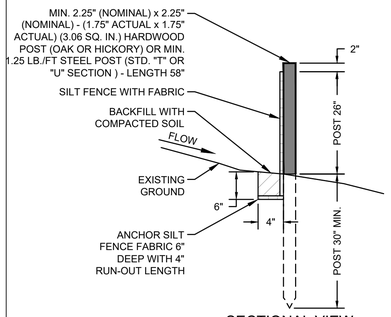
PLAN VIEW
NOT TO SCALE

NOTE:
INSTALLATION AND MAINTENANCE SHALL MEET THE REQUIREMENTS OF THE TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK, TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION, LATEST EDITION.

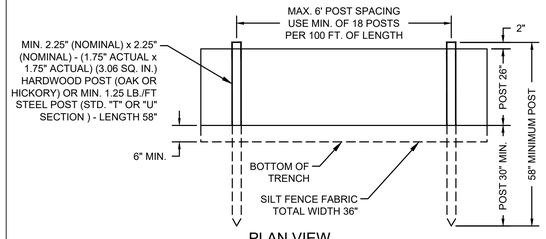
FILTREXX FILTER SOCK
NOT TO SCALE

NOTES

1. WHERE WIRE BACKING IS REQUIRED, WIRE SHALL BE A MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
2. WHERE WIRE BACKING IS REQUIRED, MIDDLE AND VERTICAL WIRES SHALL BE 12 ½ GAUGE MIN.
3. WHERE WIRE BACKING IS REQUIRED, TOP AND BOTTOM WIRES SHALL BE 10 GAUGE MIN.



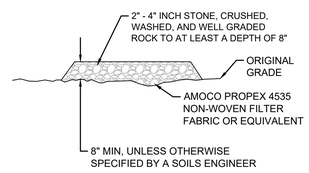
SECTIONAL VIEW
NOT TO SCALE



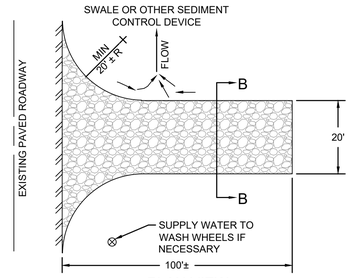
PLAN VIEW
NOT TO SCALE

NOTE:
INSTALLATION AND MAINTENANCE SHALL MEET THE REQUIREMENTS OF THE TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK, TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION, LATEST EDITION.

SILT FENCE
NOT TO SCALE



SECTION B-B
NOT TO SCALE



PLAN VIEW
NOT TO SCALE

NOTE:
INSTALLATION AND MAINTENANCE SHALL MEET THE REQUIREMENTS OF THE TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK, TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION, LATEST EDITION.

STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE

FULMER LUCAS
2002 RICHARD JONES RD - SUITE B200
NASHVILLE, TENNESSEE 37215
INFO@FULMERLUCAS.COM - (615) 345-3770

JASON C. MOREIN — REGISTERED ENGINEER — AGRICULTURE — No. 109605 — STATE OF TENNESSEE — 10/21/2026

SITE DEVELOPMENT PLANS FOR:
MORNING POINTE
RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401

DR.	DATE	DESCRIPTION
JEL	04/20/2026	FINAL PUD MASTER PLAN

SITE DETAILS

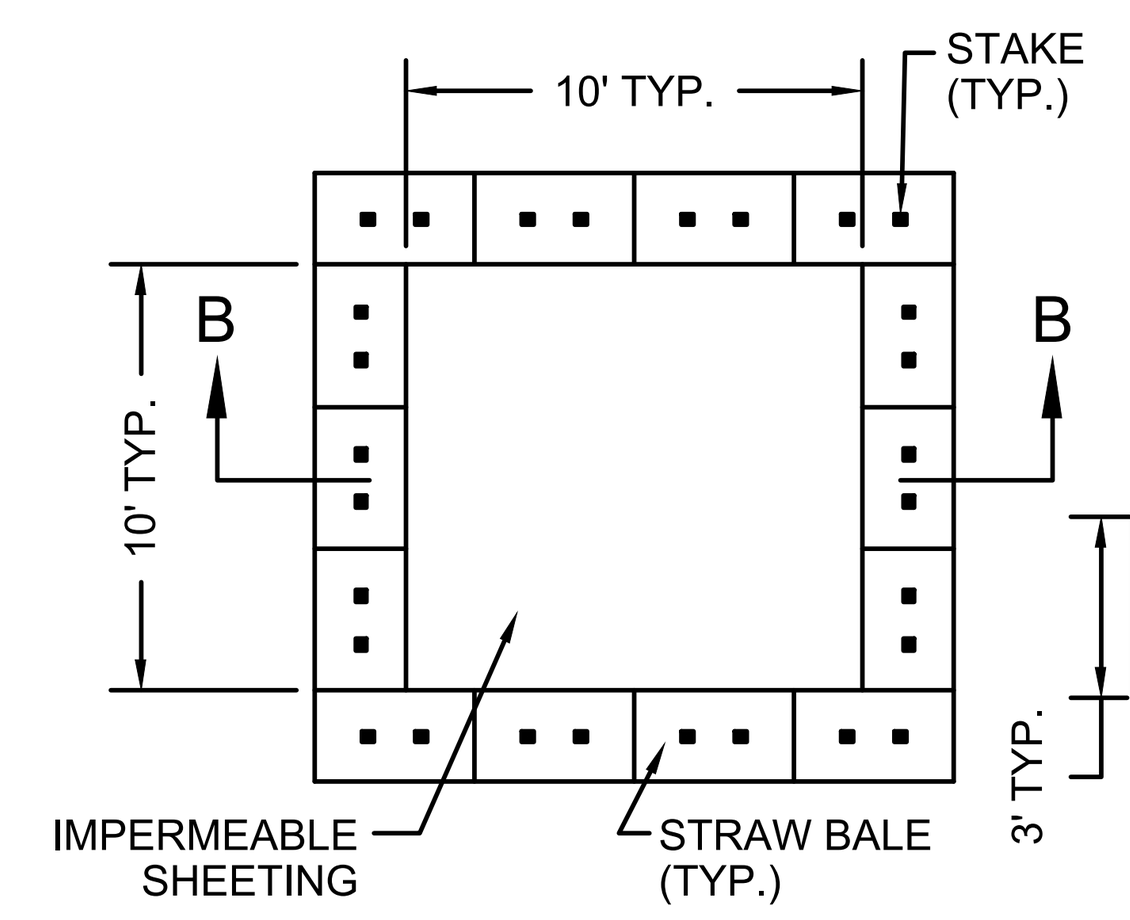
C4.5

1421-01 MORNING POINTE

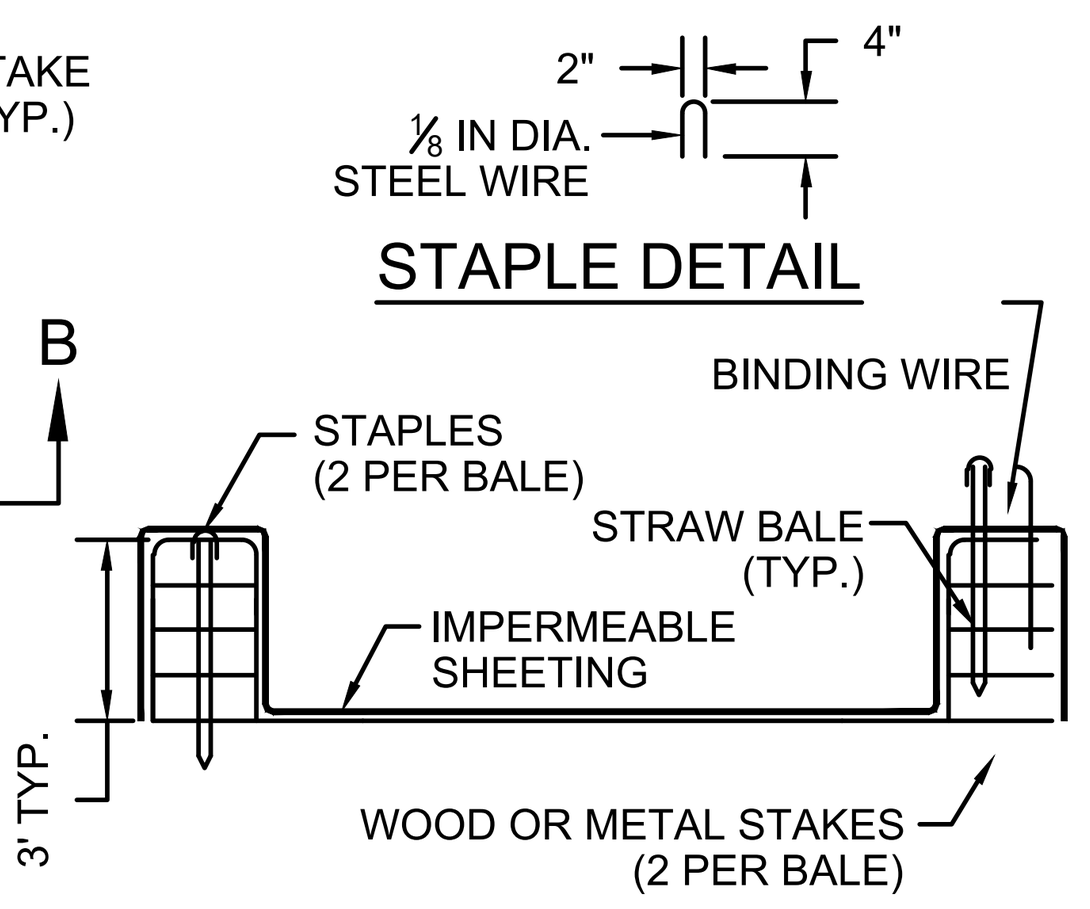
Updated: April 20, 2026
Plotted: 4/20/2026 9:06:51 AM
Xref: C:\Users\jlewis\Documents\1421 - Columbia\02 - Civil\Sheets\1421-01 Site Details.dwg

CONSTRUCTION SPECIFICATIONS

1. LOCATE WASHOUT STRUCTURE A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS AND WATER COURSES AND AWAY FROM CONSTRUCTION TRAFFIC.
2. SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLIDS AND MAINTAIN AT LEAST 4 INCHES OF FREEBOARD. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3 FEET DEEP.
3. PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE LINER. FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING, FREE OF HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.
4. PROVIDE A SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.
5. KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGED (E.G., RIPPED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT FULL, AND DISPOSE OF ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER. WET-VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER. PRIOR TO FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.



PLAN



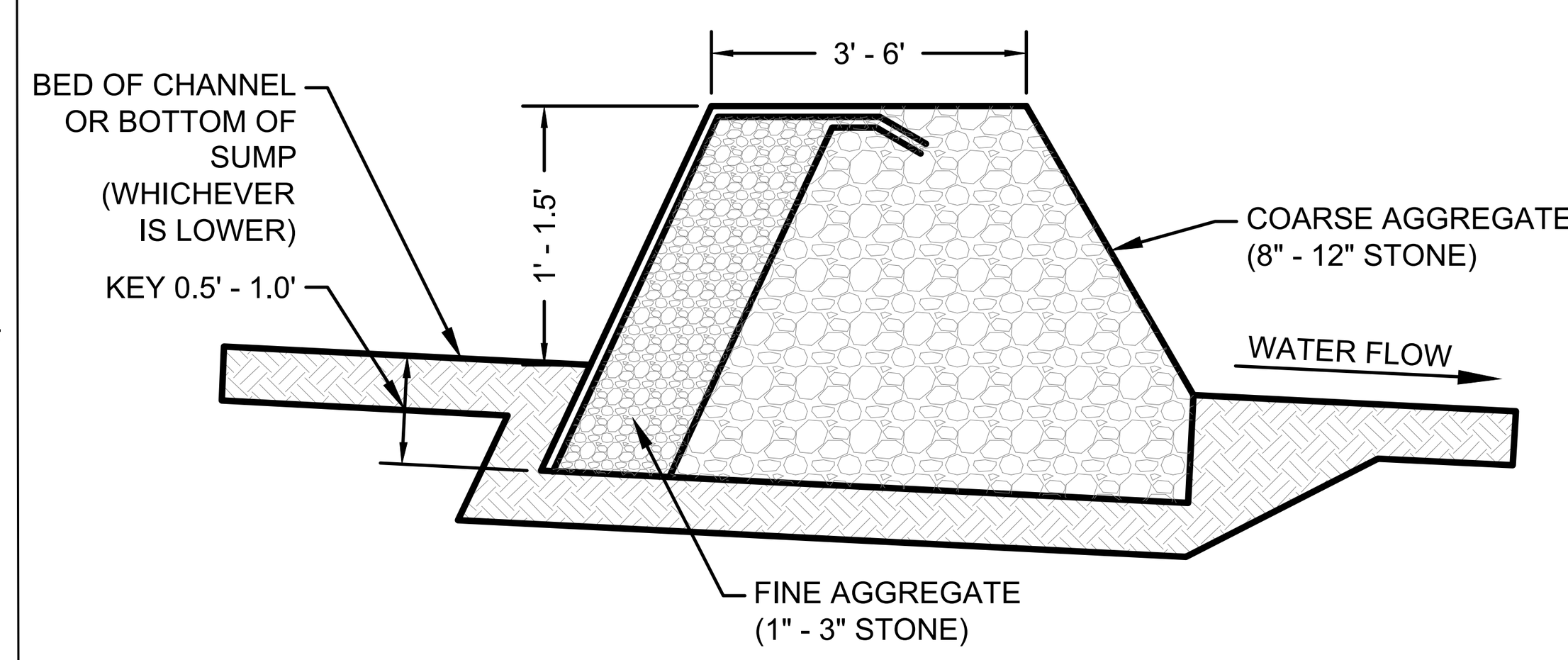
SECTION B-B

NOTE: CAN BE TWO STACKED BALES OR PARTIALLY EXCAVATED TO REACH 3 FT DEPTH.

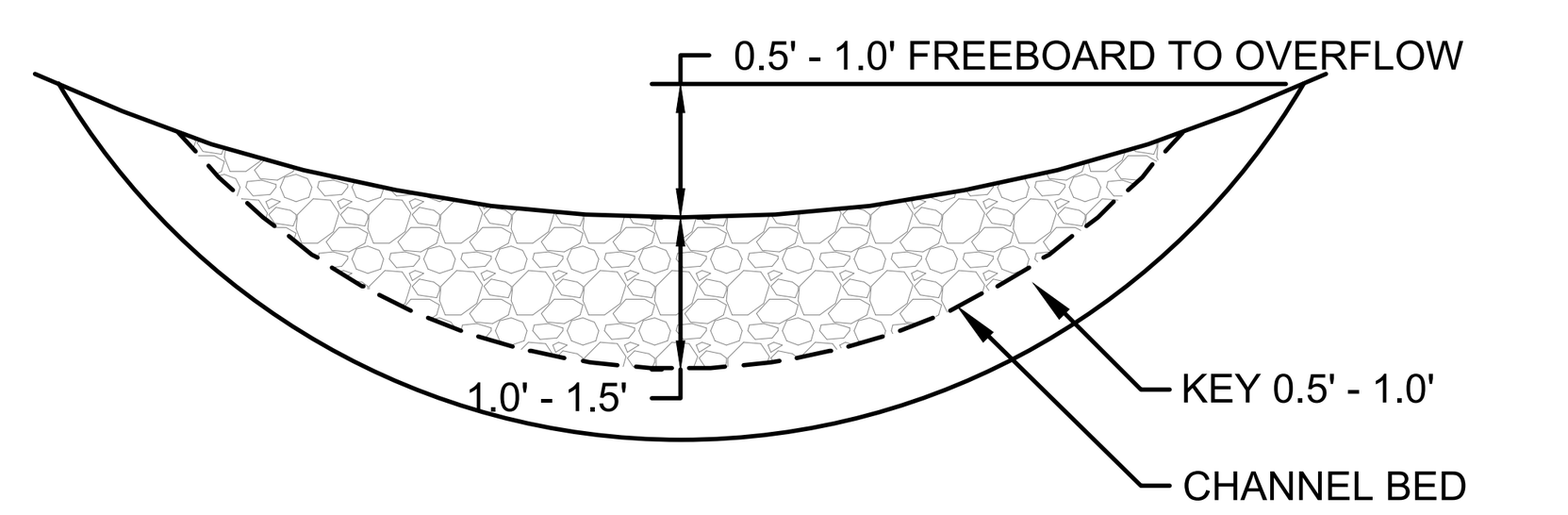
WASHOUT STRUCTURE WITH STRAW BALES

NOTE:
INSTALLATION AND MAINTENANCE SHALL MEET THE REQUIREMENTS OF THE TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK, TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION, LATEST EDITION.

CONCRETE WASHOUT
NOT TO SCALE



CROSS-SECTION
NOT TO SCALE



ELEVATION
NOT TO SCALE

NOTE:
INSTALLATION AND MAINTENANCE SHALL MEET THE REQUIREMENTS OF THE TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK, TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION, LATEST EDITION.

TEMPORARY ROCK CHECK DAM
NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. ENSURE THAT THE SUBGRADE FOR THE FILTER AND RIPRAP FOLLOWS THE REQUIRED LINES AND GRADES SHOWN IN THE PLAN. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO THE DENSITY OF THE SURROUNDING UNDISTURBED MATERIAL. LOW AREAS IN THE SUBGRADE ON UNDISTURBED SOIL MAY ALSO BE FILLED BY INCREASING THE RIPRAP THICKNESS.
2. THE RIPRAP AND GRAVEL FILTER MUST CONFORM TO THE SPECIFIED GRADING LIMITS SHOWN ON THE PLANS.
3. GEOTEXTILE MUST MEET DESIGN REQUIREMENTS AND BE PROPERLY PROTECTED FROM PUNCHING OR TEARING DURING INSTALLATION. REPAIR ANY DAMAGE BY REMOVING THE RIPRAP AND PLACING ANOTHER PIECE OF FILTER FABRIC OVER THE DAMAGED AREA. ALL CONNECTING JOINTS SHOULD OVERLAP A MINIMUM OF 1 FT. IF THE DAMAGE IS EXTENSIVE, REPLACE THE ENTIRE FILTER FABRIC.
4. RIPRAP MAY BE PLACED BY EQUIPMENT, BUT TAKE CARE TO AVOID DAMAGING THE FILTER FABRIC.
5. THE MINIMUM THICKNESS OF THE RIPRAP SHOULD BE 1.5 TIMES THE MAXIMUM STONE DIAMETER.
6. CONSTRUCT THE APRON ON ZERO GRADE WITH NO OVERFALL AT THE END. MAKE THE TOP OF THE RIPRAP AT THE DOWNSTREAM END LEVEL WITH THE RECEIVING AREA OR SLIGHTLY BELOW IT.
7. ENSURE THAT THE APRON IS PROPERLY ALIGNED WITH THE RECEIVING STREAM AND PREFERABLY STRAIGHT THROUGHOUT ITS LENGTH. IF A CURVE IS NEEDED TO FIT SITE CONDITIONS, PLACE IT IN THE UPPER SECTION OF THE APRON.
8. IMMEDIATELY AFTER CONSTRUCTION, STABILIZE ALL DISTURBED AREAS WITH VEGETATION.
9. STONE QUALITY - SELECT STONE FOR RIPRAP FROM FIELD STONE OR QUARRY STONE. THE STONE SHOULD BE HARD, ANGULAR, AND HIGHLY WEATHER-RESISTANT. THE SPECIFIC GRAVITY OF THE INDIVIDUAL STONES SHOULD BE AT LEAST 2.5.

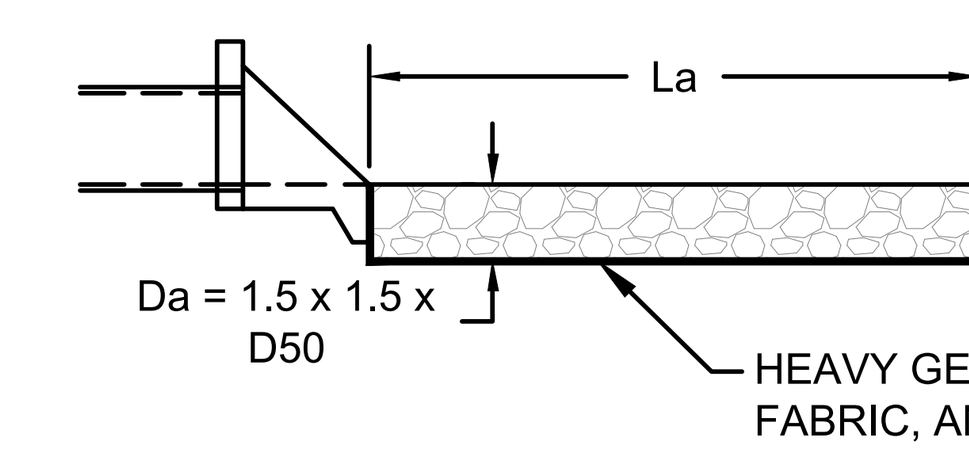
CONSTRUCTION SPECIFICATIONS

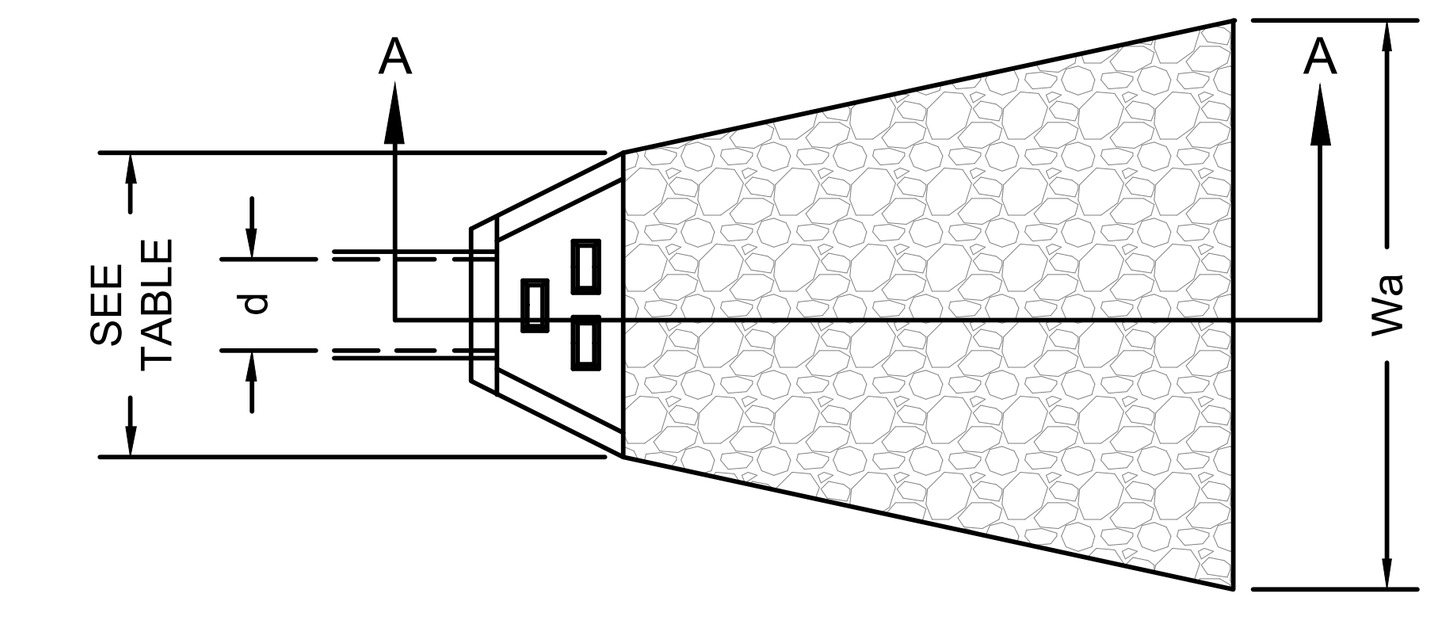
10. FILTER - INSTALL A FILTER TO PREVENT SOIL MOVEMENT THROUGH THE OPENINGS IN THE RIPRAP. THE FILTER SHOULD CONSIST OF A GRADED GRAVEL LAYER OR A SYNTHETIC FILTER CLOTH.

MAINTENANCE
INSPECT RIPRAP OUTLET STRUCTURES AFTER HEAVY RAINS TO SEE IF ANY EROSION AROUND OR BELOW THE RIPRAP HAS TAKEN PLACE OR IF STONES HAVE BEEN DISLODGED. IMMEDIATELY MAKE ALL NEEDED REPAIRS TO PREVENT FURTHER DAMAGE.

DETAIL NOTES
1. L_a IS THE LENGTH OF THE RIPRAP APRON.
2. D = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6".
3. IF THE PIPE DISCHARGES DIRECTLY INTO A WELL-DEFINED CHANNEL, THE APRON SHOULD EXTEND ACROSS THE CHANNEL BOTTOM AND UP THE CHANNEL BANKS TO AN ELEVATION 1 FOOT ABOVE THE HIGH TAILWATER DEPTH OR TO THE TOP OF THE BANK (WHICHEVER IS LESS).
4. A FILTER BLANKET OR FILTER FABRIC SHALL BE INSTALLED BETWEEN THE RIPRAP AND SOIL FOUNDATION.

APRON LENGTH AND THICKNESS
THE APRON DIMENSIONS AND d_{50}, STONE MEDIAN SIZE, SHALL BE AS FOLLOWS:

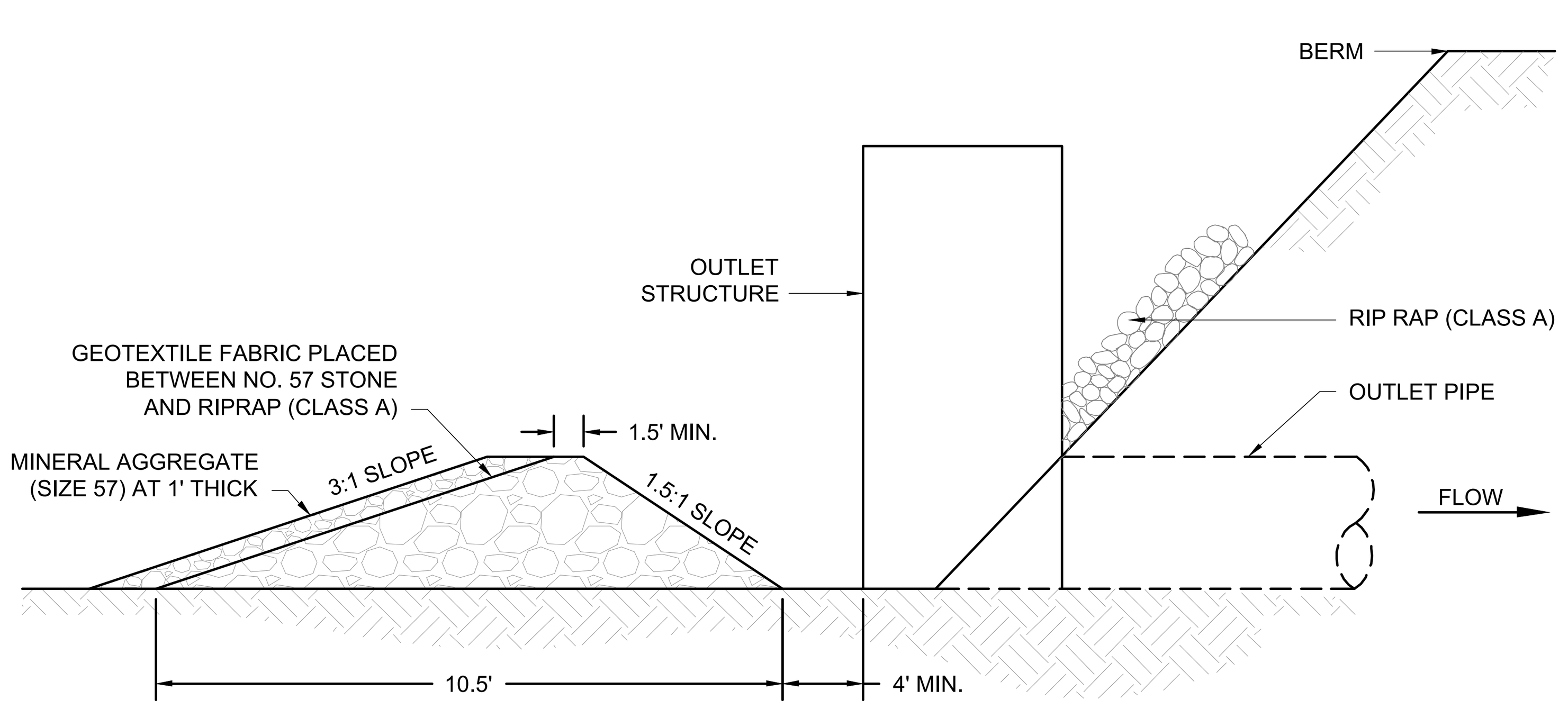




PLAN
PIPE OUTLET TO FLAT AREA

NOTE:
INSTALLATION AND MAINTENANCE SHALL MEET THE REQUIREMENTS OF THE TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK, TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION, LATEST EDITION.

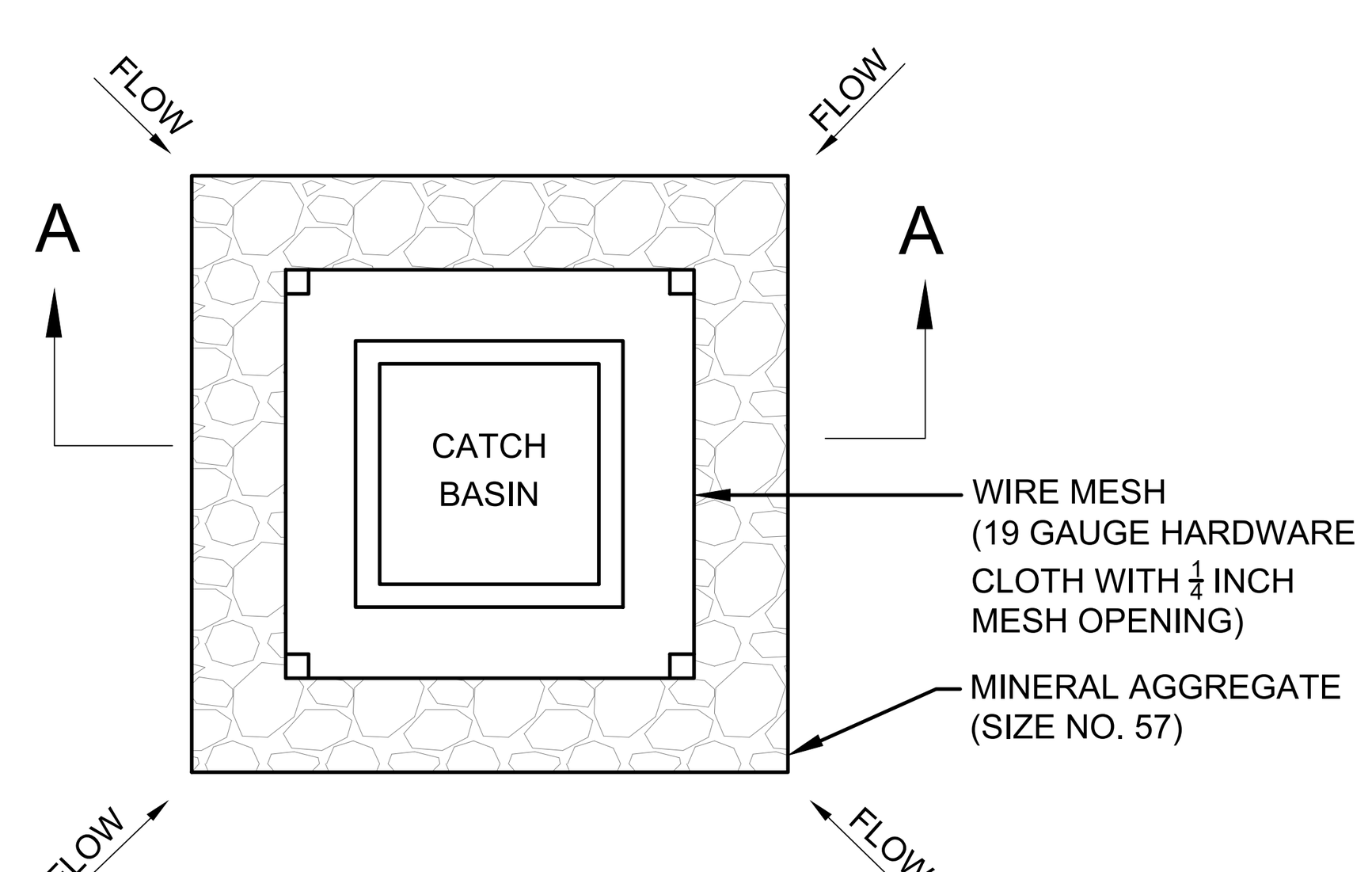
OUTLET PROTECTION
NOT TO SCALE



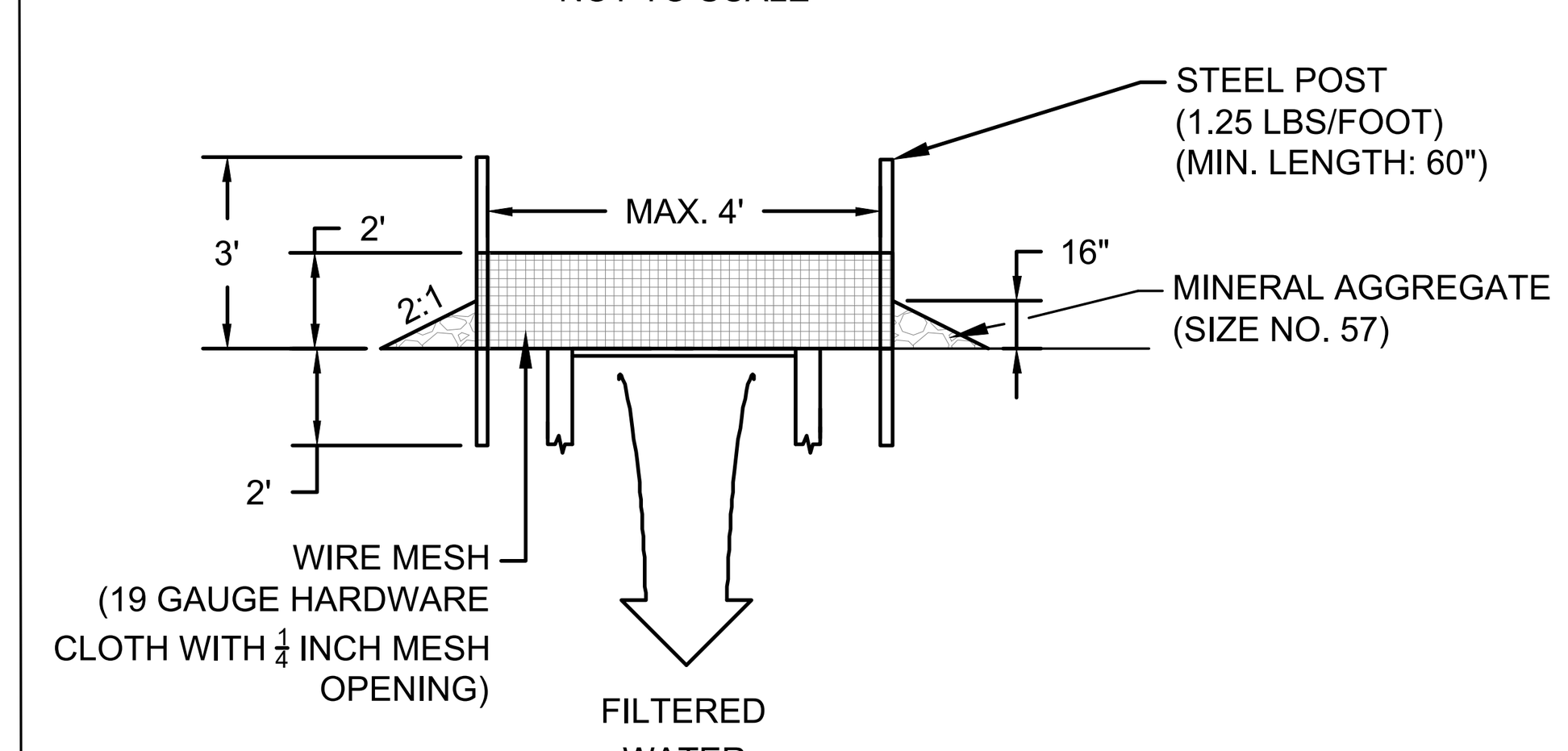
SECTIONAL VIEW

NOTE:
INSTALLATION AND MAINTENANCE SHALL MEET THE REQUIREMENTS OF THE TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK, TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION, LATEST EDITION.

ROCK FILTER RING
NOT TO SCALE



PLAN VIEW
NOT TO SCALE



SECTION A-A
NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. UNIFORMLY GRADE A SHALLOW DEPRESSION APPROACHING THE INLET.
2. DRIVE 5-FOOT STEEL POSTS 2 FEET INTO THE GROUND SURROUNDING THE INLET. SPACE POSTS EVENLY AROUND THE PERIMETER OF THE INLET, A MAXIMUM OF 4 FEET APART.
3. SURROUND THE POSTS WITH WIRE MESH HARDWARE CLOTH. SECURE THE WIRE MESH TO THE STEEL POSTS AT THE TOP, MIDDLE, AND BOTTOM. PLACING A 2-FOOT FLAP OF THE WIRE MESH UNDER THE GRAVEL FOR ANCHORING IS RECOMMENDED.
4. PLACE CLEAN GRAVEL (#57 STONE) ON A 2:1 SLOPE WITH A HEIGHT OF 16 INCHES AROUND THE WIRE, AND SMOOTH TO AN EVEN GRADE.
5. ONCE THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE ACCUMULATED SEDIMENT, AND ESTABLISH FINAL GRADING ELEVATIONS.
6. COMPACT THE AREA PROPERLY AND STABILIZE IT WITH GROUNDCOVER.

MAINTENANCE AND INSPECTION POINTS

1. SEDIMENT SHOULD NOT BE ALLOWED TO WASH INTO THE INLET. IT SHOULD BE REMOVED FROM THE INLET PROTECTION AND DISPOSED OF AND STABILIZED SO THAT IT WILL NOT ENTER THE INLET AGAIN. REMOVE SEDIMENT FROM THE DEPOSITION AREAS WHEN HALF THE HEIGHT OF THE STORAGE AREA HAS BEEN FILLED.
2. CHECK MEASURE FOR DAMAGE OR EVIDENCE OF EROSION AND BYPASSING AROUND THE INLET PROTECTION. IF INLETS ARE IN SERIES, RUNOFF THAT BYPASSES AN UPGRADIENT INLET CAN OVERWHELM A DOWNGRADIENT INLET PROTECTION DEVICE. SAND BAGS, DIVERSIONS, OR OTHER METHODS SHOULD BE USED TO DIRECT RUNOFF INTO STORM DRAIN INLETS.
3. WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED, ALL MATERIALS AND ANY SEDIMENT SHOULD BE REMOVED, AND EITHER SALVAGED OR DISPOSED OF PROPERLY. THE DISTURBED AREA SHOULD BE BROUGHT TO PROPER GRADE, THEN SMOOTHED AND COMPACTED. APPROPRIATELY STABILIZE ALL DISTURBED AREAS AROUND THE INLET.

NOTE:
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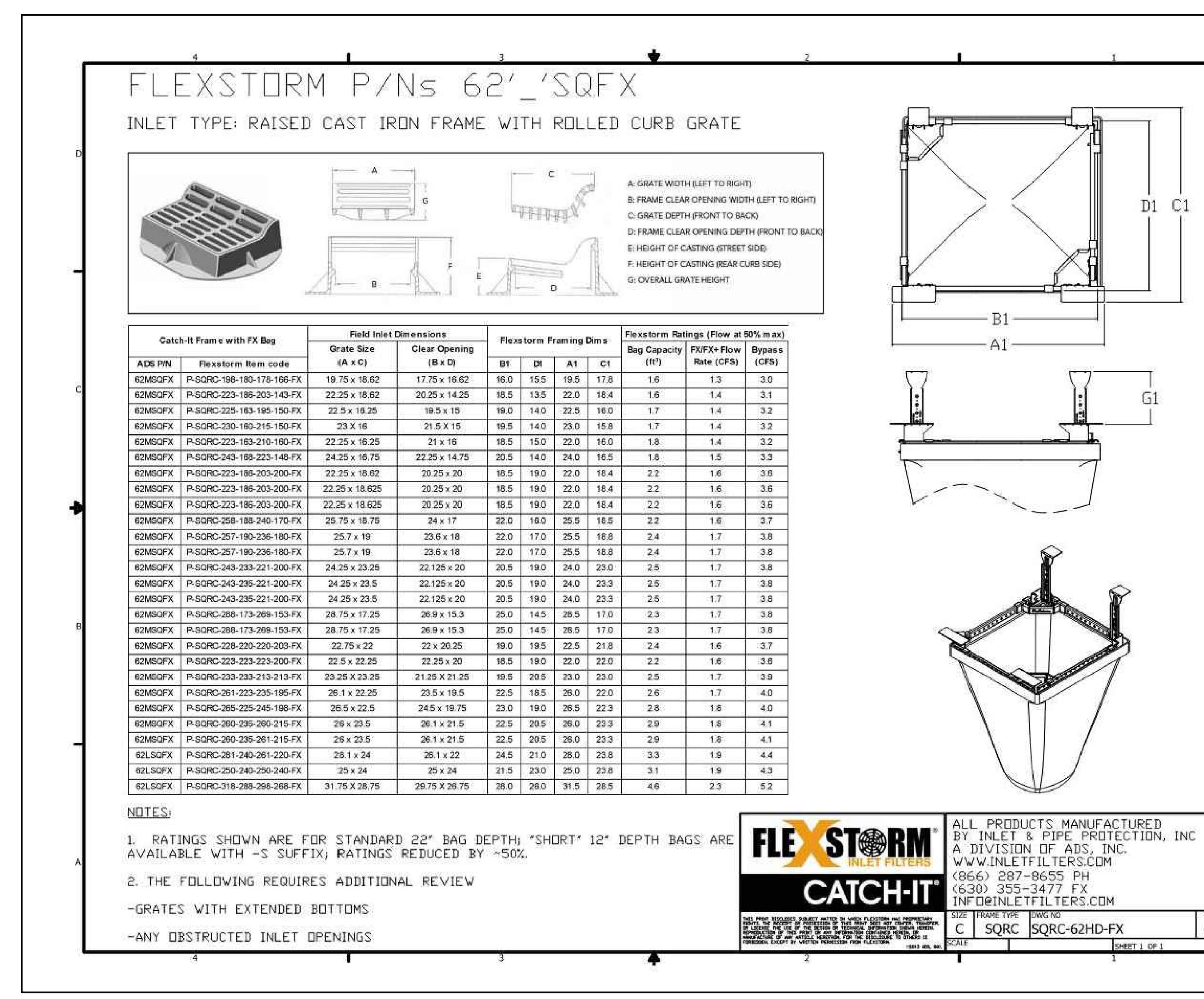
INLET PROTECTION (PRE-PAVED AREAS)
NOT TO SCALE



FLEXSTORM P/Ns 62'_'SQFX

INLET TYPE: RAISED CAST IRON FRAME WITH ROLLED CURB GRATE

A: GRATE WIDTH (LEFT TO RIGHT)
B: FRAME CLEAR OPENING WIDTH (LEFT TO RIGHT)
C: GRATE DEPTH (FRONT TO BACK)
D: FRAME CLEAR OPENING DEPTH (FRONT TO BACK)
E: HEIGHT OF CASTING (STREET SIDE)
F: HEIGHT OF CASTING (REAR CURB SIDE)
G: OVERALL GRATE HEIGHT

Catch-It Frame with FX Bag		Field Inlet Dimensions		Flexstorm Framing Dims				Flexstorm Ratings (Flow at 50% max)		
ADS P/N	Flexstorm Item code	Grate Size (A x C)	Clear Opening (B x D)	B1	D1	A1	C1	Bag Capacity (ft^3)	FX/FX+ Flow Rate (CFS)	Bypass (CFS)
62MSQFX	P-SQRC-198-180-178-166-FX	19.75 x 18.62	17.75 x 16.62	16.0	15.5	19.5	17.8	1.6	1.3	3.0
62MSQFX	P-SQRC-223-186-203-143-FX	22.25 x 18.62	20.25 x 14.25	18.5	13.5	22.0	18.4	1.6	1.4	3.1
62MSQFX	P-SQRC-225-163-195-150-FX	22.5 x 16.25	19.5 x 15	19.0	14.0	22.5	16.0	1.7	1.4	3.2
62MSQFX	P-SQRC-230-160-215-150-FX	23 X 16	21.5 X 15	19.5	14.0	23.0	15.8	1.7	1.4	3.2
62MSQFX	P-SQRC-223-163-210-160-FX	22.25 x 16.25	21 x 16	18.5	15.0	22.0	16.0	1.8	1.4	3.2
62MSQFX	P-SQRC-243-168-223-148-FX	24.25 x 16.75	22.25 x 14.75	20.5	14.0	24.0	16.5	1.8	1.5	3.3
62MSQFX	P-SQRC-223-186-203-200-FX	22.25 x 18.62	20.25 x 20	18.5	19.0	22.0	18.4	2.2	1.6	3.6
62MSQFX	P-SQRC-223-186-203-200-FX	22.25 x 18.625	20.25 x 20	18.5	19.0	22.0	18.4	2.2	1.6	3.6
62MSQFX	P-SQRC-223-186-203-200-FX	22.25 x 18.625	20.25 x 20	18.5	19.0	22.0	18.4	2.2	1.6	3.6
62MSQFX	P-SQRC-258-188-240-170-FX	25.75 x 18.75	24 x 17	22.0	16.0	25.5	18.5	2.2	1.6	3.7
62MSQFX	P-SQRC-257-190-236-180-FX	25.7 x 19	23.6 x 18	22.0	17.0	25.5	18.8	2.4	1.7	3.8
62MSQFX	P-SQRC-257-190-236-180-FX	25.7 x 19	23.6 x 18	22.0	17.0	25.5	18.8	2.4	1.7	3.8
62MSQFX	P-SQRC-243-233-221-200-FX	24.25 x 23.25	22.125 x 20	20.5	19.0	24.0	23.0	2.5	1.7	3.8
62MSQFX	P-SQRC-243-235-221-200-FX	24.25 x 23.5	22.125 x 20	20.5	19.0	24.0	23.3	2.5	1.7	3.8
62MSQFX	P-SQRC-243-235-221-200-FX	24.25 x 23.5	22.125 x 20	20.5	19.0	24.0	23.3	2.5	1.7	3.8
62MSQFX	P-SQRC-288-173-269-153-FX	28.75 x 17.25	26.9 x 15.3	25.0	14.5	28.5	17.0	2.3	1.7	3.8
62MSQFX	P-SQRC-288-173-269-153-FX	28.75 x 17.25	26.9 x 15.3	25.0	14.5	28.5	17.0	2.3	1.7	3.8
62MSQFX	P-SQRC-228-220-220-203-FX	22.75 x 22	22 x 20.25	19.0	19.5	22.5	21.8	2.4	1.6	3.7
62MSQFX	P-SQRC-223-223-223-200-FX	22.5 x 22.25	22.25 x 20	18.5	19.0	22.0	22.0	2.2	1.6	3.6
62MSQFX	P-SQRC-233-233-213-213-FX	23.25 X 23.25	21.25 X 21.25	19.5	20.5	23.0	23.0	2.5	1.7	3.9
62MSQFX	P-SQRC-261-223-235-195-FX	26.1 x 22.25	23.5 x 19.5	22.5	18.5	26.0	22.0	2.6	1.7	4.0
62MSQFX	P-SQRC-265-225-245-198-FX	26.5 x 22.5	24.5 x 19.75	23.0	19.0	26.5	22.3	2.8	1.8	4.0
62MSQFX	P-SQRC-260-235-260-215-FX	26 x 23.5	26.1 x 21.5	22.5	20.5	26.0	23.3	2.9	1.8	4.1
62MSQFX	P-SQRC-260-235-261-215-FX	26 x 23.5	26.1 x 21.5	22.5	20.5	26.0	23.3	2.9	1.8	4.1
62LSQFX	P-SQRC-281-240-261-220-FX	28.1 x 24	26.1 x 22	24.5	21.0	28.0	23.8	3.3	1.9	4.4
62LSQFX	P-SQRC-250-240-250-240-FX	25 x 24	25 x 24	21.5	23.0	25.0	23.8	3.1	1.9	4.3
62LSQFX	P-SQRC-318-288-298-268-FX	31.75 X 28.75	29.75 X 26.75	28.0	26.0	31.5	28.5	4.6	2.3	5.2

NOTES:

1. RATINGS SHOWN ARE FOR STANDARD 22" BAG DEPTH; "SHORT" 12" DEPTH BAGS ARE AVAILABLE WITH -S SUFFIX; RATINGS REDUCED BY ~50%.
2. THE FOLLOWING REQUIRES ADDITIONAL REVIEW
-GRATES WITH EXTENDED BOTTOMS
-ANY OBSTRUCTED INLET OPENINGS

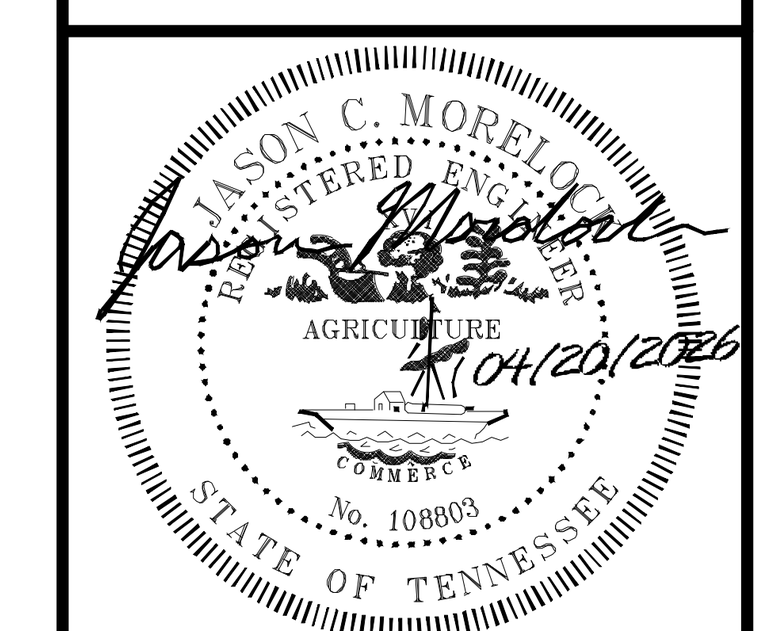
FLEXSTORM INLET FILTERS
CATCH-IT

ALL PRODUCTS MANUFACTURED BY INLET & PIPE PROTECTION, INC
A DIVISION OF ADS, INC.
WWW.INLETFILTERS.COM
(866) 287-8655 PH
(630) 355-3477 FX
INFO@INLETFILTERS.COM

SIZE C | FRAME TYPE SQRC | DWG NO SQRC-62HD-FX | REV A
SHEET 1 OF 1

INLET PROTECTION (POST-PAVED AREAS)
NOT TO SCALE

FULMER LUCAS
2002 RICHARD JONES RD - SUITE B200
NASHVILLE, TENNESSEE 37215
INFO@FULMERLUCAS.COM - (615) 345-3770



SITE DEVELOPMENT PLANS FOR:
MORNING POINTE
RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401

DR.	DATE	DESCRIPTION
JEL	04/20/2026	FINAL PUD MASTER PLAN

SITE DETAILS

C4.6

1421-01 MORNING POINTE

Monday, April 20, 2026
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CONSTRUCTION SPECIFICATIONS

GRADING AND SHAPING:
EXCESSIVE WATER RUNOFF SHALL BE REDUCED BY PROPERLY DESIGNED AND INSTALLED EROSION CONTROL PRACTICES SUCH AS DITCHES, DIKES, DIVERSIONS, AND SEDIMENT BASINS. NO SHAPING OR GRADING IS REQUIRED IF SLOPES CAN BE STABILIZED BY HAND-SEEDED VEGETATION OR IF HYDRAULIC SEEDING EQUIPMENT IS TO BE USED.

SEEDBED PREPARATION:
GOOD SEEDBED PREPARATION IS ESSENTIAL TO SUCCESSFUL PLANT ESTABLISHMENT. A GOOD SEEDBED IS WELL PULVERIZED, LOOSE AND UNIFORM. WHERE HYDROSEEDING METHODS ARE USED, THE SURFACE MAY BE LEFT WITH A MORE IRREGULAR SURFACE OF LARGE CLODS AND STONES.

LIMING:
APPLY LIME ACCORDING TO SOIL TEST RECOMMENDATIONS. IF THE PH (ACIDITY) OF THE SOIL IS NOT KNOWN, AN APPLICATION OF GROUND AGRICULTURAL LIMESTONE AT THE RATE TO 1 TO 1½ TONS/ACRE ON COARSE TEXTURED SOILS AND 2-3 TONS/ACRE ON FINE TEXTURED SOILS IS USUALLY SUFFICIENT. APPLY LIMESTONE UNIFORMLY AND INCORPORATE INTO THE TOP 4-6
INCHES OF SOIL. SOILS WITH A PH OF 6 OR HIGHER DO NOT NEED TO BE LIMED.

FERTILIZER:
BASE APPLICATION RATES ON SOIL TESTS. WHEN SOIL TESTS ARE NOT POSSIBLE, APPLY A 10-10-10 GRADE FERTILIZER AT 700-1000LB/ACRE. BOTH FERTILIZER AND LIME SHOULD
BE INCORPORATED INTO THE TOP 4-6 INCHES OF SOIL. IF A HYDRAULIC SEEDER IS USED, DO NOT MIX SEED AND FERTILIZER MORE THAN 30 MINUTES BEFORE THE APPLICATION.

SURFACE ROUGHENING:
IF RECENT TILLAGE OPERATIONS HAVE RESULTED IN A LOOSE SURFACE, ADDITIONAL ROUGHENING MAY NOT BE NECESSARY, EXCEPT TO BREAK UP LARGE CLODS. IF RAINFALL CAUSED THE SURFACE TO BECOME SEALED OR CRUSTED, LOOSEN IT JUST PRIOR TO SEEDING BY DISKING, RAKING, HARROWING, OR OTHER SUITABLE METHODS. GROOVE OR FURROW SLOPES STEEPER THAN 3:1 ON THE CONTOUR BEFORE SEEDING.

CONSTRUCTION SPECIFICATIONS

SEEDING:
SELECT A NON-INVASIVE GRASS OR GRASS-LEGUME MIXTURE SUITABLE TO THE AREA AND SEASON OF THE YEAR. SEE FIGURES 7.8-1 TO 7.8-3 FOR SUGGESTIONS OF TEMPORARY SEEDING SPECIES. ALTHOUGH NATIVE PLANTS ARE PREFERRED, THERE ARE CURRENTLY NO AVAILABLE NATIVE SPECIES THAT ARE NOT COST PROHIBITIVE. NON-INVASIVE ANNUAL PLANTS ARE PREFERRED. SEED SHALL BE APPLIED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDRAULIC SEEDER. DRILL OR CULTIPACKER SEEDERS SHOULD NORMALLY PLACE SEED ¼ TO ½ INCHES DEEP. APPROPRIATE DEPTH OF PLANTING IS 10 TIMES THE SEED DIAMETER. SOIL SHOULD BE RAKED LIGHTLY TO COVER SEED WITH SOIL IF SEEDED BY HAND.

MULCHING:
THE USE OF MULCH WILL HELP ENSURE ESTABLISHMENT UNDER NORMAL CONDITIONS, AND IS ESSENTIAL TO SEEDING SUCCESS UNDER HARSH SITE CONDITIONS. HARSH SITE CONDITIONS INCLUDE:

- SEEDING IN FALL FOR WINTER COVER
- SLOPES STEEPER THAN 3:1
- EXCESSIVELY HOT OR DRY WEATHER
- ADVERSE SOILS (SHALLOW, ROCKY, OR HIGH IN CLAY OR SAND), AND
- AREAS RECEIVING CONCENTRATED FLOW.

IRRIGATION:
DURING TIMES OF DROUGHT, WATER SHALL BE APPLIED AT A RATE NOT CAUSING RUNOFF AND EROSION. THE SOIL SHALL BE THOROUGHLY WETTED TO A DEPTH THAT WILL ENSURE GERMINATION OF THE SEED. SUBSEQUENT APPLICATIONS SHOULD BE MADE AS NEEDED. NEWLY SEEDED AREAS REQUIRE MORE WATER THAN MORE MATURE PLANTS.

TEMPORARY COVER SEEDING MIXTURES

SEEDING DATES	GRASS SEED	SOIL AMENDMENTS	MULCH	MAINTENANCE
JANUARY 1 TO MAY 1	RYE (120 LBS/ACRE)	FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LBS/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LBS/ACRE 10-10-10 FERTILIZER.	APPLY 4,000 LBS/ACTE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.	REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESSED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.
MAY 1 TO AUGUST 15	OATS (60 LBS/ACRE)			
	BROWN TOP MILLET (30 LBS/ACRE)			
AUGUST 15 - DECEMBER 31	OATS (30 LBS/ACRE)			
	WINTER WHEAT (30 LBS/ACRE)			

NOTE:
INSTALLATION AND MAINTENANCE SHALL MEET THE REQUIREMENTS OF THE TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK, TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION, LATEST EDITION.

TEMPORARY SEEDING
NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

GRADING AND SHAPING:
GRADING AND SHAPING MAY NOT BE REQUIRED WHERE HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS TO BE USED. VERTICAL BANKS SHALL BE SLOPED TO ENABLE PLANT ESTABLISHMENT.

WHEN CONVENTIONAL SEEDING AND FERTILIZING ARE TO BE DONE, GRADE AND SHAPE THE SLOPE, WHERE FEASIBLE AND PRACTICAL, SO THAT EQUIPMENT CAN BE USED SAFELY AND EFFICIENTLY DURING SEEDBED PREPARATION, SEEDING, MULCHING, AND MAINTENANCE OF VEGETATION.

CONCENTRATIONS OF WATER THAT COULD CAUSE EXCESSIVE SOIL EROSION SHOULD BE DIVERTED TO A SAFE OUTLET. DIVERSIONS AND OTHER TREATMENT PRACTICES MUST CONFORM TO THE APPROPRIATE STANDARDS AND SPECIFICATIONS.

PLANT SELECTION:
ONLY CERTIFIED SEED SHALL BE USED. REFER TO TABLE FOR SUGGESTED SPECIES. GRASS TYPE SHOULD BE SELECTED ON THE BASIS OF SPECIES CHARACTERISTICS; SITE AND SOIL CONDITIONS; PLANNED USE AND MAINTENANCE OF THE AREA; TIME OF YEAR OF PLANTING, METHOD OF PLANTING; AND THE NEEDS AND DESIRES OF THE LAND USER.

PLANT SELECTION MAY ALSO INCLUDE ANNUAL COMPANION CROPS. ANNUAL COMPANION CROPS SHOULD BE USED ONLY WHEN THE PERENNIAL SPECIES ARE NOT PLANTED DURING THEIR OPTIMUM PLANTING PERIOD. CARE SHOULD BE TAKEN IN SELECTING COMPANION CROP SPECIES AND SEEDING RATES BECAUSE ANNUAL CROPS WILL COMPETE WITH PERENNIAL SPECIES FOR WATER, NUTRIENTS, AND GROWING SPACE. A HIGH SEEDING RATE OF THE COMPANION CROP MAY PREVENT THE ESTABLISHMENT OF PERENNIAL SPECIES.

RYEGRASS SHALL NOT BE USED IN ANY SEEDING MIXTURES CONTAINING PERMANENT, PERENNIAL SPECIES DUE TO ITS ABILITY TO OUT-COMPETE DESIRED SPECIES CHOSEN FOR PERMANENT PERENNIAL COVER. HOWEVER, CRIMSON, CLOVER, OATS AND WINTER WHEAT
CAN BE PLANTED ANY TIME OF THE YEAR AND ARE RECOMMENDED AS A COVER CROP WITH NATIVE PERENNIAL SPECIES.

TOPSOIL:
TOPSOIL SHOULD BE REPLACED ON ALL AREAS TO BE SEEDED. SEE PRACTICE 7.3 FOR MORE INFORMATION ON THE REMOVAL, STORAGE AND REAPPLICATION OF TOPSOIL.

SEEDBED PREPARATION:
WHEN CONVENTIONAL SEEDING IS TO BE USED, TOPSOIL SHOULD BE APPLIED TO ANY AREA WHERE THE DISTURBANCE RESULTS IN SUBSOIL AT THE FINAL GRADE SURFACE. A MINIMUM DEPTH OF 4" IS REQUIRED. SOIL PH SHOULD BE ABOVE 5 – PREFERABLY BETWEEN 6.0 AND 6.5. SOIL ON THE SITE SHOULD BE TESTED TO DETERMINE LIME AND FERTILIZER RATES. SOIL SHOULD BE SUBMITTED TO A SOILS SPECIALIST OR COUNTY AGRICULTURAL EXTENSION AGENT FOR TESTING AND SOIL AMENDMENT RECOMMENDATIONS. IN THE ABSENCE OF SOIL TEST RESULTS, THE FOLLOWING APPLICATION RATES CAN BE USED:

GROUND AGRICULTURAL LIMESTONE:
- LIGHT-TEXTURED, SANDY SOILS: 1- 1 1/2 TONS/ACRE
- HEAVY-TEXTURED, CLAYEY SOILS: 2-3 TONS/ACRE

FERTILIZER:
- GRASSES: 800-1200 LB/ACRE OF 10-10-10 (OR THE EQUIVALENT)
- GRASS-LEGUME MIXTURES: 800-1200 LB/ACRE OF 5-10-10 (OR THE EQUIVALENT)

BROADCAST SEEDING:
- SEEDBED PREPARATION MAY NOT BE REQUIRED WHERE HYDRAULIC SEEDING EQUIPMENT IS TO BE USED.
- TILLAGE, AT A MINIMUM, SHALL ADEQUATELY LOOSEN THE SOIL TO A DEPTH OF 4 TO 6 INCHES; ALLEVIATE COMPACTION; INCORPORATE TOPSOIL, LIME, AND FERTILIZER; SMOOTH AND FIRM THE SOIL; ALLOW FOR THE PROPER PLACEMENT OF SEED, SPRIGS, OR PLANTS; AND ALLOW FOR THE ANCHORING OF STRAW OR HAY MULCH IF A CRIMPER IS TO BE USED.
- TILLAGE MAY BE DONE WITH ANY SUITABLE EQUIPMENT.
- TILLAGE SHOULD BE DONE PARALLEL TO THE CONTOUR WHERE FEASIBLE.
- ON SLOPES TOO STEEP FOR THE SAFE OPERATION OF TILLAGE EQUIPMENT, THE SOIL SURFACE SHALL BE PITTED OR TRENCHED ACROSS THE SLOPE WITH APPROPRIATE HAND TOOLS TO PROVIDE CONSECUTIVE BEDS, 6 TO 8 INCHES APART, IN WHICH SEED MAY LODGE AND GERMINATE. HYDRAULIC SEEDING MAY ALSO BE USED.

CONSTRUCTION SPECIFICATIONS

INOCULANTS:
NATIVE LEGUME SEEDS DO NOT NEED TO BE INOCULATED. ALL NON-NATIVE LEGUME SEED SHALL BE INOCULATED WITH APPROPRIATE NITROGEN FIXING BACTERIA. THE INOCULANTS SHALL BE PURE CULTURE PREPARED SPECIFICALLY FOR THE SEED SPECIES AND USED WITHIN THE DATES ON THE CONTAINER. A MIXING MEDIUM RECOMMENDED BY THE MANUFACTURER SHALL BE USED TO BOND THE INOCULANTS TO THE SEED. FOR CONVENTIONAL SEEDING, USE TWICE THE AMOUNT OF INOCULANTS RECOMMENDED BY THE MANUFACTURER.

NO-TILL SEEDING:
NO-TILL SEEDING IS PERMISSIBLE INTO ANNUAL COVER CROPS WHEN PLANTING IS DONE FOLLOWING MATURITY OF THE COVER CROP OR IF THE TEMPORARY COVER STAND IS SPARSE ENOUGH TO ALLOW ADEQUATE GROWTH OF THE PERMANENT (PERENNIAL) SPECIES. NO-TILL SEEDING SHALL BE DONE WITH APPROPRIATE NO-TILL SEEDING EQUIPMENT. THE SEED MUST BE UNIFORMLY DISTRIBUTED AND PLANTED AT THE PROPER DEPTH. NATIVE GRASSES RESPOND VERY WELL TO DRILL SEEDING AT A DEPTH OF ONE-FOURTH INCH.

MULCH:
STRAW MULCH IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS AND MUST BE APPLIED IMMEDIATELY AFTER THE APPLICATION OF SEED. THE APPLICATION RATE FOR MULCH IS 2 TONS PER ACRE WITH OVERALL UNIFORM SOIL COVERAGE OF 70%. ALL MULCH MUST BE ANCHORED.

MAINTENANCE AND INSPECTION POINTS:
ANY AREAS THAT HAVE WASHED OUT DUE TO HIGH STORMWATER FLOWS, AREAS THAT HAVE BEEN DISTURBED BY BLOWING WIND, AND AREAS THAT DO NOT SHOW GOOD GERMINATION SHOULD BE RETREATED.

INSPECT SEEDED AREAS FOR FAILURE AND MAKE NECESSARY REPAIRS AND RESEEDINGS WITHIN THE SAME SEASON, IF POSSIBLE.

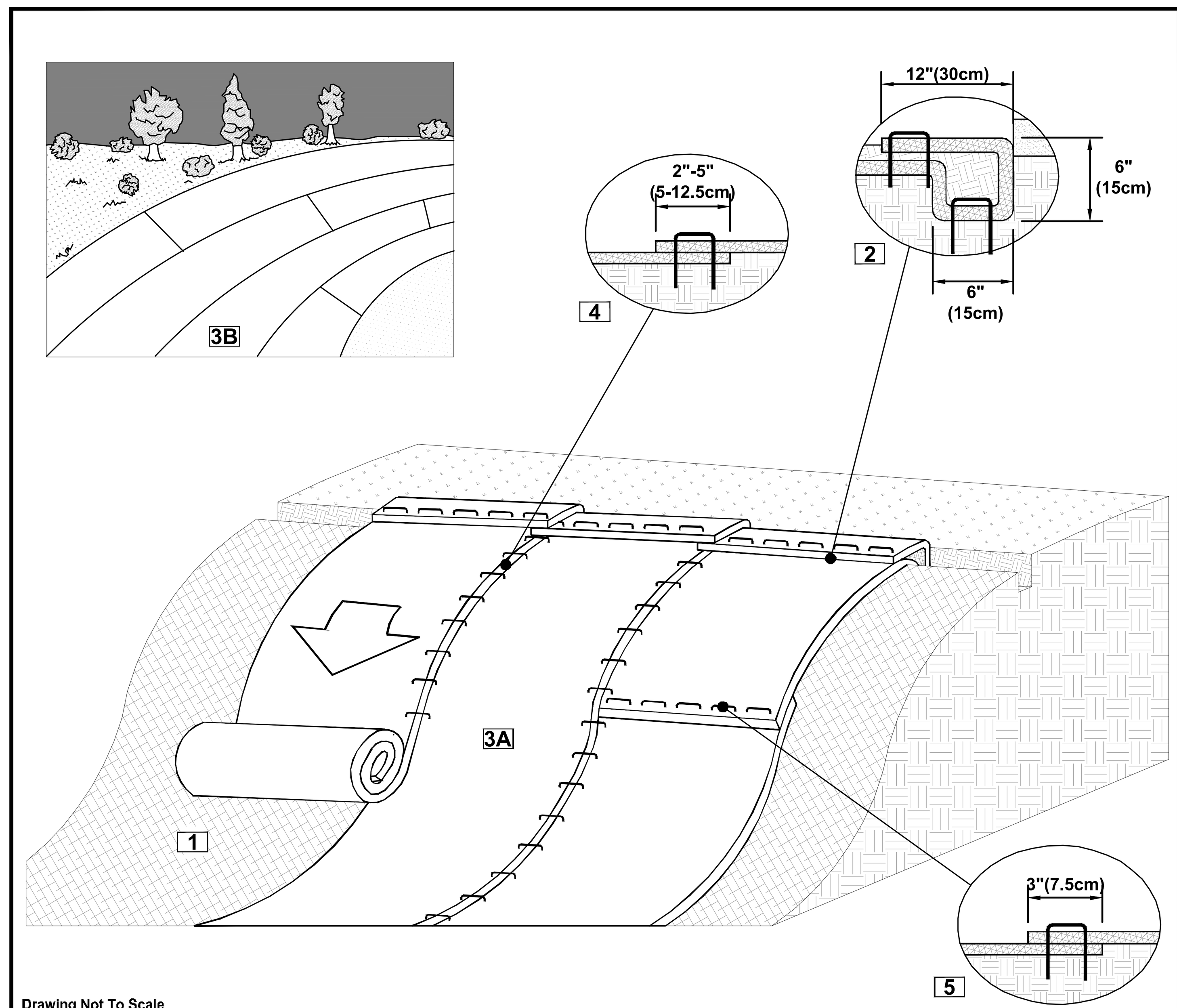
RESEEDING:
IF A STAND HAS INADEQUATE COVER, RE-EVALUATE CHOICE OF PLANT MATERIALS AND QUANTITIES OF LIME AND FERTILIZER. RE-ESTABLISH THE STAND AFTER SEEDBED PREPARATION OR OVER-SEED THE STAND. CONSIDER SEEDING TEMPORARY, ANNUAL SPECIES IF THE TIME OF YEAR IS NOT APPROPRIATE FOR PERMANENT SEEDING.

PERMANENT COVER SEEDING MIXTURES

ZONE		BEST	MARGINAL	PREFERRED RATE/MIX (lb/ac PLS)
REGION II	LOW MAINTENANCE; SLOPES AND POOR, SHALLOW SOILS	AUG 25 - SEPT 15 FEB 15 - MAY 30	SEPT 15 - OCT 25 MAR 21 - MAY 30	15 BROWNTOP MULLET 5 LITTLE BLUESTEM 2 SWITCH GRASS 2 TALL DROPSEED 5 SIDEOATS GRAMMA 2 BLACK-EYED SUSAN 2 PARTRIDGE PEA 1 GREYHEADED CONEFLOWER
	LOW MAINTENANCE; MODERATE SLOPES; SOILS >6in. DEPTH	AUG 25 - SEPT 15 FEB 15 - MAY 30	SEPT 15 - OCT 25 MAR 21 - MAY 30	15 BROWNTOP MULLET 5 PURPLETOP 5 LITTLE BLUESTREAM 5 VIRGINIA WILD RYE 2 BLACK-EYED SUSAN 2 PARTRIDGE PEA 1 GREYHEADED CONEFLOWER
	HIGH MAINTENANCE	AUG 30 - OCT 15	FEB 15 - APR 15	15 BROWNTOP MULLET 2 PARTRIDGE PEA 45 RED FESCUE 45 HARD FESCUE 25 CHEWING FESCUE

NOTE:
INSTALLATION AND MAINTENANCE SHALL MEET THE REQUIREMENTS OF THE TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK, TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION, LATEST EDITION.

PERMANENT SEEDING
NOT TO SCALE



NORTH AMERICAN GREEN
5401 St. Wendel - Cynthiana Rd. Poseyville, IN 47633
PH: 800-722-2040 www.nagreen.com

Disclaimer:
The information presented herein is general design information only. For specific applications, consult an independent professional for further design guidance.

Drawn on: 5-4-17

SLOPE INSTALLATION DETAIL

1. Prepare soil before installing rolled erosion control products (RECPs), including any necessary application of lime, fertilizer, and seed.
2. Begin at the top of the slope by anchoring the RECPs in a 6"(15cm) deep X 6"(15cm) wide trench with approximately 12" (30cm) of RECPs extended beyond the up-slope portion of the trench. Anchor the RECPs with a row of staples/stakes approximately 12" (30cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to the compacted soil and fold the remaining 12"(30cm) portion of RECPs back over the seed and compacted soil. Secure RECPs over compacted soil with a row of staples/stakes spaced approximately 12"(30cm) apart across the width of the RECPs.
3. Roll the RECPs (A) down or (B) horizontally across the slope. RECPs will unroll with appropriate side against the soil surface. All RECPs must be securely fastened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide.
4. The edges of parallel RECPs must be stapled with approximately 2" - 5" (5-12.5cm) overlap depending on the RECPs type.
5. Consecutive RECPs spliced down the slope must be end over end (Shingle style) with an approximate 3"(7.5cm) overlap. Staple through overlapped area, approximately 12"(30cm) apart across entire RECPs width.

*NOTE:
In loose soil conditions, the use of staple or stake lengths greater than 6"(15cm) may be necessary to properly secure the RECP's.

NOTE:
INSTALLATION AND MAINTENANCE SHALL MEET THE REQUIREMENTS OF THE TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK, TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION, LATEST EDITION.

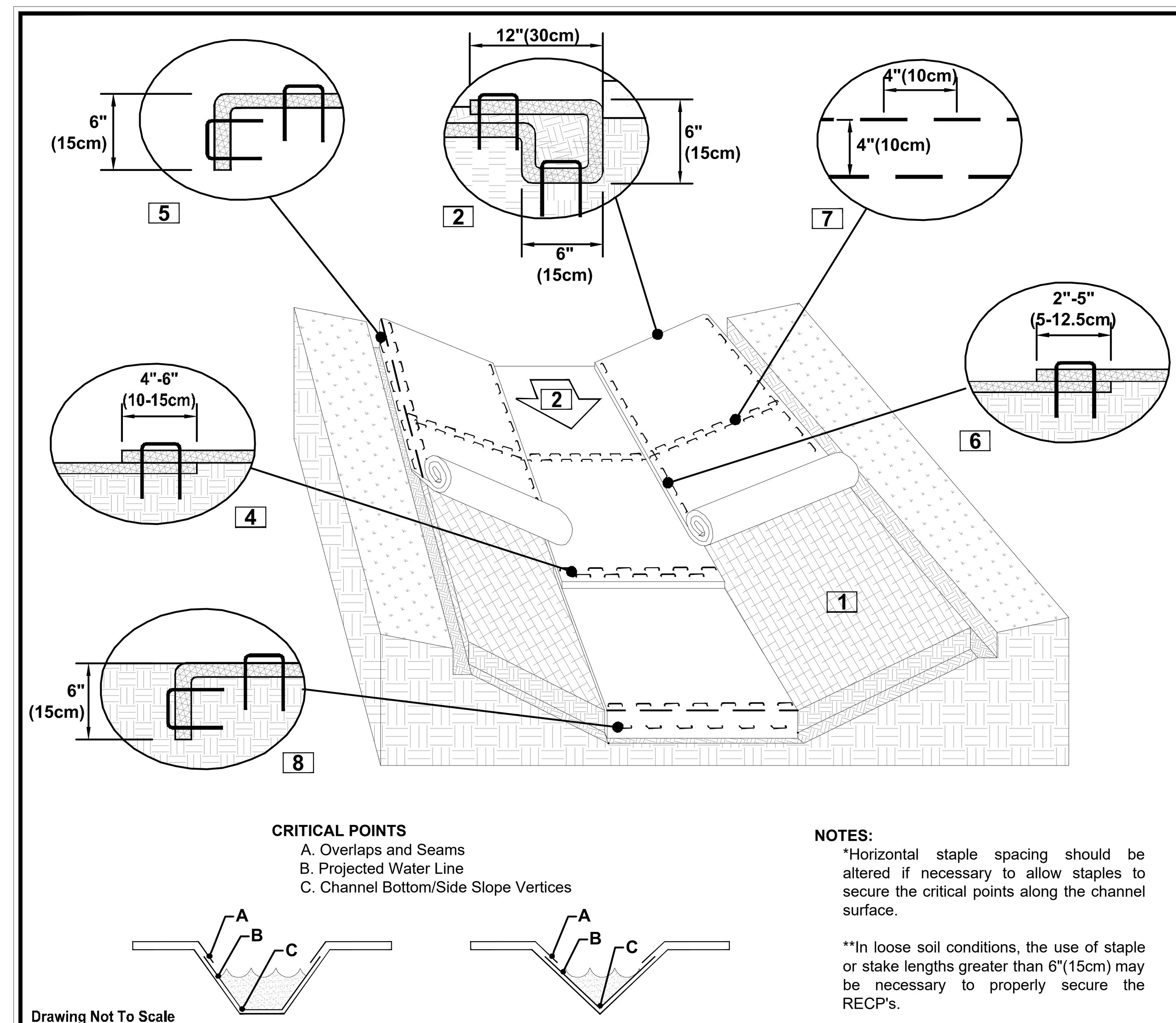
EROSION CONTROL BLANKET (SLOPE INSTALLATION)
NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. EVEN IF PROPERLY DESIGNED, IF NOT PROPERLY INSTALLED, EROSION CONTROL BLANKETS WILL LIKELY NOT FUNCTION AS DESIRED. PROPER INSTALLATION IS IMPERATIVE. EVEN IF PROPERLY INSTALLED, IF NOT PROPERLY TIMED AND NOURISHED, VEGETATION WILL LIKELY NOT GROW AS DESIRED. PROPER SEED/VEGETATION SELECTION IS ALSO IMPERATIVE. GRADE THE SURFACE OF INSTALLATION AREAS SO THAT THE GROUND IS SMOOTH AND SOIL LOOSE. WHEN SEEDING PRIOR TO INSTALLATION, FOLLOW THE STEPS FOR SEED BED PREPARATION, SOIL AMENDMENTS, AND SEEDING. ALL GULLIES, RILLS, AND ANY OTHER DISTURBED AREAS MUST BE FINE GRADED PRIOR TO INSTALLATION. SPREAD SEED BEFORE BLANKET INSTALLATION. (IMPORTANT: REMOVE ALL LARGE ROCKS, DIRT CLODS, STUMPS, ROOTS, GRASS CLUMPS, TRASH, AND OTHER OBSTRUCTIONS FROM THE SOIL SURFACE TO ALLOW FOR DIRECT CONTACT BETWEEN THE SOIL SURFACE AND THE BLANKET.) TERMINAL ANCHOR TRENCHES ARE REQUIRED AT BLANKET END. TERMINAL ANCHOR TRENCHES SHOULD BE A MINIMUM OF 12 INCHES IN DEPTH AND 6 INCHES IN WIDTH.
2. **INSTALLATION FOR SLOPES:** PLACE THE BLANKET 2-3 FEET OVER THE TOP OF THE SLOPE AND INTO AN EXCAVATED END TRENCH MEASURING APPROXIMATELY 12 INCHES DEEP BY 6 INCHES WIDE. PIN THE BLANKET AT 1 FOOT INTERVALS ALONG THE BOTTOM OF THE TRENCH, BACKFILL, AND COMPACT. UNROLL THE BLANKET DOWN (OR ALONG) THE SLOPE MAINTAINING DIRECT CONTACT BETWEEN THE SOIL AND THE BLANKET. OVERLAP ADJACENT ROLLS A MINIMUM OF 3 INCHES. PIN THE BLANKET TO THE GROUND USING STAPLES OR PINS IN A 3 FOOT CENTER-TO-CENTER PATTERN OR AS RECOMMENDED BY MANUFACTURER.
3. **ANCHORING DEVICES:** 11 GAUGE, AT LEAST 6 INCHES LENGTH BY 1 INCH WIDTH, STAPLES OR 12 INCH MINIMUM LENGTH WOODEN STAKES ARE RECOMMENDED FOR ANCHORING THE BLANKET TO THE GROUND. DRIVE STAPLES OR PINS SO THAT THE TOP OF THE STAPLE OR PIN IS FLUSH WITH THE GROUND SURFACE. ANCHOR EACH BLANKET EVERY 3 FEET ALONG ITS CENTER. LONGITUDINAL OVERLAPS MUST BE SUFFICIENT TO ACCOMMODATE A ROW OF ANCHORS AND UNIFORM ALONG THE ENTIRE LENGTH OF OVERLAP AND ANCHORED EVERY 3 FEET ALONG THE OVERLAP LENGTH. ROLL ENDS MAY BE SPLICED BY OVERLAPPING 1 FOOT (IN THE DIRECTION OF WATER FLOW), WITH THE UPSTREAM/UPSLOPE MAT PLACED ON TOP OF THE DOWNSTREAM/DOWNSLOPE BLANKET. THIS OVERLAP SHOULD BE ANCHORED AT 1 FOOT SPACING ACROSS THE BLANKET. WHEN INSTALLING MULTIPLE WIDTH MATS HEAT SEAMED IN THE FACTORY, ALL FACTORY SEAMS AND FIELD OVERLAPS SHOULD BE SIMILARLY ANCHORED.

MAINTENANCE AND INSPECTION POINTS

1. GOOD CONTACT WITH THE GROUND MUST BE MAINTAINED, AND EROSION MUST NOT OCCUR BENEATH THE BLANKET.
2. ANY AREAS OF THE BLANKET THAT ARE DAMAGED OR NOT IN CLOSE CONTACT WITH THE GROUND SHALL BE REPAIRED AND STAPLED.
3. IF EROSION OCCURS DUE TO POORLY CONTROLLED DRAINAGE, THE PROBLEM SHALL BE FIXED AND THE ERODED AREA REPAIRED.
4. MONITOR AND REPAIR THE BLANKET AS NECESSARY UNTIL GROUND COVER IS ESTABLISHED. INSPECTIONS SHOULD INCLUDE WALKING ACROSS THE SLOPE TO CHECK FOR EROSION GULLIES THAT CAN BE FELT RATHER THAN SEEN.



CRITICAL POINTS
A. Overlaps and Seams
B. Projected Water Line
C. Channel Bottom/Side Slope Vertices

NOTES:
*Horizontal staple spacing should be altered if necessary to allow staples to secure the critical points along the channel surface.

**In loose soil conditions, the use of staple or stake lengths greater than 6"(15cm) may be necessary to properly secure the RECP's.

NORTH AMERICAN GREEN
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PH: 800-722-2040 www.nagreen.com

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Drawn on: 5-4-17

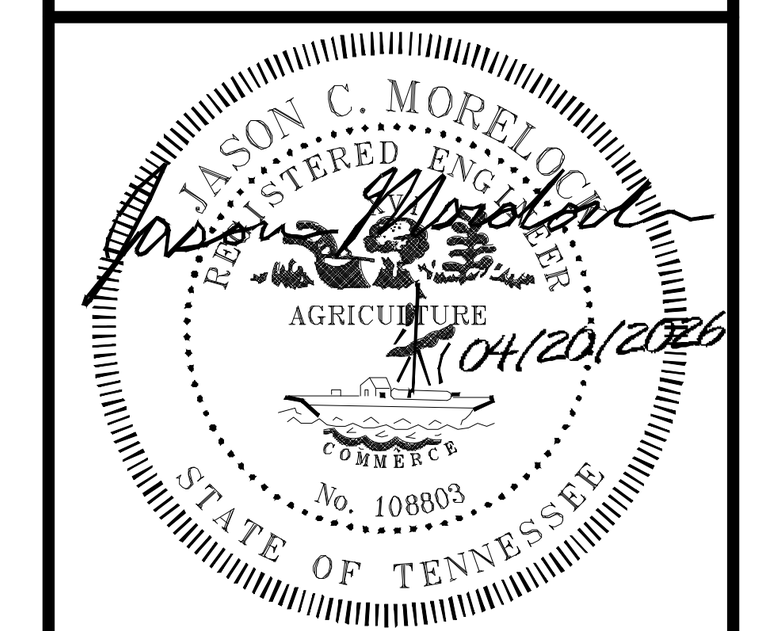
CHANNEL INSTALLATION DETAIL

1. Prepare soil before installing rolled erosion control products (RECPs), including any necessary application of lime, fertilizer, and seed.
2. Begin at the top of the channel by anchoring the RECPs in a 6"(15cm) deep X 6"(15cm) wide trench with approximately 12"(30cm) of RECPs extended beyond the up-slope portion of the trench. Use ShoreMax mat at the channel/culvert outlet as supplemental scour protection as needed. Anchor the RECPs with a row of staples/stakes approximately 12"(30cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Apply seed to the compacted soil and fold the remaining 12"(30cm) portion of RECPs back over the seed and compacted soil. Secure RECPs over compacted soil with a row of staples/stakes spaced approximately 12" apart across the width of the RECPs.
3. Roll center RECPs in direction of water flow in bottom of channel. RECPs will unroll with appropriate side against the soil surface. All RECPs must be securely fastened to soil surface by placing staples/stakes in appropriate locations as shown in the staple pattern guide.
4. Place consecutive RECPs end-over-end (Shingle style) with a 4"-6" overlap. Use a double row of staples staggered 4" apart and 4" on center to secure RECPs.
5. Full length edge of RECPs at top of side slopes must be anchored with a row of staples/stakes approximately 12"(30cm) apart in a 6"(15cm) deep X 6"(15cm) wide trench. Backfill and compact the trench after stapling.
6. Adjacent RECPs must be overlapped approximately 2"-5" (5-12.5cm) (Depending on RECPs type) and stapled.
7. In high flow channel applications a staple check slot is recommended at 30 to 40 foot (9 -12m) intervals. Use a double row of staples staggered 4"(10cm) apart and 4"(10cm) on center over entire width of the channel.
8. The terminal end of the RECPs must be anchored with a row of staples/stakes approximately 12" (30cm) apart in a 6"(15cm) deep X 6"(15cm) wide trench. Backfill and compact the trench after stapling.

NOTE:
INSTALLATION AND MAINTENANCE SHALL MEET THE REQUIREMENTS OF THE TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK, TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION, LATEST EDITION.

EROSION CONTROL BLANKET (CHANNEL INSTALLATION)
NOT TO SCALE

FULMER LUCAS
2002 RICHARD JONES RD - SUITE B200
NASHVILLE, TENNESSEE 37215
INFO@FULMERLUCAS.COM - (615) 345-3770



SITE DEVELOPMENT PLANS FOR:
MORNING POINTE
RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401

DR.	DATE	DESCRIPTION
JEL	04/20/2026	FINAL PUD MASTER PLAN

SITE DETAILS

C4.7

1421-01 MORNING POINTE

Monday, April 20, 2026
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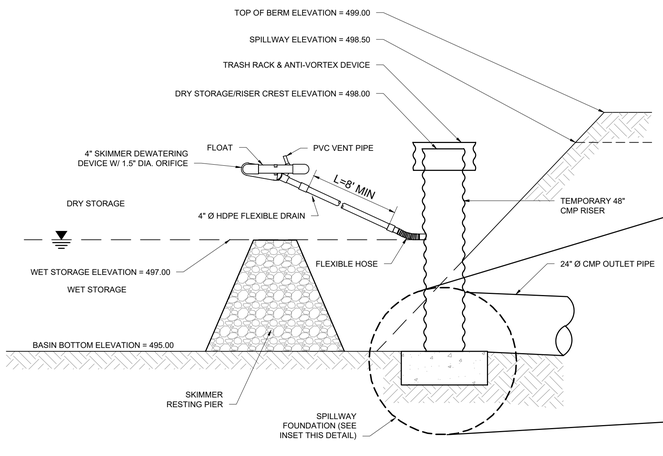
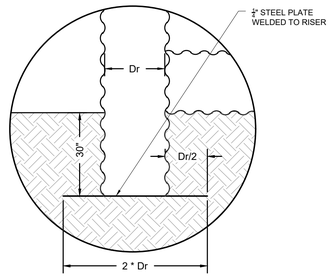
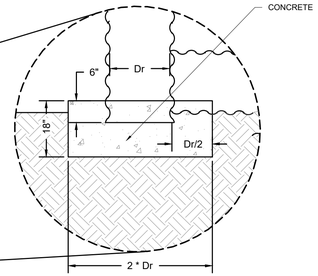
NOTE:
INSTALLATION AND MAINTENANCE SHALL MEET THE REQUIREMENTS OF THE TENNESSEE EROSION & SEDIMENT CONTROL HANDBOOK, TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION, LATEST EDITION.



SEDIMENT BASIN OUTLET STRUCTURE



STEEL BASE FOR EMBANKMENT
10 FEET OR LESS IN HEIGHT



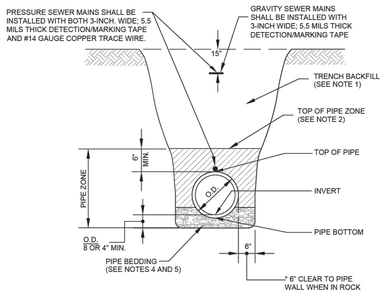
CONCRETE BASE FOR EMBANKMENT
10 FEET OR LESS IN HEIGHT

SPILLWAY FOUNDATION

TEMPORARY SEDIMENT BASIN #1
NOT TO SCALE

NOTES:

1. SEE PROJECT SPECIFICATIONS FOR BACKFILL REQUIREMENTS.
2. "PIPE ZONE" EXTENDS TO 6" ABOVE TOP OF PIPE AND BACKFILL IN TO BE CRUSHED STONE, GRAVEL OR OTHER GRANULAR MATERIAL AS APPROVED BY THE ENGINEER.
3. LIMIT TRENCH WIDTH AT TOP OF PIPE ZONE TO O.D. + 16", UNLESS PERMITTED OTHERWISE BY ENGINEER.
4. PIPE BEDDING IS TO BE CRUSHED GRAVEL OR OTHER GRANULAR MATERIAL AS APPROVED BY ENGINEER. DEPTH UNDER BOTTOM OF PIPE IS TO BE 1/8 OUTER DIAMETER (O.D.) OF PIPE OR 4", WHICHEVER IS GREATER.*
5. PIPE TO BE CONTINUOUSLY SUPPORTED ALONG LENGTH OF PIPE BARREL EXCEPT AT BELLS. BELL HOLES ARE REQUIRED SUCH THAT NO BEARING LOAD IS TAKEN BY THE BELL.



TYPICAL SEWER INSTALLATION
NOT TO SCALE

STANDARD SEWER DETAIL NO: S1

TYPICAL SEWER INSTALLATION
NOT TO SCALE

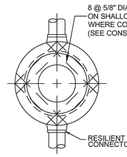
NOTE: ALL MANHOLES SHALL BE MANUFACTURED WITH XYPEX ADMIX C-1000/C-2000 OR APPROVED EQUAL FOR WATERPROOFING AND PROTECTION AGAINST HYDROGEN SULFIDE DETERIORATION. DOSAGE RATE SHALL BE 3% OF WEIGHT OF CEMENT.

CONSTRUCTION NOTES

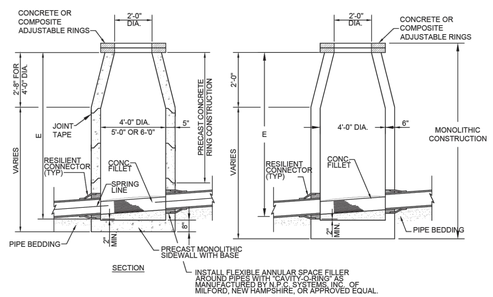
CYLINDRICAL AND CONICAL SECTIONS OF ALL MANHOLES SHALL BE CONSTRUCTED OF EITHER MONOLITHIC CONCRETE OR PRECAST CONCRETE RINGS AS DESIGNED IN THE PROJECT SPECIFICATIONS OF THE CONTRACT DOCUMENT. CONCENTRIC CONES SHALL BE USED ON PRECAST CONCRETE AND MONOLITHIC CONCRETE UNITS. DIMENSION "E" VARIES. WHEN LESS THAN 5-FEET OMIT CONE AND EXTEND CYLINDRICAL MANHOLE SIDEWALL SECTION TO AN ELEVATION 8-INCHES BELOW BOTTOM OF ADJUSTING BRICK. CONSTRUCT 8-INCH THICK CONCRETE SLAB ON TOP OF CYLINDRICAL SECTION REINFORCED WITH 5/8-INCH DIA. BARS AS SHOWN. PROVIDE 24-INCH DIAMETER OPENING IN SLAB FOR MANHOLE'S FRAME AND BRICK ADJUSTMENT RINGS AS ON CONED MANHOLE. BENCH WALLS IN MANHOLES FOR SEWERS 18-INCHES IN DIAMETER AND SMALLER TO BE BUILT UP TO THE THREE-QUARTER POINT ON PIPE. SEWERS 21-INCHES TO 30-INCHES IN DIAMETER - 15-INCHES HIGH. LARGER SEWERS TO SPRING LINE. NO BENCH WALLS REQUIRED IN DEAD END MANHOLES, ALTHOUGH BOTTOM TO BE PROPERLY DISHED.

ALL JOINTS TO BE WRAPPED WITH 6" JOINT TAPE.

NOTE: GRANULAR BACKFILL MATERIAL SHALL BE PLACED ADJACENT TO MANHOLE IN AREAS WHERE SWELLING CLAY EXIST.



PLAN



SECTION

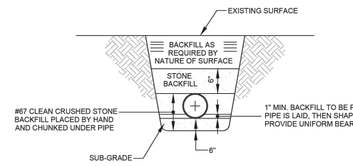
FOR SEWERS
36" DIAMETER & SMALLER
NOT TO SCALE

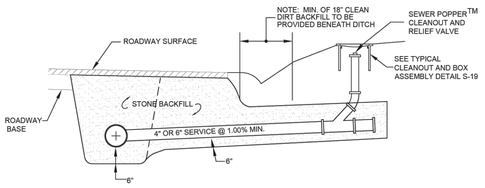
POURED IN PLACE MANHOLE
NOT TO SCALE

STANDARD MANHOLES
NOT TO SCALE

STANDARD SEWER DETAIL NO: S2

STANDARD MANHOLES
NOT TO SCALE



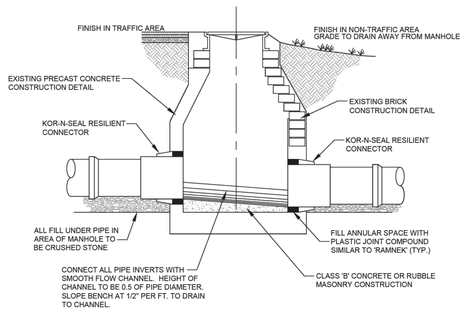


NOTE: CLEANOUT SHALL BE INSTALLED AT THE PROPERTY LINE.

SERVICE LINE
NOT TO SCALE

STANDARD SEWER DETAIL NO: S4

SERVICE LINE
NOT TO SCALE



CONNECTION TO EXISTING MANHOLE
NOT TO SCALE

NOTE: THE CONTRACTOR SHALL NOT CONNECT TO EXISTING MANHOLE UNTIL ALL NEW SEWAGE FACILITIES HAVE BEEN INSTALLED, TESTED AND RELEASED FOR SERVICE.

STANDARD SEWER DETAIL NO: S5

CONNECTION TO EXISTING MANHOLE
NOT TO SCALE

FULMER LUCAS
2002 RICHARD JONES RD - SUITE B200
NASHVILLE, TENNESSEE 37215
INFO@FULMERLUCAS.COM - (615) 345-3770

JASON C. MOREIN — REGISTERED ENGINEER — AGRICULTURE — No. 109605 — STATE OF TENNESSEE
10/23/2025

SITE DEVELOPMENT PLANS FOR:
MORNING POINTE
RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401

DR.	DATE	DESCRIPTION
JEL	04/20/2026	FINAL PUD MASTER PLAN

SITE DETAILS

C4.8

1421-01 MORNING POINTE

Updated: Apr 20, 2026
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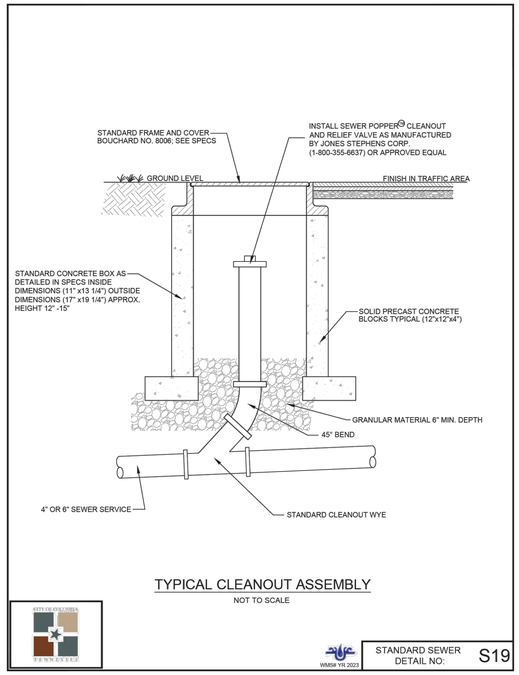


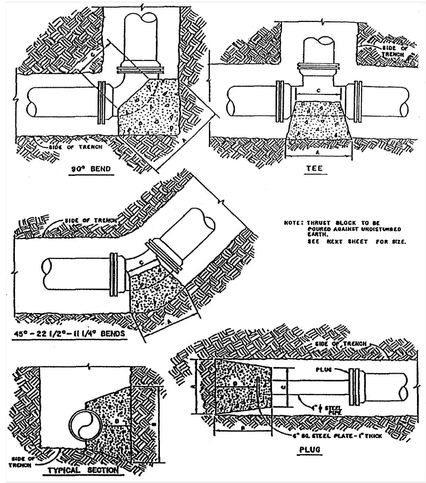
TYPICAL CLEANOUT ASSEMBLY
NOT TO SCALE

STANDARD SEWER DETAIL NO: S19

WMSII YR 2023

TYPICAL CLEANOUT ASSEMBLY
NOT TO SCALE

IV. WATER DISTRIBUTION SYSTEM STANDARD DRAWINGS



COLUMBIA WATER SYSTEM	REVISED: JUNE 1997	THRUST BLOCKING DETAILS	DRAWING NO. CWS 1

42

WATER THRUST BLOCKING DETAILS
NOT TO SCALE

11-1/4° BEND

Size	2"	3"	4"	6"	8"	10"	12"	16"	18"
A	8"	9"	9"	11"	13"	16"	18"	16"	30"
B	8"	9"	9"	11"	13"	16"	18"	16"	30"
C	8"	8"	8"	10"	12"	14"	16"	16"	15"
D	4"	4"	4"	5"	6"	8"	9"	9"	16"

TEE

Size	2"	3"	4"	6"	8"	10"	12"	16"-18"
Main	2'-6"	2'-6"	8'-12"	8'-10"	8'-10"	8'-10"	12"	12"
Branch	2'-6"	2'-6"	2'-6"	2'-6"	2'-6"	2'-6"	12"	12"
A	9"	9"	9"	9"	11"	13"	16"	18"
B	9"	9"	9"	9"	11"	13"	16"	18"
C	8"	8"	8"	10"	12"	14"	16"	16"
D	4"	4"	4"	5"	6"	8"	9"	15"

PLUG

Size	2"	3"	4"	6"	8"	10"	12"	18"
A	26"	26"	26"	26"	26"	26"	26"	26"
B	26"	26"	26"	26"	26"	26"	26"	26"
C	12"	12"	12"	12"	12"	12"	12"	12"
D	11	11	12	13	12	12	12	11"

90° BEND

Size	2"	3"	4"	6"	8"	10"	12"	18"
A	16"	16"	16"	26"	33"	40"	50"	70"
B	16"	16"	16"	24"	33"	40"	50"	70"
C	8"	8"	8"	12"	15"	16"	16"	22"
D	8"	8"	8"	12"	16"	20"	25"	24"

45° BEND

Size	2"	3"	4"	6"	8"	10"	12"	18"
A	12"	12"	12"	18"	24"	31"	37"	52"
B	12"	12"	12"	18"	24"	31"	37"	52"
C	8"	8"	8"	10"	12"	14"	16"	14"
D	6"	6"	6"	9"	12"	15"	16"	18"

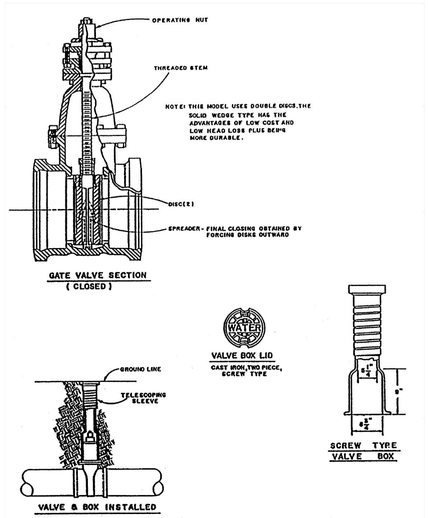
22-1/2° BEND

Size	2"	3"	4"	6"	8"	10"	12"	16"
A	8"	9"	9"	13"	18"	23"	26"	40"
B	8"	9"	9"	13"	18"	23"	26"	40"
C	4"	5"	5"	8"	10"	14"	16"	16"
D	4"	4"	4"	6"	9"	11"	13"	16"

COLUMBIA WATER SYSTEM	REVISED: JUNE 1997	THRUST BLOCKING DIMENSIONS	DRAWING NO. CWS 2

43

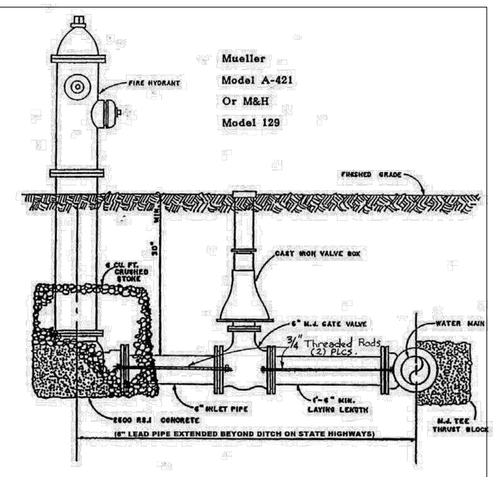
WATER THRUST BLOCKING DIMENSIONS
NOT TO SCALE



COLUMBIA WATER SYSTEM	REVISED: JUNE 1997	GATE VALVE & VALVE BOX	DRAWING NO. GV-VB 1

44

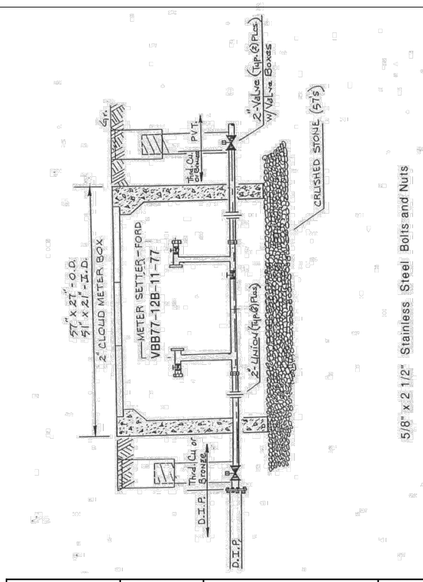
WATER GATE VALVE & VALVE BOX
NOT TO SCALE



COLUMBIA WATER SYSTEM	REVISED: JUNE 1997	FIRE HYDRANT ASSEMBLY	DRAWING NO. FHA 1

45

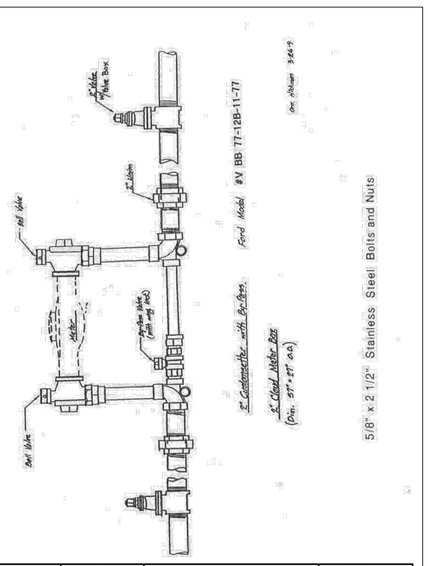
FIRE HYDRANT ASSEMBLY
NOT TO SCALE



COLUMBIA UTILITIES BOARD	REVISED: JULY 1997	WATER SERVICE ASSEMBLY 2" METER	DRAWING NO. CWS 1

49

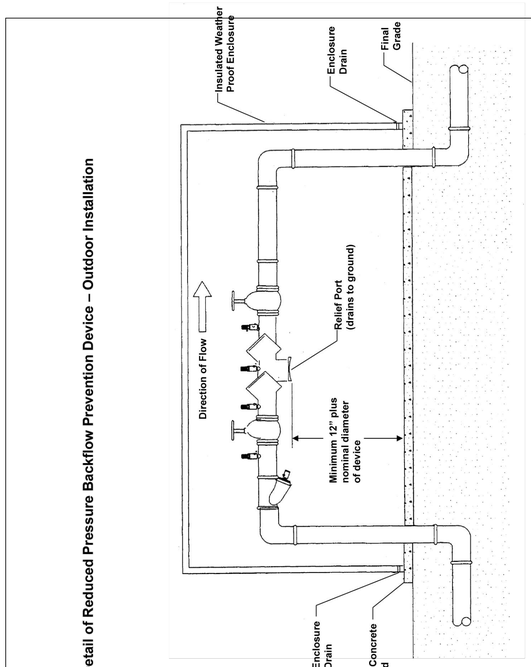
WATER SERVICE ASSEMBLY 2" METER
NOT TO SCALE



COLUMBIA WATER SYSTEM	REVISED: JUNE 1997	WATER SERVICE ASSEMBLY 2" METER	DRAWING NO. CWS 2

50

WATER SERVICE ASSEMBLY 2" METER
NOT TO SCALE



63

WATER RPBP OUTDOOR INSTALLATION
NOT TO SCALE

FULMER LUCAS
2002 RICHARD JONES RD - SUITE B200
NASHVILLE, TENNESSEE 37215
INFO@FULMERLUCAS.COM - (615) 345-3770

JASON C. MORELOCK — REGISTERED LANDSCAPE ARCHITECT — AGRICULTURE — No. 108605 — STATE OF TENNESSEE

SITE DEVELOPMENT PLANS FOR:
MORNING POINTE
RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401

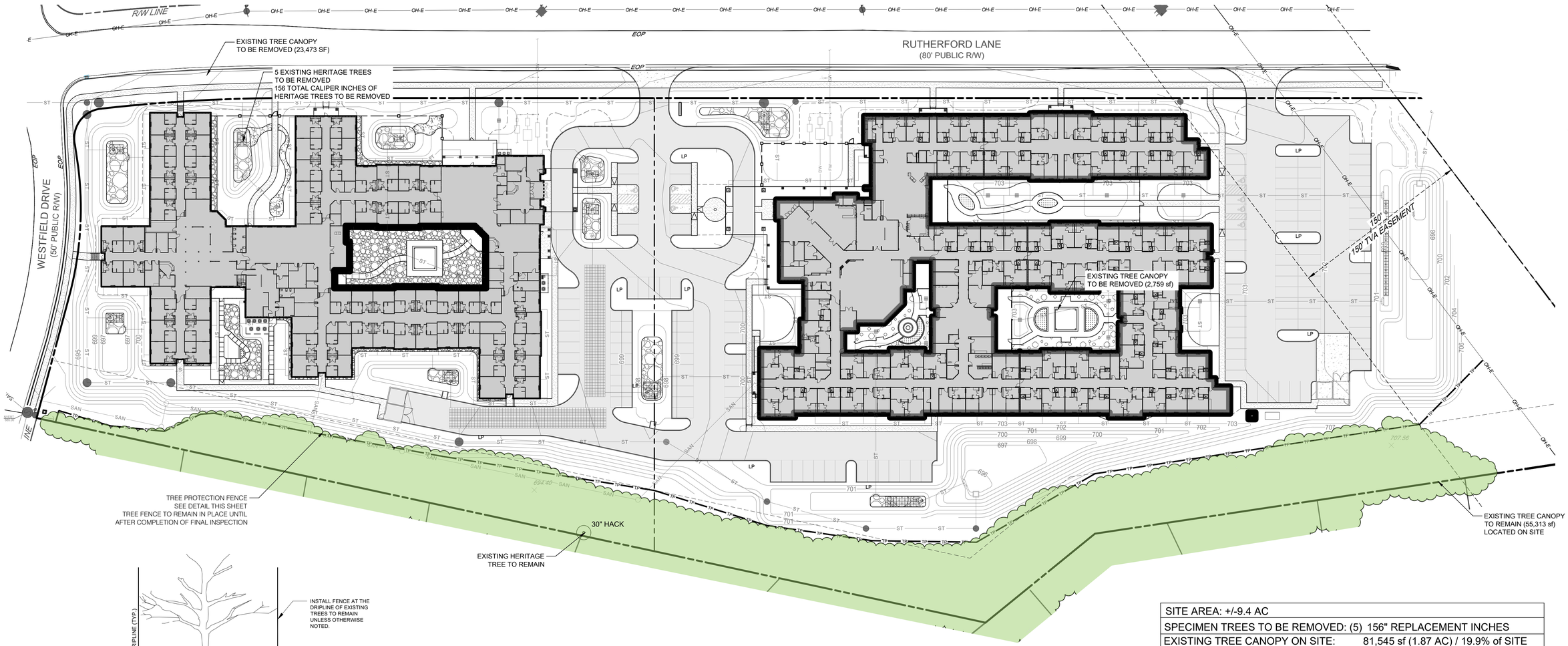
DR.	DATE	DESCRIPTION
JEL	04/20/2026	FINAL PUD MASTER PLAN

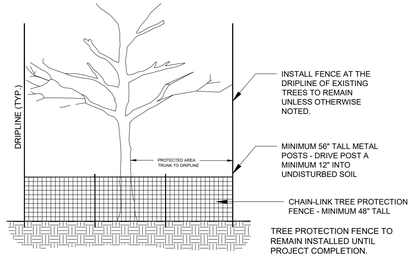
SITE DETAILS

C4.9

1421-01 MORNING POINTE

Modified: April 20, 2026
Z:\Active Projects\1421 - Columbia\02 - CivilSheets\1421-01 Site Details.dwg





CHAIN LINK FENCING TREE PROTECTION

TREE PROTECTION NOTES:

1. The tree protection barriers shall be constructed before the issuance of any permits, and shall remain intact throughout the entire period of construction.
2. The tree protection barrier shall be installed as labeled on this plan or a distance to the radius of the dripline, whichever is greatest, as measured from the trunk of the protected tree.
3. Any required excavation in or around the protection zone to accommodate underground services, footings, etc; shall be indicated on the plan, and shall be excavated by hand. In addition, related root pruning shall be accomplished via ANSI A-300 standard so as to minimize compact on the general root system. Root prunning to occur prior to grading.
4. The storage of building materials or stockpiling shall not be permitted within the limits of or against the protection barriers.
5. Trees within the protection barriers must be adequately cared for throughout the construction pro cess (i.e., they must be watered sufficiently, particularly if the tree's root system has been disturbed by excavation.) Fill shall not be placed upon the root system as to endanger the health or life of the affected tree.
6. Heavy accumulation of dust from construction activity may occur on the surface of tree foliage. To control dust, tree foliage may be hosed down upon the request of the Landscape Architect or Owners Representative.
7. Removal of all tree protection fencing will be done by the Contractor. Restoration of all areas disturbed by the fencing will be the Contractor's responsibility. All tree fence to remain intact until final completion of the project.

SITE AREA: +/-9.4 AC	
SPECIMEN TREES TO BE REMOVED: (5) 156" REPLACEMENT INCHES	
EXISTING TREE CANOPY ON SITE:	81,545 sf (1.87 AC) / 19.9% of SITE
REQ. CANOPY RETENTION (24% OF EXISTING COVER)	19,571 sf (0.45 AC)
PROPOSED CANOPY RETENTION (67.9% EX. COVER)	55,313 sf (1.27 AC)

0 40 80 120 feet
SCALE: 1" = 40'

NORTH

LAND DESIGN
106 MISSION CRT. STE 403B
Franklin, TN 37067
615.376.2421
hblanddesign.com

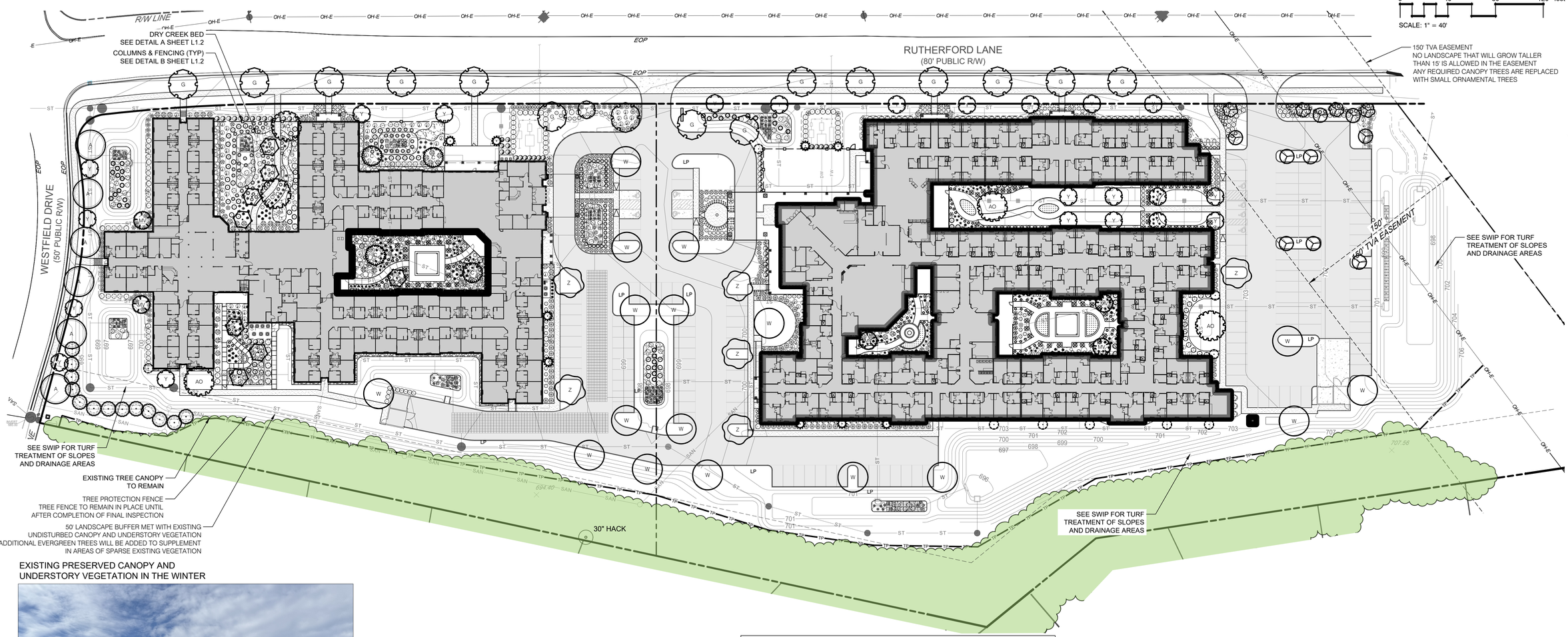
PROPOSED SITE FOR:
MORNING POINTE
COLUMBIA, TENNESSEE

CONNOR L. BALL
REGISTERED
AGRICULTURE
COMMERCE
TENNESSEE NO. 808
LANDSCAPE ARCHITECT

Job # - 25277
BY: cb

TREE PRESERVATION PLAN

L1.0



EXISTING PRESERVED CANOPY AND UNDERSTORY VEGETATION IN THE WINTER





- 1 TREE PER 50 FT OF FRONTAGE
  1,237 LF / 50 = 25 STREET TREES
- HERITAGE TREE REPLACEMENT: 156"
  PROVIDED: >157.5" (63 - 2.5" TREES)
- 1 CANOPY TREE PER 2,000 SF OF PARKING AREA
  64,369sf PARKING AREA / 2,000 = 32 PARKING LOT TREES
- MIN. SIZE: 2.5" / MIN. SPECIES: 4 / MAX GENERA 40%
- FOUNDATION PLANTINGS
- ALL TREES TO BE INSTALLED AT A MIX. 6' FROM ANY WATER MAIN OR PUBLIC WATER SYSTEM INFRASTRUCTURE

HB LAND DESIGN
106 MISSION CRT. STE 403B
Franklin, TN 37067
615.376.2421
hblanddesign.com

PROPOSED SITE FOR:
MORNING POINTE
COLUMBIA, TENNESSEE

CONNOR L. BALL
REGISTERED
AGRICULTURAL
COMMERCE
TENNESSEE NO. 808
LANDSCAPE ARCHITECT

Job # - 25277
BY: cb

NORTH

L1.1

LANDSCAPE PLAN

PLANTING NOTES:

1. Refer to all written specifications; adhere to Plans and Specifications for all phases of work.
2. Verify all utility locations in the field before work begins. Repair damaged utilities to owners satisfaction at no additional cost.
3. Verify all material quantities on the drawing during bidding and pricing. In the event of a discrepancy, the quantities drawn on the plan will take precedence over the material schedule.
4. All materials are subject to the approval of the Landscape Architect, City, and Owner.
5. Once unloaded from truck, immediately stand all trees up. DO NOT lie the trees down. This will reduce the risk of sunscald.
6. Plants shall meet specifications. Root balls shall meet or exceed size standards as set forth by 'American Standards for Nursery Stock'. Main leaders of all trees shall remain intact.
7. Mulch plant pits and planting beds with specified mulch to the depth indicated on drawings.
8. Prepare all topsoil used in tree, shrub, and seed mixes in accordance with the specifications
9. Discard any material which turns brown or defoliates within 5 days after planting. Replace immediately with approved specified material at no additional cost.
10. Maintain all plant material and lawns until project is accepted in full by the City.
11. Install all plant material in accordance with all local codes and ordinances. Obtain any required permits necessary to complete the work.
12. Trees shall be first quality representatives of their species and shall meet all requirements otherwise stipulated. The Landscape Architect reserves the right to reject plant materials in the field, at the growing location, or at the job site at any time during the project.
13. Test all tree pits for drainage. Any tree pit that holds water for more than 24 hours shall be installed using filter fabric wrapped perforated drainage tube (sloped to low point) and a washed pea gravel pit well drain

LANDSCAPE NOTES:

1. Contractor responsible for locating and protecting all underground utilities prior to digging.
2. Contractor responsible for protecting existing trees from damage during construction as shown on plans.
3. Contractor to install 6" minimum depth of clean, friable topsoil at all planting beds and lawn areas prior to fine grading.
4. Existing grass in proposed planting areas to be killed and removed and area to be hand raked to remove all rocks and debris larger than 1 inch in diameter prior to planting shrubs or laying sod. Landscape contractor to provide fine grading.
5. Any existing grass disturbed during construction to be fully removed, re-graded and replaced. All tire marks and indention to be repaired.
6. Soil to be tested to determine fertilizer and lime requirements and distributed prior to laying sod.
7. Sod to be delivered fresh (cut less than 24 hours prior to arriving on site), laid immediately, rolled, and watered thoroughly immediately after planting. edge of sod adjacent to mulch beds to be shovel cut. All sod to be delivered in largest rolls available. there shall be no gaps between sod joints.
8. The contractor is solely responsible for the establishment of the areas designated as seed to the final acceptance of the owner and city. The contractor shall plan to overseed areas that do not germinate and/or provide adequate coverage.
9. Planting mix to be provided as specified in the landscape specifications.
10. The landscape contractor shall guarantee all plants installed for one full year from date of acceptance. All plants shall be alive and at a vigorous rate of growth at the end of the guarantee period. The landscape contractor shall not be responsible for acts of god or vandalism.
11. Any plant that is determined dead, in an unhealthy or unsightly condition, lost its shape due to dead branches or other symptoms of poor, non-vigorous growth, as determined by the landscape architect, shall be replaced by the landscape contractor at no cost to owner.
12. Prior to installation, the landscape contractor shall inspect the subgrade, general site conditions, verify elevations, utility locations, irrigation, approve topsoil provided by general contractor and observe the site conditions under which the work is to be done. Notify general contractor of any unsatisfactory conditions, and work shall not proceed until such conditions have been corrected.
13. Water all plant material that are newly planted thoroughly twice in first 24 hours and apply mulch immediately.
14. All areas of disturbance outside of landscape beds shall be repaired with turf.
15. Any utility structure, light poles, sign, or other feature may not be added to any required landscape island in such a manner that would displace the required element(s) (trees, shrubs, etc.)

TREE SPECIFICATIONS: ALL TREES SHALL HAVE THE FOLLOWING CHARACTERISTICS:

1. Deciduous trees shall have one dominant single straight trunk with the tip of the leader on the main trunk left intact and the terminal bud on the central leader is at the highest point on the tree.
2. Trees with forked trunks are acceptable if all the following conditions are met:
   a. The fork occurs in the upper 1/3 of the tree.
   b. One fork is less than 2/3 the diameter of the dominant fork.
   c. The top 1/3 of the smaller fork is removed at the time of planting.
3. No branch is greater than 2/3 the diameter of the trunk directly above the branch.
4. The trunk and/or major branches shall not touch
5. Several branches are larger in diameter and obviously more dominant.
6. Branching habit is more horizontal than vertical, and no branches are oriented nearly vertical to the trunk.
7. Branches are evenly distributed around the trunk with no more than one major branch located directly above another and the crown is full of foliage evenly distributed around the tree
8. Crown spread shall look proportional to the tree.
9. NO flush cuts or open trunk wounds or other bark injury
10. Root ball meets all ANSI standards and is appropriately sized

DEFICIENCIES NOT ACCEPTED:

1. Tip dieback on 5% of branches
2. Crown thin/spasely foliated
3. Included bark
4. Major Branches touching
5. Asymmetrical branching

TO AVOID OVERHEAD LIGHT POLE CONFLICTS:

In the event proposed canopy trees are in conflict (within 15') with proposed or existing light pole locations, the landscape contractor shall stop work and contact Heibert+Ball Land Design immediately for coordination and field adjustment

TO AVOID OVERHEAD UTILITY CONFLICTS:

In the event proposed canopy trees are in conflict (within 25') with proposed or existing overhead utility locations, the landscape contractor shall stop work and contact Heibert+Ball Land Design immediately for coordination and field adjustment.

PLANT SCHEDULE

SYMBOL	QTY	COMMON / BOTANICAL NAME	CONT	CAL	SIZE
BUFFER TREES					
•	13	Little Gem Magnolia / Magnolia grandiflora `Little Gem' Full Dense form. Full to base. See tree specifications	B & B		8`-10` HT
PARKING LOT TREES					
	9	Black Diamond Best Red Crape Myrtle / Lagerstroemia indica 'Black Diamond Best Red' 3 Cane. Min. Evenly Branched. Matched. See Tree Specifications	#15 Container	CLUMP	8` HT
W	17	Willow Oak / Quercus phellos 5` Clear Trunk. Evenly Branched. Matched. See Tree Specifications	B & B	2.5"Cal	Per ANSI
Z	6	Village Green Zelkova / Zelkova serrata `Village Green` 5` Clear Trunk. Evenly Branched. Matched. See Tree Specifications	B & B	2.5"Cal	Per ANSI
REPLACEMENT TREES					
AO	5	October Glory Maple / Acer rubrum `October Glory' 5` Clear Trunk. Evenly Branched. Full Symmetrcal Crown. See Tree Specifications.	B & B	2.5"Cal	12`-14` HT
•	9	Columnar European Hornbean / Carpinus betulus `Fastigiata` 3` Clear Trunk. Evenly Branched. See Tree Specifications	B & B	2.5"Cal	10`-12` HT
C	4	Red Fox Katsura Tree / Cercidiphyllum japonicum 'Red Fox' 4` Clear Trunk. Evenly Branched. Full Symmetrcal Crown. See Tree Specifications.	B & B	2.5"Cal	10`-12` HT
•	8	Cherokee Princess Dogwood / Cornus florida `Cherokee Princess` 4' Clear Trunk. Full Symmetrcal Crown See Tree Specifications	B & B	2.5"Cal	10`-12` HT
•	9	Slender Silhouette Sweet Gum / Liquidambar styraciflua 'Slender Silhouette' 4' Clear Trunk. Evenly Branched. Full Symetrical Crown. See Tree Specifications	B & B	2.5"Cal	10`-12` HT
MV	5	Sweet Bay 'Hentry Hicks (Tree Form) / Magnolia virginiana `Henry Hicks` (TF) Single Stem. Full Rounded Head. See Tree Specifications. Matched Specimens	B & B	2.5"Cal	10`-12` HT
Y	23	Yoshino Cherry / Prunus x yedoensis 4` Clear Trunk. Evenly Branched. Matched. See Tree Specifications	B & B	2.5"Cal	12`-14` HT
STREET TREES					
A	6	Summer Red Red Maple / Acer rubrum `HOSR` 5` Clear Trunk. Evenly Branched. Matched. See Tree Specifications	B & B	2.5"Cal	Per ANSI
G	15	Kentucky Coffeetree / Gymnocladus dioica 'Espresso' 5` Clear Trunk. Evenly Branched. Matched. See Tree Specifications	B & B	2.5"Cal	Per ANSI
	4	Black Diamond Blush Crape Myrtle / Lagerstroemia indica 'Black Diamond Blush' 3 Cane. Min. Evenly Branched. Matched. See Tree Specifications	#15 Container	CLUMP	8` HT

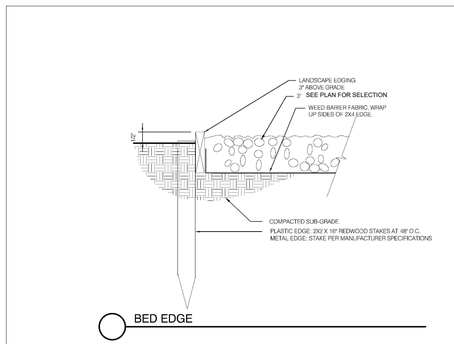
WHEN THE TERMS "POT", "CONTAINER", OR "CALIPER" ARE USED TO DESCRIBE MINIMUM SIZE AT PLANTING, THE ESTABLISHED AMERICAN STANDARD FOR NURSERY STOCK SHALL APPLY. THAT IS: •"ALL CONTAINER GROWN (DECIDUOUS OR CONIFER) SHRUBS SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED AND ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THEY SHALL HAVE TOPS WHICH ARE OF GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION." "AN ESTABLISHED CONTAINER GROWN (DECIDUOUS OR CONIFER) SHRUB SHALL BE A (DECIDUOUS OR CONIFER) SHRUB TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER." •CONTAINER SIZE MAY BE CONVERTED TO MINIMUM HEIGHT/SPREAD AS FOLLOWS:
1 GALLON = 12" TO 15" HEIGHT OR SPREAD
3 GALLON = 15"-18" HEIGHT OR SPREAD
5 GALLON = 18" TO 24" HEIGHT OR SPREAD
7 GALLON = 24" TO 30" HEIGHT OR SPREAD

PLAN NOTES:

1. ACCEPT WHERE SPECIFIED AS ROCK MULCH; ALL LANDSCAPE BEDS SHALL BE NEATLY TRENCHED WITH A BED EDGE AND HAVE 3" MINIMUM DEPTH OF PINE BARK MULCH.
2. ALL TREES AND SHRUBS SHALL BE COORDINATED WITH LIGHTING PLAN PRIOR TO INSTALLATION.
3. ALL AREAS OF DISTURBANCE NOT SPECIFIED AS SOD SHALL BE SEEDED WITH 80% REBEL SUPREME, 20% MERION BLUEGRASS @ 8#/1,000 SF UNLESS OTHERWISE NOTED ON GRADING PLANS
4. ANY CHANGES TO TREE SPECIES OR LOCATIONS MAY REQUIRE THE CONTRACTOR TO PROVIDE AN AS-BUILT OF THE INSTALLED LANDSCAPE AND POSSIBLY DELAY APPROVAL OF THE SITE BY THE CITY OF COLUMBIA

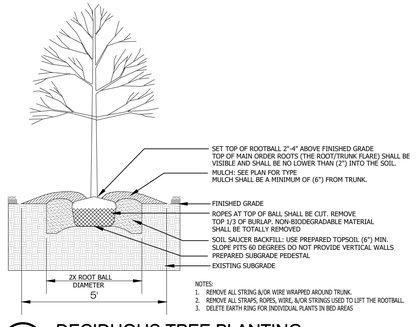
PLANT SCHEDULE

SYMBOL	CODE	QTY	COMMON / BOTANICAL NAME	HT / CONT.
SHRUBS				
	AE2	68	Radiance Abelia / Abelia x grandiflora `Radiance' Full; Dense; Well Rooted	#3 Container
	AZ	29	Northern Lights Deciduous Azalea / Azalea x `Mandarin Lights' Full. Heavy. Well Branched	#3 Container
	BGV	93	Green Velvet Boxwood / Buxus x 'Green Velvet' Full; Dense Form. Matched	#3 Container
	BI	29	Green Mountain Boxwood / Buxus x `Green Mountain' Full; Dense Form. Unsheered	#5 Container
	CE	43	Pearl Glamt Beautyberry / Callicarpa x 'NCCX2' Full; Heavy; Well Rooted, Matching	#1 Container
	CS	23	Winters Snowman Camellia / Camellia x 'Winter's Snowman' Full; Dense; Well Rooted	#5 Container
	CH	106	Duke`s Garden Plum Yew / Cephalotaxus harringtonia `Duke`s Garden' Full; Heavy; Well Rooted; Matching	#3 Container
	CC	2	Harry Lauder's Walking Stick / Corylus avellana 'Contorta' Full. Heavy. Well Branched.	#7 Container
	DV	92	Vintage Jade Distylium / Distylium x Vintage Jade Full; Dense; Well Rooted	#3 Container
	FG	15	Blue Shadow Fothergilla / Fothergilla x intermedia Blue Shadow Full; Dense; Well Rooted	#3 Container
	HA	138	Annabelle Hydrangea / Hydrangea arborescens `Annabelle' Full; Dense Form. Matched	#3 Container
	HY	28	Limelight Prime® Panicle Hydrangea / Hydrangea paniculata 'SMNHPPH' Full; Well Rooted	#7 Container
	HQ	14	Alice Oakleaf Hydrangea / Hydrangea quercifolia `Alice' Full; Heavy; Well Rooted, Matching	#3 Container
	HM	12	Munchkin Oakleaf Hydrangea / Hydrangea quercifolia `Munchkin' Full; Heavy; Well Rooted; Matching	#3 Container
	ID2	43	Dwarf Burford Holly / Ilex cornuta `Burfordii Nana' Full; Dense Form	30"-36" HT
	IC	48	Soft Touch Holly / Ilex cornuta `Soft Touch' Full; Dense Form	#3 Container
	IV4	54	Little Henry Sweetspire / Itea virginica `Little Henry' Full; Dense Form	#3 Container
	IV3	92	Merlot Sweetspire / Itea virginica `Merlot' Full. Heavy. Well Branched	18" HT
	JV	82	Old Gold Juniper / Juniperus chinensis 'Old Gold' Full. Heavy. Well Branched.	#3 Container
	JO	59	Grey Owl Juniper / Juniperus virginiana `Grey Owl' Full. Heavy. Well Branched.	#3 Container
	JO2	6	Stonehenge Skinny Yew / Taxus 'Stonehenge Skinny' Full; Dense Form.	#3 Container
	VM	51	Spice Baby™ Koreanspice Viburnum / Viburnum carlesii 'SMVCB'	#5 Container
	VP	30	Prague Viburnum / Viburnum x pragense Full; Dense Form. Matched	#5 Container
GRASSES				
	CA	42	Karl Foersters Feather Reed Grass / Calamagrostis x acutiflora `Karl Foerster' Full; Dense; Well Rooted	#1 Container
	LB2	172	Big Blue Lilyturf / Liriope muscari `Big Blue' Full; Dense; Well Rooted	1 Quart Pot
	PV2	32	Blue Switch Grass / Panicum virgatum `Heavy Metal' Full; Dense; Well Rooted	#1 Container
	PV	133	Shenandoah Switch Grass / Panicum virgatum `Shenandoah' Full; Dense; Well Rooted	#1 Container
PERENNIALS				
	DE	83	Autumn Fern / Dryopteris erythrosora `Brilliance' Full; Heavy; Well Rooted; Matching	#1 Container
	EM	48	Phantom Joe Pye Weed / Eupatorium maculatum 'Phantom' Full; Dense; Well Rooted; Matching	#1 Container
	HE2	83	Lenten Rose / Helleborus 'Ice n Roses White' Full; Heavy; Well Rooted;	#1 Container
	HG	29	Autumn Bride Heuchera / Heuchera 'Autumn Bride' Full; Dense; Well Rooted	#1 Container
	HR	93	Royal Standard Hosta / Hosta 'Royal Standard' Full; Heavy; Well Rooted,	#2 Container
	IR	66	Southern Blue Flag Iris / Iris virginica Full; Dense; Well Rooted	#1 Container
	NW	25	Junior Walker's Catmint / Nepeta x faassenii 'Novanepjun' Full; Dense Form. Matched	#1 Container
	RF	24	Goldsturm Black-eyed Susan / Rudbeckia fulgida `Goldsturm' Full; Dense; Well Rooted	#1 Container
SYMBOL	CODE	QTY	COMMON / BOTANICAL NAME	CONT
GROUND COVERS				
	RR3	844 sf	Dry Creek Bed Locally sourced Colorado River Rock. Color: Rocky Mountain Mix of 6"-10" Rock (40%) and 3"-6" Rock (60%) And 7 Large Boulders Installed over Weed Fabric with Steel Bed Edge	Space as Noted
	RR2	12,535 sf	River Rock Mulch 3" Depth of locally sourced 2"-5" Tennessee River Stone Mulch. Install over weed fabric and steel bed edge in all areas other than Focal Points. Focal points to be installed construced per detail on Civil Sheets	Space as Noted
	SC3	254	Selection of Perennial, Annuals, and Grasses / Seasonal Color Install an appealing layered look.	4"pot@
	SC	4,493 sf	Slate Chips Mulch 3"-4" Depth of locally sourced slate chips installed over weed fabric and bound by steel bed edging.	Space as Noted



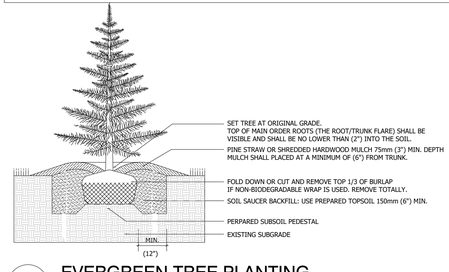
BED EDGE

STONE MULCH BEDS ARE TO BE DELINEATED WITH 5 ½" PLASTIC LANDSCAPE EDGING, STAKED AT 3' INTERVALS.
FOLLOW MANUFACTURERS INSTALLATION DIRECTIONS
LANDSCAPE CONTRACTOR TO SUPPLY AND INSTALL A PERVIOUS WEED BARRIER (DEWITT, DUPONT OR APPROVED EQUAL)
IN ACCORDANCE WITH MANUFACTURER'S
INSTRUCTIONS WITHIN ALL MULCH BEDS. ALL WEED BARRIER WILL BE OVERLAPPED A MINIMUM OF 6" AT ALL SEAMS.
AT PLANT LOCATIONS, BARRIER SHOULD BE CUT IN AN "X" PATTERN SO TO ACCOMMODATE ROOT BALL AND REPLACED AFTER PLANT HAS BEEN INSTALLED



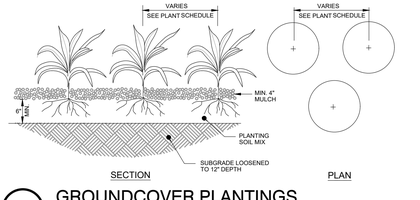
NOTES:
1. REMOVE ALL STRING &/OR WIRE WRAPPED AROUND TRUNK.
2. REMOVE ALL STRAPS, ROPES, WIRE, &/OR STRINGS USED TO LIFT THE ROOTBALL.
3. DELETE EARTH RING FOR INDIVIDUAL PLANTS IN BED AREAS

DECIDUOUS TREE PLANTING



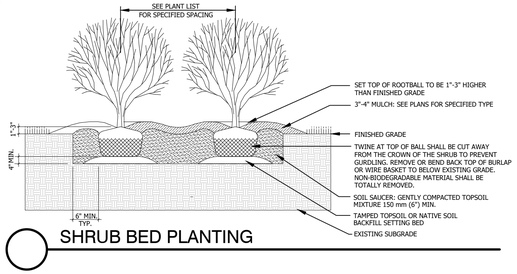
EVERGREEN TREE PLANTING

P-NO-12



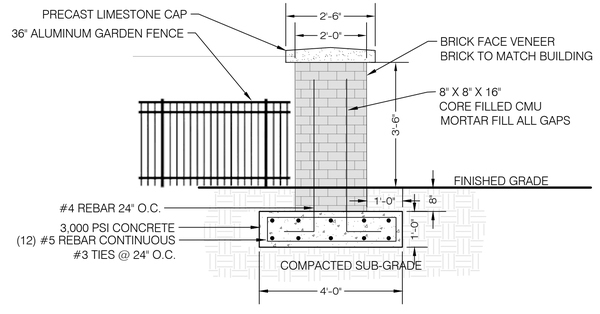
GROUNDCOVER PLANTINGS

GROUNDCOVER, GRASSES, AND PERENNIALS



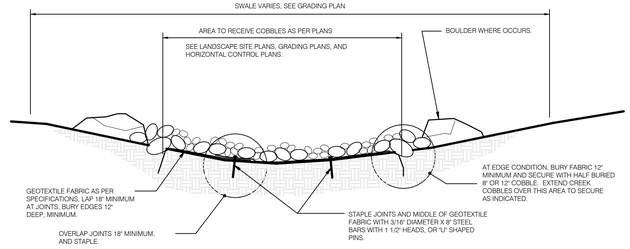
SHRUB BED PLANTING

Know what's **below.** **Call** before you dig.



B 42" COLUMN DETAIL & GARDEN FENCE

1/2" = 1'-0"



A DRY CREEK BED INSTALLATION

1/2" = 1'-0"

LAND DESIGN
106 MISSION CRT. STE 403B
Franklin, TN 37067
615.376.2421
hblanddesign.com

PROPOSED SITE FOR:
MORNING POINTE
COLUMBIA, TENNESSEE

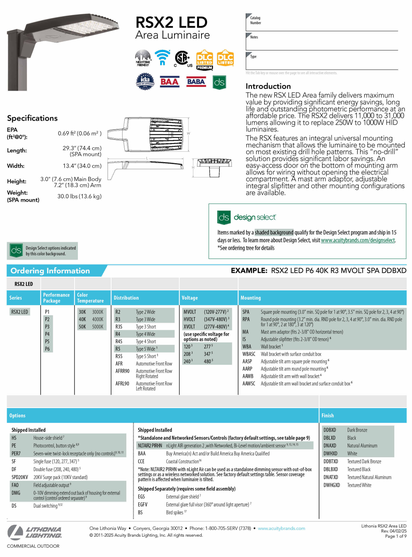
CONNOR L. BALL
REGISTERED
ABRICUS, TN
LANDSCAPE ARCHITECT

Job # - 25277
BY: cb

NORTH

L1.1

LANDSCAPE PLAN



RSX2 LED
Area Luminaire

Introduction
The new RSX LED Area family delivers maximum value by providing significant energy savings, long life and outstanding photometric performance at an affordable price. The RSX2 delivers 11,000 to 31,000 lumens allowing it to replace 250W to 1000W HID luminaires.

The RSX features an integral universal mounting mechanism that allows the luminaire to be mounted on most existing drill hole patterns. This "no-drill" solution provides significant labor savings. An easy-access door on the bottom of mounting arm allows for wiring without opening the electrical compartment. A mast arm adaptor, adjustable integral slipfitter and other mounting configurations are available.

Specifications
EPA (ft²@0°): 0.69 ft² (0.06 m²)
Length: 29.3" (74.4 cm) (SPA mount)
Width: 13.4" (34.0 cm)
Height: 3.0" (7.6 cm) Main Body, 7.2" (18.3 cm) Arm
Weight: (SPA mount) 30.0 lbs (13.6 kg)

design select
Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect.
*See ordering tree for details

Design Select options indicated by this color background.

Ordering Information
EXAMPLE: RSX2 LED P6 40K R3 MVOLT SPA DDBXD

RSX2 LED

Series	Performance Package	Color Temperature	Distribution	Voltage	Mounting
RSX2 LED	P1	30K 3000K	R2 Type 2 Wide	MVOLT (120V-277V)*	SPA Square pole mounting (3.0" min. SQ pole for 1 at 90°, 3.5" min. SQ pole for 2, 3, 4 at 90°)
	P2	40K 4000K	R3 Type 3 Wide	HVOLT (347V-480V)*	RPA Round pole mounting (3.2" min. dia. RND pole for 2, 3, 4 at 90°, 3.0" min. dia. RND pole for 1 at 90°, 2 at 180°, 3 at 120°)
	P3	50K 5000K	R3S Type 3 Short	XVOLT (277V-480V)*	WA Mast arm adaptor (fits 2-3/8" OD horizontal tenon)
	P4		R4 Type 4 Wide	Use specific voltage for options as noted)	IS Adjustable slipfitter (fits 2-3/8" OD tenon)*
	P5		R4S Type 4 Short	120* 277*	WBA Wall bracket*
	P6		R5S Type 5 Short*	208* 347*	WBASC Wall bracket with surface conduit box
			AFR Automotive Front Row	240* 480*	AASP Adjustable tilt arm square pole mounting*
			AFRR90 Automotive Front Row Right Rotated		AARP Adjustable tilt arm round pole mounting*
			AFRL90 Automotive Front Row Left Rotated		AABB Adjustable tilt arm with wall bracket*
					AARSC Adjustable tilt arm wall bracket and surface conduit box*

Options	Finish
Shipped Installed	DDBXD Dark Bronze
HS House-side shield*	DBLBD Black
PE Photocontrol, button style**	DNAXD Natural Aluminum
PEBT Seven-wire twist-lock receptacle only (no control)**	DWHXD White
SF Single fuse (120, 277, 347)	DDBTXD Textured Dark Bronze
DF Double fuse (208, 240, 480)	DBLBXD Textured Black
SPD20KV 20KV Surge pack (10kV standard)	DNATXD Textured Natural Aluminum
FAO Field adjustable output*	DWHGXD Textured White
DMG 0-10V dimming extend out back of housing for external control (control ordered separate)*	
DS Dual switch(es)***	
Shipped Installed	
*Standalone and Networked Sensors, Controls (factory default settings, see table page 9)	
NLTAIR2 PIRHN Night time operation, multi-functional, BLE enabled motion & ambient sensor (see page 7)***	
BAA Buy America's Act and/or Build America Buy America Qualified	
CCE Central Construction*	
*Note: NLTAIR2 PIRHN with eLight Kit can be used as a standalone dimming sensor with out-of-box settings or as a wireless networked solution. See factory default settings table. Sensor coverage pattern is affected when luminaire is tilted.	
**Shipped Separately (require same field assembly)	
EGS External glare shield*	
EGFV External glare full visor (360° around light aperture)*	
BS Bird spikes*	

Accessories
Ordered and shipped separately.
KBA8 B Anchor bolts for KBA8 LED*

NOTES
1 Only available in the 12C, ASY version.
2 Only available in the 12C, 35K version.
3 Only available with ASY, KAMELEON version.
4 Not available with ELCW.
5 Not available with MVOLT. Long line voltage from 120-277V (50/60 Hz). Specify 120, 208, 240 or 277 options only when ordering with fusing (SF, DF options), or photocontrol (PE option).
6 Not available with 347V. Not available with fusing. Not available with ELCW option.
7 Single fuse (SF) requires 120, 277, or 347 voltage option. Double fuse (DF) requires 208, 240, or 480 voltage.
8 KBA8 LO not available with LHA84 option.
9 Stripping is available only in the colors listed.

LITHONIA LIGHTING
COMMERCIAL OUTDOOR
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Lithonia RSX2 Area LED
Rev. 04/02/25
Page 1 of 9

2 TYPES SP1, SP1D, & SP2
NOT TO SCALE



KBA8 LED
LED Specification Bollard

Introduction
The KBA8 Bollard is a stylish, fully integrated LED solution for walkways. It features a sleek, modern design and is carefully engineered to provide long-lasting, energy-efficient lighting with a variety of optical and control options for customized performance.

With an expected service life of over 20 years of nighttime use and up to 70% in energy savings over comparable 100W metal halide luminaires, the KBA8 Bollard is a reliable, low-maintenance lighting solution that produces sites that are exceptionally illuminated.

Specifications
Diameter: 8" Round (203.2 mm)
Height: 42" (106.7 mm)
Weight (max): 27 lbs (12.25 kg)

Ordering Information
EXAMPLE: KBA8 LED 16C 700 40K SYM MVOLT DDBXD

KBA8 LED

Series	LEDs	Drive current	Color temperature	Distribution	Voltage	Control options
KBA8 LED	Asymmetric: 12C 12 LEDs*	350 350 mA	30K 3000 K	ASY Asymmetric*	MVOLT*	Shipped installed
		450 450 mA*	40K 4000 K	SYM Symmetric*	120*	PE Photoelectric cell, button type
	Symmetric: 16C 16 LEDs*	530 530 mA	50K 5000 K		208*	DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)
		700 700 mA	AMBPC Amber phosphor converted		240*	ELCW Emergency battery backup, CA 1 Hr (0.9 lmn/cm)plate*
			AMBLW Amber limited wavelength**		277*	
					347*	

Other options	Finish (required)
Shipped installed	DNAYXD White
SF Single fuse (120, 277, 347V) *	DNAXD Natural aluminum
DF Double fuse (208, 240V) *	DDBXD Dark bronze
HS4 24" overall height	DBLXD Black
HS8 32" overall height	DDBTXD Textured dark bronze
HS96 36" overall height	DBLBXD Textured black
PIR Ground-fault fixture outlet	DNATXD Textured natural aluminum
LHA8 Without anchor bolts (3 bolt base)	DWHGXD Textured white
LHA84 4 bolt retrofit base without anchor bolts *	

Accessories
Ordered and shipped separately.
KBA8 B Anchor bolts for KBA8 LED*

NOTES
1 Only available in the 12C, ASY version.
2 Only available in the 16C, SYM version.
3 Only available with ASY, KAMELEON version.
4 Not available with ELCW.
5 Not available with MVOLT. Long line voltage from 120-277V (50/60 Hz). Specify 120, 208, 240 or 277 options only when ordering with fusing (SF, DF options), or photocontrol (PE option).
6 Not available with 347V. Not available with fusing. Not available with ELCW option.
7 Single fuse (SF) requires 120, 277, or 347 voltage option. Double fuse (DF) requires 208, 240, or 480 voltage.
8 KBA8 LO not available with LHA84 option.
9 Stripping is available only in the colors listed.

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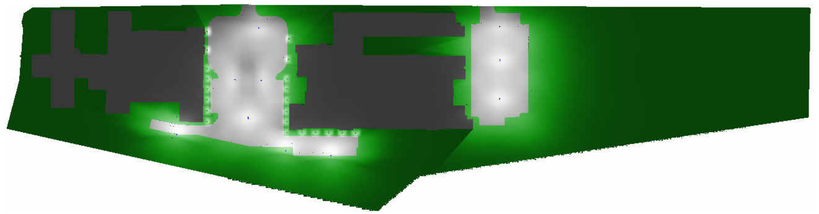
KBA8-LED
Rev. 11/21/22

3 TYPE BD1
NOT TO SCALE

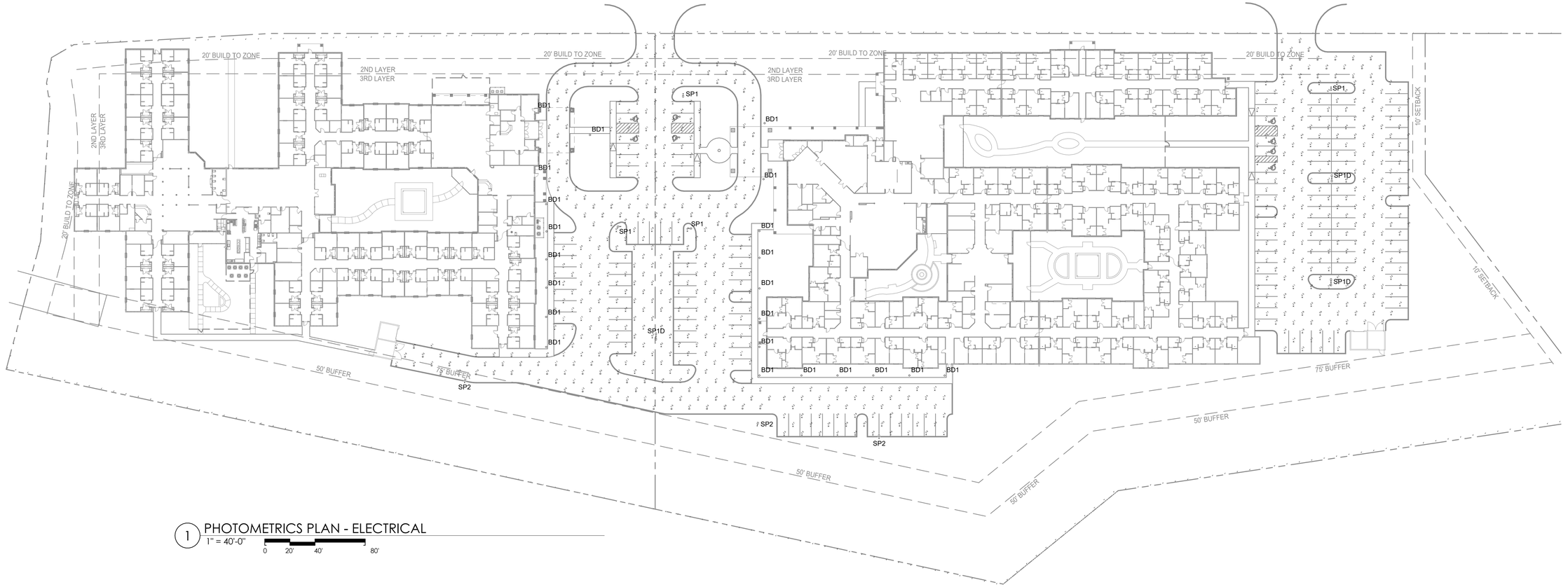
Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
DRIVE 2	◇	4.0 fc	12.5 fc	0.9 fc	13.9:1	4.4:1
DRIVE 3	◇	1.1 fc	3.1 fc	0.1 fc	31.0:1	11.0:1
PARKING 1	+	2.3 fc	5.5 fc	1.0 fc	5.5:1	2.3:1
PARKING 2	+	3.1 fc	9.2 fc	1.0 fc	9.2:1	3.1:1
PARKING 3	+	4.8 fc	12.3 fc	1.3 fc	9.5:1	3.7:1
PARKING 4	+	3.6 fc	9.7 fc	1.0 fc	9.7:1	3.6:1
PROPERTY LINE	×	0.0 fc	0.2 fc	0.0 fc	N/A	N/A
DRIVE 1	◇	1.6 fc	6.4 fc	0.1 fc	64.0:1	16.0:1

SITE LIGHTING FIXTURE SCHEDULE

TYPE	MANUFACTURER	MODEL	VOLTAGE	INPUT WATTS	CCT/LUMENS	MOUNTING	DESCRIPTION
BD1	LITHONIA	KBA8-LED-12C-350-50K-ASY	120	16	5000K/1650	BOLLARD	LED BOLLARD, DARK BRONZE
SP1	LITHONIA	RSX2-LED-P6-50K-R3-EGS	208	244	5000K/30267	POLE	SITE POLE LIGHT (30' MOUNTING HEIGHT) DARK BRONZE
SP1D	LITHONIA	(2) RSX1-LED-P4-50K-R3	208	488	5000K/60534	POLE	SITE POLE LIGHT (30' MOUNTING HEIGHT) DARK BRONZE, DUAL HEAD
SP2	LITHONIA	RSX2-LED-P6-50K-AFR	208	244	5000K/30332	POLE	SITE POLE LIGHT (30' MOUNTING HEIGHT) DARK BRONZE



4 PHOTOMETRIC RENDER
NOT TO SCALE



1 PHOTOMETRICS PLAN - ELECTRICAL
1" = 40'-0"
0 20' 40' 80'

REVISIONS

pmc Consulting Engineers
www.powermgmt.com
PROJECT NO. 25097
MIM / MIM

699 DALLAS ROAD
CHATTANOOGA, TN 37405
(423) 265-3272
FAX (423)266-5502

NEUHOFF TAYLOR ARCHITECTS

SITE DEVELOPMENT PLANS FOR
MORNING POINTE
RUTHERFORD LANE
COLUMBIA, TENNESSEE

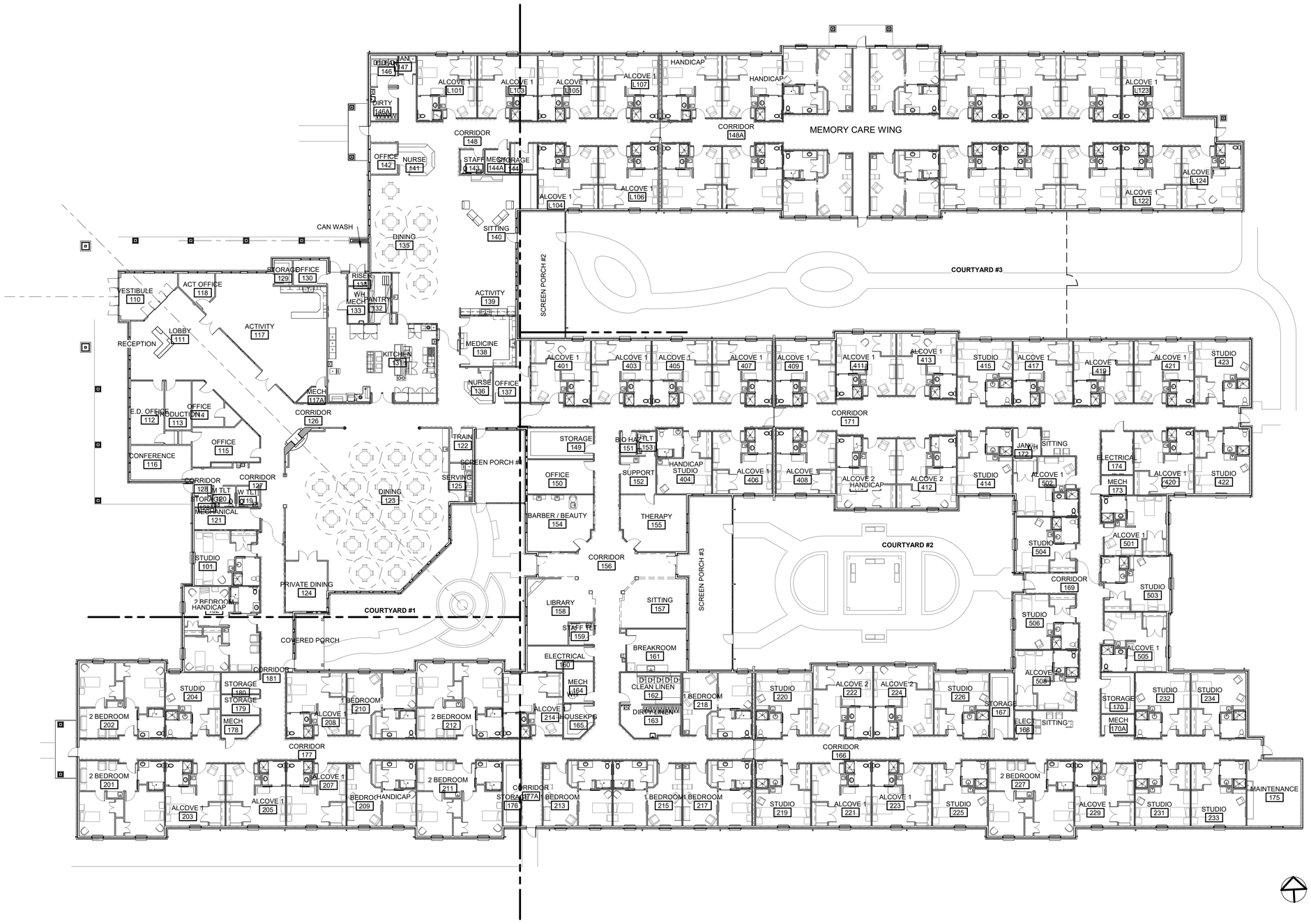
MATTHEW IAN MCDANIEL
REGISTERED ENGINEER
No. 131293
STATE OF TENNESSEE
11/17/2025

PROJECT #
25047

DATE
11-17-25

DRAWING NAME
PHOTOMETRICS PLAN - ELECTRICAL

SHEET #
EP1.0



1 FLOOR PLAN
1/16" = 1'-0"

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CHATTANOOGA, TN 37405
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FAX (423)266-5502

NEUHOFF TAYLOR ARCHITECTS

REVISIONS

MORNING POINTE OF COLUMBIA
ASSISTED LIVING AND MEMORY CARE FACILITY
RUTHERFORD LANE
COLUMBIA, TENNESSEE

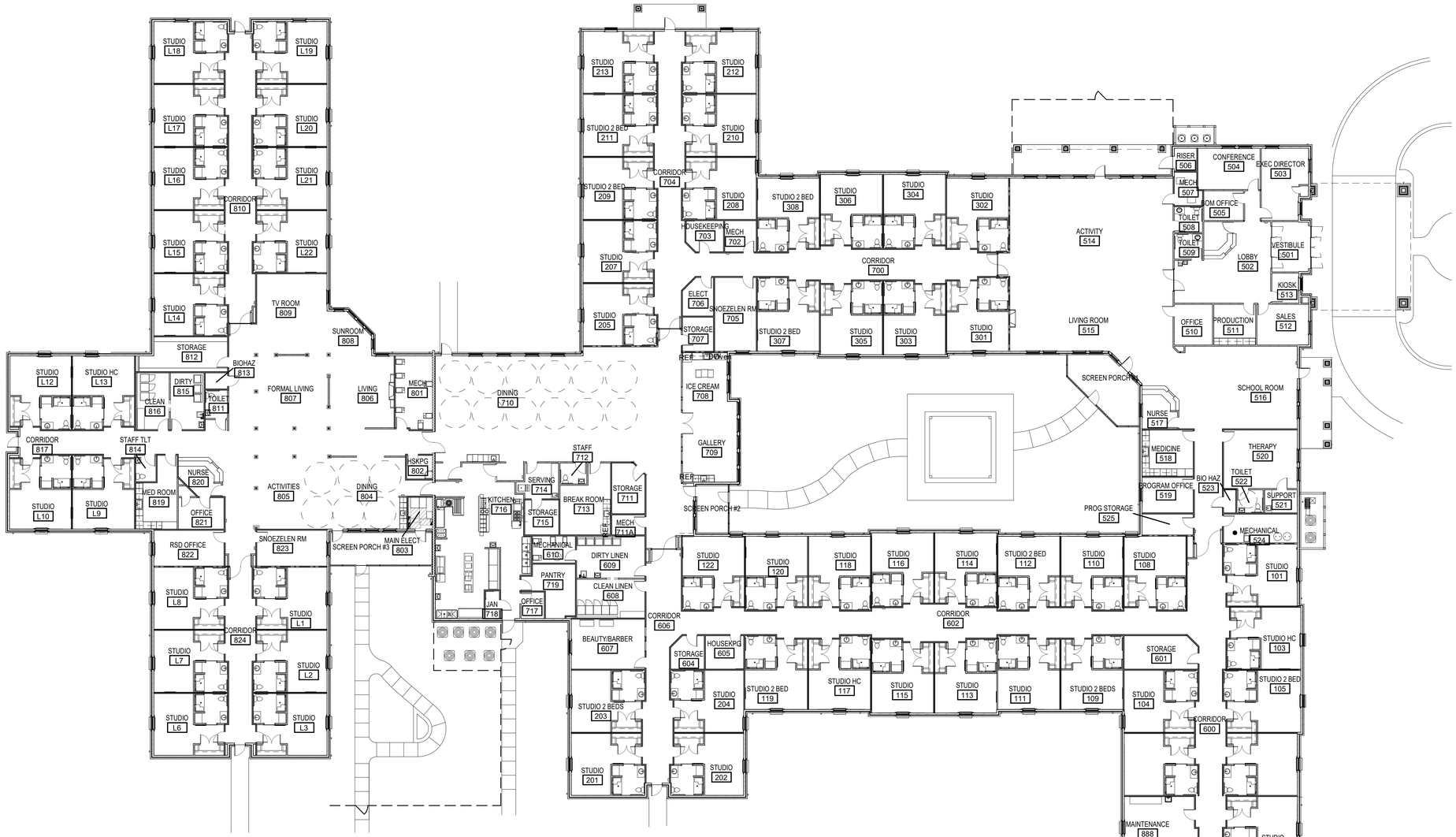
RANDALL P. TAYLOR REGISTERED ARCHITECT STATE OF TENNESSEE 17 25

PROJECT # 25049

DATE 11-17-25

DRAWING NAME FLOOR PLAN

SHEET # A1



1 FLOOR PLAN
1/16" = 1'-0"

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FAX (423)266-5502

NEUHOFF TAYLOR ARCHITECTS

THE LANTERN AT MORNING POINTE
ALZHEIMER'S CENTER OF EXCELLENCE COLUMBIA

RUTHERFORD LANE
COLUMBIA, TN

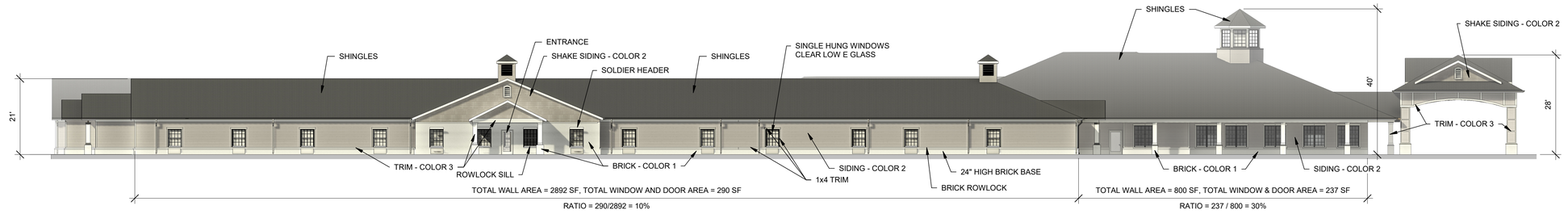
RANDALL P. TAYLOR
REGISTERED ARCHITECT
STATE OF TENNESSEE
NO. 19021
11/7/25

PROJECT #
25048

DATE
11-17-25

DRAWING NAME
FLOOR PLAN

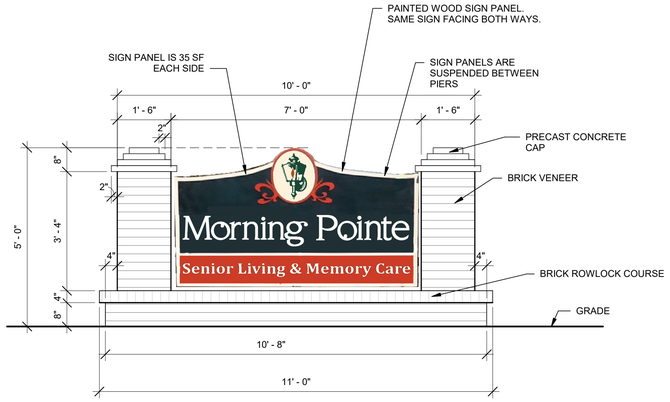
SHEET #
A1



2 NORTH (FRONTAGE) ELEVATION
1/16" = 1'-0"



1 SOUTH ELEVATION
1/16" = 1'-0"



5 MORNING POINTE SIGN
1/2" = 1'-0"



3 WEST ELEVATION
1/16" = 1'-0"



4 EAST ELEVATION
1/16" = 1'-0"

REVISIONS

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CHATTANOOGA, TN 37405
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NEUHOFF TAYLOR ARCHITECTS

MORNING POINTE OF COLUMBIA
ASSISTED LIVING AND MEMORY CARE FACILITY

RUTHERFORD LANE
COLUMBIA, TENNESSEE

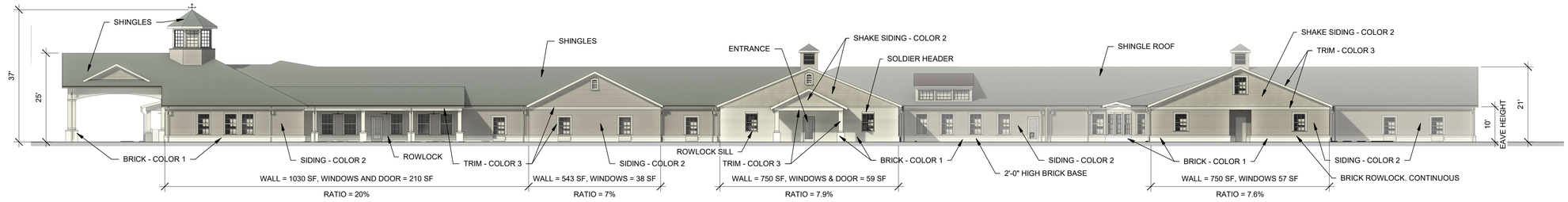
RANDALL P. TAYLOR
REGISTERED ARCHITECT
No. 19021
STATE OF TENNESSEE
11/17/25

PROJECT #
25049

DATE
11-17-25

DRAWING NAME
ELEVATIONS

SHEET #
A2



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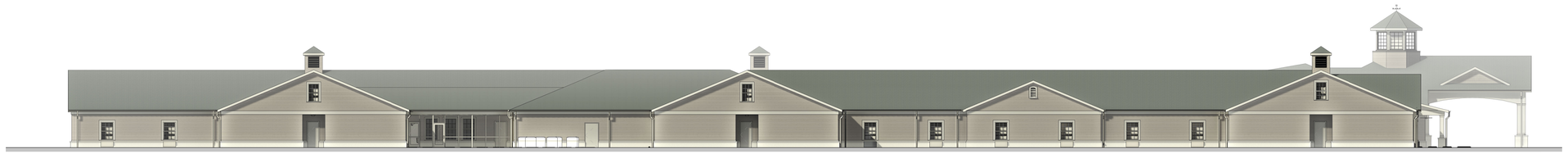
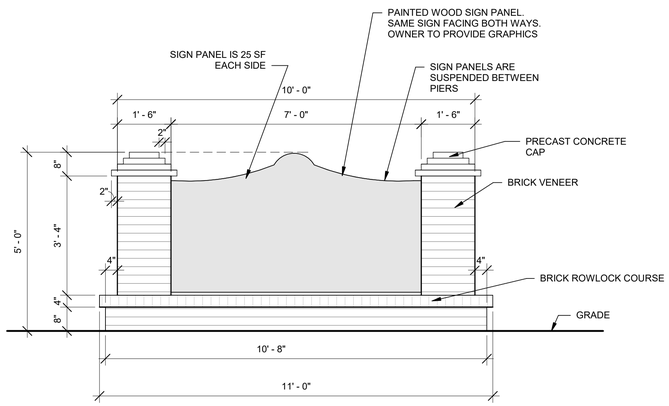
1/16" = 1'-0"



2 SOUTH ELEVATION
1/16" = 1'-0"



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1/2" = 1'-0"



3 WEST ELEVATION
1/16" = 1'-0"



4 EAST ELEVATION
1/16" = 1'-0"

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THE LANTERN AT MORNING POINTE
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RUTHERFORD LANE
COLUMBIA, TN

RANDALL P. TAYLOR
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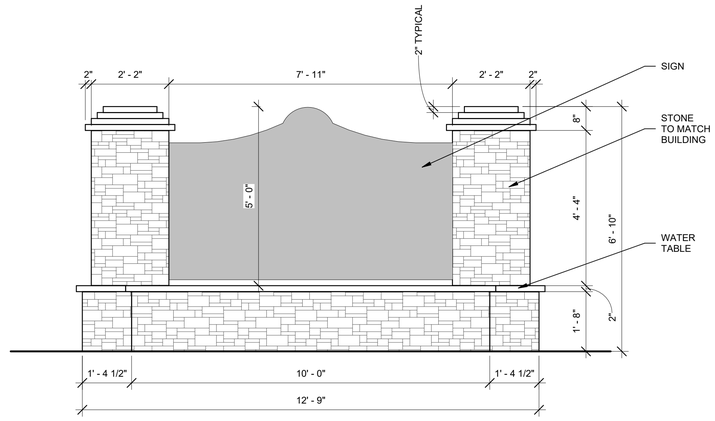
No. 18021
STATE OF TENNESSEE
11/17/25

PROJECT #
25048

DATE
11-17-25

DRAWING NAME
ELEVATIONS

SHEET #
A2



1 MONUMENT SIGN ELEVATION
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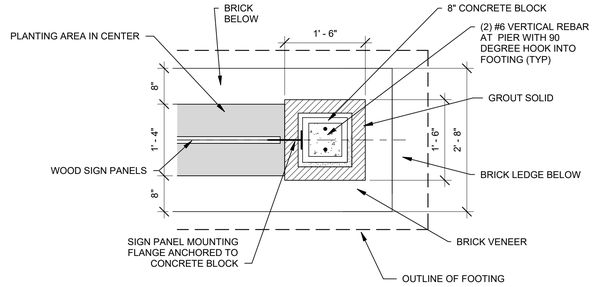
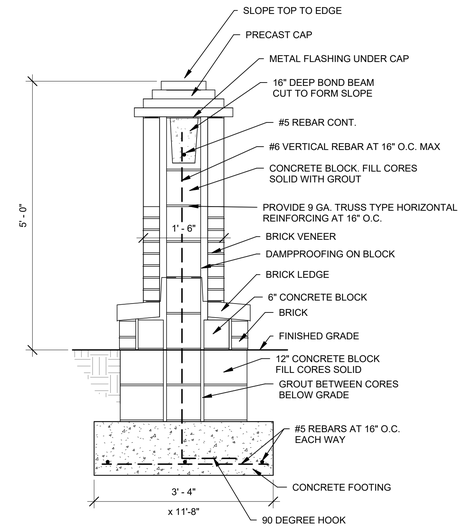


2 PLAN DETAIL AT PIER
3/4" = 1'-0"



3 SECTION
3/4" = 1'-0"

REVISIONS

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FAX (423)266-5502

NEUHOFF TAYLOR ARCHITECTS

MORNING POINTE OF COLUMBIA
ASSISTED LIVING AND MEMORY CARE FACILITY
200 RUTHERFORD LANE
COLUMBIA, TENNESSEE

RANDALL P. TAYLOR
REGISTERED ARCHITECT
No. 19021
STATE OF TENNESSEE
4/14/26

PROJECT #
25049

DATE
4-14-26

DRAWING NAME
EXTERIOR SIGNS

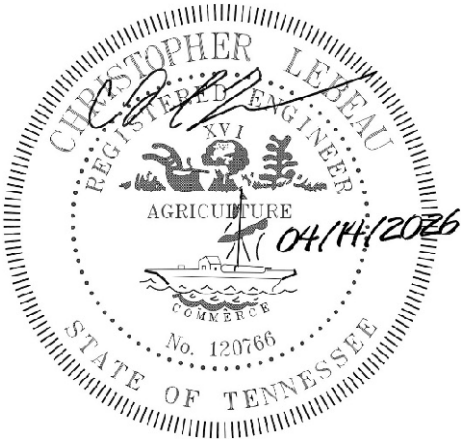
SHEET #
A7.2

FULMER LUCAS

DRAINAGE REPORT

FOR

MORNING POINTE
FL PROJECT #1421-01



Enclosures:

- Drainage Area Maps
- Hydraflow Storm Sewers Report
- HydroCAD Report
- USDA Web Soil Survey

PROJECT DESCRIPTION/NARRATIVE:

Proposed work for this project consists of the construction of an assisted living and memory care campus at the intersection of Westfield Drive and Rutherford Lane. The pre-developed condition consists of a weighted average curve number of 51.1, and the post-developed condition will see an increase of curve number to 70.5.

Underground detention, surface detention and Focal Point Units have been proposed to satisfy the target runoff reduction requirement, as well as to assist in attenuating the peak flow. The pre-developed and routed peak flows have been compiled in the table below:

Design Storm	Pre-Outfall 1 (CFS)	Post-Outfall 1 Routed (CFS)*	Pre-Outfall 2 (CFS)	Post-Outfall 2 Routed (CFS)*	Pre-Outfall 3 (CFS)	Post-Outfall 3 Routed (CFS)*
1-YEAR	0.52	2.77	0.08	0.00	0.18	2.03
2-YEAR	1.17	4.16	0.45	0.01	0.66	3.34
5-YEAR	2.27	5.99	0.91	0.07	1.64	5.36
10-YEAR	3.28	7.73	3.69	0.30	2.63	7.16
25-YEAR	4.82	10.10	6.81	0.79	4.19	9.83
50-YEAR	6.11	11.90	9.67	1.28	5.54	12.04
100-YEAR	7.52	13.75	12.95	1.86	7.04	14.43

* ”Post-Q Routed” contains both the peak flow out of the treated areas, and the peak flow of the bypassed area.

Design Storm	Pre-Development Cumulative Flows (CFS) From Property	Post-Development Routed Cumulative Flows (CFS) From Property
1-YEAR	0.88	4.80
2-YEAR	2.65	7.51
5-YEAR	6.76	11.42
10-YEAR	11.09	15.19
25-YEAR	18.19	20.72
50-YEAR	24.44	25.22
100-YEAR	31.46	30.04

Cumulative flows were calculated to compare the overall flows leaving the property. The USDA soil survey reflects type A soils, which have low runoff potential and high infiltration rates. Due to the low flow rates leaving the property in pre-development condition, it is not practical to meet the pre-development flows with the post-development conditions. The applicant would like to discuss further with the City to determine alternative methods for stormwater infrastructure on this property.

Drainage Area Maps

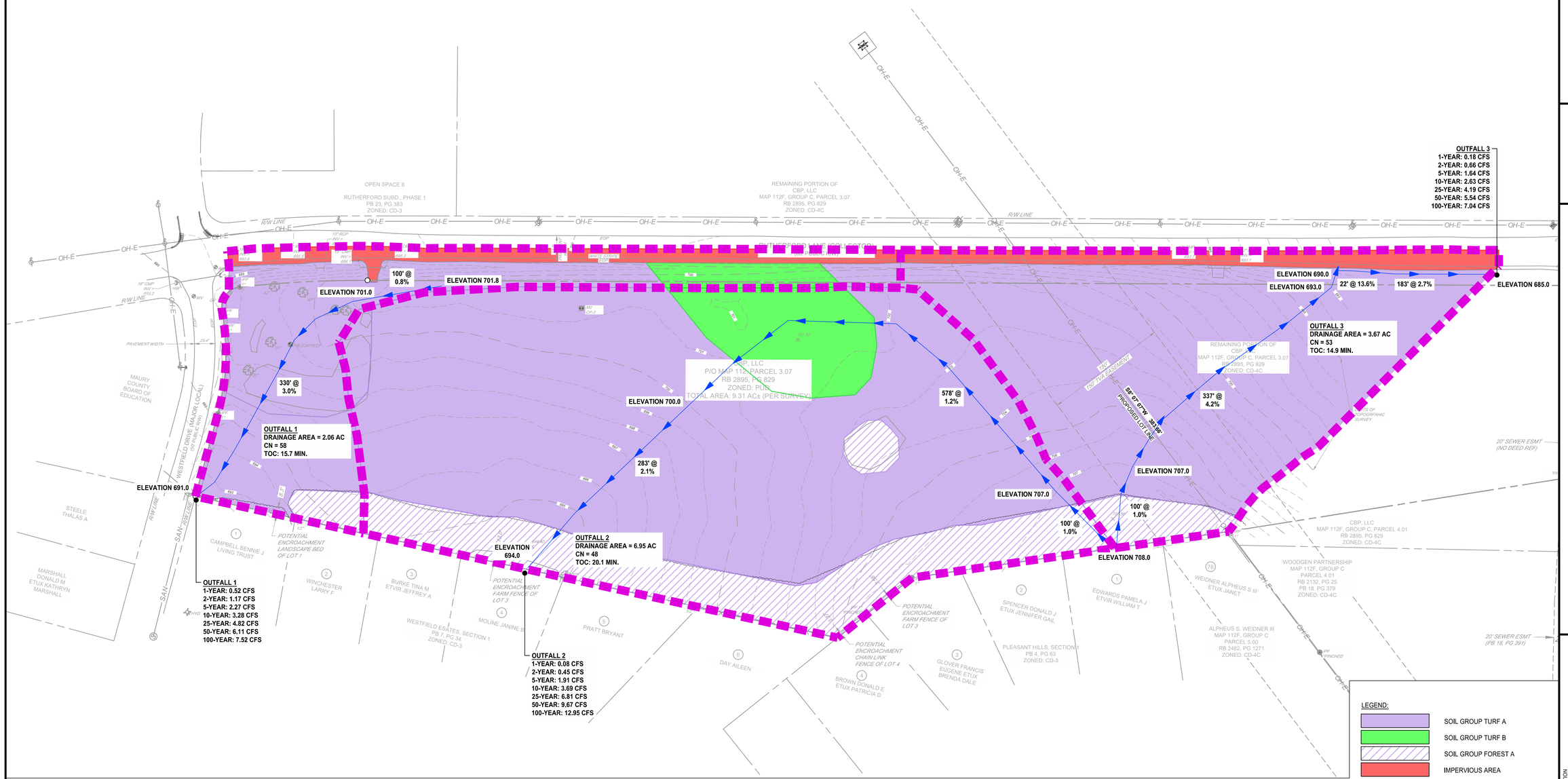
Know what's **below.**
Call before you dig.

FULMER LUCAS
2002 RICHARD JONES RD - SUITE B200
NASHVILLE, TENNESSEE 37215
INFO@FULMERLUCAS.COM - (615) 345-3770

SITE DEVELOPMENT PLANS FOR:

MORNING POINTE

RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401



CUMULATIVE FLOWS FOR THE PROPERTY

1-YEAR FLOW = (0.52 + 0.08 + 0.28) CFS = 0.88 CFS
2-YEAR FLOW = (1.17 + 0.45 + 1.03) CFS = 2.65 CFS
5-YEAR FLOW = (2.27 + 1.91 + 2.58) CFS = 6.76 CFS
10-YEAR FLOW = (3.28 + 3.69 + 4.12) CFS = 11.09 CFS
25-YEAR FLOW = (4.82 + 6.81 + 6.56) CFS = 18.19 CFS
50-YEAR FLOW = (6.11 + 9.67 + 8.66) CFS = 24.44 CFS
100-YEAR FLOW = (7.52 + 12.95 + 10.99) CFS = 31.46 CFS

SURVEY INFO
PROVIDED BY: M2 GROUP, LLC
DATUM: TENNESSEE STATE PLANE (NAD83 & NAVD 88)

DR.	DATE	DESCRIPTION
JEL	04/20/2026	FINAL PUD MASTER PLAN

OVERALL EXISTING DRAINAGE AREA MAP

PRE

1421-01 MORNING POINTE

Monday, April 20, 2026
User: Mandy Stanfield
I:\1421-Morning Pointe\01 - Columbia\02 - Civil\Exhibits\1421-01_Drainage_EXISTING.dwg

Know what's **below.**
Call before you dig.

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SITE DEVELOPMENT PLANS FOR:
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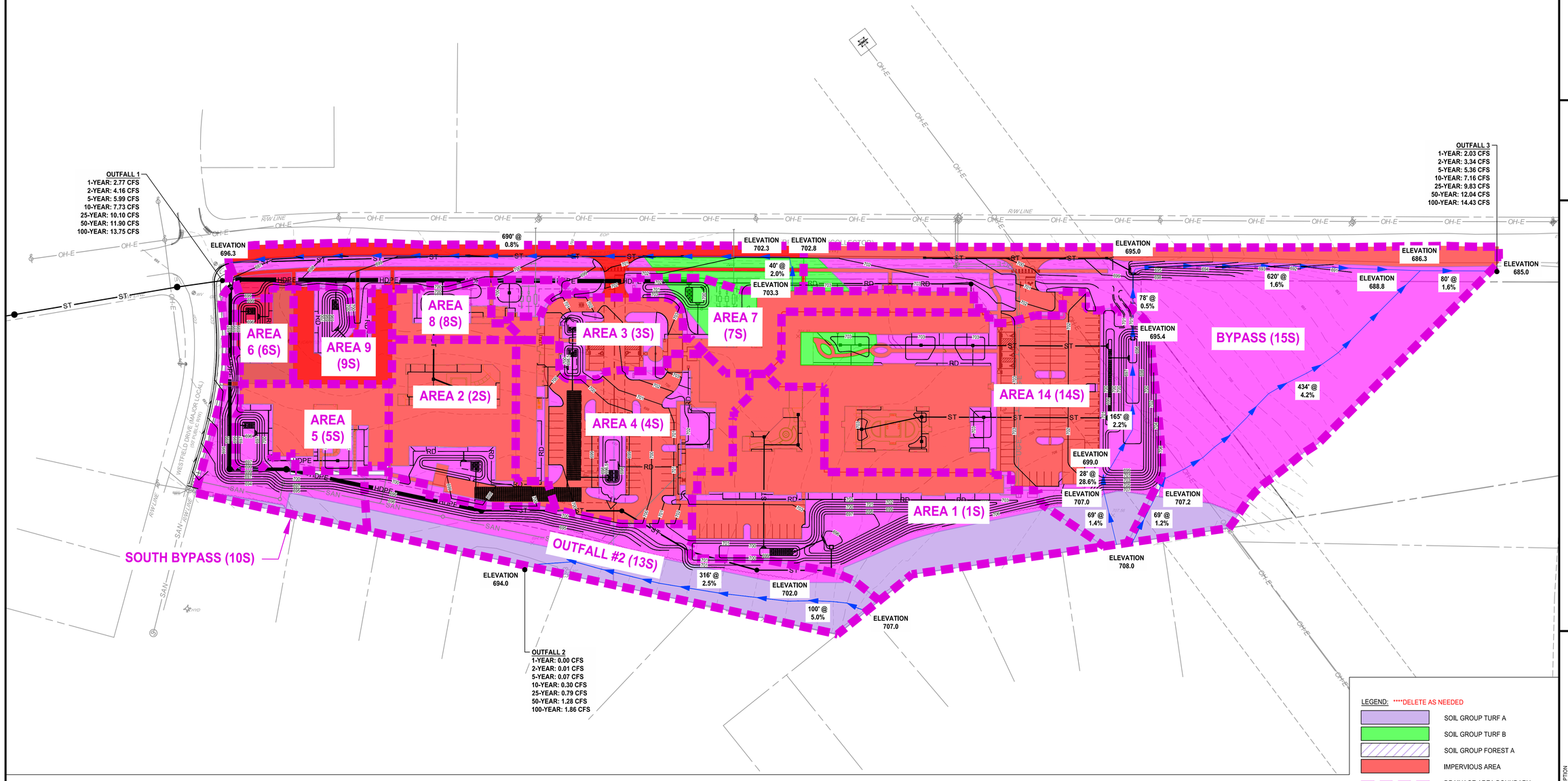
RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401



LEGEND: ****DELETE AS NEEDED

- SOIL GROUP TURF A
- SOIL GROUP TURF B
- SOIL GROUP FOREST A
- IMPERVIOUS AREA
- DRAINAGE AREA BOUNDARY
- FLOW PATH

0 25 50 100 150
SCALE: 1" = 60'

SURVEY INFO
PROVIDED BY: M2 GROUP, LLC
DATUM: TENNESSEE STATE PLANE (NAD83 & NAVD 88)

CUMULATIVE FLOWS FOR THE PROPERTY

1-YEAR FLOW = (0.97 + 1.80 + 0.00 + 2.03) CFS = 4.80 CFS
2-YEAR FLOW = (1.69 + 2.47 + 0.01 + 3.34) CFS = 7.51 CFS
5-YEAR FLOW = (2.58 + 3.41 + 0.07 + 5.36) CFS = 11.42 CFS
10-YEAR FLOW = (3.57 + 4.16 + 0.30 + 7.16) CFS = 15.19 CFS
25-YEAR FLOW = (4.89 + 5.21 + 0.79 + 9.83) CFS = 20.72 CFS
50-YEAR FLOW = (5.84 + 6.06 + 1.28 + 12.04) CFS = 25.22 CFS
100-YEAR FLOW = (6.81 + 6.94 + 1.86 + 14.43) CFS = 30.04 CFS

DR.	DATE	DESCRIPTION
JEL	04/20/2026	FINAL PUD MASTER PLAN

OVERALL PROPOSED DRAINAGE AREA MAP

POST

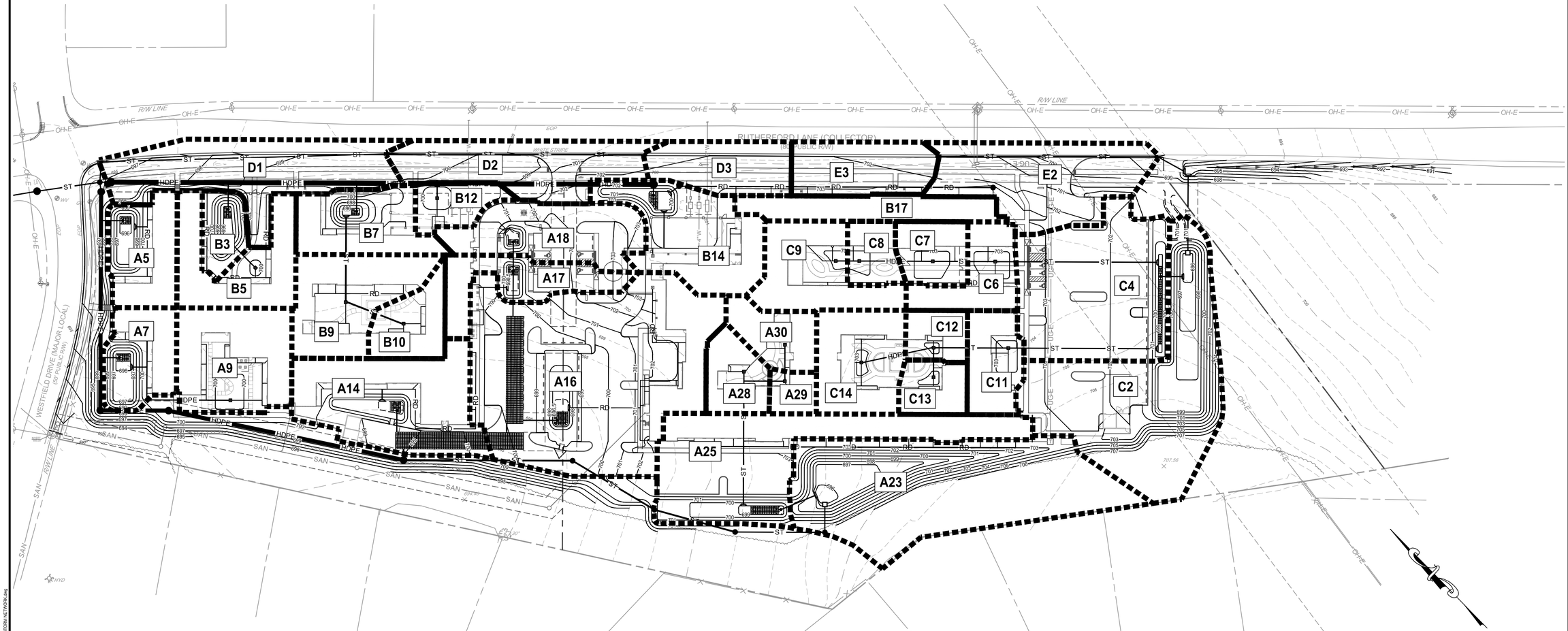
1421-01 MORNING POINTE

Monday, April 20, 2026
11:43:13am, Mandy Stewart - Columbia\02 - Civil\Exhibits\1421-01_Drainage_PROPOSED.dwg

Know what's **below.**
Call before you dig.

INLET	AREA (AC)	IMP (AC)	FOR (AC)	PER (AC)	C-FACTOR	Tc (MINS)
A5	0.18	0.09	0.00	0.08	0.58	5
A7	0.16	0.08	0.00	0.09	0.52	5
A9	0.29	0.20	0.00	0.09	0.71	5
A14	0.40	0.29	0.00	0.11	0.74	5
A16	0.98	0.76	0.00	0.23	0.76	5
A17	0.17	0.12	0.00	0.04	0.74	5
A18	0.26	0.19	0.00	0.07	0.75	5
A23	0.72	0.00	0.32	0.40	0.09	5
A25	0.50	0.38	0.00	0.12	0.75	5
A28	0.11	0.11	0.00	0.00	0.95	5
A29	0.05	0.05	0.00	0.00	0.95	5
A30	0.12	0.12	0.00	0.00	0.95	5
B3	0.08	0.00	0.00	0.08	0.15	5
B5	0.22	0.11	0.00	0.11	0.54	5
B7	0.20	0.11	0.00	0.09	0.59	5
B9	0.26	0.26	0.00	0.00	0.95	5
B10	0.12	0.12	0.00	0.00	0.95	5

INLET	AREA (AC)	IMP (AC)	FOR (AC)	PER (AC)	C-FACTOR	Tc (MINS)
B12	0.09	0.01	0.00	0.07	0.27	5
B14	0.31	0.13	0.00	0.17	0.49	5
B17	0.16	0.16	0.00	0.00	0.95	5
C2	0.65	0.19	0.11	0.36	0.36	5
C4	0.51	0.41	0.00	0.10	0.79	5
C6	0.14	0.10	0.00	0.04	0.72	5
C7	0.11	0.05	0.00	0.05	0.55	5
C8	0.19	0.15	0.00	0.04	0.78	5
C9	0.12	0.07	0.00	0.05	0.63	5
C11	0.13	0.09	0.00	0.04	0.70	5
C12	0.08	0.08	0.00	0.00	0.95	5
C13	0.09	0.09	0.00	0.00	0.95	5
C14	0.22	0.22	0.00	0.00	0.95	5
D1	0.39	0.15	0.00	0.24	0.46	5
D2	0.29	0.16	0.00	0.14	0.57	5
D3	0.17	0.07	0.00	0.10	0.47	5
E2	0.36	0.18	0.00	0.18	0.56	5
E3	0.18	0.07	0.00	0.11	0.48	5



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MORNING POINTE
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COLUMBIA, MAURY COUNTY, TENNESSEE 38401

DR.	DATE	DESCRIPTION
JEL	04/20/2026	FINAL PUD MASTER PLAN

STORM NETWORK DRAINAGE AREA MAP

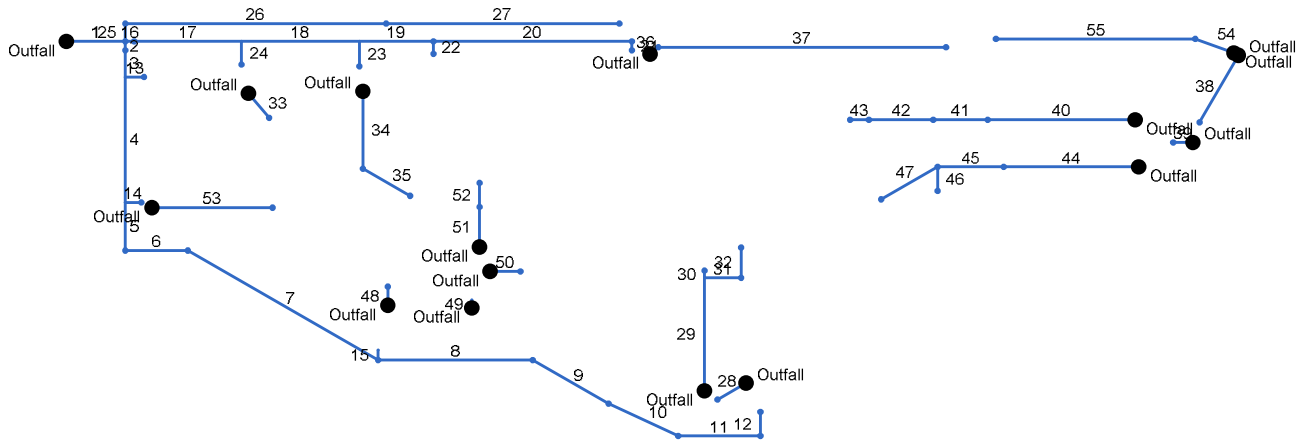
NET

1421-01 MORNING POINTE

Monday, April 20, 2026
10:21am by thomas.dowell
N:\Projects\1421-01 - Columbia\02 - Civil\Exhibits\1421-01_Drainage_STORM NETWORK.dwg

Hydraflow Storm Sewers Report

Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan



Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line	(ft)	Incr (ac)	Total (ac)	(C)	Incr	Total	Inlet (min)	Syst (min)	(in/hr)	(cfs)	(cfs)	(ft/s)	Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
55	54	223.000	0.18	0.18	0.48	0.09	0.09	5.0	5.0	7.2	0.63	4.13	2.08	12	1.35	694.50	697.50	695.06	697.83	698.00	701.40	E3-E2
54	End	46.000	0.36	0.54	0.56	0.20	0.29	5.0	9.7	6.1	1.76	3.71	3.71	12	1.09	694.00	694.50	694.60	695.06	694.00	698.00	E2-E1
53	End	135.000	0.29	0.29	0.71	0.21	0.21	5.0	5.0	7.2	1.49	2.56	3.29	12	0.52	696.00	696.70	696.61	697.22	696.00	699.20	A9-A8
52	51	27.000	0.26	0.26	0.75	0.20	0.20	5.0	5.0	7.2	1.41	2.65	2.92	12	0.56	695.35	695.50	696.00	696.04	699.00	699.00	A18-A17
51	End	45.000	0.17	0.43	0.74	0.13	0.32	5.0	5.3	7.2	2.30	7.60	3.72	12	4.56	693.30	695.35	694.17	696.00	699.75	699.00	A17-A15
50	End	34.000	0.98	0.98	0.76	0.74	0.74	5.0	5.0	7.2	5.39	8.05	3.05	18	0.59	693.30	693.50	696.52	696.61	699.50	697.00	A16-A15
49	End	9.000	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	7.70	0.00	5.26	18	0.00	693.30	693.30	694.37	694.57	700.00	700.00	A15-A13
48	End	21.000	0.40	0.40	0.74	0.30	0.30	5.0	5.0	7.2	2.14	8.51	3.55	12	5.71	693.30	694.50	694.17	695.13	698.75	698.00	A14-A13
47	45	73.000	0.22	0.22	0.95	0.21	0.21	5.0	5.0	7.2	1.51	4.66	1.23	15	0.52	700.16	700.54	701.94	701.98	702.75	702.75	C14-C12
46	45	27.000	0.09	0.09	0.95	0.09	0.09	5.0	5.0	7.2	0.62	4.97	0.50	15	0.59	700.16	700.32	701.94	701.94	702.75	702.75	C13-C12
45	44	74.000	0.08	0.39	0.95	0.08	0.37	5.0	6.0	7.0	2.58	4.69	2.10	15	0.53	699.77	700.16	701.69	701.81	702.50	702.75	C12-C11
44	End	151.000	0.13	0.52	0.70	0.09	0.46	5.0	6.6	6.8	3.14	4.61	2.56	15	0.51	699.00	699.77	701.28	701.64	699.00	702.50	C11-C10
43	42	21.000	0.12	0.12	0.63	0.08	0.08	5.0	5.0	7.2	0.55	2.80	1.84	12	0.62	700.55	700.68	701.21	700.99	702.75	702.75	C9-C8
42	41	72.000	0.19	0.31	0.78	0.15	0.22	5.0	5.5	7.1	1.59	2.59	3.01	12	0.53	700.17	700.55	700.92	701.11	702.50	702.75	C8-C7
41	40	61.000	0.11	0.42	0.55	0.06	0.28	5.0	6.1	6.9	1.97	2.62	3.66	12	0.54	699.84	700.17	700.49	700.82	702.50	702.50	C7-C6
40	End	165.000	0.14	0.56	0.72	0.10	0.39	5.0	6.5	6.8	2.63	4.61	3.70	15	0.51	699.00	699.84	699.77	700.49	699.00	702.50	C6-C5
39	End	22.000	0.51	0.51	0.79	0.40	0.40	5.0	5.0	7.2	8.67	7.76	5.54	18	0.55	695.88	696.00	697.08	697.29	696.00	699.50	C4-C3
38	End	87.000	0.65	0.65	0.36	0.23	0.23	5.0	5.0	7.2	10.36	7.47	6.18	18	0.51	695.00	695.44	696.27	697.22	697.00	698.00	C2-C1
37	36	322.000	0.16	0.16	0.95	0.15	0.15	5.0	5.0	7.2	1.10	1.55	3.02	10	0.50	700.07	701.69	700.65	702.17	702.25	703.50	B17-B16
36	End	12.000	0.00	0.16	0.00	0.00	0.15	0.0	7.7	6.5	0.99	1.67	2.86	10	0.58	700.00	700.07	700.53	700.56	700.00	702.25	B16-B15
35	34	61.000	0.12	0.12	0.95	0.11	0.11	5.0	5.0	7.2	0.83	2.58	1.14	12	0.52	696.45	696.77	697.54	697.57	700.00	700.00	B10-B9
34	End	87.000	0.26	0.38	0.95	0.25	0.36	5.0	6.0	7.0	2.52	2.56	3.75	12	0.52	696.00	696.45	696.79	697.25	696.00	700.00	B9-B8

Project File: Storm Sewer Model.stm | Number of lines: 55 | Run Date: 4/20/2026

NOTES:Intensity = 88.24 / (Inlet time + 15.50) ^ 0.83; Return period =Yrs. 10 ; c = cir e = ellip b = box

Storm Sewer Tabulation

Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line	(ft)	Incr (ac)	Total (ac)	(C)	Incr	Total	Inlet (min)	Syst (min)	(in/hr)	(cfs)	(cfs)	(ft/s)	Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
33	End	36.000	0.22	0.22	0.95	0.21	0.21	5.0	5.0	7.2	1.51	2.59	3.25	12	0.53	696.00	696.19	696.61	696.73	696.00	699.50	B5-B4
32	31	34.000	0.12	0.12	0.95	0.11	0.11	5.0	5.0	7.2	0.83	4.83	1.85	15	0.56	699.85	700.04	700.79	700.40	703.00	703.00	A30-A29
31	29	41.000	0.05	0.17	0.95	0.05	0.16	5.0	5.8	7.0	1.13	4.51	1.08	15	0.49	699.65	699.85	700.75	700.76	703.50	703.00	A29-A27
30	29	8.000	0.11	0.11	0.95	0.10	0.10	5.0	5.0	7.2	0.76	4.56	0.67	15	0.50	699.65	699.69	700.75	700.75	703.50	703.00	A28-A27
29	End	127.000	0.00	0.28	0.00	0.00	0.27	0.0	6.6	6.8	1.81	4.62	1.55	15	0.51	699.00	699.65	700.62	700.71	699.00	703.50	A27-A26
28	End	37.000	0.50	0.50	0.75	0.38	0.38	5.0	5.0	7.2	2.71	4.63	3.49	15	0.51	695.81	696.00	696.63	696.71	695.81	699.50	A25-A24
27	26	261.000	0.17	0.17	0.47	0.08	0.08	5.0	5.0	7.2	0.58	7.98	2.02	15	1.30	694.10	697.50	694.55	697.80	698.90	701.18	D3-D2
26	25	292.000	0.29	0.46	0.57	0.17	0.25	5.0	14.2	5.3	1.30	7.07	2.17	15	1.20	690.60	694.10	693.01	694.55	696.00	698.90	D2-D1
25	1	20.000	0.39	0.85	0.46	0.18	0.42	5.0	17.8	4.8	2.06	10.24	1.16	18	0.95	690.41	690.60	692.97	692.98	695.90	696.00	D1-A2
24	17	26.000	0.08	0.08	0.15	0.01	0.01	5.0	5.0	7.2	1.59	9.73	3.54	12	7.46	691.06	693.00	691.64	693.53	698.90	696.50	B3-B2
23	18	28.000	0.20	0.20	0.59	0.12	0.12	5.0	5.0	7.2	3.35	7.61	7.12	12	4.57	691.72	693.00	692.19	693.78	699.80	696.50	B7-B6
22	19	14.000	0.09	0.09	0.27	0.02	0.02	5.0	5.0	7.2	0.18	18.70	1.64	12	27.57	692.14	696.00	692.37	696.17	700.50	699.50	B12-B11
21	20	10.000	0.31	0.31	0.49	0.15	0.15	5.0	5.0	7.2	1.10	21.81	4.65	12	37.50	693.25	697.00	693.53	697.44	702.10	700.50	B14-B13
20	19	222.000	0.00	0.31	0.00	0.00	0.15	0.0	5.1	7.2	1.09	184.2	2.52	60	0.50	692.14	693.25	692.42	693.53	700.50	702.10	B13-B11
19	18	83.000	0.00	0.40	0.00	0.00	0.18	0.0	71.3	2.2	0.39	185.3	1.08	60	0.51	691.72	692.14	692.19	692.32	699.80	700.50	B11-B6
18	17	132.000	0.00	0.60	0.00	0.00	0.29	0.0	93.7	1.8	3.03	184.2	2.81	60	0.50	691.06	691.72	691.64	692.19	698.90	699.80	B6-B2
17	16	120.000	0.00	0.68	0.00	0.00	0.31	0.0	103.4	1.7	4.52	184.2	2.01	60	0.50	690.46	691.06	693.05	691.64	696.25	698.90	B2-B1
16	1	10.000	0.00	0.68	0.00	0.00	0.31	0.0	109.9	1.6	4.49	5.00	3.66	15	0.60	690.40	690.46	692.97	693.02	695.90	696.25	B1-A2
15	7	11.000	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0	9.84	22.62	5.65	24	1.00	693.19	693.30	694.24	694.42	699.10	699.10	A13-A12
14	4	18.000	0.16	0.16	0.52	0.08	0.08	5.0	5.0	7.2	2.10	19.67	2.80	15	9.28	691.33	693.00	692.46	693.58	699.30	696.50	A7-A6
13	3	21.000	0.18	0.18	0.58	0.10	0.10	5.0	5.0	7.2	0.76	21.78	1.72	15	11.38	690.61	693.00	691.76	693.34	697.50	696.50	A5-A4
12	11	27.000	0.72	0.72	0.09	0.06	0.06	5.0	5.0	7.2	3.18	4.65	3.14	15	0.52	695.46	695.60	696.47	696.52	703.60	698.00	A23-A22

Project File: Storm Sewer Model.stm | Number of lines: 55 | Run Date: 4/20/2026

NOTES:Intensity = 88.24 / (Inlet time + 15.50) ^ 0.83; Return period =Yrs. 10 ; c = cir e = ellip b = box

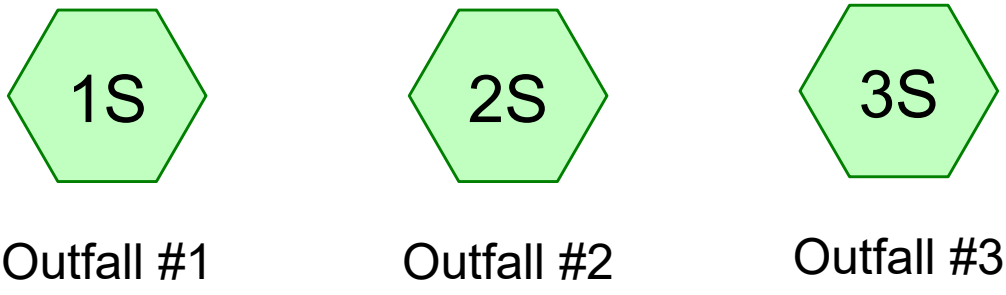
Storm Sewer Tabulation

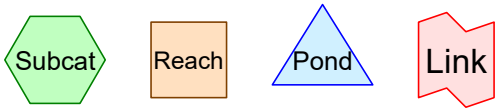
Station		Len	Drng Area		Rnoff coeff	Area x C		Tc		Rain (I)	Total flow	Cap full	Vel	Pipe		Invert Elev		HGL Elev		Grnd / Rim Elev		Line ID
Line	To Line	(ft)	Incr (ac)	Total (ac)	(C)	Incr	Total	Inlet (min)	Syst (min)	(in/hr)	(cfs)	(cfs)	(ft/s)	Size (in)	Slope (%)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
11	10	92.000	0.00	0.72	0.00	0.00	0.06	0.0	5.2	7.2	3.18	4.62	3.83	15	0.51	694.99	695.46	695.87	696.20	701.00	703.60	A22-A21
10	9	86.000	0.00	0.72	0.00	0.00	0.06	0.0	5.8	7.0	3.16	4.57	4.01	15	0.50	694.56	694.99	695.33	695.75	701.50	701.00	A21-A20
9	8	98.000	0.00	0.72	0.00	0.00	0.06	0.0	6.3	6.9	3.16	4.61	3.82	15	0.51	694.06	694.56	694.94	695.29	699.25	701.50	A20-A19
8	7	173.000	0.00	0.72	0.00	0.00	0.06	0.0	7.0	6.7	3.14	4.58	3.55	15	0.50	693.19	694.06	694.24	694.79	699.10	699.25	A19-A12
7	6	246.000	0.00	0.72	0.00	0.00	0.06	0.0	8.1	6.4	12.97	102.0	4.92	48	0.50	691.95	693.19	693.00	694.24	700.50	699.10	A12-A11
6	5	70.000	0.00	0.72	0.00	0.00	0.06	0.0	12.1	5.7	12.92	101.6	4.91	48	0.50	691.60	691.95	692.65	693.00	699.30	700.50	A11-A10
5	4	54.000	0.00	0.72	0.00	0.00	0.06	0.0	13.2	5.5	12.91	101.6	4.67	48	0.50	691.33	691.60	692.46	692.65	699.30	699.30	A10-A6
4	3	141.000	0.00	0.88	0.00	0.00	0.15	0.0	14.1	5.3	14.84	102.7	5.04	48	0.51	690.61	691.33	691.76	692.46	697.50	699.30	A6-A4
3	2	30.000	0.00	1.06	0.00	0.00	0.25	0.0	16.0	5.1	15.33	101.6	3.36	48	0.50	690.46	690.61	693.36	691.76	696.00	697.50	A4-A3
2	1	10.000	0.00	1.06	0.00	0.00	0.25	0.0	16.4	5.0	15.32	8.13	8.67	18	0.60	690.40	690.46	692.97	693.18	695.90	696.00	A3-A2
1	End	66.000	0.00	2.59	0.00	0.00	0.98	0.0	109.9	1.6	19.64	15.99	6.71	24	0.50	690.07	690.40	691.71	692.35	695.00	695.90	A2-A1

Project File: Storm Sewer Model.stm | Number of lines: 55 | Run Date: 4/20/2026

NOTES:Intensity = 88.24 / (Inlet time + 15.50) ^ 0.83; Return period =Yrs. 10 ; c = cir e = ellip b = box

HydroCAD Report





Routing Diagram for Stormwater Calculations - Existing
Prepared by Fulmer Lucas, Printed 4/20/2026
HydroCAD® 10.20-8a s/n 11448 © 2025 HydroCAD Software Solutions LLC

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-year	Type II 24-hr		Default	24.00	1	3.24	2
2	2-year	Type II 24-hr		Default	24.00	1	3.87	2
3	5-year	Type II 24-hr		Default	24.00	1	4.71	2
4	10-year	Type II 24-hr		Default	24.00	1	5.38	2
5	25-year	Type II 24-hr		Default	24.00	1	6.30	2
6	50-year	Type II 24-hr		Default	24.00	1	7.02	2
7	100-year	Type II 24-hr		Default	24.00	1	7.77	2

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
424,710	49	50-75% Grass cover, Fair, HSG A (1S, 2S, 3S)
31,363	69	50-75% Grass cover, Fair, HSG B (1S, 2S)
29,185	98	Paved parking, HSG A (1S, 3S)
67,082	36	Woods, Fair, HSG A (1S, 2S, 3S)
552,341	**51**	**TOTAL AREA**

Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
520,978	HSG A	1S, 2S, 3S
31,363	HSG B	1S, 2S
0	HSG C	
0	HSG D	
0	Other	
552,341		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover	Su Nu
424,710	31,363	0	0	0	456,073	50-75% Grass cover, Fair	
29,185	0	0	0	0	29,185	Paved parking	
67,082	0	0	0	0	67,082	Woods, Fair	
520,978	**31,363**	**0**	**0**	**0**	**552,341**	**TOTAL AREA**	

Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Outfall #1 Runoff Area=2.060 ac 16.50% Impervious Runoff Depth=0.36"
Flow Length=430' Tc=15.7 min CN=58 Runoff=0.52 cfs 2,658 cf

Subcatchment2S: Outfall #2 Runoff Area=6.950 ac 0.00% Impervious Runoff Depth=0.10"
Flow Length=961' Tc=20.1 min CN=48 Runoff=0.08 cfs 2,441 cf

Subcatchment3S: Outfall #3 Runoff Area=3.670 ac 8.99% Impervious Runoff Depth=0.21"
Flow Length=642' Tc=14.9 min CN=53 Runoff=0.28 cfs 2,772 cf

Total Runoff Area = 552,341 sf Runoff Volume = 7,871 cf Average Runoff Depth = 0.17"
94.72% Pervious = 523,156 sf 5.28% Impervious = 29,185 sf

Summary for Subcatchment 1S: Outfall #1

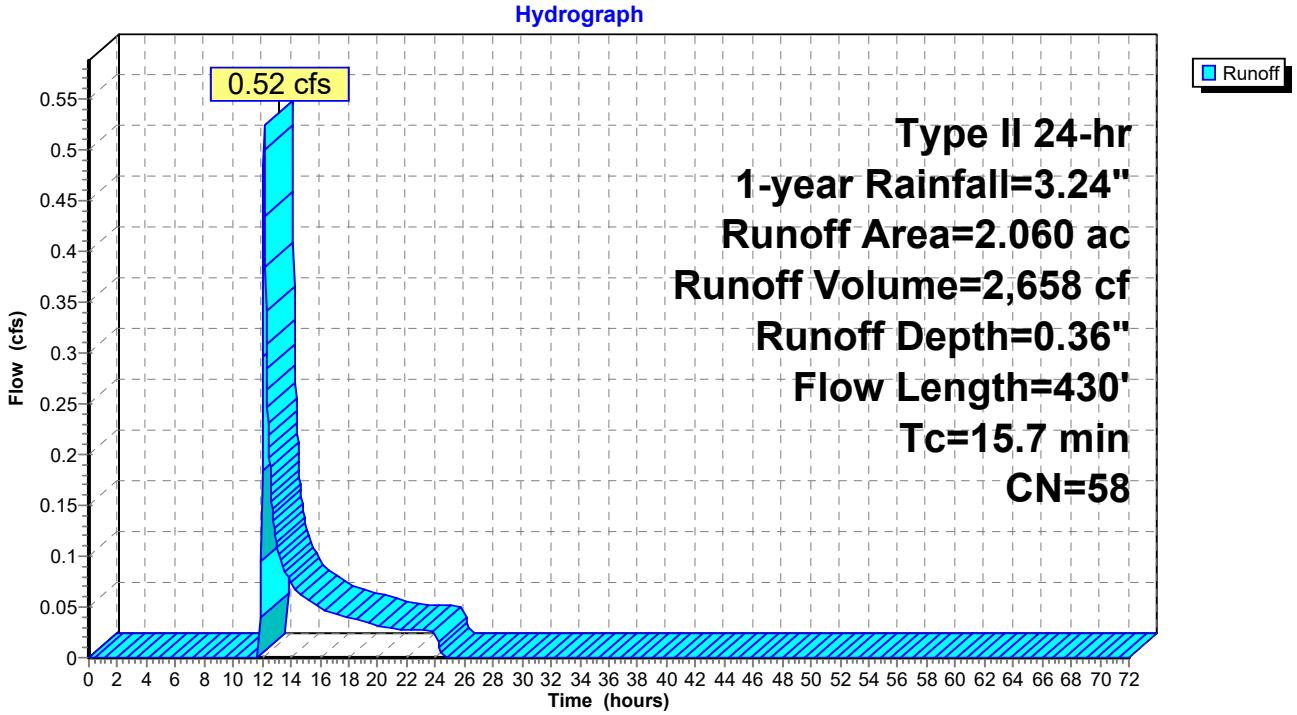
Runoff = 0.52 cfs @ 12.13 hrs, Volume= 2,658 cf, Depth= 0.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 1-year Rainfall=3.24"

Area (ac)	CN	Description
1.480	49	50-75% Grass cover, Fair, HSG A
0.150	69	50-75% Grass cover, Fair, HSG B
0.090	36	Woods, Fair, HSG A
0.340	98	Paved parking, HSG A
2.060	58	Weighted Average
1.720		83.50% Pervious Area
0.340		16.50% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.7	100	0.0080	0.12		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
2.0	330	0.0300	2.79		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
15.7	430	Total			

Subcatchment 1S: Outfall #1



Summary for Subcatchment 2S: Outfall #2

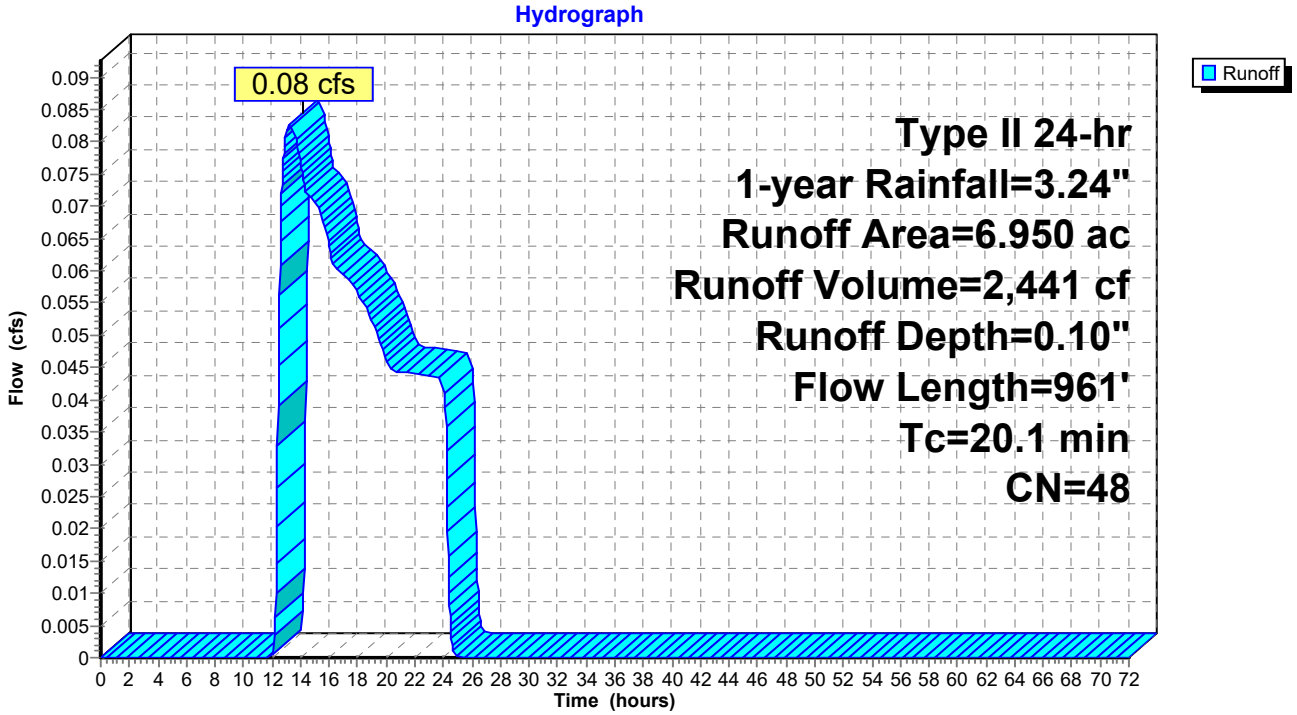
Runoff = 0.08 cfs @ 13.14 hrs, Volume= 2,441 cf, Depth= 0.10"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 1-year Rainfall=3.24"

Area (ac)	CN	Description
5.110	49	50-75% Grass cover, Fair, HSG A
0.570	69	50-75% Grass cover, Fair, HSG B
1.270	36	Woods, Fair, HSG A
6.950	48	Weighted Average
6.950		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0100	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
5.5	578	0.0120	1.76		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
2.0	283	0.0210	2.33		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
20.1	961	Total			

Subcatchment 2S: Outfall #2



Summary for Subcatchment 3S: Outfall #3

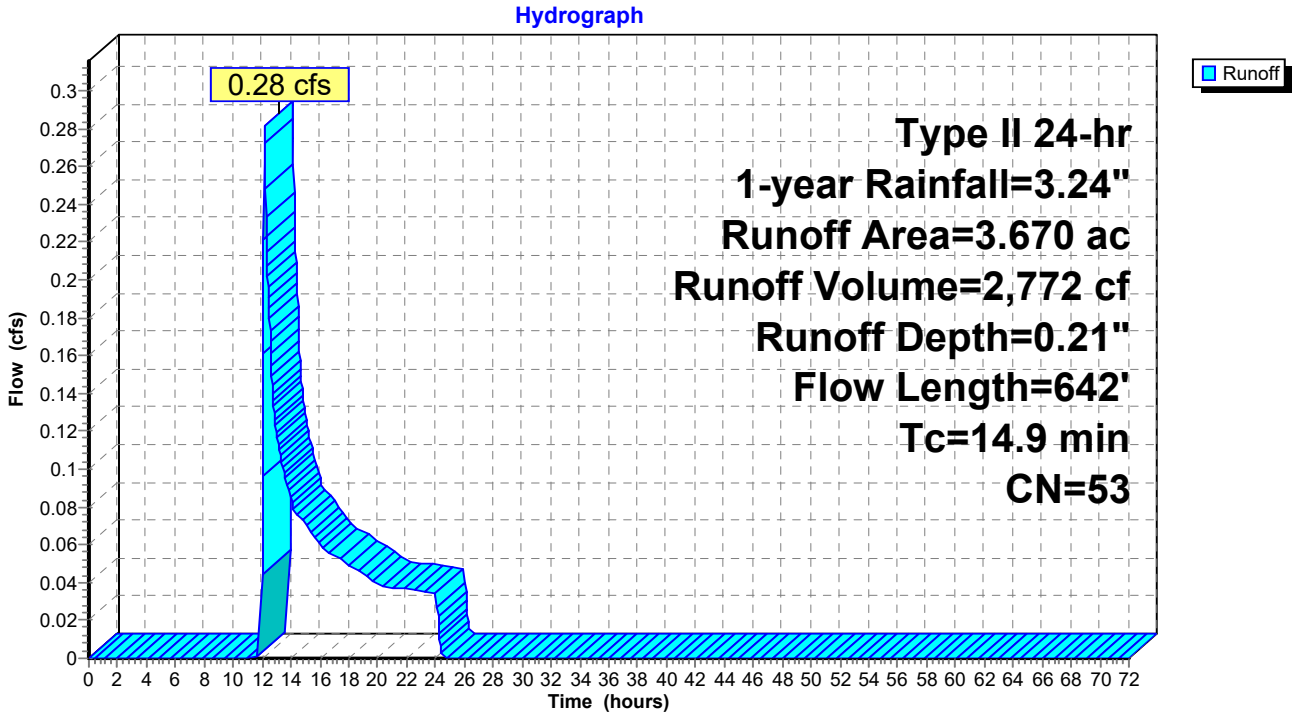
Runoff = 0.28 cfs @ 12.16 hrs, Volume= 2,772 cf, Depth= 0.21"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 1-year Rainfall=3.24"

Area (ac)	CN	Description
3.160	49	50-75% Grass cover, Fair, HSG A
0.180	36	Woods, Fair, HSG A
0.330	98	Paved parking, HSG A
3.670	53	Weighted Average
3.340		91.01% Pervious Area
0.330		8.99% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0100	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
1.7	337	0.0420	3.30		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.1	22	0.1360	5.94		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.5	183	0.0270	6.06	15.14	**Channel Flow,** Area= 2.5 sf Perim= 6.2' r= 0.40' n= 0.022 Earth, clean & straight
14.9	642	Total			

Subcatchment 3S: Outfall #3



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Outfall #1 Runoff Area=2.060 ac 16.50% Impervious Runoff Depth=0.61"
Flow Length=430' Tc=15.7 min CN=58 Runoff=1.17 cfs 4,538 cf

Subcatchment2S: Outfall #2 Runoff Area=6.950 ac 0.00% Impervious Runoff Depth=0.23"
Flow Length=961' Tc=20.1 min CN=48 Runoff=0.45 cfs 5,839 cf

Subcatchment3S: Outfall #3 Runoff Area=3.670 ac 8.99% Impervious Runoff Depth=0.40"
Flow Length=642' Tc=14.9 min CN=53 Runoff=1.03 cfs 5,340 cf

Total Runoff Area = 552,341 sf Runoff Volume = 15,717 cf Average Runoff Depth = 0.34"
94.72% Pervious = 523,156 sf 5.28% Impervious = 29,185 sf

Summary for Subcatchment 1S: Outfall #1

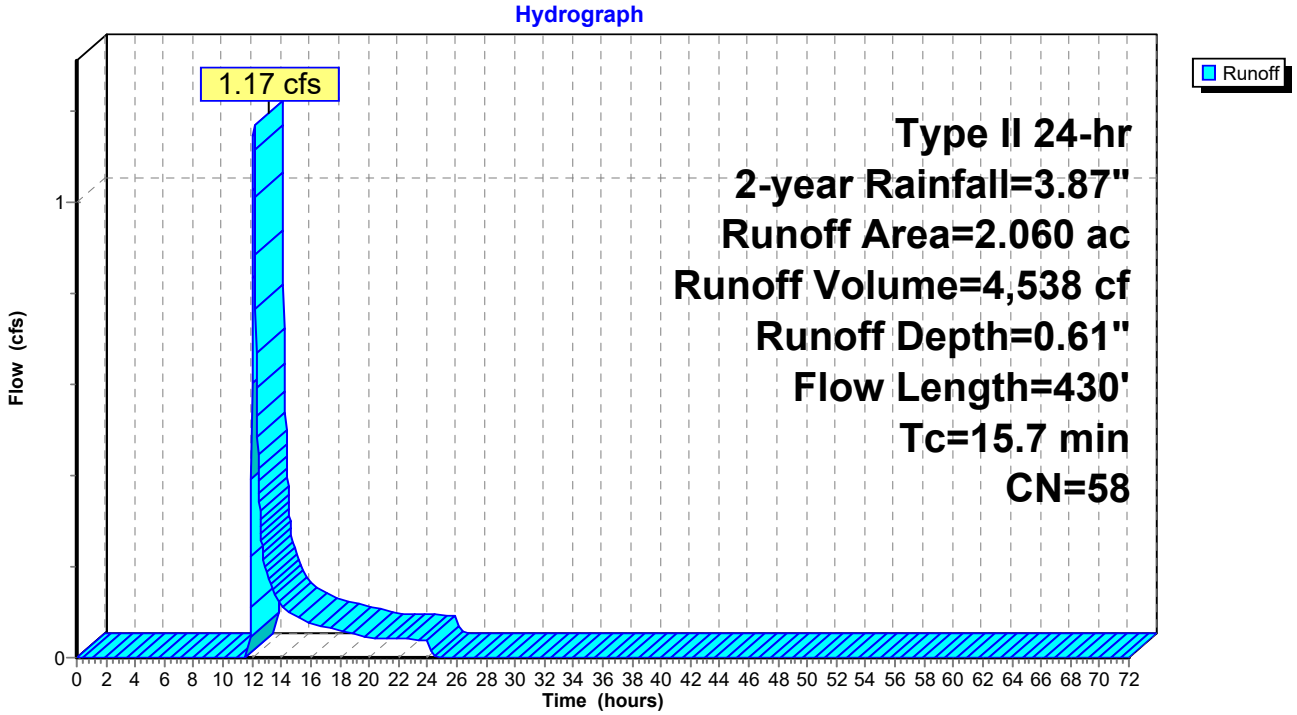
Runoff = 1.17 cfs @ 12.11 hrs, Volume= 4,538 cf, Depth= 0.61"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 2-year Rainfall=3.87"

Area (ac)	CN	Description
1.480	49	50-75% Grass cover, Fair, HSG A
0.150	69	50-75% Grass cover, Fair, HSG B
0.090	36	Woods, Fair, HSG A
0.340	98	Paved parking, HSG A
2.060	58	Weighted Average
1.720		83.50% Pervious Area
0.340		16.50% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.7	100	0.0080	0.12		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
2.0	330	0.0300	2.79		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
15.7	430	Total			

Subcatchment 1S: Outfall #1



Summary for Subcatchment 2S: Outfall #2

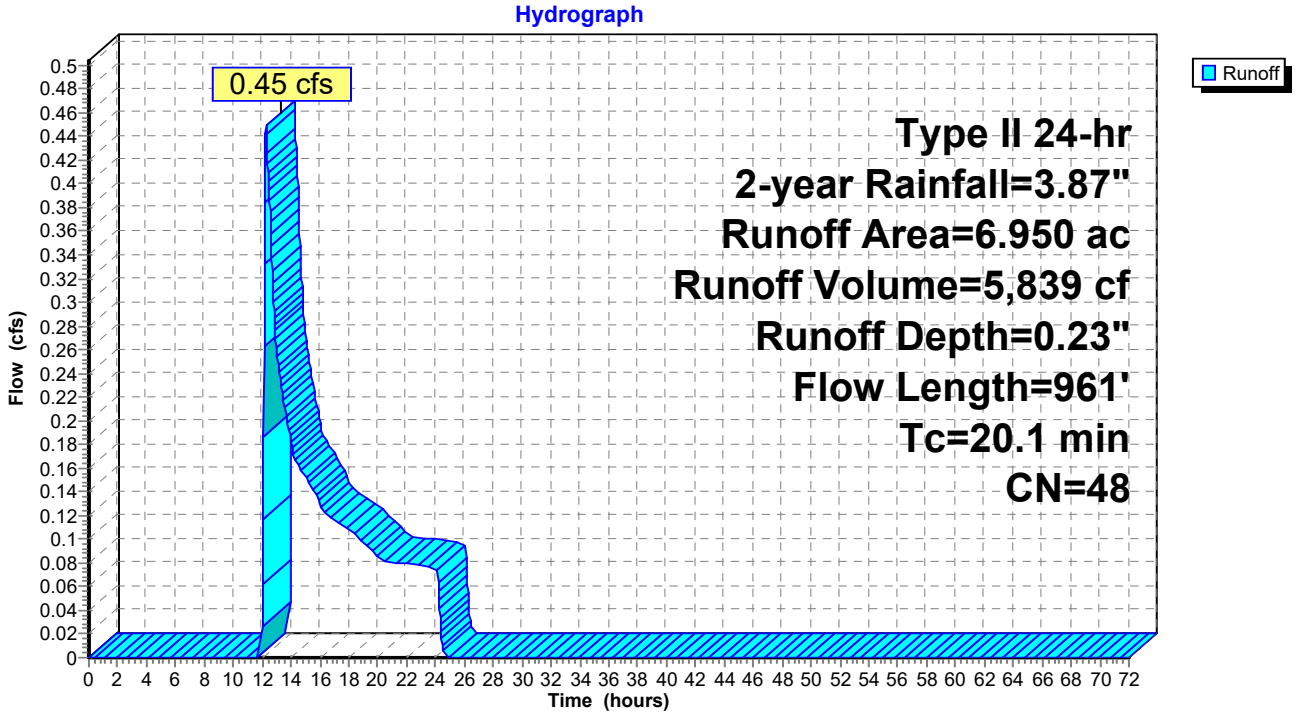
Runoff = 0.45 cfs @ 12.28 hrs, Volume= 5,839 cf, Depth= 0.23"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 2-year Rainfall=3.87"

Area (ac)	CN	Description
5.110	49	50-75% Grass cover, Fair, HSG A
0.570	69	50-75% Grass cover, Fair, HSG B
1.270	36	Woods, Fair, HSG A
6.950	48	Weighted Average
6.950		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0100	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
5.5	578	0.0120	1.76		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
2.0	283	0.0210	2.33		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
20.1	961	Total			

Subcatchment 2S: Outfall #2



Summary for Subcatchment 3S: Outfall #3

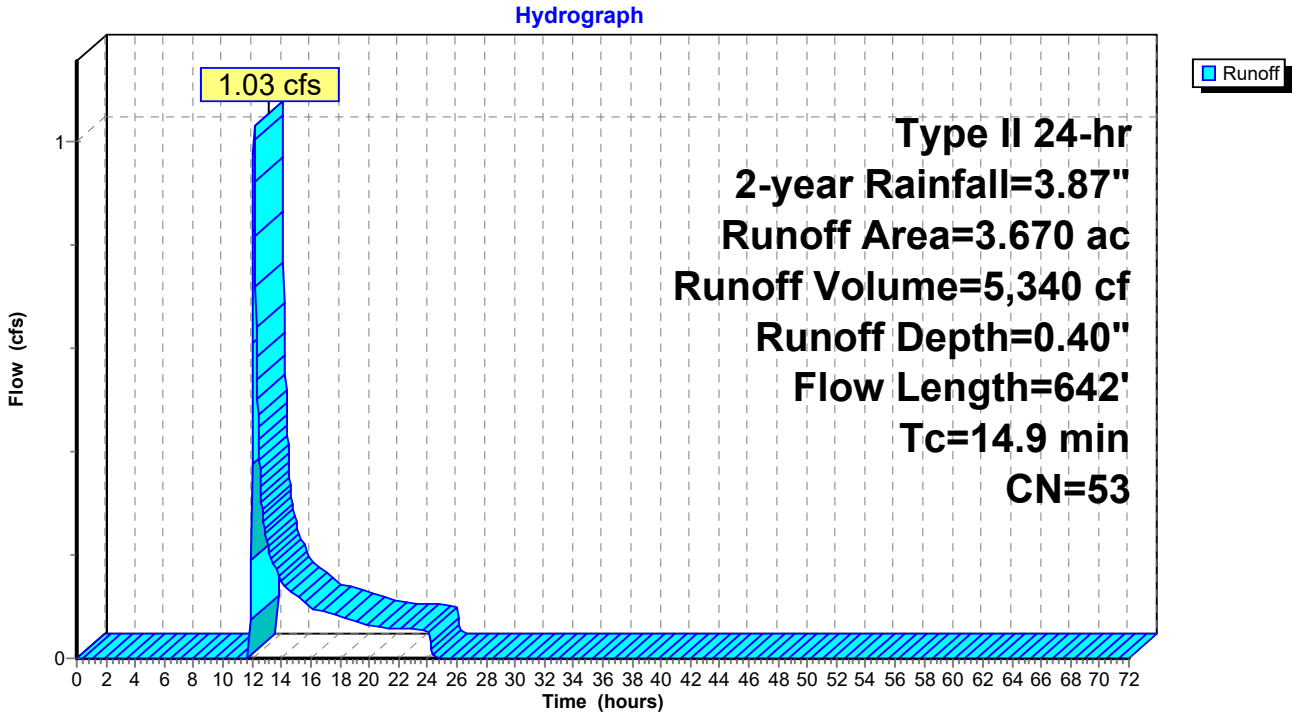
Runoff = 1.03 cfs @ 12.12 hrs, Volume= 5,340 cf, Depth= 0.40"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 2-year Rainfall=3.87"

Area (ac)	CN	Description
3.160	49	50-75% Grass cover, Fair, HSG A
0.180	36	Woods, Fair, HSG A
0.330	98	Paved parking, HSG A
3.670	53	Weighted Average
3.340		91.01% Pervious Area
0.330		8.99% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0100	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
1.7	337	0.0420	3.30		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.1	22	0.1360	5.94		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.5	183	0.0270	6.06	15.14	**Channel Flow,** Area= 2.5 sf Perim= 6.2' r= 0.40' n= 0.022 Earth, clean & straight
14.9	642	Total			

Subcatchment 3S: Outfall #3



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Outfall #1 Runoff Area=2.060 ac 16.50% Impervious Runoff Depth=1.01"
Flow Length=430' Tc=15.7 min CN=58 Runoff=2.27 cfs 7,574 cf

Subcatchment2S: Outfall #2 Runoff Area=6.950 ac 0.00% Impervious Runoff Depth=0.48"
Flow Length=961' Tc=20.1 min CN=48 Runoff=1.91 cfs 12,200 cf

Subcatchment3S: Outfall #3 Runoff Area=3.670 ac 8.99% Impervious Runoff Depth=0.73"
Flow Length=642' Tc=14.9 min CN=53 Runoff=2.58 cfs 9,731 cf

Total Runoff Area = 552,341 sf Runoff Volume = 29,505 cf Average Runoff Depth = 0.64"
94.72% Pervious = 523,156 sf 5.28% Impervious = 29,185 sf

Summary for Subcatchment 1S: Outfall #1

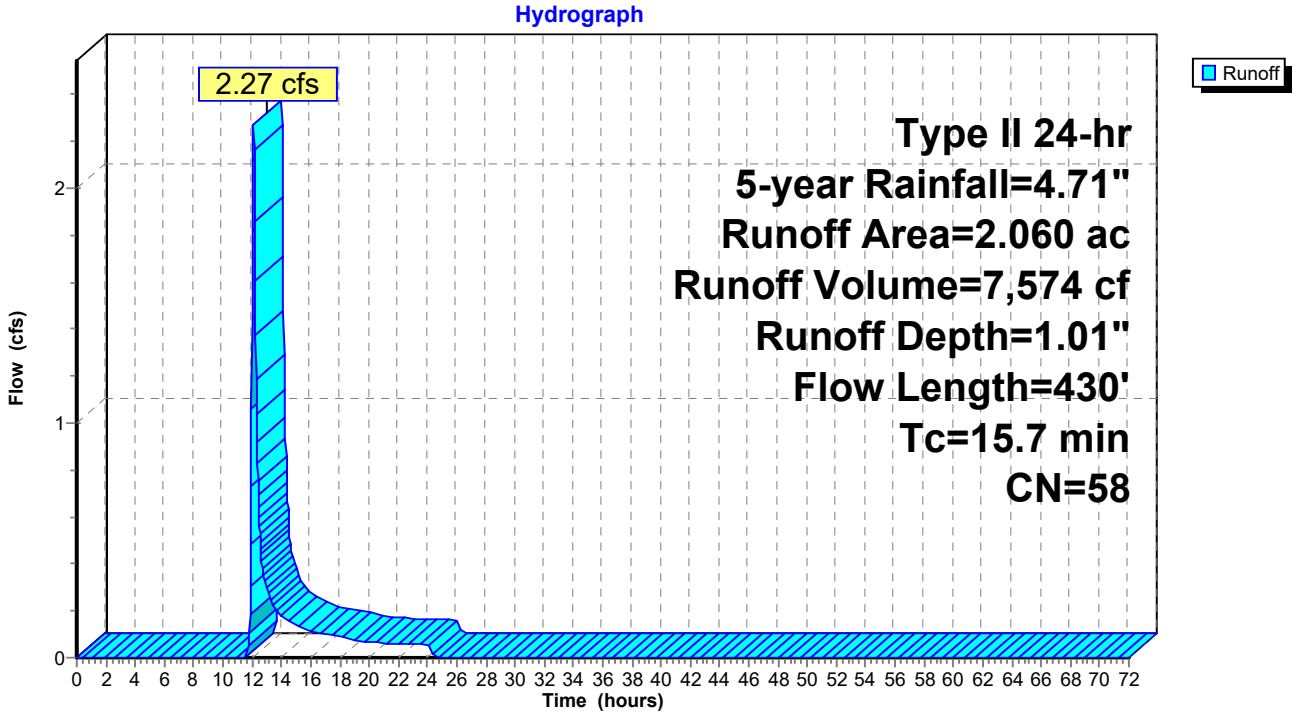
Runoff = 2.27 cfs @ 12.10 hrs, Volume= 7,574 cf, Depth= 1.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 5-year Rainfall=4.71"

Area (ac)	CN	Description
1.480	49	50-75% Grass cover, Fair, HSG A
0.150	69	50-75% Grass cover, Fair, HSG B
0.090	36	Woods, Fair, HSG A
0.340	98	Paved parking, HSG A
2.060	58	Weighted Average
1.720		83.50% Pervious Area
0.340		16.50% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.7	100	0.0080	0.12		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
2.0	330	0.0300	2.79		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
15.7	430	Total			

Subcatchment 1S: Outfall #1



Summary for Subcatchment 2S: Outfall #2

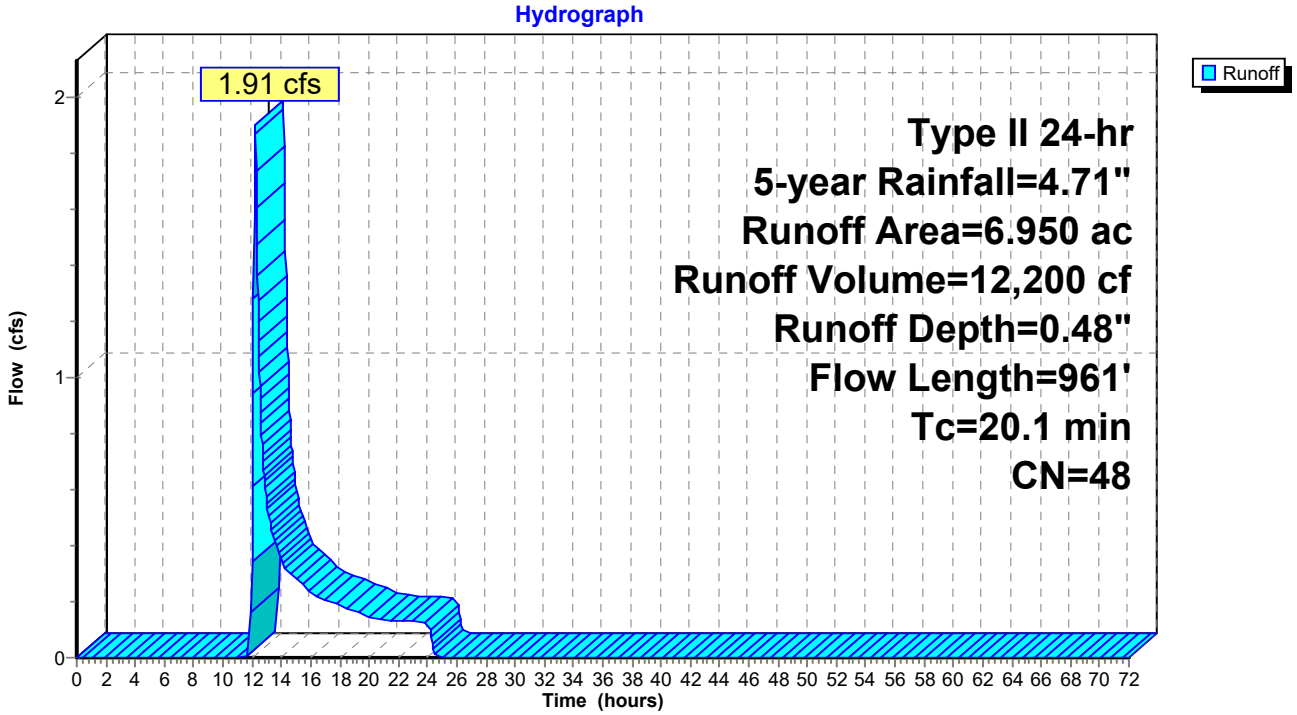
Runoff = 1.91 cfs @ 12.20 hrs, Volume= 12,200 cf, Depth= 0.48"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 5-year Rainfall=4.71"

Area (ac)	CN	Description
5.110	49	50-75% Grass cover, Fair, HSG A
0.570	69	50-75% Grass cover, Fair, HSG B
1.270	36	Woods, Fair, HSG A
6.950	48	Weighted Average
6.950		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0100	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
5.5	578	0.0120	1.76		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
2.0	283	0.0210	2.33		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
20.1	961	Total			

Subcatchment 2S: Outfall #2



Summary for Subcatchment 3S: Outfall #3

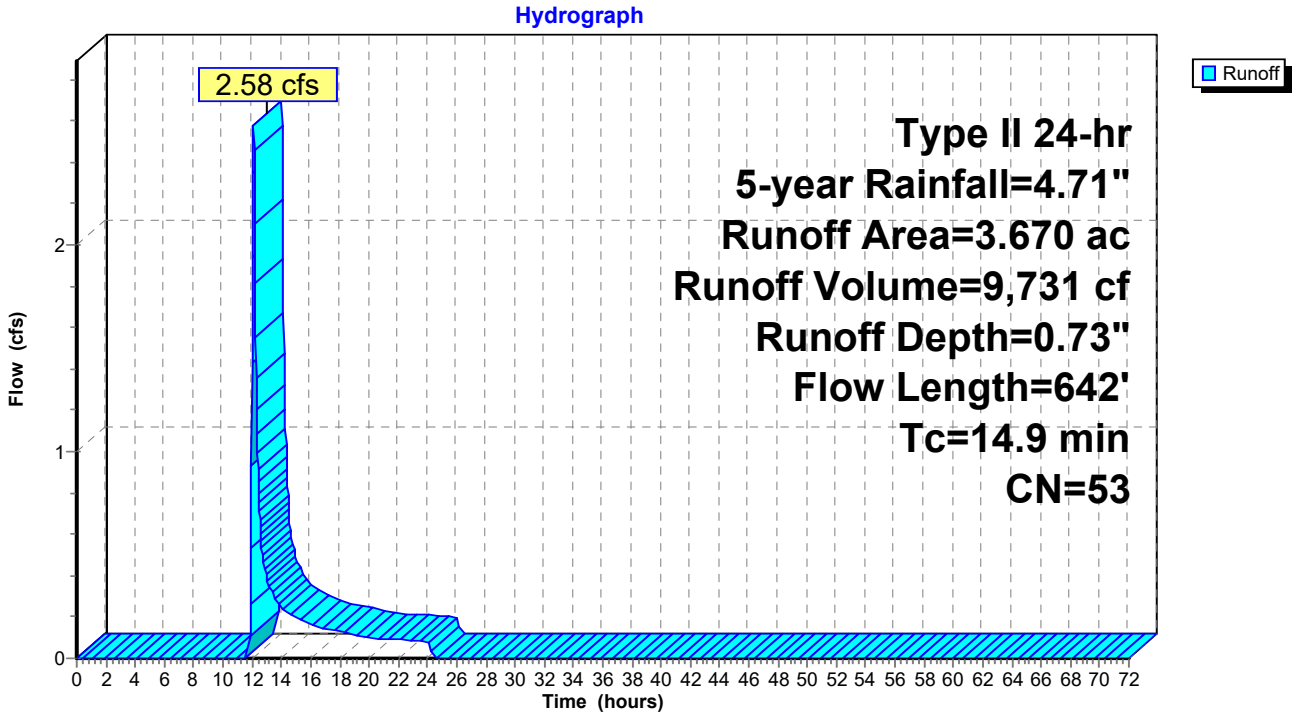
Runoff = 2.58 cfs @ 12.10 hrs, Volume= 9,731 cf, Depth= 0.73"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 5-year Rainfall=4.71"

Area (ac)	CN	Description
3.160	49	50-75% Grass cover, Fair, HSG A
0.180	36	Woods, Fair, HSG A
0.330	98	Paved parking, HSG A
3.670	53	Weighted Average
3.340		91.01% Pervious Area
0.330		8.99% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0100	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
1.7	337	0.0420	3.30		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.1	22	0.1360	5.94		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.5	183	0.0270	6.06	15.14	**Channel Flow,** Area= 2.5 sf Perim= 6.2' r= 0.40' n= 0.022 Earth, clean & straight
14.9	642	Total			

Subcatchment 3S: Outfall #3



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Outfall #1 Runoff Area=2.060 ac 16.50% Impervious Runoff Depth=1.38"
Flow Length=430' Tc=15.7 min CN=58 Runoff=3.28 cfs 10,346 cf

Subcatchment2S: Outfall #2 Runoff Area=6.950 ac 0.00% Impervious Runoff Depth=0.74"
Flow Length=961' Tc=20.1 min CN=48 Runoff=3.69 cfs 18,545 cf

Subcatchment3S: Outfall #3 Runoff Area=3.670 ac 8.99% Impervious Runoff Depth=1.04"
Flow Length=642' Tc=14.9 min CN=53 Runoff=4.12 cfs 13,890 cf

Total Runoff Area = 552,341 sf Runoff Volume = 42,781 cf Average Runoff Depth = 0.93"
94.72% Pervious = 523,156 sf 5.28% Impervious = 29,185 sf

Summary for Subcatchment 1S: Outfall #1

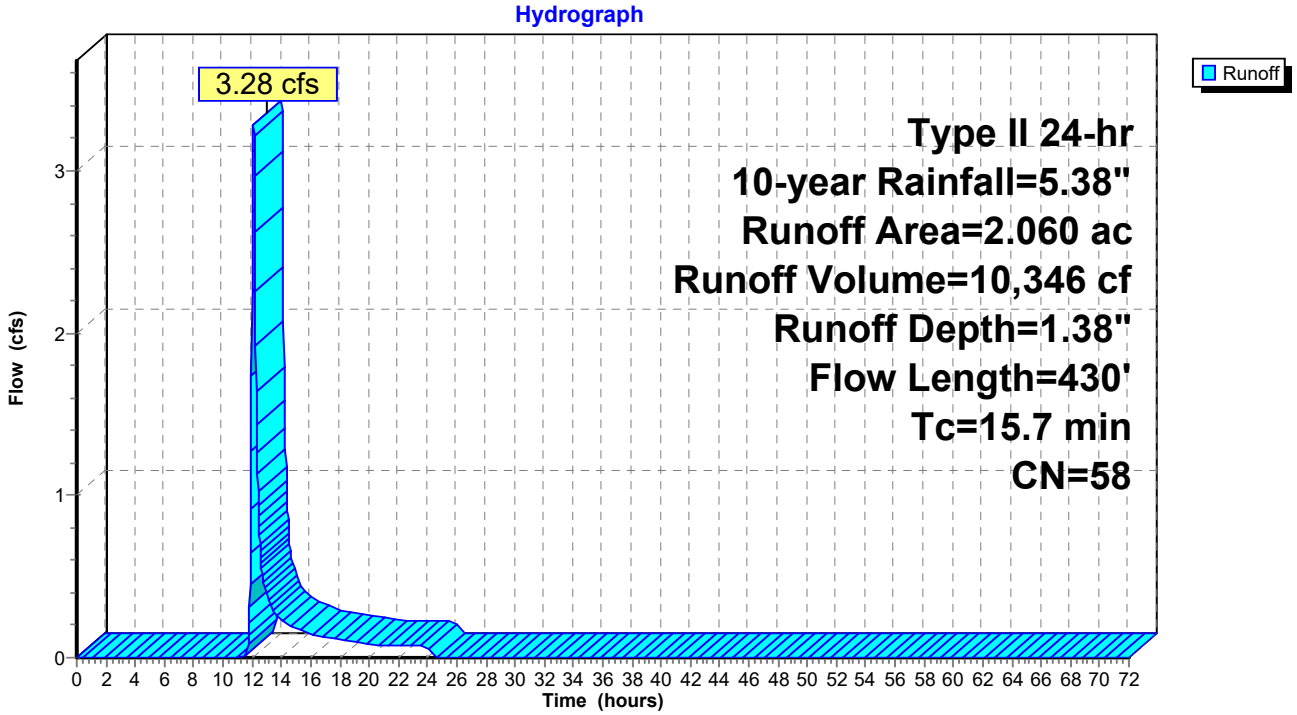
Runoff = 3.28 cfs @ 12.10 hrs, Volume= 10,346 cf, Depth= 1.38"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 10-year Rainfall=5.38"

Area (ac)	CN	Description
1.480	49	50-75% Grass cover, Fair, HSG A
0.150	69	50-75% Grass cover, Fair, HSG B
0.090	36	Woods, Fair, HSG A
0.340	98	Paved parking, HSG A
2.060	58	Weighted Average
1.720		83.50% Pervious Area
0.340		16.50% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.7	100	0.0080	0.12		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
2.0	330	0.0300	2.79		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
15.7	430	Total			

Subcatchment 1S: Outfall #1



Summary for Subcatchment 2S: Outfall #2

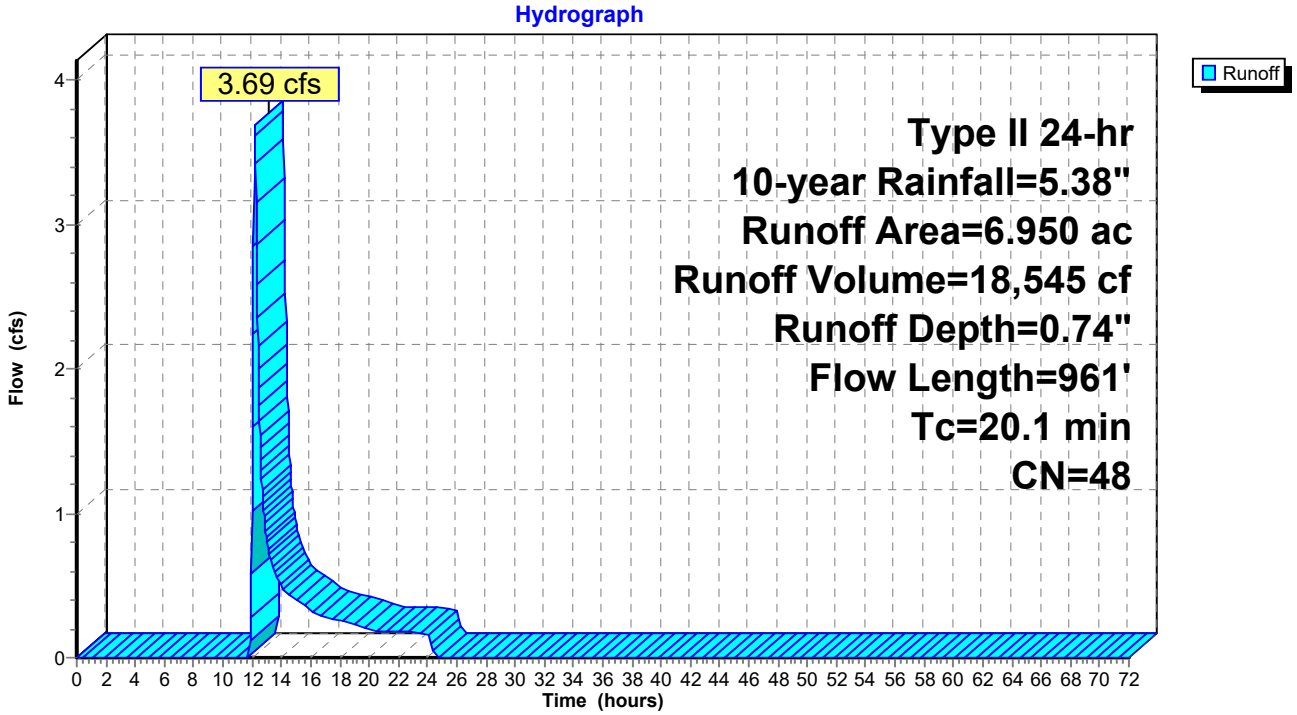
Runoff = 3.69 cfs @ 12.18 hrs, Volume= 18,545 cf, Depth= 0.74"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 10-year Rainfall=5.38"

Area (ac)	CN	Description
5.110	49	50-75% Grass cover, Fair, HSG A
0.570	69	50-75% Grass cover, Fair, HSG B
1.270	36	Woods, Fair, HSG A
6.950	48	Weighted Average
6.950		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0100	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
5.5	578	0.0120	1.76		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
2.0	283	0.0210	2.33		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
20.1	961	Total			

Subcatchment 2S: Outfall #2



Summary for Subcatchment 3S: Outfall #3

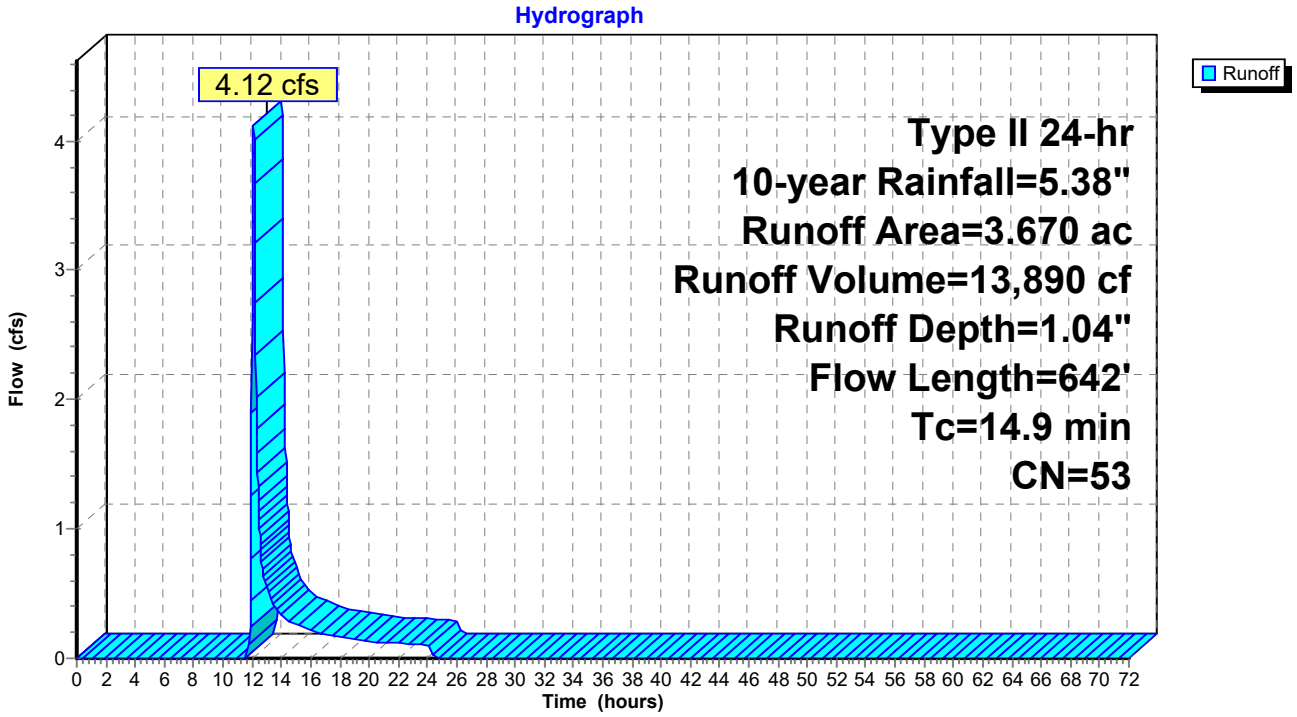
Runoff = 4.12 cfs @ 12.10 hrs, Volume= 13,890 cf, Depth= 1.04"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 10-year Rainfall=5.38"

Area (ac)	CN	Description
3.160	49	50-75% Grass cover, Fair, HSG A
0.180	36	Woods, Fair, HSG A
0.330	98	Paved parking, HSG A
3.670	53	Weighted Average
3.340		91.01% Pervious Area
0.330		8.99% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0100	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
1.7	337	0.0420	3.30		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.1	22	0.1360	5.94		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.5	183	0.0270	6.06	15.14	**Channel Flow,** Area= 2.5 sf Perim= 6.2' r= 0.40' n= 0.022 Earth, clean & straight
14.9	642	Total			

Subcatchment 3S: Outfall #3



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Outfall #1 Runoff Area=2.060 ac 16.50% Impervious Runoff Depth=1.95"
Flow Length=430' Tc=15.7 min CN=58 Runoff=4.82 cfs 14,556 cf

Subcatchment2S: Outfall #2 Runoff Area=6.950 ac 0.00% Impervious Runoff Depth=1.14"
Flow Length=961' Tc=20.1 min CN=48 Runoff=6.81 cfs 28,798 cf

Subcatchment3S: Outfall #3 Runoff Area=3.670 ac 8.99% Impervious Runoff Depth=1.53"
Flow Length=642' Tc=14.9 min CN=53 Runoff=6.56 cfs 20,378 cf

Total Runoff Area = 552,341 sf Runoff Volume = 63,732 cf Average Runoff Depth = 1.38"
94.72% Pervious = 523,156 sf 5.28% Impervious = 29,185 sf

Summary for Subcatchment 1S: Outfall #1

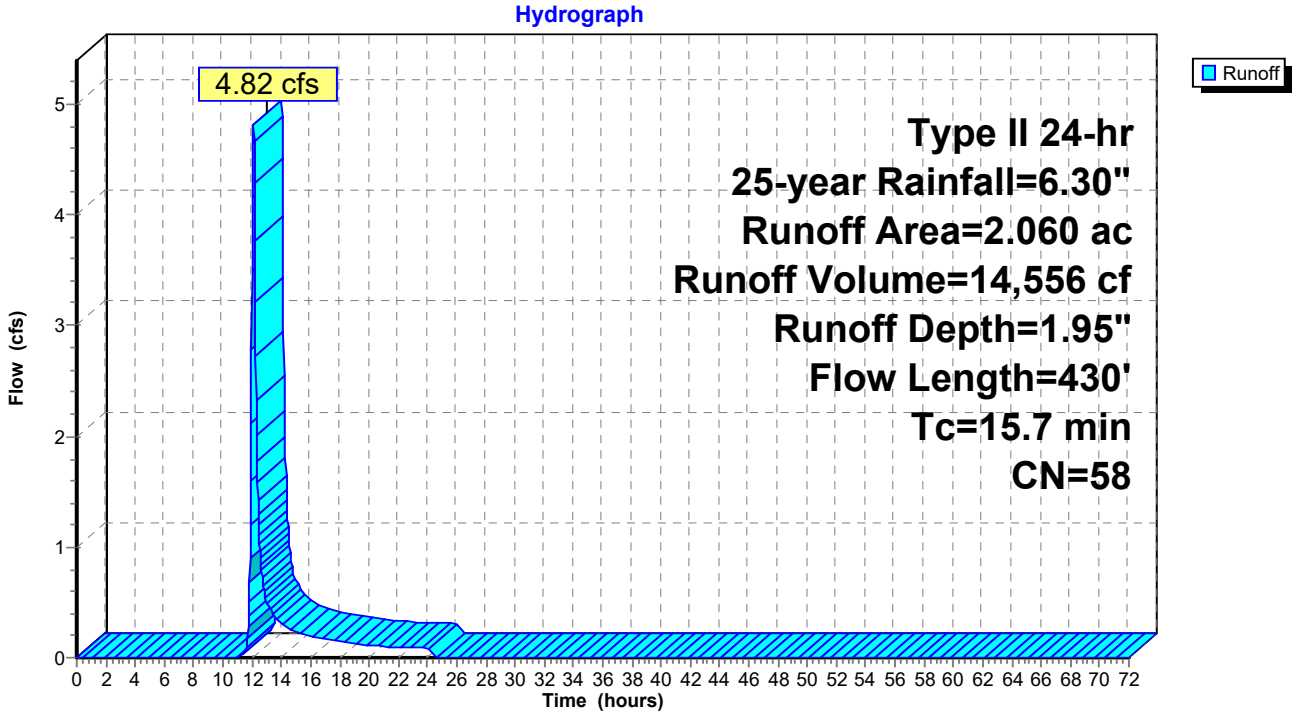
Runoff = 4.82 cfs @ 12.09 hrs, Volume= 14,556 cf, Depth= 1.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 25-year Rainfall=6.30"

Area (ac)	CN	Description
1.480	49	50-75% Grass cover, Fair, HSG A
0.150	69	50-75% Grass cover, Fair, HSG B
0.090	36	Woods, Fair, HSG A
0.340	98	Paved parking, HSG A
2.060	58	Weighted Average
1.720		83.50% Pervious Area
0.340		16.50% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.7	100	0.0080	0.12		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
2.0	330	0.0300	2.79		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
15.7	430	Total			

Subcatchment 1S: Outfall #1



Summary for Subcatchment 2S: Outfall #2

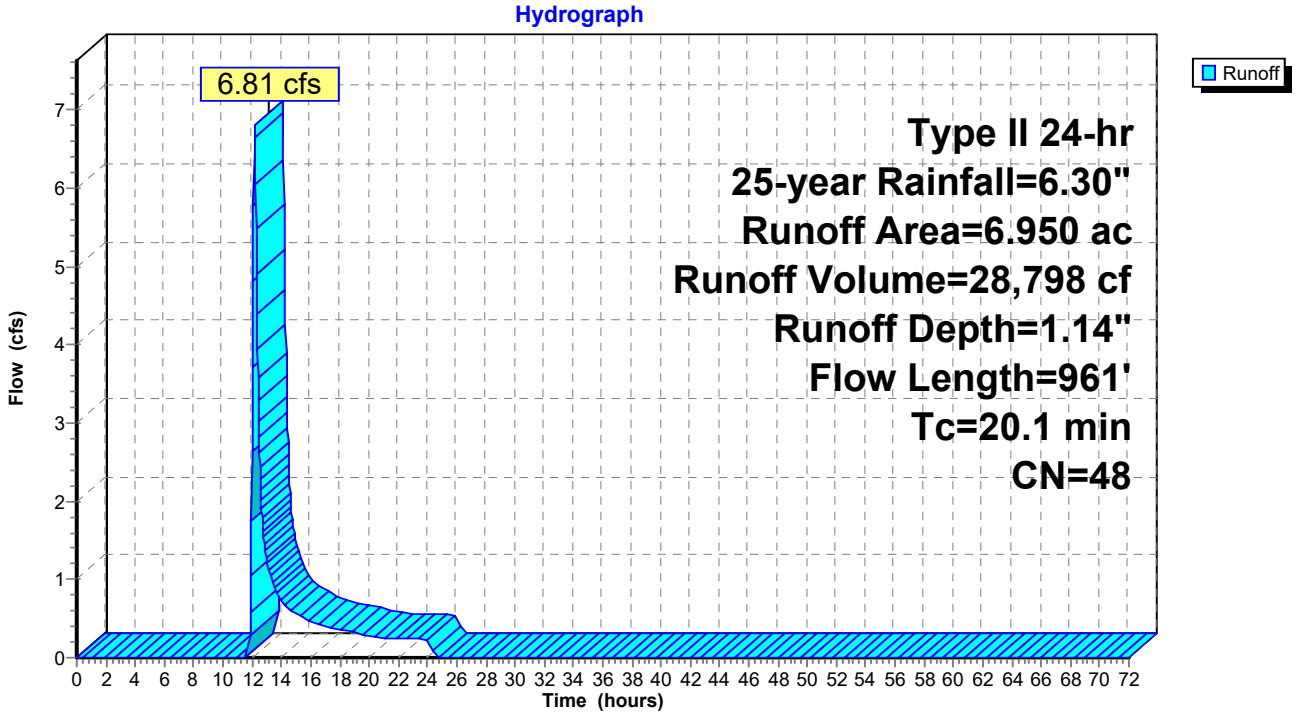
Runoff = 6.81 cfs @ 12.17 hrs, Volume= 28,798 cf, Depth= 1.14"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 25-year Rainfall=6.30"

Area (ac)	CN	Description
5.110	49	50-75% Grass cover, Fair, HSG A
0.570	69	50-75% Grass cover, Fair, HSG B
1.270	36	Woods, Fair, HSG A
6.950	48	Weighted Average
6.950		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0100	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
5.5	578	0.0120	1.76		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
2.0	283	0.0210	2.33		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
20.1	961	Total			

Subcatchment 2S: Outfall #2



Summary for Subcatchment 3S: Outfall #3

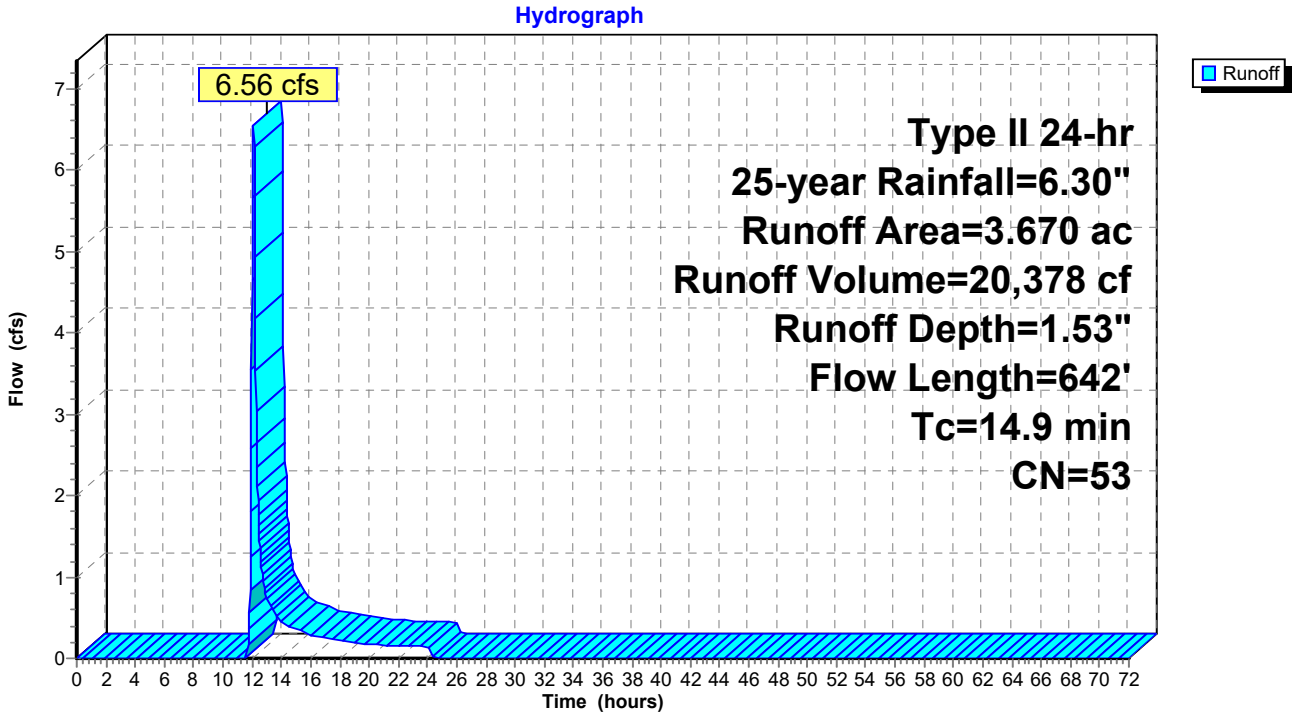
Runoff = 6.56 cfs @ 12.09 hrs, Volume= 20,378 cf, Depth= 1.53"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 25-year Rainfall=6.30"

Area (ac)	CN	Description
3.160	49	50-75% Grass cover, Fair, HSG A
0.180	36	Woods, Fair, HSG A
0.330	98	Paved parking, HSG A
3.670	53	Weighted Average
3.340		91.01% Pervious Area
0.330		8.99% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0100	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
1.7	337	0.0420	3.30		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.1	22	0.1360	5.94		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.5	183	0.0270	6.06	15.14	**Channel Flow,** Area= 2.5 sf Perim= 6.2' r= 0.40' n= 0.022 Earth, clean & straight
14.9	642	Total			

Subcatchment 3S: Outfall #3



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Outfall #1 Runoff Area=2.060 ac 16.50% Impervious Runoff Depth=2.42"
Flow Length=430' Tc=15.7 min CN=58 Runoff=6.11 cfs 18,118 cf

Subcatchment2S: Outfall #2 Runoff Area=6.950 ac 0.00% Impervious Runoff Depth=1.50"
Flow Length=961' Tc=20.1 min CN=48 Runoff=9.67 cfs 37,883 cf

Subcatchment3S: Outfall #3 Runoff Area=3.670 ac 8.99% Impervious Runoff Depth=1.95"
Flow Length=642' Tc=14.9 min CN=53 Runoff=8.66 cfs 25,980 cf

Total Runoff Area = 552,341 sf Runoff Volume = 81,980 cf Average Runoff Depth = 1.78"
94.72% Pervious = 523,156 sf 5.28% Impervious = 29,185 sf

Summary for Subcatchment 1S: Outfall #1

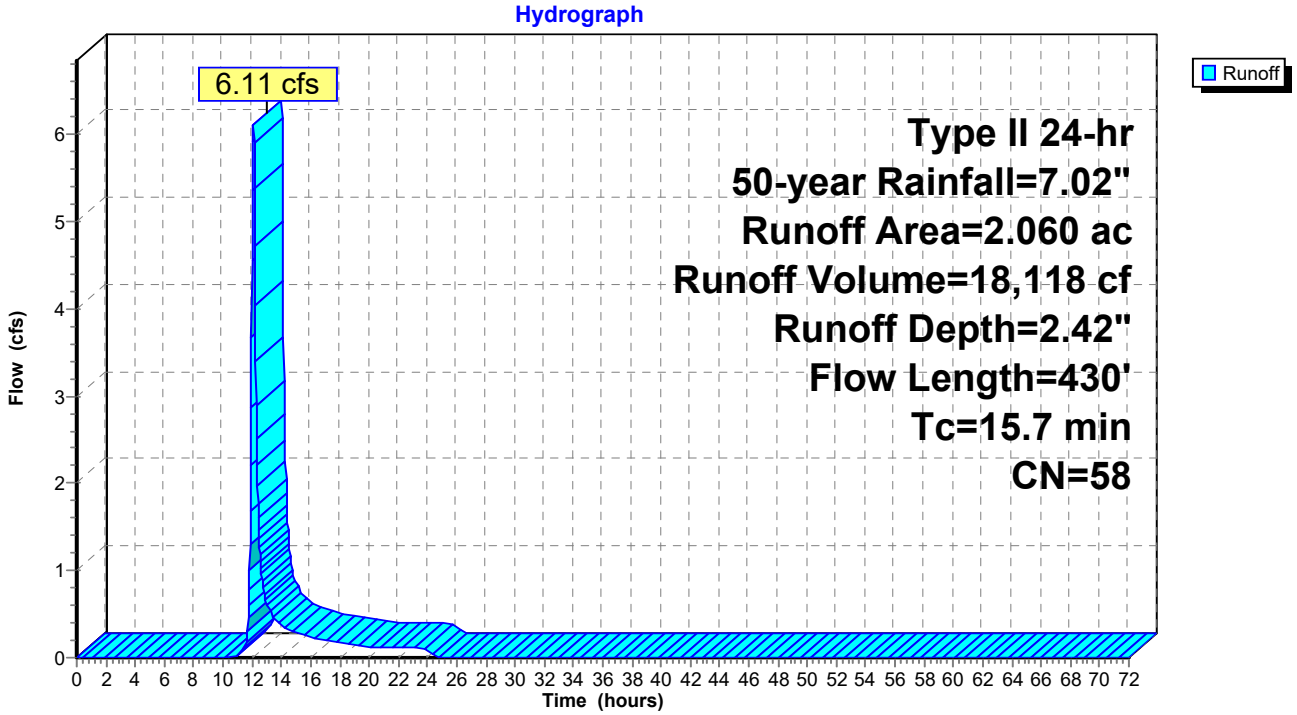
Runoff = 6.11 cfs @ 12.09 hrs, Volume= 18,118 cf, Depth= 2.42"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 50-year Rainfall=7.02"

Area (ac)	CN	Description
1.480	49	50-75% Grass cover, Fair, HSG A
0.150	69	50-75% Grass cover, Fair, HSG B
0.090	36	Woods, Fair, HSG A
0.340	98	Paved parking, HSG A
2.060	58	Weighted Average
1.720		83.50% Pervious Area
0.340		16.50% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.7	100	0.0080	0.12		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
2.0	330	0.0300	2.79		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
15.7	430	Total			

Subcatchment 1S: Outfall #1



Summary for Subcatchment 2S: Outfall #2

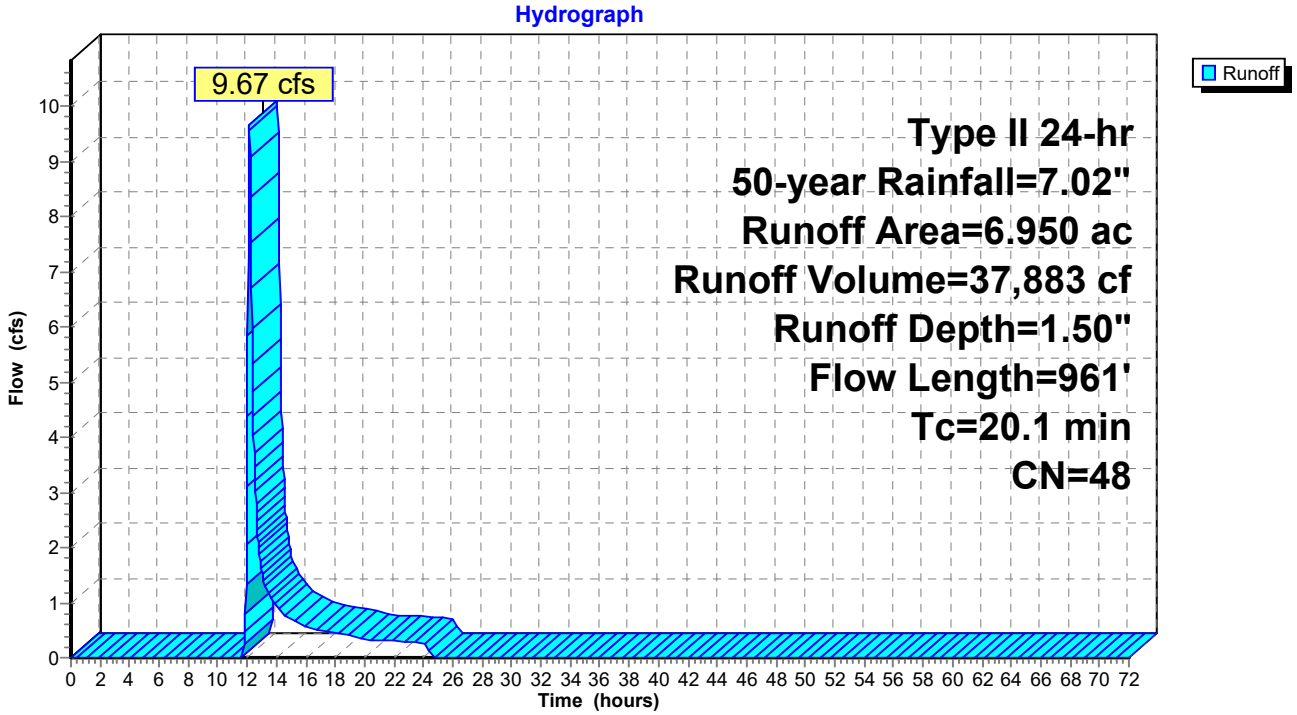
Runoff = 9.67 cfs @ 12.16 hrs, Volume= 37,883 cf, Depth= 1.50"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 50-year Rainfall=7.02"

Area (ac)	CN	Description
5.110	49	50-75% Grass cover, Fair, HSG A
0.570	69	50-75% Grass cover, Fair, HSG B
1.270	36	Woods, Fair, HSG A
6.950	48	Weighted Average
6.950		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0100	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
5.5	578	0.0120	1.76		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
2.0	283	0.0210	2.33		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
20.1	961	Total			

Subcatchment 2S: Outfall #2



Summary for Subcatchment 3S: Outfall #3

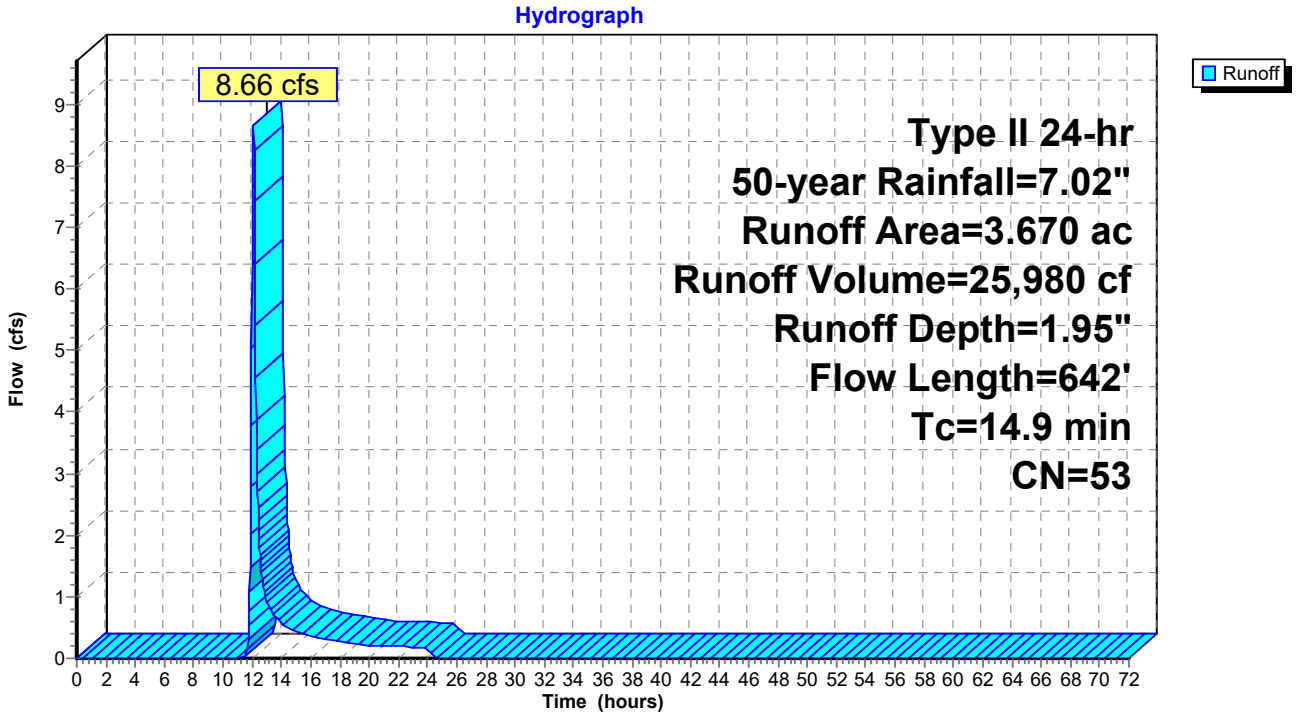
Runoff = 8.66 cfs @ 12.08 hrs, Volume= 25,980 cf, Depth= 1.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 50-year Rainfall=7.02"

Area (ac)	CN	Description
3.160	49	50-75% Grass cover, Fair, HSG A
0.180	36	Woods, Fair, HSG A
0.330	98	Paved parking, HSG A
3.670	53	Weighted Average
3.340		91.01% Pervious Area
0.330		8.99% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0100	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
1.7	337	0.0420	3.30		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.1	22	0.1360	5.94		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.5	183	0.0270	6.06	15.14	**Channel Flow,** Area= 2.5 sf Perim= 6.2' r= 0.40' n= 0.022 Earth, clean & straight
14.9	642	Total			

Subcatchment 3S: Outfall #3



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Outfall #1 Runoff Area=2.060 ac 16.50% Impervious Runoff Depth=2.95"
Flow Length=430' Tc=15.7 min CN=58 Runoff=7.52 cfs 22,034 cf

Subcatchment2S: Outfall #2 Runoff Area=6.950 ac 0.00% Impervious Runoff Depth=1.91"
Flow Length=961' Tc=20.1 min CN=48 Runoff=12.95 cfs 48,192 cf

Subcatchment3S: Outfall #3 Runoff Area=3.670 ac 8.99% Impervious Runoff Depth=2.42"
Flow Length=642' Tc=14.9 min CN=53 Runoff=10.99 cfs 32,226 cf

Total Runoff Area = 552,341 sf Runoff Volume = 102,451 cf Average Runoff Depth = 2.23"
94.72% Pervious = 523,156 sf 5.28% Impervious = 29,185 sf

Summary for Subcatchment 1S: Outfall #1

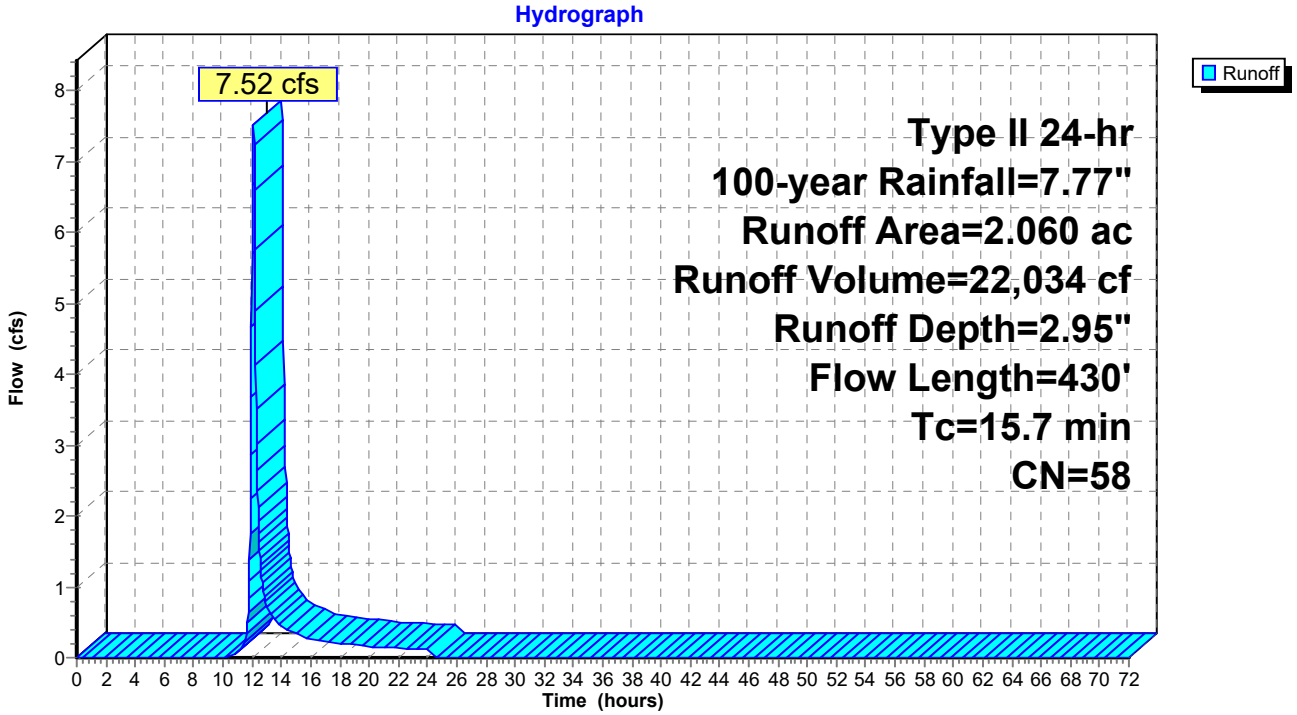
Runoff = 7.52 cfs @ 12.09 hrs, Volume= 22,034 cf, Depth= 2.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 100-year Rainfall=7.77"

Area (ac)	CN	Description
1.480	49	50-75% Grass cover, Fair, HSG A
0.150	69	50-75% Grass cover, Fair, HSG B
0.090	36	Woods, Fair, HSG A
0.340	98	Paved parking, HSG A
2.060	58	Weighted Average
1.720		83.50% Pervious Area
0.340		16.50% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.7	100	0.0080	0.12		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
2.0	330	0.0300	2.79		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
15.7	430	Total			

Subcatchment 1S: Outfall #1



Summary for Subcatchment 2S: Outfall #2

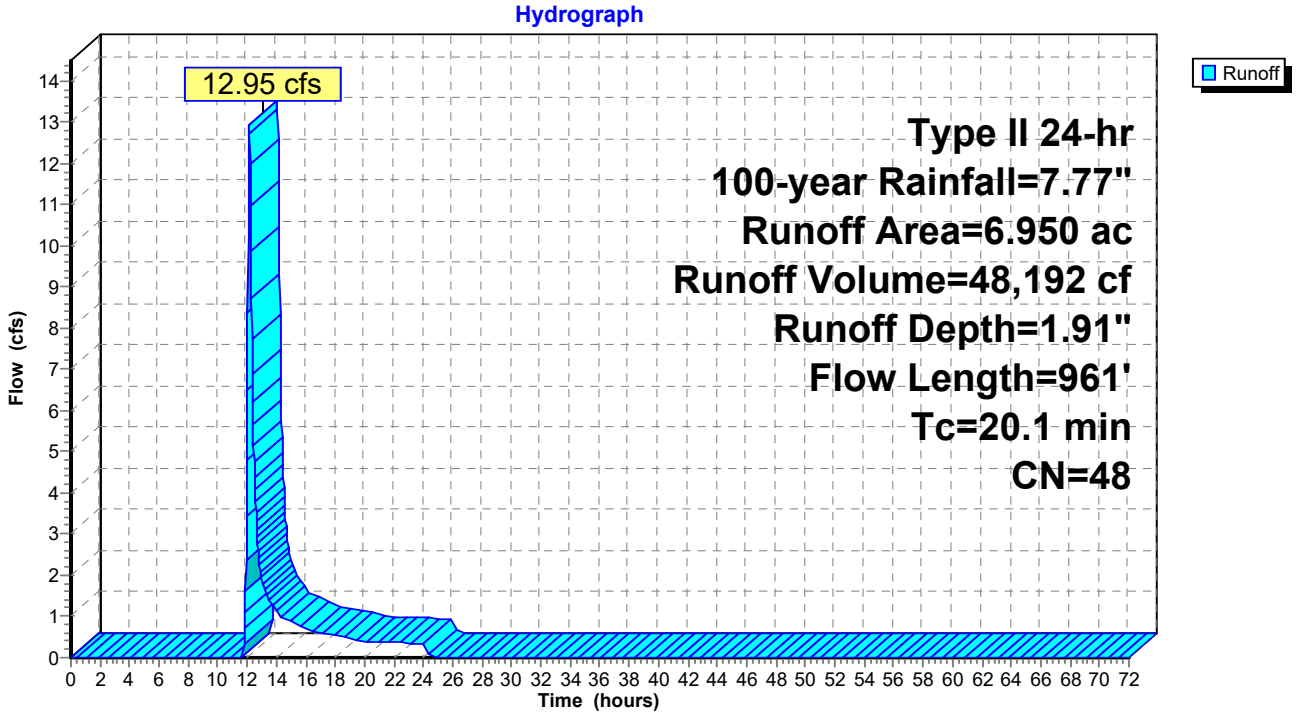
Runoff = 12.95 cfs @ 12.15 hrs, Volume= 48,192 cf, Depth= 1.91"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 100-year Rainfall=7.77"

Area (ac)	CN	Description
5.110	49	50-75% Grass cover, Fair, HSG A
0.570	69	50-75% Grass cover, Fair, HSG B
1.270	36	Woods, Fair, HSG A
6.950	48	Weighted Average
6.950		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0100	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
5.5	578	0.0120	1.76		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
2.0	283	0.0210	2.33		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
20.1	961	Total			

Subcatchment 2S: Outfall #2



Summary for Subcatchment 3S: Outfall #3

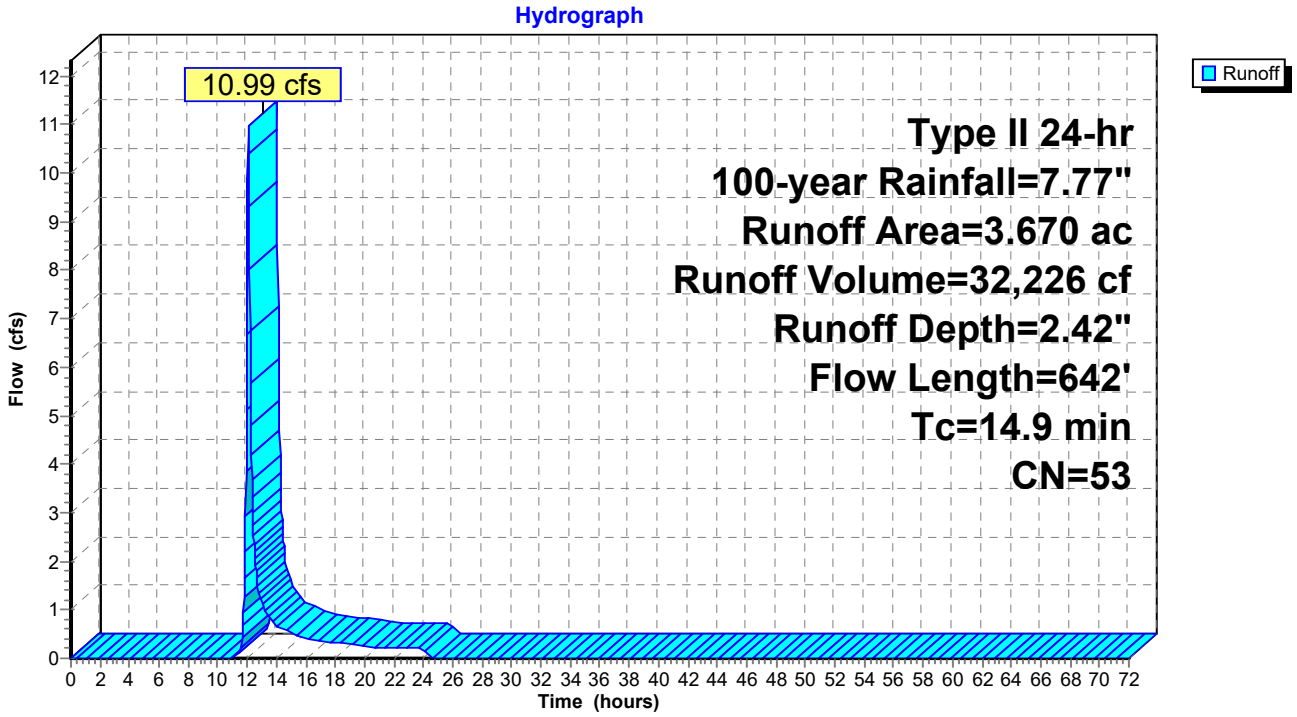
Runoff = 10.99 cfs @ 12.08 hrs, Volume= 32,226 cf, Depth= 2.42"

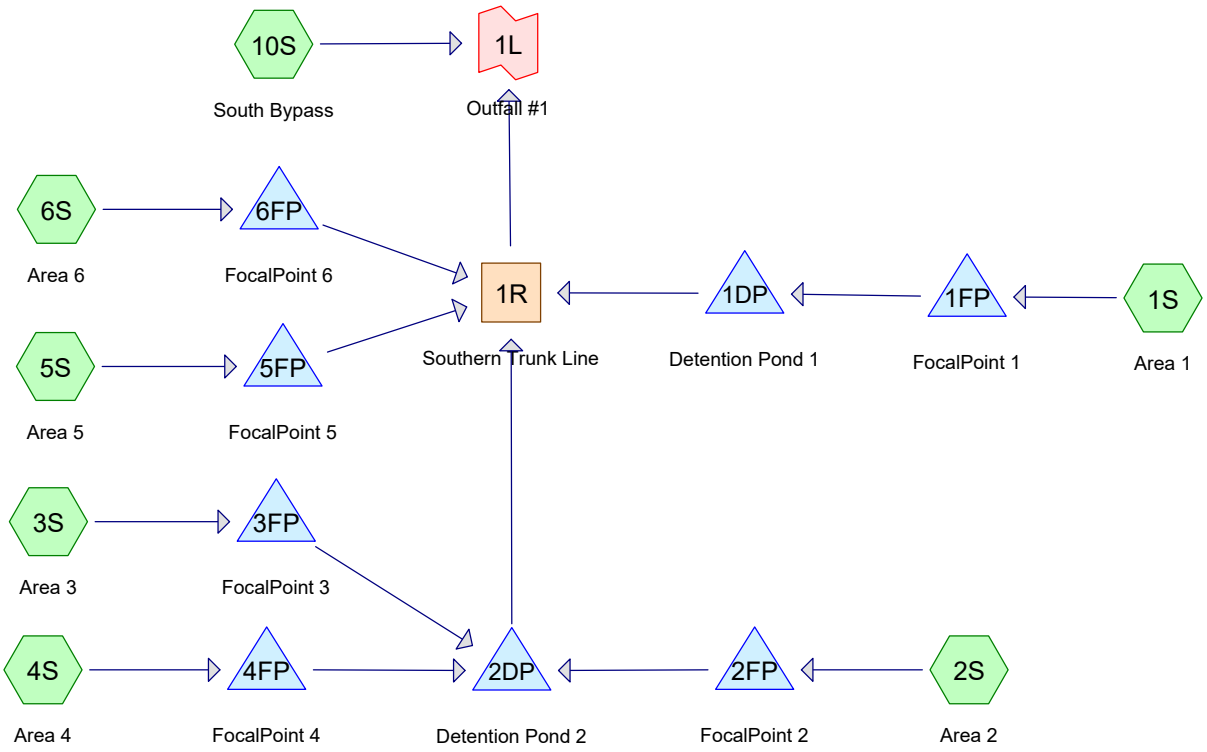
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 100-year Rainfall=7.77"

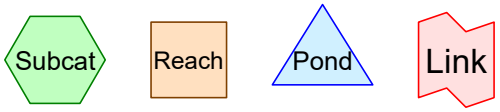
Area (ac)	CN	Description
3.160	49	50-75% Grass cover, Fair, HSG A
0.180	36	Woods, Fair, HSG A
0.330	98	Paved parking, HSG A
3.670	53	Weighted Average
3.340		91.01% Pervious Area
0.330		8.99% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0100	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
1.7	337	0.0420	3.30		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.1	22	0.1360	5.94		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.5	183	0.0270	6.06	15.14	**Channel Flow,** Area= 2.5 sf Perim= 6.2' r= 0.40' n= 0.022 Earth, clean & straight
14.9	642	Total			

Subcatchment 3S: Outfall #3







Routing Diagram for Stormwater Calculations - Proposed - Outfall 1 South
Prepared by Fulmer Lucas, Printed 4/20/2026
HydroCAD® 10.20-8a s/n 11448 © 2025 HydroCAD Software Solutions LLC

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-year	Type II 24-hr		Default	24.00	1	3.24	2
2	2-year	Type II 24-hr		Default	24.00	1	3.87	2
3	5-year	Type II 24-hr		Default	24.00	1	4.71	2
4	10-year	Type II 24-hr		Default	24.00	1	5.38	2
5	25-year	Type II 24-hr		Default	24.00	1	6.30	2
6	50-year	Type II 24-hr		Default	24.00	1	7.02	2
7	100-year	Type II 24-hr		Default	24.00	1	7.77	2

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
65,776	49	50-75% Grass cover, Fair, HSG A (1S, 2S, 3S, 4S, 5S, 6S, 10S)
121,097	98	Paved parking, HSG A (1S, 2S, 3S, 4S, 5S, 6S, 10S)
16,988	36	Woods, Fair, HSG A (1S, 10S)
203,861	**77**	**TOTAL AREA**

Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
203,861	HSG A	1S, 2S, 3S, 4S, 5S, 6S, 10S
0	HSG B	
0	HSG C	
0	HSG D	
0	Other	
203,861		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover	Su Nu
65,776	0	0	0	0	65,776	50-75% Grass cover, Fair	
121,097	0	0	0	0	121,097	Paved parking	
16,988	0	0	0	0	16,988	Woods, Fair	
203,861	**0**	**0**	**0**	**0**	**203,861**	**TOTAL AREA**	

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
1	1R	695.46	690.10	1,058.0	0.0051	0.013	0.0	24.0	0.0	
2	1DP	695.60	695.46	28.0	0.0050	0.013	0.0	18.0	0.0	
3	1FP	696.00	695.80	40.0	0.0050	0.013	0.0	18.0	0.0	
4	2DP	694.00	693.20	10.0	0.0800	0.013	0.0	18.0	0.0	
5	2FP	694.50	694.00	28.0	0.0179	0.013	0.0	18.0	0.0	
6	3FP	696.00	694.00	80.0	0.0250	0.013	0.0	18.0	0.0	
7	4FP	696.00	695.88	23.0	0.0052	0.013	0.0	18.0	0.0	
8	5FP	694.00	691.39	24.0	0.1088	0.013	0.0	18.0	0.0	
9	6FP	694.00	690.87	24.0	0.1304	0.013	0.0	18.0	0.0	

Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Area 1 Runoff Area=1.480 ac 43.92% Impervious Runoff Depth=0.75"
Tc=5.0 min CN=68 Runoff=1.96 cfs 4,053 cf

Subcatchment2S: Area 2 Runoff Area=0.720 ac 83.33% Impervious Runoff Depth=2.21"
Tc=5.0 min CN=90 Runoff=2.81 cfs 5,765 cf

Subcatchment3S: Area 3 Runoff Area=0.380 ac 71.05% Impervious Runoff Depth=1.72"
Tc=5.0 min CN=84 Runoff=1.19 cfs 2,367 cf

Subcatchment4S: Area 4 Runoff Area=1.100 ac 79.09% Impervious Runoff Depth=2.03"
Tc=5.0 min CN=88 Runoff=4.02 cfs 8,118 cf

Subcatchment5S: Area 5 Runoff Area=0.440 ac 61.36% Impervious Runoff Depth=1.37"
Tc=5.0 min CN=79 Runoff=1.11 cfs 2,183 cf

Subcatchment6S: Area 6 Runoff Area=0.180 ac 55.56% Impervious Runoff Depth=1.18"
Tc=5.0 min CN=76 Runoff=0.39 cfs 771 cf

Subcatchment10S: South Bypass Runoff Area=0.380 ac 5.26% Impervious Runoff Depth=0.12"
Tc=5.0 min CN=49 Runoff=0.01 cfs 160 cf

Reach 1R: Southern Trunk Line Avg. Flow Depth=0.33' Max Vel=2.82 fps Inflow=1.40 cfs 17,868 cf
24.0" Round Pipe n=0.013 L=1,058.0' S=0.0051 '/' Capacity=16.10 cfs Outflow=0.96 cfs 17,865 cf

Pond 1DP: Detention Pond 1 Peak Elev=696.59' Storage=734 cf Inflow=1.91 cfs 3,683 cf
Outflow=0.38 cfs 3,683 cf

Pond 1FP: FocalPoint 1 Peak Elev=699.68' Storage=502 cf Inflow=1.96 cfs 4,053 cf
Outflow=1.91 cfs 3,683 cf

Pond 2DP: Detention Pond 2 Peak Elev=694.80' Storage=6,955 cf Inflow=7.60 cfs 13,435 cf
Outflow=0.33 cfs 12,487 cf

Pond 2FP: FocalPoint 2 Peak Elev=698.22' Storage=972 cf Inflow=2.81 cfs 5,765 cf
Outflow=2.73 cfs 5,043 cf

Pond 3FP: FocalPoint 3 Peak Elev=699.62' Storage=824 cf Inflow=1.19 cfs 2,367 cf
Outflow=1.07 cfs 1,646 cf

Pond 4FP: FocalPoint 4 Peak Elev=699.80' Storage=1,389 cf Inflow=4.02 cfs 8,118 cf
Outflow=4.23 cfs 6,746 cf

Pond 5FP: FocalPoint 5 Peak Elev=697.60' Storage=725 cf Inflow=1.11 cfs 2,183 cf
Outflow=0.83 cfs 1,555 cf

Pond 6FP: FocalPoint 6 Peak Elev=697.50' Storage=629 cf Inflow=0.39 cfs 771 cf
Outflow=0.01 cfs 143 cf

Link 1L: Outfall #1

Inflow=0.97 cfs 18,025 cf
Primary=0.97 cfs 18,025 cf

Total Runoff Area = 203,861 sf Runoff Volume = 23,417 cf Average Runoff Depth = 1.38"
40.60% Pervious = 82,764 sf 59.40% Impervious = 121,097 sf

Summary for Subcatchment 1S: Area 1

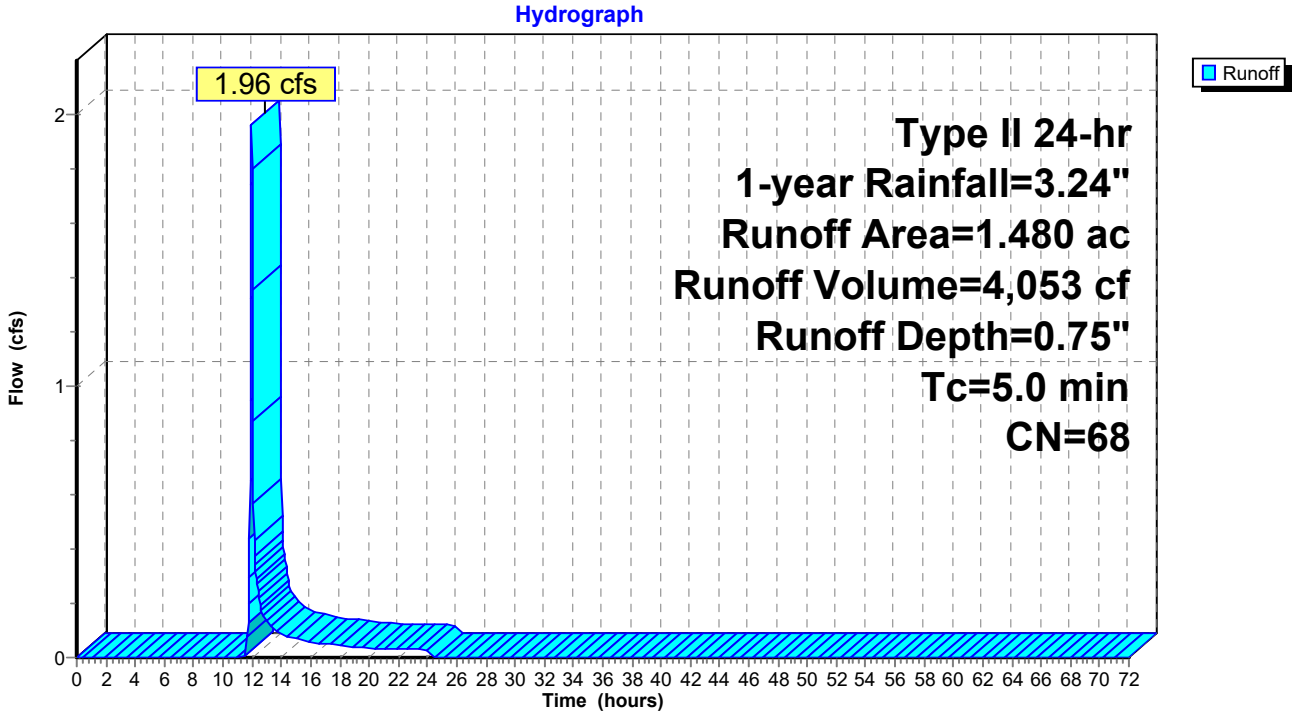
Runoff = 1.96 cfs @ 11.97 hrs, Volume= 4,053 cf, Depth= 0.75"
Routed to Pond 1FP : FocalPoint 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 1-year Rainfall=3.24"

Area (ac)	CN	Description
0.510	49	50-75% Grass cover, Fair, HSG A
0.320	36	Woods, Fair, HSG A
0.650	98	Paved parking, HSG A
1.480	68	Weighted Average
0.830		56.08% Pervious Area
0.650		43.92% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 1S: Area 1



Summary for Subcatchment 2S: Area 2

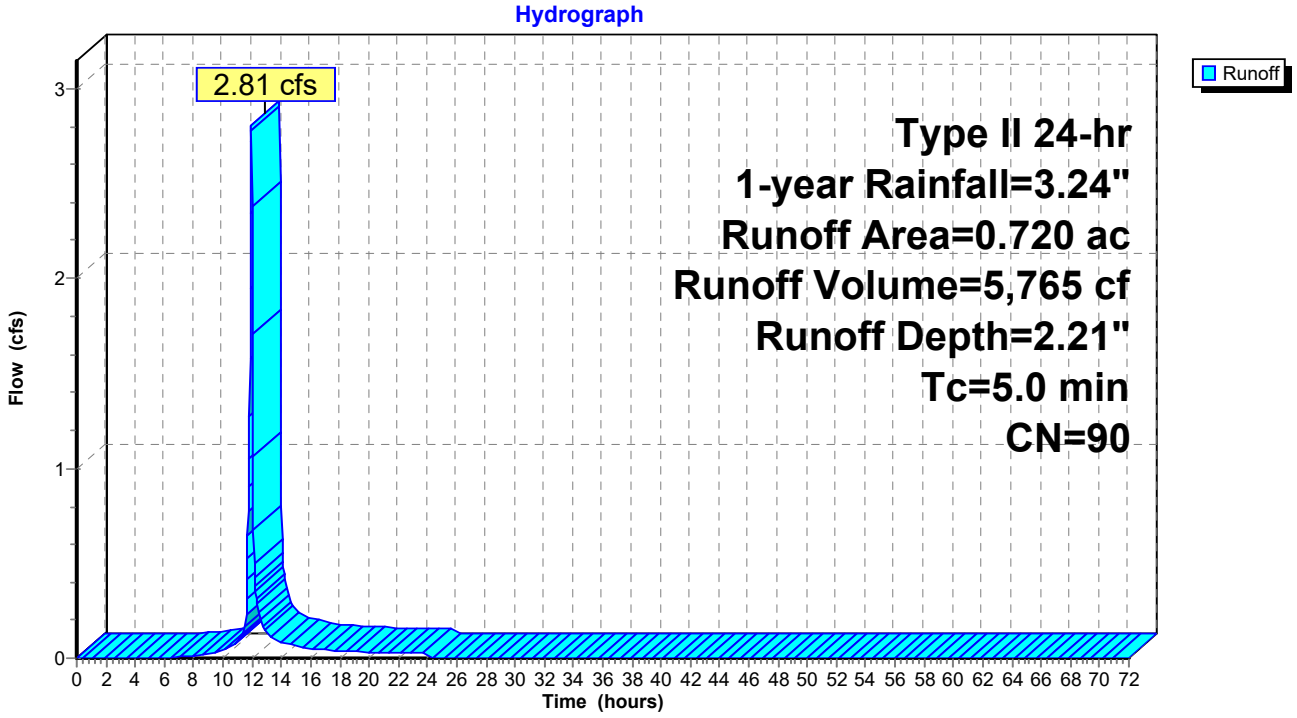
Runoff = 2.81 cfs @ 11.96 hrs, Volume= 5,765 cf, Depth= 2.21"
Routed to Pond 2FP : FocalPoint 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 1-year Rainfall=3.24"

Area (ac)	CN	Description
0.120	49	50-75% Grass cover, Fair, HSG A
0.600	98	Paved parking, HSG A
0.720	90	Weighted Average
0.120		16.67% Pervious Area
0.600		83.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 2S: Area 2



Summary for Subcatchment 3S: Area 3

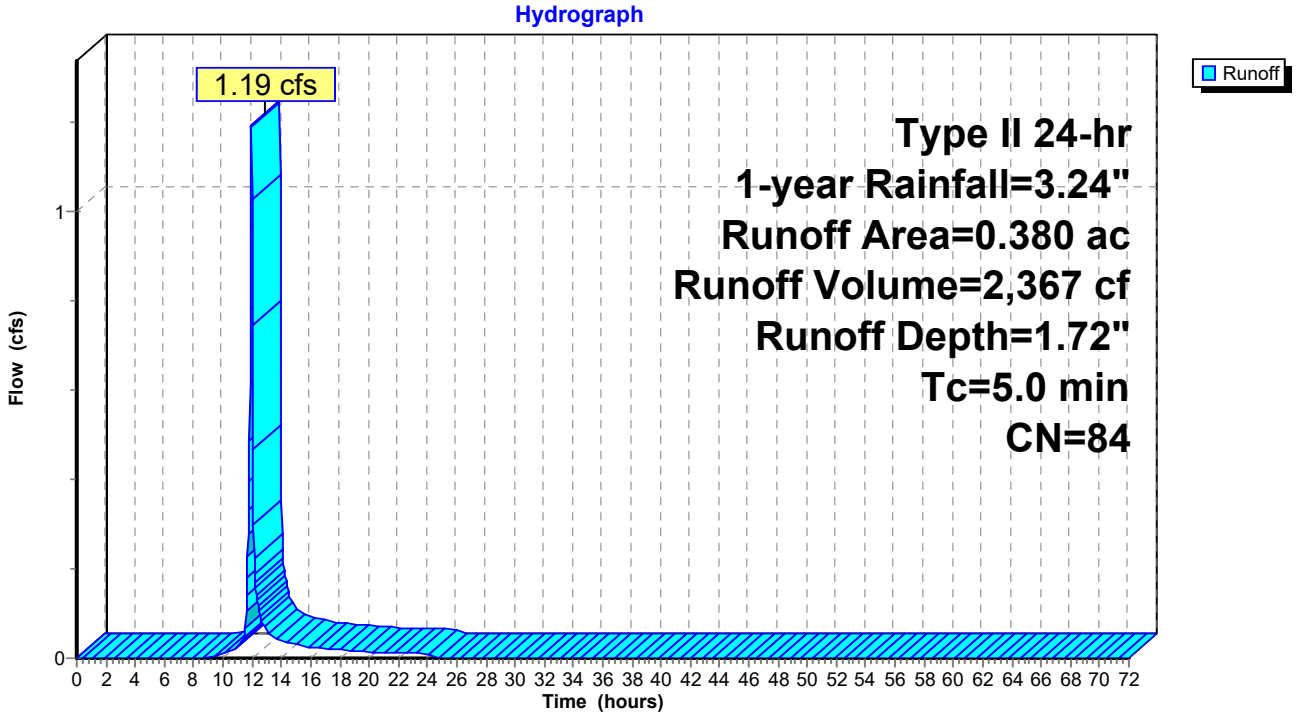
Runoff = 1.19 cfs @ 11.96 hrs, Volume= 2,367 cf, Depth= 1.72"
Routed to Pond 3FP : FocalPoint 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 1-year Rainfall=3.24"

Area (ac)	CN	Description
0.110	49	50-75% Grass cover, Fair, HSG A
0.270	98	Paved parking, HSG A
0.380	84	Weighted Average
0.110		28.95% Pervious Area
0.270		71.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 3S: Area 3



Summary for Subcatchment 4S: Area 4

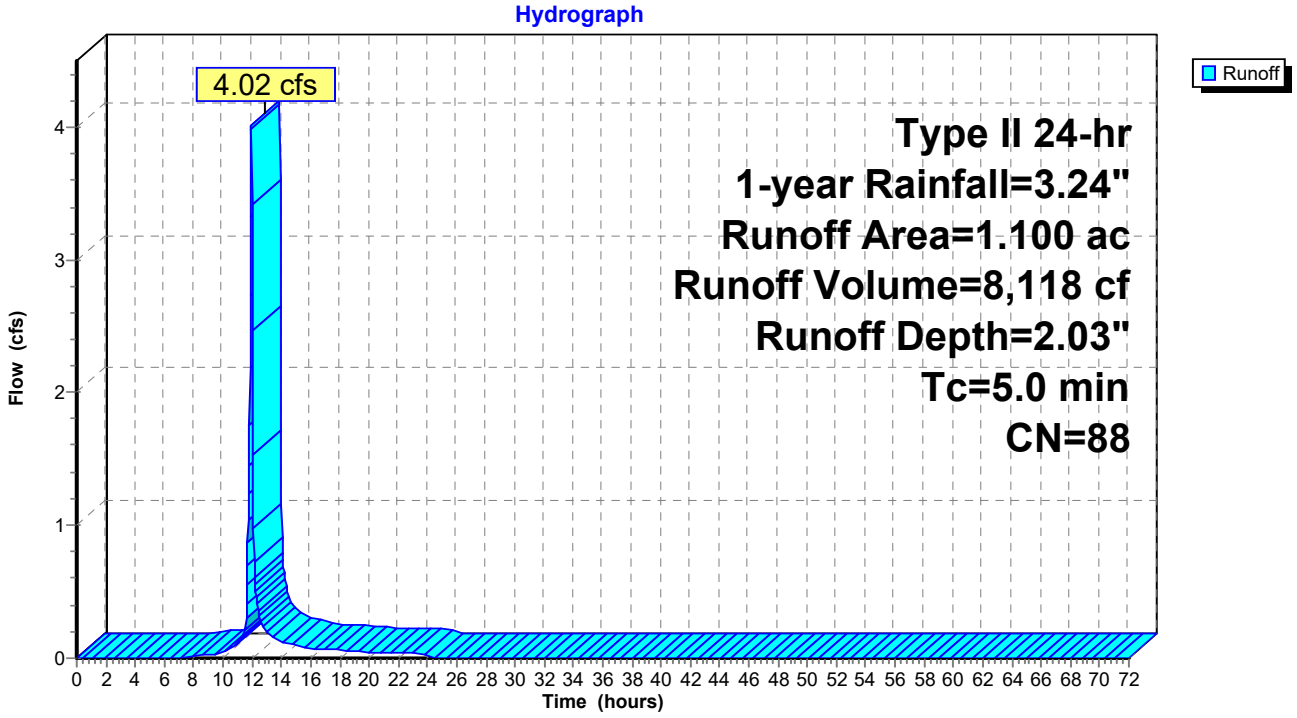
Runoff = 4.02 cfs @ 11.96 hrs, Volume= 8,118 cf, Depth= 2.03"
Routed to Pond 4FP : FocalPoint 4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 1-year Rainfall=3.24"

Area (ac)	CN	Description
0.230	49	50-75% Grass cover, Fair, HSG A
0.870	98	Paved parking, HSG A
1.100	88	Weighted Average
0.230		20.91% Pervious Area
0.870		79.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 4S: Area 4



Summary for Subcatchment 5S: Area 5

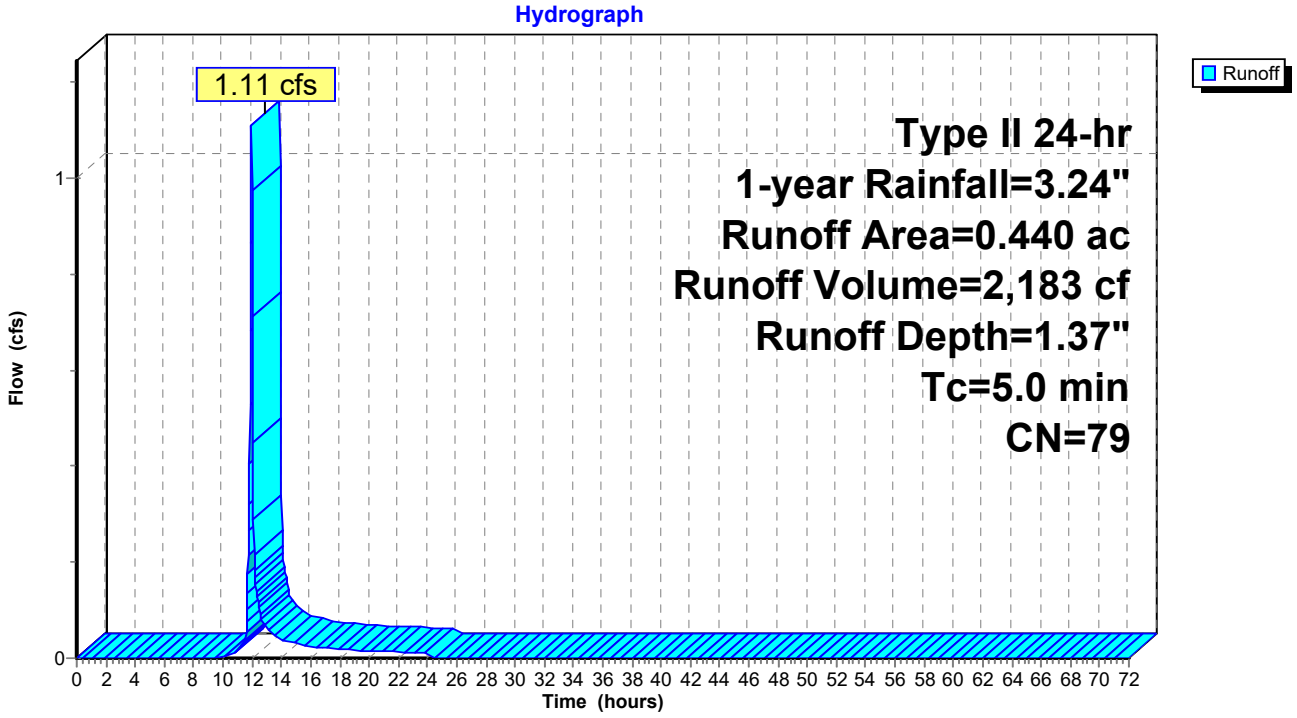
Runoff = 1.11 cfs @ 11.96 hrs, Volume= 2,183 cf, Depth= 1.37"
Routed to Pond 5FP : FocalPoint 5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 1-year Rainfall=3.24"

Area (ac)	CN	Description
0.170	49	50-75% Grass cover, Fair, HSG A
0.270	98	Paved parking, HSG A
0.440	79	Weighted Average
0.170		38.64% Pervious Area
0.270		61.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 5S: Area 5



Summary for Subcatchment 6S: Area 6

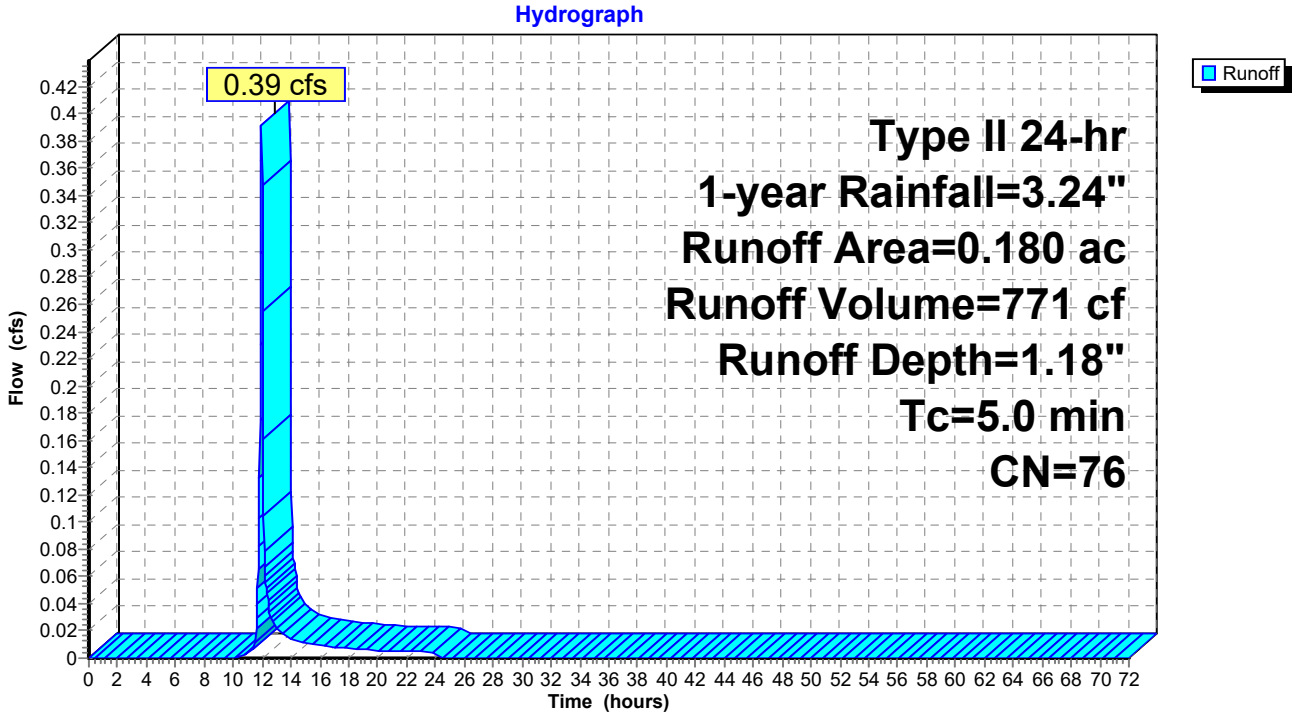
Runoff = 0.39 cfs @ 11.97 hrs, Volume= 771 cf, Depth= 1.18"
Routed to Pond 6FP : FocalPoint 6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 1-year Rainfall=3.24"

Area (ac)	CN	Description
0.080	49	50-75% Grass cover, Fair, HSG A
0.100	98	Paved parking, HSG A
0.180	76	Weighted Average
0.080		44.44% Pervious Area
0.100		55.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 6S: Area 6



Summary for Subcatchment 10S: South Bypass

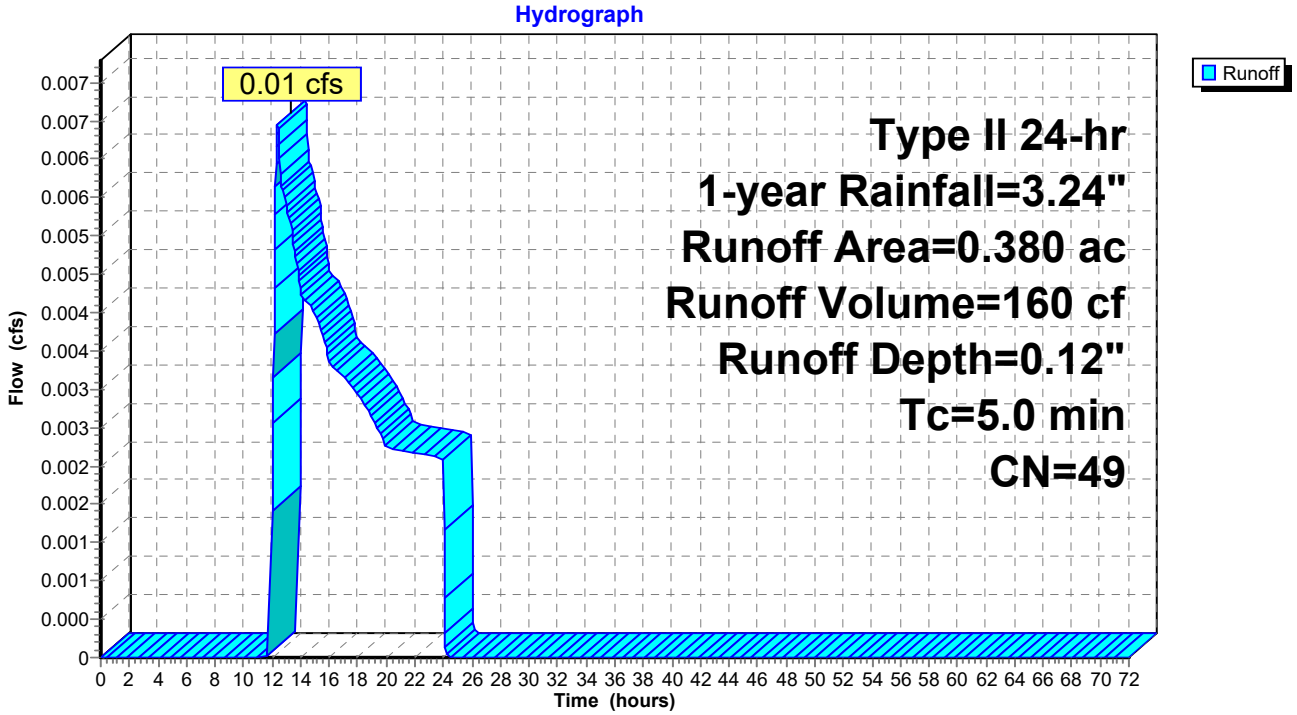
Runoff = 0.01 cfs @ 12.39 hrs, Volume= 160 cf, Depth= 0.12"
Routed to Link 1L : Outfall #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 1-year Rainfall=3.24"

Area (ac)	CN	Description
0.290	49	50-75% Grass cover, Fair, HSG A
0.070	36	Woods, Fair, HSG A
0.020	98	Paved parking, HSG A
0.380	49	Weighted Average
0.360		94.74% Pervious Area
0.020		5.26% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 10S: South Bypass



Summary for Reach 1R: Southern Trunk Line

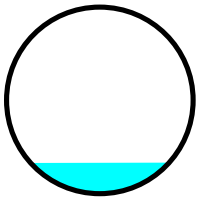
[52] Hint: Inlet/Outlet conditions not evaluated
[79] Warning: Submerged Pond 1DP Primary device # 1 INLET by 0.19'
[81] Warning: Exceeded Pond 2DP by 1.71' @ 0.00 hrs
[79] Warning: Submerged Pond 5FP Primary device # 1 INLET by 1.79'
[79] Warning: Submerged Pond 6FP Primary device # 1 INLET by 1.79'

Inflow Area = 187,308 sf, 64.19% Impervious, Inflow Depth > 1.14" for 1-year event
Inflow = 1.40 cfs @ 12.03 hrs, Volume= 17,868 cf
Outflow = 0.96 cfs @ 12.24 hrs, Volume= 17,865 cf, Atten= 32%, Lag= 12.6 min
Routed to Link 1L : Outfall #1

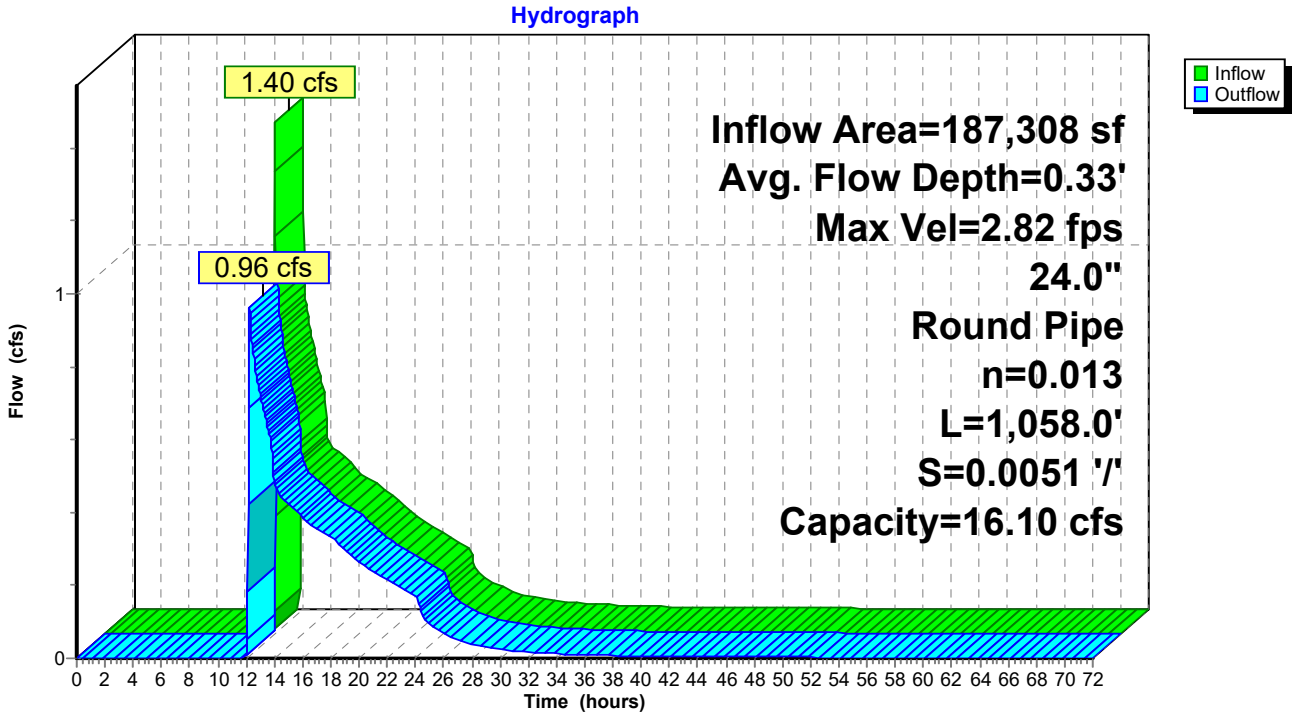
Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Max. Velocity= 2.82 fps, Min. Travel Time= 6.3 min
Avg. Velocity = 0.91 fps, Avg. Travel Time= 19.3 min

Peak Storage= 362 cf @ 12.13 hrs
Average Depth at Peak Storage= 0.33' , Surface Width= 1.49'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 16.10 cfs

24.0" Round Pipe
n= 0.013
Length= 1,058.0' Slope= 0.0051 '/'
Inlet Invert= 695.46', Outlet Invert= 690.10'



Reach 1R: Southern Trunk Line



Summary for Pond 1DP: Detention Pond 1

[44] Hint: Outlet device #2 is below defined storage
[79] Warning: Submerged Pond 1FP Primary device # 1 INLET by 0.59'

Inflow Area = 64,469 sf, 43.92% Impervious, Inflow Depth = 0.69" for 1-year event
Inflow = 1.91 cfs @ 11.99 hrs, Volume= 3,683 cf
Outflow = 0.38 cfs @ 12.17 hrs, Volume= 3,683 cf, Atten= 80%, Lag= 11.1 min
Primary = 0.38 cfs @ 12.17 hrs, Volume= 3,683 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 696.59' @ 12.17 hrs Surf.Area= 1,358 sf Storage= 734 cf

Plug-Flow detention time= 12.0 min calculated for 3,682 cf (100% of inflow)
Center-of-Mass det. time= 12.0 min (909.4 - 897.5)

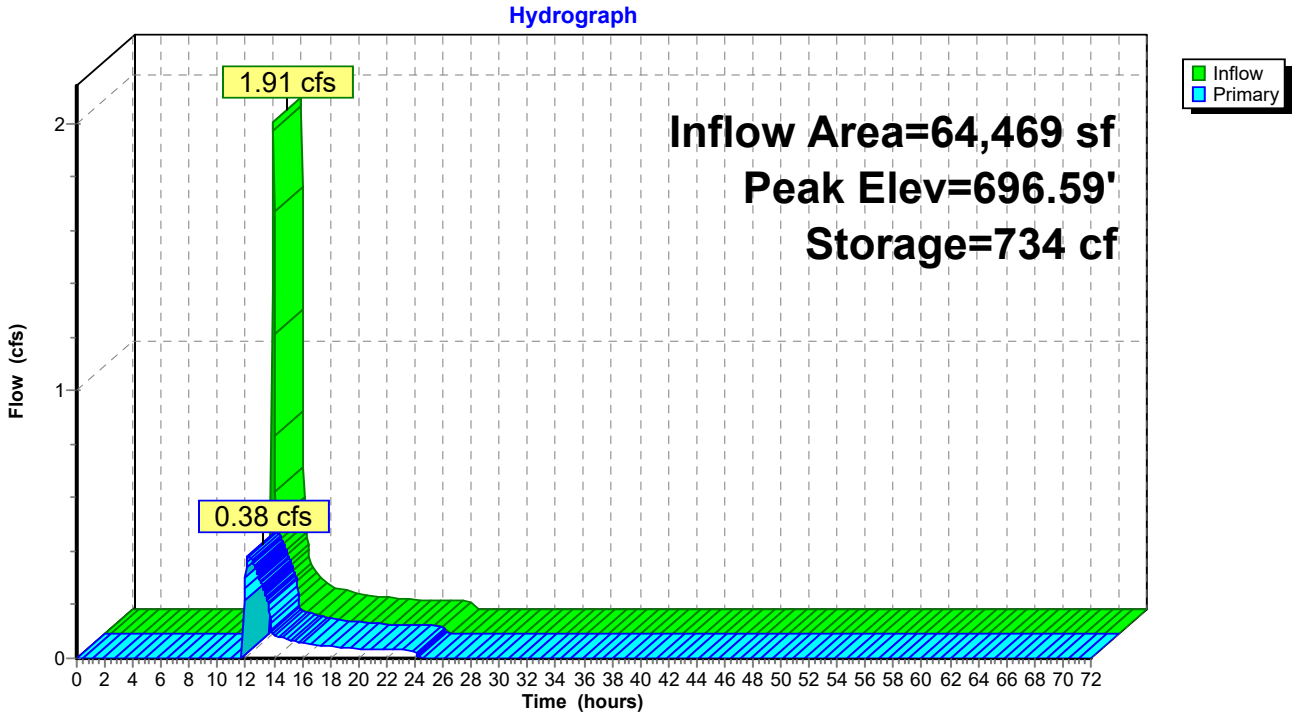
Volume	Invert	Avail.Storage	Storage Description
#1	695.80'	19,432 cf	**Custom Stage Data (Prismatic)** Listed below

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.80	0	0	0
696.00	285	29	29
697.00	2,098	1,192	1,220
698.00	3,151	2,625	3,845
699.00	4,138	3,645	7,489
700.00	5,311	4,725	12,214
701.00	9,125	7,218	19,432

Device	Routing	Invert	Outlet Devices
#1	Primary	695.60'	**18.0" Round Culvert** L= 28.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 695.60' / 695.46' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	695.60'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.38 cfs @ 12.17 hrs HW=696.59' TW=565.00' (Fixed TW Elev= 565.00')
└─**1=Culvert** (Passes 0.38 cfs of 3.08 cfs potential flow)
  ├─**2=Orifice/Grate** (Orifice Controls 0.38 cfs @ 4.37 fps)
  └─**3=Orifice/Grate** (Controls 0.00 cfs)

Pond 1DP: Detention Pond 1



Summary for Pond 1FP: FocalPoint 1

[92] Warning: Device #3 is above defined storage

Inflow Area = 64,469 sf, 43.92% Impervious, Inflow Depth = 0.75" for 1-year event
Inflow = 1.96 cfs @ 11.97 hrs, Volume= 4,053 cf
Outflow = 1.91 cfs @ 11.99 hrs, Volume= 3,683 cf, Atten= 3%, Lag= 0.9 min
Primary = 1.91 cfs @ 11.99 hrs, Volume= 3,683 cf
Routed to Pond 1DP : Detention Pond 1

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 699.68' @ 11.99 hrs Surf.Area= 827 sf Storage= 502 cf

Plug-Flow detention time= 65.9 min calculated for 3,683 cf (91% of inflow)
Center-of-Mass det. time= 19.2 min (897.5 - 878.2)

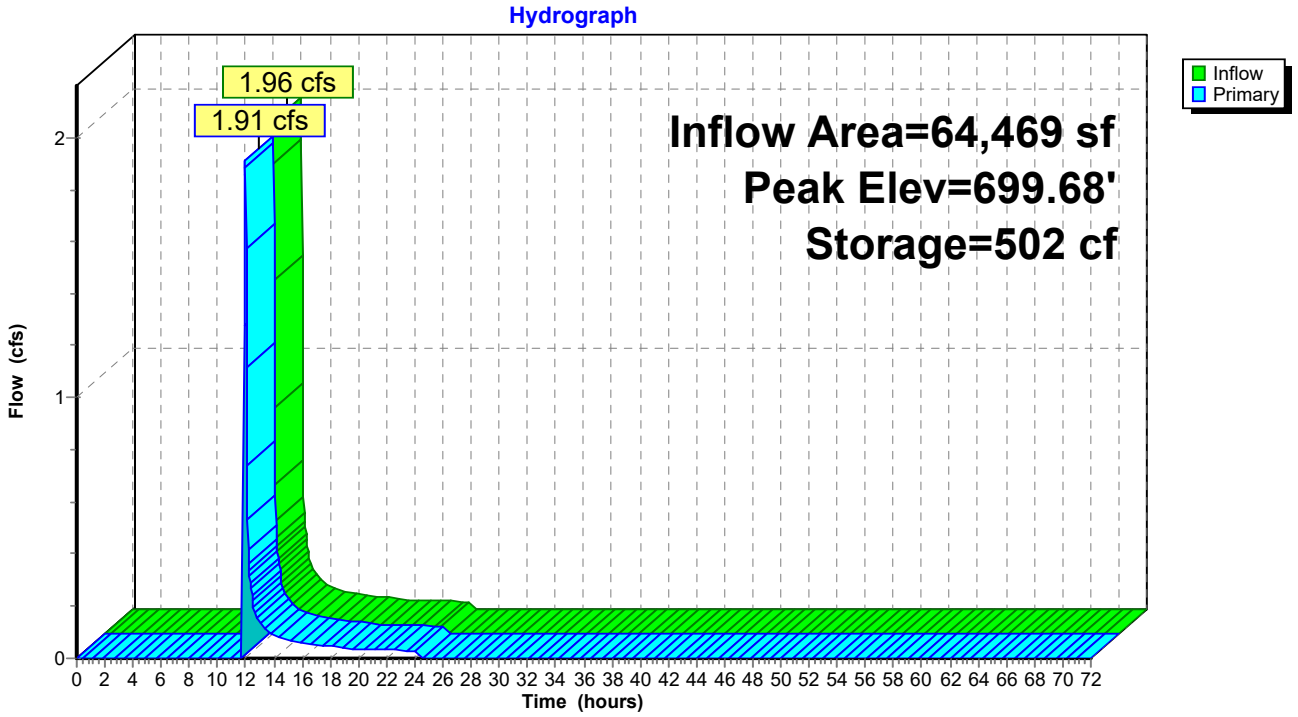
Volume	Invert	Avail.Storage	Storage Description
#1	696.00'	815 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
696.00	237	0.0	0	0
699.00	237	20.0	142	142
700.00	1,109	100.0	673	815

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 40.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 695.80' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**10.0' long x 18.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=1.87 cfs @ 11.99 hrs HW=699.67' (Free Discharge)
- **1=Culvert** (Passes 1.87 cfs of 14.55 cfs potential flow)
  - **2=Orifice/Grate** (Weir Controls 1.87 cfs @ 1.36 fps)
- **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1FP: FocalPoint 1



Summary for Pond 2DP: Detention Pond 2

[79] Warning: Submerged Pond 2FP Primary device # 1 INLET by 0.30'
[79] Warning: Submerged Pond 3FP Primary device # 1 OUTLET by 0.80'

Inflow Area = 95,832 sf, 79.09% Impervious, Inflow Depth = 1.68" for 1-year event
Inflow = 7.60 cfs @ 11.99 hrs, Volume= 13,435 cf
Outflow = 0.33 cfs @ 13.35 hrs, Volume= 12,487 cf, Atten= 96%, Lag= 81.8 min
Primary = 0.33 cfs @ 13.35 hrs, Volume= 12,487 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 694.80' @ 13.35 hrs Surf.Area= 8,711 sf Storage= 6,955 cf

Plug-Flow detention time= 345.0 min calculated for 12,487 cf (93% of inflow)
Center-of-Mass det. time= 307.2 min (1,150.9 - 843.6)

Volume	Invert	Avail.Storage	Storage Description
#1A	693.75'	3,019 cf	**38.12'W x 114.25'L x 4.79'H Field A** 20,877 cf Overall - 13,330 cf Embedded = 7,547 cf x 40.0% Voids
#2A	694.00'	12,663 cf	**Ferguson R-Tank HD 2.5** x 1222 Inside #1 Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf 1222 Chambers in 26 Rows
#3B	693.75'	3,019 cf	**38.12'W x 114.25'L x 4.79'H Field B** 20,877 cf Overall - 13,330 cf Embedded = 7,547 cf x 40.0% Voids
#4B	694.00'	12,663 cf	**Ferguson R-Tank HD 2.5** x 1222 Inside #3 Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf 1222 Chambers in 26 Rows
		31,364 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 10.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 693.20' S= 0.0800 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	694.00'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	697.00'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=0.33 cfs @ 13.35 hrs HW=694.80' TW=565.00' (Fixed TW Elev= 565.00')
- **1=Culvert** (Passes 0.33 cfs of 2.91 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.33 cfs @ 3.83 fps)
- **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 2DP: Detention Pond 2 - Chamber Wizard Field A

Chamber Model = Ferguson R-Tank HD 2.5 (Ferguson R-Tank HD)
Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf
Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf

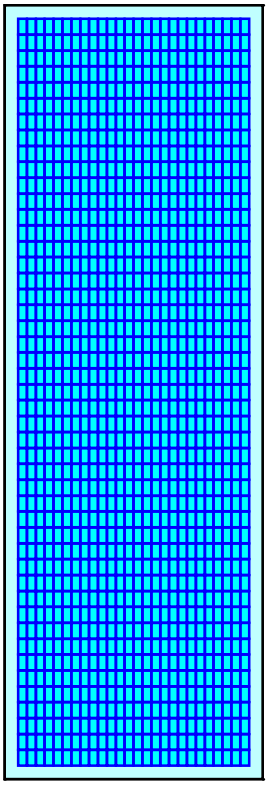
47 Chambers/Row x 2.35' Long = 110.25' Row Length +24.0" End Stone x 2 = 114.25' Base Length
26 Rows x 15.7" Wide + 24.0" Side Stone x 2 = 38.12' Base Width
3.0" Stone Base + 42.5" Chamber Height + 12.0" Stone Cover = 4.79' Field Height

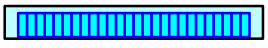
1,222 Chambers x 10.4 cf = 12,663.1 cf Chamber Storage
1,222 Chambers x 10.9 cf = 13,329.6 cf Displacement

20,876.7 cf Field - 13,329.6 cf Chambers = 7,547.2 cf Stone x 40.0% Voids = 3,018.9 cf Stone Storage

Chamber Storage + Stone Storage = 15,682.0 cf = 0.360 af
Overall Storage Efficiency = 75.1%
Overall System Size = 114.25' x 38.12' x 4.79'

1,222 Chambers
773.2 cy Field
279.5 cy Stone





Pond 2DP: Detention Pond 2 - Chamber Wizard Field B

Chamber Model = Ferguson R-Tank HD 2.5 (Ferguson R-Tank HD)
Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf
Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf

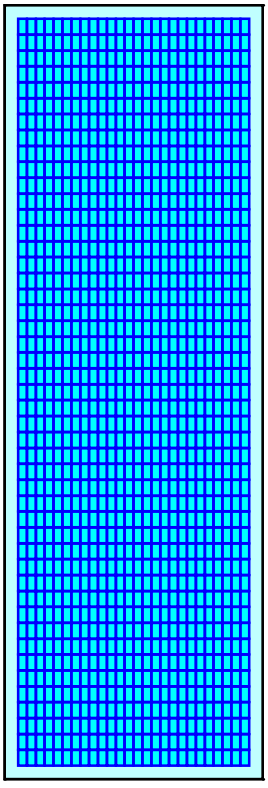
47 Chambers/Row x 2.35' Long = 110.25' Row Length +24.0" End Stone x 2 = 114.25' Base Length
26 Rows x 15.7" Wide + 24.0" Side Stone x 2 = 38.12' Base Width
3.0" Stone Base + 42.5" Chamber Height + 12.0" Stone Cover = 4.79' Field Height

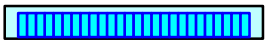
1,222 Chambers x 10.4 cf = 12,663.1 cf Chamber Storage
1,222 Chambers x 10.9 cf = 13,329.6 cf Displacement

20,876.7 cf Field - 13,329.6 cf Chambers = 7,547.2 cf Stone x 40.0% Voids = 3,018.9 cf Stone Storage

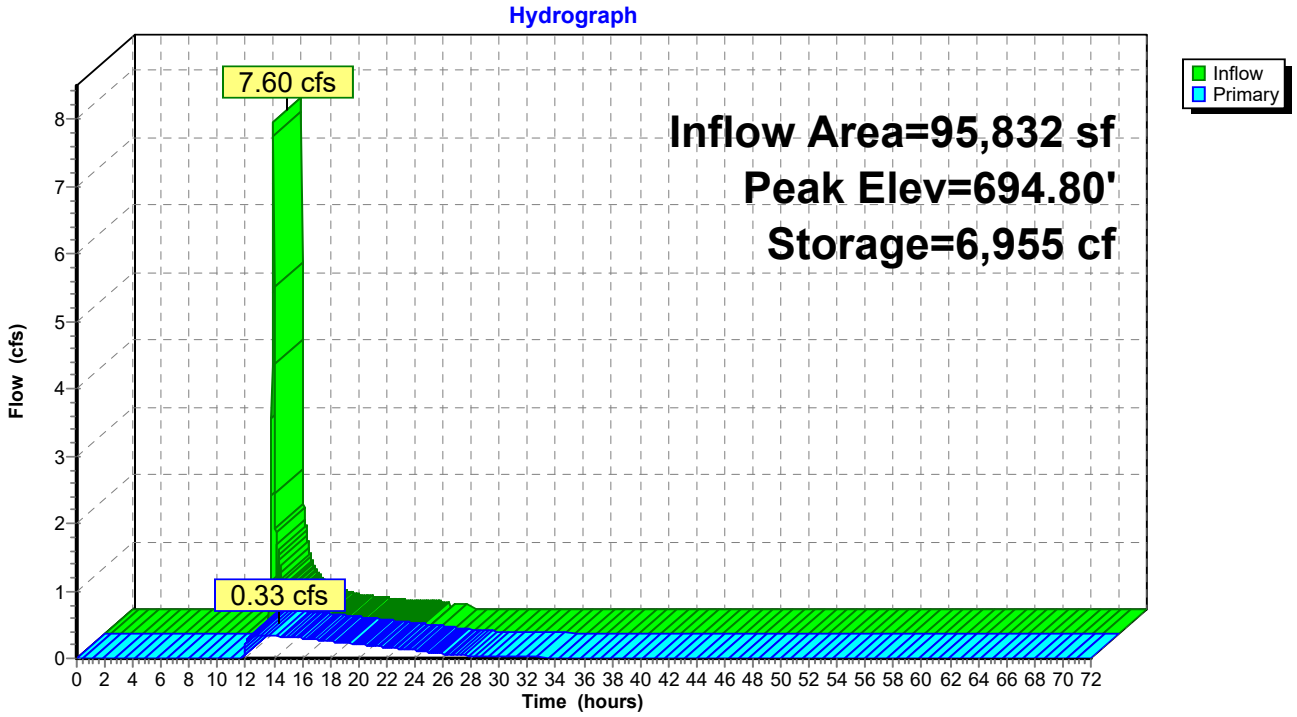
Chamber Storage + Stone Storage = 15,682.0 cf = 0.360 af
Overall Storage Efficiency = 75.1%
Overall System Size = 114.25' x 38.12' x 4.79'

1,222 Chambers
773.2 cy Field
279.5 cy Stone





Pond 2DP: Detention Pond 2



Summary for Pond 2FP: FocalPoint 2

Inflow Area = 31,363 sf, 83.33% Impervious, Inflow Depth = 2.21" for 1-year event
Inflow = 2.81 cfs @ 11.96 hrs, Volume= 5,765 cf
Outflow = 2.73 cfs @ 11.97 hrs, Volume= 5,043 cf, Atten= 3%, Lag= 0.9 min
Primary = 2.73 cfs @ 11.97 hrs, Volume= 5,043 cf
Routed to Pond 2DP : Detention Pond 2

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 698.22' @ 11.97 hrs Surf.Area= 1,176 sf Storage= 972 cf

Plug-Flow detention time= 89.6 min calculated for 5,040 cf (87% of inflow)
Center-of-Mass det. time= 29.5 min (831.9 - 802.4)

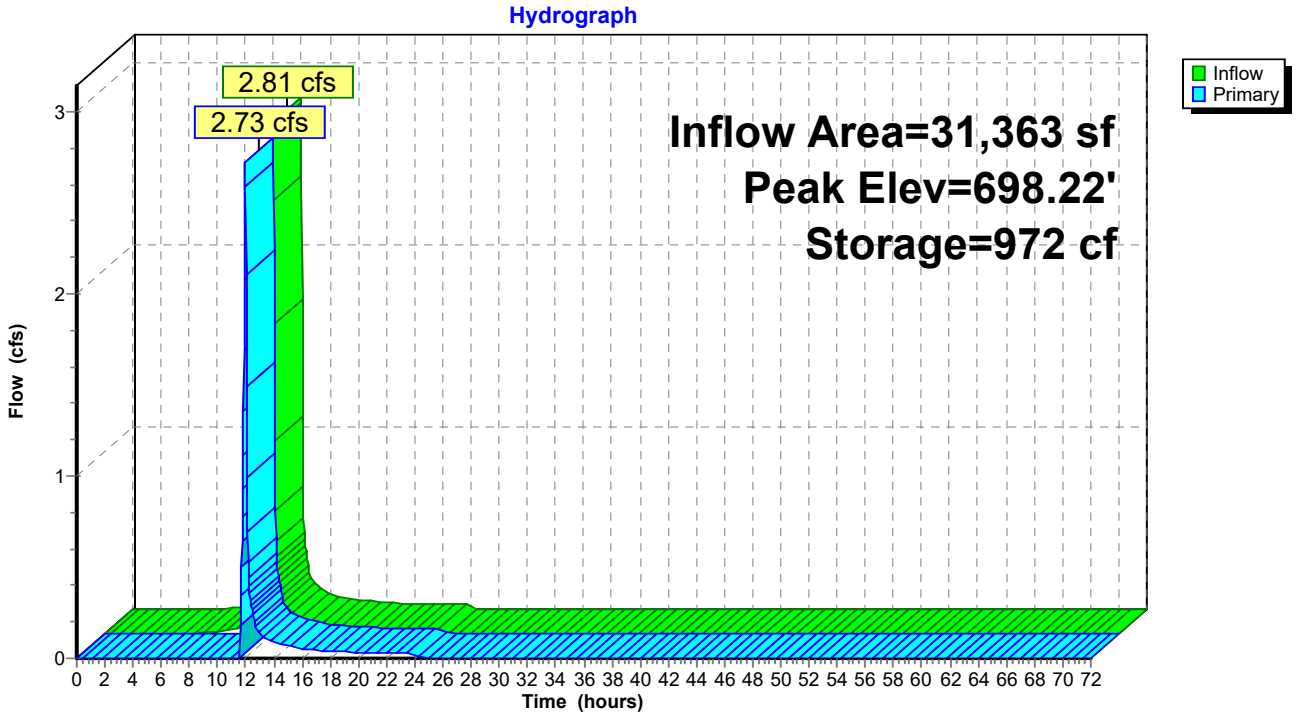
Volume	Invert	Avail.Storage	Storage Description
#1	694.50'	1,317 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.50	539	0.0	0	0
697.50	539	20.0	323	323
698.00	1,056	100.0	399	722
698.50	1,323	100.0	595	1,317

Device	Routing	Invert	Outlet Devices
#1	Primary	694.50'	**18.0" Round Culvert** L= 28.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.50' / 694.00' S= 0.0179 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	698.00'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=2.70 cfs @ 11.97 hrs HW=698.22' (Free Discharge)
└**1=Culvert** (Passes 2.70 cfs of 14.67 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 2.70 cfs @ 1.54 fps)

Pond 2FP: FocalPoint 2



Summary for Pond 3FP: FocalPoint 3

Inflow Area = 16,553 sf, 71.05% Impervious, Inflow Depth = 1.72" for 1-year event
Inflow = 1.19 cfs @ 11.96 hrs, Volume= 2,367 cf
Outflow = 1.07 cfs @ 12.00 hrs, Volume= 1,646 cf, Atten= 10%, Lag= 2.6 min
Primary = 1.07 cfs @ 12.00 hrs, Volume= 1,646 cf
Routed to Pond 2DP : Detention Pond 2

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 699.62' @ 12.01 hrs Surf.Area= 892 sf Storage= 824 cf

Plug-Flow detention time= 163.8 min calculated for 1,646 cf (70% of inflow)
Center-of-Mass det. time= 59.8 min (884.7 - 824.9)

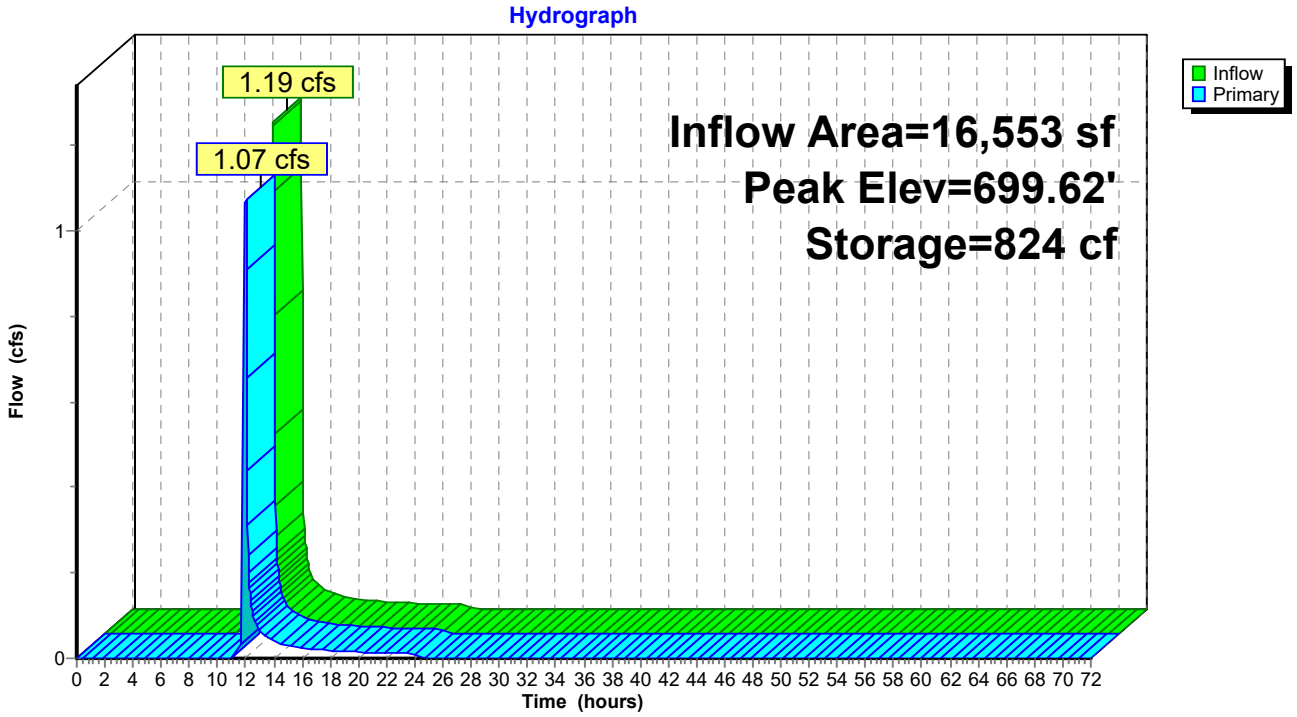
Volume	Invert	Avail.Storage	Storage Description
#1	696.00'	1,197 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
696.00	602	0.0	0	0
699.00	602	20.0	361	361
700.00	1,070	100.0	836	1,197

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 80.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 694.00' S= 0.0250 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.03 cfs @ 12.00 hrs HW=699.62' (Free Discharge)
↑**1=Culvert** (Passes 1.03 cfs of 14.41 cfs potential flow)
↑**2=Orifice/Grate** (Weir Controls 1.03 cfs @ 1.12 fps)

Pond 3FP: FocalPoint 3



Summary for Pond 4FP: FocalPoint 4

[92] Warning: Device #2 is above defined storage
[92] Warning: Device #3 is above defined storage
[93] Warning: Storage range exceeded by 0.80'
[88] Warning: Qout>Qin may require smaller dt or Finer Routing
[85] Warning: Oscillations may require smaller dt or Finer Routing (severity=201)

Inflow Area = 47,916 sf, 79.09% Impervious, Inflow Depth = 2.03" for 1-year event
Inflow = 4.02 cfs @ 11.96 hrs, Volume= 8,118 cf
Outflow = 4.23 cfs @ 11.95 hrs, Volume= 6,746 cf, Atten= 0%, Lag= 0.0 min
Primary = 4.23 cfs @ 11.95 hrs, Volume= 6,746 cf
Routed to Pond 2DP : Detention Pond 2

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 699.80' @ 11.95 hrs Surf.Area= 1,491 sf Storage= 1,389 cf

Plug-Flow detention time= 105.8 min calculated for 6,743 cf (83% of inflow)
Center-of-Mass det. time= 31.8 min (842.3 - 810.5)

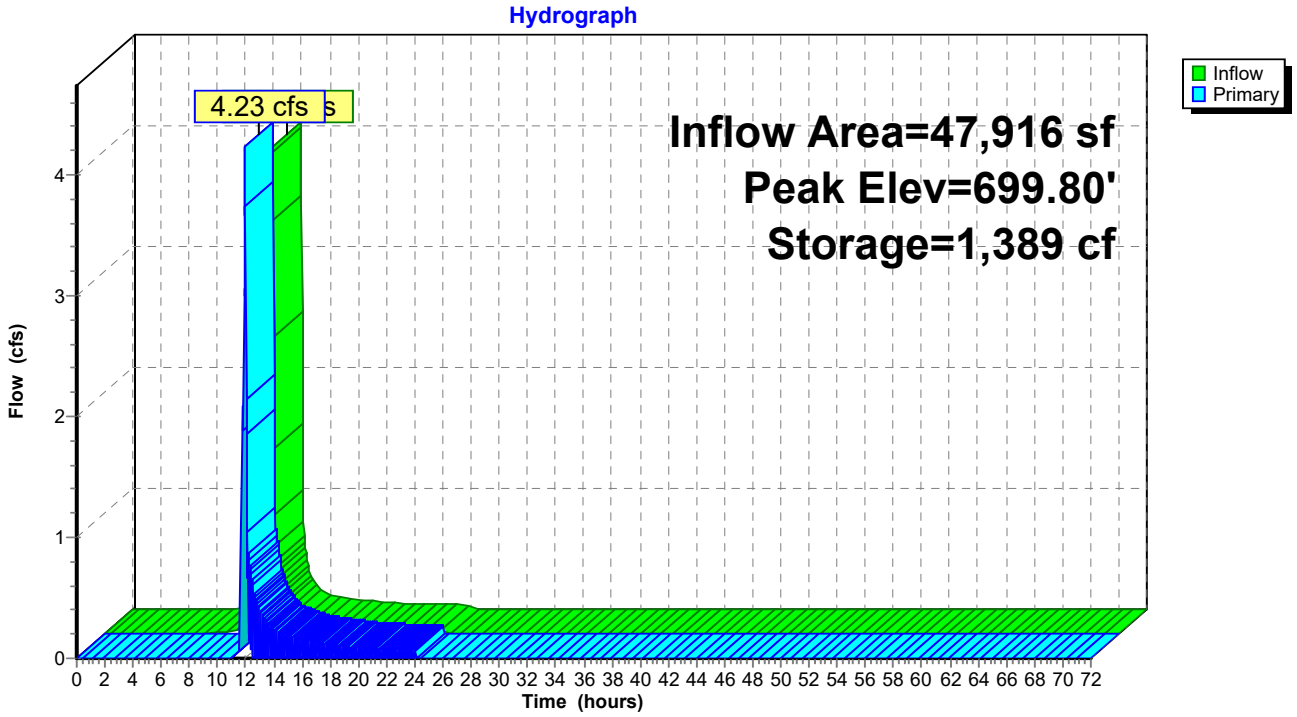
Volume	Invert	Avail.Storage	Storage Description
#1	695.00'	1,389 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.00	585	0.0	0	0
698.00	585	20.0	351	351
699.00	1,491	100.0	1,038	1,389

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 23.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 695.88' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**6.0' long x 133.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=4.09 cfs @ 11.95 hrs HW=699.79' (Free Discharge)
└**1=Culvert** (Passes 4.09 cfs of 14.84 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 4.09 cfs @ 1.77 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 4FP: FocalPoint 4



Summary for Pond 5FP: FocalPoint 5

Inflow Area = 19,166 sf, 61.36% Impervious, Inflow Depth = 1.37" for 1-year event
Inflow = 1.11 cfs @ 11.96 hrs, Volume= 2,183 cf
Outflow = 0.83 cfs @ 12.02 hrs, Volume= 1,555 cf, Atten= 26%, Lag= 3.5 min
Primary = 0.83 cfs @ 12.02 hrs, Volume= 1,555 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 697.60' @ 12.02 hrs Surf.Area= 996 sf Storage= 725 cf

Plug-Flow detention time= 163.0 min calculated for 1,554 cf (71% of inflow)
Center-of-Mass det. time= 57.3 min (898.4 - 841.1)

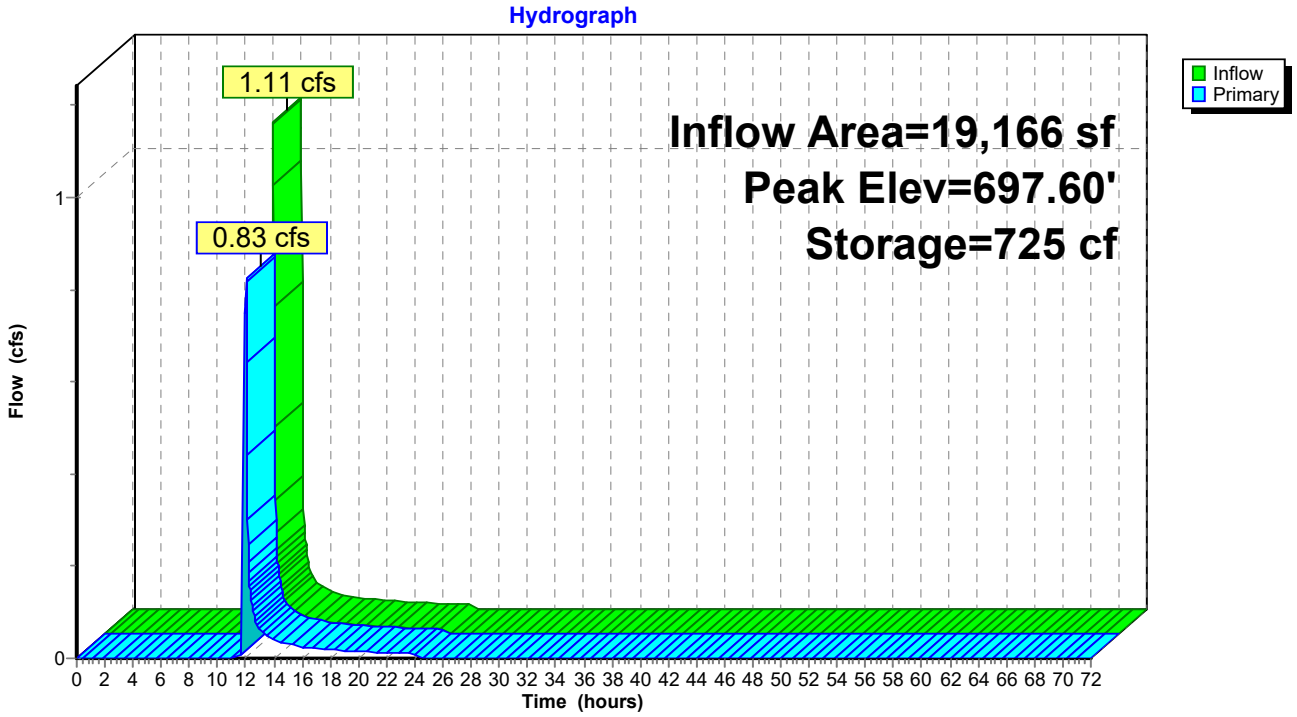
Volume	Invert	Avail.Storage	Storage Description
#1	694.00'	2,779 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.00	472	0.0	0	0
697.00	472	20.0	283	283
698.00	1,344	100.0	908	1,191
699.00	1,832	100.0	1,588	2,779

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 24.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 691.39' S= 0.1088 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	697.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	698.50'	**6.0' long x 9.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.46 2.55 2.70 2.69 2.68 2.68 2.67 2.64 2.64 2.64 2.65 2.64 2.65 2.65 2.66 2.67 2.69

Primary OutFlow Max=0.80 cfs @ 12.02 hrs HW=697.60' (Free Discharge)
└─**1=Culvert** (Passes 0.80 cfs of 14.36 cfs potential flow)
└─**2=Orifice/Grate** (Weir Controls 0.80 cfs @ 1.03 fps)
└─**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 5FP: FocalPoint 5



Summary for Pond 6FP: FocalPoint 6

Inflow Area = 7,841 sf, 55.56% Impervious, Inflow Depth = 1.18" for 1-year event
Inflow = 0.39 cfs @ 11.97 hrs, Volume= 771 cf
Outflow = 0.01 cfs @ 17.29 hrs, Volume= 143 cf, Atten= 98%, Lag= 319.2 min
Primary = 0.01 cfs @ 17.29 hrs, Volume= 143 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 697.50' @ 17.29 hrs Surf.Area= 909 sf Storage= 629 cf

Plug-Flow detention time= 509.9 min calculated for 143 cf (19% of inflow)
Center-of-Mass det. time= 365.1 min (1,215.7 - 850.6)

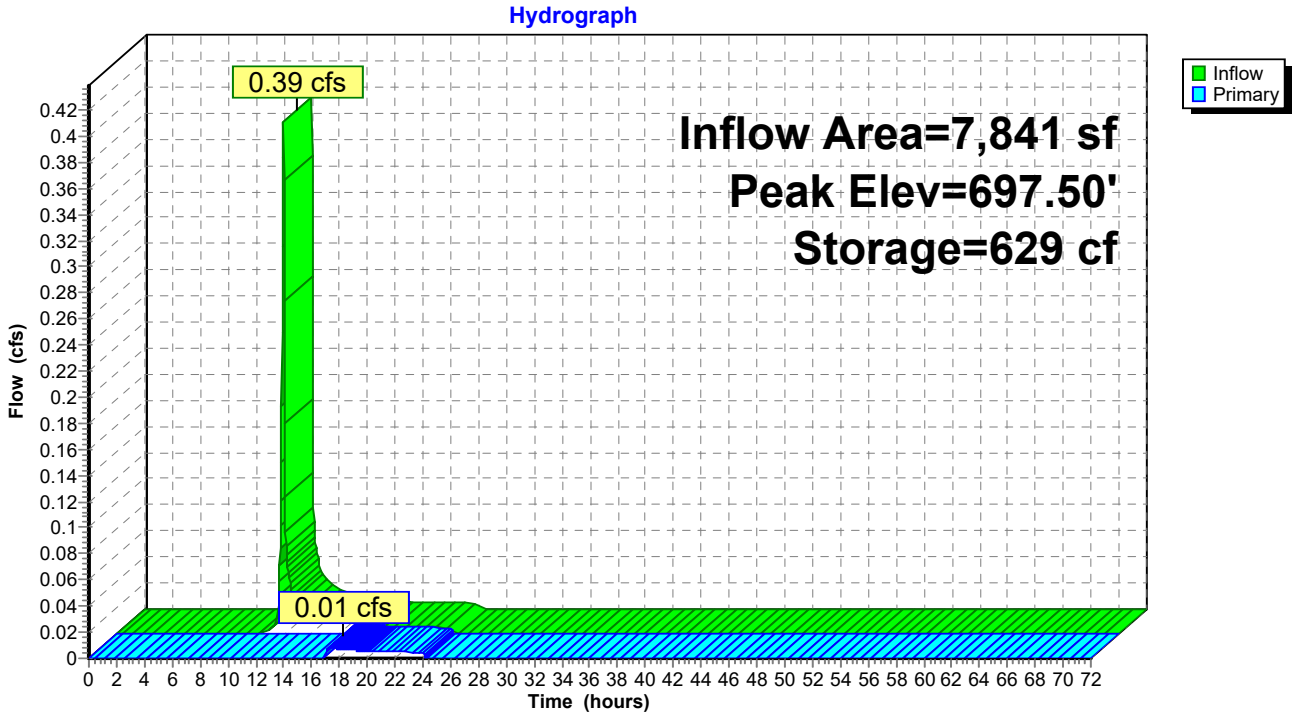
Volume	Invert	Avail.Storage	Storage Description
#1	694.00'	2,779 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.00	472	0.0	0	0
697.00	472	20.0	283	283
698.00	1,344	100.0	908	1,191
699.00	1,832	100.0	1,588	2,779

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 24.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 690.87' S= 0.1304 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	697.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	698.50'	**6.0' long x 9.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.46 2.55 2.70 2.69 2.68 2.68 2.67 2.64 2.64 2.64 2.65 2.64 2.65 2.65 2.66 2.67 2.69

Primary OutFlow Max=0.00 cfs @ 17.29 hrs HW=697.50' (Free Discharge)
└─**1=Culvert** (Passes 0.00 cfs of 14.11 cfs potential flow)
└─**2=Orifice/Grate** (Weir Controls 0.00 cfs @ 0.12 fps)
└─**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 6FP: FocalPoint 6

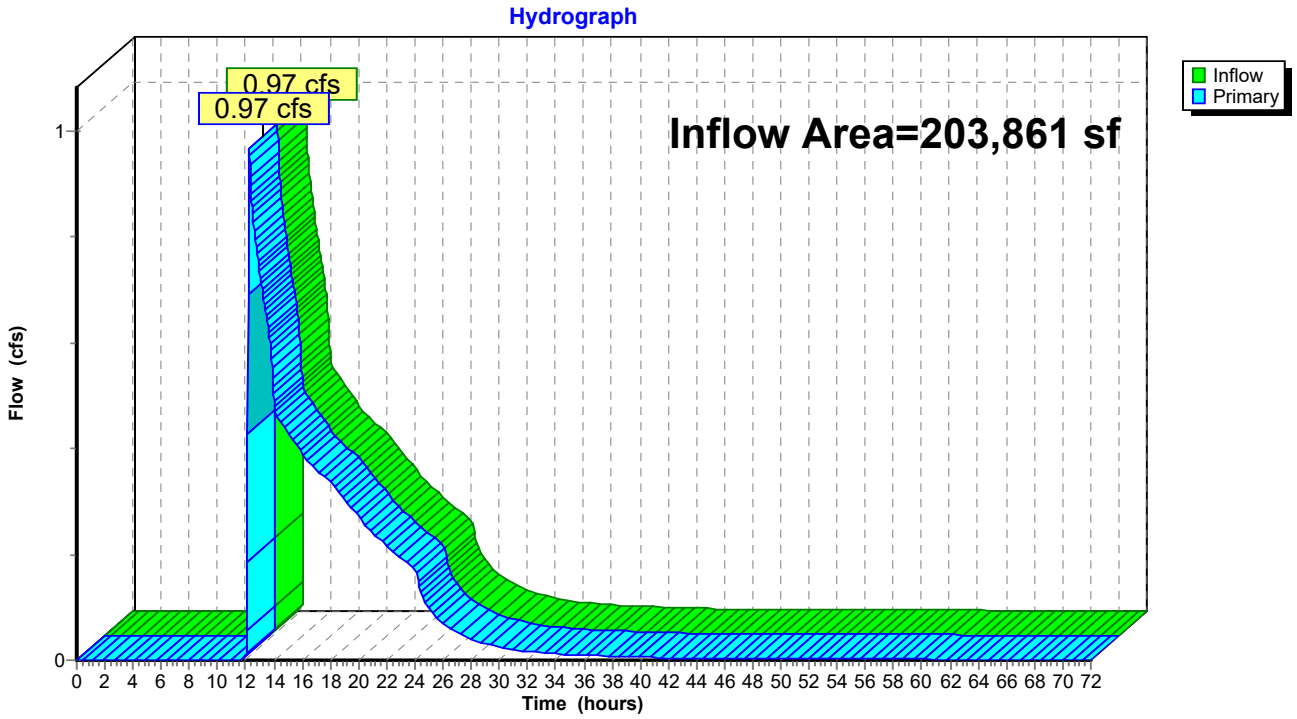


Summary for Link 1L: Outfall #1

Inflow Area = 203,861 sf, 59.40% Impervious, Inflow Depth > 1.06" for 1-year event
Inflow = 0.97 cfs @ 12.24 hrs, Volume= 18,025 cf
Primary = 0.97 cfs @ 12.24 hrs, Volume= 18,025 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs

Link 1L: Outfall #1



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Area 1 Runoff Area=1.480 ac 43.92% Impervious Runoff Depth=1.12"
Tc=5.0 min CN=68 Runoff=3.02 cfs 6,036 cf

Subcatchment2S: Area 2 Runoff Area=0.720 ac 83.33% Impervious Runoff Depth=2.80"
Tc=5.0 min CN=90 Runoff=3.51 cfs 7,308 cf

Subcatchment3S: Area 3 Runoff Area=0.380 ac 71.05% Impervious Runoff Depth=2.26"
Tc=5.0 min CN=84 Runoff=1.56 cfs 3,113 cf

Subcatchment4S: Area 4 Runoff Area=1.100 ac 79.09% Impervious Runoff Depth=2.61"
Tc=5.0 min CN=88 Runoff=5.09 cfs 10,416 cf

Subcatchment5S: Area 5 Runoff Area=0.440 ac 61.36% Impervious Runoff Depth=1.86"
Tc=5.0 min CN=79 Runoff=1.51 cfs 2,968 cf

Subcatchment6S: Area 6 Runoff Area=0.180 ac 55.56% Impervious Runoff Depth=1.64"
Tc=5.0 min CN=76 Runoff=0.55 cfs 1,071 cf

Subcatchment10S: South Bypass Runoff Area=0.380 ac 5.26% Impervious Runoff Depth=0.26"
Tc=5.0 min CN=49 Runoff=0.07 cfs 362 cf

Reach 1R: Southern Trunk Line Avg. Flow Depth=0.43' Max Vel=3.31 fps Inflow=2.14 cfs 25,522 cf
24.0" Round Pipe n=0.013 L=1,058.0' S=0.0051 '/' Capacity=16.10 cfs Outflow=1.66 cfs 25,519 cf

Pond 1DP: Detention Pond 1 Peak Elev=697.12' Storage=1,527 cf Inflow=2.95 cfs 5,666 cf
Outflow=0.49 cfs 5,666 cf

Pond 1FP: FocalPoint 1 Peak Elev=699.74' Storage=553 cf Inflow=3.02 cfs 6,036 cf
Outflow=2.95 cfs 5,666 cf

Pond 2DP: Detention Pond 2 Peak Elev=695.18' Storage=9,903 cf Inflow=10.36 cfs 18,026 cf
Outflow=0.42 cfs 17,072 cf

Pond 2FP: FocalPoint 2 Peak Elev=698.26' Storage=1,016 cf Inflow=3.51 cfs 7,308 cf
Outflow=3.42 cfs 6,586 cf

Pond 3FP: FocalPoint 3 Peak Elev=699.65' Storage=852 cf Inflow=1.56 cfs 3,113 cf
Outflow=1.52 cfs 2,393 cf

Pond 4FP: FocalPoint 4 Peak Elev=699.86' Storage=1,389 cf Inflow=5.09 cfs 10,416 cf
Outflow=5.44 cfs 9,048 cf

Pond 5FP: FocalPoint 5 Peak Elev=697.65' Storage=770 cf Inflow=1.51 cfs 2,968 cf
Outflow=1.43 cfs 2,340 cf

Pond 6FP: FocalPoint 6 Peak Elev=697.51' Storage=633 cf Inflow=0.55 cfs 1,071 cf
Outflow=0.03 cfs 443 cf

Link 1L: Outfall #1 Inflow=1.69 cfs 25,881 cf
Primary=1.69 cfs 25,881 cf

Total Runoff Area = 203,861 sf Runoff Volume = 31,274 cf Average Runoff Depth = 1.84"
40.60% Pervious = 82,764 sf 59.40% Impervious = 121,097 sf

Summary for Subcatchment 1S: Area 1

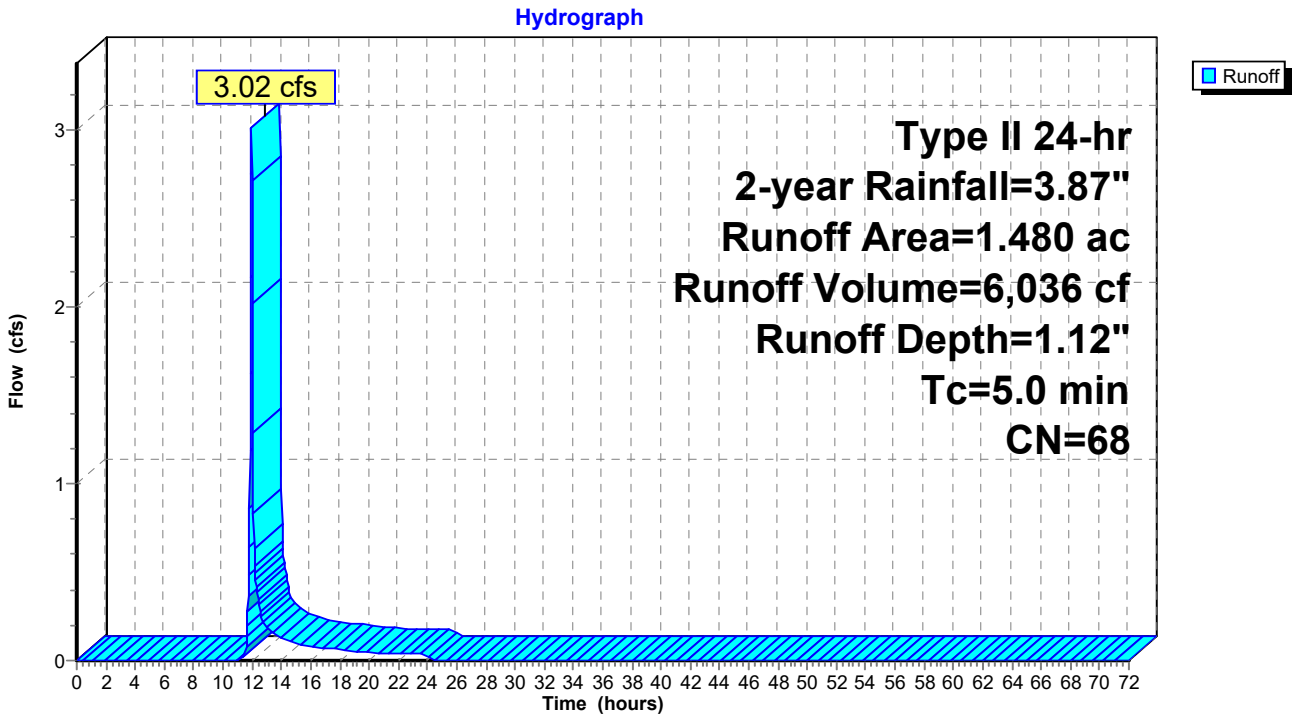
Runoff = 3.02 cfs @ 11.97 hrs, Volume= 6,036 cf, Depth= 1.12"
Routed to Pond 1FP : FocalPoint 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 2-year Rainfall=3.87"

Area (ac)	CN	Description
0.510	49	50-75% Grass cover, Fair, HSG A
0.320	36	Woods, Fair, HSG A
0.650	98	Paved parking, HSG A
1.480	68	Weighted Average
0.830		56.08% Pervious Area
0.650		43.92% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 1S: Area 1



Summary for Subcatchment 2S: Area 2

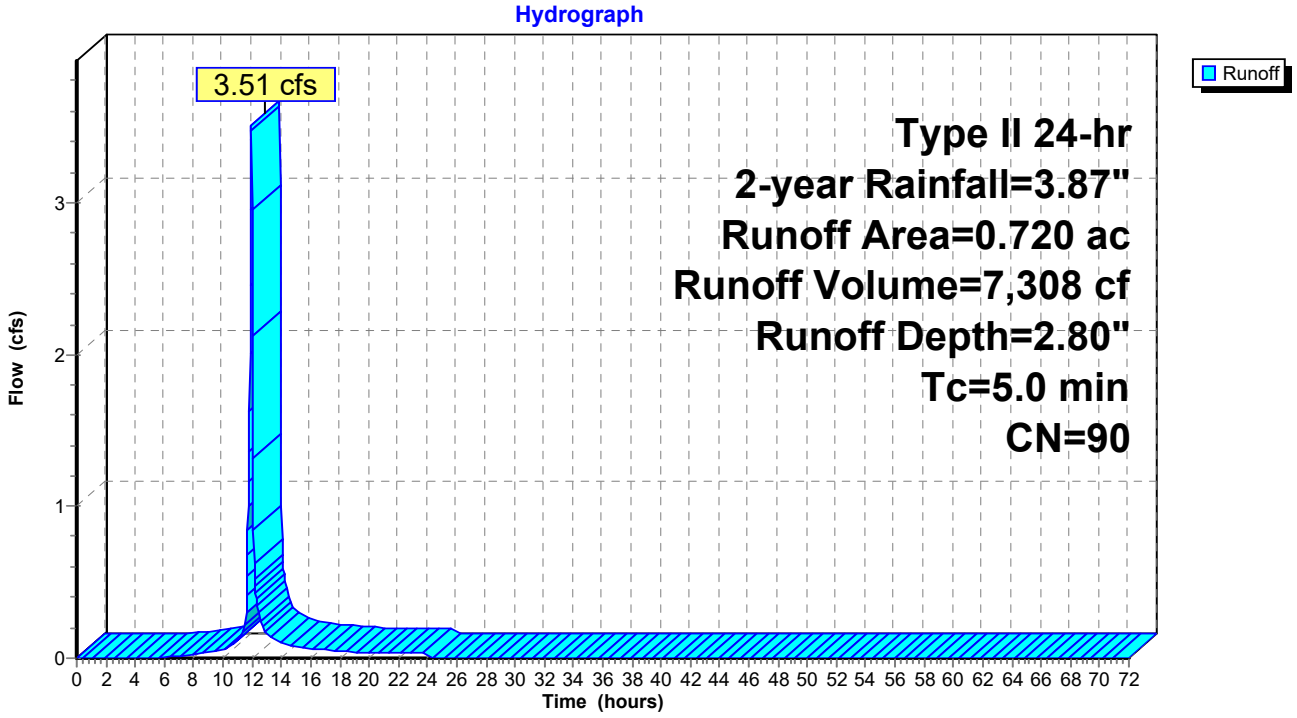
Runoff = 3.51 cfs @ 11.96 hrs, Volume= 7,308 cf, Depth= 2.80"
Routed to Pond 2FP : FocalPoint 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 2-year Rainfall=3.87"

Area (ac)	CN	Description
0.120	49	50-75% Grass cover, Fair, HSG A
0.600	98	Paved parking, HSG A
0.720	90	Weighted Average
0.120		16.67% Pervious Area
0.600		83.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 2S: Area 2



Summary for Subcatchment 3S: Area 3

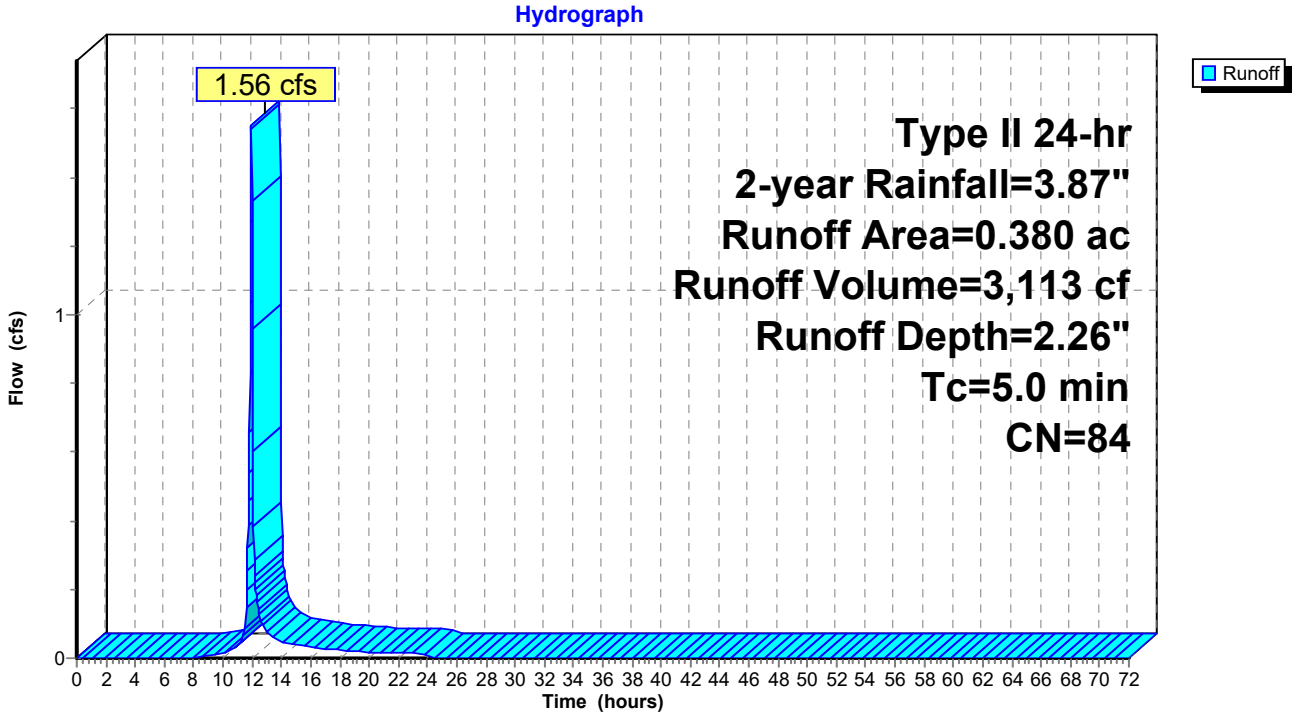
Runoff = 1.56 cfs @ 11.96 hrs, Volume= 3,113 cf, Depth= 2.26"
Routed to Pond 3FP : FocalPoint 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 2-year Rainfall=3.87"

Area (ac)	CN	Description
0.110	49	50-75% Grass cover, Fair, HSG A
0.270	98	Paved parking, HSG A
0.380	84	Weighted Average
0.110		28.95% Pervious Area
0.270		71.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 3S: Area 3



Summary for Subcatchment 4S: Area 4

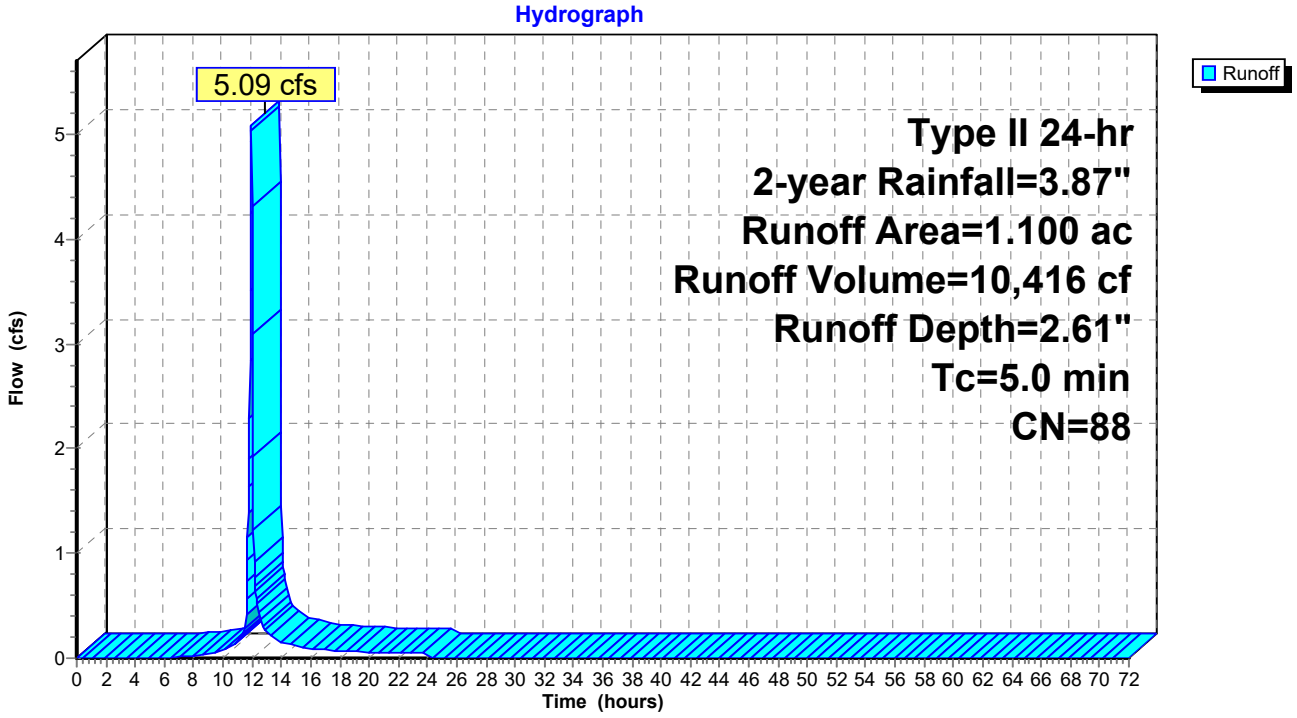
Runoff = 5.09 cfs @ 11.96 hrs, Volume= 10,416 cf, Depth= 2.61"
Routed to Pond 4FP : FocalPoint 4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 2-year Rainfall=3.87"

Area (ac)	CN	Description
0.230	49	50-75% Grass cover, Fair, HSG A
0.870	98	Paved parking, HSG A
1.100	88	Weighted Average
0.230		20.91% Pervious Area
0.870		79.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 4S: Area 4



Summary for Subcatchment 5S: Area 5

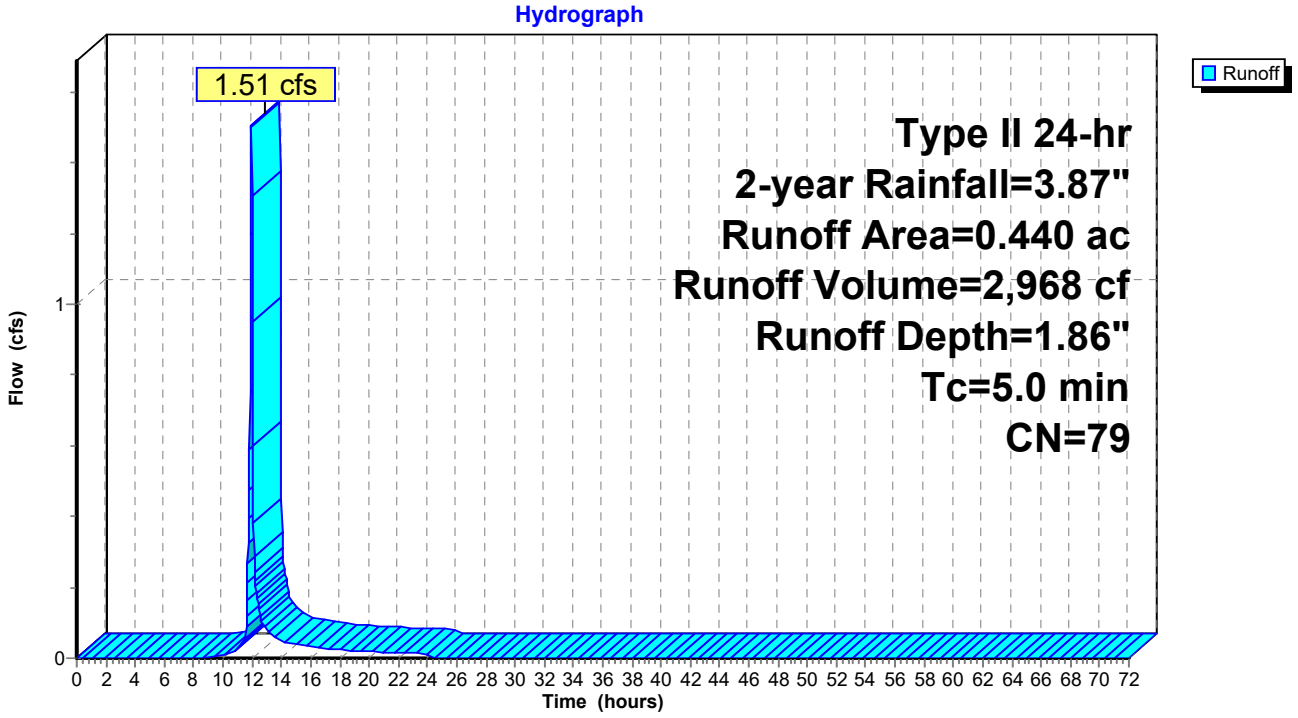
Runoff = 1.51 cfs @ 11.96 hrs, Volume= 2,968 cf, Depth= 1.86"
Routed to Pond 5FP : FocalPoint 5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 2-year Rainfall=3.87"

Area (ac)	CN	Description
0.170	49	50-75% Grass cover, Fair, HSG A
0.270	98	Paved parking, HSG A
0.440	79	Weighted Average
0.170		38.64% Pervious Area
0.270		61.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 5S: Area 5



Summary for Subcatchment 6S: Area 6

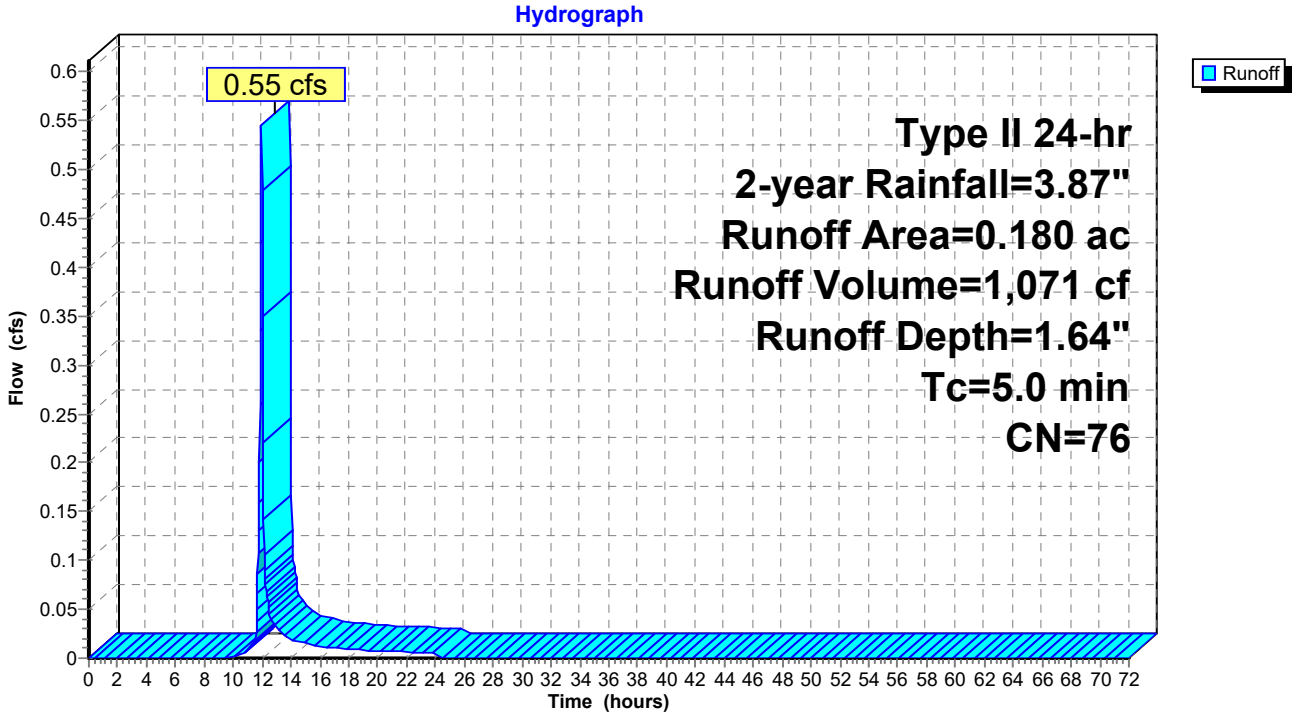
Runoff = 0.55 cfs @ 11.96 hrs, Volume= 1,071 cf, Depth= 1.64"
Routed to Pond 6FP : FocalPoint 6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 2-year Rainfall=3.87"

Area (ac)	CN	Description
0.080	49	50-75% Grass cover, Fair, HSG A
0.100	98	Paved parking, HSG A
0.180	76	Weighted Average
0.080		44.44% Pervious Area
0.100		55.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 6S: Area 6



Summary for Subcatchment 10S: South Bypass

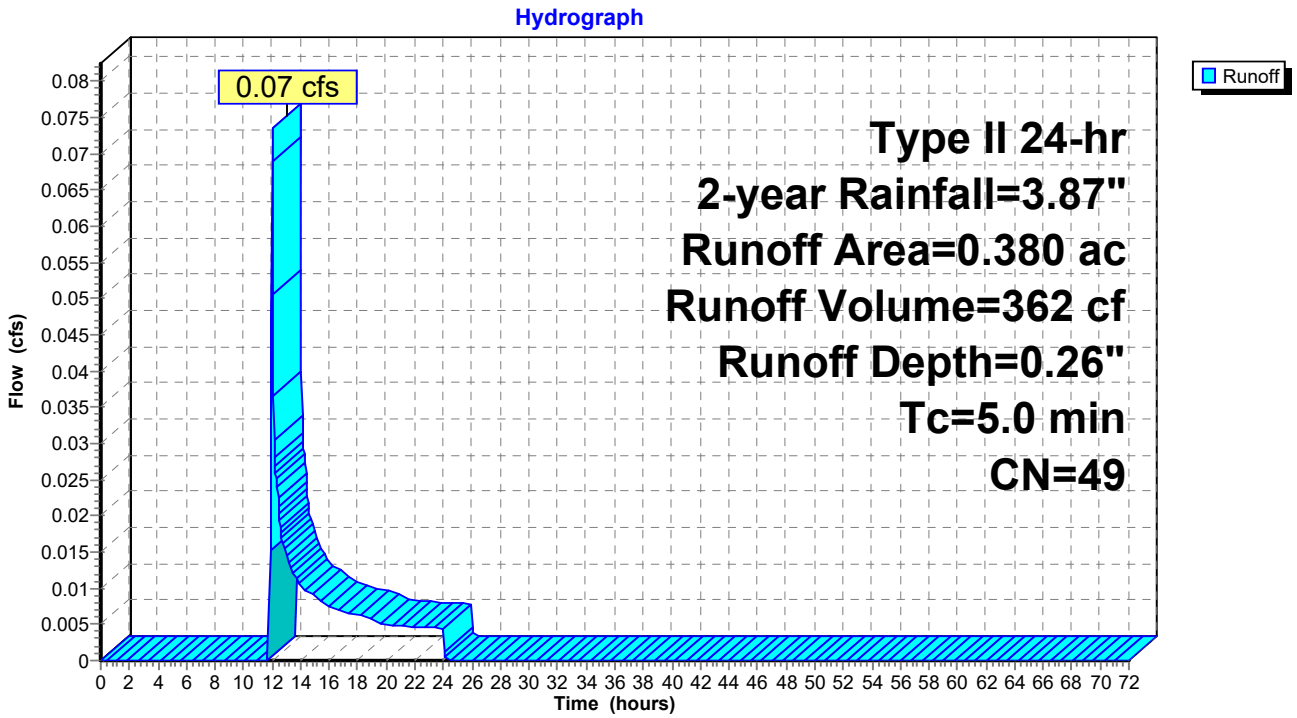
Runoff = 0.07 cfs @ 12.01 hrs, Volume= 362 cf, Depth= 0.26"
Routed to Link 1L : Outfall #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 2-year Rainfall=3.87"

Area (ac)	CN	Description
0.290	49	50-75% Grass cover, Fair, HSG A
0.070	36	Woods, Fair, HSG A
0.020	98	Paved parking, HSG A
0.380	49	Weighted Average
0.360		94.74% Pervious Area
0.020		5.26% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 10S: South Bypass



Summary for Reach 1R: Southern Trunk Line

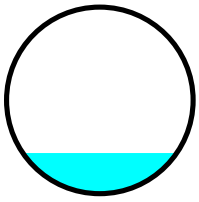
[52] Hint: Inlet/Outlet conditions not evaluated
[79] Warning: Submerged Pond 1DP Primary device # 1 INLET by 0.29'
[81] Warning: Exceeded Pond 2DP by 1.71' @ 0.00 hrs
[79] Warning: Submerged Pond 5FP Primary device # 1 INLET by 1.89'
[79] Warning: Submerged Pond 6FP Primary device # 1 INLET by 1.89'

Inflow Area = 187,308 sf, 64.19% Impervious, Inflow Depth > 1.64" for 2-year event
Inflow = 2.14 cfs @ 12.00 hrs, Volume= 25,522 cf
Outflow = 1.66 cfs @ 12.16 hrs, Volume= 25,519 cf, Atten= 23%, Lag= 9.6 min
Routed to Link 1L : Outfall #1

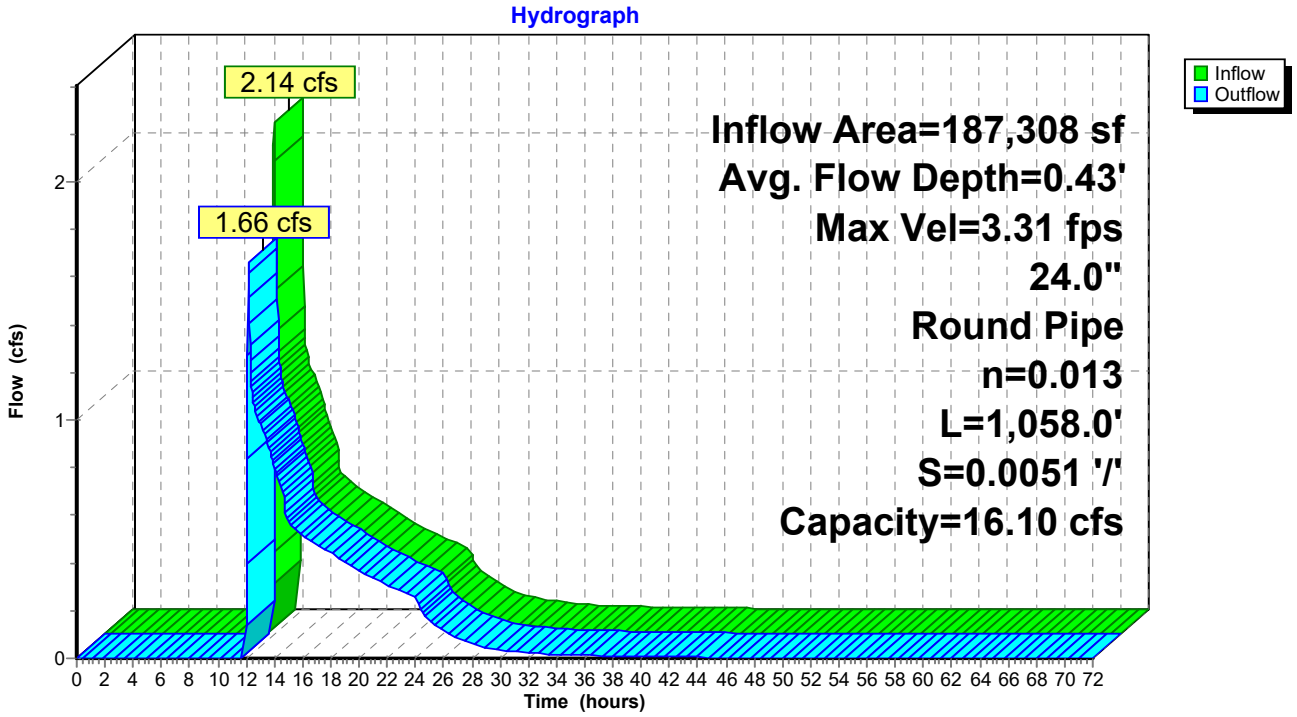
Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Max. Velocity= 3.31 fps, Min. Travel Time= 5.3 min
Avg. Velocity = 0.99 fps, Avg. Travel Time= 17.8 min

Peak Storage= 532 cf @ 12.07 hrs
Average Depth at Peak Storage= 0.43' , Surface Width= 1.65'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 16.10 cfs

24.0" Round Pipe
n= 0.013
Length= 1,058.0' Slope= 0.0051 '/'
Inlet Invert= 695.46', Outlet Invert= 690.10'



Reach 1R: Southern Trunk Line



Summary for Pond 1DP: Detention Pond 1

[44] Hint: Outlet device #2 is below defined storage
[79] Warning: Submerged Pond 1FP Primary device # 1 INLET by 1.12'

Inflow Area = 64,469 sf, 43.92% Impervious, Inflow Depth = 1.05" for 2-year event
Inflow = 2.95 cfs @ 11.98 hrs, Volume= 5,666 cf
Outflow = 0.49 cfs @ 12.21 hrs, Volume= 5,666 cf, Atten= 83%, Lag= 13.6 min
Primary = 0.49 cfs @ 12.21 hrs, Volume= 5,666 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 697.12' @ 12.21 hrs Surf.Area= 2,221 sf Storage= 1,527 cf

Plug-Flow detention time= 22.7 min calculated for 5,666 cf (100% of inflow)
Center-of-Mass det. time= 22.7 min (899.9 - 877.2)

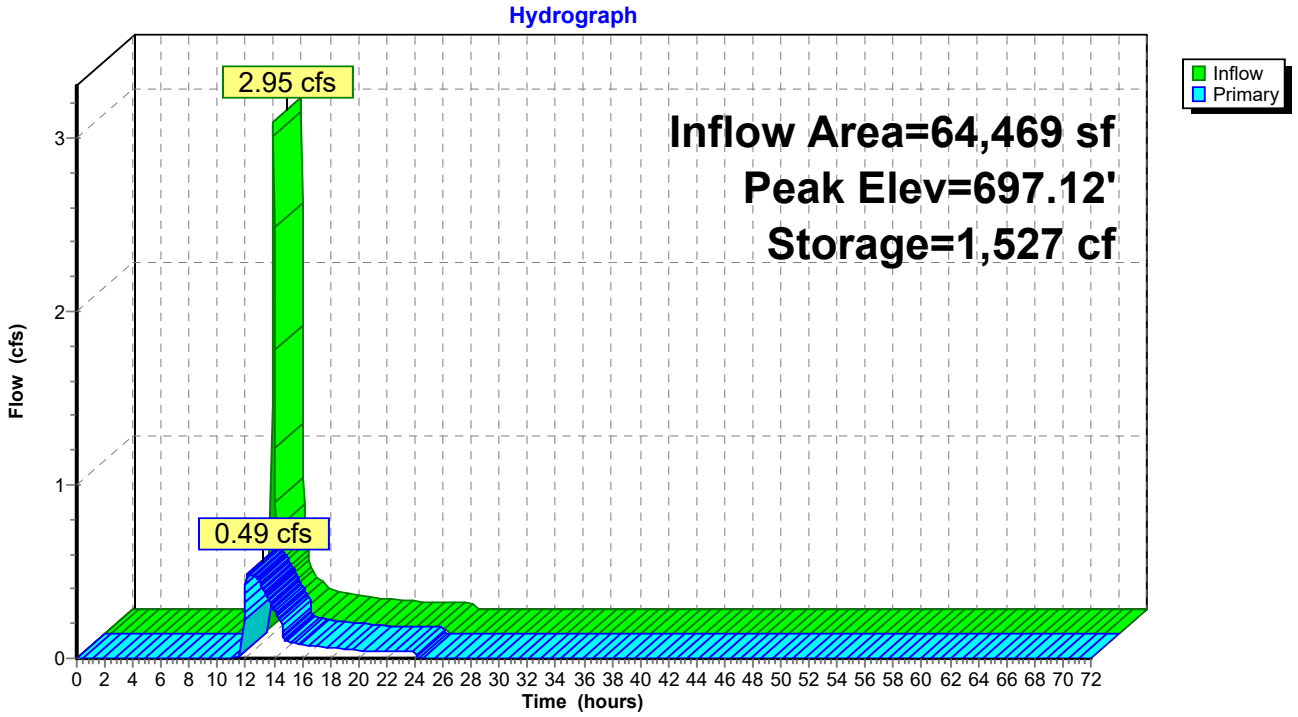
Volume	Invert	Avail.Storage	Storage Description
#1	695.80'	19,432 cf	**Custom Stage Data (Prismatic)** Listed below

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.80	0	0	0
696.00	285	29	29
697.00	2,098	1,192	1,220
698.00	3,151	2,625	3,845
699.00	4,138	3,645	7,489
700.00	5,311	4,725	12,214
701.00	9,125	7,218	19,432

Device	Routing	Invert	Outlet Devices
#1	Primary	695.60'	**18.0" Round Culvert** L= 28.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 695.60' / 695.46' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	695.60'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.49 cfs @ 12.21 hrs HW=697.12' TW=565.00' (Fixed TW Elev= 565.00')
└─**1=Culvert** (Passes 0.49 cfs of 6.04 cfs potential flow)
  ├─**2=Orifice/Grate** (Orifice Controls 0.49 cfs @ 5.60 fps)
  └─**3=Orifice/Grate** (Controls 0.00 cfs)

Pond 1DP: Detention Pond 1



Summary for Pond 1FP: FocalPoint 1

[92] Warning: Device #3 is above defined storage

Inflow Area = 64,469 sf, 43.92% Impervious, Inflow Depth = 1.12" for 2-year event
Inflow = 3.02 cfs @ 11.97 hrs, Volume= 6,036 cf
Outflow = 2.95 cfs @ 11.98 hrs, Volume= 5,666 cf, Atten= 2%, Lag= 0.8 min
Primary = 2.95 cfs @ 11.98 hrs, Volume= 5,666 cf
Routed to Pond 1DP : Detention Pond 1

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 699.74' @ 11.98 hrs Surf.Area= 879 sf Storage= 553 cf

Plug-Flow detention time= 45.5 min calculated for 5,666 cf (94% of inflow)
Center-of-Mass det. time= 12.6 min (877.2 - 864.6)

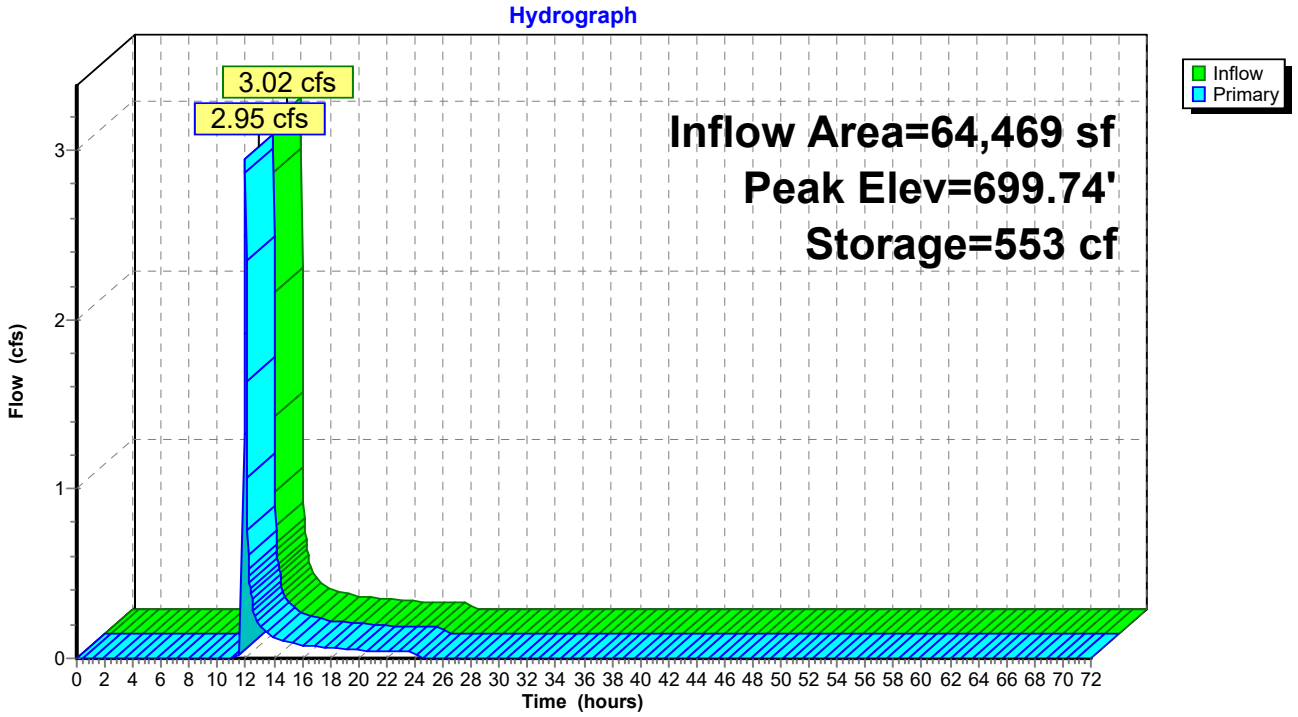
Volume	Invert	Avail.Storage	Storage Description
#1	696.00'	815 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
696.00	237	0.0	0	0
699.00	237	20.0	142	142
700.00	1,109	100.0	673	815

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 40.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 695.80' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**10.0' long x 18.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=2.89 cfs @ 11.98 hrs HW=699.73' (Free Discharge)
- **1=Culvert** (Passes 2.89 cfs of 14.70 cfs potential flow)
  - **2=Orifice/Grate** (Weir Controls 2.89 cfs @ 1.58 fps)
- **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1FP: FocalPoint 1



Summary for Pond 2DP: Detention Pond 2

[79] Warning: Submerged Pond 2FP Primary device # 1 INLET by 0.68'
[79] Warning: Submerged Pond 3FP Primary device # 1 OUTLET by 1.18'

Inflow Area = 95,832 sf, 79.09% Impervious, Inflow Depth = 2.26" for 2-year event
Inflow = 10.36 cfs @ 11.97 hrs, Volume= 18,026 cf
Outflow = 0.42 cfs @ 13.31 hrs, Volume= 17,072 cf, Atten= 96%, Lag= 80.4 min
Primary = 0.42 cfs @ 13.31 hrs, Volume= 17,072 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 695.18' @ 13.31 hrs Surf.Area= 8,711 sf Storage= 9,903 cf

Plug-Flow detention time= 355.6 min calculated for 17,072 cf (95% of inflow)
Center-of-Mass det. time= 326.2 min (1,158.2 - 832.0)

Volume	Invert	Avail.Storage	Storage Description
#1A	693.75'	3,019 cf	**38.12'W x 114.25'L x 4.79'H Field A** 20,877 cf Overall - 13,330 cf Embedded = 7,547 cf x 40.0% Voids
#2A	694.00'	12,663 cf	**Ferguson R-Tank HD 2.5** x 1222 Inside #1 Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf 1222 Chambers in 26 Rows
#3B	693.75'	3,019 cf	**38.12'W x 114.25'L x 4.79'H Field B** 20,877 cf Overall - 13,330 cf Embedded = 7,547 cf x 40.0% Voids
#4B	694.00'	12,663 cf	**Ferguson R-Tank HD 2.5** x 1222 Inside #3 Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf 1222 Chambers in 26 Rows
		31,364 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 10.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 693.20' S= 0.0800 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	694.00'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	697.00'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=0.42 cfs @ 13.31 hrs HW=695.18' TW=565.00' (Fixed TW Elev= 565.00')
- **1=Culvert** (Passes 0.42 cfs of 5.55 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.42 cfs @ 4.86 fps)
- **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 2DP: Detention Pond 2 - Chamber Wizard Field A

Chamber Model = Ferguson R-Tank HD 2.5 (Ferguson R-Tank HD)
Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf
Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf

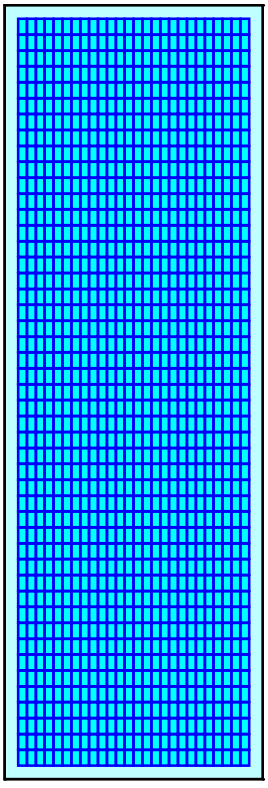
47 Chambers/Row x 2.35' Long = 110.25' Row Length +24.0" End Stone x 2 = 114.25' Base Length
26 Rows x 15.7" Wide + 24.0" Side Stone x 2 = 38.12' Base Width
3.0" Stone Base + 42.5" Chamber Height + 12.0" Stone Cover = 4.79' Field Height

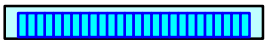
1,222 Chambers x 10.4 cf = 12,663.1 cf Chamber Storage
1,222 Chambers x 10.9 cf = 13,329.6 cf Displacement

20,876.7 cf Field - 13,329.6 cf Chambers = 7,547.2 cf Stone x 40.0% Voids = 3,018.9 cf Stone Storage

Chamber Storage + Stone Storage = 15,682.0 cf = 0.360 af
Overall Storage Efficiency = 75.1%
Overall System Size = 114.25' x 38.12' x 4.79'

1,222 Chambers
773.2 cy Field
279.5 cy Stone





Pond 2DP: Detention Pond 2 - Chamber Wizard Field B

Chamber Model = Ferguson R-Tank HD 2.5 (Ferguson R-Tank HD)
Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf
Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf

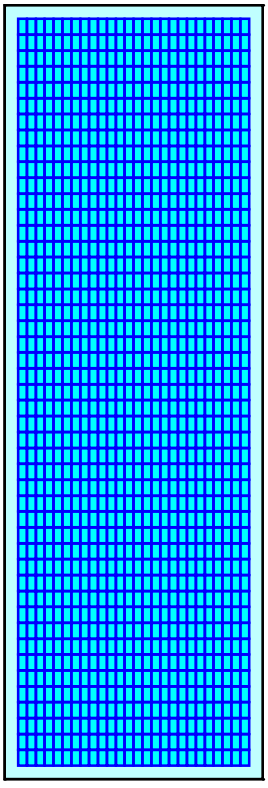
47 Chambers/Row x 2.35' Long = 110.25' Row Length +24.0" End Stone x 2 = 114.25' Base Length
26 Rows x 15.7" Wide + 24.0" Side Stone x 2 = 38.12' Base Width
3.0" Stone Base + 42.5" Chamber Height + 12.0" Stone Cover = 4.79' Field Height

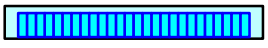
1,222 Chambers x 10.4 cf = 12,663.1 cf Chamber Storage
1,222 Chambers x 10.9 cf = 13,329.6 cf Displacement

20,876.7 cf Field - 13,329.6 cf Chambers = 7,547.2 cf Stone x 40.0% Voids = 3,018.9 cf Stone Storage

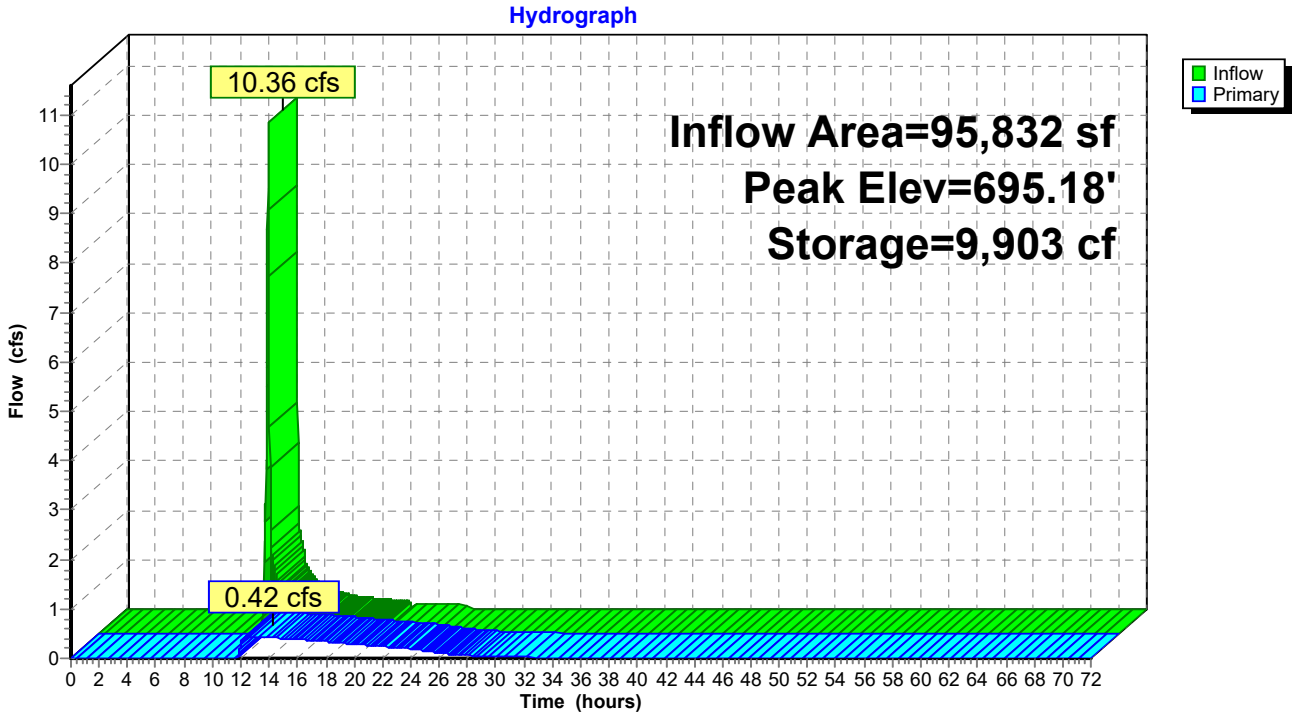
Chamber Storage + Stone Storage = 15,682.0 cf = 0.360 af
Overall Storage Efficiency = 75.1%
Overall System Size = 114.25' x 38.12' x 4.79'

1,222 Chambers
773.2 cy Field
279.5 cy Stone





Pond 2DP: Detention Pond 2



Summary for Pond 2FP: FocalPoint 2

Inflow Area = 31,363 sf, 83.33% Impervious, Inflow Depth = 2.80" for 2-year event
Inflow = 3.51 cfs @ 11.96 hrs, Volume= 7,308 cf
Outflow = 3.42 cfs @ 11.97 hrs, Volume= 6,586 cf, Atten= 3%, Lag= 0.9 min
Primary = 3.42 cfs @ 11.97 hrs, Volume= 6,586 cf
Routed to Pond 2DP : Detention Pond 2

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 698.26' @ 11.97 hrs Surf.Area= 1,195 sf Storage= 1,016 cf

Plug-Flow detention time= 77.6 min calculated for 6,583 cf (90% of inflow)
Center-of-Mass det. time= 27.1 min (822.8 - 795.7)

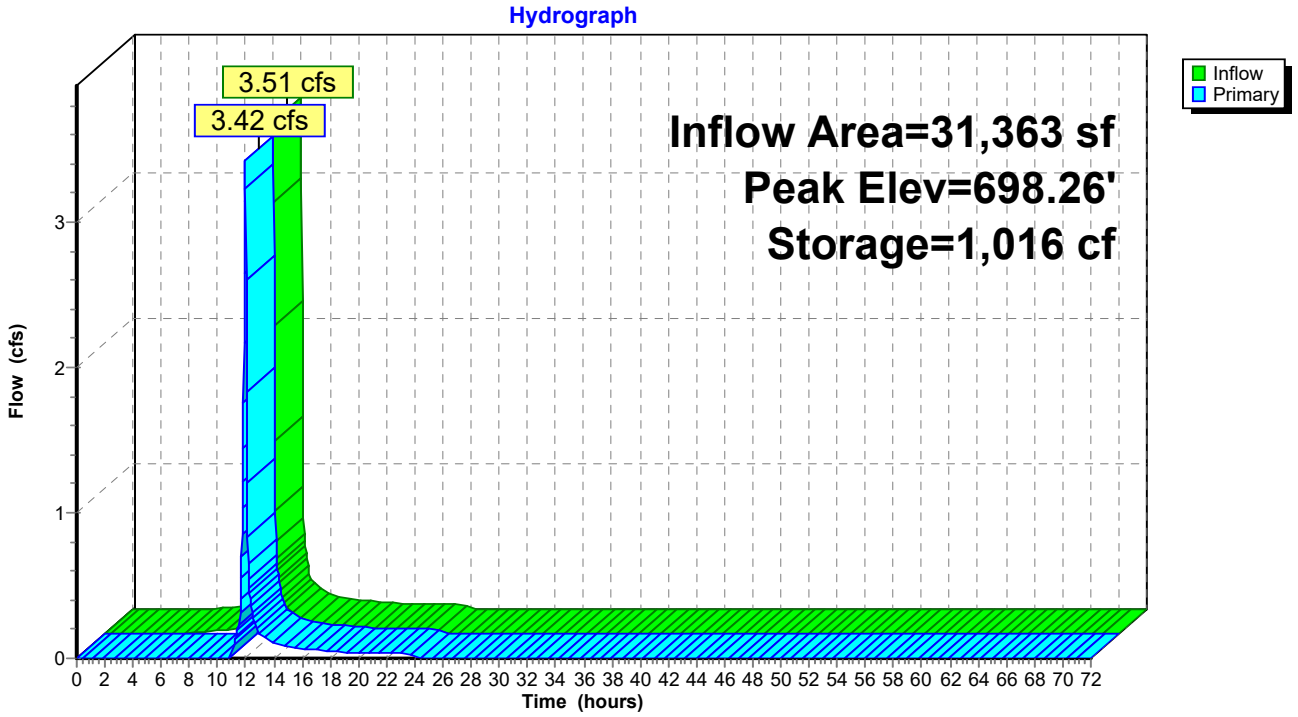
Volume	Invert	Avail.Storage	Storage Description
#1	694.50'	1,317 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.50	539	0.0	0	0
697.50	539	20.0	323	323
698.00	1,056	100.0	399	722
698.50	1,323	100.0	595	1,317

Device	Routing	Invert	Outlet Devices
#1	Primary	694.50'	**18.0" Round Culvert** L= 28.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.50' / 694.00' S= 0.0179 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	698.00'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=3.40 cfs @ 11.97 hrs HW=698.26' (Free Discharge)
↑ **1=Culvert** (Passes 3.40 cfs of 14.76 cfs potential flow)
↑ **2=Orifice/Grate** (Weir Controls 3.40 cfs @ 1.67 fps)

Pond 2FP: FocalPoint 2



Summary for Pond 3FP: FocalPoint 3

Inflow Area = 16,553 sf, 71.05% Impervious, Inflow Depth = 2.26" for 2-year event
Inflow = 1.56 cfs @ 11.96 hrs, Volume= 3,113 cf
Outflow = 1.52 cfs @ 11.98 hrs, Volume= 2,393 cf, Atten= 3%, Lag= 1.0 min
Primary = 1.52 cfs @ 11.98 hrs, Volume= 2,393 cf
Routed to Pond 2DP : Detention Pond 2

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 699.65' @ 11.98 hrs Surf.Area= 907 sf Storage= 852 cf

Plug-Flow detention time= 133.9 min calculated for 2,393 cf (77% of inflow)
Center-of-Mass det. time= 44.1 min (861.2 - 817.1)

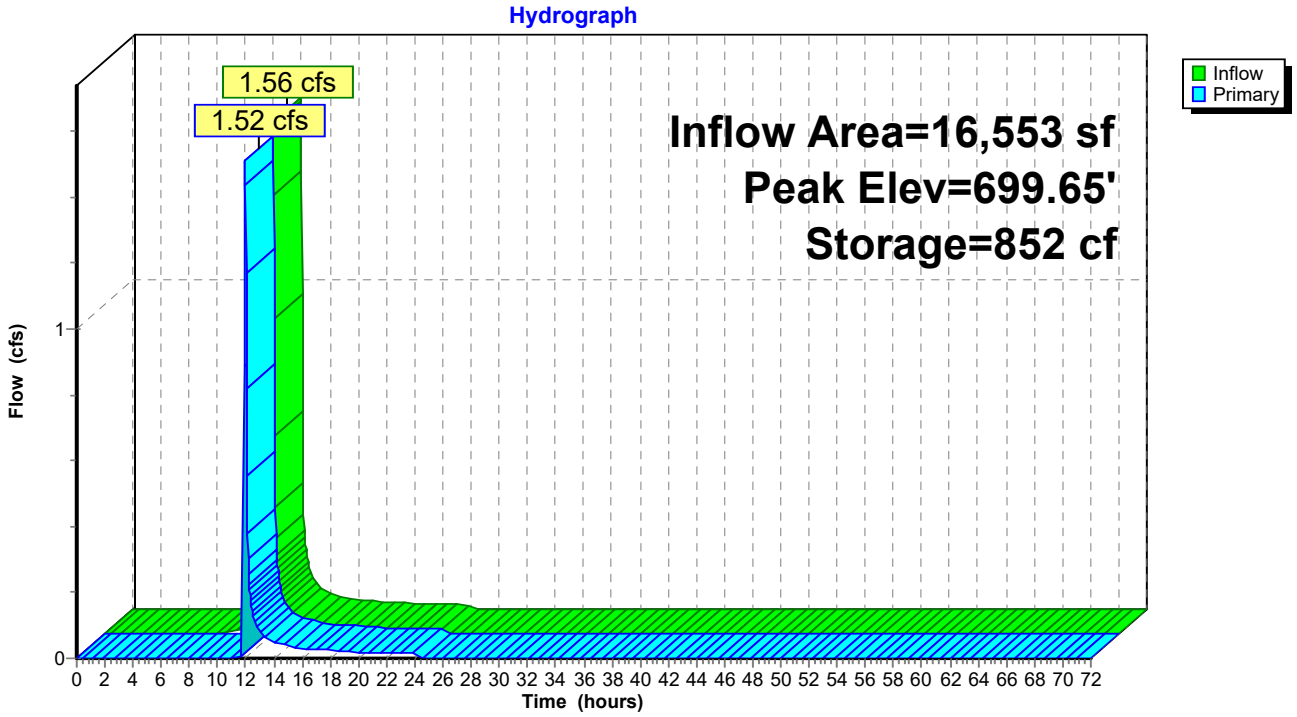
Volume	Invert	Avail.Storage	Storage Description
#1	696.00'	1,197 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
696.00	602	0.0	0	0
699.00	602	20.0	361	361
700.00	1,070	100.0	836	1,197

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 80.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 694.00' S= 0.0250 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.49 cfs @ 11.98 hrs HW=699.65' (Free Discharge)
↑**1=Culvert** (Passes 1.49 cfs of 14.49 cfs potential flow)
↑**2=Orifice/Grate** (Weir Controls 1.49 cfs @ 1.27 fps)

Pond 3FP: FocalPoint 3



Summary for Pond 4FP: FocalPoint 4

[92] Warning: Device #2 is above defined storage
[92] Warning: Device #3 is above defined storage
[93] Warning: Storage range exceeded by 0.86'
[88] Warning: Qout>Qin may require smaller dt or Finer Routing
[85] Warning: Oscillations may require smaller dt or Finer Routing (severity=204)

Inflow Area = 47,916 sf, 79.09% Impervious, Inflow Depth = 2.61" for 2-year event
Inflow = 5.09 cfs @ 11.96 hrs, Volume= 10,416 cf
Outflow = 5.44 cfs @ 11.97 hrs, Volume= 9,048 cf, Atten= 0%, Lag= 0.4 min
Primary = 5.44 cfs @ 11.97 hrs, Volume= 9,048 cf
Routed to Pond 2DP : Detention Pond 2

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 699.86' @ 11.97 hrs Surf.Area= 1,491 sf Storage= 1,389 cf

Plug-Flow detention time= 89.8 min calculated for 9,044 cf (87% of inflow)
Center-of-Mass det. time= 27.6 min (831.0 - 803.5)

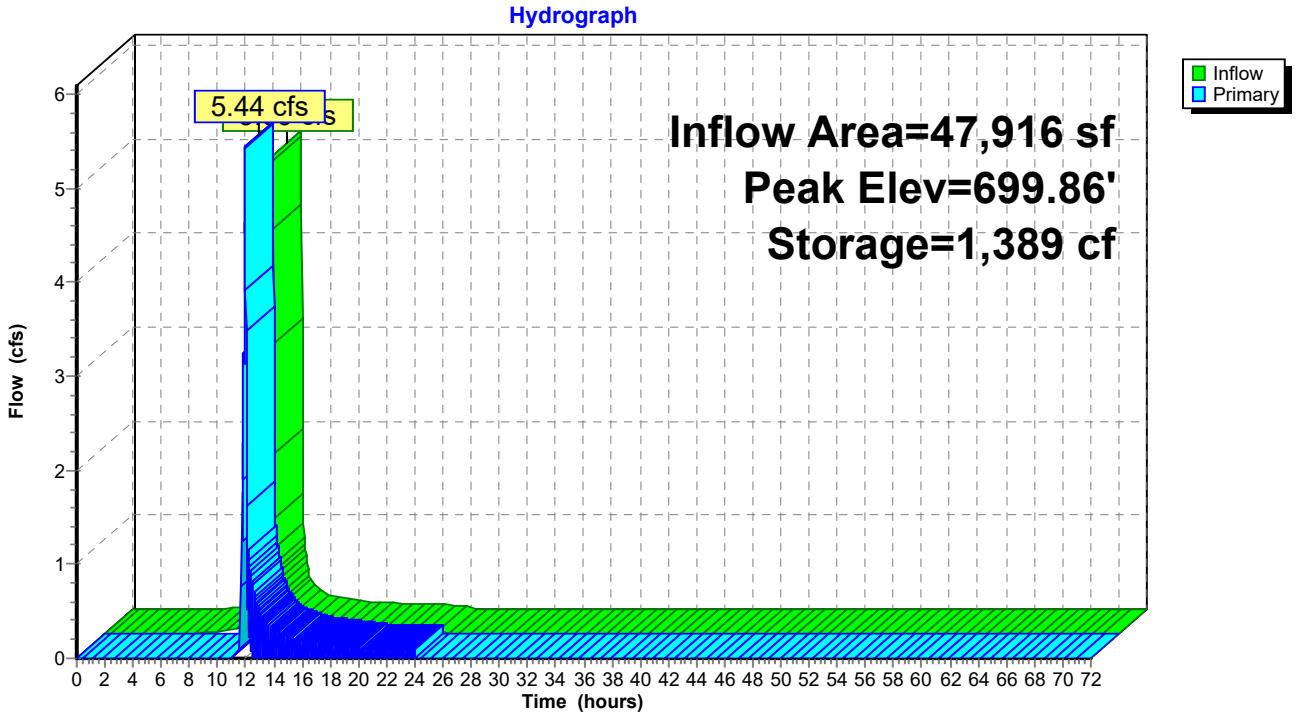
Volume	Invert	Avail.Storage	Storage Description
#1	695.00'	1,389 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.00	585	0.0	0	0
698.00	585	20.0	351	351
699.00	1,491	100.0	1,038	1,389

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 23.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 695.88' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**6.0' long x 133.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=5.30 cfs @ 11.97 hrs HW=699.85' (Free Discharge)
└**1=Culvert** (Passes 5.30 cfs of 14.98 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 5.30 cfs @ 1.93 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 4FP: FocalPoint 4



Summary for Pond 5FP: FocalPoint 5

Inflow Area = 19,166 sf, 61.36% Impervious, Inflow Depth = 1.86" for 2-year event
Inflow = 1.51 cfs @ 11.96 hrs, Volume= 2,968 cf
Outflow = 1.43 cfs @ 11.99 hrs, Volume= 2,340 cf, Atten= 5%, Lag= 1.3 min
Primary = 1.43 cfs @ 11.99 hrs, Volume= 2,340 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 697.65' @ 11.99 hrs Surf.Area= 1,035 sf Storage= 770 cf

Plug-Flow detention time= 126.8 min calculated for 2,339 cf (79% of inflow)
Center-of-Mass det. time= 39.3 min (871.5 - 832.2)

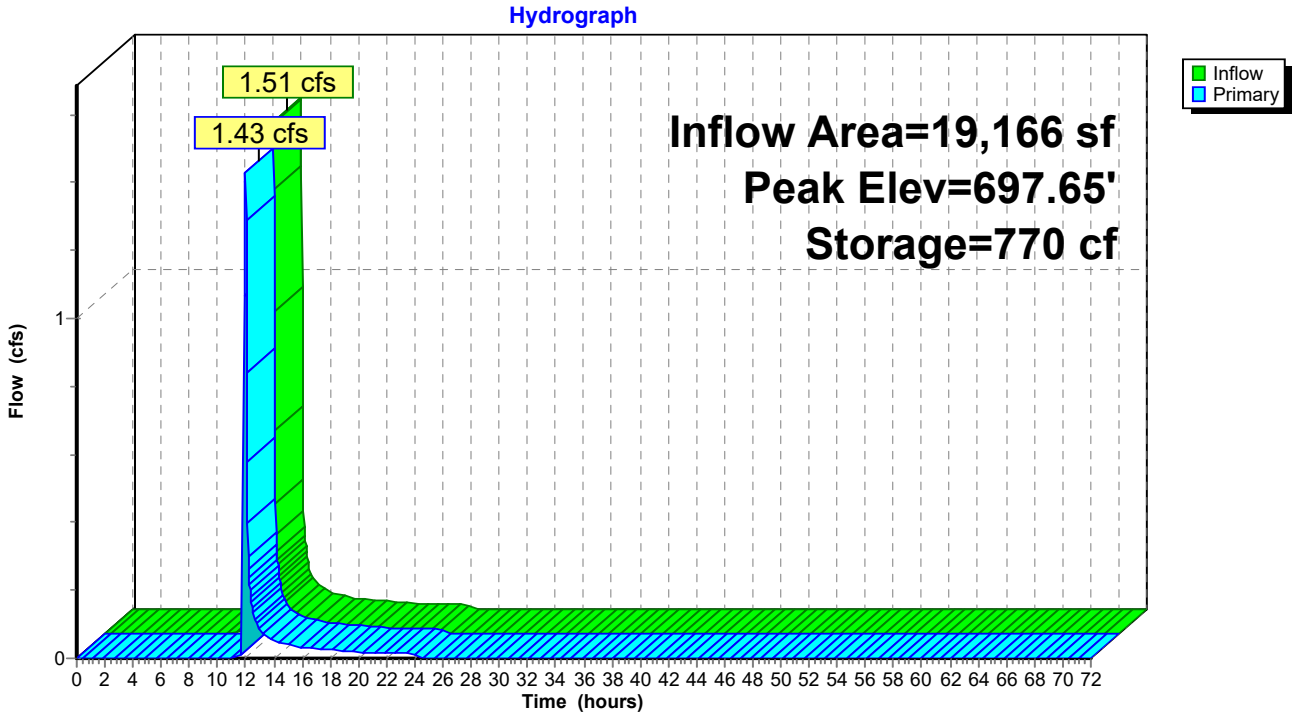
Volume	Invert	Avail.Storage	Storage Description
#1	694.00'	2,779 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.00	472	0.0	0	0
697.00	472	20.0	283	283
698.00	1,344	100.0	908	1,191
699.00	1,832	100.0	1,588	2,779

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 24.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 691.39' S= 0.1088 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	697.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	698.50'	**6.0' long x 9.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.46 2.55 2.70 2.69 2.68 2.68 2.67 2.64 2.64 2.64 2.65 2.64 2.65 2.65 2.66 2.67 2.69

Primary OutFlow Max=1.40 cfs @ 11.99 hrs HW=697.64' (Free Discharge)
└**1=Culvert** (Passes 1.40 cfs of 14.47 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 1.40 cfs @ 1.24 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 5FP: FocalPoint 5



Summary for Pond 6FP: FocalPoint 6

Inflow Area = 7,841 sf, 55.56% Impervious, Inflow Depth = 1.64" for 2-year event
Inflow = 0.55 cfs @ 11.96 hrs, Volume= 1,071 cf
Outflow = 0.03 cfs @ 12.98 hrs, Volume= 443 cf, Atten= 94%, Lag= 60.8 min
Primary = 0.03 cfs @ 12.98 hrs, Volume= 443 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 697.51' @ 12.98 hrs Surf.Area= 913 sf Storage= 633 cf

Plug-Flow detention time= 306.8 min calculated for 443 cf (41% of inflow)
Center-of-Mass det. time= 176.1 min (1,016.9 - 840.8)

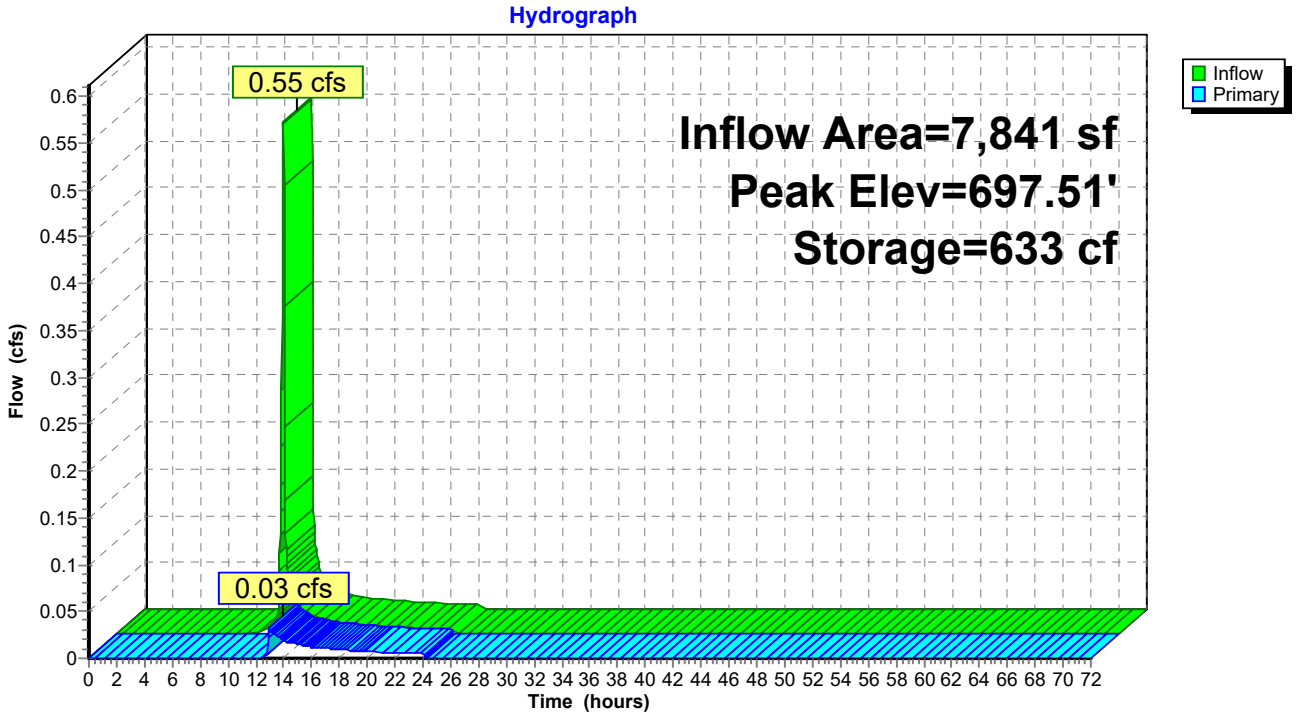
Volume	Invert	Avail.Storage	Storage Description
#1	694.00'	2,779 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.00	472	0.0	0	0
697.00	472	20.0	283	283
698.00	1,344	100.0	908	1,191
699.00	1,832	100.0	1,588	2,779

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 24.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 690.87' S= 0.1304 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	697.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	698.50'	**6.0' long x 9.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.46 2.55 2.70 2.69 2.68 2.68 2.67 2.64 2.64 2.64 2.65 2.64 2.65 2.65 2.66 2.67 2.69

Primary OutFlow Max=0.01 cfs @ 12.98 hrs HW=697.51' (Free Discharge)
└**1=Culvert** (Passes 0.01 cfs of 14.12 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 0.01 cfs @ 0.24 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 6FP: FocalPoint 6

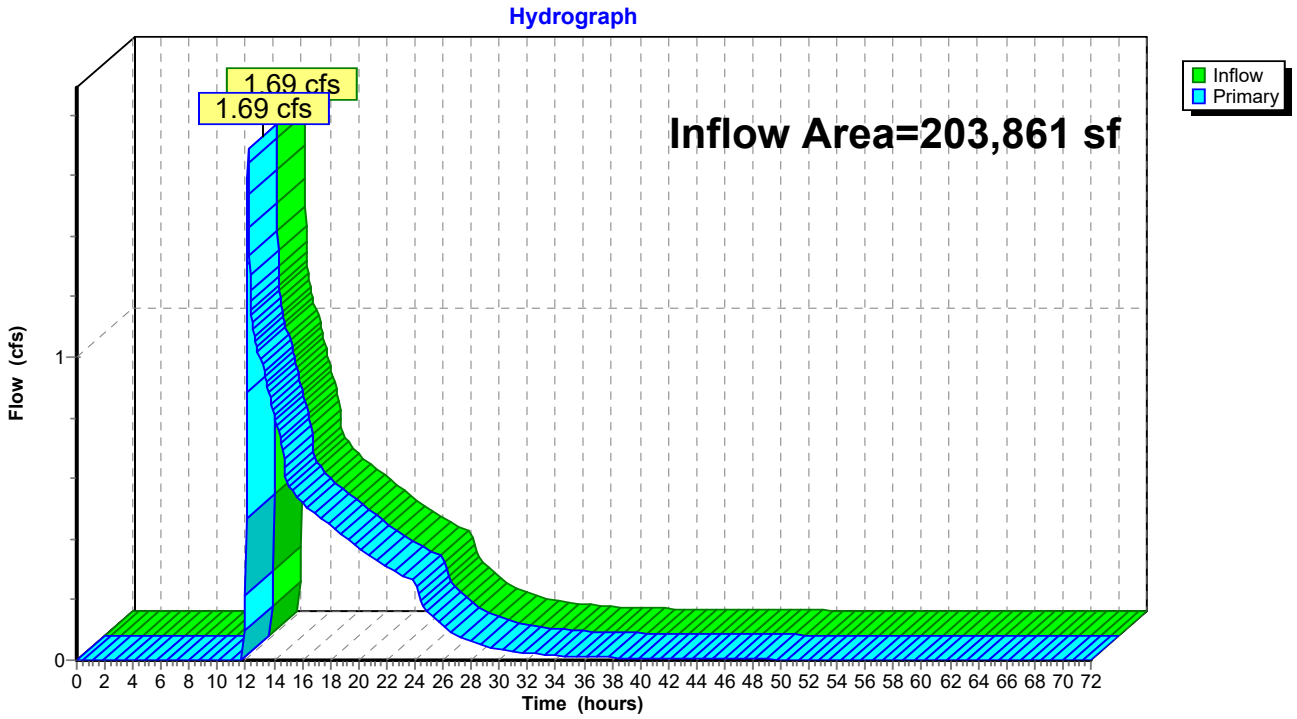


Summary for Link 1L: Outfall #1

Inflow Area = 203,861 sf, 59.40% Impervious, Inflow Depth > 1.52" for 2-year event
Inflow = 1.69 cfs @ 12.16 hrs, Volume= 25,881 cf
Primary = 1.69 cfs @ 12.16 hrs, Volume= 25,881 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs

Link 1L: Outfall #1



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Area 1 Runoff Area=1.480 ac 43.92% Impervious Runoff Depth=1.68"
Tc=5.0 min CN=68 Runoff=4.57 cfs 9,004 cf

Subcatchment2S: Area 2 Runoff Area=0.720 ac 83.33% Impervious Runoff Depth=3.60"
Tc=5.0 min CN=90 Runoff=4.45 cfs 9,402 cf

Subcatchment3S: Area 3 Runoff Area=0.380 ac 71.05% Impervious Runoff Depth=3.01"
Tc=5.0 min CN=84 Runoff=2.05 cfs 4,147 cf

Subcatchment4S: Area 4 Runoff Area=1.100 ac 79.09% Impervious Runoff Depth=3.39"
Tc=5.0 min CN=88 Runoff=6.52 cfs 13,553 cf

Subcatchment5S: Area 5 Runoff Area=0.440 ac 61.36% Impervious Runoff Depth=2.55"
Tc=5.0 min CN=79 Runoff=2.06 cfs 4,079 cf

Subcatchment6S: Area 6 Runoff Area=0.180 ac 55.56% Impervious Runoff Depth=2.30"
Tc=5.0 min CN=76 Runoff=0.76 cfs 1,502 cf

Subcatchment10S: South Bypass Runoff Area=0.380 ac 5.26% Impervious Runoff Depth=0.53"
Tc=5.0 min CN=49 Runoff=0.26 cfs 731 cf

Reach 1R: Southern Trunk Line Avg. Flow Depth=0.54' Max Vel=3.73 fps Inflow=2.88 cfs 36,273 cf
24.0" Round Pipe n=0.013 L=1,058.0' S=0.0051 '/' Capacity=16.10 cfs Outflow=2.51 cfs 36,270 cf

Pond 1DP: Detention Pond 1 Peak Elev=697.64' Storage=2,896 cf Inflow=4.48 cfs 8,635 cf
Outflow=0.57 cfs 8,635 cf

Pond 1FP: FocalPoint 1 Peak Elev=699.81' Storage=622 cf Inflow=4.57 cfs 9,004 cf
Outflow=4.48 cfs 8,635 cf

Pond 2DP: Detention Pond 2 Peak Elev=695.73' Storage=14,049 cf Inflow=12.93 cfs 24,277 cf
Outflow=0.53 cfs 23,314 cf

Pond 2FP: FocalPoint 2 Peak Elev=698.31' Storage=1,070 cf Inflow=4.45 cfs 9,402 cf
Outflow=4.34 cfs 8,679 cf

Pond 3FP: FocalPoint 3 Peak Elev=699.68' Storage=881 cf Inflow=2.05 cfs 4,147 cf
Outflow=2.00 cfs 3,426 cf

Pond 4FP: FocalPoint 4 Peak Elev=699.91' Storage=1,389 cf Inflow=6.52 cfs 13,553 cf
Outflow=6.62 cfs 12,171 cf

Pond 5FP: FocalPoint 5 Peak Elev=697.68' Storage=807 cf Inflow=2.06 cfs 4,079 cf
Outflow=1.99 cfs 3,451 cf

Pond 6FP: FocalPoint 6 Peak Elev=697.54' Storage=667 cf Inflow=0.76 cfs 1,502 cf
Outflow=0.24 cfs 874 cf

Link 1L: Outfall #1

Inflow=2.58 cfs 37,001 cf
Primary=2.58 cfs 37,001 cf

Total Runoff Area = 203,861 sf Runoff Volume = 42,418 cf Average Runoff Depth = 2.50"
40.60% Pervious = 82,764 sf 59.40% Impervious = 121,097 sf

Summary for Subcatchment 1S: Area 1

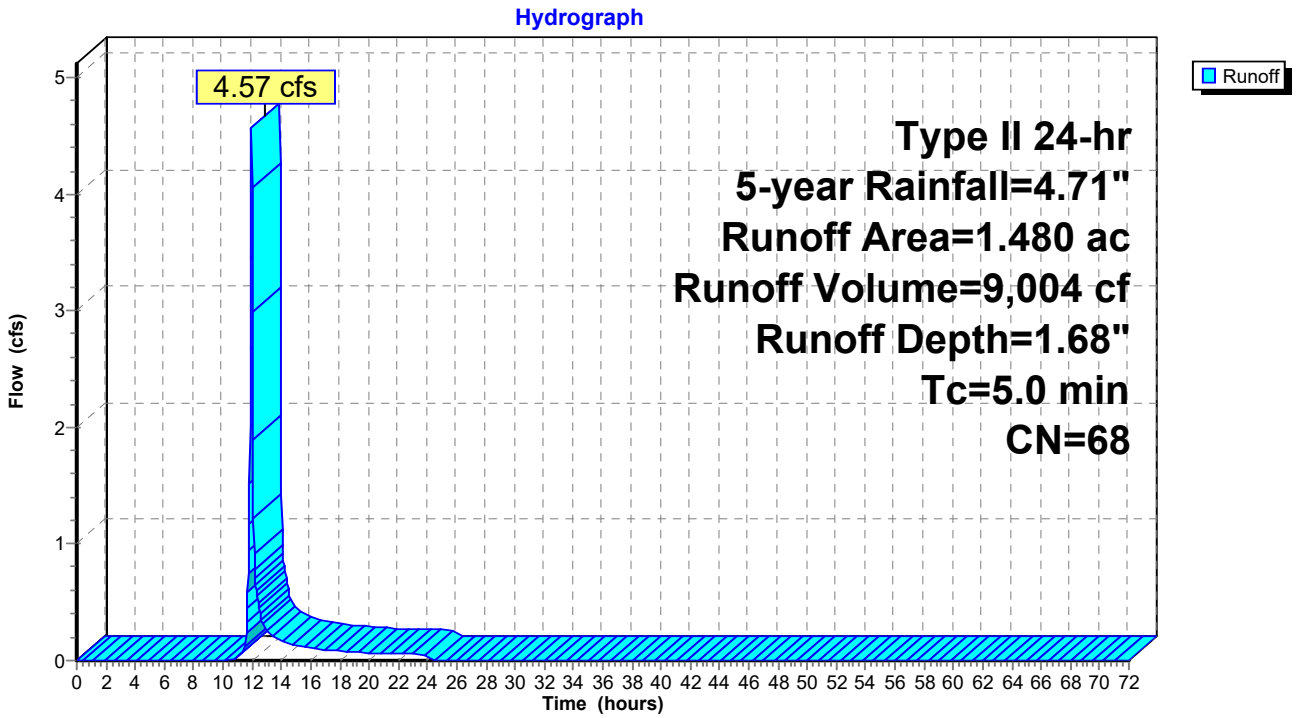
Runoff = 4.57 cfs @ 11.97 hrs, Volume= 9,004 cf, Depth= 1.68"
Routed to Pond 1FP : FocalPoint 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 5-year Rainfall=4.71"

Area (ac)	CN	Description
0.510	49	50-75% Grass cover, Fair, HSG A
0.320	36	Woods, Fair, HSG A
0.650	98	Paved parking, HSG A
1.480	68	Weighted Average
0.830		56.08% Pervious Area
0.650		43.92% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 1S: Area 1



Summary for Subcatchment 2S: Area 2

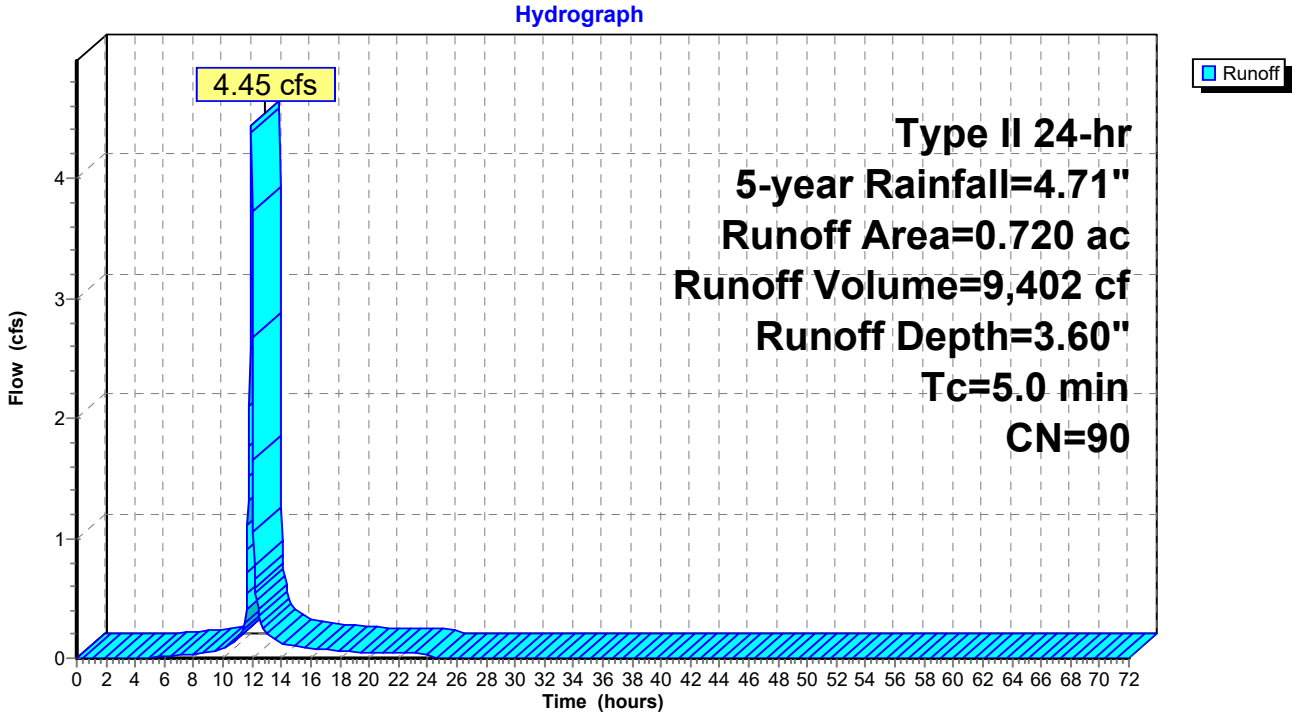
Runoff = 4.45 cfs @ 11.96 hrs, Volume= 9,402 cf, Depth= 3.60"
Routed to Pond 2FP : FocalPoint 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 5-year Rainfall=4.71"

Area (ac)	CN	Description
0.120	49	50-75% Grass cover, Fair, HSG A
0.600	98	Paved parking, HSG A
0.720	90	Weighted Average
0.120		16.67% Pervious Area
0.600		83.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 2S: Area 2



Summary for Subcatchment 3S: Area 3

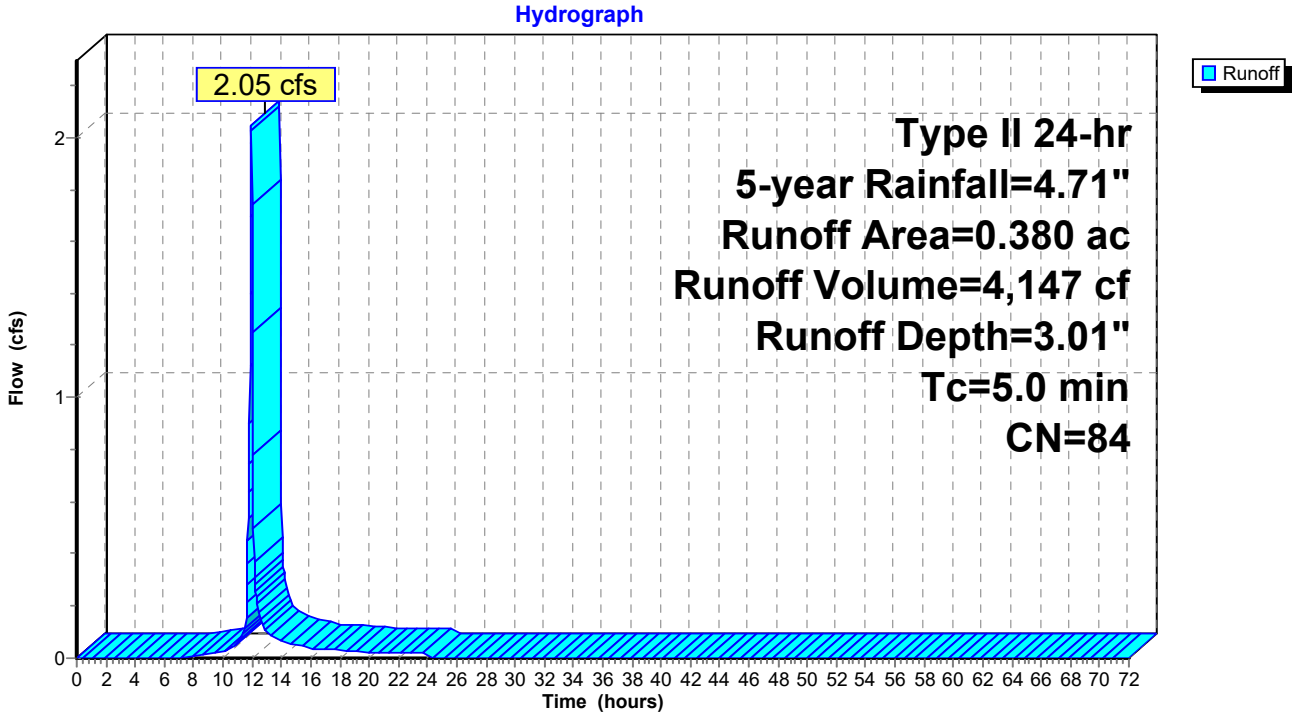
Runoff = 2.05 cfs @ 11.96 hrs, Volume= 4,147 cf, Depth= 3.01"
Routed to Pond 3FP : FocalPoint 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 5-year Rainfall=4.71"

Area (ac)	CN	Description
0.110	49	50-75% Grass cover, Fair, HSG A
0.270	98	Paved parking, HSG A
0.380	84	Weighted Average
0.110		28.95% Pervious Area
0.270		71.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 3S: Area 3



Summary for Subcatchment 4S: Area 4

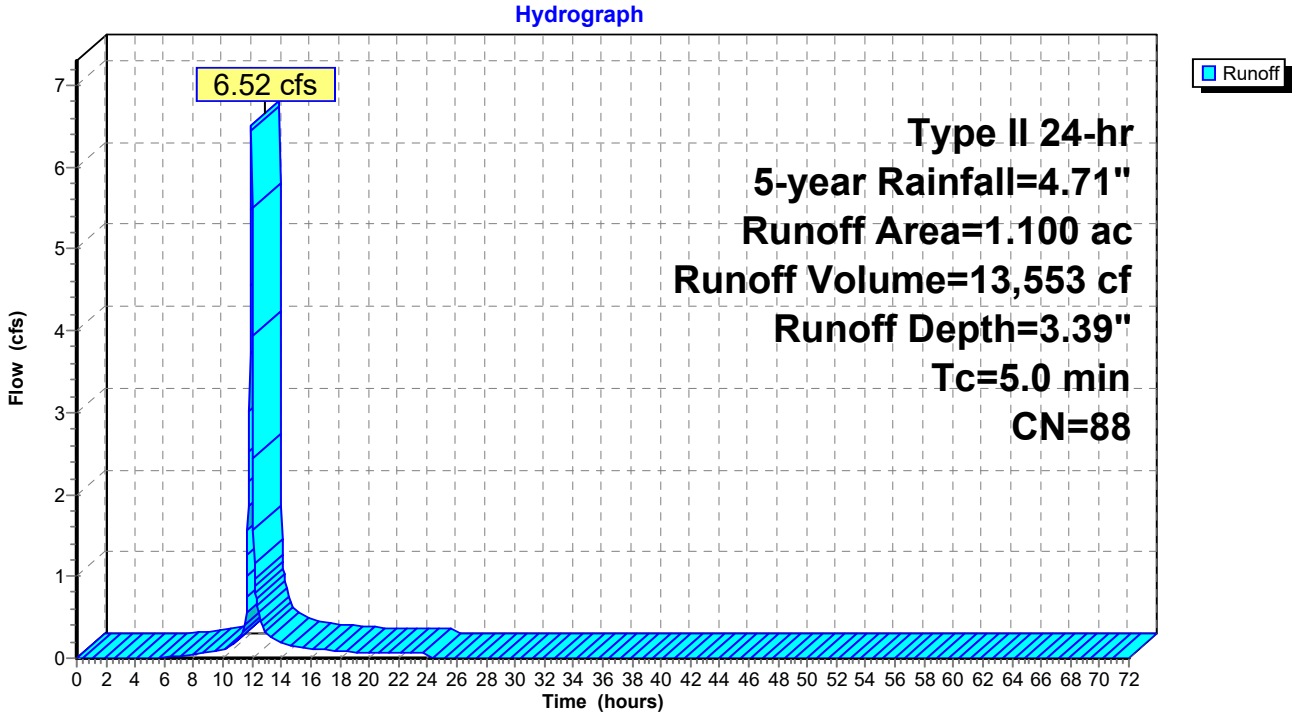
Runoff = 6.52 cfs @ 11.96 hrs, Volume= 13,553 cf, Depth= 3.39"
Routed to Pond 4FP : FocalPoint 4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 5-year Rainfall=4.71"

Area (ac)	CN	Description
0.230	49	50-75% Grass cover, Fair, HSG A
0.870	98	Paved parking, HSG A
1.100	88	Weighted Average
0.230		20.91% Pervious Area
0.870		79.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 4S: Area 4



Summary for Subcatchment 5S: Area 5

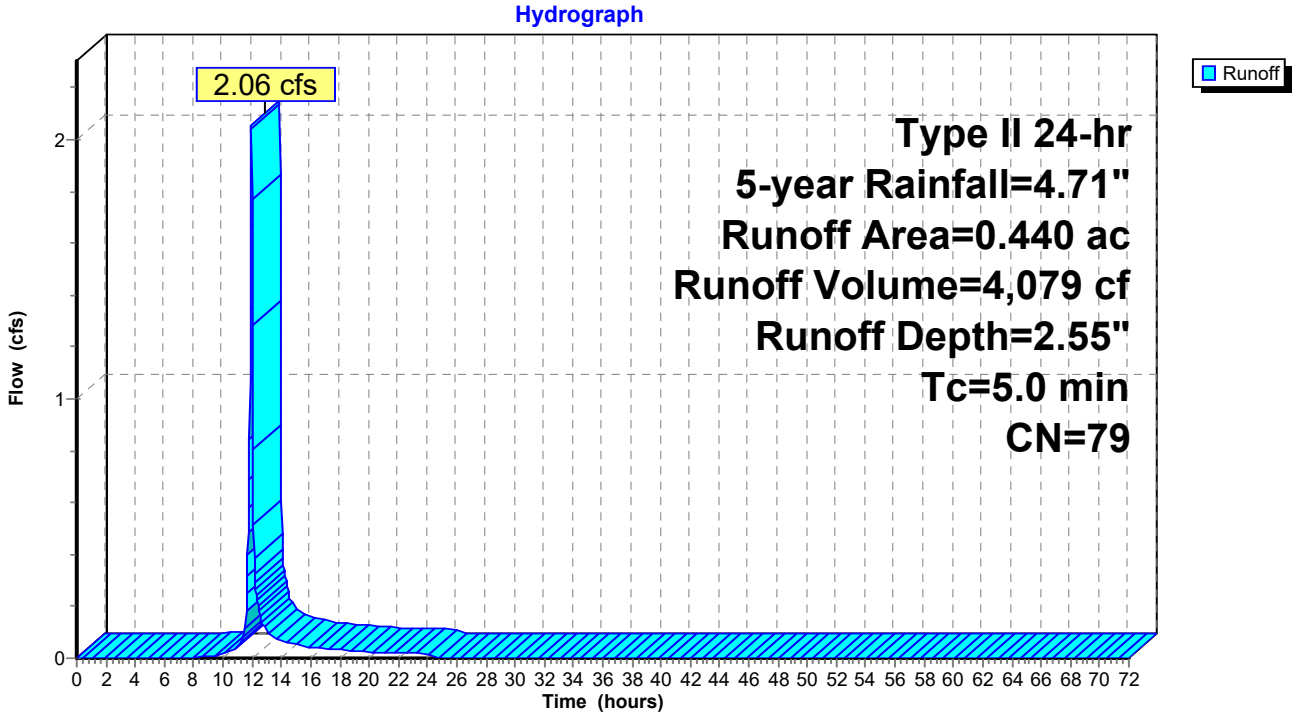
Runoff = 2.06 cfs @ 11.96 hrs, Volume= 4,079 cf, Depth= 2.55"
Routed to Pond 5FP : FocalPoint 5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 5-year Rainfall=4.71"

Area (ac)	CN	Description
0.170	49	50-75% Grass cover, Fair, HSG A
0.270	98	Paved parking, HSG A
0.440	79	Weighted Average
0.170		38.64% Pervious Area
0.270		61.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 5S: Area 5



Summary for Subcatchment 6S: Area 6

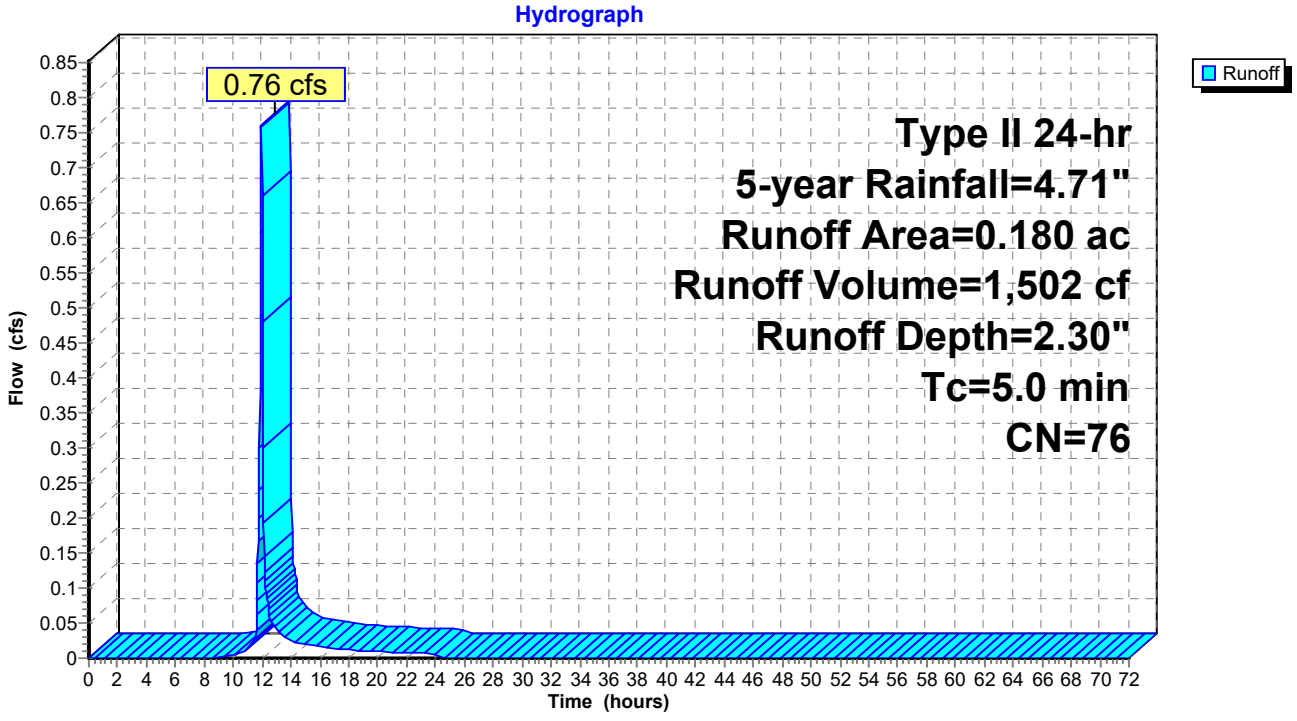
Runoff = 0.76 cfs @ 11.96 hrs, Volume= 1,502 cf, Depth= 2.30"
Routed to Pond 6FP : FocalPoint 6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 5-year Rainfall=4.71"

Area (ac)	CN	Description
0.080	49	50-75% Grass cover, Fair, HSG A
0.100	98	Paved parking, HSG A
0.180	76	Weighted Average
0.080		44.44% Pervious Area
0.100		55.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 6S: Area 6



Summary for Subcatchment 10S: South Bypass

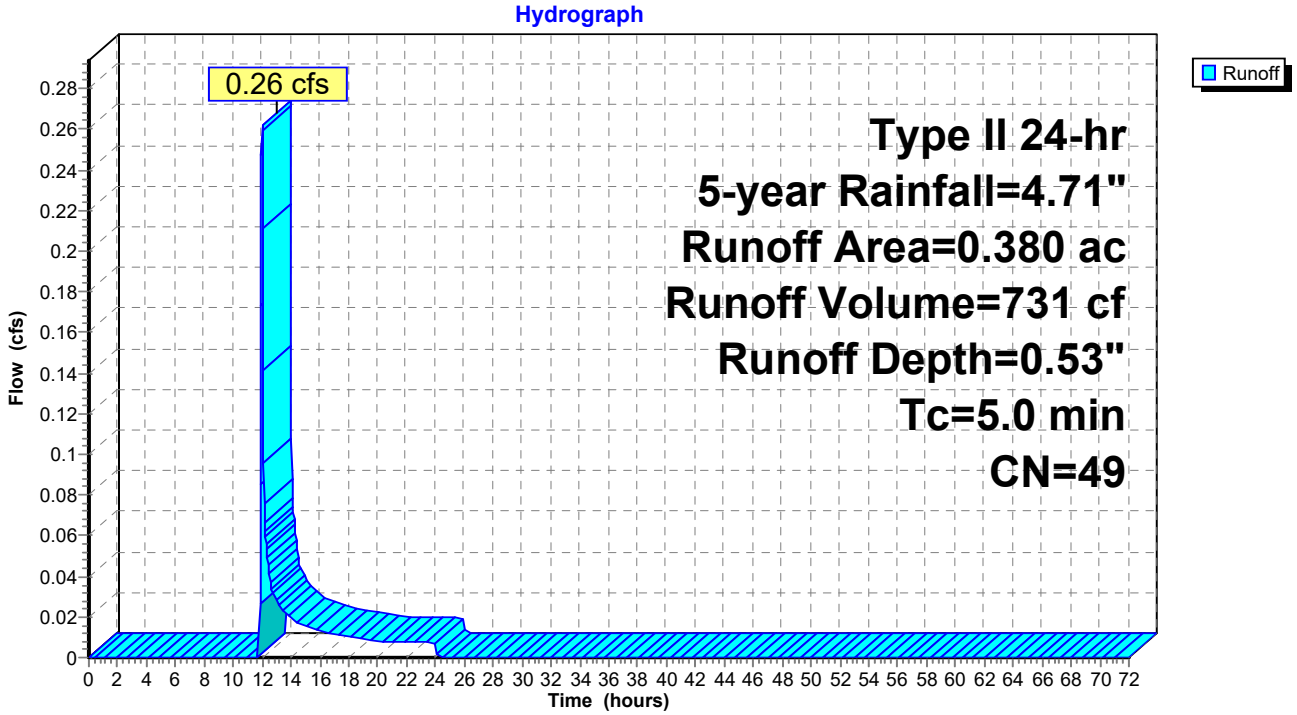
Runoff = 0.26 cfs @ 11.99 hrs, Volume= 731 cf, Depth= 0.53"
Routed to Link 1L : Outfall #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 5-year Rainfall=4.71"

Area (ac)	CN	Description
0.290	49	50-75% Grass cover, Fair, HSG A
0.070	36	Woods, Fair, HSG A
0.020	98	Paved parking, HSG A
0.380	49	Weighted Average
0.360		94.74% Pervious Area
0.020		5.26% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 10S: South Bypass



Summary for Reach 1R: Southern Trunk Line

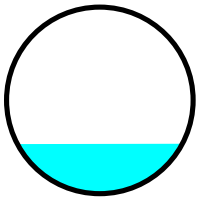
[52] Hint: Inlet/Outlet conditions not evaluated
[79] Warning: Submerged Pond 1DP Primary device # 1 INLET by 0.39'
[81] Warning: Exceeded Pond 2DP by 1.71' @ 0.00 hrs
[79] Warning: Submerged Pond 5FP Primary device # 1 INLET by 1.99'
[79] Warning: Submerged Pond 6FP Primary device # 1 INLET by 1.99'

Inflow Area = 187,308 sf, 64.19% Impervious, Inflow Depth > 2.32" for 5-year event
Inflow = 2.88 cfs @ 11.98 hrs, Volume= 36,273 cf
Outflow = 2.51 cfs @ 12.13 hrs, Volume= 36,270 cf, Atten= 13%, Lag= 8.4 min
Routed to Link 1L : Outfall #1

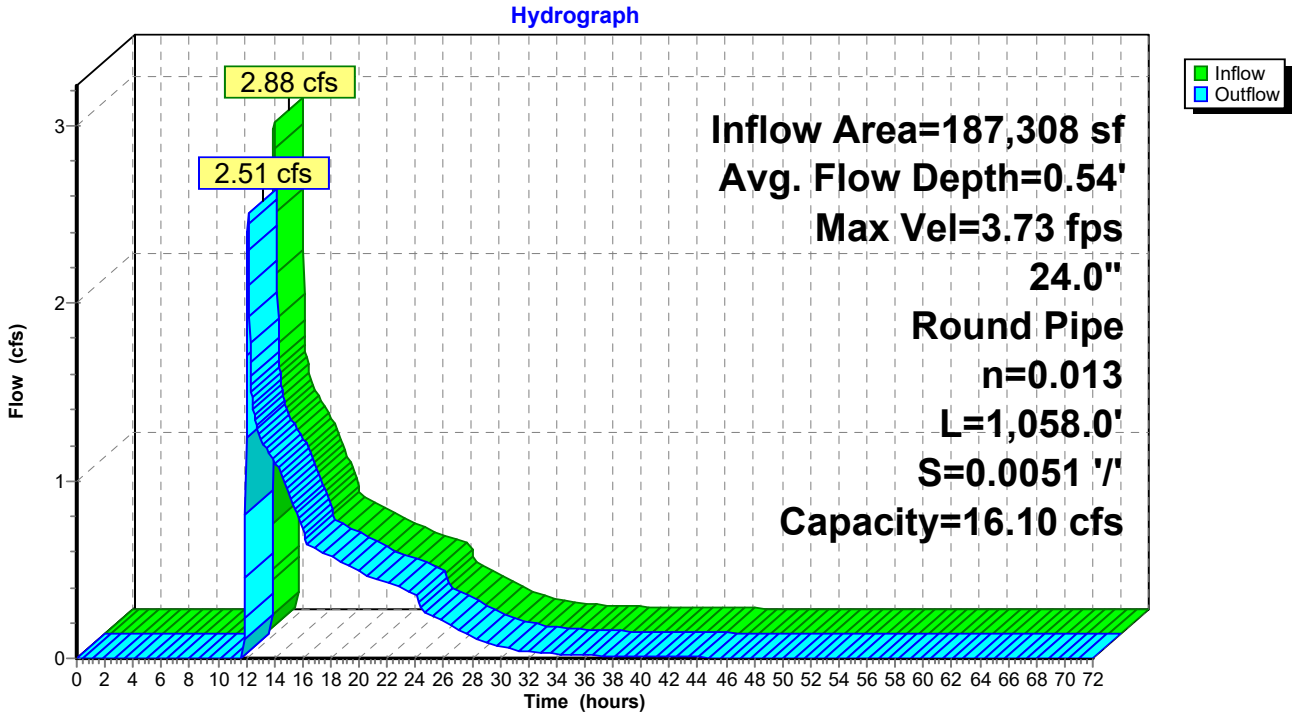
Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Max. Velocity= 3.73 fps, Min. Travel Time= 4.7 min
Avg. Velocity = 1.09 fps, Avg. Travel Time= 16.2 min

Peak Storage= 715 cf @ 12.04 hrs
Average Depth at Peak Storage= 0.54' , Surface Width= 1.77'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 16.10 cfs

24.0" Round Pipe
n= 0.013
Length= 1,058.0' Slope= 0.0051 '/'
Inlet Invert= 695.46', Outlet Invert= 690.10'



Reach 1R: Southern Trunk Line



Summary for Pond 1DP: Detention Pond 1

[44] Hint: Outlet device #2 is below defined storage
[79] Warning: Submerged Pond 1FP Primary device # 1 INLET by 1.64'

Inflow Area = 64,469 sf, 43.92% Impervious, Inflow Depth = 1.61" for 5-year event
Inflow = 4.48 cfs @ 11.98 hrs, Volume= 8,635 cf
Outflow = 0.57 cfs @ 12.34 hrs, Volume= 8,635 cf, Atten= 87%, Lag= 21.4 min
Primary = 0.57 cfs @ 12.34 hrs, Volume= 8,635 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 697.64' @ 12.34 hrs Surf.Area= 2,771 sf Storage= 2,896 cf

Plug-Flow detention time= 41.1 min calculated for 8,631 cf (100% of inflow)
Center-of-Mass det. time= 41.1 min (901.9 - 860.8)

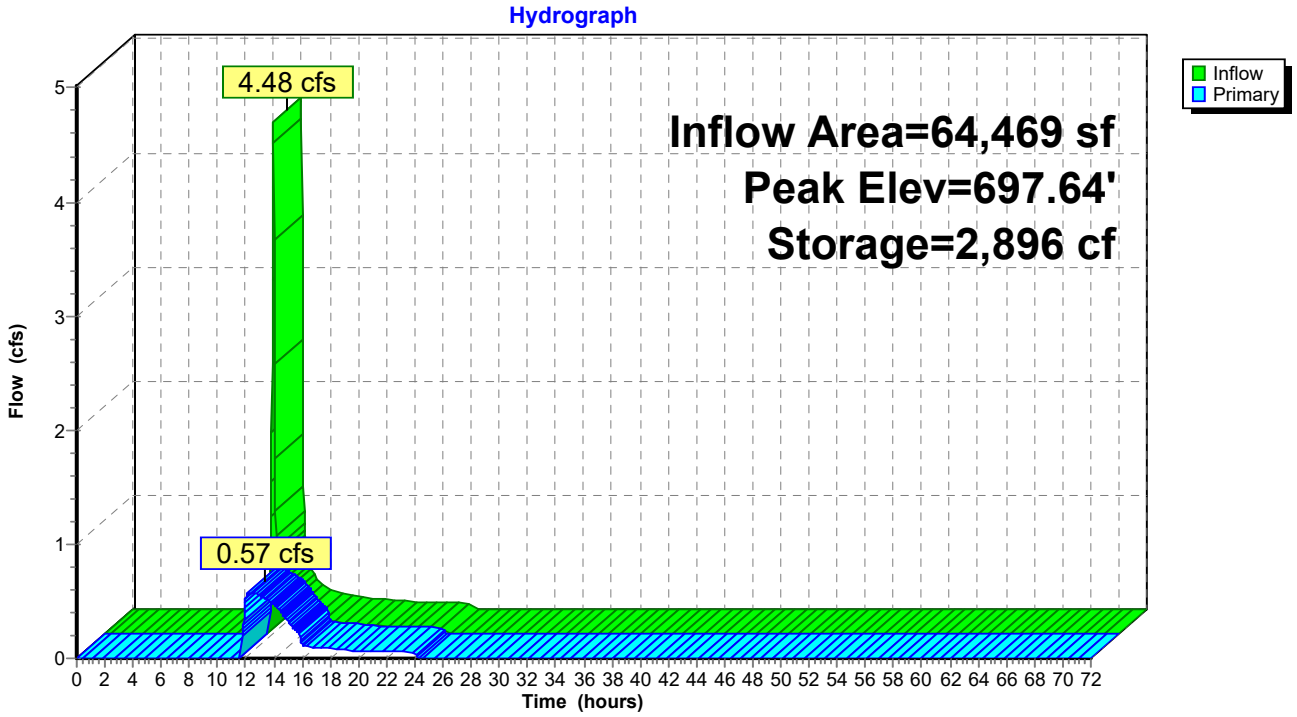
Volume	Invert	Avail.Storage	Storage Description
#1	695.80'	19,432 cf	**Custom Stage Data (Prismatic)** Listed below

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.80	0	0	0
696.00	285	29	29
697.00	2,098	1,192	1,220
698.00	3,151	2,625	3,845
699.00	4,138	3,645	7,489
700.00	5,311	4,725	12,214
701.00	9,125	7,218	19,432

Device	Routing	Invert	Outlet Devices
#1	Primary	695.60'	**18.0" Round Culvert** L= 28.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 695.60' / 695.46' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	695.60'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.57 cfs @ 12.34 hrs HW=697.64' TW=565.00' (Fixed TW Elev= 565.00')
└─**1=Culvert** (Passes 0.57 cfs of 8.24 cfs potential flow)
  ├─**2=Orifice/Grate** (Orifice Controls 0.57 cfs @ 6.59 fps)
  └─**3=Orifice/Grate** (Controls 0.00 cfs)

Pond 1DP: Detention Pond 1



Summary for Pond 1FP: FocalPoint 1

[92] Warning: Device #3 is above defined storage

Inflow Area = 64,469 sf, 43.92% Impervious, Inflow Depth = 1.68" for 5-year event
Inflow = 4.57 cfs @ 11.97 hrs, Volume= 9,004 cf
Outflow = 4.48 cfs @ 11.98 hrs, Volume= 8,635 cf, Atten= 2%, Lag= 0.7 min
Primary = 4.48 cfs @ 11.98 hrs, Volume= 8,635 cf
Routed to Pond 1DP : Detention Pond 1

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 699.81' @ 11.98 hrs Surf.Area= 945 sf Storage= 622 cf

Plug-Flow detention time= 31.8 min calculated for 8,635 cf (96% of inflow)
Center-of-Mass det. time= 8.8 min (860.8 - 852.0)

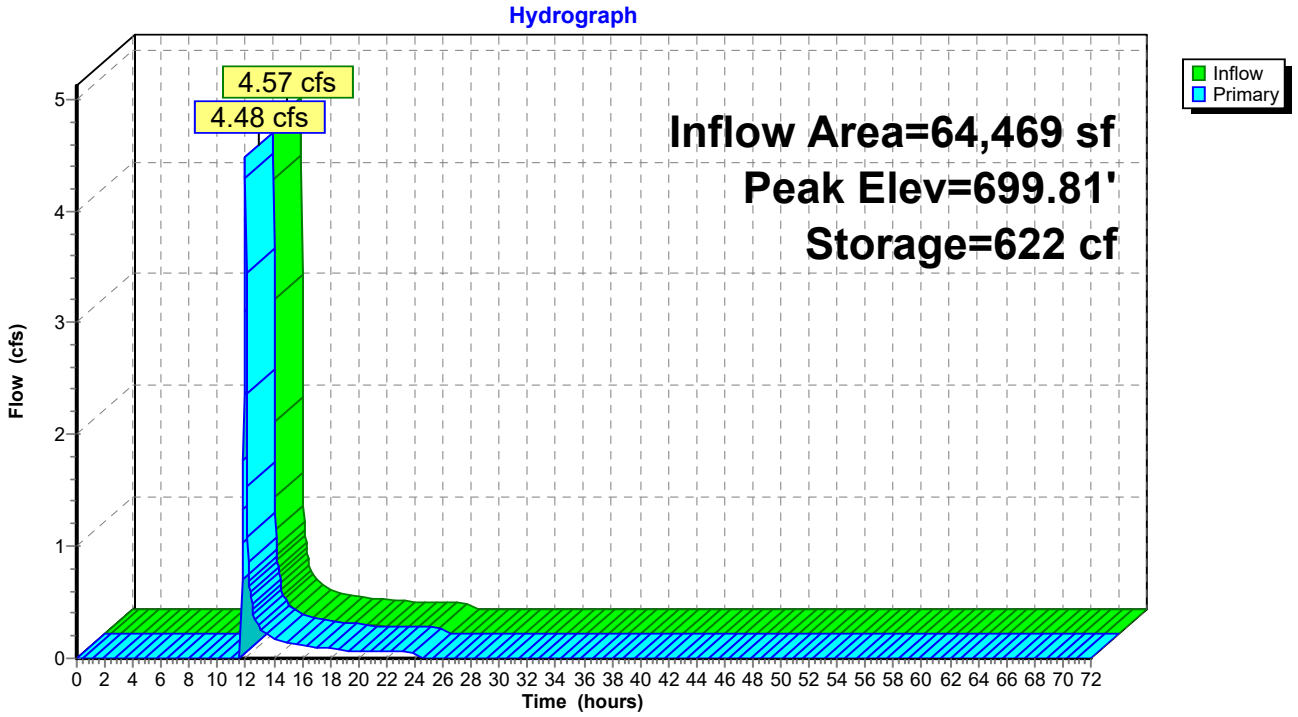
Volume	Invert	Avail.Storage	Storage Description
#1	696.00'	815 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
696.00	237	0.0	0	0
699.00	237	20.0	142	142
700.00	1,109	100.0	673	815

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 40.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 695.80' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**10.0' long x 18.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=4.41 cfs @ 11.98 hrs HW=699.81' (Free Discharge)
- **1=Culvert** (Passes 4.41 cfs of 14.88 cfs potential flow)
  - **2=Orifice/Grate** (Weir Controls 4.41 cfs @ 1.82 fps)
- **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1FP: FocalPoint 1



Summary for Pond 2DP: Detention Pond 2

[79] Warning: Submerged Pond 2FP Primary device # 1 INLET by 1.23'
[79] Warning: Submerged Pond 3FP Primary device # 1 OUTLET by 1.73'

Inflow Area = 95,832 sf, 79.09% Impervious, Inflow Depth = 3.04" for 5-year event
Inflow = 12.93 cfs @ 11.97 hrs, Volume= 24,277 cf
Outflow = 0.53 cfs @ 13.32 hrs, Volume= 23,314 cf, Atten= 96%, Lag= 81.1 min
Primary = 0.53 cfs @ 13.32 hrs, Volume= 23,314 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 695.73' @ 13.32 hrs Surf.Area= 8,711 sf Storage= 14,049 cf

Plug-Flow detention time= 382.2 min calculated for 23,305 cf (96% of inflow)
Center-of-Mass det. time= 360.4 min (1,182.0 - 821.6)

Volume	Invert	Avail.Storage	Storage Description
#1A	693.75'	3,019 cf	**38.12'W x 114.25'L x 4.79'H Field A** 20,877 cf Overall - 13,330 cf Embedded = 7,547 cf x 40.0% Voids
#2A	694.00'	12,663 cf	**Ferguson R-Tank HD 2.5** x 1222 Inside #1 Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf 1222 Chambers in 26 Rows
#3B	693.75'	3,019 cf	**38.12'W x 114.25'L x 4.79'H Field B** 20,877 cf Overall - 13,330 cf Embedded = 7,547 cf x 40.0% Voids
#4B	694.00'	12,663 cf	**Ferguson R-Tank HD 2.5** x 1222 Inside #3 Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf 1222 Chambers in 26 Rows
		31,364 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 10.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 693.20' S= 0.0800 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	694.00'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	697.00'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=0.53 cfs @ 13.32 hrs HW=695.73' TW=565.00' (Fixed TW Elev= 565.00')
- **1=Culvert** (Passes 0.53 cfs of 8.42 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.53 cfs @ 6.02 fps)
- **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 2DP: Detention Pond 2 - Chamber Wizard Field A

Chamber Model = Ferguson R-Tank HD 2.5 (Ferguson R-Tank HD)
Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf
Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf

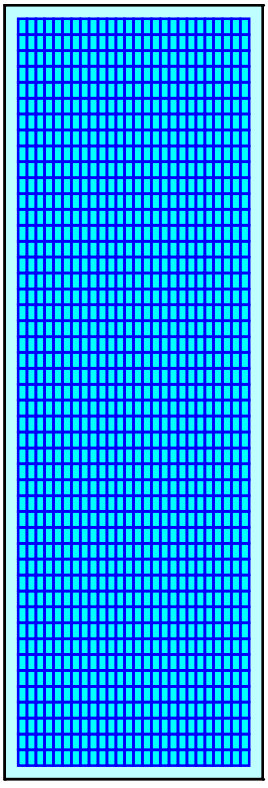
47 Chambers/Row x 2.35' Long = 110.25' Row Length +24.0" End Stone x 2 = 114.25' Base Length
26 Rows x 15.7" Wide + 24.0" Side Stone x 2 = 38.12' Base Width
3.0" Stone Base + 42.5" Chamber Height + 12.0" Stone Cover = 4.79' Field Height

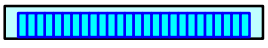
1,222 Chambers x 10.4 cf = 12,663.1 cf Chamber Storage
1,222 Chambers x 10.9 cf = 13,329.6 cf Displacement

20,876.7 cf Field - 13,329.6 cf Chambers = 7,547.2 cf Stone x 40.0% Voids = 3,018.9 cf Stone Storage

Chamber Storage + Stone Storage = 15,682.0 cf = 0.360 af
Overall Storage Efficiency = 75.1%
Overall System Size = 114.25' x 38.12' x 4.79'

1,222 Chambers
773.2 cy Field
279.5 cy Stone





Pond 2DP: Detention Pond 2 - Chamber Wizard Field B

Chamber Model = Ferguson R-Tank HD 2.5 (Ferguson R-Tank HD)
Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf
Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf

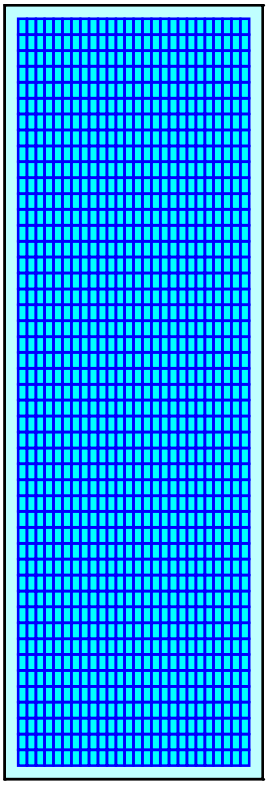
47 Chambers/Row x 2.35' Long = 110.25' Row Length +24.0" End Stone x 2 = 114.25' Base Length
26 Rows x 15.7" Wide + 24.0" Side Stone x 2 = 38.12' Base Width
3.0" Stone Base + 42.5" Chamber Height + 12.0" Stone Cover = 4.79' Field Height

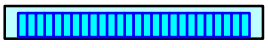
1,222 Chambers x 10.4 cf = 12,663.1 cf Chamber Storage
1,222 Chambers x 10.9 cf = 13,329.6 cf Displacement

20,876.7 cf Field - 13,329.6 cf Chambers = 7,547.2 cf Stone x 40.0% Voids = 3,018.9 cf Stone Storage

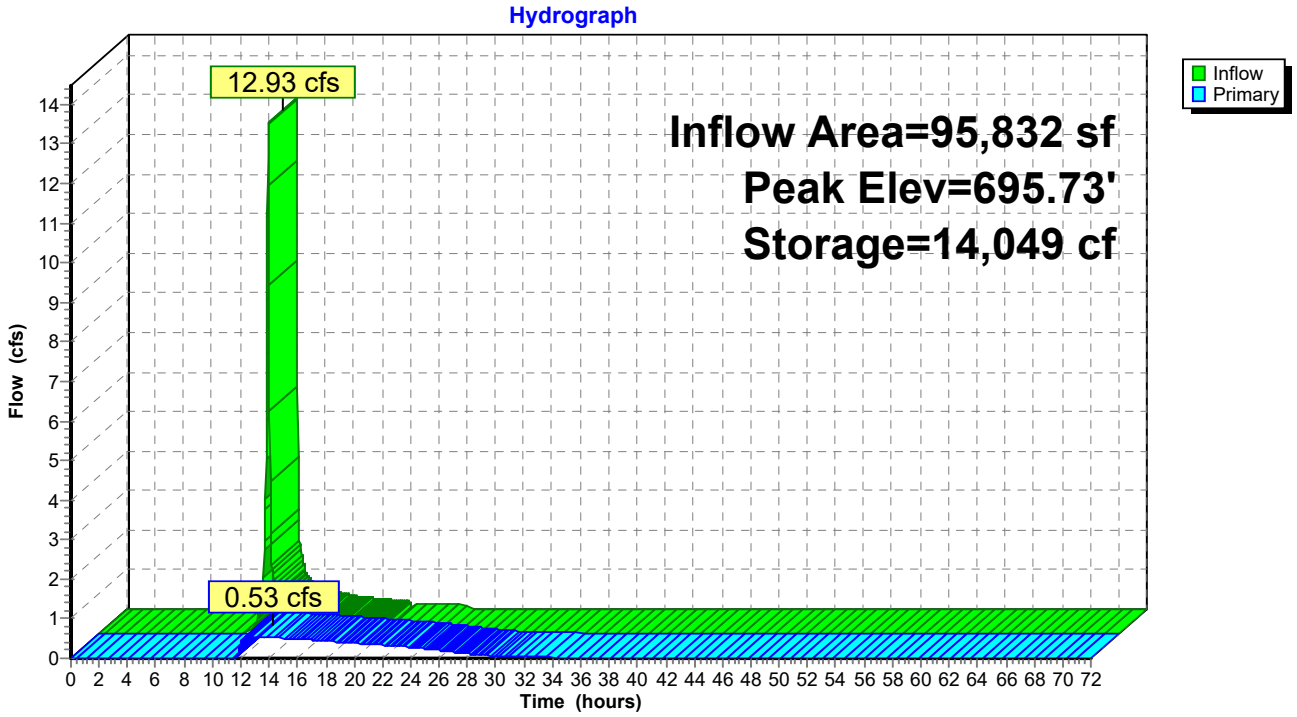
Chamber Storage + Stone Storage = 15,682.0 cf = 0.360 af
Overall Storage Efficiency = 75.1%
Overall System Size = 114.25' x 38.12' x 4.79'

1,222 Chambers
773.2 cy Field
279.5 cy Stone





Pond 2DP: Detention Pond 2



Summary for Pond 2FP: FocalPoint 2

Inflow Area = 31,363 sf, 83.33% Impervious, Inflow Depth = 3.60" for 5-year event
Inflow = 4.45 cfs @ 11.96 hrs, Volume= 9,402 cf
Outflow = 4.34 cfs @ 11.97 hrs, Volume= 8,679 cf, Atten= 2%, Lag= 0.8 min
Primary = 4.34 cfs @ 11.97 hrs, Volume= 8,679 cf
Routed to Pond 2DP : Detention Pond 2

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 698.31' @ 11.97 hrs Surf.Area= 1,219 sf Storage= 1,070 cf

Plug-Flow detention time= 66.7 min calculated for 8,679 cf (92% of inflow)
Center-of-Mass det. time= 25.0 min (813.7 - 788.6)

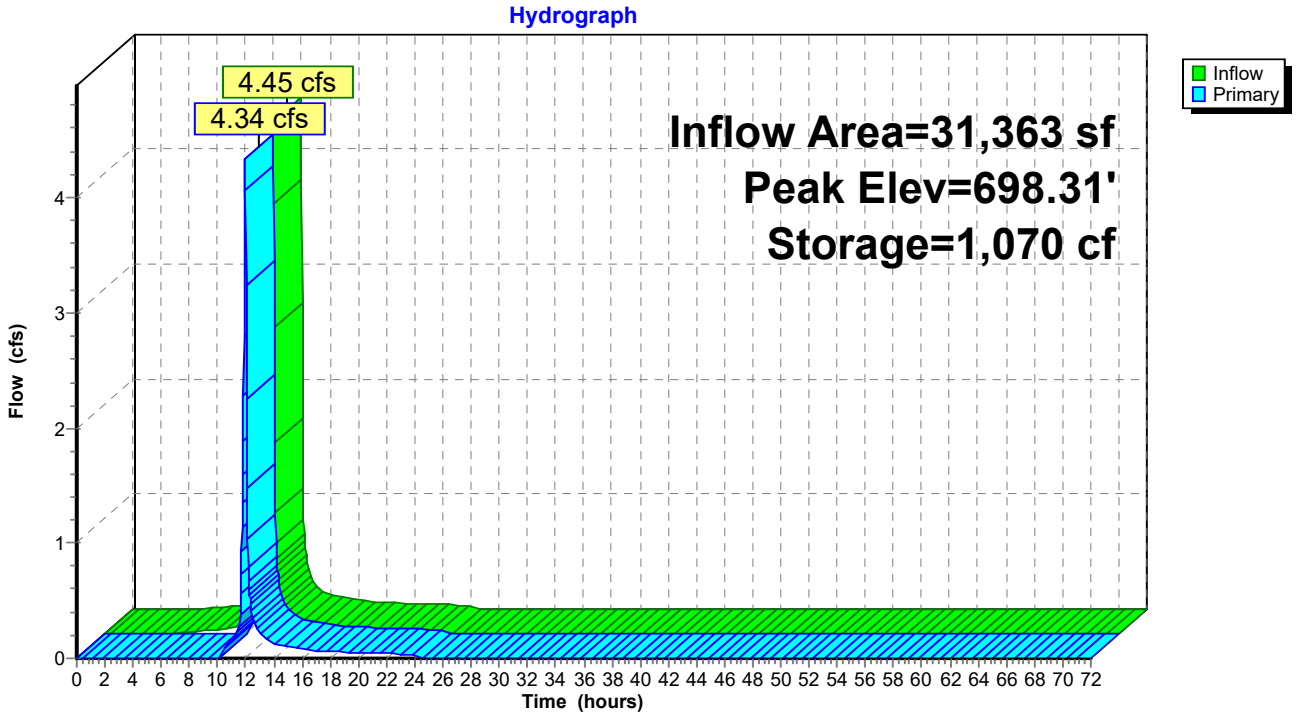
Volume	Invert	Avail.Storage	Storage Description
#1	694.50'	1,317 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.50	539	0.0	0	0
697.50	539	20.0	323	323
698.00	1,056	100.0	399	722
698.50	1,323	100.0	595	1,317

Device	Routing	Invert	Outlet Devices
#1	Primary	694.50'	**18.0" Round Culvert** L= 28.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.50' / 694.00' S= 0.0179 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	698.00'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=4.33 cfs @ 11.97 hrs HW=698.31' (Free Discharge)
└**1=Culvert** (Passes 4.33 cfs of 14.87 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 4.33 cfs @ 1.81 fps)

Pond 2FP: FocalPoint 2



Summary for Pond 3FP: FocalPoint 3

Inflow Area = 16,553 sf, 71.05% Impervious, Inflow Depth = 3.01" for 5-year event
Inflow = 2.05 cfs @ 11.96 hrs, Volume= 4,147 cf
Outflow = 2.00 cfs @ 11.97 hrs, Volume= 3,426 cf, Atten= 2%, Lag= 0.8 min
Primary = 2.00 cfs @ 11.97 hrs, Volume= 3,426 cf
Routed to Pond 2DP : Detention Pond 2

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 699.68' @ 11.97 hrs Surf.Area= 921 sf Storage= 881 cf

Plug-Flow detention time= 110.2 min calculated for 3,425 cf (83% of inflow)
Center-of-Mass det. time= 35.0 min (843.9 - 808.9)

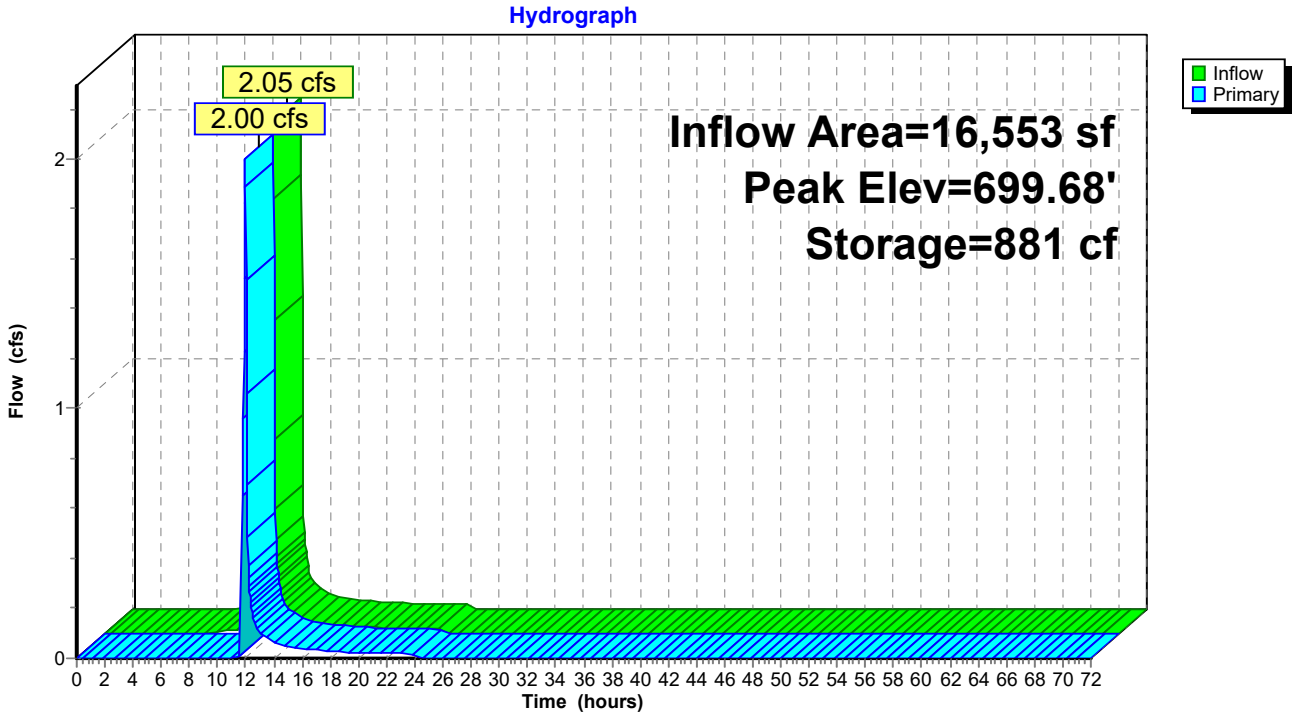
Volume	Invert	Avail.Storage	Storage Description
#1	696.00'	1,197 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
696.00	602	0.0	0	0
699.00	602	20.0	361	361
700.00	1,070	100.0	836	1,197

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 80.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 694.00' S= 0.0250 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.98 cfs @ 11.97 hrs HW=699.68' (Free Discharge)
↑—**1=Culvert** (Passes 1.98 cfs of 14.57 cfs potential flow)
↑—**2=Orifice/Grate** (Weir Controls 1.98 cfs @ 1.39 fps)

Pond 3FP: FocalPoint 3



Summary for Pond 4FP: FocalPoint 4

[92] Warning: Device #2 is above defined storage
[92] Warning: Device #3 is above defined storage
[93] Warning: Storage range exceeded by 0.91'
[88] Warning: Qout>Qin may require smaller dt or Finer Routing
[85] Warning: Oscillations may require smaller dt or Finer Routing (severity=204)

Inflow Area = 47,916 sf, 79.09% Impervious, Inflow Depth = 3.39" for 5-year event
Inflow = 6.52 cfs @ 11.96 hrs, Volume= 13,553 cf
Outflow = 6.62 cfs @ 11.96 hrs, Volume= 12,171 cf, Atten= 0%, Lag= 0.2 min
Primary = 6.62 cfs @ 11.96 hrs, Volume= 12,171 cf
Routed to Pond 2DP : Detention Pond 2

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 699.91' @ 11.96 hrs Surf.Area= 1,491 sf Storage= 1,389 cf

Plug-Flow detention time= 76.7 min calculated for 12,166 cf (90% of inflow)
Center-of-Mass det. time= 25.0 min (821.0 - 796.0)

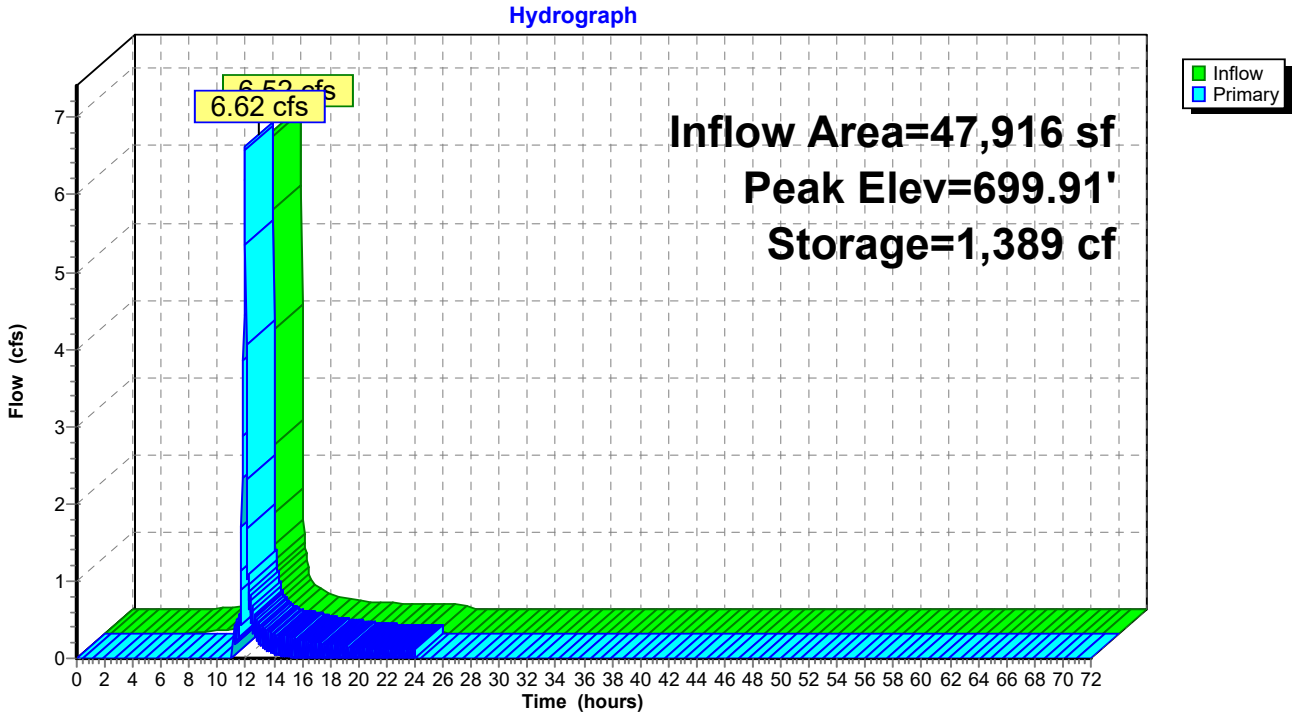
Volume	Invert	Avail.Storage	Storage Description
#1	695.00'	1,389 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.00	585	0.0	0	0
698.00	585	20.0	351	351
699.00	1,491	100.0	1,038	1,389

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 23.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 695.88' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**6.0' long x 133.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=6.46 cfs @ 11.96 hrs HW=699.90' (Free Discharge)
- **1=Culvert** (Passes 6.46 cfs of 15.10 cfs potential flow)
  - **2=Orifice/Grate** (Weir Controls 6.46 cfs @ 2.06 fps)
- **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 4FP: FocalPoint 4



Summary for Pond 5FP: FocalPoint 5

Inflow Area = 19,166 sf, 61.36% Impervious, Inflow Depth = 2.55" for 5-year event
Inflow = 2.06 cfs @ 11.96 hrs, Volume= 4,079 cf
Outflow = 1.99 cfs @ 11.98 hrs, Volume= 3,451 cf, Atten= 3%, Lag= 1.0 min
Primary = 1.99 cfs @ 11.98 hrs, Volume= 3,451 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 697.68' @ 11.98 hrs Surf.Area= 1,066 sf Storage= 807 cf

Plug-Flow detention time= 99.5 min calculated for 3,449 cf (85% of inflow)
Center-of-Mass det. time= 29.2 min (852.2 - 823.1)

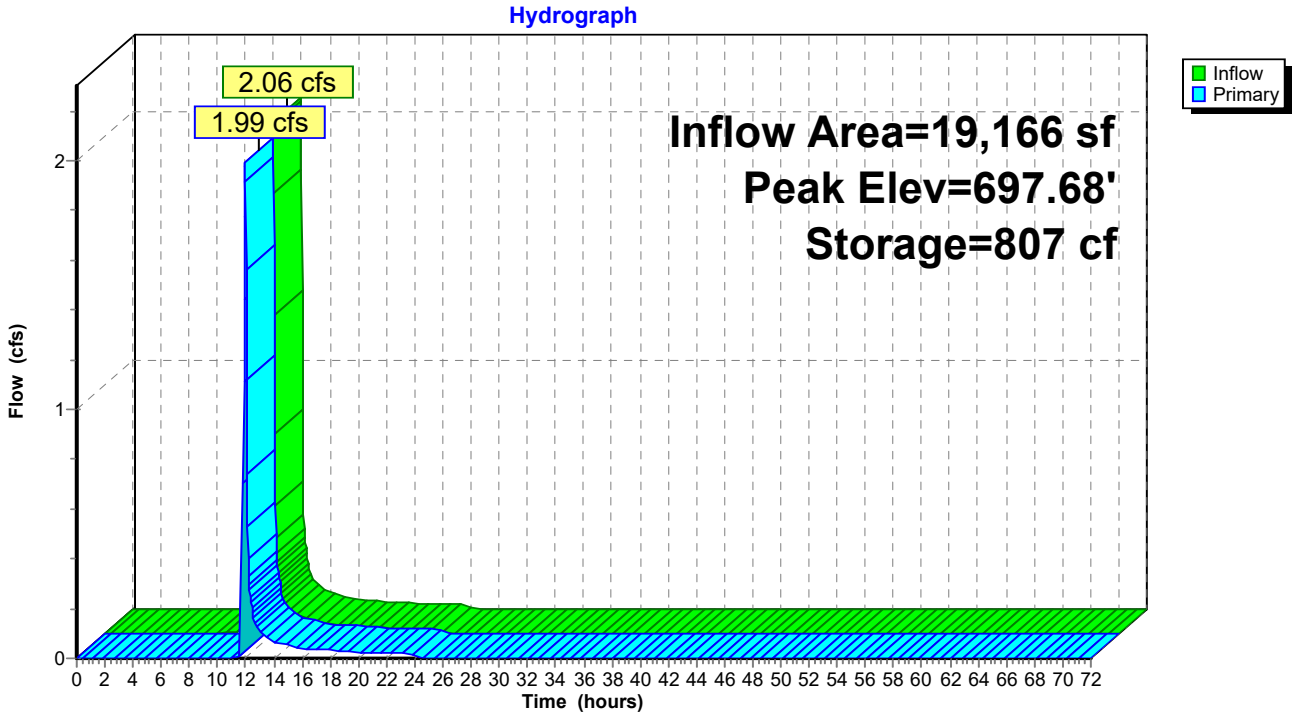
Volume	Invert	Avail.Storage	Storage Description
#1	694.00'	2,779 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.00	472	0.0	0	0
697.00	472	20.0	283	283
698.00	1,344	100.0	908	1,191
699.00	1,832	100.0	1,588	2,779

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 24.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 691.39' S= 0.1088 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	697.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	698.50'	**6.0' long x 9.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.46 2.55 2.70 2.69 2.68 2.68 2.67 2.64 2.64 2.64 2.65 2.64 2.65 2.65 2.66 2.67 2.69

Primary OutFlow Max=1.95 cfs @ 11.98 hrs HW=697.68' (Free Discharge)
- **1=Culvert** (Passes 1.95 cfs of 14.56 cfs potential flow)
  - **2=Orifice/Grate** (Weir Controls 1.95 cfs @ 1.38 fps)
- **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 5FP: FocalPoint 5



Summary for Pond 6FP: FocalPoint 6

Inflow Area = 7,841 sf, 55.56% Impervious, Inflow Depth = 2.30" for 5-year event
Inflow = 0.76 cfs @ 11.96 hrs, Volume= 1,502 cf
Outflow = 0.24 cfs @ 12.08 hrs, Volume= 874 cf, Atten= 68%, Lag= 7.0 min
Primary = 0.24 cfs @ 12.08 hrs, Volume= 874 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 697.54' @ 12.08 hrs Surf.Area= 945 sf Storage= 667 cf

Plug-Flow detention time= 211.1 min calculated for 874 cf (58% of inflow)
Center-of-Mass det. time= 93.1 min (924.1 - 831.0)

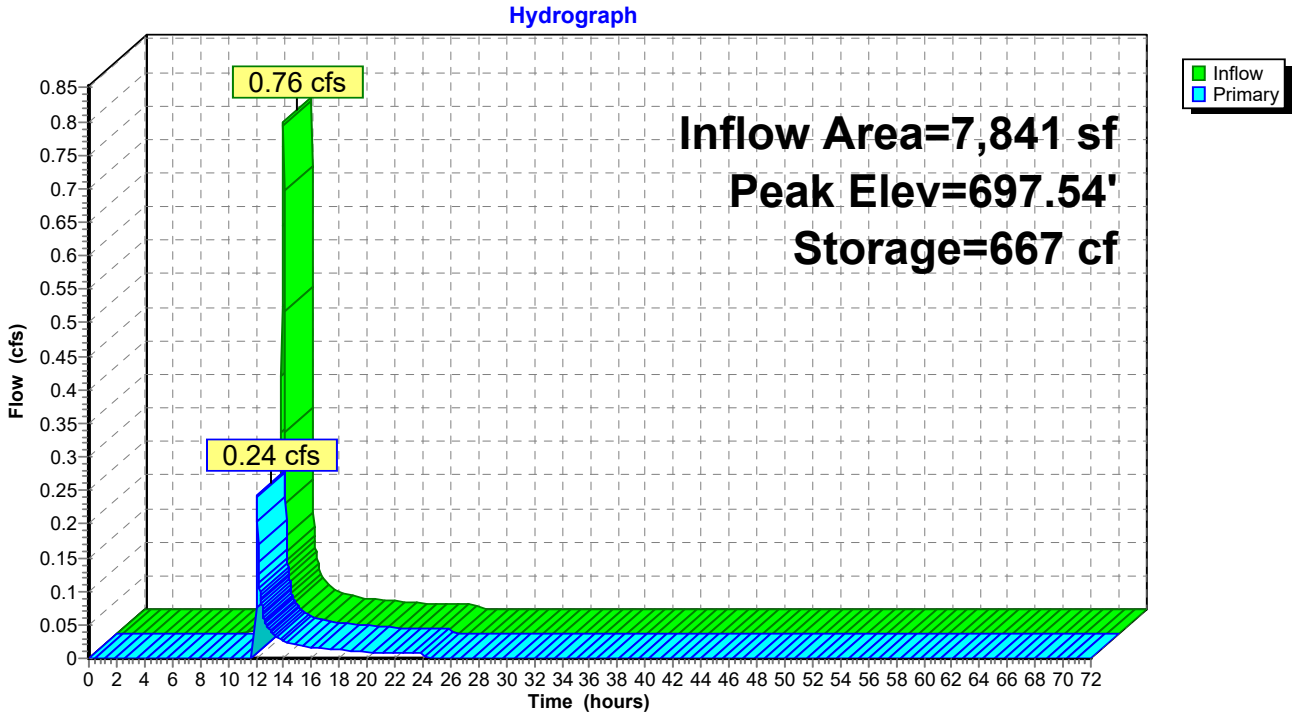
Volume	Invert	Avail.Storage	Storage Description
#1	694.00'	2,779 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.00	472	0.0	0	0
697.00	472	20.0	283	283
698.00	1,344	100.0	908	1,191
699.00	1,832	100.0	1,588	2,779

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 24.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 690.87' S= 0.1304 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	697.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	698.50'	**6.0' long x 9.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.46 2.55 2.70 2.69 2.68 2.68 2.67 2.64 2.64 2.64 2.65 2.64 2.65 2.65 2.66 2.67 2.69

Primary OutFlow Max=0.22 cfs @ 12.08 hrs HW=697.54' (Free Discharge)
└**1=Culvert** (Passes 0.22 cfs of 14.22 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 0.22 cfs @ 0.67 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 6FP: FocalPoint 6

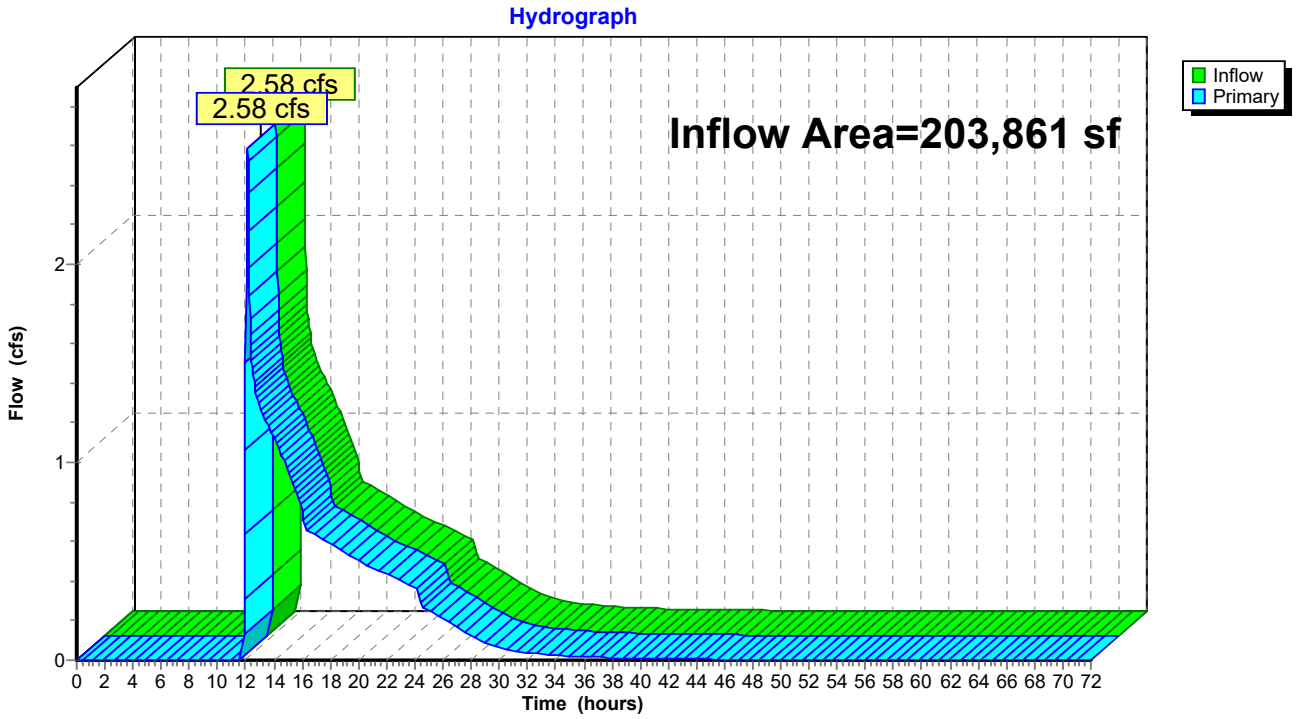


Summary for Link 1L: Outfall #1

Inflow Area = 203,861 sf, 59.40% Impervious, Inflow Depth > 2.18" for 5-year event
Inflow = 2.58 cfs @ 12.12 hrs, Volume= 37,001 cf
Primary = 2.58 cfs @ 12.12 hrs, Volume= 37,001 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs

Link 1L: Outfall #1



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Area 1 Runoff Area=1.480 ac 43.92% Impervious Runoff Depth=2.15"
Tc=5.0 min CN=68 Runoff=5.90 cfs 11,575 cf

Subcatchment2S: Area 2 Runoff Area=0.720 ac 83.33% Impervious Runoff Depth=4.24"
Tc=5.0 min CN=90 Runoff=5.19 cfs 11,091 cf

Subcatchment3S: Area 3 Runoff Area=0.380 ac 71.05% Impervious Runoff Depth=3.62"
Tc=5.0 min CN=84 Runoff=2.44 cfs 4,993 cf

Subcatchment4S: Area 4 Runoff Area=1.100 ac 79.09% Impervious Runoff Depth=4.03"
Tc=5.0 min CN=88 Runoff=7.66 cfs 16,096 cf

Subcatchment5S: Area 5 Runoff Area=0.440 ac 61.36% Impervious Runoff Depth=3.13"
Tc=5.0 min CN=79 Runoff=2.50 cfs 5,002 cf

Subcatchment6S: Area 6 Runoff Area=0.180 ac 55.56% Impervious Runoff Depth=2.85"
Tc=5.0 min CN=76 Runoff=0.94 cfs 1,863 cf

Subcatchment10S: South Bypass Runoff Area=0.380 ac 5.26% Impervious Runoff Depth=0.79"
Tc=5.0 min CN=49 Runoff=0.46 cfs 1,095 cf

Reach 1R: Southern Trunk Line Avg. Flow Depth=0.63' Max Vel=4.09 fps Inflow=4.01 cfs 45,202 cf
24.0" Round Pipe n=0.013 L=1,058.0' S=0.0051 '/' Capacity=16.10 cfs Outflow=3.44 cfs 45,199 cf

Pond 1DP: Detention Pond 1 Peak Elev=698.09' Storage=4,164 cf Inflow=5.79 cfs 11,206 cf
Outflow=0.64 cfs 11,206 cf

Pond 1FP: FocalPoint 1 Peak Elev=699.87' Storage=679 cf Inflow=5.90 cfs 11,575 cf
Outflow=5.79 cfs 11,206 cf

Pond 2DP: Detention Pond 2 Peak Elev=696.18' Storage=17,463 cf Inflow=14.92 cfs 29,357 cf
Outflow=0.60 cfs 28,388 cf

Pond 2FP: FocalPoint 2 Peak Elev=698.34' Storage=1,111 cf Inflow=5.19 cfs 11,091 cf
Outflow=5.07 cfs 10,369 cf

Pond 3FP: FocalPoint 3 Peak Elev=699.70' Storage=902 cf Inflow=2.44 cfs 4,993 cf
Outflow=2.39 cfs 4,272 cf

Pond 4FP: FocalPoint 4 Peak Elev=699.95' Storage=1,389 cf Inflow=7.66 cfs 16,096 cf
Outflow=7.70 cfs 14,715 cf

Pond 5FP: FocalPoint 5 Peak Elev=697.71' Storage=835 cf Inflow=2.50 cfs 5,002 cf
Outflow=2.43 cfs 4,373 cf

Pond 6FP: FocalPoint 6 Peak Elev=697.59' Storage=712 cf Inflow=0.94 cfs 1,863 cf
Outflow=0.69 cfs 1,235 cf

Link 1L: Outfall #1

Inflow=3.57 cfs 46,293 cf
Primary=3.57 cfs 46,293 cf

Total Runoff Area = 203,861 sf Runoff Volume = 51,715 cf Average Runoff Depth = 3.04"
40.60% Pervious = 82,764 sf 59.40% Impervious = 121,097 sf

Summary for Subcatchment 1S: Area 1

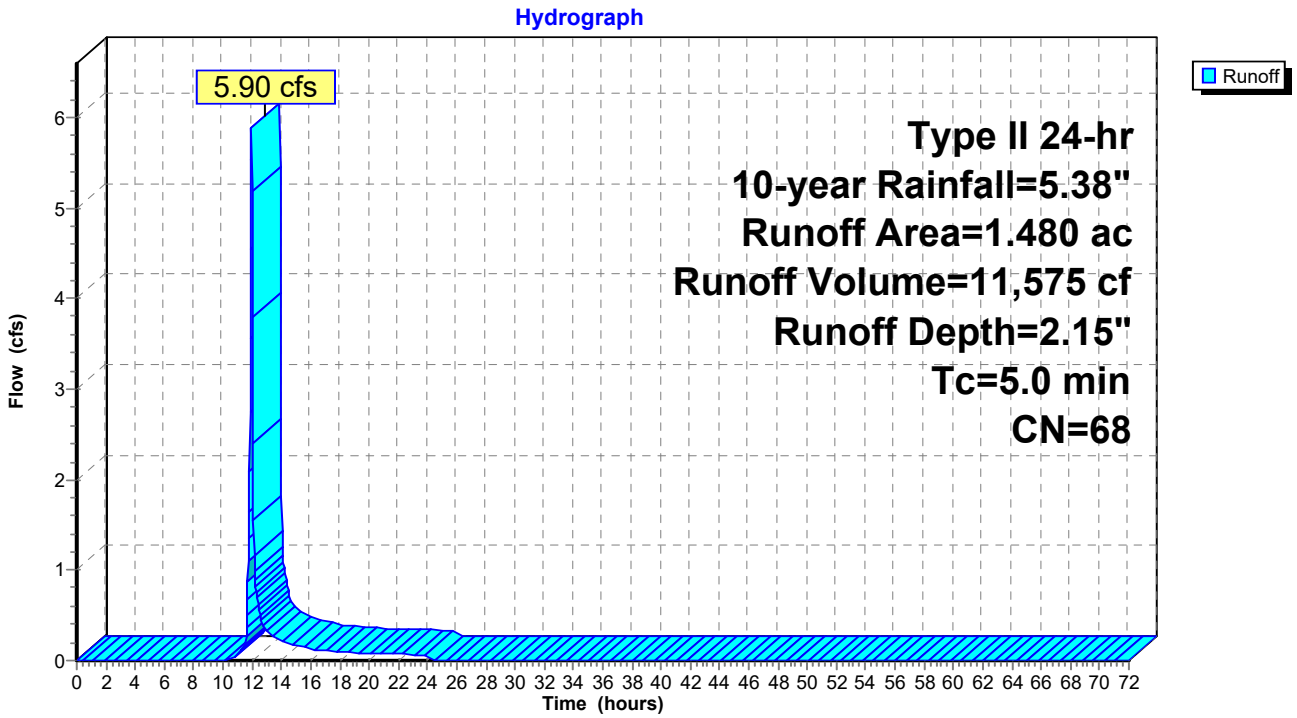
Runoff = 5.90 cfs @ 11.97 hrs, Volume= 11,575 cf, Depth= 2.15"
Routed to Pond 1FP : FocalPoint 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 10-year Rainfall=5.38"

Area (ac)	CN	Description
0.510	49	50-75% Grass cover, Fair, HSG A
0.320	36	Woods, Fair, HSG A
0.650	98	Paved parking, HSG A
1.480	68	Weighted Average
0.830		56.08% Pervious Area
0.650		43.92% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 1S: Area 1



Summary for Subcatchment 2S: Area 2

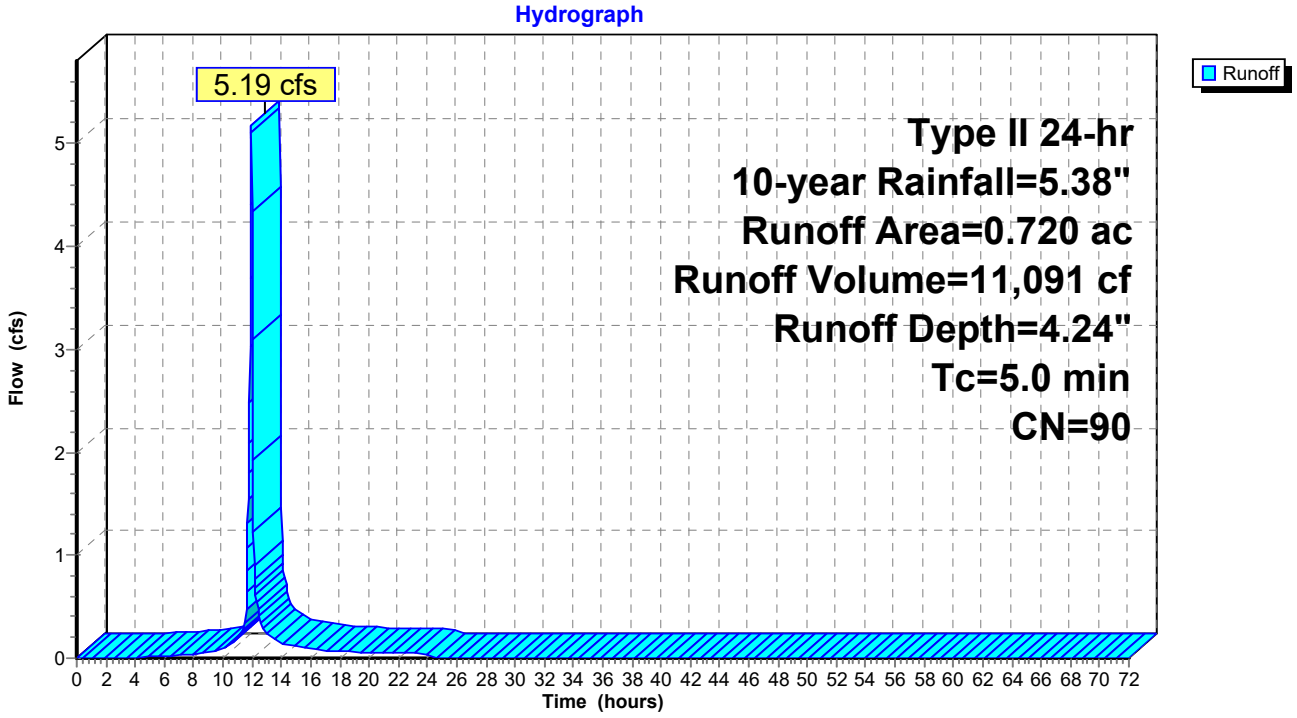
Runoff = 5.19 cfs @ 11.96 hrs, Volume= 11,091 cf, Depth= 4.24"
Routed to Pond 2FP : FocalPoint 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 10-year Rainfall=5.38"

Area (ac)	CN	Description
0.120	49	50-75% Grass cover, Fair, HSG A
0.600	98	Paved parking, HSG A
0.720	90	Weighted Average
0.120		16.67% Pervious Area
0.600		83.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 2S: Area 2



Summary for Subcatchment 3S: Area 3

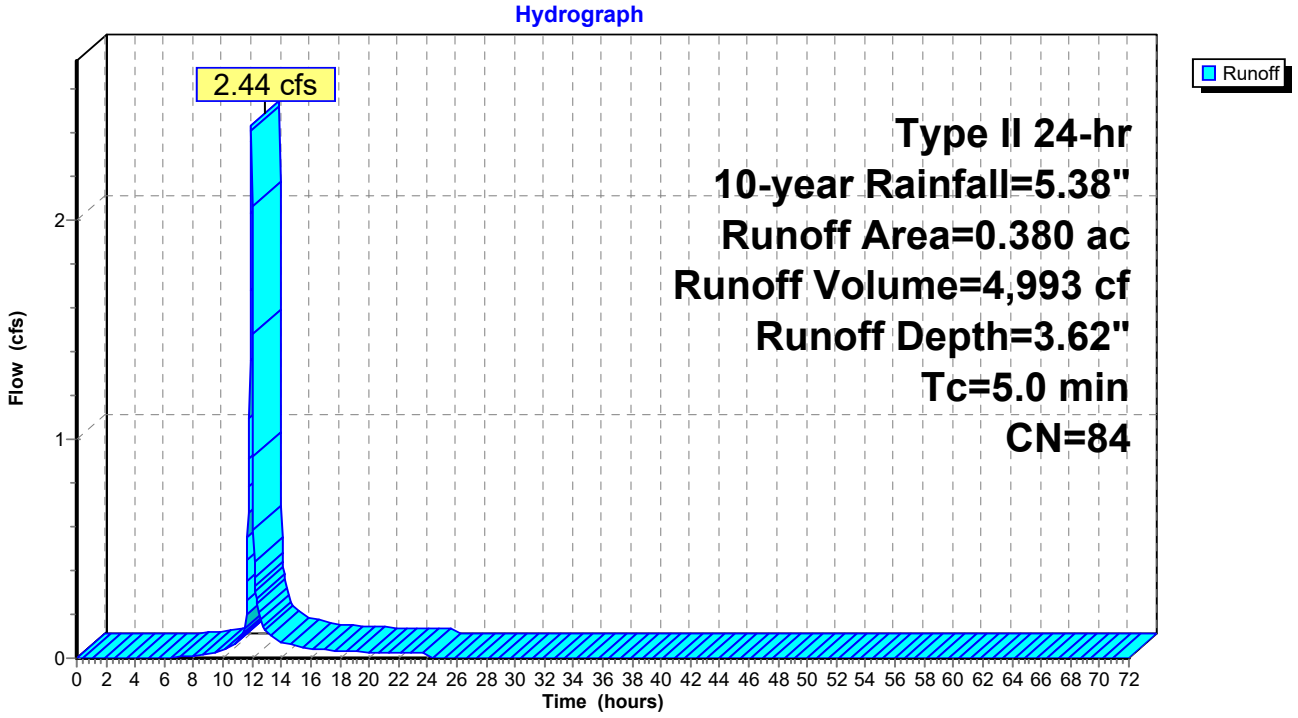
Runoff = 2.44 cfs @ 11.96 hrs, Volume= 4,993 cf, Depth= 3.62"
Routed to Pond 3FP : FocalPoint 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 10-year Rainfall=5.38"

Area (ac)	CN	Description
0.110	49	50-75% Grass cover, Fair, HSG A
0.270	98	Paved parking, HSG A
0.380	84	Weighted Average
0.110		28.95% Pervious Area
0.270		71.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 3S: Area 3



Summary for Subcatchment 4S: Area 4

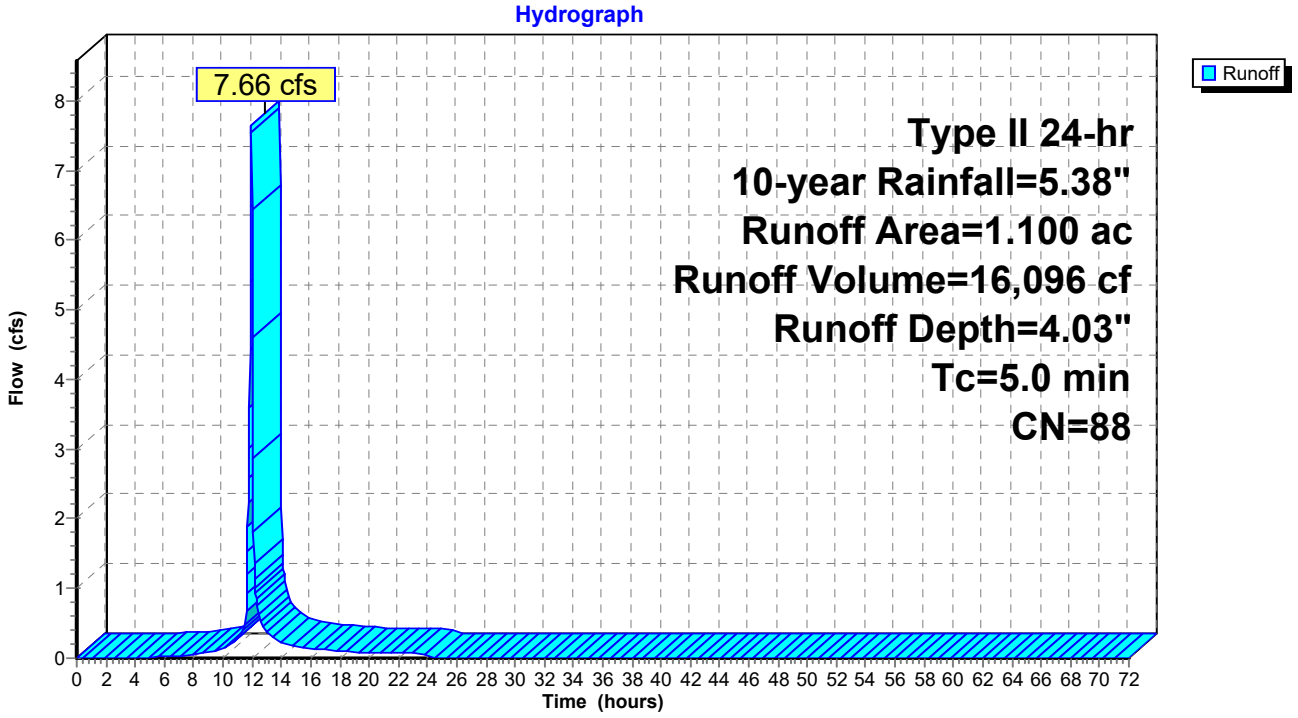
Runoff = 7.66 cfs @ 11.96 hrs, Volume= 16,096 cf, Depth= 4.03"
Routed to Pond 4FP : FocalPoint 4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 10-year Rainfall=5.38"

Area (ac)	CN	Description
0.230	49	50-75% Grass cover, Fair, HSG A
0.870	98	Paved parking, HSG A
1.100	88	Weighted Average
0.230		20.91% Pervious Area
0.870		79.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 4S: Area 4



Summary for Subcatchment 5S: Area 5

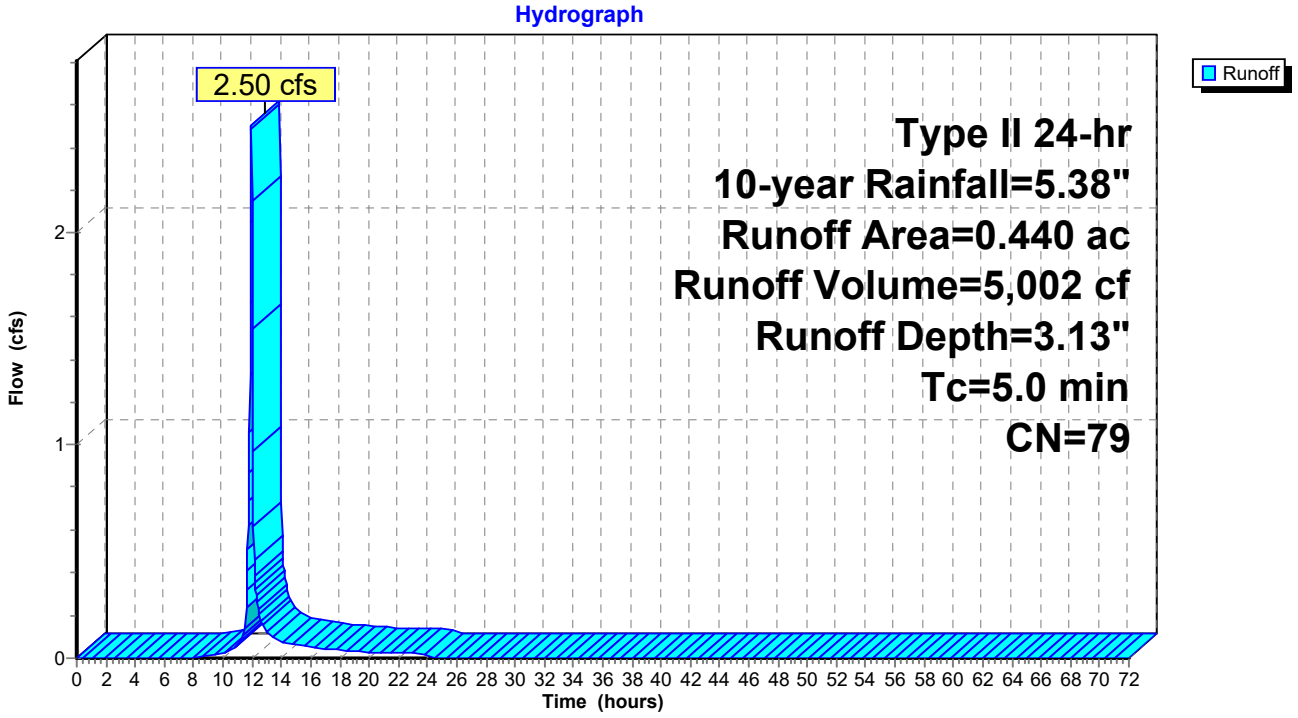
Runoff = 2.50 cfs @ 11.96 hrs, Volume= 5,002 cf, Depth= 3.13"
Routed to Pond 5FP : FocalPoint 5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 10-year Rainfall=5.38"

Area (ac)	CN	Description
0.170	49	50-75% Grass cover, Fair, HSG A
0.270	98	Paved parking, HSG A
0.440	79	Weighted Average
0.170		38.64% Pervious Area
0.270		61.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 5S: Area 5



Summary for Subcatchment 6S: Area 6

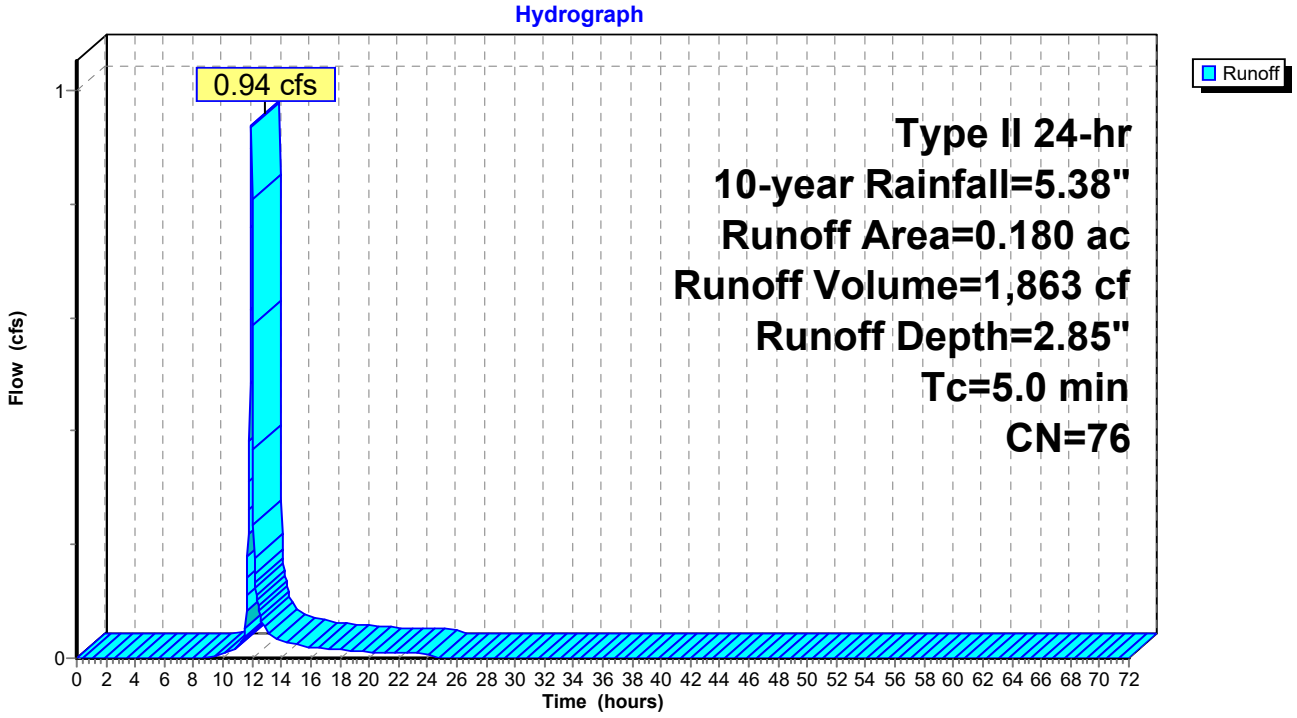
Runoff = 0.94 cfs @ 11.96 hrs, Volume= 1,863 cf, Depth= 2.85"
Routed to Pond 6FP : FocalPoint 6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 10-year Rainfall=5.38"

Area (ac)	CN	Description
0.080	49	50-75% Grass cover, Fair, HSG A
0.100	98	Paved parking, HSG A
0.180	76	Weighted Average
0.080		44.44% Pervious Area
0.100		55.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 6S: Area 6



Summary for Subcatchment 10S: South Bypass

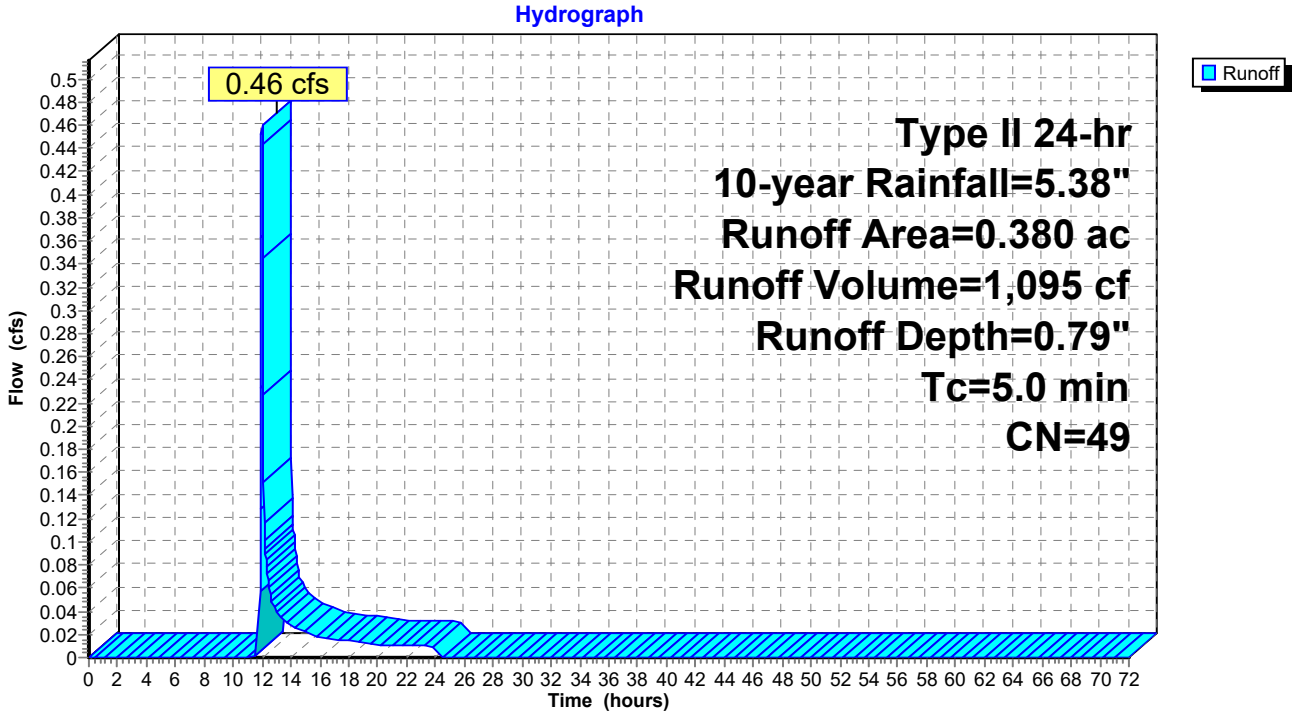
Runoff = 0.46 cfs @ 11.98 hrs, Volume= 1,095 cf, Depth= 0.79"
Routed to Link 1L : Outfall #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 10-year Rainfall=5.38"

Area (ac)	CN	Description
0.290	49	50-75% Grass cover, Fair, HSG A
0.070	36	Woods, Fair, HSG A
0.020	98	Paved parking, HSG A
0.380	49	Weighted Average
0.360		94.74% Pervious Area
0.020		5.26% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 10S: South Bypass



Summary for Reach 1R: Southern Trunk Line

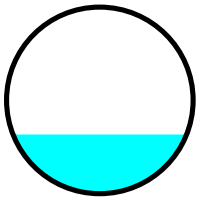
[52] Hint: Inlet/Outlet conditions not evaluated
[79] Warning: Submerged Pond 1DP Primary device # 1 INLET by 0.49'
[81] Warning: Exceeded Pond 2DP by 1.71' @ 0.00 hrs
[79] Warning: Submerged Pond 5FP Primary device # 1 INLET by 2.09'
[79] Warning: Submerged Pond 6FP Primary device # 1 INLET by 2.09'

Inflow Area = 187,308 sf, 64.19% Impervious, Inflow Depth > 2.90" for 10-year event
Inflow = 4.01 cfs @ 12.00 hrs, Volume= 45,202 cf
Outflow = 3.44 cfs @ 12.11 hrs, Volume= 45,199 cf, Atten= 14%, Lag= 6.7 min
Routed to Link 1L : Outfall #1

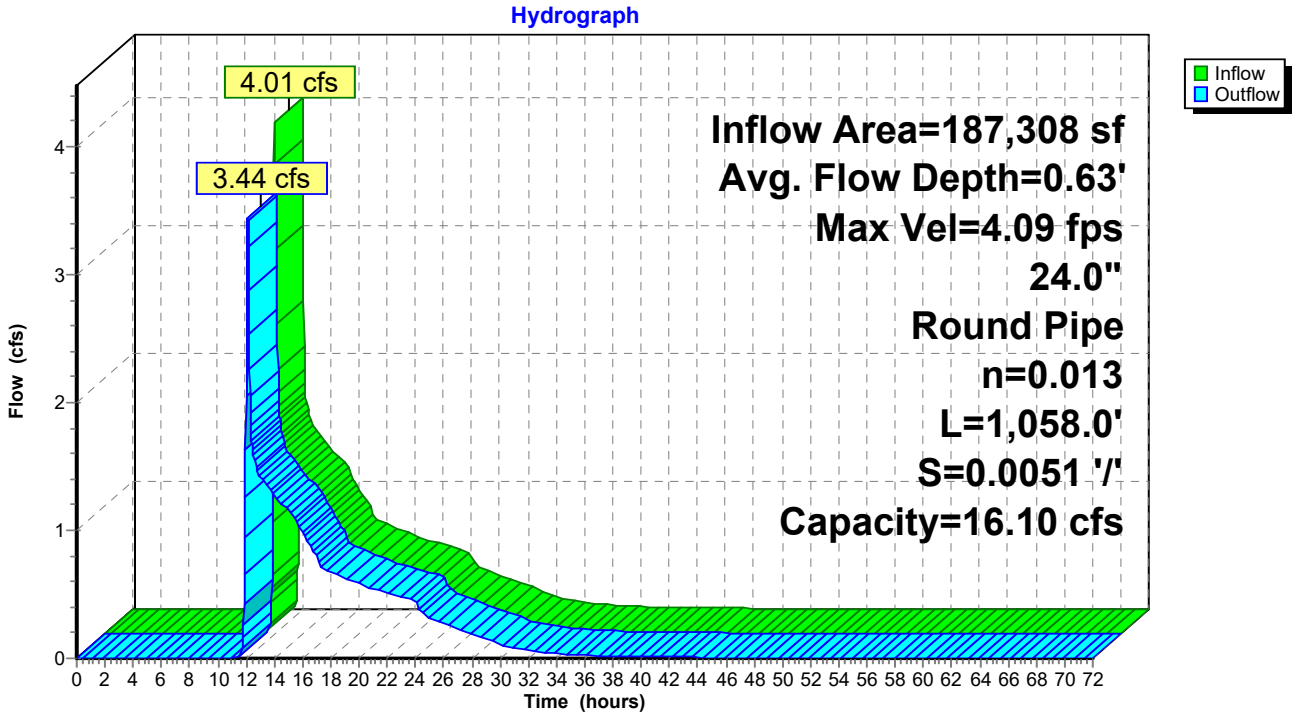
Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Max. Velocity= 4.09 fps, Min. Travel Time= 4.3 min
Avg. Velocity = 1.16 fps, Avg. Travel Time= 15.2 min

Peak Storage= 902 cf @ 12.04 hrs
Average Depth at Peak Storage= 0.63' , Surface Width= 1.86'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 16.10 cfs

24.0" Round Pipe
n= 0.013
Length= 1,058.0' Slope= 0.0051 '/'
Inlet Invert= 695.46', Outlet Invert= 690.10'



Reach 1R: Southern Trunk Line



Summary for Pond 1DP: Detention Pond 1

[44] Hint: Outlet device #2 is below defined storage
[79] Warning: Submerged Pond 1FP Primary device # 1 INLET by 2.09'

Inflow Area = 64,469 sf, 43.92% Impervious, Inflow Depth = 2.09" for 10-year event
Inflow = 5.79 cfs @ 11.98 hrs, Volume= 11,206 cf
Outflow = 0.64 cfs @ 12.41 hrs, Volume= 11,206 cf, Atten= 89%, Lag= 26.1 min
Primary = 0.64 cfs @ 12.41 hrs, Volume= 11,206 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 698.09' @ 12.41 hrs Surf.Area= 3,237 sf Storage= 4,164 cf

Plug-Flow detention time= 56.5 min calculated for 11,201 cf (100% of inflow)
Center-of-Mass det. time= 56.5 min (908.4 - 851.9)

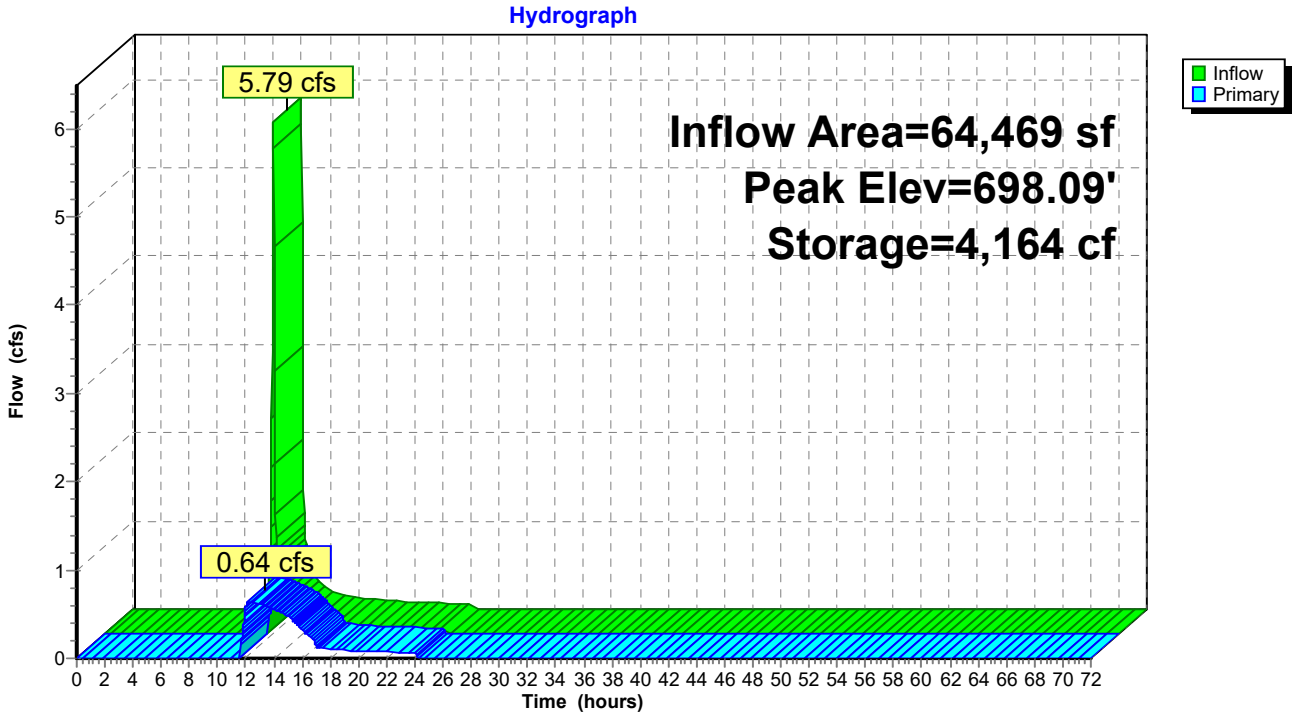
Volume	Invert	Avail.Storage	Storage Description
#1	695.80'	19,432 cf	**Custom Stage Data (Prismatic)** Listed below

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.80	0	0	0
696.00	285	29	29
697.00	2,098	1,192	1,220
698.00	3,151	2,625	3,845
699.00	4,138	3,645	7,489
700.00	5,311	4,725	12,214
701.00	9,125	7,218	19,432

Device	Routing	Invert	Outlet Devices
#1	Primary	695.60'	**18.0" Round Culvert** L= 28.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 695.60' / 695.46' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	695.60'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.64 cfs @ 12.41 hrs HW=698.09' TW=565.00' (Fixed TW Elev= 565.00')
└─**1=Culvert** (Passes 0.64 cfs of 10.62 cfs potential flow)
  ├─**2=Orifice/Grate** (Orifice Controls 0.64 cfs @ 7.34 fps)
  └─**3=Orifice/Grate** (Controls 0.00 cfs)

Pond 1DP: Detention Pond 1



Summary for Pond 1FP: FocalPoint 1

[92] Warning: Device #3 is above defined storage

Inflow Area = 64,469 sf, 43.92% Impervious, Inflow Depth = 2.15" for 10-year event
Inflow = 5.90 cfs @ 11.97 hrs, Volume= 11,575 cf
Outflow = 5.79 cfs @ 11.98 hrs, Volume= 11,206 cf, Atten= 2%, Lag= 0.7 min
Primary = 5.79 cfs @ 11.98 hrs, Volume= 11,206 cf
Routed to Pond 1DP : Detention Pond 1

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 699.87' @ 11.98 hrs Surf.Area= 996 sf Storage= 679 cf

Plug-Flow detention time= 25.7 min calculated for 11,201 cf (97% of inflow)
Center-of-Mass det. time= 7.4 min (851.9 - 844.5)

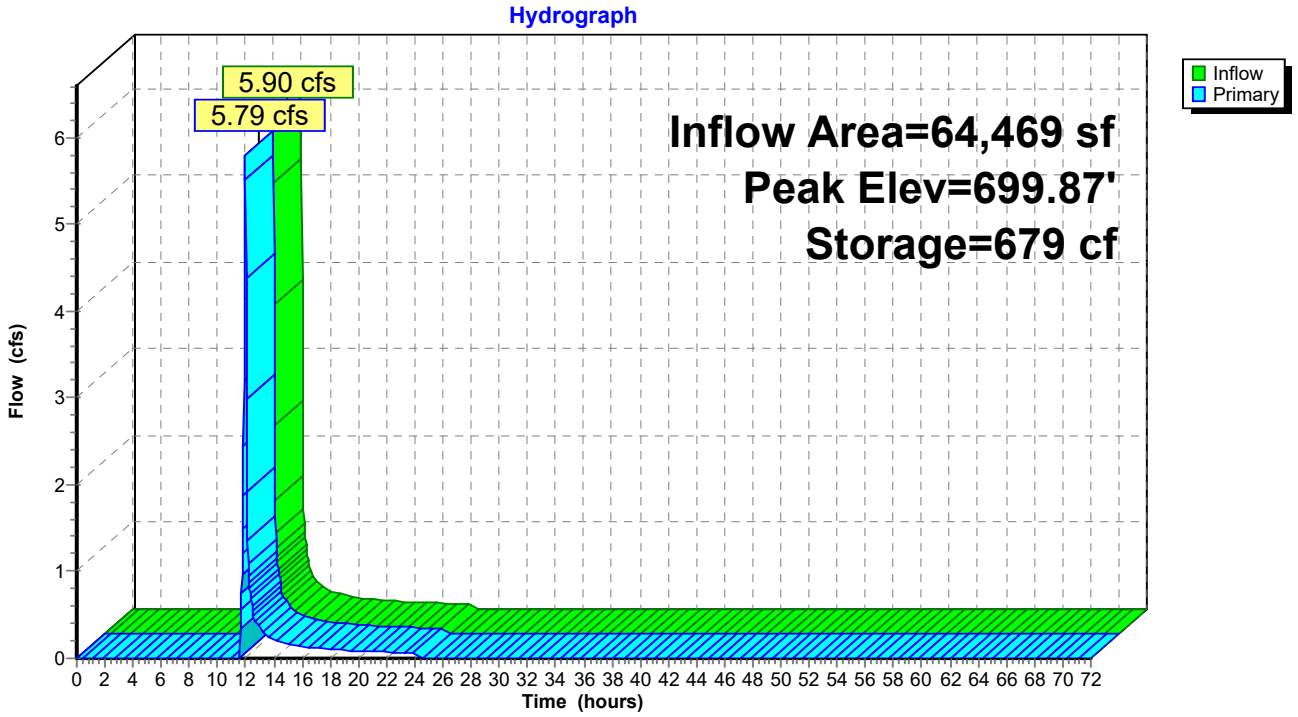
Volume	Invert	Avail.Storage	Storage Description
#1	696.00'	815 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
696.00	237	0.0	0	0
699.00	237	20.0	142	142
700.00	1,109	100.0	673	815

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 40.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 695.80' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**10.0' long x 18.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=5.71 cfs @ 11.98 hrs HW=699.87' (Free Discharge)
- **1=Culvert** (Passes 5.71 cfs of 15.02 cfs potential flow)
  - **2=Orifice/Grate** (Weir Controls 5.71 cfs @ 1.98 fps)
- **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1FP: FocalPoint 1



Summary for Pond 2DP: Detention Pond 2

[79] Warning: Submerged Pond 2FP Primary device # 1 INLET by 1.68'
[79] Warning: Submerged Pond 3FP Primary device # 1 INLET by 0.18'
[79] Warning: Submerged Pond 4FP Primary device # 1 INLET by 0.18'

Inflow Area = 95,832 sf, 79.09% Impervious, Inflow Depth = 3.68" for 10-year event
Inflow = 14.92 cfs @ 11.96 hrs, Volume= 29,357 cf
Outflow = 0.60 cfs @ 13.36 hrs, Volume= 28,388 cf, Atten= 96%, Lag= 84.1 min
Primary = 0.60 cfs @ 13.36 hrs, Volume= 28,388 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 696.18' @ 13.36 hrs Surf.Area= 8,711 sf Storage= 17,463 cf

Plug-Flow detention time= 408.1 min calculated for 28,388 cf (97% of inflow)
Center-of-Mass det. time= 388.7 min (1,203.9 - 815.2)

Volume	Invert	Avail.Storage	Storage Description
#1A	693.75'	3,019 cf	**38.12'W x 114.25'L x 4.79'H Field A** 20,877 cf Overall - 13,330 cf Embedded = 7,547 cf x 40.0% Voids
#2A	694.00'	12,663 cf	**Ferguson R-Tank HD 2.5** x 1222 Inside #1 Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf 1222 Chambers in 26 Rows
#3B	693.75'	3,019 cf	**38.12'W x 114.25'L x 4.79'H Field B** 20,877 cf Overall - 13,330 cf Embedded = 7,547 cf x 40.0% Voids
#4B	694.00'	12,663 cf	**Ferguson R-Tank HD 2.5** x 1222 Inside #3 Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf 1222 Chambers in 26 Rows
		31,364 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 10.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 693.20' S= 0.0800 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	694.00'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	697.00'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=0.60 cfs @ 13.36 hrs HW=696.18' TW=565.00' (Fixed TW Elev= 565.00')
- **1=Culvert** (Passes 0.60 cfs of 10.16 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.60 cfs @ 6.83 fps)
- **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 2DP: Detention Pond 2 - Chamber Wizard Field A

Chamber Model = Ferguson R-Tank HD 2.5 (Ferguson R-Tank HD)
Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf
Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf

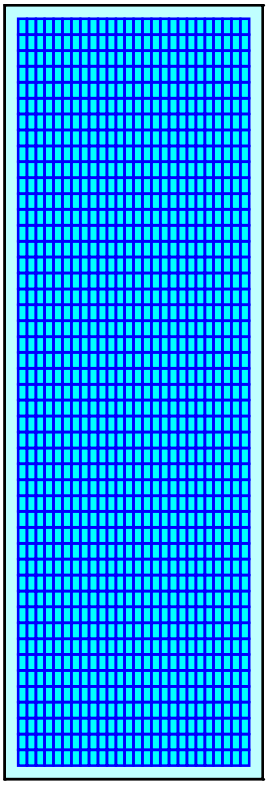
47 Chambers/Row x 2.35' Long = 110.25' Row Length +24.0" End Stone x 2 = 114.25' Base Length
26 Rows x 15.7" Wide + 24.0" Side Stone x 2 = 38.12' Base Width
3.0" Stone Base + 42.5" Chamber Height + 12.0" Stone Cover = 4.79' Field Height

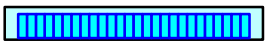
1,222 Chambers x 10.4 cf = 12,663.1 cf Chamber Storage
1,222 Chambers x 10.9 cf = 13,329.6 cf Displacement

20,876.7 cf Field - 13,329.6 cf Chambers = 7,547.2 cf Stone x 40.0% Voids = 3,018.9 cf Stone Storage

Chamber Storage + Stone Storage = 15,682.0 cf = 0.360 af
Overall Storage Efficiency = 75.1%
Overall System Size = 114.25' x 38.12' x 4.79'

1,222 Chambers
773.2 cy Field
279.5 cy Stone





Pond 2DP: Detention Pond 2 - Chamber Wizard Field B

Chamber Model = Ferguson R-Tank HD 2.5 (Ferguson R-Tank HD)
Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf
Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf

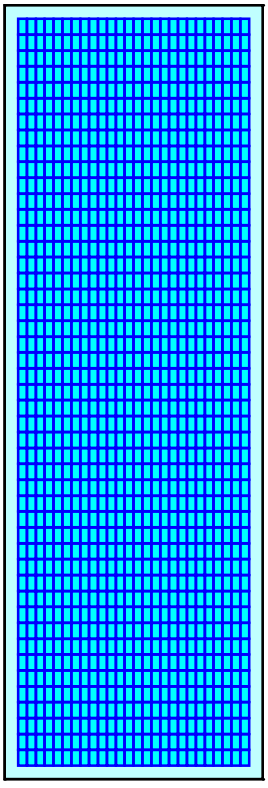
47 Chambers/Row x 2.35' Long = 110.25' Row Length +24.0" End Stone x 2 = 114.25' Base Length
26 Rows x 15.7" Wide + 24.0" Side Stone x 2 = 38.12' Base Width
3.0" Stone Base + 42.5" Chamber Height + 12.0" Stone Cover = 4.79' Field Height

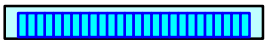
1,222 Chambers x 10.4 cf = 12,663.1 cf Chamber Storage
1,222 Chambers x 10.9 cf = 13,329.6 cf Displacement

20,876.7 cf Field - 13,329.6 cf Chambers = 7,547.2 cf Stone x 40.0% Voids = 3,018.9 cf Stone Storage

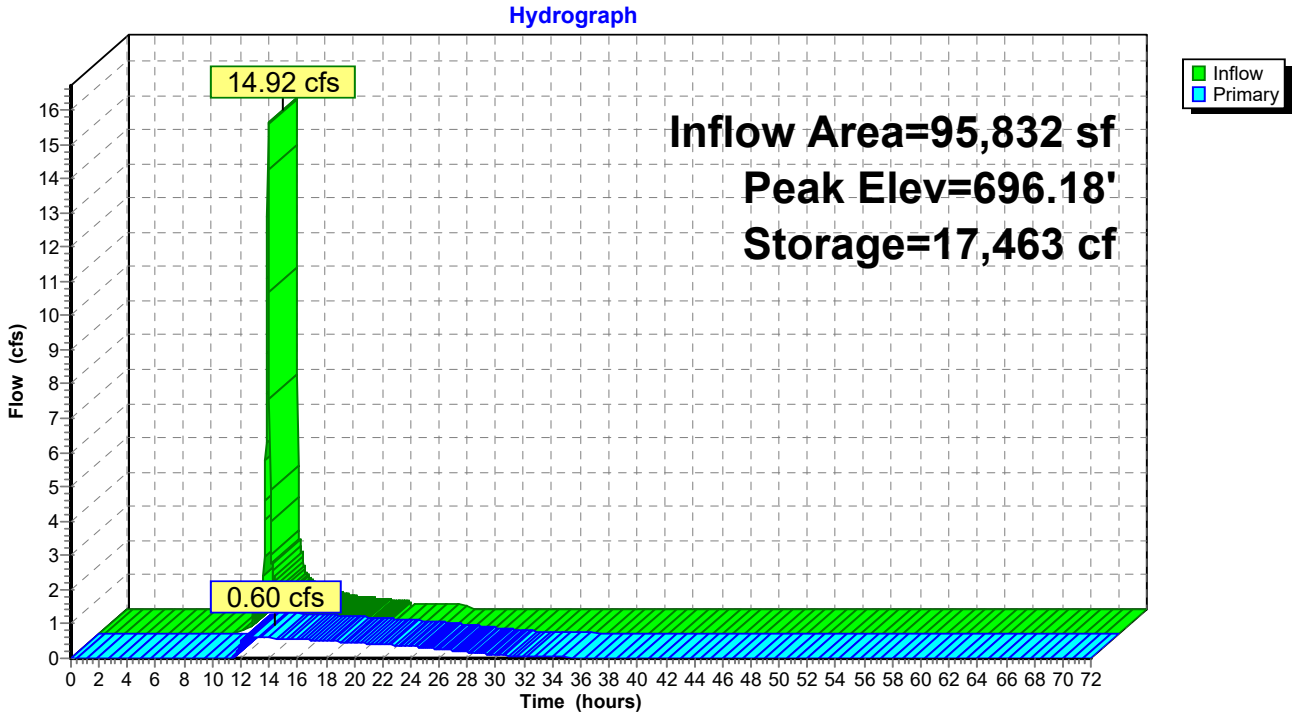
Chamber Storage + Stone Storage = 15,682.0 cf = 0.360 af
Overall Storage Efficiency = 75.1%
Overall System Size = 114.25' x 38.12' x 4.79'

1,222 Chambers
773.2 cy Field
279.5 cy Stone





Pond 2DP: Detention Pond 2



Summary for Pond 2FP: FocalPoint 2

Inflow Area = 31,363 sf, 83.33% Impervious, Inflow Depth = 4.24" for 10-year event
Inflow = 5.19 cfs @ 11.96 hrs, Volume= 11,091 cf
Outflow = 5.07 cfs @ 11.97 hrs, Volume= 10,369 cf, Atten= 2%, Lag= 0.8 min
Primary = 5.07 cfs @ 11.97 hrs, Volume= 10,369 cf
Routed to Pond 2DP : Detention Pond 2

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 698.34' @ 11.97 hrs Surf.Area= 1,237 sf Storage= 1,111 cf

Plug-Flow detention time= 60.2 min calculated for 10,369 cf (93% of inflow)
Center-of-Mass det. time= 23.7 min (807.7 - 784.1)

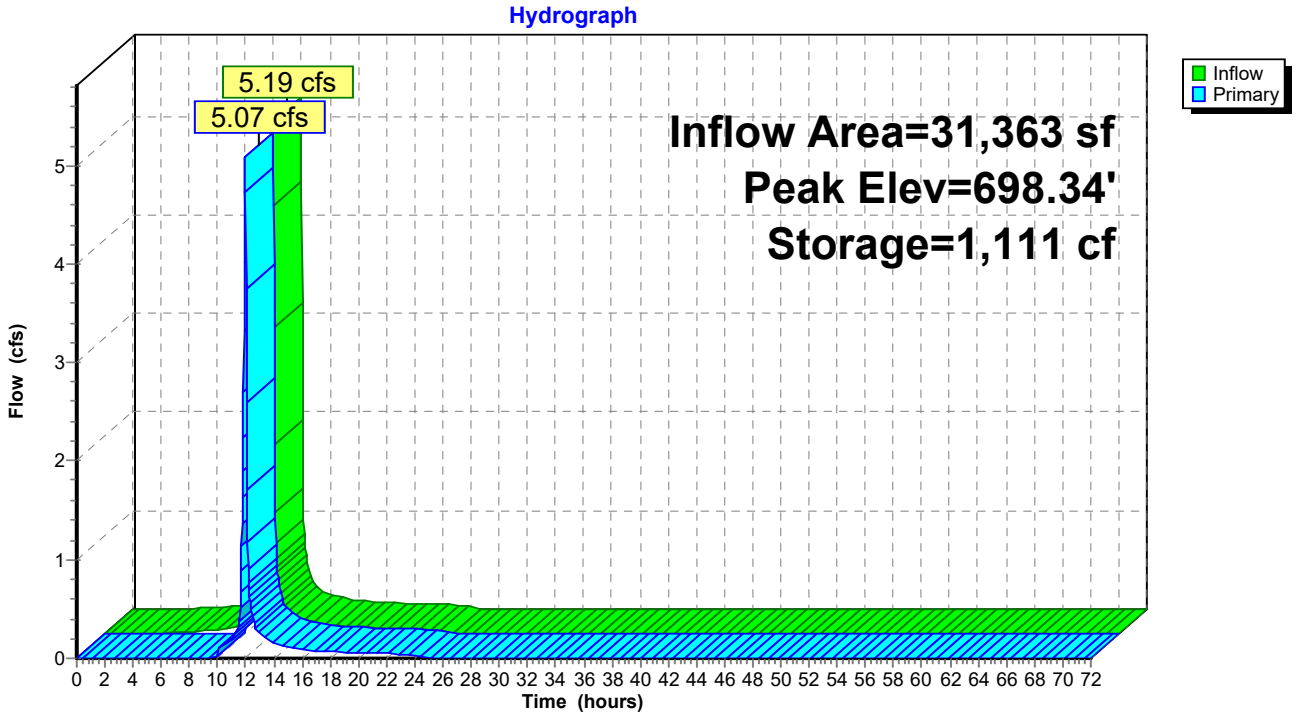
Volume	Invert	Avail.Storage	Storage Description
#1	694.50'	1,317 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.50	539	0.0	0	0
697.50	539	20.0	323	323
698.00	1,056	100.0	399	722
698.50	1,323	100.0	595	1,317

Device	Routing	Invert	Outlet Devices
#1	Primary	694.50'	**18.0" Round Culvert** L= 28.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.50' / 694.00' S= 0.0179 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	698.00'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=5.07 cfs @ 11.97 hrs HW=698.34' (Free Discharge)
↑ **1=Culvert** (Passes 5.07 cfs of 14.95 cfs potential flow)
↑ **2=Orifice/Grate** (Weir Controls 5.07 cfs @ 1.90 fps)

Pond 2FP: FocalPoint 2



Summary for Pond 3FP: FocalPoint 3

Inflow Area = 16,553 sf, 71.05% Impervious, Inflow Depth = 3.62" for 10-year event
Inflow = 2.44 cfs @ 11.96 hrs, Volume= 4,993 cf
Outflow = 2.39 cfs @ 11.97 hrs, Volume= 4,272 cf, Atten= 2%, Lag= 0.8 min
Primary = 2.39 cfs @ 11.97 hrs, Volume= 4,272 cf
Routed to Pond 2DP : Detention Pond 2

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 699.70' @ 11.97 hrs Surf.Area= 932 sf Storage= 902 cf

Plug-Flow detention time= 98.2 min calculated for 4,272 cf (86% of inflow)
Center-of-Mass det. time= 31.5 min (835.2 - 803.6)

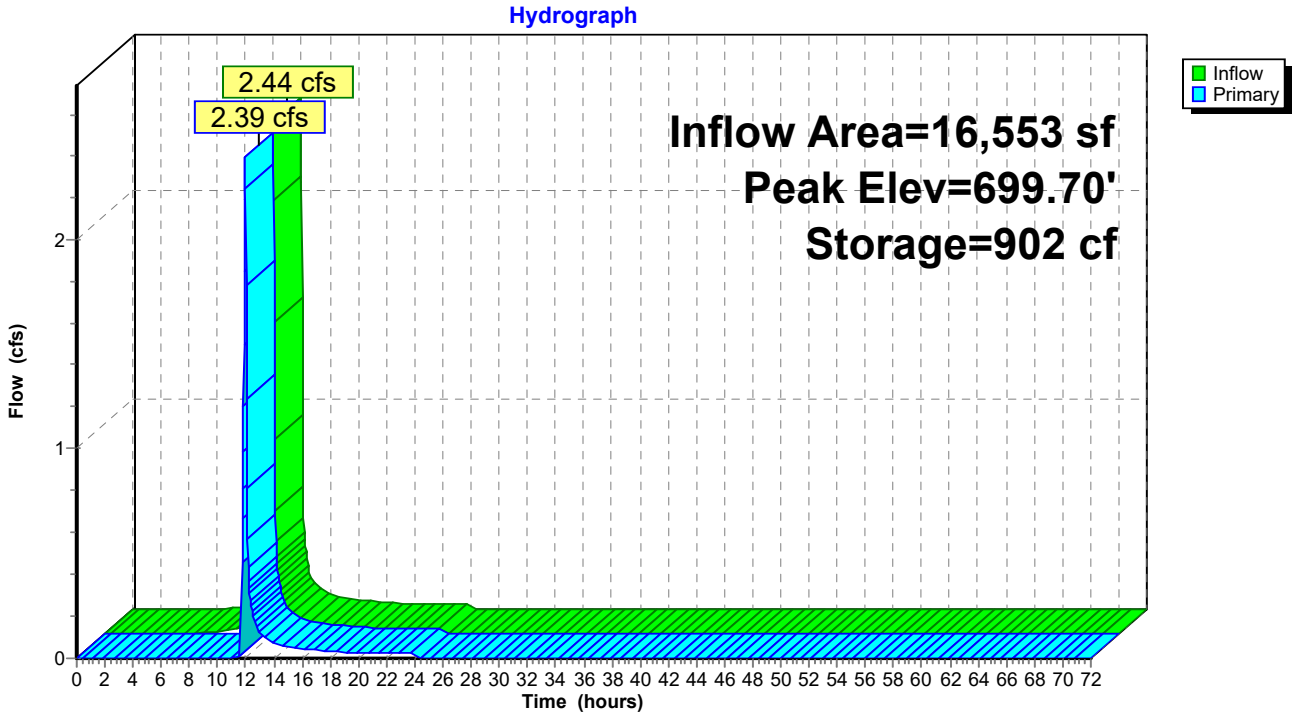
Volume	Invert	Avail.Storage	Storage Description
#1	696.00'	1,197 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
696.00	602	0.0	0	0
699.00	602	20.0	361	361
700.00	1,070	100.0	836	1,197

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 80.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 694.00' S= 0.0250 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=2.37 cfs @ 11.97 hrs HW=699.70' (Free Discharge)
↑—**1=Culvert** (Passes 2.37 cfs of 14.62 cfs potential flow)
↑—**2=Orifice/Grate** (Weir Controls 2.37 cfs @ 1.48 fps)

Pond 3FP: FocalPoint 3



Summary for Pond 4FP: FocalPoint 4

[92] Warning: Device #2 is above defined storage
[92] Warning: Device #3 is above defined storage
[93] Warning: Storage range exceeded by 0.95'
[88] Warning: Qout>Qin may require smaller dt or Finer Routing
[85] Warning: Oscillations may require smaller dt or Finer Routing (severity=211)

Inflow Area = 47,916 sf, 79.09% Impervious, Inflow Depth = 4.03" for 10-year event
Inflow = 7.66 cfs @ 11.96 hrs, Volume= 16,096 cf
Outflow = 7.70 cfs @ 11.95 hrs, Volume= 14,715 cf, Atten= 0%, Lag= 0.0 min
Primary = 7.70 cfs @ 11.95 hrs, Volume= 14,715 cf
Routed to Pond 2DP : Detention Pond 2

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 699.95' @ 11.95 hrs Surf.Area= 1,491 sf Storage= 1,389 cf

Plug-Flow detention time= 68.9 min calculated for 14,709 cf (91% of inflow)
Center-of-Mass det. time= 23.6 min (814.7 - 791.2)

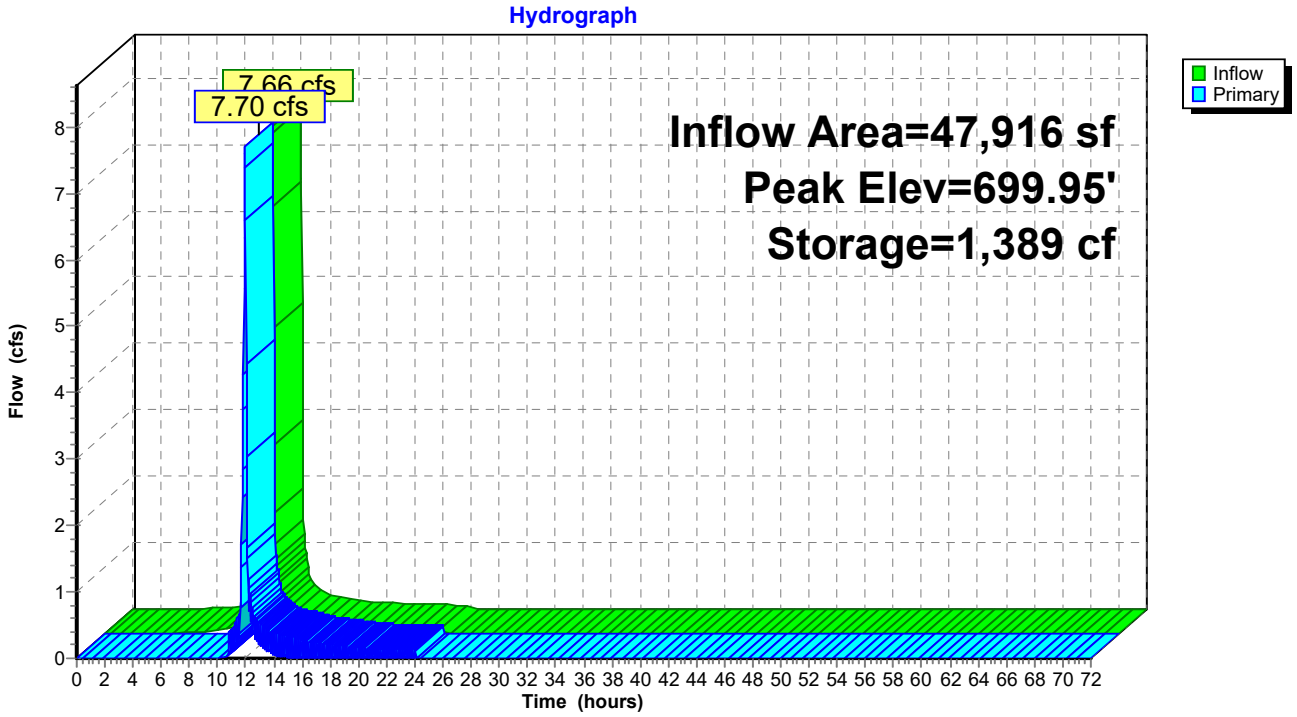
Volume	Invert	Avail.Storage	Storage Description
#1	695.00'	1,389 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.00	585	0.0	0	0
698.00	585	20.0	351	351
699.00	1,491	100.0	1,038	1,389

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 23.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 695.88' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**6.0' long x 133.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=7.52 cfs @ 11.95 hrs HW=699.94' (Free Discharge)
└**1=Culvert** (Passes 7.52 cfs of 15.20 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 7.52 cfs @ 2.17 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 4FP: FocalPoint 4



Summary for Pond 5FP: FocalPoint 5

Inflow Area = 19,166 sf, 61.36% Impervious, Inflow Depth = 3.13" for 10-year event
Inflow = 2.50 cfs @ 11.96 hrs, Volume= 5,002 cf
Outflow = 2.43 cfs @ 11.98 hrs, Volume= 4,373 cf, Atten= 3%, Lag= 0.9 min
Primary = 2.43 cfs @ 11.98 hrs, Volume= 4,373 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 697.71' @ 11.98 hrs Surf.Area= 1,089 sf Storage= 835 cf

Plug-Flow detention time= 86.0 min calculated for 4,373 cf (87% of inflow)
Center-of-Mass det. time= 25.3 min (842.6 - 817.3)

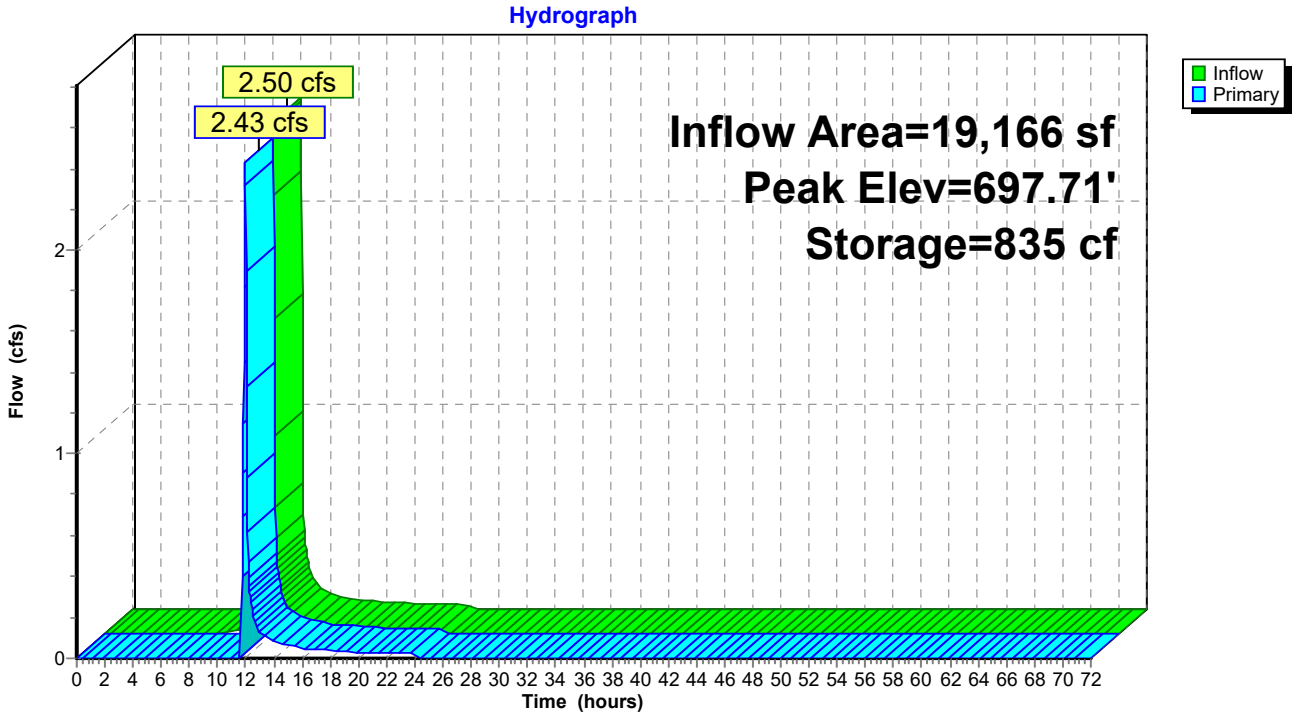
Volume	Invert	Avail.Storage	Storage Description
#1	694.00'	2,779 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.00	472	0.0	0	0
697.00	472	20.0	283	283
698.00	1,344	100.0	908	1,191
699.00	1,832	100.0	1,588	2,779

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 24.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 691.39' S= 0.1088 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	697.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	698.50'	**6.0' long x 9.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.46 2.55 2.70 2.69 2.68 2.68 2.67 2.64 2.64 2.64 2.65 2.64 2.65 2.65 2.66 2.67 2.69

Primary OutFlow Max=2.40 cfs @ 11.98 hrs HW=697.71' (Free Discharge)
└─**1=Culvert** (Passes 2.40 cfs of 14.63 cfs potential flow)
└─**2=Orifice/Grate** (Weir Controls 2.40 cfs @ 1.48 fps)
└─**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 5FP: FocalPoint 5



Summary for Pond 6FP: FocalPoint 6

Inflow Area = 7,841 sf, 55.56% Impervious, Inflow Depth = 2.85" for 10-year event
Inflow = 0.94 cfs @ 11.96 hrs, Volume= 1,863 cf
Outflow = 0.69 cfs @ 12.02 hrs, Volume= 1,235 cf, Atten= 27%, Lag= 3.7 min
Primary = 0.69 cfs @ 12.02 hrs, Volume= 1,235 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 697.59' @ 12.02 hrs Surf.Area= 985 sf Storage= 712 cf

Plug-Flow detention time= 175.2 min calculated for 1,235 cf (66% of inflow)
Center-of-Mass det. time= 67.3 min (892.2 - 824.8)

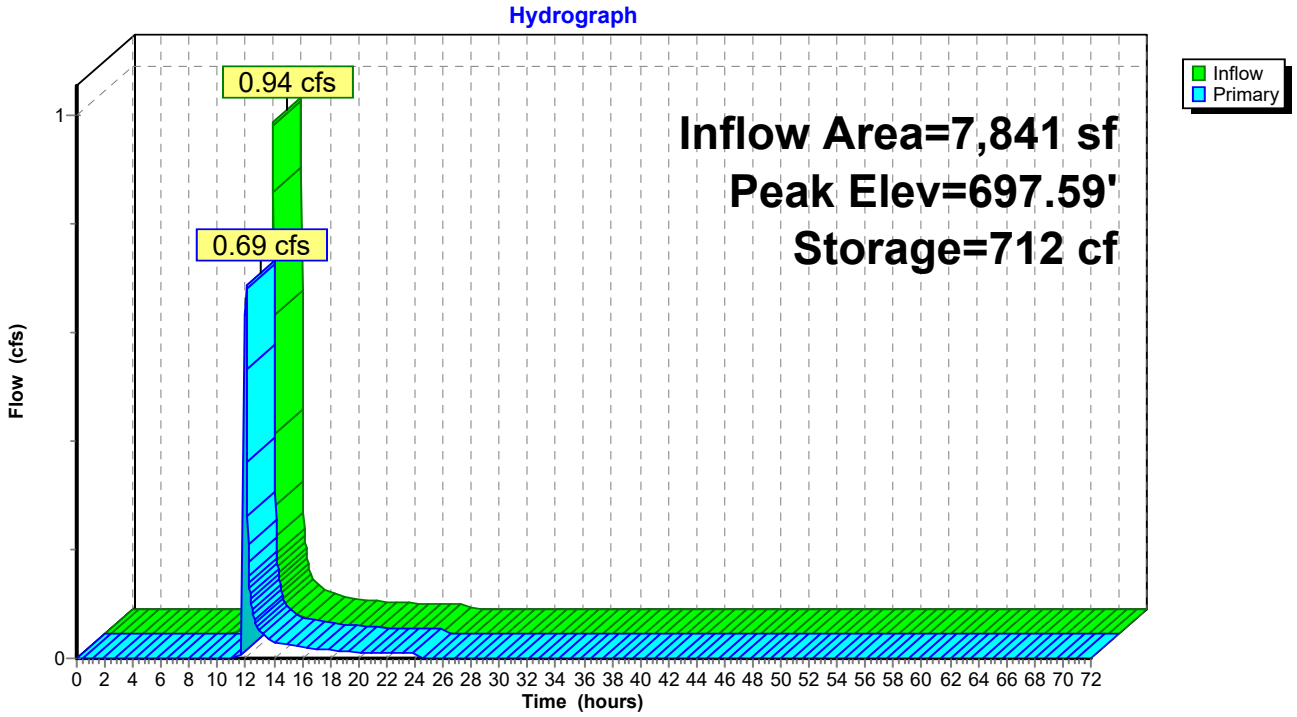
Volume	Invert	Avail.Storage	Storage Description
#1	694.00'	2,779 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.00	472	0.0	0	0
697.00	472	20.0	283	283
698.00	1,344	100.0	908	1,191
699.00	1,832	100.0	1,588	2,779

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 24.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 690.87' S= 0.1304 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	697.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	698.50'	**6.0' long x 9.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.46 2.55 2.70 2.69 2.68 2.68 2.67 2.64 2.64 2.64 2.65 2.64 2.65 2.65 2.66 2.67 2.69

Primary OutFlow Max=0.65 cfs @ 12.02 hrs HW=697.59' (Free Discharge)
└**1=Culvert** (Passes 0.65 cfs of 14.33 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 0.65 cfs @ 0.96 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 6FP: FocalPoint 6

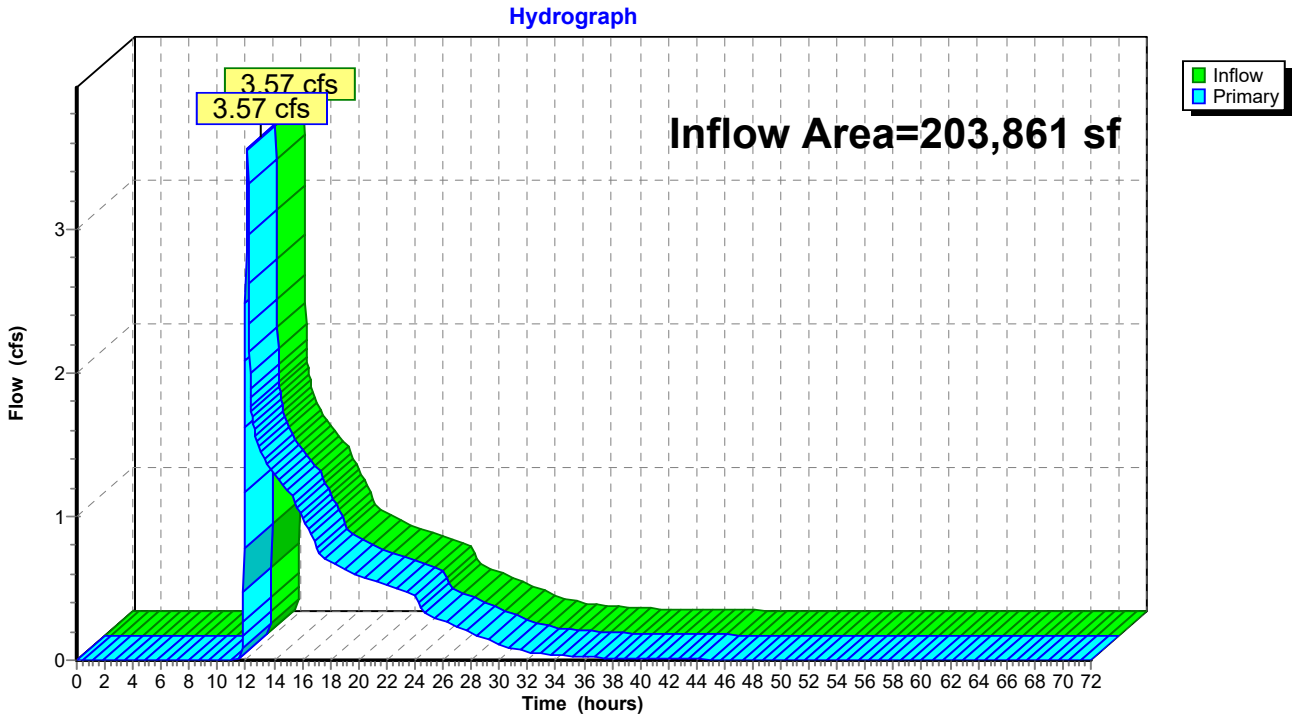


Summary for Link 1L: Outfall #1

Inflow Area = 203,861 sf, 59.40% Impervious, Inflow Depth > 2.73" for 10-year event
Inflow = 3.57 cfs @ 12.11 hrs, Volume= 46,293 cf
Primary = 3.57 cfs @ 12.11 hrs, Volume= 46,293 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs

Link 1L: Outfall #1



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Area 1 Runoff Area=1.480 ac 43.92% Impervious Runoff Depth=2.85"
Tc=5.0 min CN=68 Runoff=7.80 cfs 15,329 cf

Subcatchment2S: Area 2 Runoff Area=0.720 ac 83.33% Impervious Runoff Depth=5.14"
Tc=5.0 min CN=90 Runoff=6.20 cfs 13,430 cf

Subcatchment3S: Area 3 Runoff Area=0.380 ac 71.05% Impervious Runoff Depth=4.48"
Tc=5.0 min CN=84 Runoff=2.98 cfs 6,177 cf

Subcatchment4S: Area 4 Runoff Area=1.100 ac 79.09% Impervious Runoff Depth=4.92"
Tc=5.0 min CN=88 Runoff=9.21 cfs 19,627 cf

Subcatchment5S: Area 5 Runoff Area=0.440 ac 61.36% Impervious Runoff Depth=3.95"
Tc=5.0 min CN=79 Runoff=3.12 cfs 6,307 cf

Subcatchment6S: Area 6 Runoff Area=0.180 ac 55.56% Impervious Runoff Depth=3.64"
Tc=5.0 min CN=76 Runoff=1.19 cfs 2,379 cf

Subcatchment10S: South Bypass Runoff Area=0.380 ac 5.26% Impervious Runoff Depth=1.22"
Tc=5.0 min CN=49 Runoff=0.78 cfs 1,678 cf

Reach 1R: Southern Trunk Line Avg. Flow Depth=0.74' Max Vel=4.44 fps Inflow=5.32 cfs 57,819 cf
24.0" Round Pipe n=0.013 L=1,058.0' S=0.0051 '/' Capacity=16.10 cfs Outflow=4.65 cfs 57,816 cf

Pond 1DP: Detention Pond 1 Peak Elev=698.60' Storage=6,034 cf Inflow=7.68 cfs 14,959 cf
Outflow=0.71 cfs 14,959 cf

Pond 1FP: FocalPoint 1 Peak Elev=699.95' Storage=758 cf Inflow=7.80 cfs 15,329 cf
Outflow=7.68 cfs 14,959 cf

Pond 2DP: Detention Pond 2 Peak Elev=696.80' Storage=22,200 cf Inflow=18.30 cfs 36,410 cf
Outflow=0.68 cfs 35,431 cf

Pond 2FP: FocalPoint 2 Peak Elev=698.38' Storage=1,165 cf Inflow=6.20 cfs 13,430 cf
Outflow=6.08 cfs 12,708 cf

Pond 3FP: FocalPoint 3 Peak Elev=699.73' Storage=930 cf Inflow=2.98 cfs 6,177 cf
Outflow=2.93 cfs 5,456 cf

Pond 4FP: FocalPoint 4 Peak Elev=700.01' Storage=1,389 cf Inflow=9.21 cfs 19,627 cf
Outflow=9.33 cfs 18,246 cf

Pond 5FP: FocalPoint 5 Peak Elev=697.74' Storage=872 cf Inflow=3.12 cfs 6,307 cf
Outflow=3.04 cfs 5,679 cf

Pond 6FP: FocalPoint 6 Peak Elev=697.62' Storage=746 cf Inflow=1.19 cfs 2,379 cf
Outflow=1.12 cfs 1,750 cf

Link 1L: Outfall #1 Inflow=4.89 cfs 59,494 cf
Primary=4.89 cfs 59,494 cf

Total Runoff Area = 203,861 sf Runoff Volume = 64,926 cf Average Runoff Depth = 3.82"
40.60% Pervious = 82,764 sf 59.40% Impervious = 121,097 sf

Summary for Subcatchment 1S: Area 1

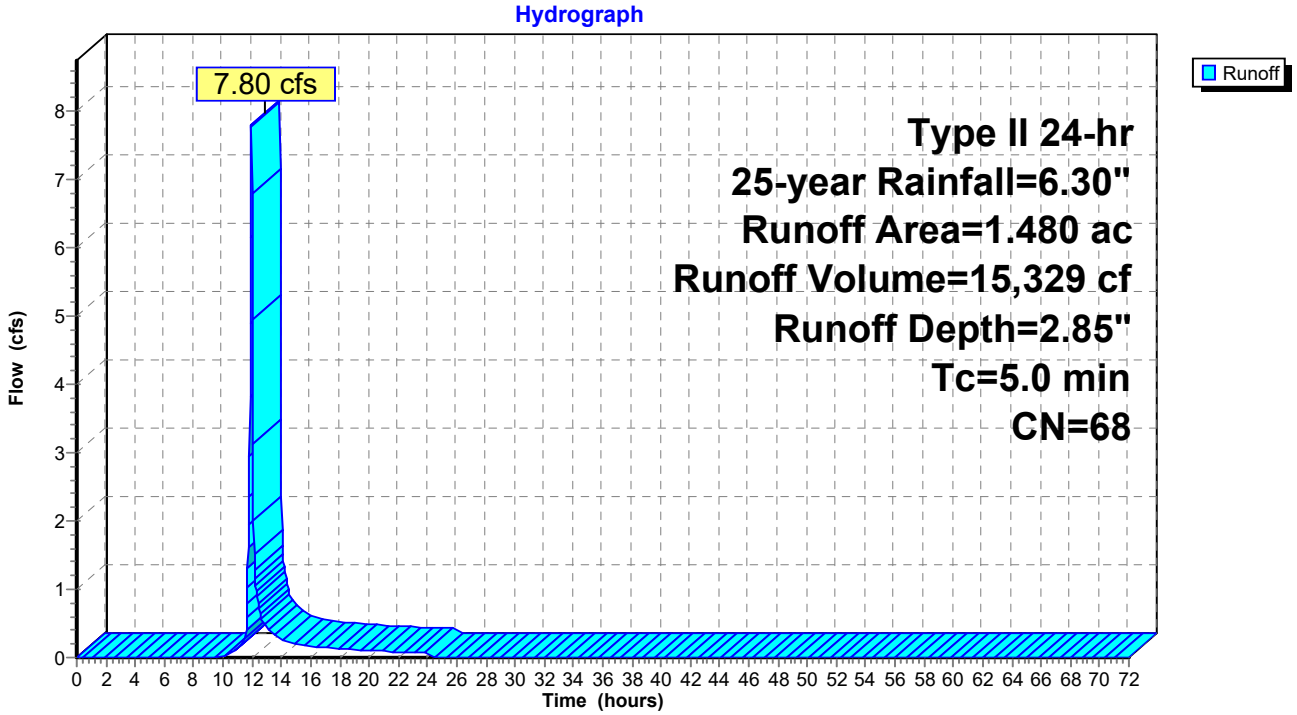
Runoff = 7.80 cfs @ 11.96 hrs, Volume= 15,329 cf, Depth= 2.85"
Routed to Pond 1FP : FocalPoint 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 25-year Rainfall=6.30"

Area (ac)	CN	Description
0.510	49	50-75% Grass cover, Fair, HSG A
0.320	36	Woods, Fair, HSG A
0.650	98	Paved parking, HSG A
1.480	68	Weighted Average
0.830		56.08% Pervious Area
0.650		43.92% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 1S: Area 1



Summary for Subcatchment 2S: Area 2

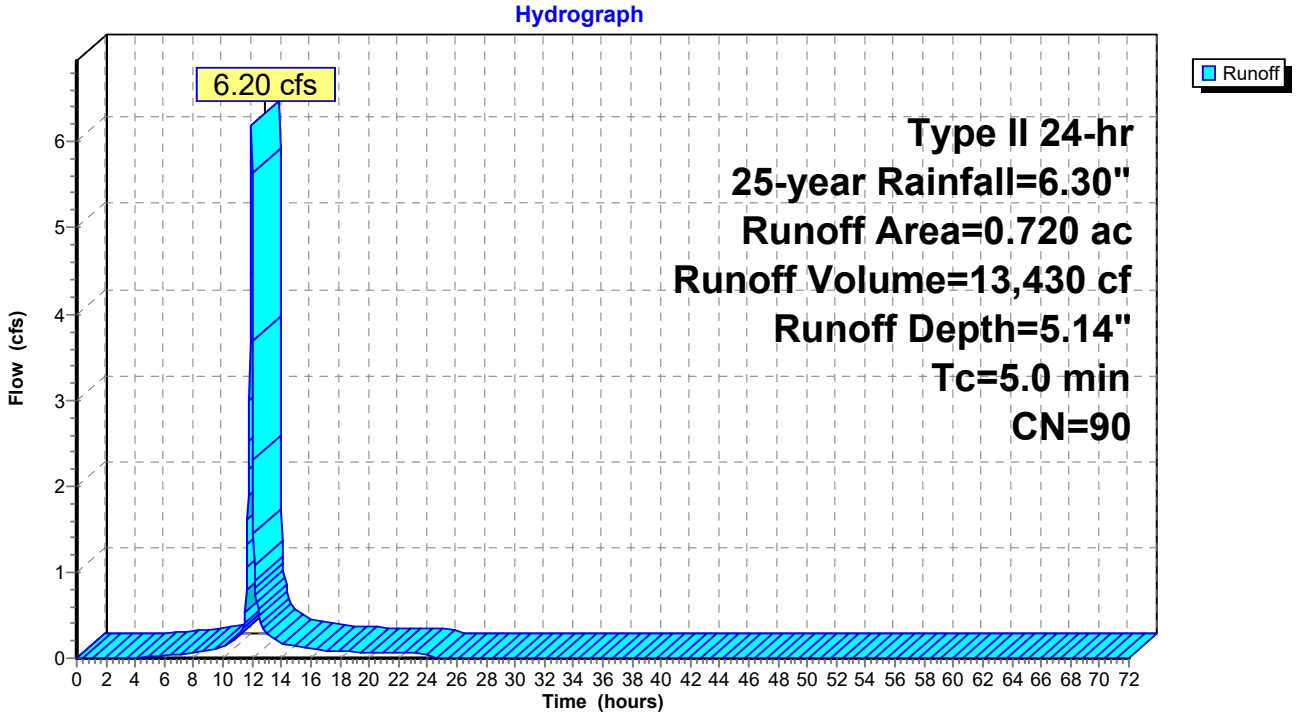
Runoff = 6.20 cfs @ 11.96 hrs, Volume= 13,430 cf, Depth= 5.14"
Routed to Pond 2FP : FocalPoint 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 25-year Rainfall=6.30"

Area (ac)	CN	Description
0.120	49	50-75% Grass cover, Fair, HSG A
0.600	98	Paved parking, HSG A
0.720	90	Weighted Average
0.120		16.67% Pervious Area
0.600		83.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 2S: Area 2



Summary for Subcatchment 3S: Area 3

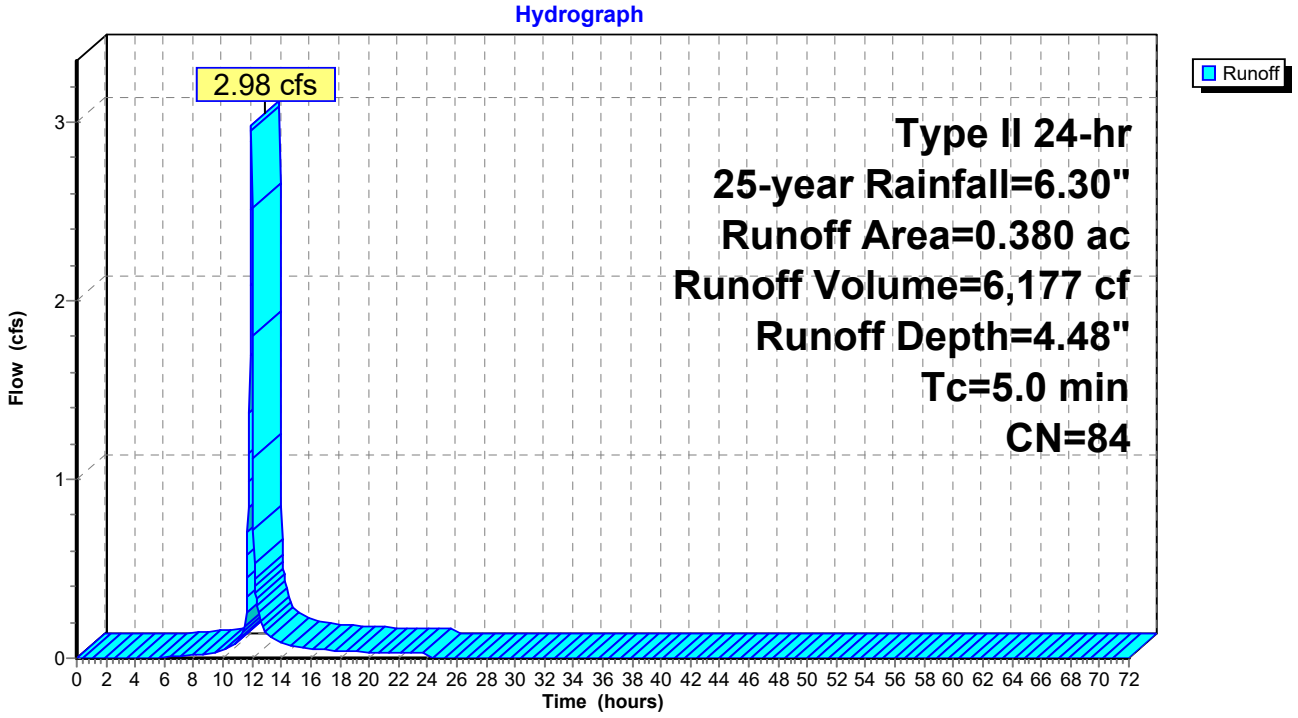
Runoff = 2.98 cfs @ 11.96 hrs, Volume= 6,177 cf, Depth= 4.48"
Routed to Pond 3FP : FocalPoint 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 25-year Rainfall=6.30"

Area (ac)	CN	Description
0.110	49	50-75% Grass cover, Fair, HSG A
0.270	98	Paved parking, HSG A
0.380	84	Weighted Average
0.110		28.95% Pervious Area
0.270		71.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 3S: Area 3



Summary for Subcatchment 4S: Area 4

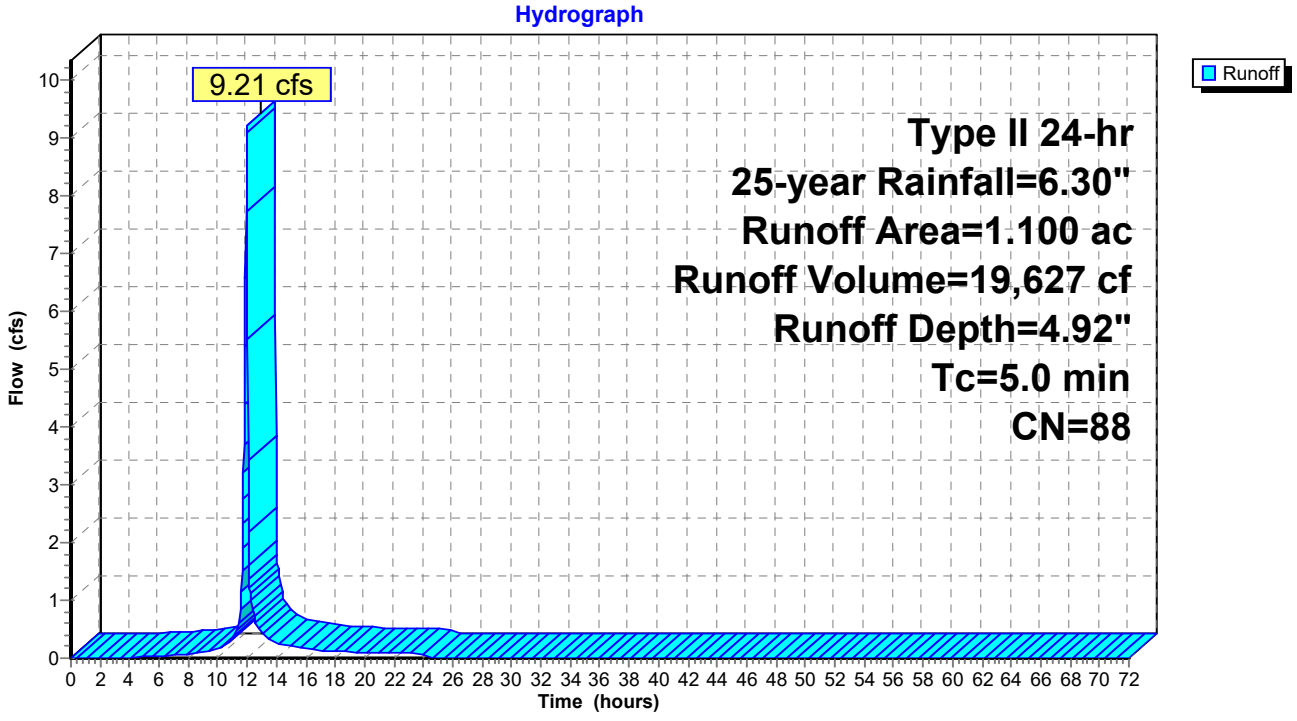
Runoff = 9.21 cfs @ 11.96 hrs, Volume= 19,627 cf, Depth= 4.92"
Routed to Pond 4FP : FocalPoint 4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 25-year Rainfall=6.30"

Area (ac)	CN	Description
0.230	49	50-75% Grass cover, Fair, HSG A
0.870	98	Paved parking, HSG A
1.100	88	Weighted Average
0.230		20.91% Pervious Area
0.870		79.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 4S: Area 4



Summary for Subcatchment 5S: Area 5

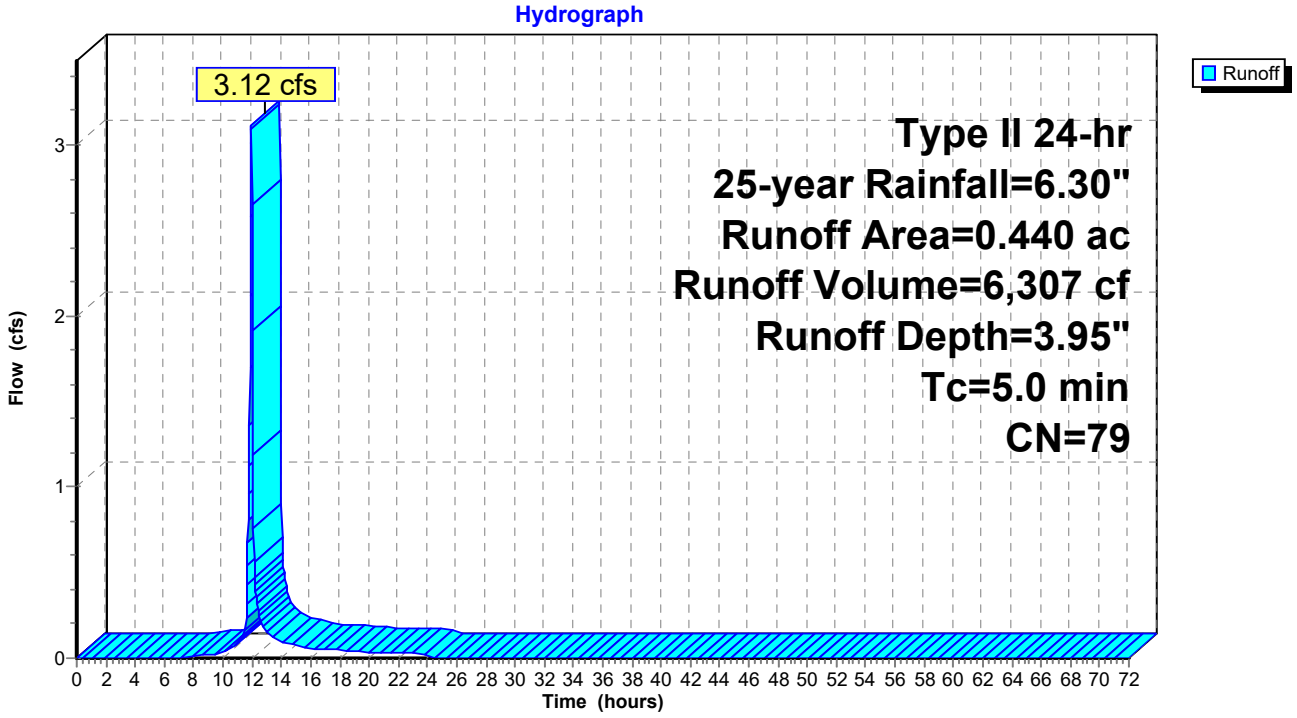
Runoff = 3.12 cfs @ 11.96 hrs, Volume= 6,307 cf, Depth= 3.95"
Routed to Pond 5FP : FocalPoint 5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 25-year Rainfall=6.30"

Area (ac)	CN	Description
0.170	49	50-75% Grass cover, Fair, HSG A
0.270	98	Paved parking, HSG A
0.440	79	Weighted Average
0.170		38.64% Pervious Area
0.270		61.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 5S: Area 5



Summary for Subcatchment 6S: Area 6

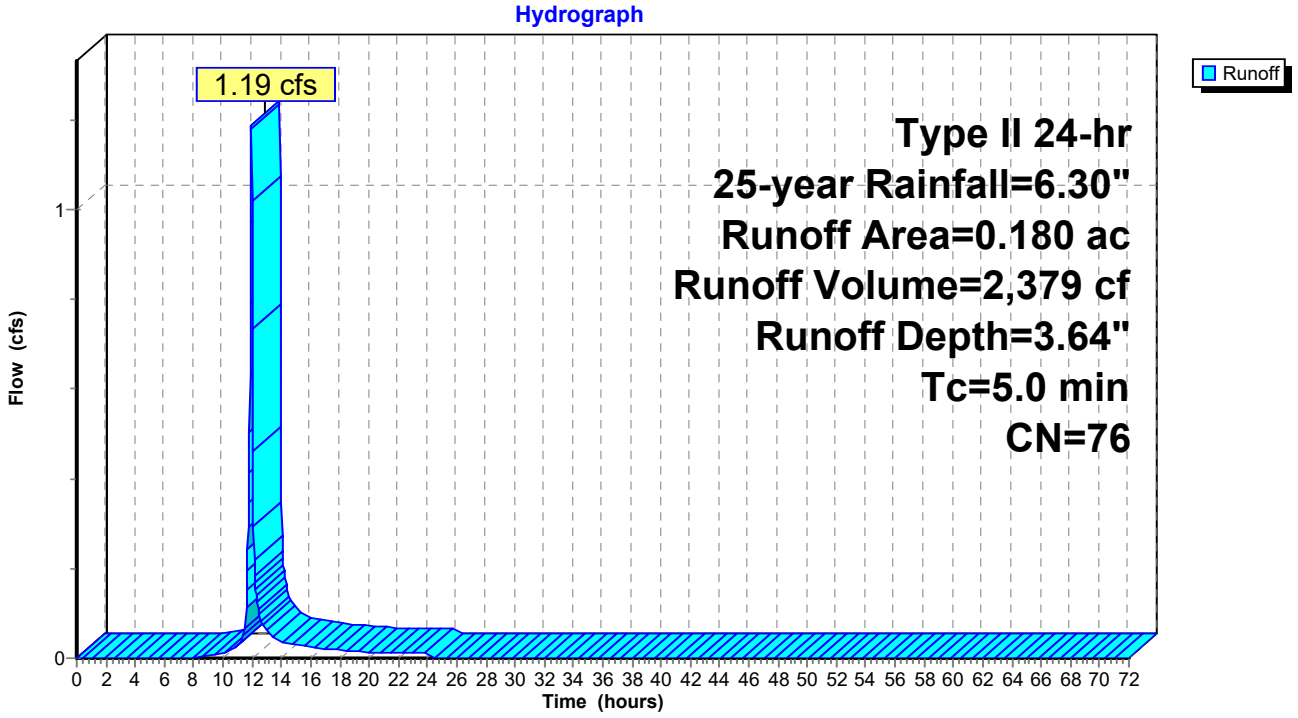
Runoff = 1.19 cfs @ 11.96 hrs, Volume= 2,379 cf, Depth= 3.64"
Routed to Pond 6FP : FocalPoint 6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 25-year Rainfall=6.30"

Area (ac)	CN	Description
0.080	49	50-75% Grass cover, Fair, HSG A
0.100	98	Paved parking, HSG A
0.180	76	Weighted Average
0.080		44.44% Pervious Area
0.100		55.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 6S: Area 6



Summary for Subcatchment 10S: South Bypass

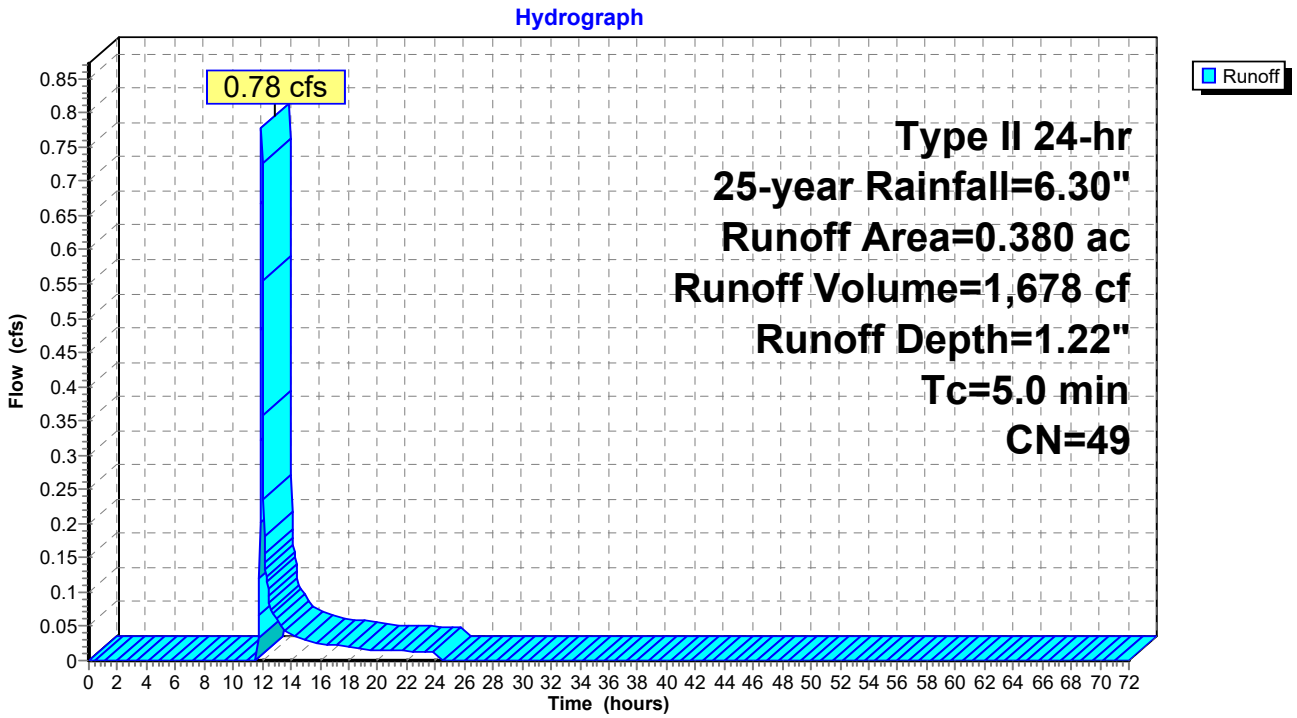
Runoff = 0.78 cfs @ 11.98 hrs, Volume= 1,678 cf, Depth= 1.22"
Routed to Link 1L : Outfall #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 25-year Rainfall=6.30"

Area (ac)	CN	Description
0.290	49	50-75% Grass cover, Fair, HSG A
0.070	36	Woods, Fair, HSG A
0.020	98	Paved parking, HSG A
0.380	49	Weighted Average
0.360		94.74% Pervious Area
0.020		5.26% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 10S: South Bypass



Summary for Reach 1R: Southern Trunk Line

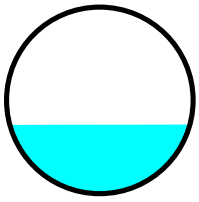
[52] Hint: Inlet/Outlet conditions not evaluated
[79] Warning: Submerged Pond 1DP Primary device # 1 INLET by 0.60'
[81] Warning: Exceeded Pond 2DP by 1.71' @ 0.00 hrs
[79] Warning: Submerged Pond 5FP Primary device # 1 INLET by 2.20'
[79] Warning: Submerged Pond 6FP Primary device # 1 INLET by 2.20'

Inflow Area = 187,308 sf, 64.19% Impervious, Inflow Depth > 3.70" for 25-year event
Inflow = 5.32 cfs @ 11.98 hrs, Volume= 57,819 cf
Outflow = 4.65 cfs @ 12.09 hrs, Volume= 57,816 cf, Atten= 13%, Lag= 6.5 min
Routed to Link 1L : Outfall #1

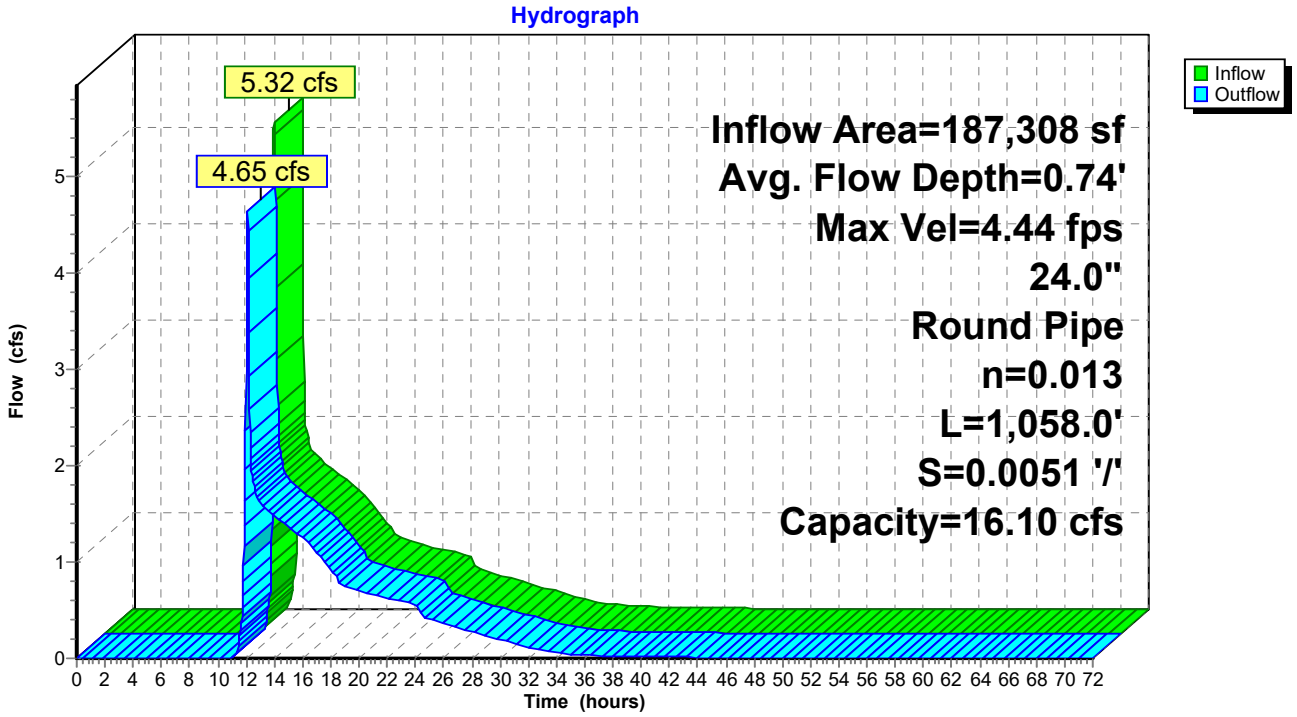
Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Max. Velocity= 4.44 fps, Min. Travel Time= 4.0 min
Avg. Velocity = 1.26 fps, Avg. Travel Time= 14.0 min

Peak Storage= 1,115 cf @ 12.02 hrs
Average Depth at Peak Storage= 0.74' , Surface Width= 1.93'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 16.10 cfs

24.0" Round Pipe
n= 0.013
Length= 1,058.0' Slope= 0.0051 '/'
Inlet Invert= 695.46', Outlet Invert= 690.10'



Reach 1R: Southern Trunk Line



Summary for Pond 1DP: Detention Pond 1

[44] Hint: Outlet device #2 is below defined storage
[79] Warning: Submerged Pond 1FP Primary device # 1 INLET by 2.60'

Inflow Area = 64,469 sf, 43.92% Impervious, Inflow Depth = 2.78" for 25-year event
Inflow = 7.68 cfs @ 11.97 hrs, Volume= 14,959 cf
Outflow = 0.71 cfs @ 12.49 hrs, Volume= 14,959 cf, Atten= 91%, Lag= 31.1 min
Primary = 0.71 cfs @ 12.49 hrs, Volume= 14,959 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 698.60' @ 12.49 hrs Surf.Area= 3,744 sf Storage= 6,034 cf

Plug-Flow detention time= 77.7 min calculated for 14,953 cf (100% of inflow)
Center-of-Mass det. time= 77.7 min (920.4 - 842.7)

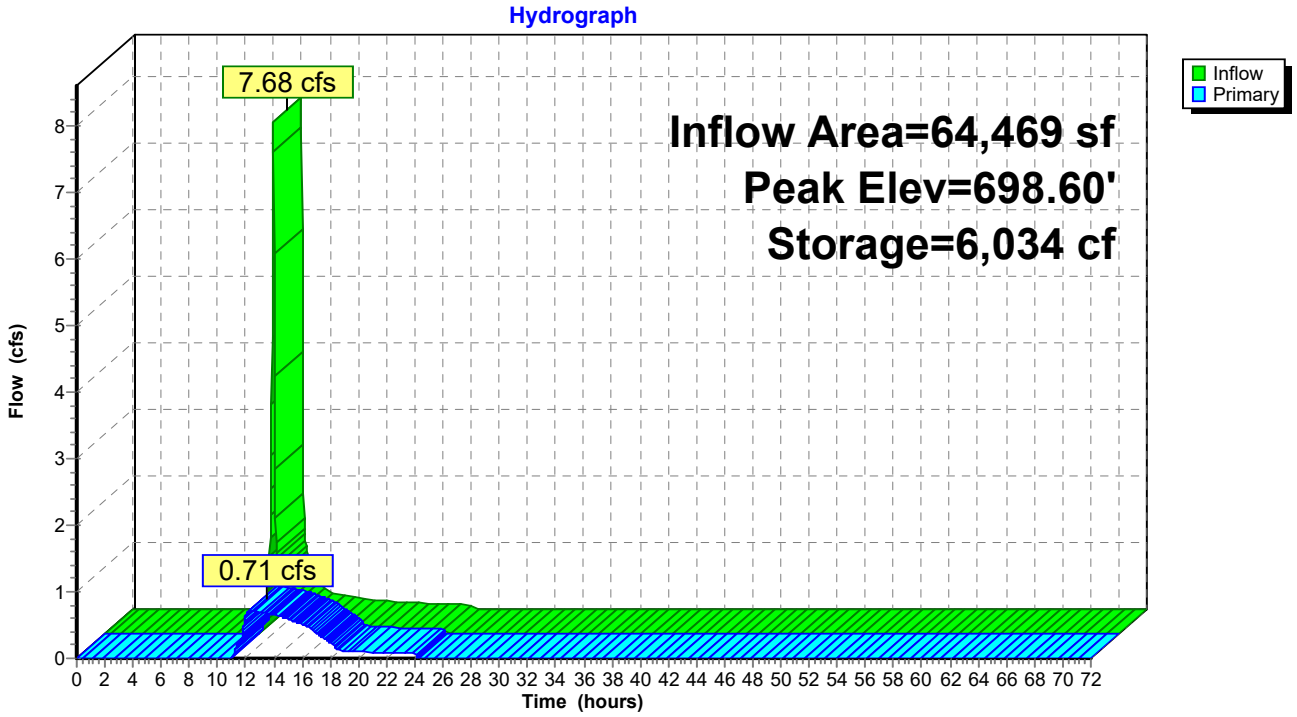
Volume	Invert	Avail.Storage	Storage Description
#1	695.80'	19,432 cf	**Custom Stage Data (Prismatic)** Listed below

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.80	0	0	0
696.00	285	29	29
697.00	2,098	1,192	1,220
698.00	3,151	2,625	3,845
699.00	4,138	3,645	7,489
700.00	5,311	4,725	12,214
701.00	9,125	7,218	19,432

Device	Routing	Invert	Outlet Devices
#1	Primary	695.60'	**18.0" Round Culvert** L= 28.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 695.60' / 695.46' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	695.60'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.71 cfs @ 12.49 hrs HW=698.60' TW=565.00' (Fixed TW Elev= 565.00')
└─**1=Culvert** (Passes 0.71 cfs of 12.77 cfs potential flow)
  ├─**2=Orifice/Grate** (Orifice Controls 0.71 cfs @ 8.11 fps)
  └─**3=Orifice/Grate** (Controls 0.00 cfs)

Pond 1DP: Detention Pond 1



Summary for Pond 1FP: FocalPoint 1

[92] Warning: Device #3 is above defined storage

Inflow Area = 64,469 sf, 43.92% Impervious, Inflow Depth = 2.85" for 25-year event
Inflow = 7.80 cfs @ 11.96 hrs, Volume= 15,329 cf
Outflow = 7.68 cfs @ 11.97 hrs, Volume= 14,959 cf, Atten= 2%, Lag= 0.6 min
Primary = 7.68 cfs @ 11.97 hrs, Volume= 14,959 cf
Routed to Pond 1DP : Detention Pond 1

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 699.95' @ 11.97 hrs Surf.Area= 1,063 sf Storage= 758 cf

Plug-Flow detention time= 20.5 min calculated for 14,953 cf (98% of inflow)
Center-of-Mass det. time= 6.4 min (842.7 - 836.3)

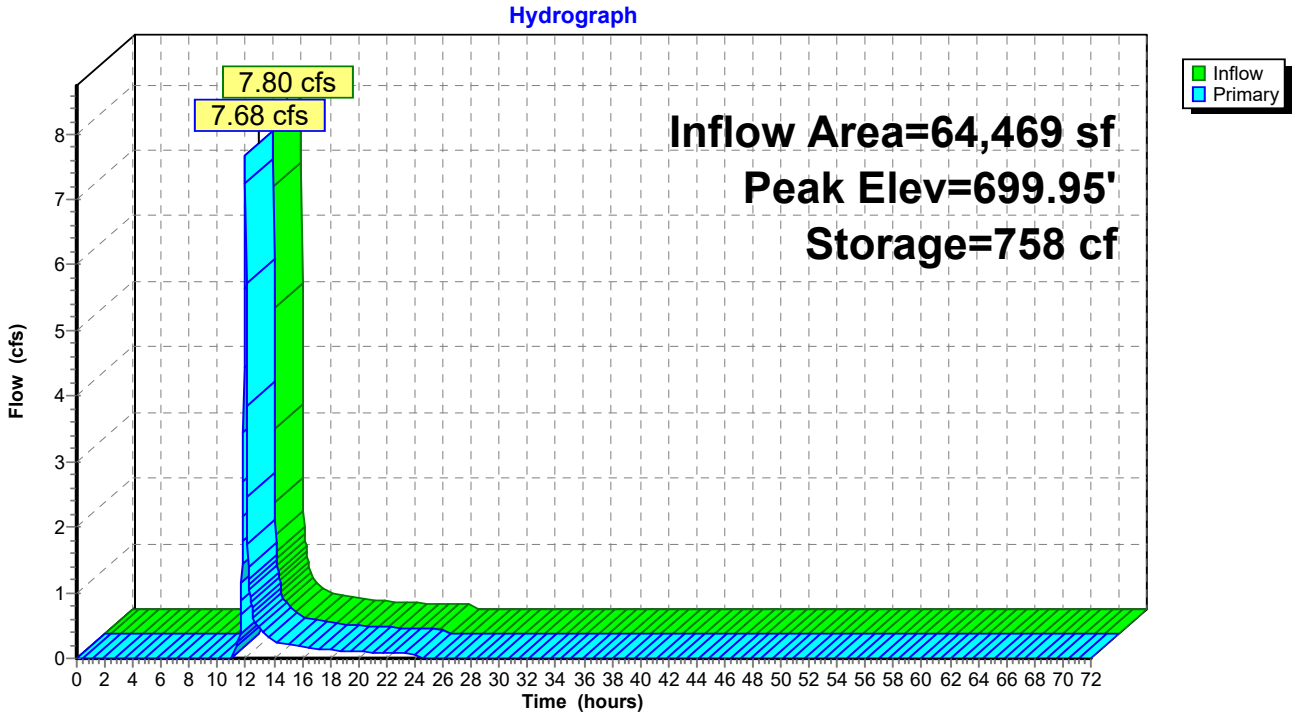
Volume	Invert	Avail.Storage	Storage Description
#1	696.00'	815 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
696.00	237	0.0	0	0
699.00	237	20.0	142	142
700.00	1,109	100.0	673	815

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 40.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 695.80' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**10.0' long x 18.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=7.60 cfs @ 11.97 hrs HW=699.94' (Free Discharge)
└**1=Culvert** (Passes 7.60 cfs of 15.21 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 7.60 cfs @ 2.18 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1FP: FocalPoint 1



Summary for Pond 2DP: Detention Pond 2

[79] Warning: Submerged Pond 2FP Primary device # 1 INLET by 2.30'
[79] Warning: Submerged Pond 3FP Primary device # 1 INLET by 0.80'
[79] Warning: Submerged Pond 4FP Primary device # 1 INLET by 0.80'

Inflow Area = 95,832 sf, 79.09% Impervious, Inflow Depth = 4.56" for 25-year event
Inflow = 18.30 cfs @ 11.96 hrs, Volume= 36,410 cf
Outflow = 0.68 cfs @ 13.44 hrs, Volume= 35,431 cf, Atten= 96%, Lag= 88.4 min
Primary = 0.68 cfs @ 13.44 hrs, Volume= 35,431 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 696.80' @ 13.44 hrs Surf.Area= 8,711 sf Storage= 22,200 cf

Plug-Flow detention time= 441.5 min calculated for 35,431 cf (97% of inflow)
Center-of-Mass det. time= 425.4 min (1,233.5 - 808.1)

Volume	Invert	Avail.Storage	Storage Description
#1A	693.75'	3,019 cf	**38.12'W x 114.25'L x 4.79'H Field A** 20,877 cf Overall - 13,330 cf Embedded = 7,547 cf x 40.0% Voids
#2A	694.00'	12,663 cf	**Ferguson R-Tank HD 2.5** x 1222 Inside #1 Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf 1222 Chambers in 26 Rows
#3B	693.75'	3,019 cf	**38.12'W x 114.25'L x 4.79'H Field B** 20,877 cf Overall - 13,330 cf Embedded = 7,547 cf x 40.0% Voids
#4B	694.00'	12,663 cf	**Ferguson R-Tank HD 2.5** x 1222 Inside #3 Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf 1222 Chambers in 26 Rows
		31,364 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 10.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 693.20' S= 0.0800 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	694.00'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	697.00'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=0.68 cfs @ 13.44 hrs HW=696.80' TW=565.00' (Fixed TW Elev= 565.00')
- **1=Culvert** (Passes 0.68 cfs of 12.18 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.68 cfs @ 7.81 fps)
- **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 2DP: Detention Pond 2 - Chamber Wizard Field A

Chamber Model = Ferguson R-Tank HD 2.5 (Ferguson R-Tank HD)
Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf
Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf

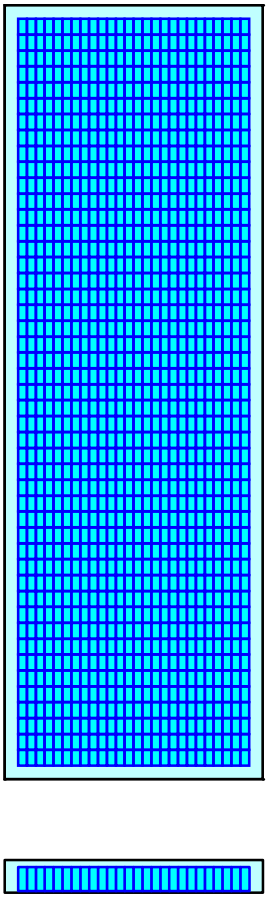
47 Chambers/Row x 2.35' Long = 110.25' Row Length +24.0" End Stone x 2 = 114.25' Base Length
26 Rows x 15.7" Wide + 24.0" Side Stone x 2 = 38.12' Base Width
3.0" Stone Base + 42.5" Chamber Height + 12.0" Stone Cover = 4.79' Field Height

1,222 Chambers x 10.4 cf = 12,663.1 cf Chamber Storage
1,222 Chambers x 10.9 cf = 13,329.6 cf Displacement

20,876.7 cf Field - 13,329.6 cf Chambers = 7,547.2 cf Stone x 40.0% Voids = 3,018.9 cf Stone Storage

Chamber Storage + Stone Storage = 15,682.0 cf = 0.360 af
Overall Storage Efficiency = 75.1%
Overall System Size = 114.25' x 38.12' x 4.79'

1,222 Chambers
773.2 cy Field
279.5 cy Stone



Pond 2DP: Detention Pond 2 - Chamber Wizard Field B

Chamber Model = Ferguson R-Tank HD 2.5 (Ferguson R-Tank HD)
Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf
Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf

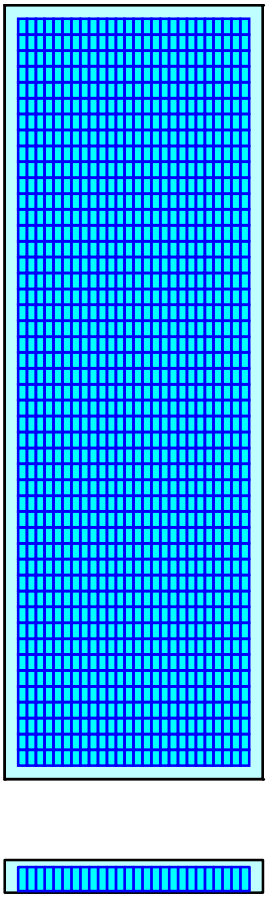
47 Chambers/Row x 2.35' Long = 110.25' Row Length +24.0" End Stone x 2 = 114.25' Base Length
26 Rows x 15.7" Wide + 24.0" Side Stone x 2 = 38.12' Base Width
3.0" Stone Base + 42.5" Chamber Height + 12.0" Stone Cover = 4.79' Field Height

1,222 Chambers x 10.4 cf = 12,663.1 cf Chamber Storage
1,222 Chambers x 10.9 cf = 13,329.6 cf Displacement

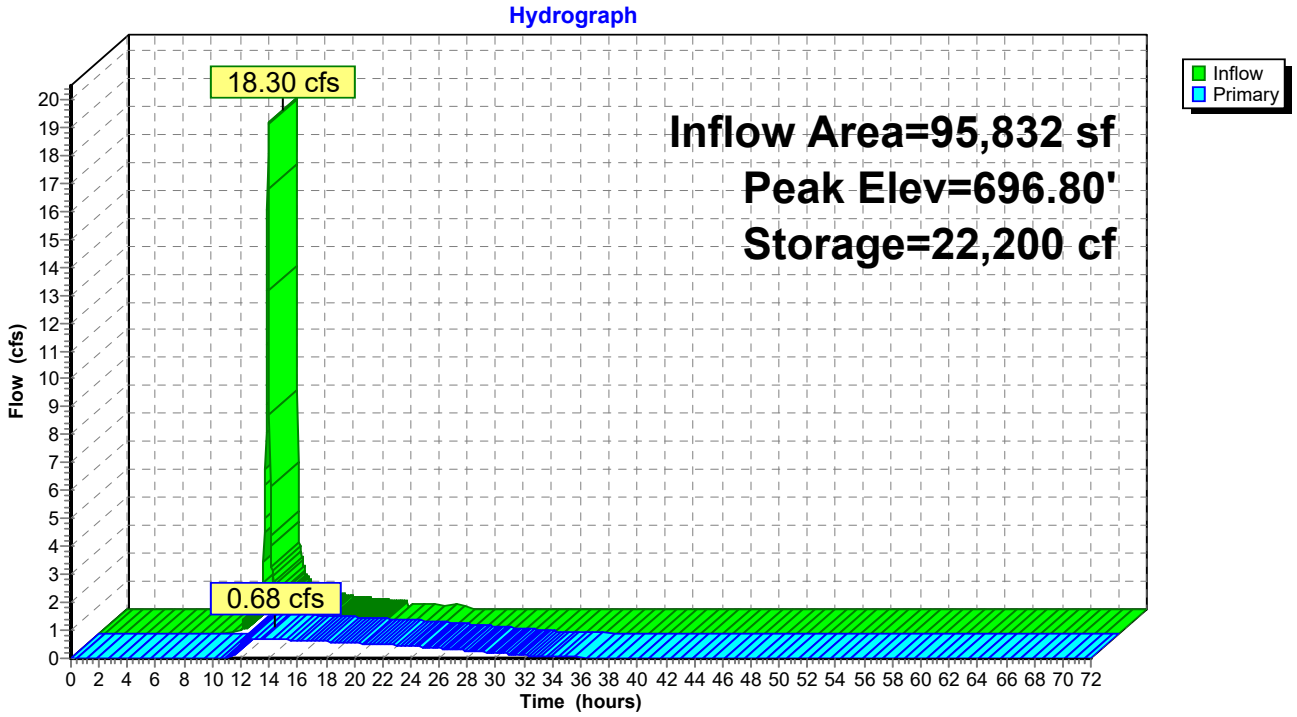
20,876.7 cf Field - 13,329.6 cf Chambers = 7,547.2 cf Stone x 40.0% Voids = 3,018.9 cf Stone Storage

Chamber Storage + Stone Storage = 15,682.0 cf = 0.360 af
Overall Storage Efficiency = 75.1%
Overall System Size = 114.25' x 38.12' x 4.79'

1,222 Chambers
773.2 cy Field
279.5 cy Stone



Pond 2DP: Detention Pond 2



Summary for Pond 2FP: FocalPoint 2

Inflow Area = 31,363 sf, 83.33% Impervious, Inflow Depth = 5.14" for 25-year event
Inflow = 6.20 cfs @ 11.96 hrs, Volume= 13,430 cf
Outflow = 6.08 cfs @ 11.97 hrs, Volume= 12,708 cf, Atten= 2%, Lag= 0.8 min
Primary = 6.08 cfs @ 11.97 hrs, Volume= 12,708 cf
Routed to Pond 2DP : Detention Pond 2

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 698.38' @ 11.97 hrs Surf.Area= 1,260 sf Storage= 1,165 cf

Plug-Flow detention time= 53.1 min calculated for 12,702 cf (95% of inflow)
Center-of-Mass det. time= 22.0 min (800.9 - 778.9)

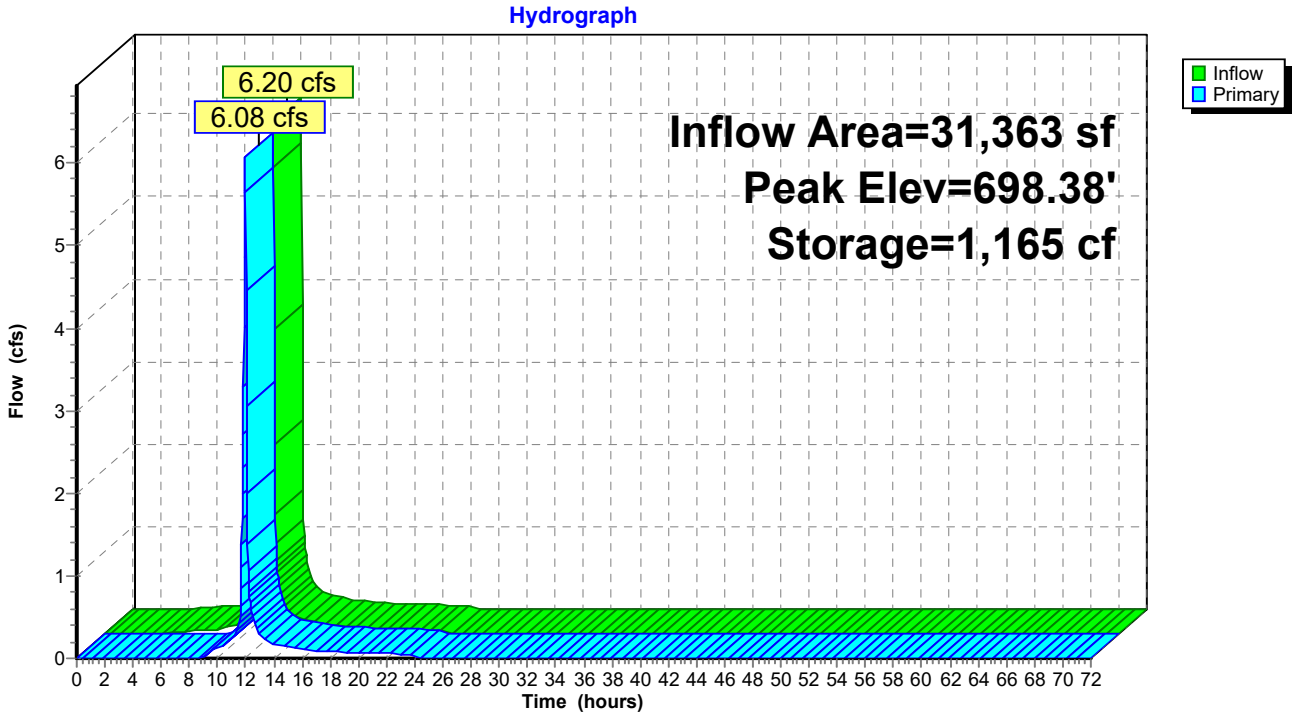
Volume	Invert	Avail.Storage	Storage Description
#1	694.50'	1,317 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.50	539	0.0	0	0
697.50	539	20.0	323	323
698.00	1,056	100.0	399	722
698.50	1,323	100.0	595	1,317

Device	Routing	Invert	Outlet Devices
#1	Primary	694.50'	**18.0" Round Culvert** L= 28.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.50' / 694.00' S= 0.0179 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	698.00'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=6.07 cfs @ 11.97 hrs HW=698.38' (Free Discharge)
└**1=Culvert** (Passes 6.07 cfs of 15.06 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 6.07 cfs @ 2.02 fps)

Pond 2FP: FocalPoint 2



Summary for Pond 3FP: FocalPoint 3

Inflow Area = 16,553 sf, 71.05% Impervious, Inflow Depth = 4.48" for 25-year event
Inflow = 2.98 cfs @ 11.96 hrs, Volume= 6,177 cf
Outflow = 2.93 cfs @ 11.97 hrs, Volume= 5,456 cf, Atten= 2%, Lag= 0.7 min
Primary = 2.93 cfs @ 11.97 hrs, Volume= 5,456 cf
Routed to Pond 2DP : Detention Pond 2

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 699.73' @ 11.97 hrs Surf.Area= 946 sf Storage= 930 cf

Plug-Flow detention time= 86.0 min calculated for 5,454 cf (88% of inflow)
Center-of-Mass det. time= 28.9 min (826.5 - 797.6)

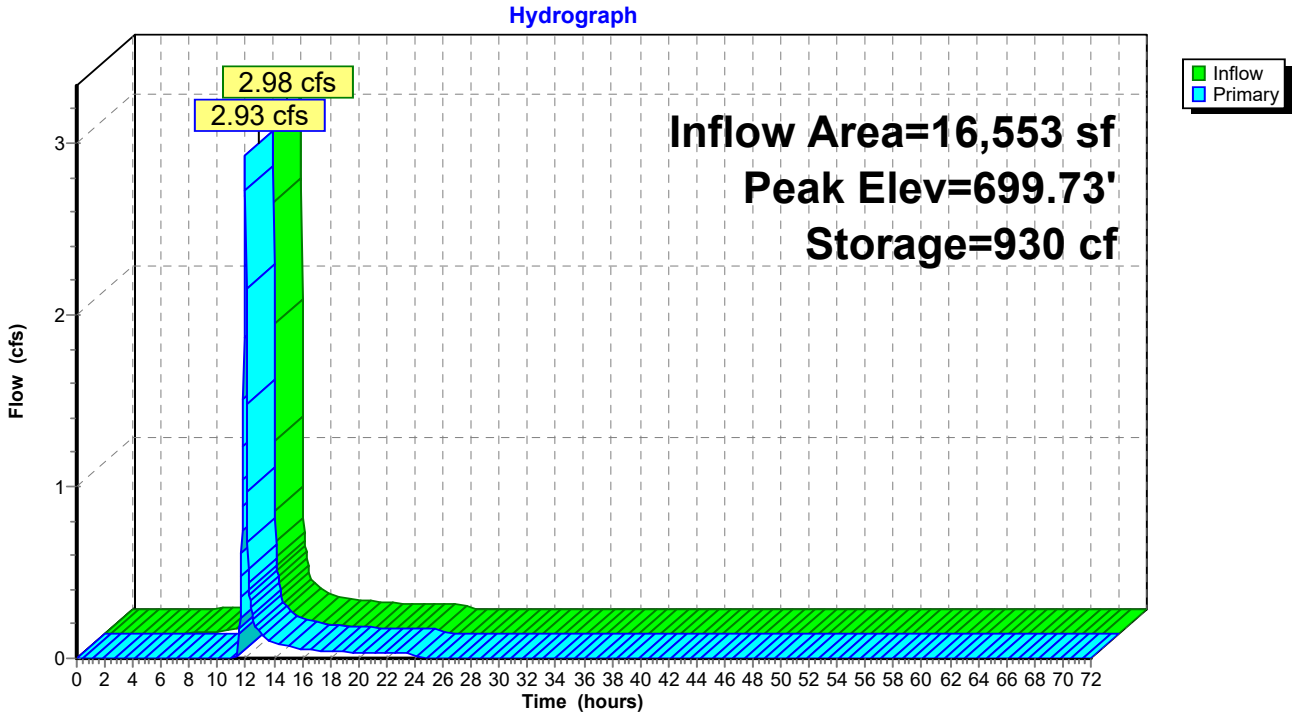
Volume	Invert	Avail.Storage	Storage Description
#1	696.00'	1,197 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
696.00	602	0.0	0	0
699.00	602	20.0	361	361
700.00	1,070	100.0	836	1,197

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 80.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 694.00' S= 0.0250 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=2.91 cfs @ 11.97 hrs HW=699.73' (Free Discharge)
↑**1=Culvert** (Passes 2.91 cfs of 14.70 cfs potential flow)
↑**2=Orifice/Grate** (Weir Controls 2.91 cfs @ 1.58 fps)

Pond 3FP: FocalPoint 3



Summary for Pond 4FP: FocalPoint 4

[92] Warning: Device #2 is above defined storage
[92] Warning: Device #3 is above defined storage
[93] Warning: Storage range exceeded by 1.01'
[88] Warning: Qout>Qin may require smaller dt or Finer Routing
[85] Warning: Oscillations may require smaller dt or Finer Routing (severity=222)

Inflow Area = 47,916 sf, 79.09% Impervious, Inflow Depth = 4.92" for 25-year event
Inflow = 9.21 cfs @ 11.96 hrs, Volume= 19,627 cf
Outflow = 9.33 cfs @ 11.96 hrs, Volume= 18,246 cf, Atten= 0%, Lag= 0.2 min
Primary = 9.33 cfs @ 11.96 hrs, Volume= 18,246 cf
Routed to Pond 2DP : Detention Pond 2

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 700.01' @ 11.96 hrs Surf.Area= 1,491 sf Storage= 1,389 cf

Plug-Flow detention time= 60.8 min calculated for 18,239 cf (93% of inflow)
Center-of-Mass det. time= 22.0 min (807.7 - 785.7)

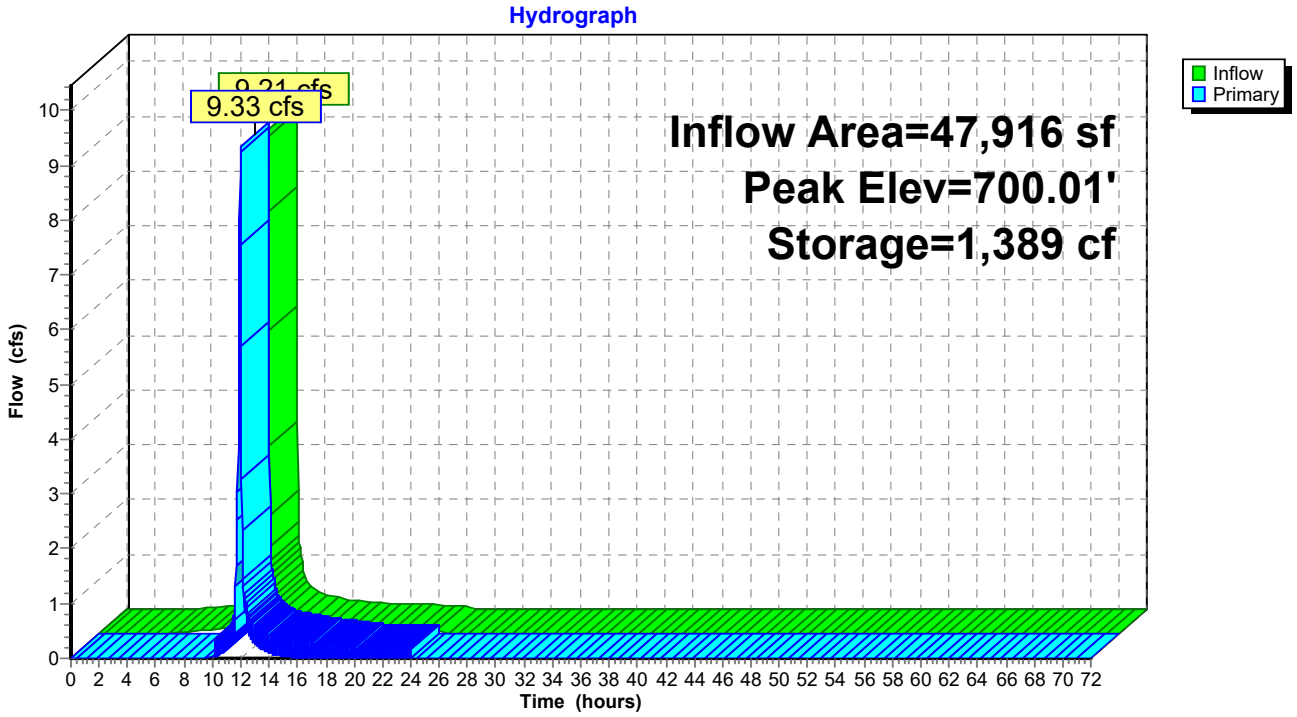
Volume	Invert	Avail.Storage	Storage Description
#1	695.00'	1,389 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.00	585	0.0	0	0
698.00	585	20.0	351	351
699.00	1,491	100.0	1,038	1,389

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 23.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 695.88' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**6.0' long x 133.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=9.10 cfs @ 11.96 hrs HW=700.00' (Free Discharge)
- **1=Culvert** (Passes 9.10 cfs of 15.34 cfs potential flow)
  - **2=Orifice/Grate** (Weir Controls 9.10 cfs @ 2.31 fps)
- **3=Broad-Crested Rectangular Weir** (Weir Controls 0.00 cfs @ 0.07 fps)

Pond 4FP: FocalPoint 4



Summary for Pond 5FP: FocalPoint 5

Inflow Area = 19,166 sf, 61.36% Impervious, Inflow Depth = 3.95" for 25-year event
Inflow = 3.12 cfs @ 11.96 hrs, Volume= 6,307 cf
Outflow = 3.04 cfs @ 11.97 hrs, Volume= 5,679 cf, Atten= 3%, Lag= 0.9 min
Primary = 3.04 cfs @ 11.97 hrs, Volume= 5,679 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 697.74' @ 11.97 hrs Surf.Area= 1,118 sf Storage= 872 cf

Plug-Flow detention time= 73.5 min calculated for 5,679 cf (90% of inflow)
Center-of-Mass det. time= 22.6 min (833.2 - 810.7)

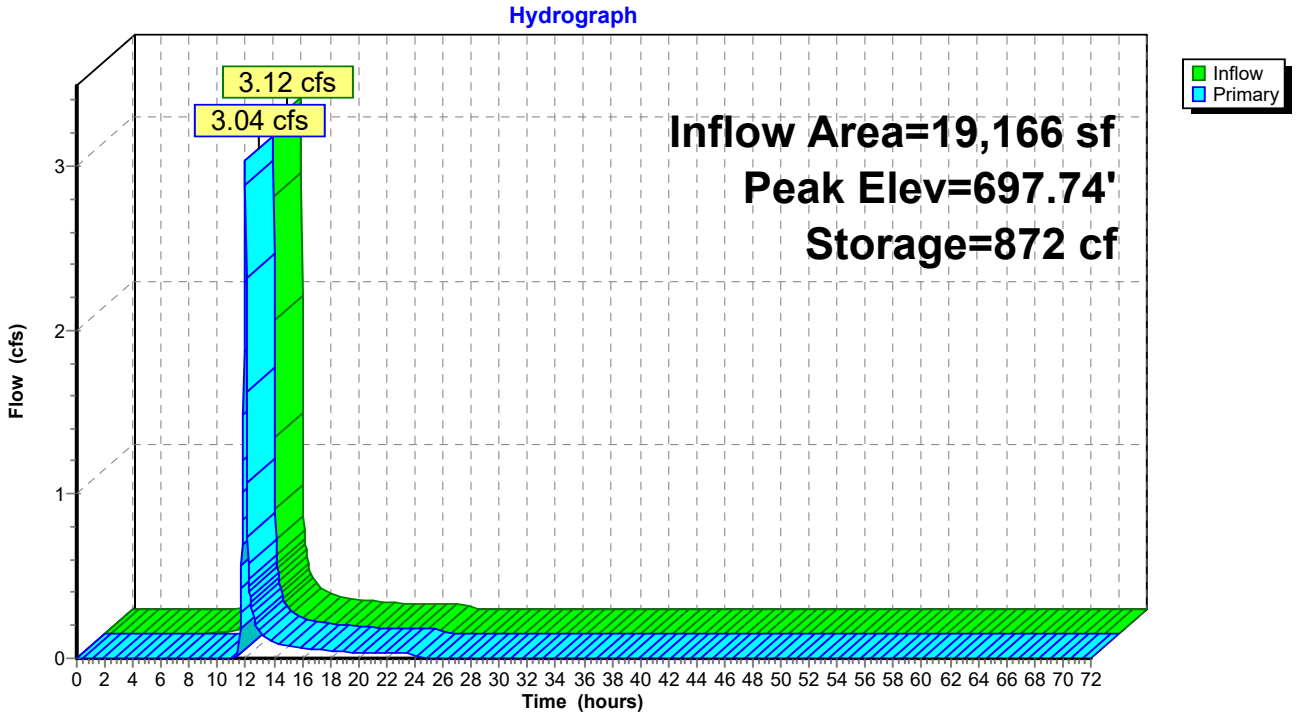
Volume	Invert	Avail.Storage	Storage Description
#1	694.00'	2,779 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.00	472	0.0	0	0
697.00	472	20.0	283	283
698.00	1,344	100.0	908	1,191
699.00	1,832	100.0	1,588	2,779

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 24.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 691.39' S= 0.1088 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	697.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	698.50'	**6.0' long x 9.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.46 2.55 2.70 2.69 2.68 2.68 2.67 2.64 2.64 2.64 2.65 2.64 2.65 2.65 2.66 2.67 2.69

Primary OutFlow Max=3.01 cfs @ 11.97 hrs HW=697.74' (Free Discharge)
- **1=Culvert** (Passes 3.01 cfs of 14.71 cfs potential flow)
  - **2=Orifice/Grate** (Weir Controls 3.01 cfs @ 1.60 fps)
- **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 5FP: FocalPoint 5



Summary for Pond 6FP: FocalPoint 6

Inflow Area = 7,841 sf, 55.56% Impervious, Inflow Depth = 3.64" for 25-year event
Inflow = 1.19 cfs @ 11.96 hrs, Volume= 2,379 cf
Outflow = 1.12 cfs @ 11.99 hrs, Volume= 1,750 cf, Atten= 6%, Lag= 1.6 min
Primary = 1.12 cfs @ 11.99 hrs, Volume= 1,750 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 697.62' @ 11.99 hrs Surf.Area= 1,015 sf Storage= 746 cf

Plug-Flow detention time= 145.9 min calculated for 1,750 cf (74% of inflow)
Center-of-Mass det. time= 50.1 min (868.0 - 817.9)

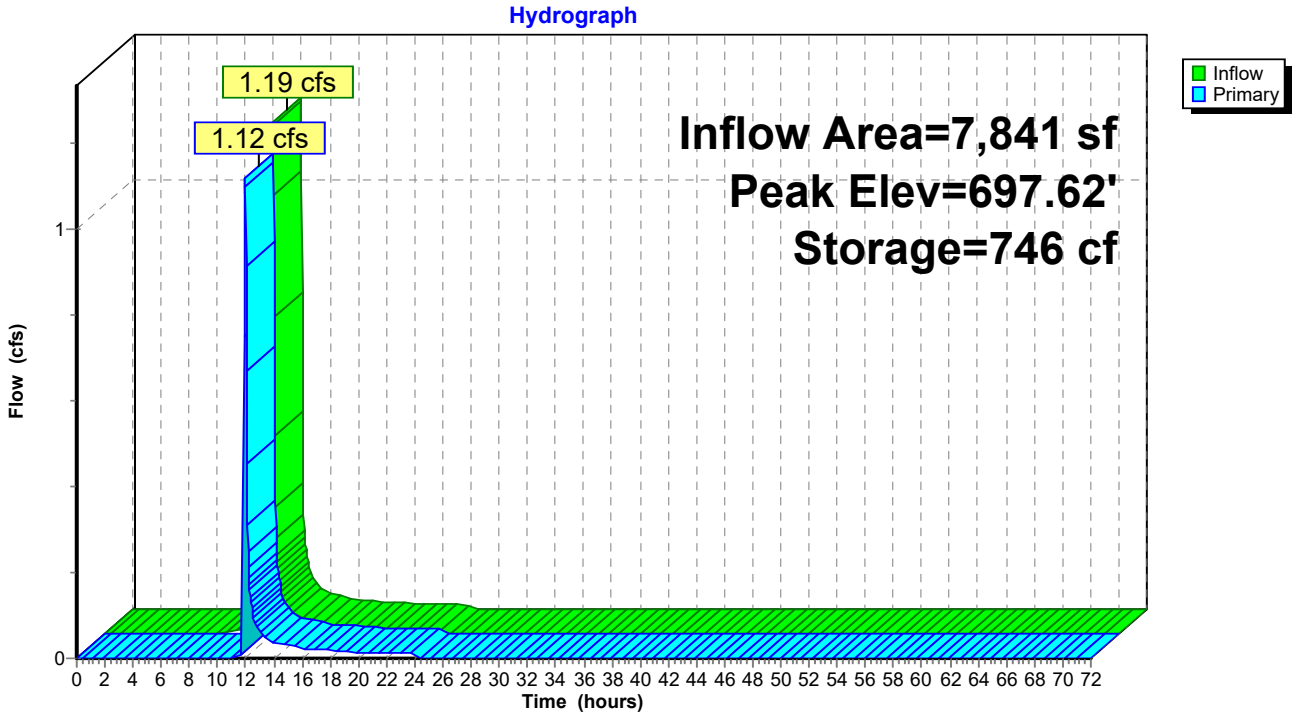
Volume	Invert	Avail.Storage	Storage Description
#1	694.00'	2,779 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.00	472	0.0	0	0
697.00	472	20.0	283	283
698.00	1,344	100.0	908	1,191
699.00	1,832	100.0	1,588	2,779

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 24.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 690.87' S= 0.1304 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	697.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	698.50'	**6.0' long x 9.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.46 2.55 2.70 2.69 2.68 2.68 2.67 2.64 2.64 2.64 2.65 2.64 2.65 2.65 2.66 2.67 2.69

Primary OutFlow Max=1.08 cfs @ 11.99 hrs HW=697.62' (Free Discharge)
└**1=Culvert** (Passes 1.08 cfs of 14.42 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 1.08 cfs @ 1.14 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 6FP: FocalPoint 6

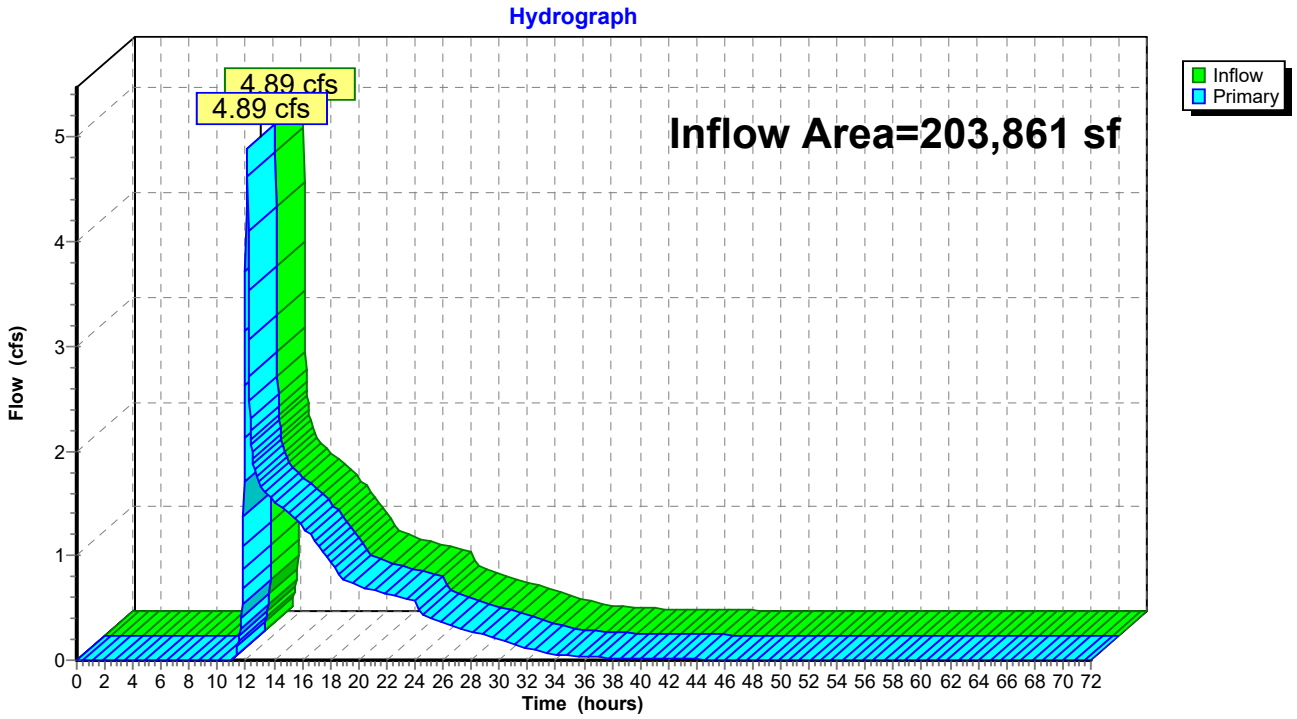


Summary for Link 1L: Outfall #1

Inflow Area = 203,861 sf, 59.40% Impervious, Inflow Depth > 3.50" for 25-year event
Inflow = 4.89 cfs @ 12.08 hrs, Volume= 59,494 cf
Primary = 4.89 cfs @ 12.08 hrs, Volume= 59,494 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs

Link 1L: Outfall #1



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Area 1 Runoff Area=1.480 ac 43.92% Impervious Runoff Depth=3.43"
Tc=5.0 min CN=68 Runoff=9.34 cfs 18,408 cf

Subcatchment2S: Area 2 Runoff Area=0.720 ac 83.33% Impervious Runoff Depth=5.84"
Tc=5.0 min CN=90 Runoff=6.99 cfs 15,271 cf

Subcatchment3S: Area 3 Runoff Area=0.380 ac 71.05% Impervious Runoff Depth=5.16"
Tc=5.0 min CN=84 Runoff=3.40 cfs 7,116 cf

Subcatchment4S: Area 4 Runoff Area=1.100 ac 79.09% Impervious Runoff Depth=5.61"
Tc=5.0 min CN=88 Runoff=10.43 cfs 22,412 cf

Subcatchment5S: Area 5 Runoff Area=0.440 ac 61.36% Impervious Runoff Depth=4.60"
Tc=5.0 min CN=79 Runoff=3.61 cfs 7,351 cf

Subcatchment6S: Area 6 Runoff Area=0.180 ac 55.56% Impervious Runoff Depth=4.28"
Tc=5.0 min CN=76 Runoff=1.39 cfs 2,793 cf

Subcatchment10S: South Bypass Runoff Area=0.380 ac 5.26% Impervious Runoff Depth=1.59"
Tc=5.0 min CN=49 Runoff=1.06 cfs 2,192 cf

Reach 1R: Southern Trunk Line Avg. Flow Depth=0.81' Max Vel=4.63 fps Inflow=6.10 cfs 67,917 cf
24.0" Round Pipe n=0.013 L=1,058.0' S=0.0051 '/' Capacity=16.10 cfs Outflow=5.47 cfs 67,913 cf

Pond 1DP: Detention Pond 1 Peak Elev=699.03' Storage=7,609 cf Inflow=9.28 cfs 18,038 cf
Outflow=0.76 cfs 18,038 cf

Pond 1FP: FocalPoint 1 Peak Elev=700.01' Storage=815 cf Inflow=9.34 cfs 18,408 cf
Outflow=9.28 cfs 18,038 cf

Pond 2DP: Detention Pond 2 Peak Elev=697.13' Storage=24,747 cf Inflow=20.45 cfs 41,974 cf
Outflow=1.27 cfs 40,991 cf

Pond 2FP: FocalPoint 2 Peak Elev=698.41' Storage=1,206 cf Inflow=6.99 cfs 15,271 cf
Outflow=6.86 cfs 14,549 cf

Pond 3FP: FocalPoint 3 Peak Elev=699.76' Storage=951 cf Inflow=3.40 cfs 7,116 cf
Outflow=3.34 cfs 6,396 cf

Pond 4FP: FocalPoint 4 Peak Elev=700.04' Storage=1,389 cf Inflow=10.43 cfs 22,412 cf
Outflow=10.44 cfs 21,030 cf

Pond 5FP: FocalPoint 5 Peak Elev=697.77' Storage=900 cf Inflow=3.61 cfs 7,351 cf
Outflow=3.53 cfs 6,723 cf

Pond 6FP: FocalPoint 6 Peak Elev=697.64' Storage=762 cf Inflow=1.39 cfs 2,793 cf
Outflow=1.34 cfs 2,165 cf

Link 1L: Outfall #1

Inflow=5.84 cfs 70,105 cf
Primary=5.84 cfs 70,105 cf

Total Runoff Area = 203,861 sf Runoff Volume = 75,544 cf Average Runoff Depth = 4.45"
40.60% Pervious = 82,764 sf 59.40% Impervious = 121,097 sf

Summary for Subcatchment 1S: Area 1

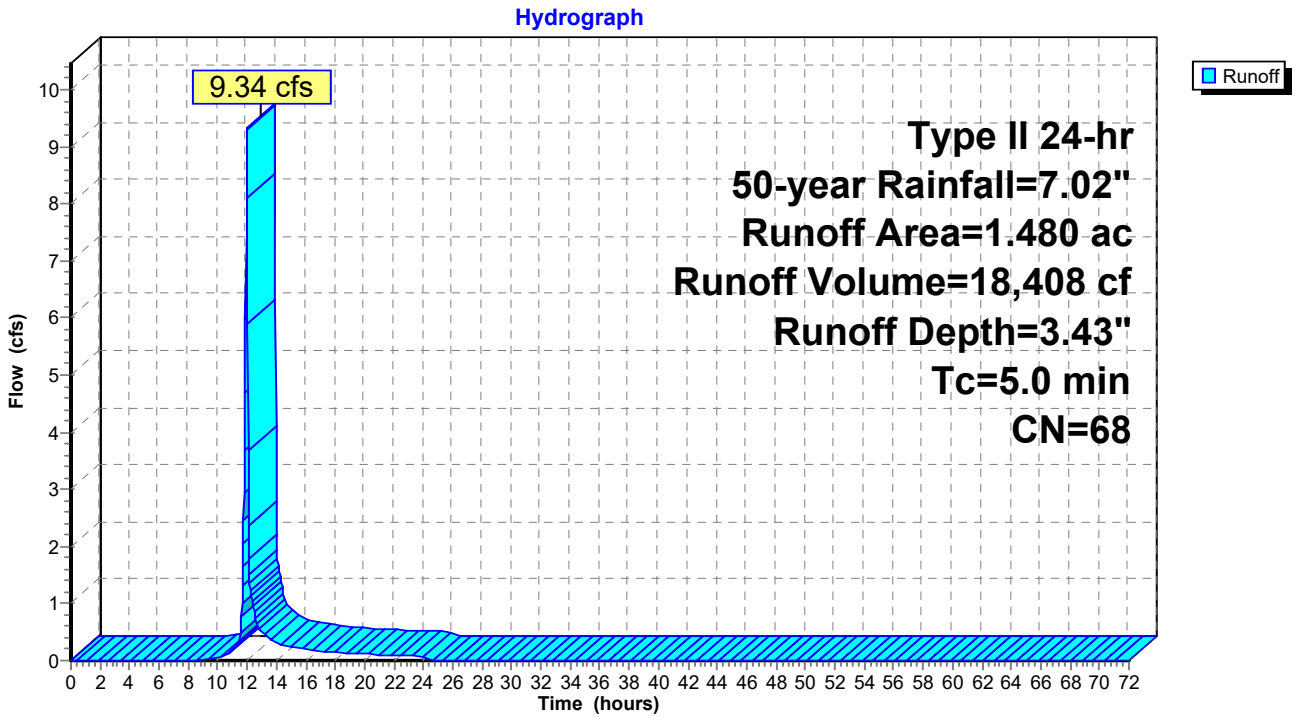
Runoff = 9.34 cfs @ 11.96 hrs, Volume= 18,408 cf, Depth= 3.43"
Routed to Pond 1FP : FocalPoint 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 50-year Rainfall=7.02"

Area (ac)	CN	Description
0.510	49	50-75% Grass cover, Fair, HSG A
0.320	36	Woods, Fair, HSG A
0.650	98	Paved parking, HSG A
1.480	68	Weighted Average
0.830		56.08% Pervious Area
0.650		43.92% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 1S: Area 1



Summary for Subcatchment 2S: Area 2

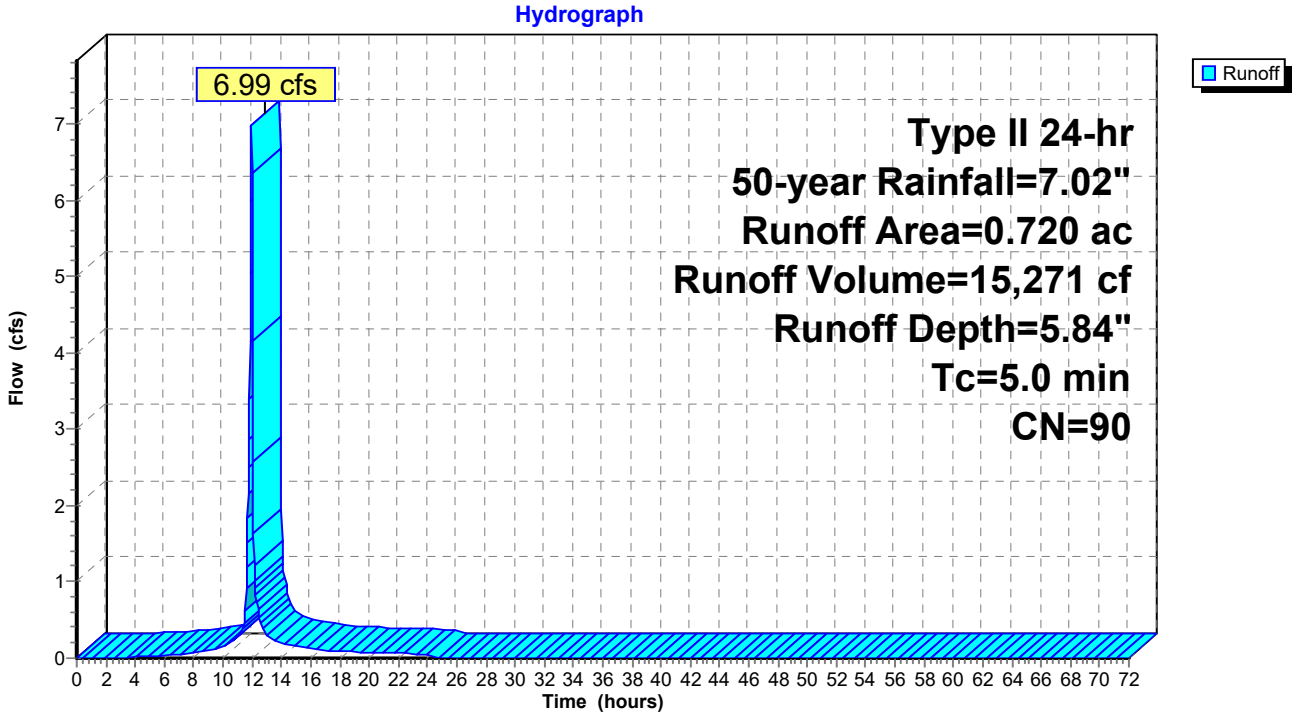
Runoff = 6.99 cfs @ 11.96 hrs, Volume= 15,271 cf, Depth= 5.84"
Routed to Pond 2FP : FocalPoint 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 50-year Rainfall=7.02"

Area (ac)	CN	Description
0.120	49	50-75% Grass cover, Fair, HSG A
0.600	98	Paved parking, HSG A
0.720	90	Weighted Average
0.120		16.67% Pervious Area
0.600		83.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 2S: Area 2



Summary for Subcatchment 3S: Area 3

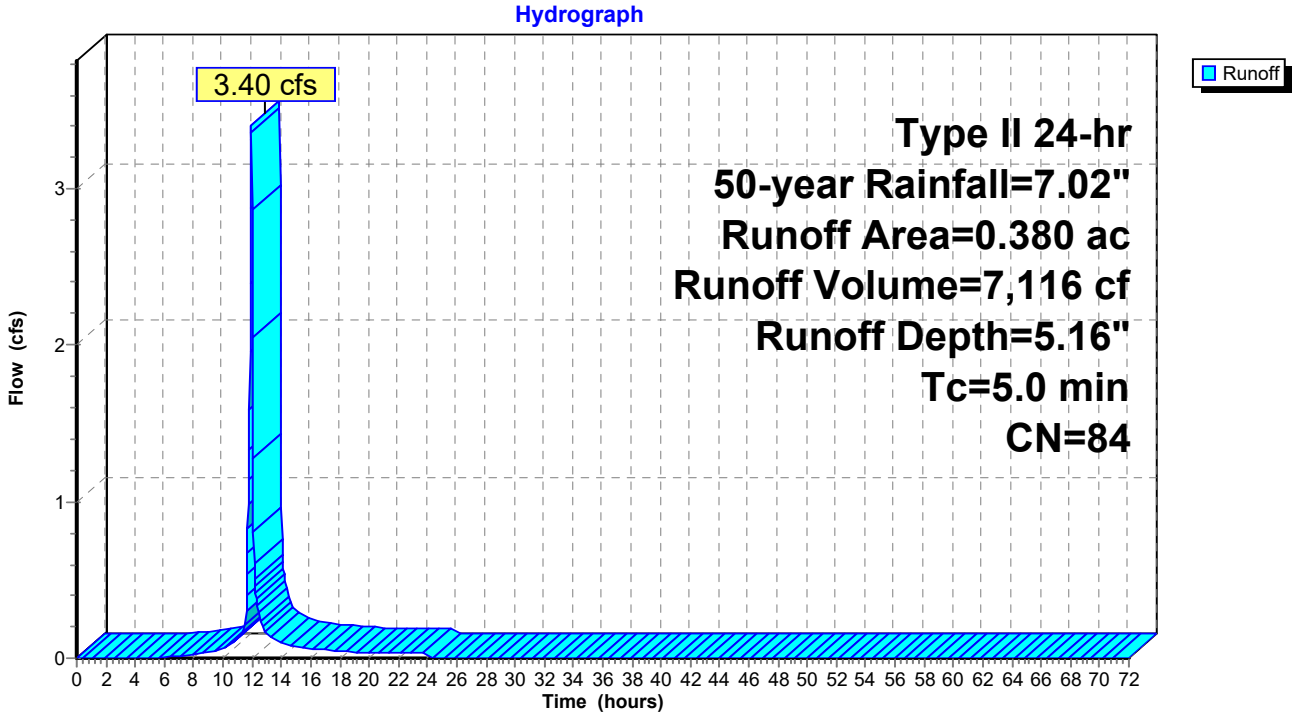
Runoff = 3.40 cfs @ 11.96 hrs, Volume= 7,116 cf, Depth= 5.16"
Routed to Pond 3FP : FocalPoint 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 50-year Rainfall=7.02"

Area (ac)	CN	Description
0.110	49	50-75% Grass cover, Fair, HSG A
0.270	98	Paved parking, HSG A
0.380	84	Weighted Average
0.110		28.95% Pervious Area
0.270		71.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 3S: Area 3



Summary for Subcatchment 4S: Area 4

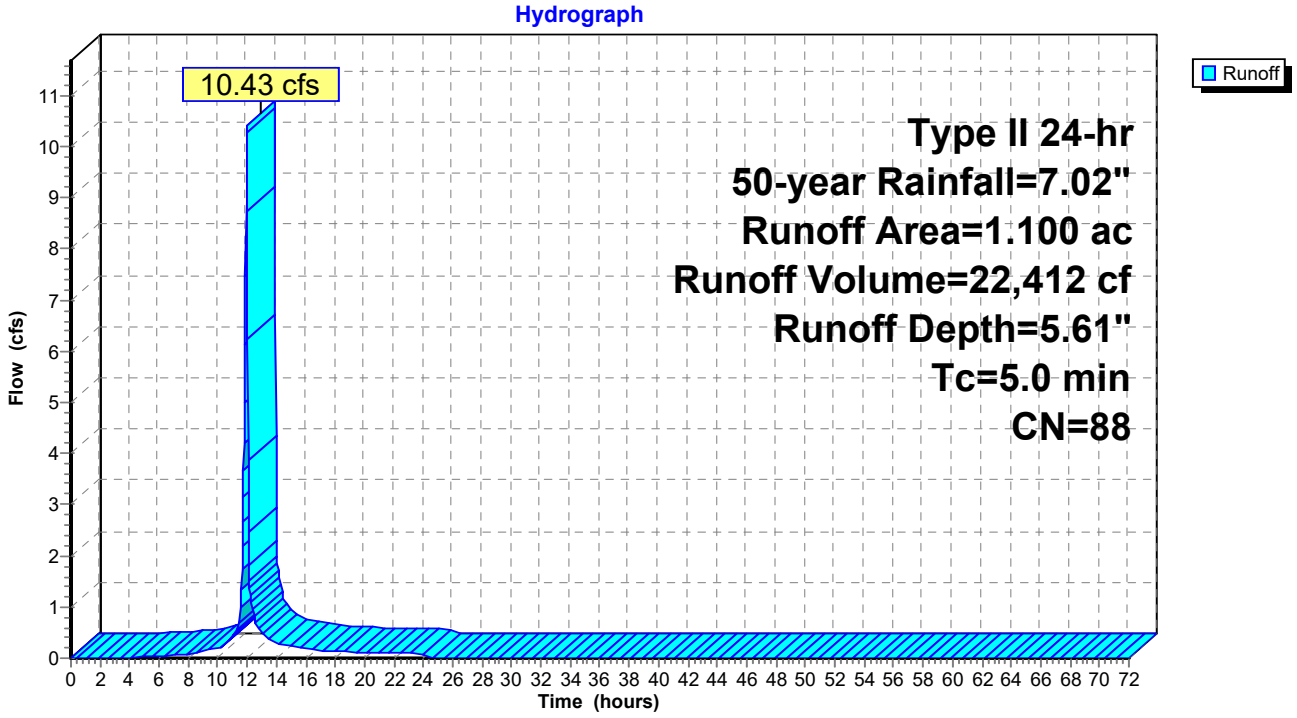
Runoff = 10.43 cfs @ 11.96 hrs, Volume= 22,412 cf, Depth= 5.61"
Routed to Pond 4FP : FocalPoint 4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 50-year Rainfall=7.02"

Area (ac)	CN	Description
0.230	49	50-75% Grass cover, Fair, HSG A
0.870	98	Paved parking, HSG A
1.100	88	Weighted Average
0.230		20.91% Pervious Area
0.870		79.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 4S: Area 4



Summary for Subcatchment 5S: Area 5

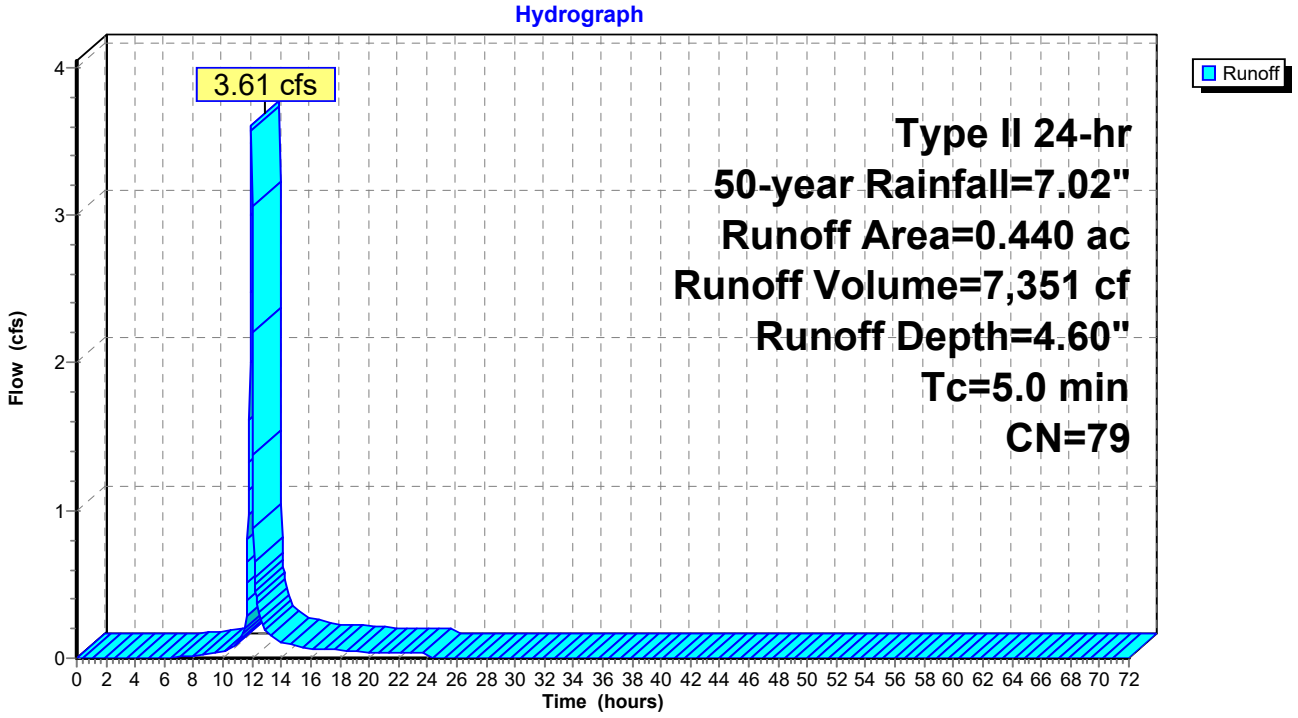
Runoff = 3.61 cfs @ 11.96 hrs, Volume= 7,351 cf, Depth= 4.60"
Routed to Pond 5FP : FocalPoint 5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 50-year Rainfall=7.02"

Area (ac)	CN	Description
0.170	49	50-75% Grass cover, Fair, HSG A
0.270	98	Paved parking, HSG A
0.440	79	Weighted Average
0.170		38.64% Pervious Area
0.270		61.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 5S: Area 5



Summary for Subcatchment 6S: Area 6

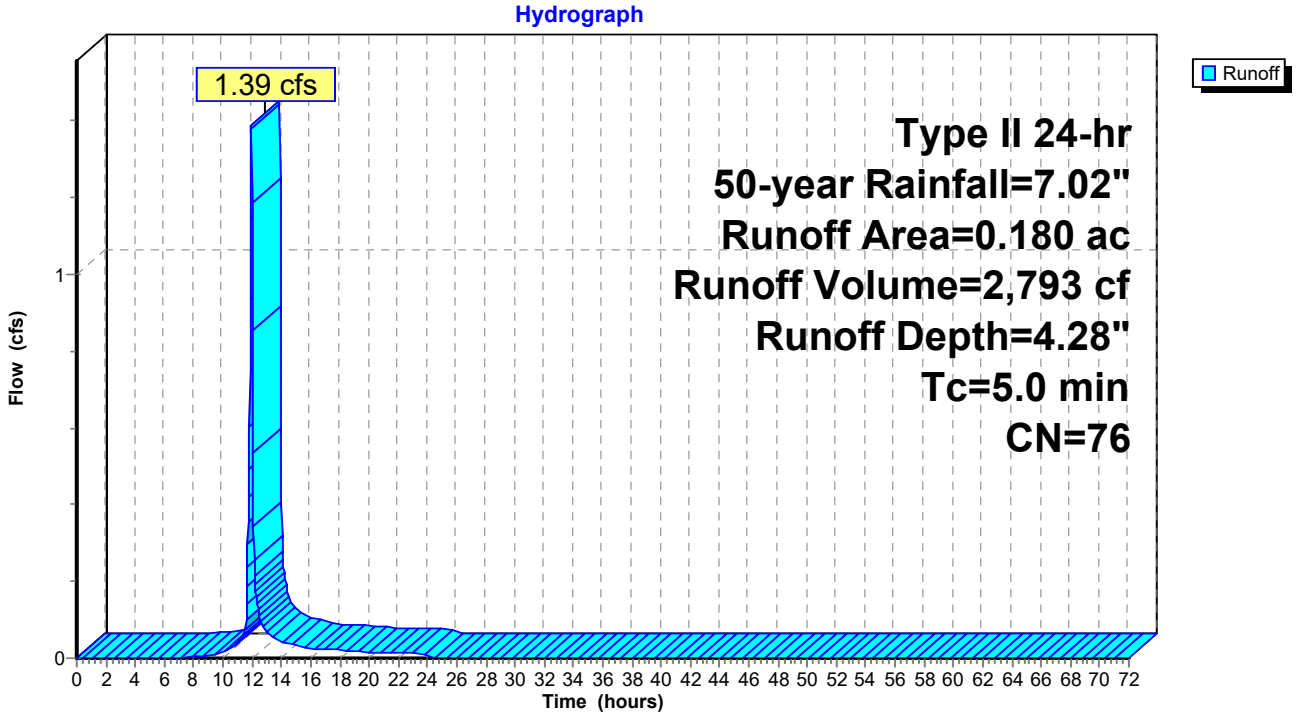
Runoff = 1.39 cfs @ 11.96 hrs, Volume= 2,793 cf, Depth= 4.28"
Routed to Pond 6FP : FocalPoint 6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 50-year Rainfall=7.02"

Area (ac)	CN	Description
0.080	49	50-75% Grass cover, Fair, HSG A
0.100	98	Paved parking, HSG A
0.180	76	Weighted Average
0.080		44.44% Pervious Area
0.100		55.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 6S: Area 6



Summary for Subcatchment 10S: South Bypass

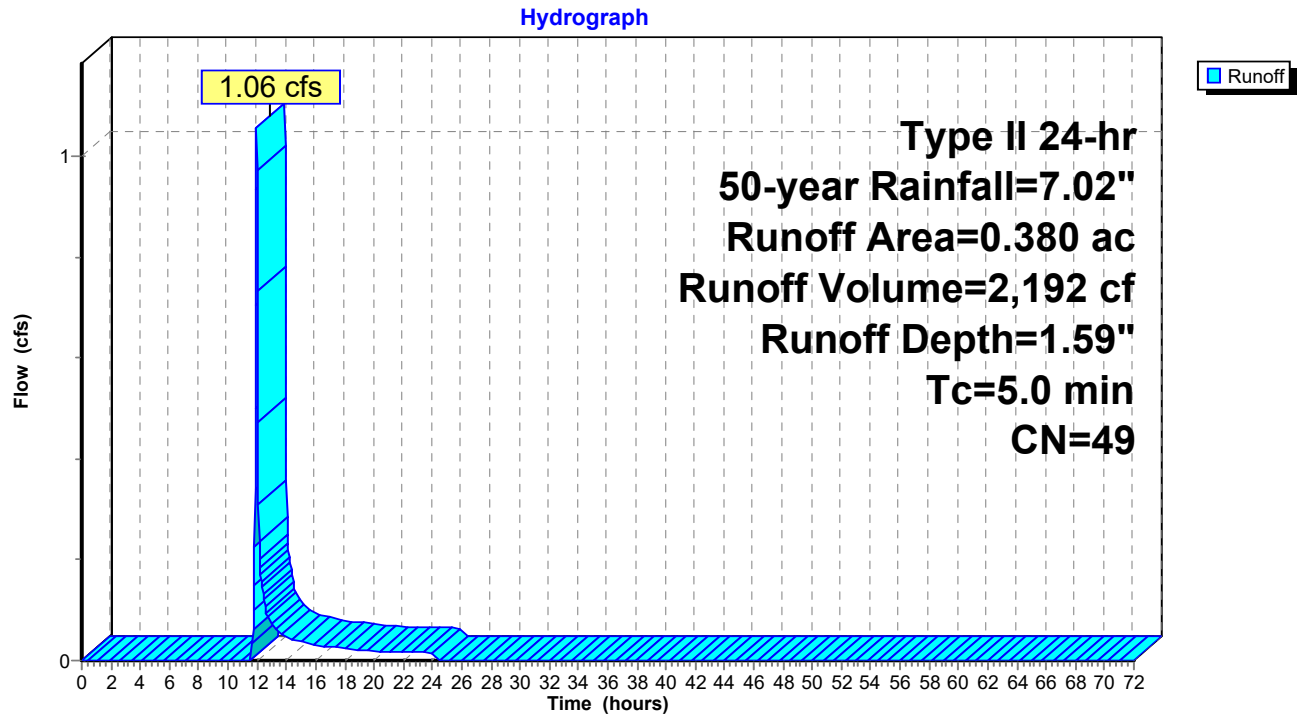
Runoff = 1.06 cfs @ 11.97 hrs, Volume= 2,192 cf, Depth= 1.59"
Routed to Link 1L : Outfall #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 50-year Rainfall=7.02"

Area (ac)	CN	Description
0.290	49	50-75% Grass cover, Fair, HSG A
0.070	36	Woods, Fair, HSG A
0.020	98	Paved parking, HSG A
0.380	49	Weighted Average
0.360		94.74% Pervious Area
0.020		5.26% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 10S: South Bypass



Summary for Reach 1R: Southern Trunk Line

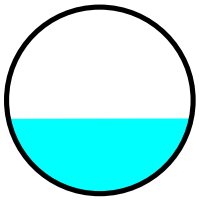
[52] Hint: Inlet/Outlet conditions not evaluated
[79] Warning: Submerged Pond 1DP Primary device # 1 INLET by 0.66'
[81] Warning: Exceeded Pond 2DP by 1.71' @ 0.00 hrs
[79] Warning: Submerged Pond 5FP Primary device # 1 INLET by 2.26'
[79] Warning: Submerged Pond 6FP Primary device # 1 INLET by 2.26'

Inflow Area = 187,308 sf, 64.19% Impervious, Inflow Depth > 4.35" for 50-year event
Inflow = 6.10 cfs @ 11.98 hrs, Volume= 67,917 cf
Outflow = 5.47 cfs @ 12.08 hrs, Volume= 67,913 cf, Atten= 10%, Lag= 6.2 min
Routed to Link 1L : Outfall #1

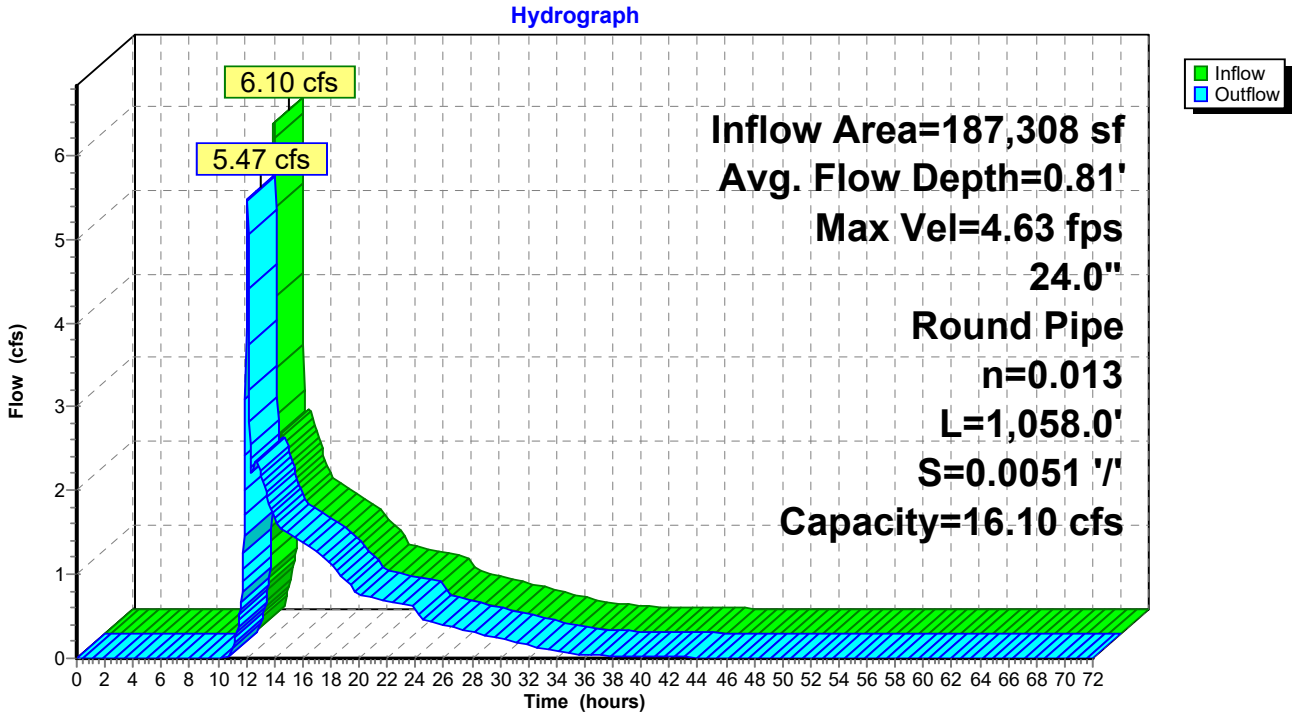
Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Max. Velocity= 4.63 fps, Min. Travel Time= 3.8 min
Avg. Velocity = 1.32 fps, Avg. Travel Time= 13.4 min

Peak Storage= 1,253 cf @ 12.02 hrs
Average Depth at Peak Storage= 0.81' , Surface Width= 1.96'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 16.10 cfs

24.0" Round Pipe
n= 0.013
Length= 1,058.0' Slope= 0.0051 '/'
Inlet Invert= 695.46', Outlet Invert= 690.10'



Reach 1R: Southern Trunk Line



Summary for Pond 1DP: Detention Pond 1

[44] Hint: Outlet device #2 is below defined storage
[79] Warning: Submerged Pond 1FP Primary device # 1 INLET by 3.03'

Inflow Area = 64,469 sf, 43.92% Impervious, Inflow Depth = 3.36" for 50-year event
Inflow = 9.28 cfs @ 11.97 hrs, Volume= 18,038 cf
Outflow = 0.76 cfs @ 12.54 hrs, Volume= 18,038 cf, Atten= 92%, Lag= 33.9 min
Primary = 0.76 cfs @ 12.54 hrs, Volume= 18,038 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 699.03' @ 12.54 hrs Surf.Area= 4,168 sf Storage= 7,609 cf

Plug-Flow detention time= 94.5 min calculated for 18,030 cf (100% of inflow)
Center-of-Mass det. time= 94.4 min (931.4 - 837.0)

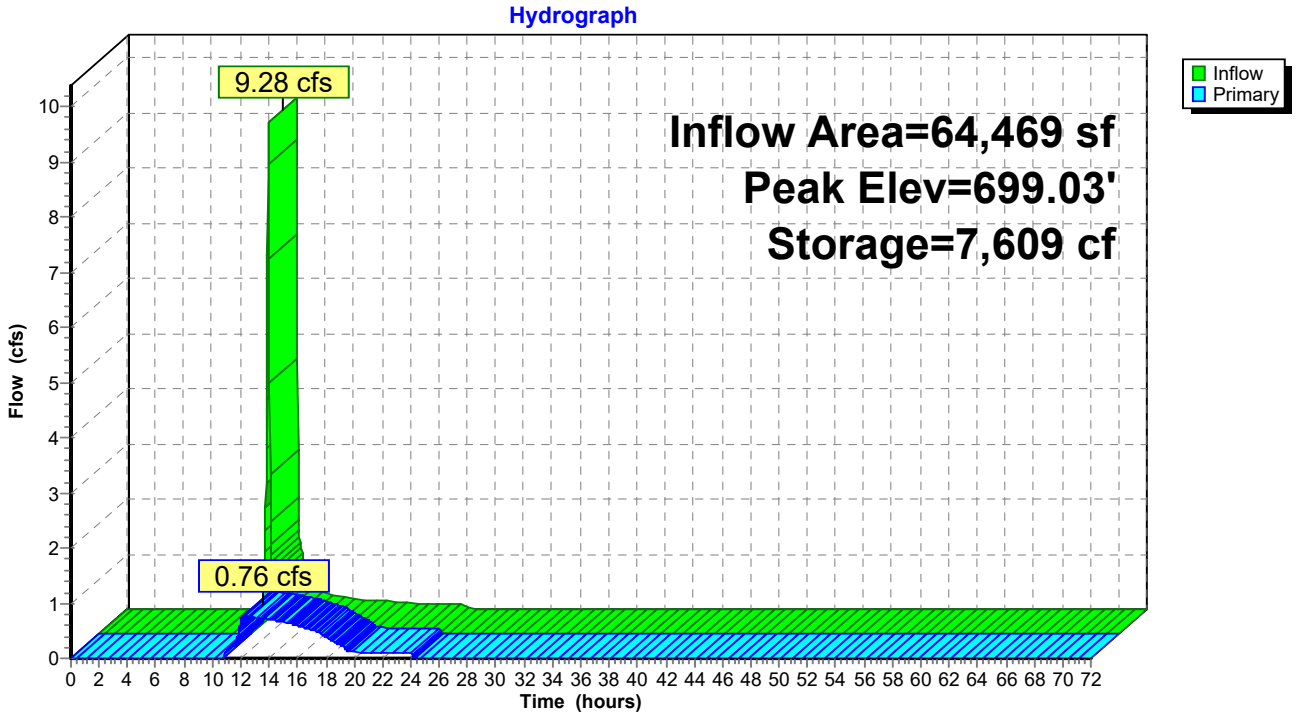
Volume	Invert	Avail.Storage	Storage Description
#1	695.80'	19,432 cf	**Custom Stage Data (Prismatic)** Listed below

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.80	0	0	0
696.00	285	29	29
697.00	2,098	1,192	1,220
698.00	3,151	2,625	3,845
699.00	4,138	3,645	7,489
700.00	5,311	4,725	12,214
701.00	9,125	7,218	19,432

Device	Routing	Invert	Outlet Devices
#1	Primary	695.60'	**18.0" Round Culvert** L= 28.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 695.60' / 695.46' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	695.60'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.76 cfs @ 12.54 hrs HW=699.03' TW=565.00' (Fixed TW Elev= 565.00')
└─**1=Culvert** (Passes 0.76 cfs of 13.92 cfs potential flow)
  ├─**2=Orifice/Grate** (Orifice Controls 0.76 cfs @ 8.69 fps)
  └─**3=Orifice/Grate** (Controls 0.00 cfs)

Pond 1DP: Detention Pond 1



Summary for Pond 1FP: FocalPoint 1

[92] Warning: Device #3 is above defined storage
[93] Warning: Storage range exceeded by 0.01'

Inflow Area = 64,469 sf, 43.92% Impervious, Inflow Depth = 3.43" for 50-year event
Inflow = 9.34 cfs @ 11.96 hrs, Volume= 18,408 cf
Outflow = 9.28 cfs @ 11.97 hrs, Volume= 18,038 cf, Atten= 1%, Lag= 0.5 min
Primary = 9.28 cfs @ 11.97 hrs, Volume= 18,038 cf
Routed to Pond 1DP : Detention Pond 1

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 700.01' @ 11.97 hrs Surf.Area= 1,109 sf Storage= 815 cf

Plug-Flow detention time= 17.9 min calculated for 18,038 cf (98% of inflow)
Center-of-Mass det. time= 6.0 min (837.0 - 831.0)

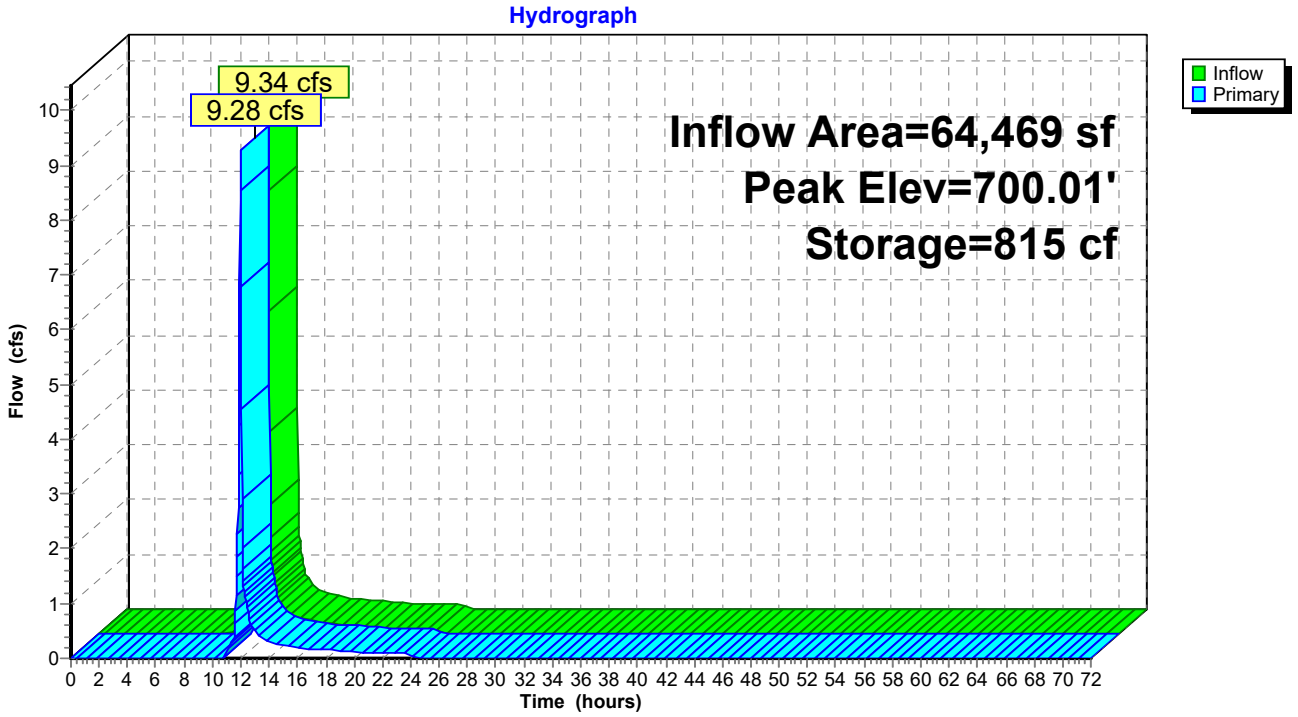
Volume	Invert	Avail.Storage	Storage Description
#1	696.00'	815 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
696.00	237	0.0	0	0
699.00	237	20.0	142	142
700.00	1,109	100.0	673	815

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 40.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 695.80' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**10.0' long x 18.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=9.21 cfs @ 11.97 hrs HW=700.00' (Free Discharge)
└**1=Culvert** (Passes 9.20 cfs of 15.35 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 9.20 cfs @ 2.32 fps)
└**3=Broad-Crested Rectangular Weir** (Weir Controls 0.01 cfs @ 0.18 fps)

Pond 1FP: FocalPoint 1



Summary for Pond 2DP: Detention Pond 2

[79] Warning: Submerged Pond 2FP Primary device # 1 INLET by 2.63'
[79] Warning: Submerged Pond 3FP Primary device # 1 INLET by 1.13'
[79] Warning: Submerged Pond 4FP Primary device # 1 INLET by 1.13'

Inflow Area = 95,832 sf, 79.09% Impervious, Inflow Depth = 5.26" for 50-year event
Inflow = 20.45 cfs @ 11.96 hrs, Volume= 41,974 cf
Outflow = 1.27 cfs @ 12.64 hrs, Volume= 40,991 cf, Atten= 94%, Lag= 40.6 min
Primary = 1.27 cfs @ 12.64 hrs, Volume= 40,991 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 697.13' @ 12.64 hrs Surf.Area= 8,711 sf Storage= 24,747 cf

Plug-Flow detention time= 433.5 min calculated for 40,974 cf (98% of inflow)
Center-of-Mass det. time= 420.2 min (1,223.6 - 803.4)

Volume	Invert	Avail.Storage	Storage Description
#1A	693.75'	3,019 cf	**38.12'W x 114.25'L x 4.79'H Field A** 20,877 cf Overall - 13,330 cf Embedded = 7,547 cf x 40.0% Voids
#2A	694.00'	12,663 cf	**Ferguson R-Tank HD 2.5** x 1222 Inside #1 Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf 1222 Chambers in 26 Rows
#3B	693.75'	3,019 cf	**38.12'W x 114.25'L x 4.79'H Field B** 20,877 cf Overall - 13,330 cf Embedded = 7,547 cf x 40.0% Voids
#4B	694.00'	12,663 cf	**Ferguson R-Tank HD 2.5** x 1222 Inside #3 Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf 1222 Chambers in 26 Rows
		31,364 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 10.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 693.20' S= 0.0800 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	694.00'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	697.00'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=1.26 cfs @ 12.64 hrs HW=697.13' TW=565.00' (Fixed TW Elev= 565.00')
└─**1=Culvert** (Passes 0.72 cfs of 13.13 cfs potential flow)
└─**2=Orifice/Grate** (Orifice Controls 0.72 cfs @ 8.29 fps)
└─**3=Broad-Crested Rectangular Weir** (Weir Controls 0.54 cfs @ 1.02 fps)

Pond 2DP: Detention Pond 2 - Chamber Wizard Field A

Chamber Model = Ferguson R-Tank HD 2.5 (Ferguson R-Tank HD)
Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf
Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf

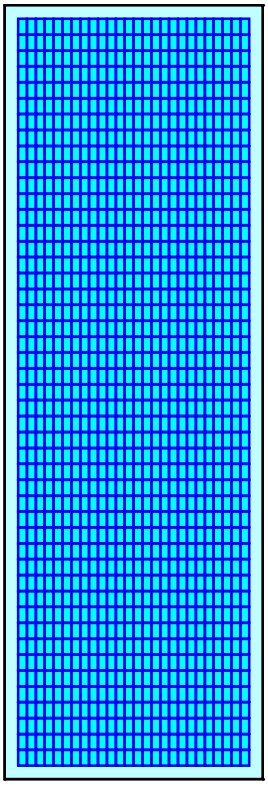
47 Chambers/Row x 2.35' Long = 110.25' Row Length +24.0" End Stone x 2 = 114.25' Base Length
26 Rows x 15.7" Wide + 24.0" Side Stone x 2 = 38.12' Base Width
3.0" Stone Base + 42.5" Chamber Height + 12.0" Stone Cover = 4.79' Field Height

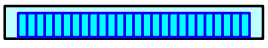
1,222 Chambers x 10.4 cf = 12,663.1 cf Chamber Storage
1,222 Chambers x 10.9 cf = 13,329.6 cf Displacement

20,876.7 cf Field - 13,329.6 cf Chambers = 7,547.2 cf Stone x 40.0% Voids = 3,018.9 cf Stone Storage

Chamber Storage + Stone Storage = 15,682.0 cf = 0.360 af
Overall Storage Efficiency = 75.1%
Overall System Size = 114.25' x 38.12' x 4.79'

1,222 Chambers
773.2 cy Field
279.5 cy Stone





Pond 2DP: Detention Pond 2 - Chamber Wizard Field B

Chamber Model = Ferguson R-Tank HD 2.5 (Ferguson R-Tank HD)
Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf
Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf

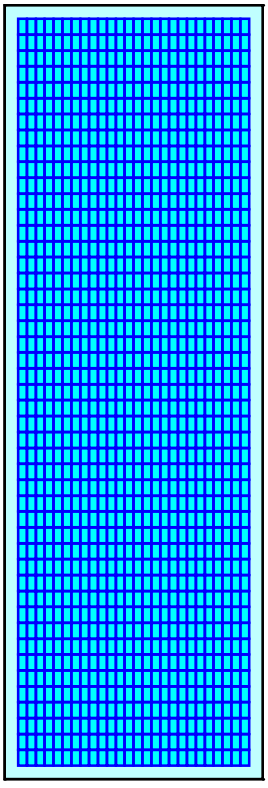
47 Chambers/Row x 2.35' Long = 110.25' Row Length +24.0" End Stone x 2 = 114.25' Base Length
26 Rows x 15.7" Wide + 24.0" Side Stone x 2 = 38.12' Base Width
3.0" Stone Base + 42.5" Chamber Height + 12.0" Stone Cover = 4.79' Field Height

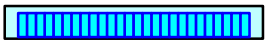
1,222 Chambers x 10.4 cf = 12,663.1 cf Chamber Storage
1,222 Chambers x 10.9 cf = 13,329.6 cf Displacement

20,876.7 cf Field - 13,329.6 cf Chambers = 7,547.2 cf Stone x 40.0% Voids = 3,018.9 cf Stone Storage

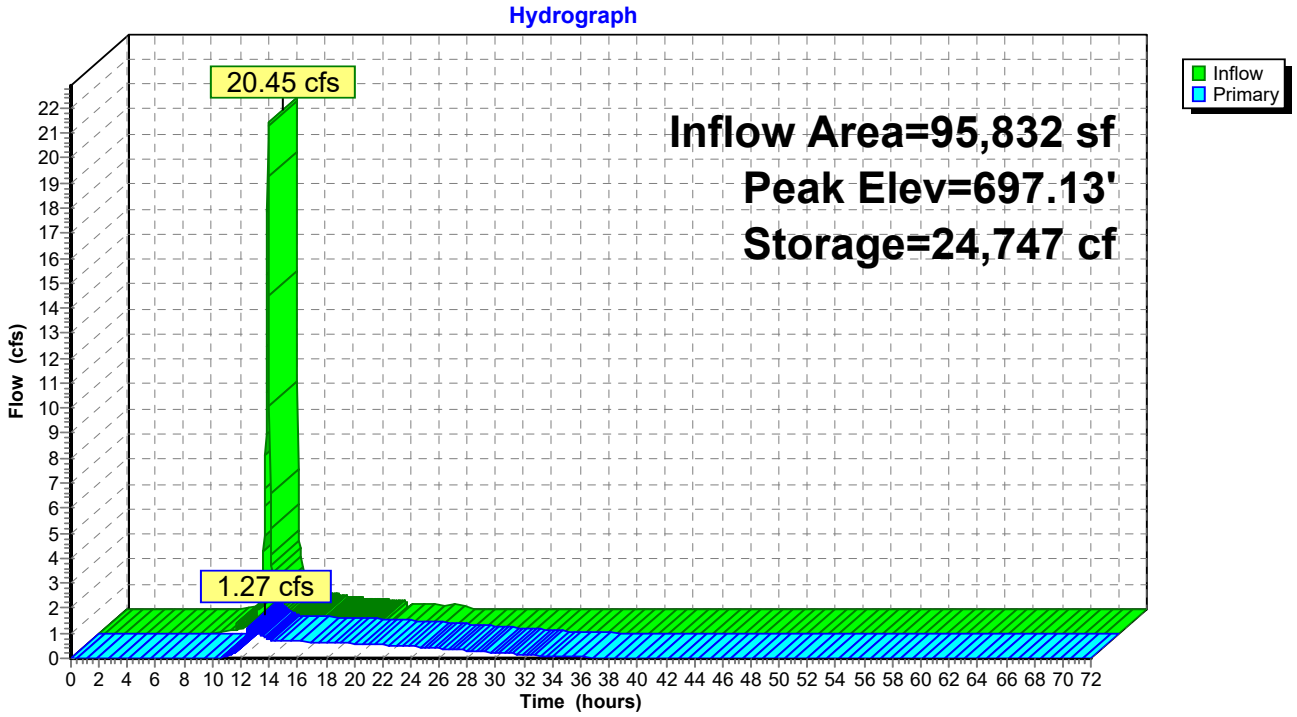
Chamber Storage + Stone Storage = 15,682.0 cf = 0.360 af
Overall Storage Efficiency = 75.1%
Overall System Size = 114.25' x 38.12' x 4.79'

1,222 Chambers
773.2 cy Field
279.5 cy Stone





Pond 2DP: Detention Pond 2



Summary for Pond 2FP: FocalPoint 2

Inflow Area = 31,363 sf, 83.33% Impervious, Inflow Depth = 5.84" for 50-year event
Inflow = 6.99 cfs @ 11.96 hrs, Volume= 15,271 cf
Outflow = 6.86 cfs @ 11.97 hrs, Volume= 14,549 cf, Atten= 2%, Lag= 0.7 min
Primary = 6.86 cfs @ 11.97 hrs, Volume= 14,549 cf
Routed to Pond 2DP : Detention Pond 2

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 698.41' @ 11.97 hrs Surf.Area= 1,277 sf Storage= 1,206 cf

Plug-Flow detention time= 48.7 min calculated for 14,542 cf (95% of inflow)
Center-of-Mass det. time= 20.8 min (796.3 - 775.5)

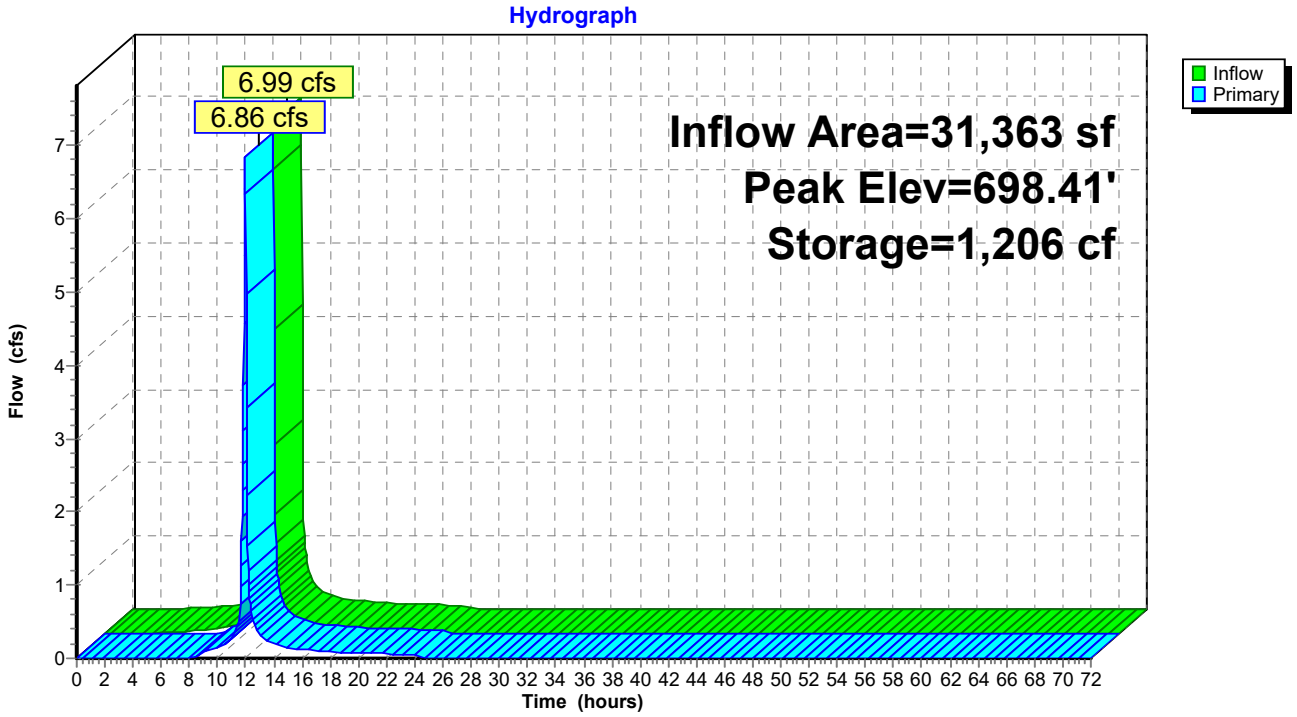
Volume	Invert	Avail.Storage	Storage Description
#1	694.50'	1,317 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.50	539	0.0	0	0
697.50	539	20.0	323	323
698.00	1,056	100.0	399	722
698.50	1,323	100.0	595	1,317

Device	Routing	Invert	Outlet Devices
#1	Primary	694.50'	**18.0" Round Culvert** L= 28.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.50' / 694.00' S= 0.0179 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	698.00'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=6.84 cfs @ 11.97 hrs HW=698.41' (Free Discharge)
↑**1=Culvert** (Passes 6.84 cfs of 15.13 cfs potential flow)
↑**2=Orifice/Grate** (Weir Controls 6.84 cfs @ 2.10 fps)

Pond 2FP: FocalPoint 2



Summary for Pond 3FP: FocalPoint 3

Inflow Area = 16,553 sf, 71.05% Impervious, Inflow Depth = 5.16" for 50-year event
Inflow = 3.40 cfs @ 11.96 hrs, Volume= 7,116 cf
Outflow = 3.34 cfs @ 11.97 hrs, Volume= 6,396 cf, Atten= 2%, Lag= 0.7 min
Primary = 3.34 cfs @ 11.97 hrs, Volume= 6,396 cf
Routed to Pond 2DP : Detention Pond 2

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 699.76' @ 11.97 hrs Surf.Area= 956 sf Storage= 951 cf

Plug-Flow detention time= 79.0 min calculated for 6,393 cf (90% of inflow)
Center-of-Mass det. time= 27.6 min (821.2 - 793.6)

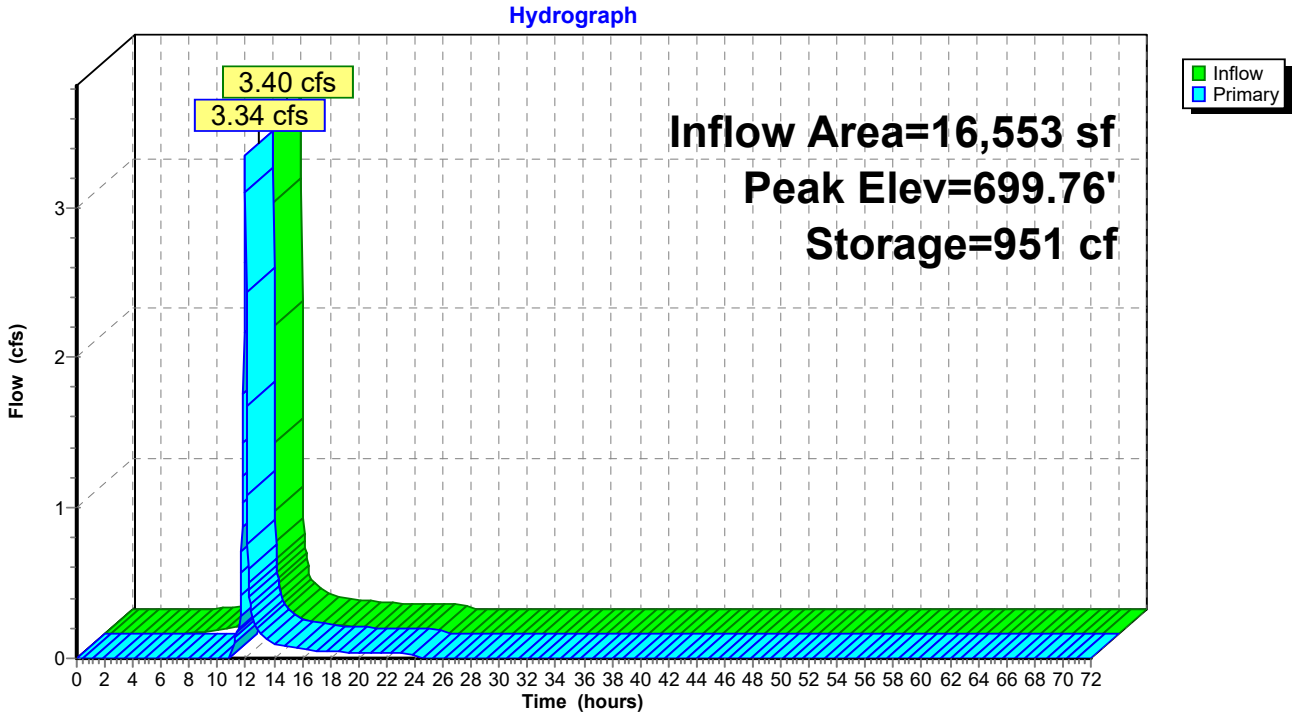
Volume	Invert	Avail.Storage	Storage Description
#1	696.00'	1,197 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
696.00	602	0.0	0	0
699.00	602	20.0	361	361
700.00	1,070	100.0	836	1,197

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 80.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 694.00' S= 0.0250 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=3.34 cfs @ 11.97 hrs HW=699.76' (Free Discharge)
↑**1=Culvert** (Passes 3.34 cfs of 14.75 cfs potential flow)
↑**2=Orifice/Grate** (Weir Controls 3.34 cfs @ 1.66 fps)

Pond 3FP: FocalPoint 3



Summary for Pond 4FP: FocalPoint 4

[92] Warning: Device #2 is above defined storage
[92] Warning: Device #3 is above defined storage
[93] Warning: Storage range exceeded by 1.04'
[88] Warning: Qout>Qin may require smaller dt or Finer Routing
[85] Warning: Oscillations may require smaller dt or Finer Routing (severity=229)

Inflow Area = 47,916 sf, 79.09% Impervious, Inflow Depth = 5.61" for 50-year event
Inflow = 10.43 cfs @ 11.96 hrs, Volume= 22,412 cf
Outflow = 10.44 cfs @ 11.95 hrs, Volume= 21,030 cf, Atten= 0%, Lag= 0.0 min
Primary = 10.44 cfs @ 11.95 hrs, Volume= 21,030 cf
Routed to Pond 2DP : Detention Pond 2

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 700.04' @ 11.95 hrs Surf.Area= 1,491 sf Storage= 1,389 cf

Plug-Flow detention time= 55.8 min calculated for 21,030 cf (94% of inflow)
Center-of-Mass det. time= 20.9 min (803.0 - 782.0)

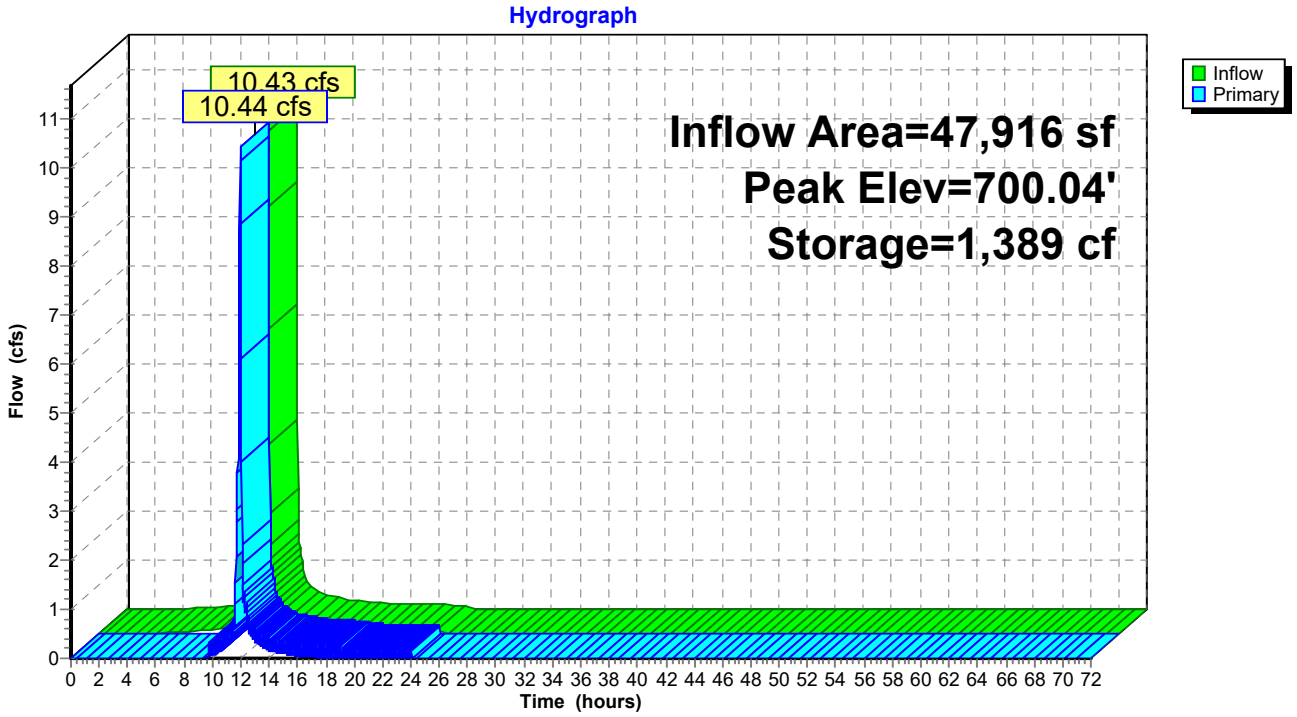
Volume	Invert	Avail.Storage	Storage Description
#1	695.00'	1,389 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.00	585	0.0	0	0
698.00	585	20.0	351	351
699.00	1,491	100.0	1,038	1,389

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 23.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 695.88' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**6.0' long x 133.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=10.21 cfs @ 11.95 hrs HW=700.04' (Free Discharge)
- **1=Culvert** (Passes 10.09 cfs of 15.43 cfs potential flow)
  - **2=Orifice/Grate** (Weir Controls 10.09 cfs @ 2.40 fps)
- **3=Broad-Crested Rectangular Weir** (Weir Controls 0.11 cfs @ 0.51 fps)

Pond 4FP: FocalPoint 4



Summary for Pond 5FP: FocalPoint 5

Inflow Area = 19,166 sf, 61.36% Impervious, Inflow Depth = 4.60" for 50-year event
Inflow = 3.61 cfs @ 11.96 hrs, Volume= 7,351 cf
Outflow = 3.53 cfs @ 11.97 hrs, Volume= 6,723 cf, Atten= 2%, Lag= 0.8 min
Primary = 3.53 cfs @ 11.97 hrs, Volume= 6,723 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 697.77' @ 11.97 hrs Surf.Area= 1,140 sf Storage= 900 cf

Plug-Flow detention time= 66.4 min calculated for 6,723 cf (91% of inflow)
Center-of-Mass det. time= 21.3 min (827.6 - 806.3)

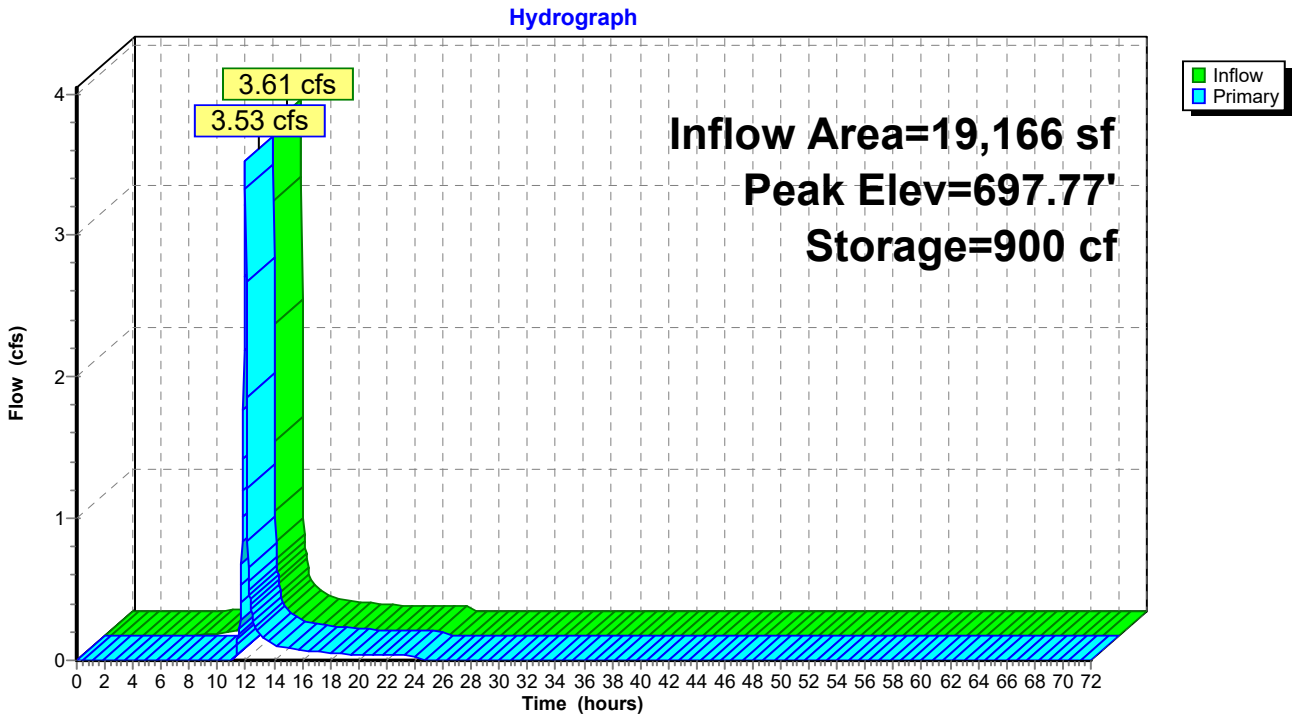
Volume	Invert	Avail.Storage	Storage Description
#1	694.00'	2,779 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.00	472	0.0	0	0
697.00	472	20.0	283	283
698.00	1,344	100.0	908	1,191
699.00	1,832	100.0	1,588	2,779

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 24.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 691.39' S= 0.1088 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	697.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	698.50'	**6.0' long x 9.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.46 2.55 2.70 2.69 2.68 2.68 2.67 2.64 2.64 2.64 2.65 2.64 2.65 2.65 2.66 2.67 2.69

Primary OutFlow Max=3.49 cfs @ 11.97 hrs HW=697.76' (Free Discharge)
└**1=Culvert** (Passes 3.49 cfs of 14.77 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 3.49 cfs @ 1.68 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 5FP: FocalPoint 5



Summary for Pond 6FP: FocalPoint 6

Inflow Area = 7,841 sf, 55.56% Impervious, Inflow Depth = 4.28" for 50-year event
Inflow = 1.39 cfs @ 11.96 hrs, Volume= 2,793 cf
Outflow = 1.34 cfs @ 11.98 hrs, Volume= 2,165 cf, Atten= 4%, Lag= 1.1 min
Primary = 1.34 cfs @ 11.98 hrs, Volume= 2,165 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 697.64' @ 11.98 hrs Surf.Area= 1,029 sf Storage= 762 cf

Plug-Flow detention time= 130.7 min calculated for 2,165 cf (78% of inflow)
Center-of-Mass det. time= 42.8 min (856.1 - 813.3)

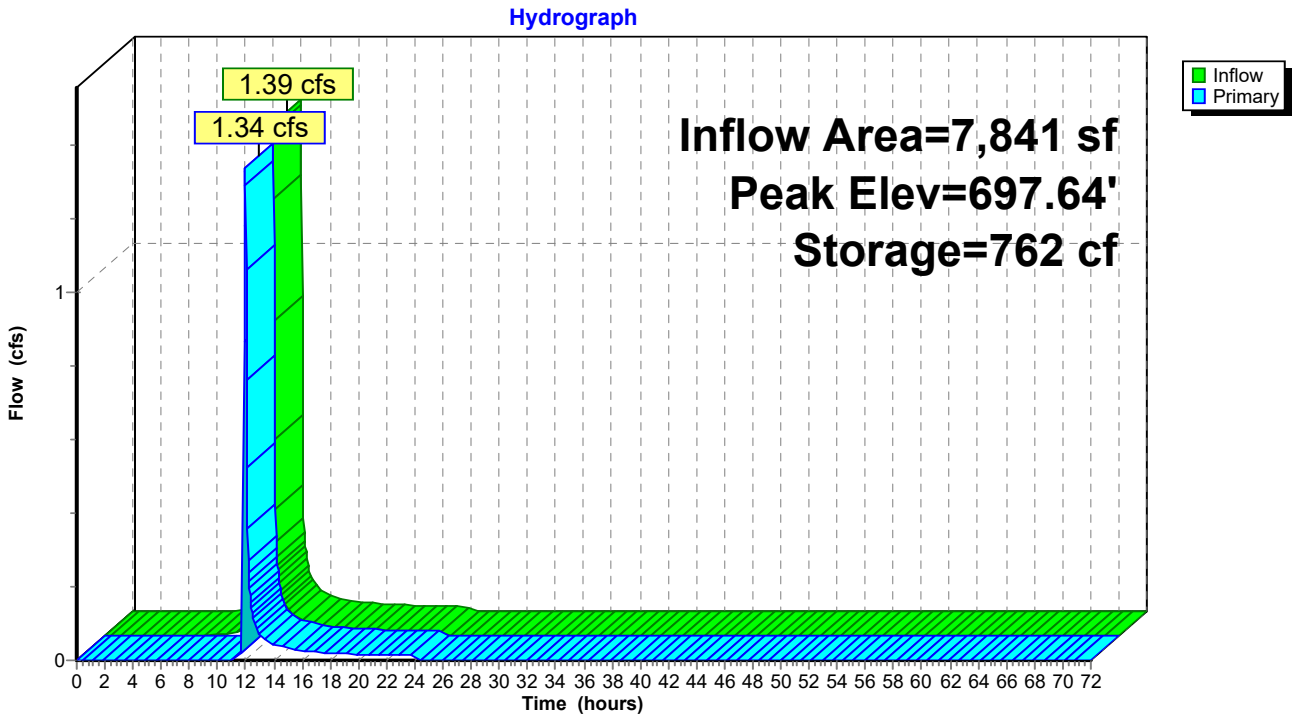
Volume	Invert	Avail.Storage	Storage Description
#1	694.00'	2,779 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.00	472	0.0	0	0
697.00	472	20.0	283	283
698.00	1,344	100.0	908	1,191
699.00	1,832	100.0	1,588	2,779

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 24.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 690.87' S= 0.1304 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	697.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	698.50'	**6.0' long x 9.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.46 2.55 2.70 2.69 2.68 2.68 2.67 2.64 2.64 2.64 2.65 2.64 2.65 2.65 2.66 2.67 2.69

Primary OutFlow Max=1.30 cfs @ 11.98 hrs HW=697.64' (Free Discharge)
└**1=Culvert** (Passes 1.30 cfs of 14.46 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 1.30 cfs @ 1.21 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 6FP: FocalPoint 6

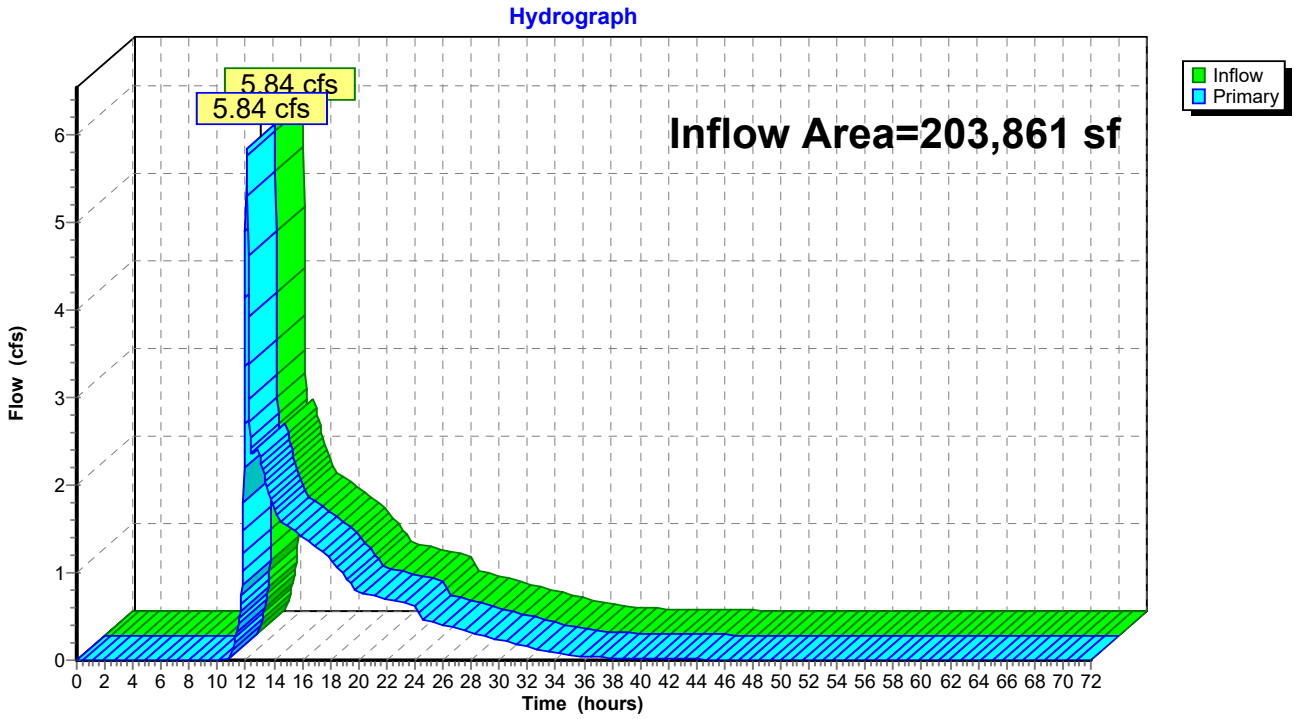


Summary for Link 1L: Outfall #1

Inflow Area = 203,861 sf, 59.40% Impervious, Inflow Depth > 4.13" for 50-year event
Inflow = 5.84 cfs @ 12.07 hrs, Volume= 70,105 cf
Primary = 5.84 cfs @ 12.07 hrs, Volume= 70,105 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs

Link 1L: Outfall #1



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Area 1 Runoff Area=1.480 ac 43.92% Impervious Runoff Depth=4.04"
Tc=5.0 min CN=68 Runoff=10.98 cfs 21,720 cf

Subcatchment2S: Area 2 Runoff Area=0.720 ac 83.33% Impervious Runoff Depth=6.58"
Tc=5.0 min CN=90 Runoff=7.80 cfs 17,196 cf

Subcatchment3S: Area 3 Runoff Area=0.380 ac 71.05% Impervious Runoff Depth=5.87"
Tc=5.0 min CN=84 Runoff=3.84 cfs 8,104 cf

Subcatchment4S: Area 4 Runoff Area=1.100 ac 79.09% Impervious Runoff Depth=6.34"
Tc=5.0 min CN=88 Runoff=11.69 cfs 25,330 cf

Subcatchment5S: Area 5 Runoff Area=0.440 ac 61.36% Impervious Runoff Depth=5.29"
Tc=5.0 min CN=79 Runoff=4.12 cfs 8,456 cf

Subcatchment6S: Area 6 Runoff Area=0.180 ac 55.56% Impervious Runoff Depth=4.95"
Tc=5.0 min CN=76 Runoff=1.60 cfs 3,234 cf

Subcatchment10S: South Bypass Runoff Area=0.380 ac 5.26% Impervious Runoff Depth=2.01"
Tc=5.0 min CN=49 Runoff=1.37 cfs 2,773 cf

Reach 1R: Southern Trunk Line Avg. Flow Depth=0.87' Max Vel=4.80 fps Inflow=6.90 cfs 78,595 cf
24.0" Round Pipe n=0.013 L=1,058.0' S=0.0051 '/' Capacity=16.10 cfs Outflow=6.28 cfs 78,591 cf

Pond 1DP: Detention Pond 1 Peak Elev=699.40' Storage=9,358 cf Inflow=11.00 cfs 21,350 cf
Outflow=0.80 cfs 21,350 cf

Pond 1FP: FocalPoint 1 Peak Elev=700.06' Storage=815 cf Inflow=10.98 cfs 21,720 cf
Outflow=11.00 cfs 21,350 cf

Pond 2DP: Detention Pond 2 Peak Elev=697.31' Storage=26,113 cf Inflow=23.05 cfs 47,798 cf
Outflow=2.74 cfs 46,812 cf

Pond 2FP: FocalPoint 2 Peak Elev=698.45' Storage=1,247 cf Inflow=7.80 cfs 17,196 cf
Outflow=7.67 cfs 16,473 cf

Pond 3FP: FocalPoint 3 Peak Elev=699.78' Storage=972 cf Inflow=3.84 cfs 8,104 cf
Outflow=3.78 cfs 7,383 cf

Pond 4FP: FocalPoint 4 Peak Elev=700.08' Storage=1,389 cf Inflow=11.69 cfs 25,330 cf
Outflow=11.67 cfs 23,942 cf

Pond 5FP: FocalPoint 5 Peak Elev=697.79' Storage=929 cf Inflow=4.12 cfs 8,456 cf
Outflow=4.03 cfs 7,828 cf

Pond 6FP: FocalPoint 6 Peak Elev=697.65' Storage=777 cf Inflow=1.60 cfs 3,234 cf
Outflow=1.54 cfs 2,606 cf

Link 1L: Outfall #1 Inflow=6.81 cfs 81,364 cf
Primary=6.81 cfs 81,364 cf

Total Runoff Area = 203,861 sf Runoff Volume = 86,811 cf Average Runoff Depth = 5.11"
40.60% Pervious = 82,764 sf 59.40% Impervious = 121,097 sf

Summary for Subcatchment 1S: Area 1

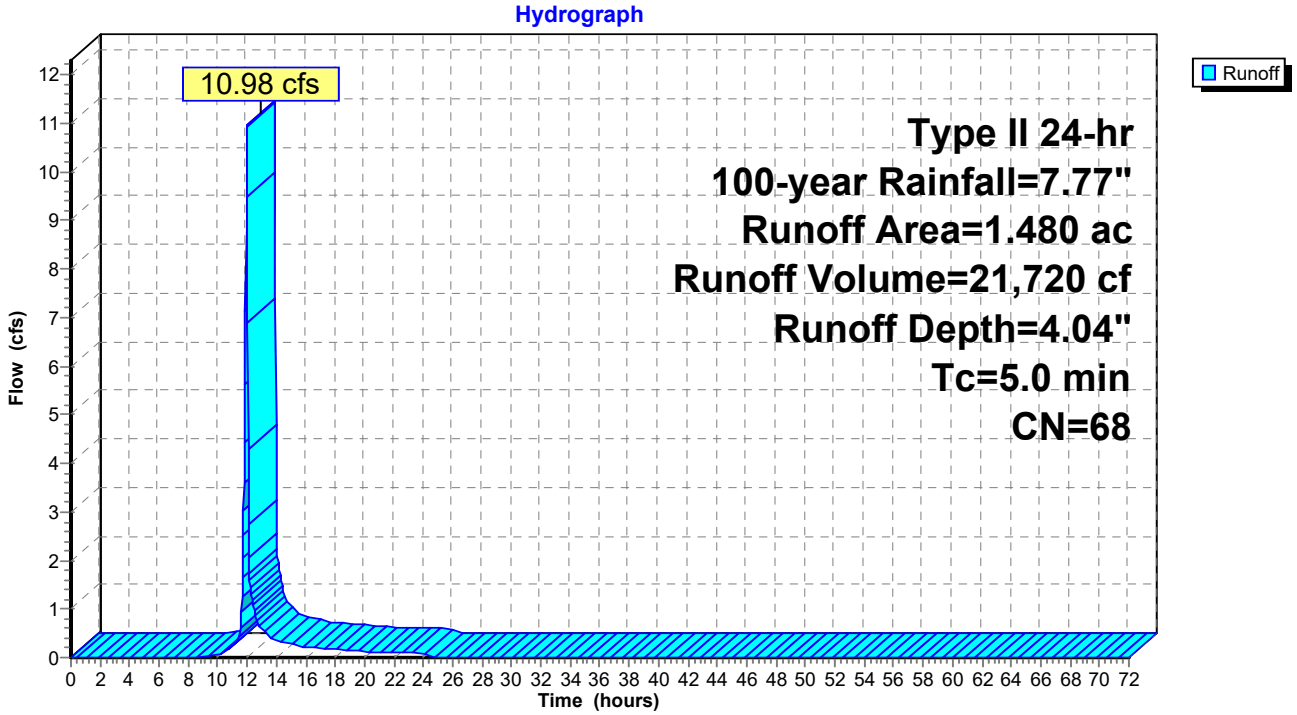
Runoff = 10.98 cfs @ 11.96 hrs, Volume= 21,720 cf, Depth= 4.04"
Routed to Pond 1FP : FocalPoint 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 100-year Rainfall=7.77"

Area (ac)	CN	Description
0.510	49	50-75% Grass cover, Fair, HSG A
0.320	36	Woods, Fair, HSG A
0.650	98	Paved parking, HSG A
1.480	68	Weighted Average
0.830		56.08% Pervious Area
0.650		43.92% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 1S: Area 1



Summary for Subcatchment 2S: Area 2

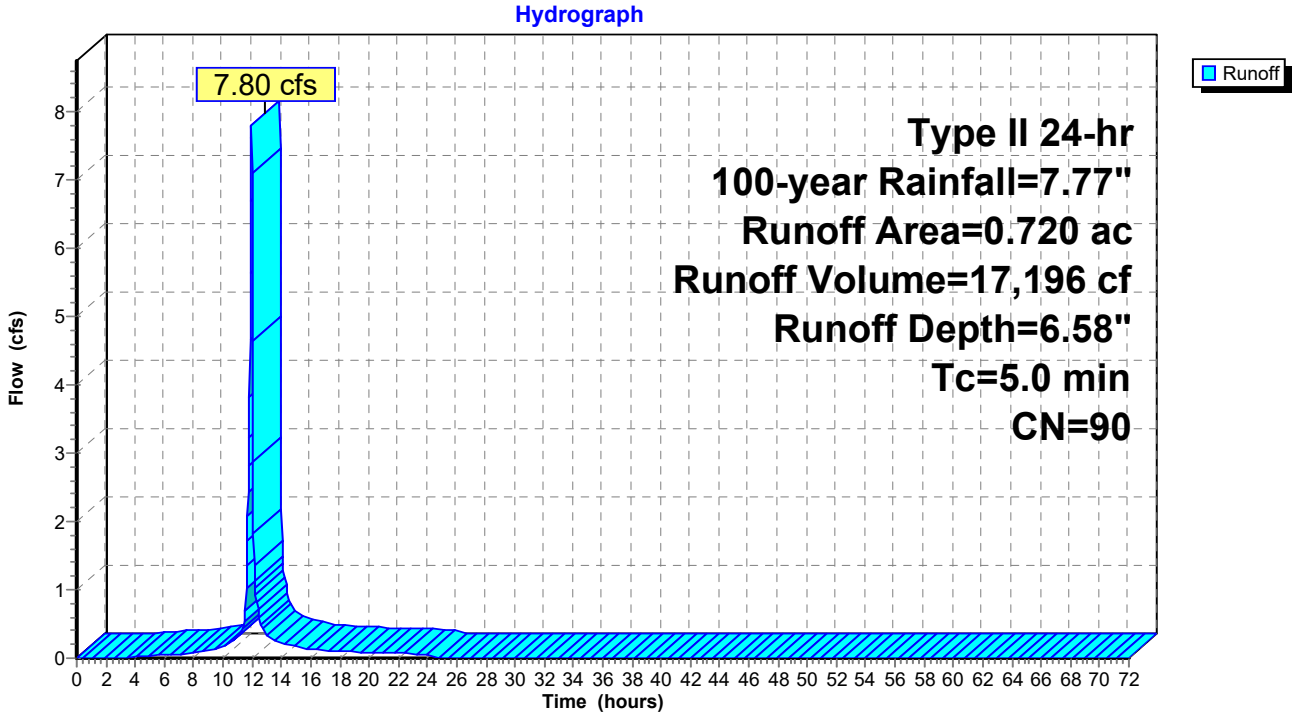
Runoff = 7.80 cfs @ 11.96 hrs, Volume= 17,196 cf, Depth= 6.58"
Routed to Pond 2FP : FocalPoint 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 100-year Rainfall=7.77"

Area (ac)	CN	Description
0.120	49	50-75% Grass cover, Fair, HSG A
0.600	98	Paved parking, HSG A
0.720	90	Weighted Average
0.120		16.67% Pervious Area
0.600		83.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 2S: Area 2



Summary for Subcatchment 3S: Area 3

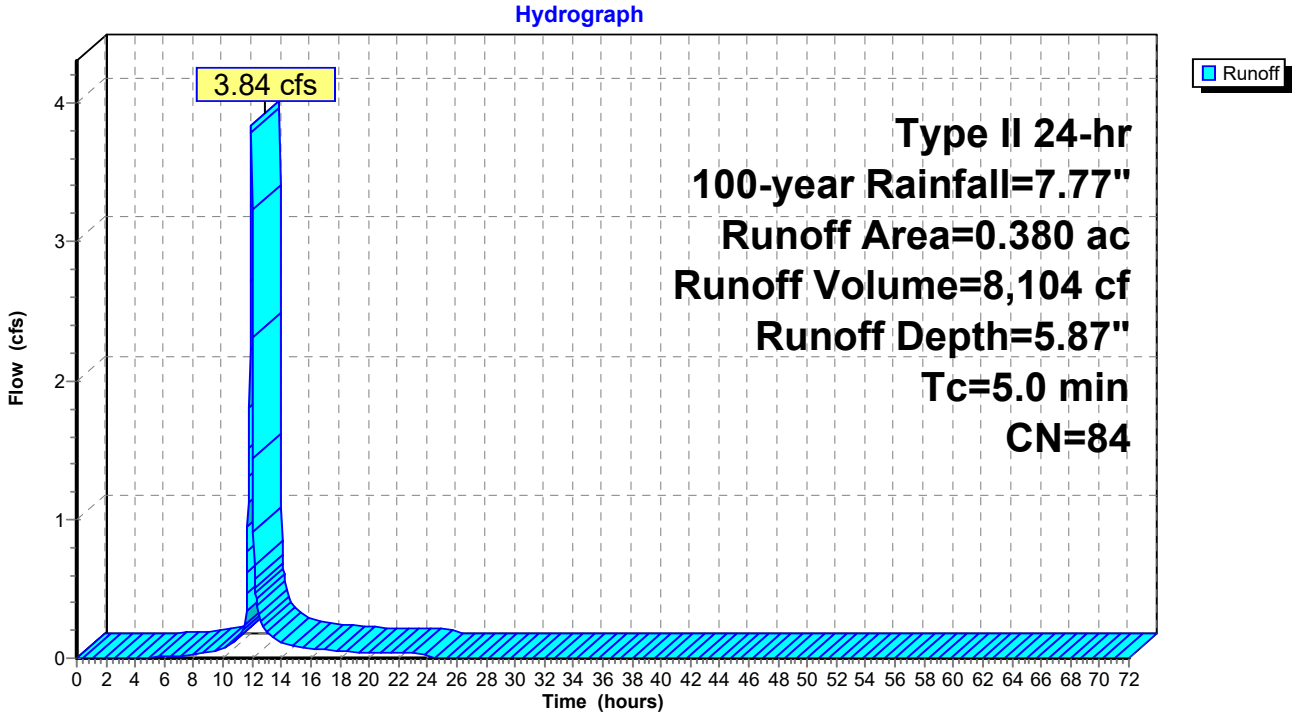
Runoff = 3.84 cfs @ 11.96 hrs, Volume= 8,104 cf, Depth= 5.87"
Routed to Pond 3FP : FocalPoint 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 100-year Rainfall=7.77"

Area (ac)	CN	Description
0.110	49	50-75% Grass cover, Fair, HSG A
0.270	98	Paved parking, HSG A
0.380	84	Weighted Average
0.110		28.95% Pervious Area
0.270		71.05% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 3S: Area 3



Summary for Subcatchment 4S: Area 4

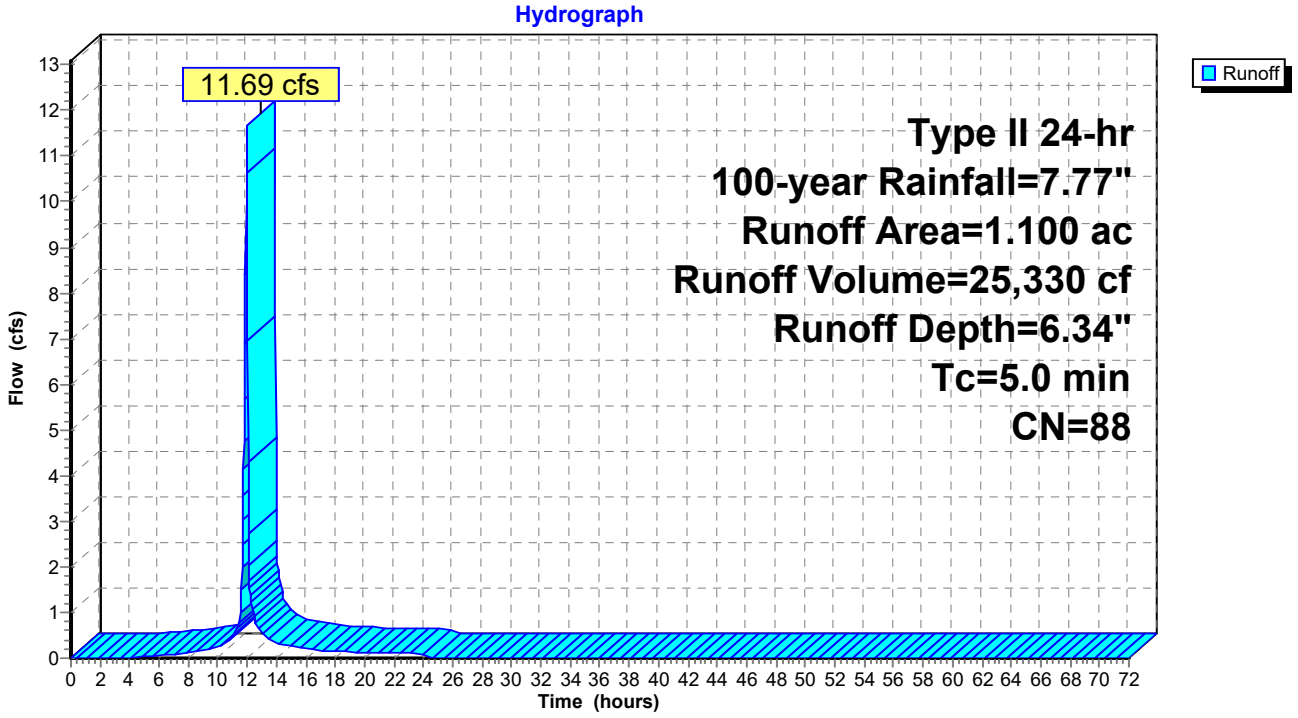
Runoff = 11.69 cfs @ 11.96 hrs, Volume= 25,330 cf, Depth= 6.34"
Routed to Pond 4FP : FocalPoint 4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 100-year Rainfall=7.77"

Area (ac)	CN	Description
0.230	49	50-75% Grass cover, Fair, HSG A
0.870	98	Paved parking, HSG A
1.100	88	Weighted Average
0.230		20.91% Pervious Area
0.870		79.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 4S: Area 4



Summary for Subcatchment 5S: Area 5

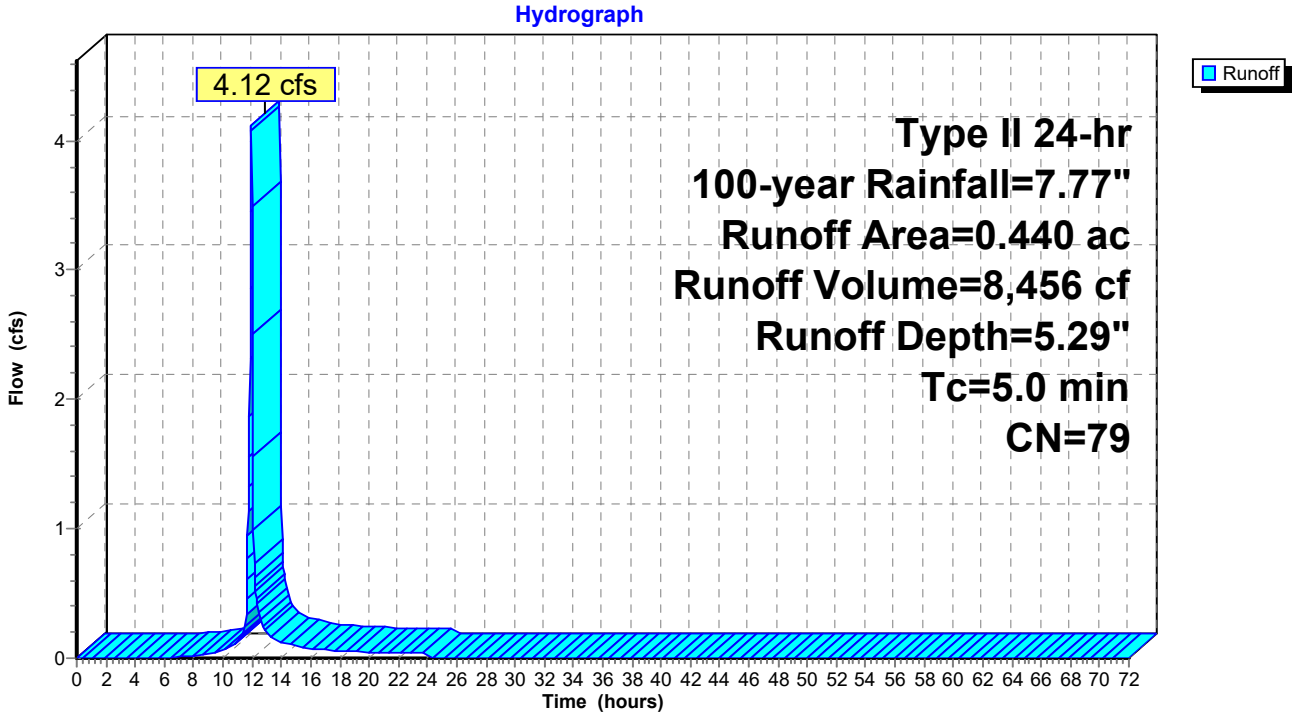
Runoff = 4.12 cfs @ 11.96 hrs, Volume= 8,456 cf, Depth= 5.29"
Routed to Pond 5FP : FocalPoint 5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 100-year Rainfall=7.77"

Area (ac)	CN	Description
0.170	49	50-75% Grass cover, Fair, HSG A
0.270	98	Paved parking, HSG A
0.440	79	Weighted Average
0.170		38.64% Pervious Area
0.270		61.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 5S: Area 5



Summary for Subcatchment 6S: Area 6

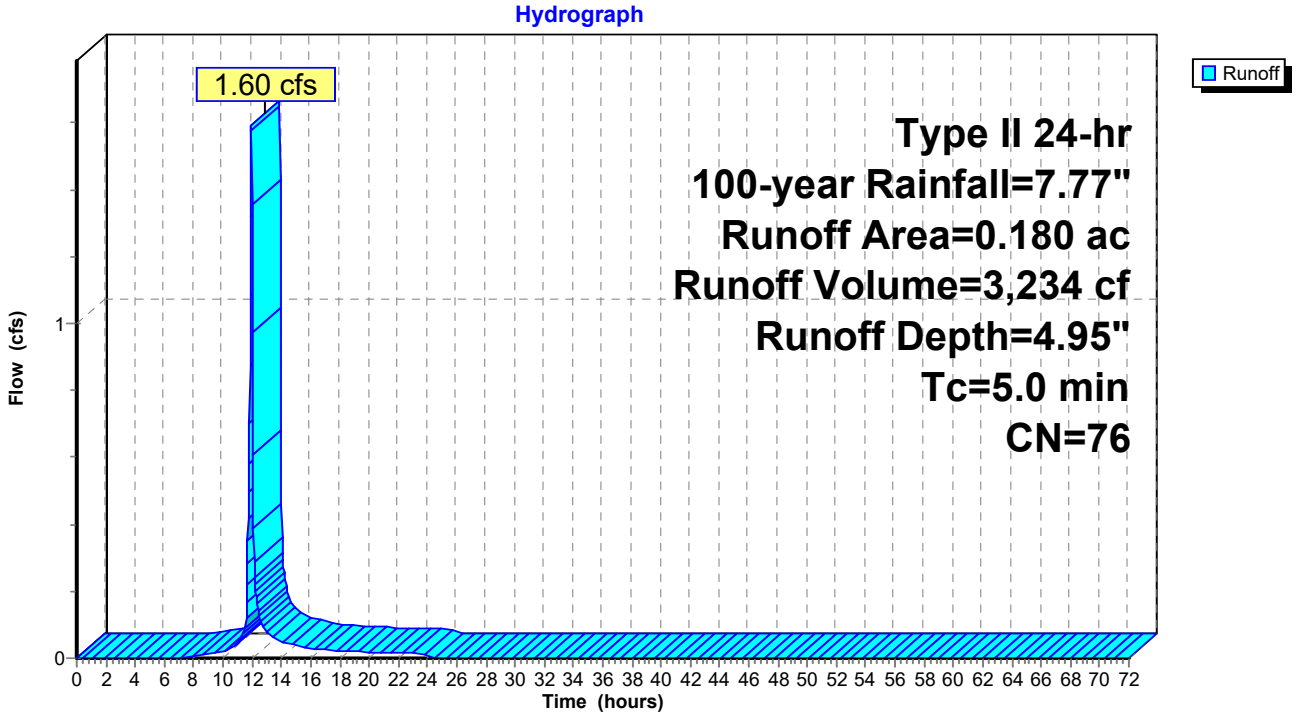
Runoff = 1.60 cfs @ 11.96 hrs, Volume= 3,234 cf, Depth= 4.95"
Routed to Pond 6FP : FocalPoint 6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 100-year Rainfall=7.77"

Area (ac)	CN	Description
0.080	49	50-75% Grass cover, Fair, HSG A
0.100	98	Paved parking, HSG A
0.180	76	Weighted Average
0.080		44.44% Pervious Area
0.100		55.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 6S: Area 6



Summary for Subcatchment 10S: South Bypass

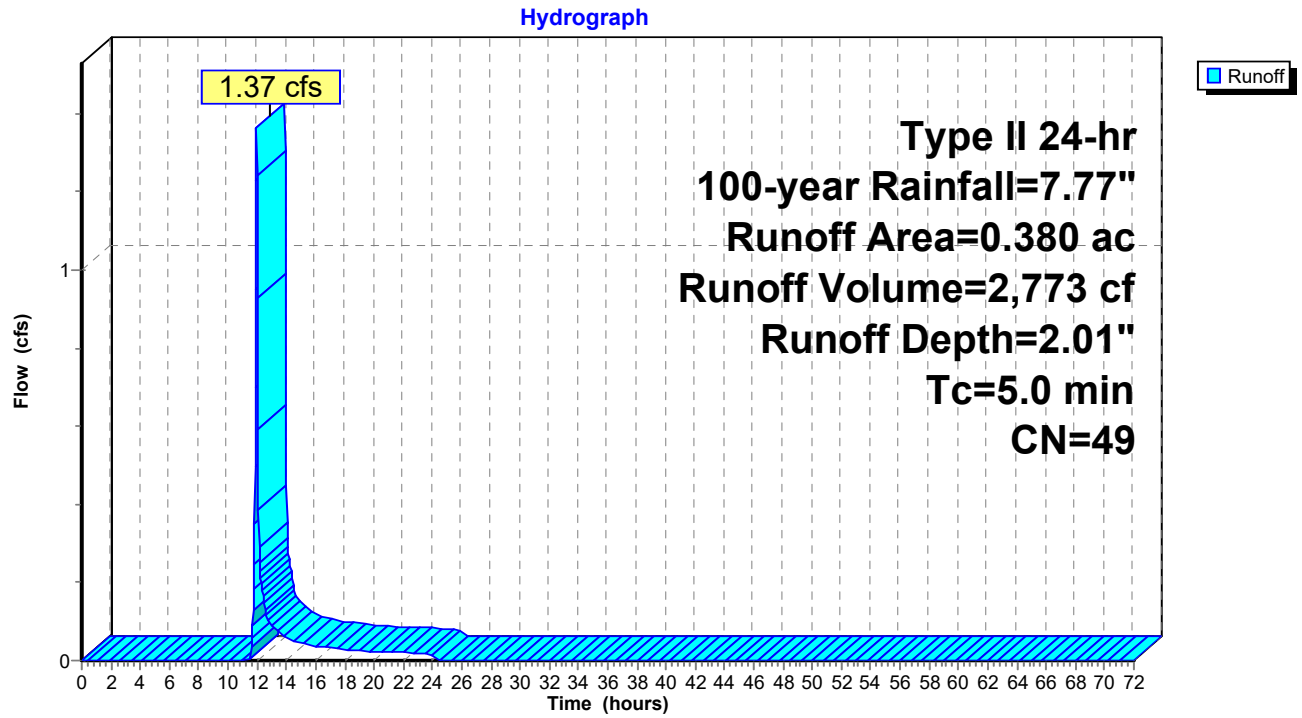
Runoff = 1.37 cfs @ 11.97 hrs, Volume= 2,773 cf, Depth= 2.01"
Routed to Link 1L : Outfall #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 100-year Rainfall=7.77"

Area (ac)	CN	Description
0.290	49	50-75% Grass cover, Fair, HSG A
0.070	36	Woods, Fair, HSG A
0.020	98	Paved parking, HSG A
0.380	49	Weighted Average
0.360		94.74% Pervious Area
0.020		5.26% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 10S: South Bypass



Summary for Reach 1R: Southern Trunk Line

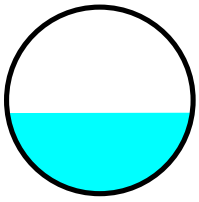
[52] Hint: Inlet/Outlet conditions not evaluated
[79] Warning: Submerged Pond 1DP Primary device # 1 INLET by 0.72'
[81] Warning: Exceeded Pond 2DP by 1.71' @ 0.00 hrs
[79] Warning: Submerged Pond 5FP Primary device # 1 INLET by 2.32'
[79] Warning: Submerged Pond 6FP Primary device # 1 INLET by 2.32'

Inflow Area = 187,308 sf, 64.19% Impervious, Inflow Depth > 5.04" for 100-year event
Inflow = 6.90 cfs @ 11.98 hrs, Volume= 78,595 cf
Outflow = 6.28 cfs @ 12.07 hrs, Volume= 78,591 cf, Atten= 9%, Lag= 5.9 min
Routed to Link 1L : Outfall #1

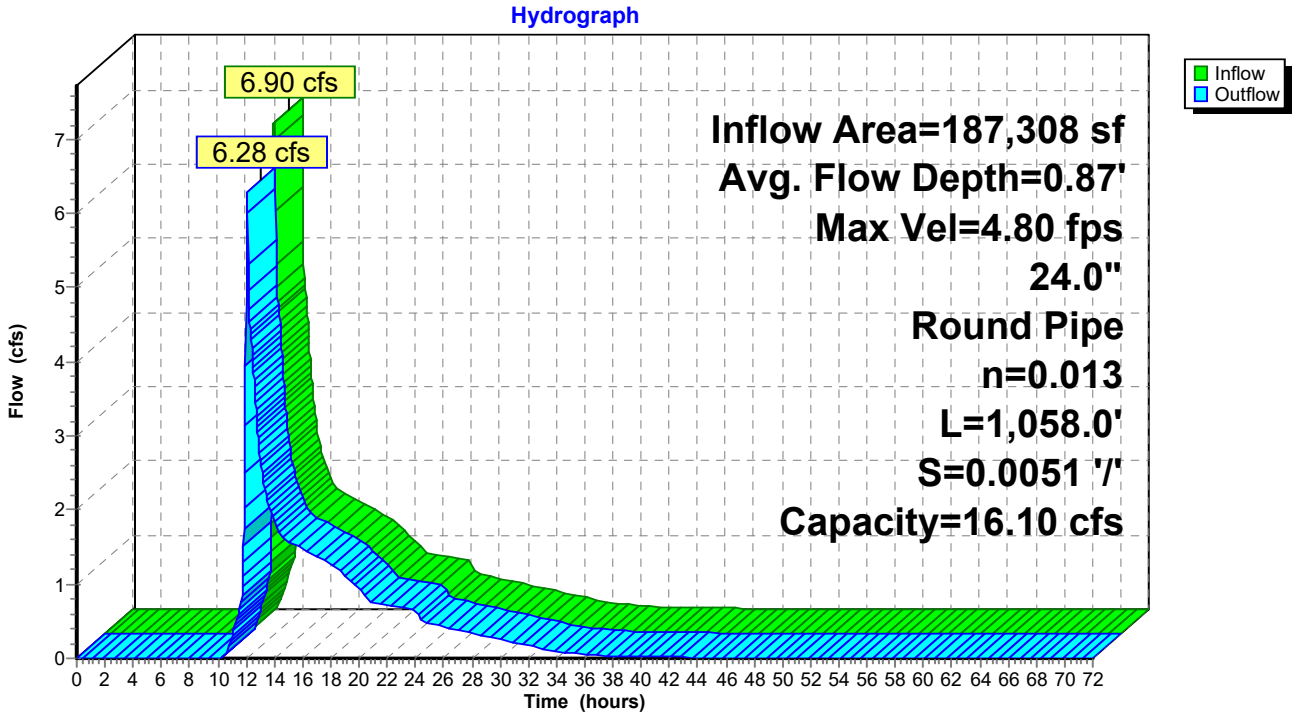
Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Max. Velocity= 4.80 fps, Min. Travel Time= 3.7 min
Avg. Velocity = 1.36 fps, Avg. Travel Time= 13.0 min

Peak Storage= 1,384 cf @ 12.01 hrs
Average Depth at Peak Storage= 0.87' , Surface Width= 1.98'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 16.10 cfs

24.0" Round Pipe
n= 0.013
Length= 1,058.0' Slope= 0.0051 '/'
Inlet Invert= 695.46', Outlet Invert= 690.10'



Reach 1R: Southern Trunk Line



Summary for Pond 1DP: Detention Pond 1

[44] Hint: Outlet device #2 is below defined storage
[79] Warning: Submerged Pond 1FP Primary device # 1 INLET by 3.40'

Inflow Area = 64,469 sf, 43.92% Impervious, Inflow Depth = 3.97" for 100-year event
Inflow = 11.00 cfs @ 11.96 hrs, Volume= 21,350 cf
Outflow = 0.80 cfs @ 12.58 hrs, Volume= 21,350 cf, Atten= 93%, Lag= 37.2 min
Primary = 0.80 cfs @ 12.58 hrs, Volume= 21,350 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 699.40' @ 12.58 hrs Surf.Area= 4,602 sf Storage= 9,358 cf

Plug-Flow detention time= 112.5 min calculated for 21,341 cf (100% of inflow)
Center-of-Mass det. time= 112.5 min (944.3 - 831.8)

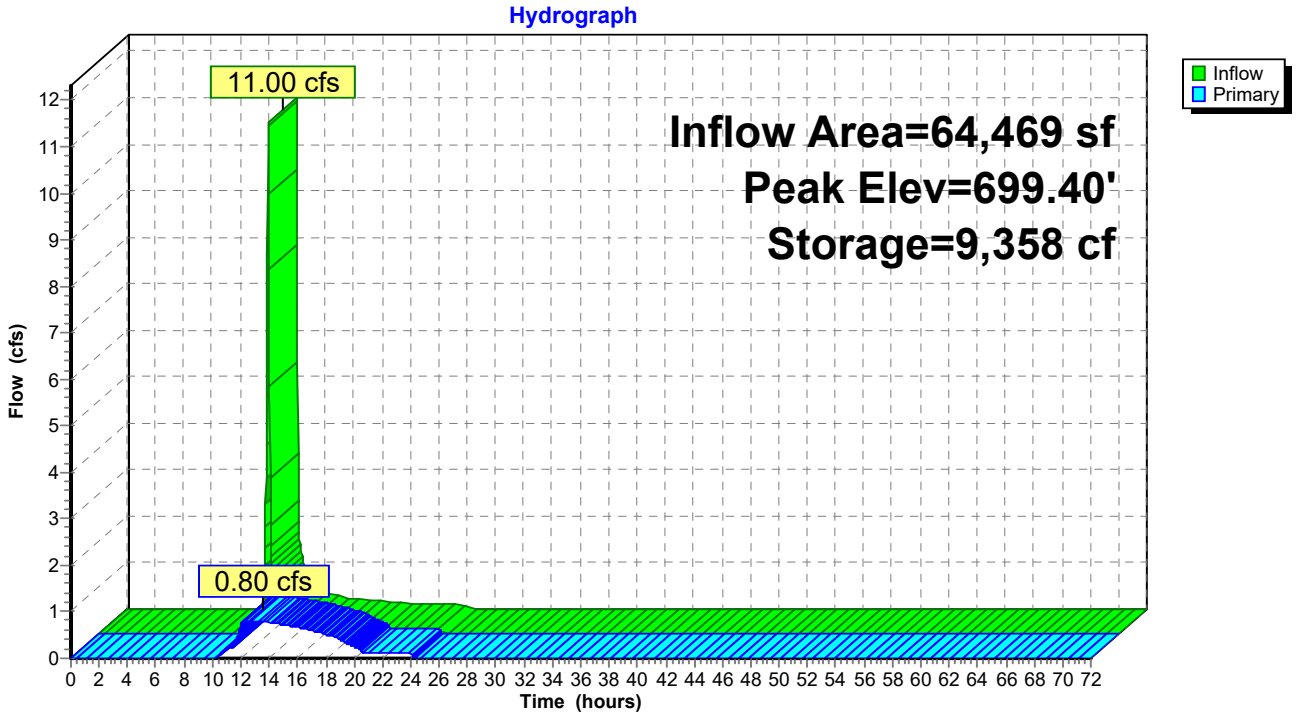
Volume	Invert	Avail.Storage	Storage Description
#1	695.80'	19,432 cf	**Custom Stage Data (Prismatic)** Listed below

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.80	0	0	0
696.00	285	29	29
697.00	2,098	1,192	1,220
698.00	3,151	2,625	3,845
699.00	4,138	3,645	7,489
700.00	5,311	4,725	12,214
701.00	9,125	7,218	19,432

Device	Routing	Invert	Outlet Devices
#1	Primary	695.60'	**18.0" Round Culvert** L= 28.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 695.60' / 695.46' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	695.60'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.80 cfs @ 12.58 hrs HW=699.40' TW=565.00' (Fixed TW Elev= 565.00')
└─**1=Culvert** (Passes 0.80 cfs of 14.85 cfs potential flow)
  ├─**2=Orifice/Grate** (Orifice Controls 0.80 cfs @ 9.17 fps)
  └─**3=Orifice/Grate** (Controls 0.00 cfs)

Pond 1DP: Detention Pond 1



Summary for Pond 1FP: FocalPoint 1

[92] Warning: Device #3 is above defined storage
[93] Warning: Storage range exceeded by 0.06'
[88] Warning: Qout>Qin may require smaller dt or Finer Routing

Inflow Area = 64,469 sf, 43.92% Impervious, Inflow Depth = 4.04" for 100-year event
Inflow = 10.98 cfs @ 11.96 hrs, Volume= 21,720 cf
Outflow = 11.00 cfs @ 11.96 hrs, Volume= 21,350 cf, Atten= 0%, Lag= 0.0 min
Primary = 11.00 cfs @ 11.96 hrs, Volume= 21,350 cf
Routed to Pond 1DP : Detention Pond 1

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 700.06' @ 11.96 hrs Surf.Area= 1,109 sf Storage= 815 cf

Plug-Flow detention time= 15.8 min calculated for 21,350 cf (98% of inflow)
Center-of-Mass det. time= 5.6 min (831.8 - 826.3)

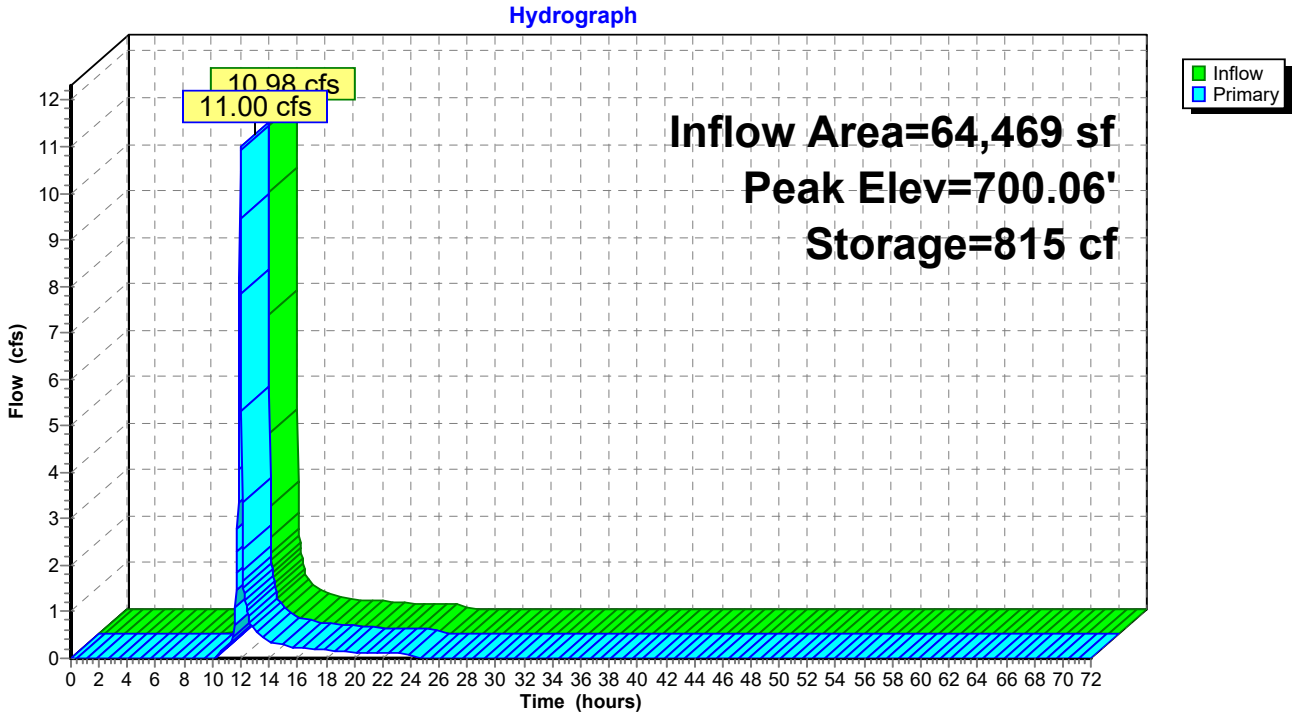
Volume	Invert	Avail.Storage	Storage Description
#1	696.00'	815 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
696.00	237	0.0	0	0
699.00	237	20.0	142	142
700.00	1,109	100.0	673	815

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 40.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 695.80' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**10.0' long x 18.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=10.80 cfs @ 11.96 hrs HW=700.05' (Free Discharge)
└**1=Culvert** (Passes 10.49 cfs of 15.46 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 10.49 cfs @ 2.43 fps)
└**3=Broad-Crested Rectangular Weir** (Weir Controls 0.30 cfs @ 0.60 fps)

Pond 1FP: FocalPoint 1



Summary for Pond 2DP: Detention Pond 2

[79] Warning: Submerged Pond 2FP Primary device # 1 INLET by 2.81'
[79] Warning: Submerged Pond 3FP Primary device # 1 INLET by 1.31'
[79] Warning: Submerged Pond 4FP Primary device # 1 INLET by 1.31'

Inflow Area = 95,832 sf, 79.09% Impervious, Inflow Depth = 5.99" for 100-year event
Inflow = 23.05 cfs @ 11.96 hrs, Volume= 47,798 cf
Outflow = 2.74 cfs @ 12.25 hrs, Volume= 46,812 cf, Atten= 88%, Lag= 17.1 min
Primary = 2.74 cfs @ 12.25 hrs, Volume= 46,812 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 697.31' @ 12.25 hrs Surf.Area= 8,711 sf Storage= 26,113 cf

Plug-Flow detention time= 399.8 min calculated for 46,812 cf (98% of inflow)
Center-of-Mass det. time= 387.1 min (1,186.1 - 799.0)

Volume	Invert	Avail.Storage	Storage Description
#1A	693.75'	3,019 cf	**38.12'W x 114.25'L x 4.79'H Field A** 20,877 cf Overall - 13,330 cf Embedded = 7,547 cf x 40.0% Voids
#2A	694.00'	12,663 cf	**Ferguson R-Tank HD 2.5** x 1222 Inside #1 Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf 1222 Chambers in 26 Rows
#3B	693.75'	3,019 cf	**38.12'W x 114.25'L x 4.79'H Field B** 20,877 cf Overall - 13,330 cf Embedded = 7,547 cf x 40.0% Voids
#4B	694.00'	12,663 cf	**Ferguson R-Tank HD 2.5** x 1222 Inside #3 Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf 1222 Chambers in 26 Rows
		31,364 cf	Total Available Storage

Storage Group A created with Chamber Wizard
Storage Group B created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 10.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 693.20' S= 0.0800 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	694.00'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	697.00'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=2.74 cfs @ 12.25 hrs HW=697.31' TW=565.00' (Fixed TW Elev= 565.00')
└─**1=Culvert** (Passes 0.75 cfs of 13.62 cfs potential flow)
└─**2=Orifice/Grate** (Orifice Controls 0.75 cfs @ 8.54 fps)
└─**3=Broad-Crested Rectangular Weir** (Weir Controls 1.99 cfs @ 1.60 fps)

Pond 2DP: Detention Pond 2 - Chamber Wizard Field A

Chamber Model = Ferguson R-Tank HD 2.5 (Ferguson R-Tank HD)
Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf
Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf

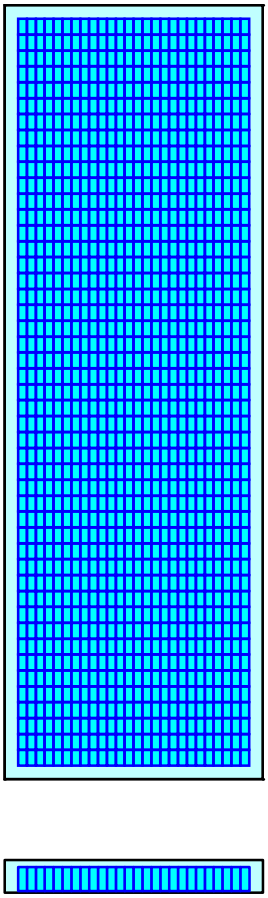
47 Chambers/Row x 2.35' Long = 110.25' Row Length +24.0" End Stone x 2 = 114.25' Base Length
26 Rows x 15.7" Wide + 24.0" Side Stone x 2 = 38.12' Base Width
3.0" Stone Base + 42.5" Chamber Height + 12.0" Stone Cover = 4.79' Field Height

1,222 Chambers x 10.4 cf = 12,663.1 cf Chamber Storage
1,222 Chambers x 10.9 cf = 13,329.6 cf Displacement

20,876.7 cf Field - 13,329.6 cf Chambers = 7,547.2 cf Stone x 40.0% Voids = 3,018.9 cf Stone Storage

Chamber Storage + Stone Storage = 15,682.0 cf = 0.360 af
Overall Storage Efficiency = 75.1%
Overall System Size = 114.25' x 38.12' x 4.79'

1,222 Chambers
773.2 cy Field
279.5 cy Stone



Pond 2DP: Detention Pond 2 - Chamber Wizard Field B

Chamber Model = Ferguson R-Tank HD 2.5 (Ferguson R-Tank HD)
Inside= 15.7"W x 42.5"H => 4.42 sf x 2.35'L = 10.4 cf
Outside= 15.7"W x 42.5"H => 4.65 sf x 2.35'L = 10.9 cf

47 Chambers/Row x 2.35' Long = 110.25' Row Length +24.0" End Stone x 2 = 114.25' Base Length
26 Rows x 15.7" Wide + 24.0" Side Stone x 2 = 38.12' Base Width
3.0" Stone Base + 42.5" Chamber Height + 12.0" Stone Cover = 4.79' Field Height

1,222 Chambers x 10.4 cf = 12,663.1 cf Chamber Storage
1,222 Chambers x 10.9 cf = 13,329.6 cf Displacement

20,876.7 cf Field - 13,329.6 cf Chambers = 7,547.2 cf Stone x 40.0% Voids = 3,018.9 cf Stone Storage

Chamber Storage + Stone Storage = 15,682.0 cf = 0.360 af
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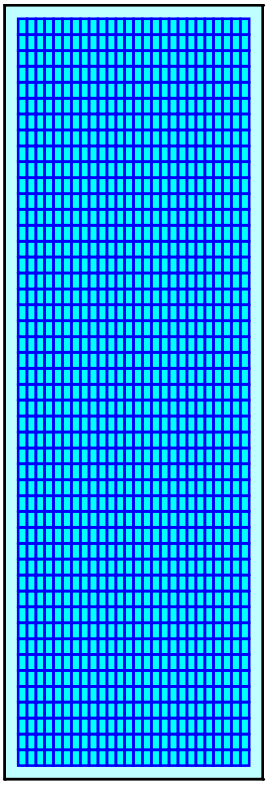
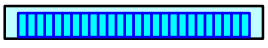
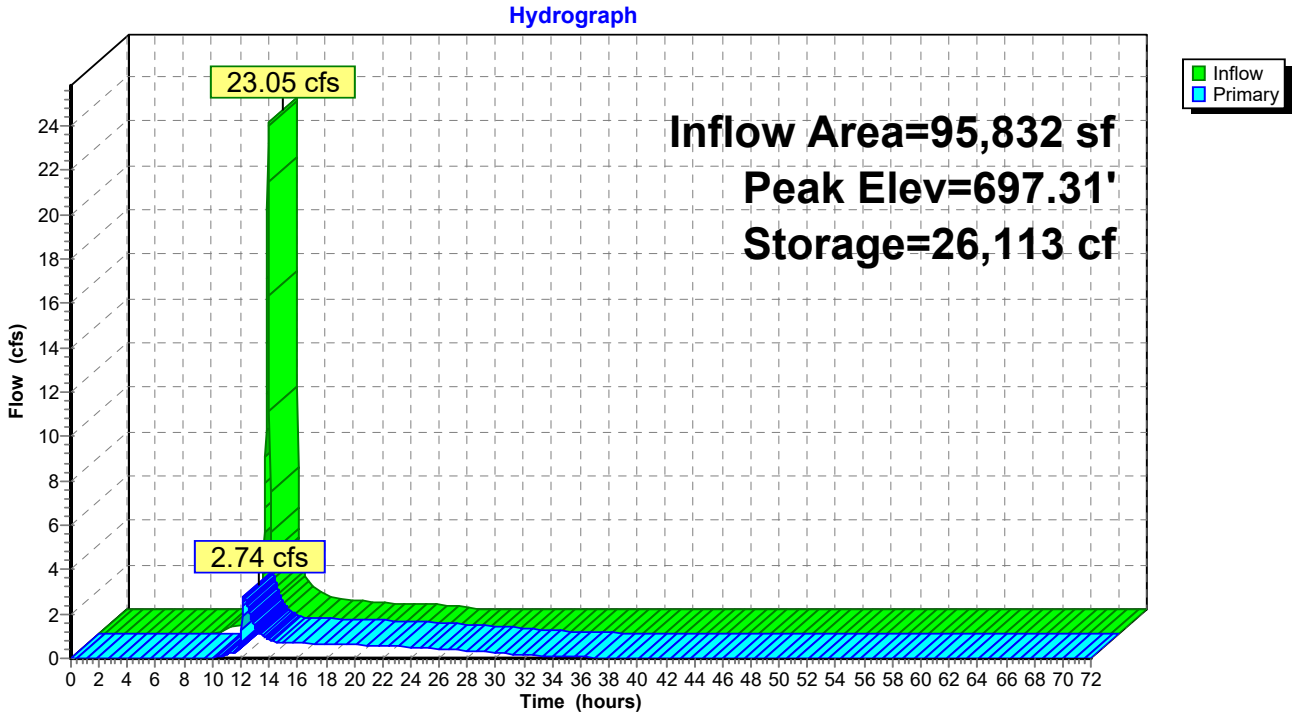




Pond 2DP: Detention Pond 2



Summary for Pond 2FP: FocalPoint 2

Inflow Area = 31,363 sf, 83.33% Impervious, Inflow Depth = 6.58" for 100-year event
Inflow = 7.80 cfs @ 11.96 hrs, Volume= 17,196 cf
Outflow = 7.67 cfs @ 11.97 hrs, Volume= 16,473 cf, Atten= 2%, Lag= 0.7 min
Primary = 7.67 cfs @ 11.97 hrs, Volume= 16,473 cf
Routed to Pond 2DP : Detention Pond 2

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 698.45' @ 11.97 hrs Surf.Area= 1,294 sf Storage= 1,247 cf

Plug-Flow detention time= 44.9 min calculated for 16,467 cf (96% of inflow)
Center-of-Mass det. time= 19.7 min (792.1 - 772.4)

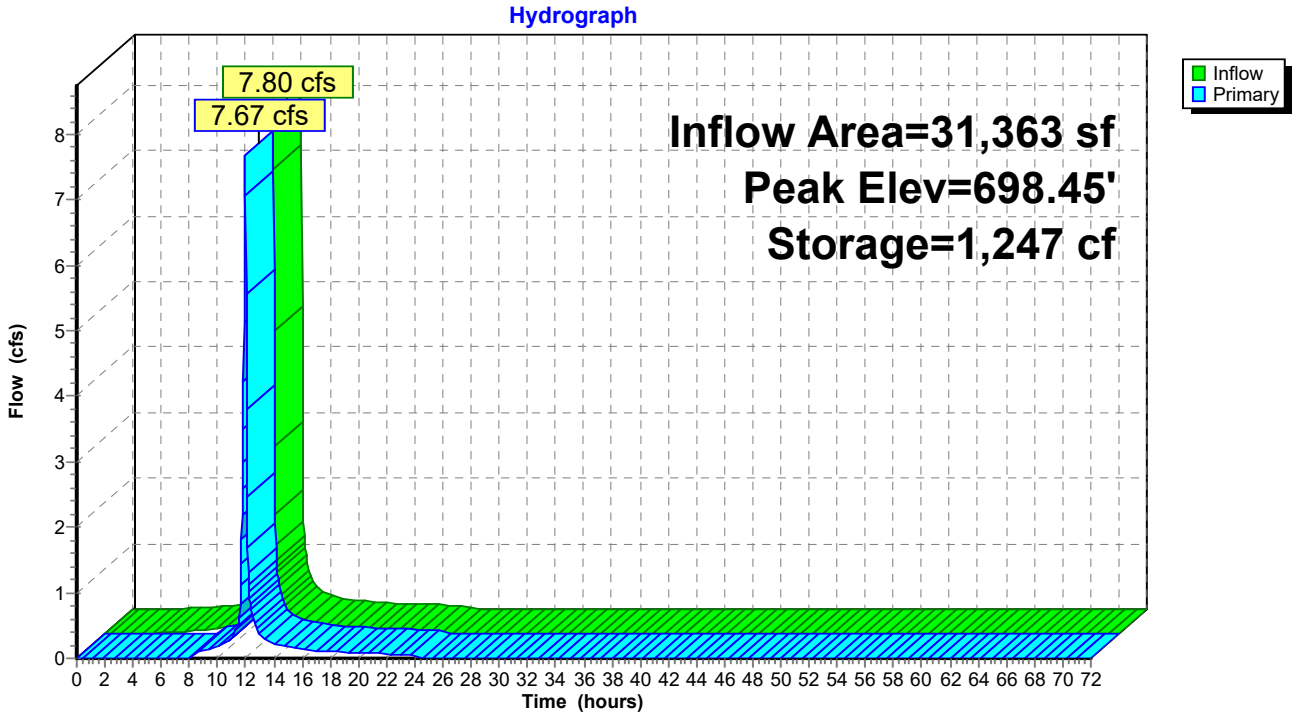
Volume	Invert	Avail.Storage	Storage Description
#1	694.50'	1,317 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.50	539	0.0	0	0
697.50	539	20.0	323	323
698.00	1,056	100.0	399	722
698.50	1,323	100.0	595	1,317

Device	Routing	Invert	Outlet Devices
#1	Primary	694.50'	**18.0" Round Culvert** L= 28.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.50' / 694.00' S= 0.0179 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	698.00'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=7.63 cfs @ 11.97 hrs HW=698.45' (Free Discharge)
↑**1=Culvert** (Passes 7.63 cfs of 15.21 cfs potential flow)
↑**2=Orifice/Grate** (Weir Controls 7.63 cfs @ 2.18 fps)

Pond 2FP: FocalPoint 2



Summary for Pond 3FP: FocalPoint 3

Inflow Area = 16,553 sf, 71.05% Impervious, Inflow Depth = 5.87" for 100-year event
Inflow = 3.84 cfs @ 11.96 hrs, Volume= 8,104 cf
Outflow = 3.78 cfs @ 11.97 hrs, Volume= 7,383 cf, Atten= 2%, Lag= 0.7 min
Primary = 3.78 cfs @ 11.97 hrs, Volume= 7,383 cf
Routed to Pond 2DP : Detention Pond 2

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 699.78' @ 11.97 hrs Surf.Area= 966 sf Storage= 972 cf

Plug-Flow detention time= 73.2 min calculated for 7,383 cf (91% of inflow)
Center-of-Mass det. time= 26.4 min (816.4 - 790.0)

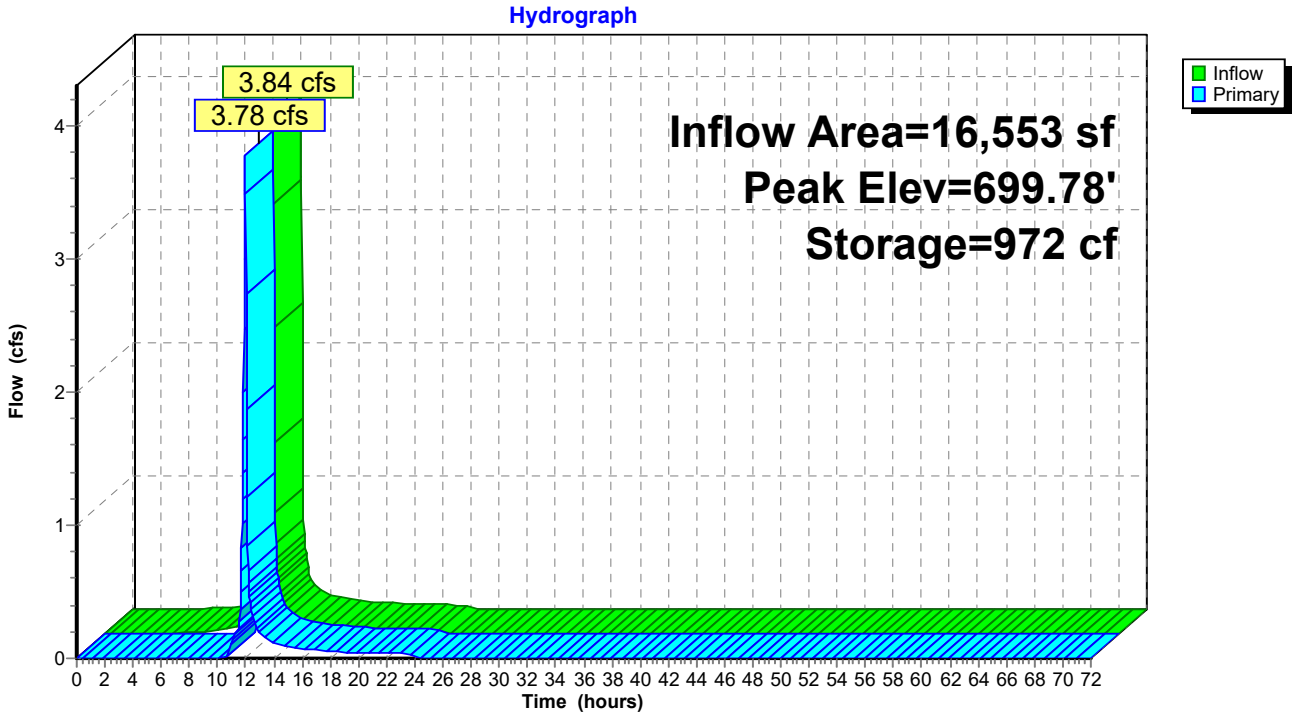
Volume	Invert	Avail.Storage	Storage Description
#1	696.00'	1,197 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
696.00	602	0.0	0	0
699.00	602	20.0	361	361
700.00	1,070	100.0	836	1,197

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 80.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 694.00' S= 0.0250 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=3.77 cfs @ 11.97 hrs HW=699.78' (Free Discharge)
↑—**1=Culvert** (Passes 3.77 cfs of 14.81 cfs potential flow)
↑—**2=Orifice/Grate** (Weir Controls 3.77 cfs @ 1.72 fps)

Pond 3FP: FocalPoint 3



Summary for Pond 4FP: FocalPoint 4

[92] Warning: Device #2 is above defined storage
[92] Warning: Device #3 is above defined storage
[93] Warning: Storage range exceeded by 1.08'

Inflow Area = 47,916 sf, 79.09% Impervious, Inflow Depth = 6.34" for 100-year event
Inflow = 11.69 cfs @ 11.96 hrs, Volume= 25,330 cf
Outflow = 11.67 cfs @ 11.96 hrs, Volume= 23,942 cf, Atten= 0%, Lag= 0.0 min
Primary = 11.67 cfs @ 11.96 hrs, Volume= 23,942 cf
Routed to Pond 2DP : Detention Pond 2

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 700.08' @ 11.96 hrs Surf.Area= 1,491 sf Storage= 1,389 cf

Plug-Flow detention time= 51.3 min calculated for 23,932 cf (94% of inflow)
Center-of-Mass det. time= 19.7 min (798.5 - 778.7)

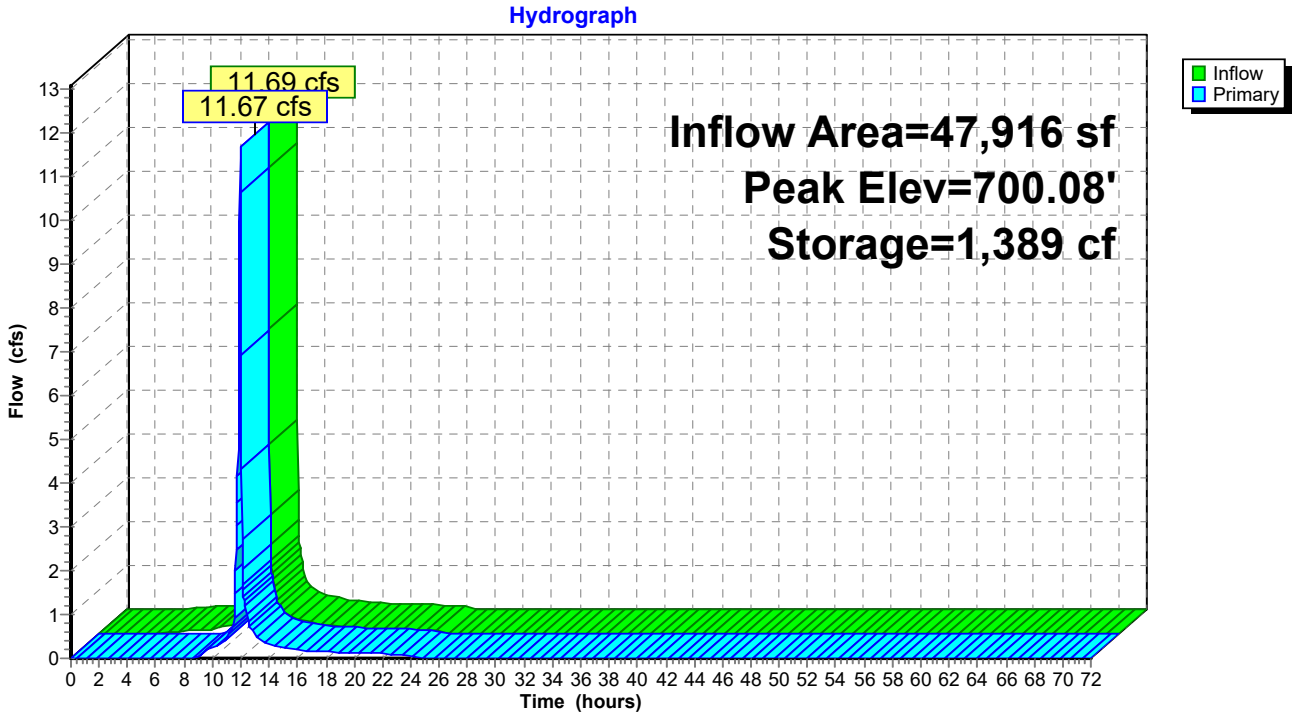
Volume	Invert	Avail.Storage	Storage Description
#1	695.00'	1,389 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.00	585	0.0	0	0
698.00	585	20.0	351	351
699.00	1,491	100.0	1,038	1,389

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 23.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 695.88' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**6.0' long x 133.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=11.43 cfs @ 11.96 hrs HW=700.07' (Free Discharge)
└**1=Culvert** (Passes 11.12 cfs of 15.51 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 11.12 cfs @ 2.47 fps)
└**3=Broad-Crested Rectangular Weir** (Weir Controls 0.31 cfs @ 0.72 fps)

Pond 4FP: FocalPoint 4



Summary for Pond 5FP: FocalPoint 5

Inflow Area = 19,166 sf, 61.36% Impervious, Inflow Depth = 5.29" for 100-year event
Inflow = 4.12 cfs @ 11.96 hrs, Volume= 8,456 cf
Outflow = 4.03 cfs @ 11.97 hrs, Volume= 7,828 cf, Atten= 2%, Lag= 0.8 min
Primary = 4.03 cfs @ 11.97 hrs, Volume= 7,828 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 697.79' @ 11.97 hrs Surf.Area= 1,161 sf Storage= 929 cf

Plug-Flow detention time= 60.7 min calculated for 7,828 cf (93% of inflow)
Center-of-Mass det. time= 20.4 min (822.7 - 802.3)

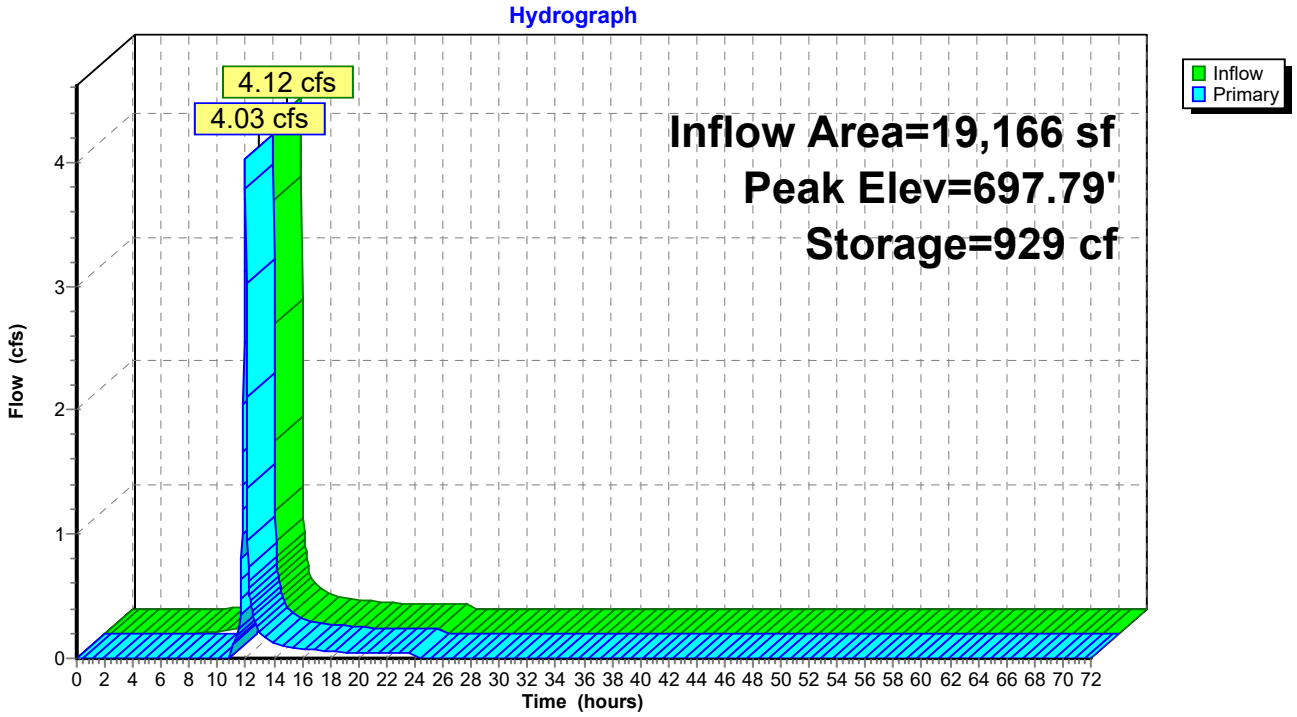
Volume	Invert	Avail.Storage	Storage Description
#1	694.00'	2,779 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.00	472	0.0	0	0
697.00	472	20.0	283	283
698.00	1,344	100.0	908	1,191
699.00	1,832	100.0	1,588	2,779

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 24.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 691.39' S= 0.1088 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	697.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	698.50'	**6.0' long x 9.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.46 2.55 2.70 2.69 2.68 2.68 2.67 2.64 2.64 2.64 2.65 2.64 2.65 2.65 2.66 2.67 2.69

Primary OutFlow Max=4.00 cfs @ 11.97 hrs HW=697.79' (Free Discharge)
└─**1=Culvert** (Passes 4.00 cfs of 14.83 cfs potential flow)
└─**2=Orifice/Grate** (Weir Controls 4.00 cfs @ 1.76 fps)
└─**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 5FP: FocalPoint 5



Summary for Pond 6FP: FocalPoint 6

Inflow Area = 7,841 sf, 55.56% Impervious, Inflow Depth = 4.95" for 100-year event
Inflow = 1.60 cfs @ 11.96 hrs, Volume= 3,234 cf
Outflow = 1.54 cfs @ 11.98 hrs, Volume= 2,606 cf, Atten= 4%, Lag= 1.0 min
Primary = 1.54 cfs @ 11.98 hrs, Volume= 2,606 cf
Routed to Reach 1R : Southern Trunk Line

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 697.65' @ 11.98 hrs Surf.Area= 1,042 sf Storage= 777 cf

Plug-Flow detention time= 118.6 min calculated for 2,606 cf (81% of inflow)
Center-of-Mass det. time= 38.1 min (847.2 - 809.1)

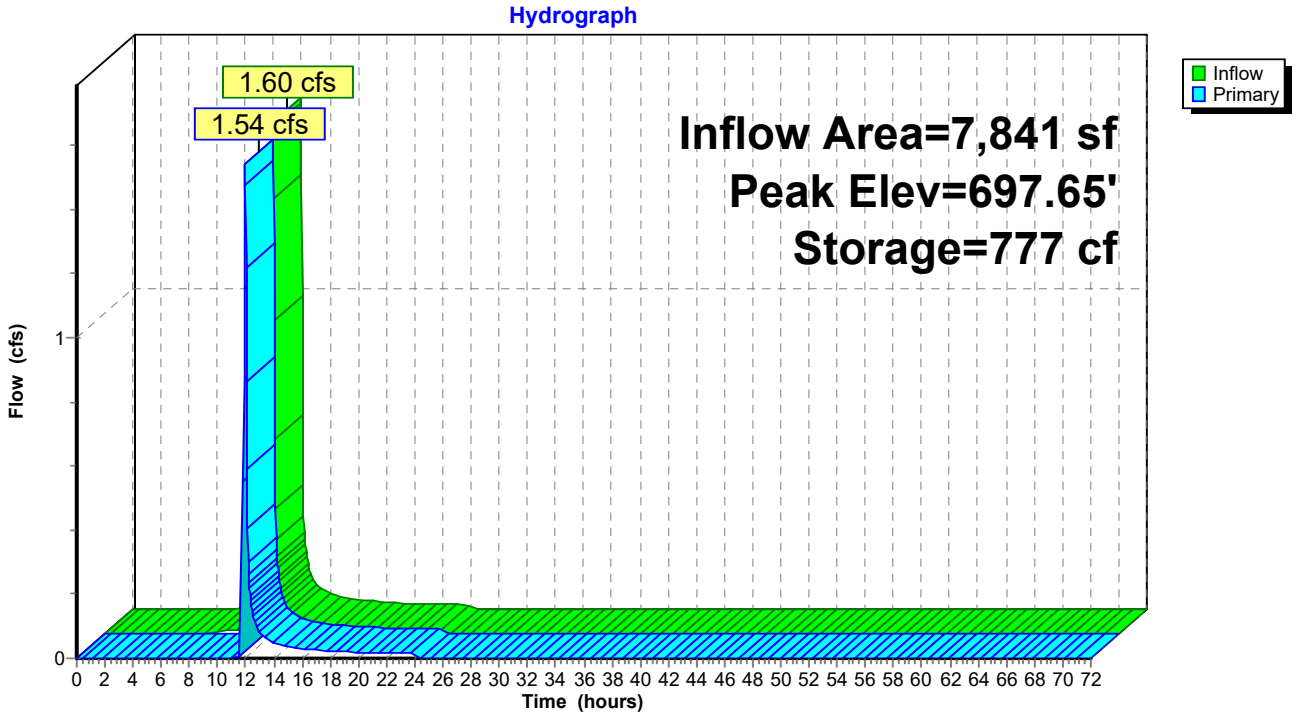
Volume	Invert	Avail.Storage	Storage Description
#1	694.00'	2,779 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.00	472	0.0	0	0
697.00	472	20.0	283	283
698.00	1,344	100.0	908	1,191
699.00	1,832	100.0	1,588	2,779

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 24.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 690.87' S= 0.1304 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	697.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	698.50'	**6.0' long x 9.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.46 2.55 2.70 2.69 2.68 2.68 2.67 2.64 2.64 2.64 2.65 2.64 2.65 2.65 2.66 2.67 2.69

Primary OutFlow Max=1.52 cfs @ 11.98 hrs HW=697.65' (Free Discharge)
└**1=Culvert** (Passes 1.52 cfs of 14.49 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 1.52 cfs @ 1.27 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 6FP: FocalPoint 6

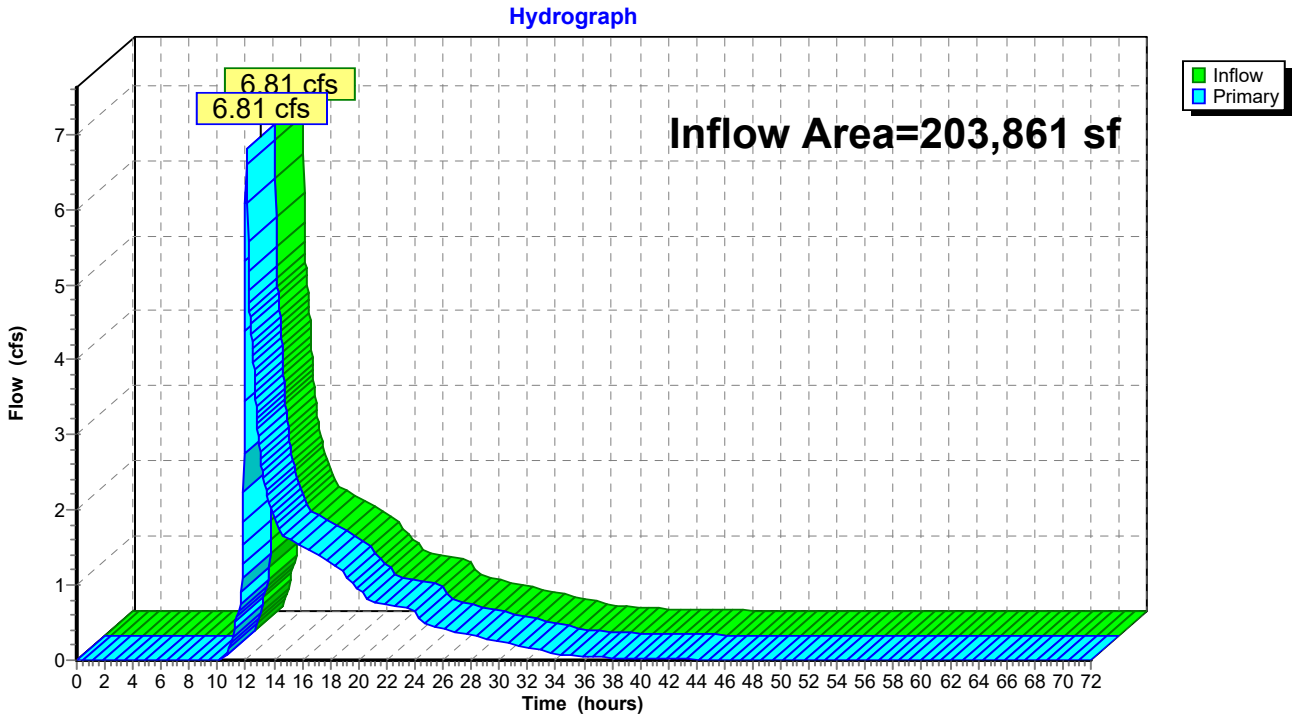


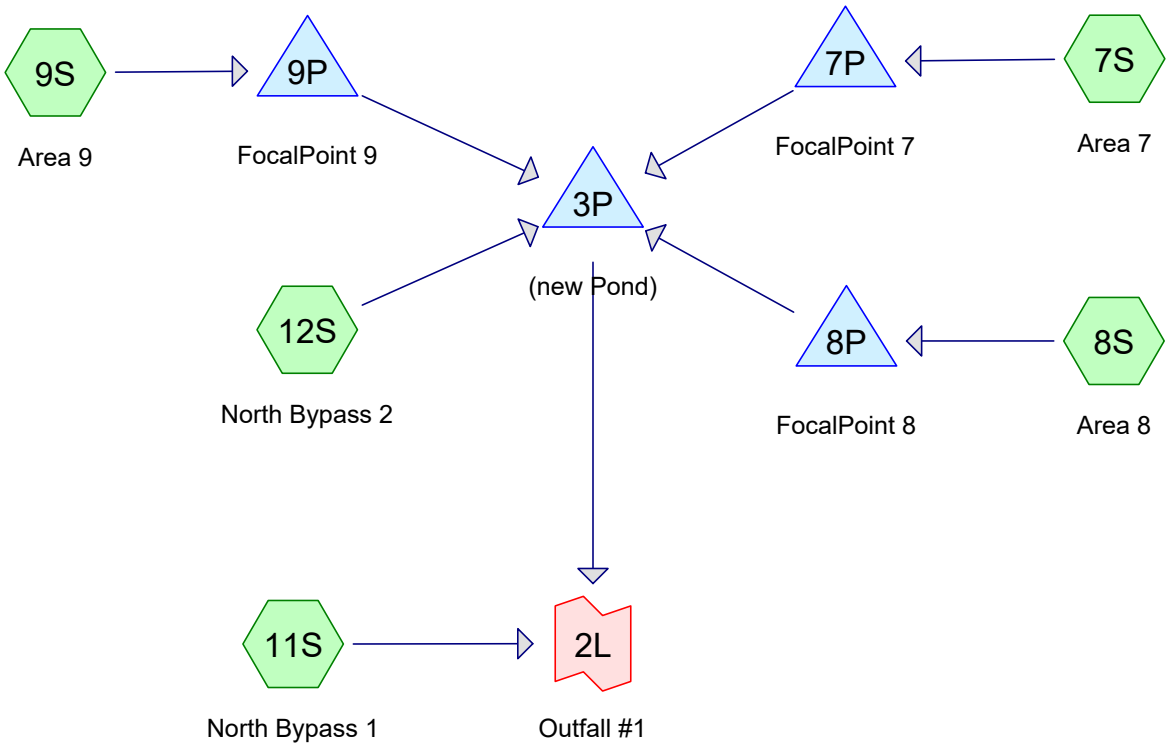
Summary for Link 1L: Outfall #1

Inflow Area = 203,861 sf, 59.40% Impervious, Inflow Depth > 4.79" for 100-year event
Inflow = 6.81 cfs @ 12.06 hrs, Volume= 81,364 cf
Primary = 6.81 cfs @ 12.06 hrs, Volume= 81,364 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs

Link 1L: Outfall #1





Subcat Reach Pond Link

Routing Diagram for Stormwater Calculations - Proposed - Outfall 1 North
Prepared by Fulmer Lucas, Printed 4/20/2026
HydroCAD® 10.20-8a s/n 11448 © 2025 HydroCAD Software Solutions LLC

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-year	Type II 24-hr		Default	24.00	1	3.24	2
2	2-year	Type II 24-hr		Default	24.00	1	3.87	2
3	5-year	Type II 24-hr		Default	24.00	1	4.71	2
4	10-year	Type II 24-hr		Default	24.00	1	5.38	2
5	25-year	Type II 24-hr		Default	24.00	1	6.30	2
6	50-year	Type II 24-hr		Default	24.00	1	7.02	2
7	100-year	Type II 24-hr		Default	24.00	1	7.77	2

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
30,056	49	50-75% Grass cover, Fair, HSG A (7S, 8S, 9S, 11S, 12S)
10,890	69	50-75% Grass cover, Fair, HSG B (7S, 11S)
42,689	98	Paved parking, HSG A (7S, 8S, 9S, 11S)
83,635	**77**	**TOTAL AREA**

Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
72,745	HSG A	7S, 8S, 9S, 11S, 12S
10,890	HSG B	7S, 11S
0	HSG C	
0	HSG D	
0	Other	
83,635		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover	Su Nu
30,056	10,890	0	0	0	40,946	50-75% Grass cover, Fair	
42,689	0	0	0	0	42,689	Paved parking	
72,745	**10,890**	**0**	**0**	**0**	**83,635**	**TOTAL AREA**	

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
1	3P	690.54	690.44	20.0	0.0050	0.013	0.0	18.0	0.0	
2	7P	697.00	696.20	16.0	0.0500	0.013	0.0	18.0	0.0	
3	8P	695.00	693.05	26.0	0.0750	0.013	0.0	18.0	0.0	
4	9P	694.00	691.74	32.0	0.0706	0.013	0.0	18.0	0.0	

Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment7S: Area 7 Runoff Area=0.450 ac 62.22% Impervious Runoff Depth=1.79"
Tc=5.0 min CN=85 Runoff=1.47 cfs 2,927 cf

Subcatchment8S: Area 8 Runoff Area=0.200 ac 55.00% Impervious Runoff Depth=1.18"
Tc=5.0 min CN=76 Runoff=0.44 cfs 857 cf

Subcatchment9S: Area 9 Runoff Area=0.300 ac 63.33% Impervious Runoff Depth=1.43"
Tc=5.0 min CN=80 Runoff=0.79 cfs 1,560 cf

Subcatchment11S: North Bypass 1 Runoff Area=0.880 ac 45.45% Impervious Runoff Depth=1.06"
Flow Length=730' Tc=10.9 min CN=74 Runoff=1.36 cfs 3,399 cf

Subcatchment12S: North Bypass 2 Runoff Area=0.090 ac 0.00% Impervious Runoff Depth=0.12"
Tc=5.0 min CN=49 Runoff=0.00 cfs 38 cf

Pond 3P: (new Pond) Peak Elev=691.90' Storage=485 cf Inflow=1.40 cfs 3,132 cf
Outflow=0.46 cfs 3,132 cf

Pond 7P: FocalPoint 7 Peak Elev=700.64' Storage=792 cf Inflow=1.47 cfs 2,927 cf
Outflow=1.40 cfs 2,287 cf

Pond 8P: FocalPoint 8 Peak Elev=698.41' Storage=857 cf Inflow=0.44 cfs 857 cf
Outflow=0.00 cfs 0 cf

Pond 9P: FocalPoint 9 Peak Elev=697.52' Storage=769 cf Inflow=0.79 cfs 1,560 cf
Outflow=0.10 cfs 807 cf

Link 2L: Outfall #1 Inflow=1.80 cfs 6,531 cf
Primary=1.80 cfs 6,531 cf

Total Runoff Area = 83,635 sf Runoff Volume = 8,780 cf Average Runoff Depth = 1.26"
48.96% Pervious = 40,946 sf 51.04% Impervious = 42,689 sf

Summary for Subcatchment 7S: Area 7

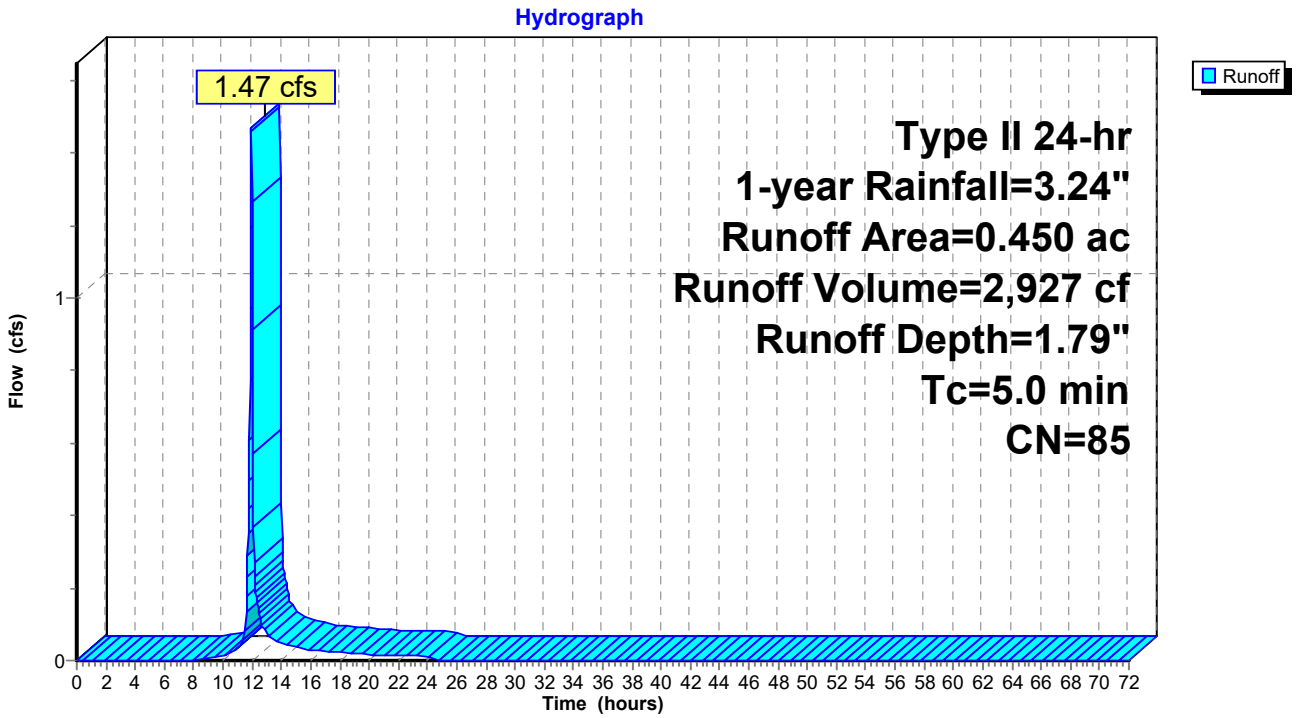
Runoff = 1.47 cfs @ 11.96 hrs, Volume= 2,927 cf, Depth= 1.79"
Routed to Pond 7P : FocalPoint 7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 1-year Rainfall=3.24"

Area (ac)	CN	Description
0.040	49	50-75% Grass cover, Fair, HSG A
0.130	69	50-75% Grass cover, Fair, HSG B
0.280	98	Paved parking, HSG A
0.450	85	Weighted Average
0.170		37.78% Pervious Area
0.280		62.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 7S: Area 7



Summary for Subcatchment 8S: Area 8

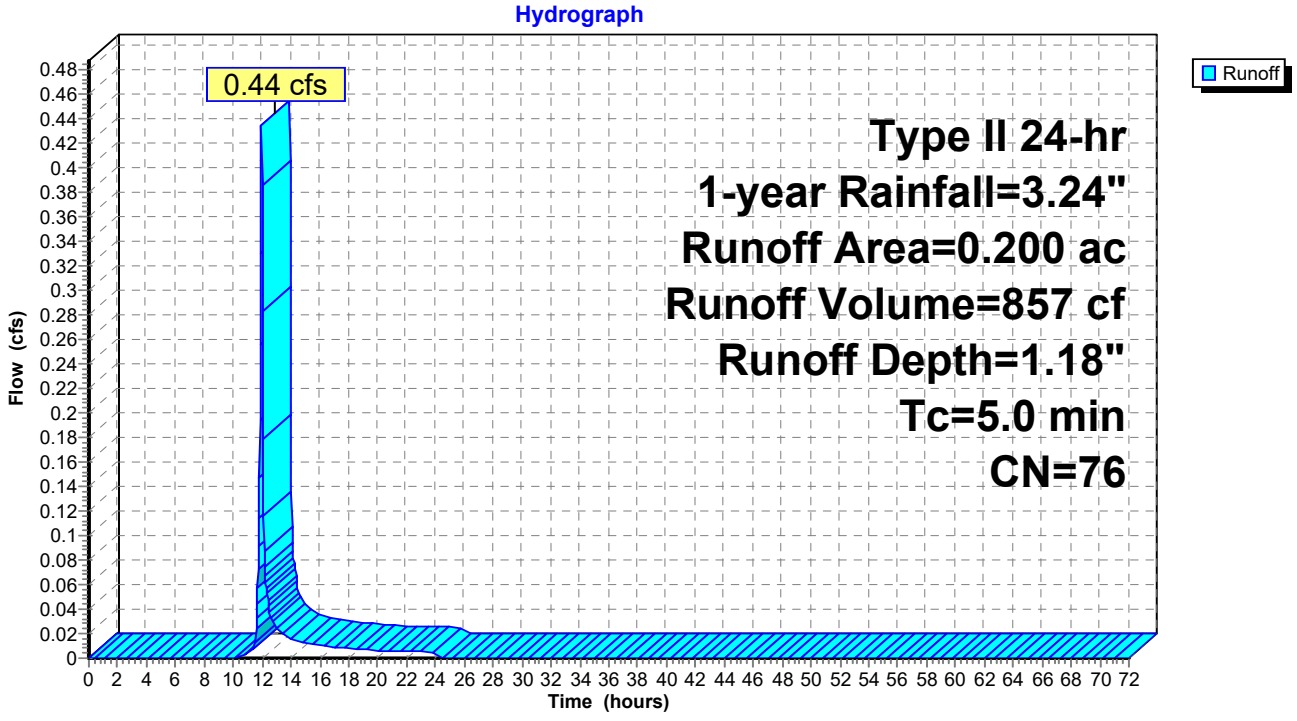
Runoff = 0.44 cfs @ 11.97 hrs, Volume= 857 cf, Depth= 1.18"
Routed to Pond 8P : FocalPoint 8

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 1-year Rainfall=3.24"

Area (ac)	CN	Description
0.090	49	50-75% Grass cover, Fair, HSG A
0.110	98	Paved parking, HSG A
0.200	76	Weighted Average
0.090		45.00% Pervious Area
0.110		55.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 8S: Area 8



Summary for Subcatchment 9S: Area 9

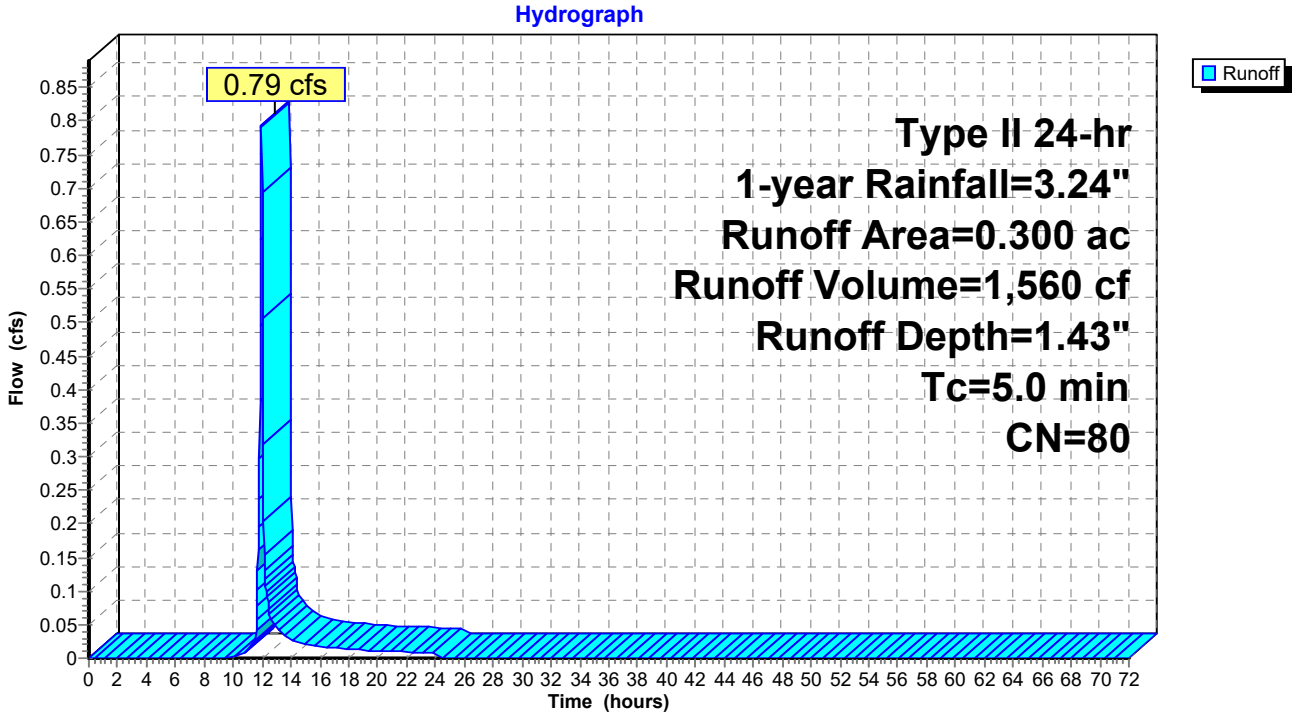
Runoff = 0.79 cfs @ 11.96 hrs, Volume= 1,560 cf, Depth= 1.43"
Routed to Pond 9P : FocalPoint 9

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 1-year Rainfall=3.24"

Area (ac)	CN	Description
0.110	49	50-75% Grass cover, Fair, HSG A
0.190	98	Paved parking, HSG A
0.300	80	Weighted Average
0.110		36.67% Pervious Area
0.190		63.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 9S: Area 9



Summary for Subcatchment 11S: North Bypass 1

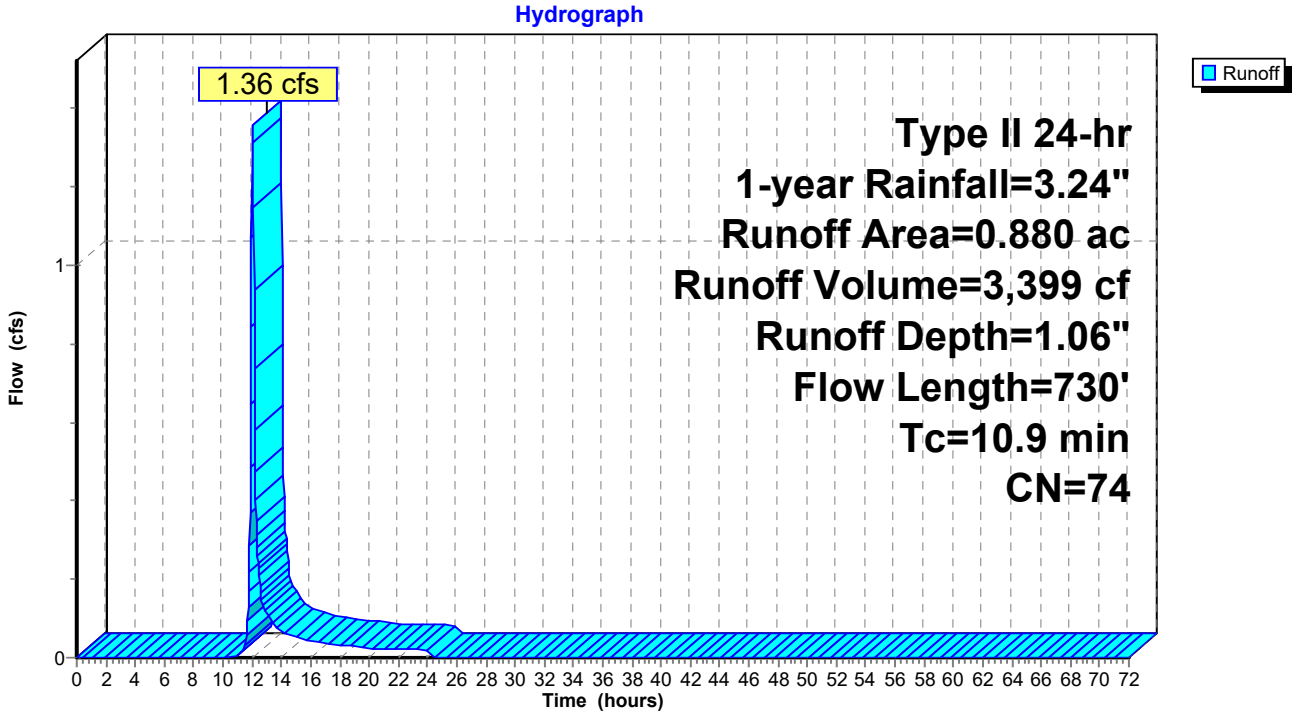
Runoff = 1.36 cfs @ 12.04 hrs, Volume= 3,399 cf, Depth= 1.06"
Routed to Link 2L : Outfall #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 1-year Rainfall=3.24"

Area (ac)	CN	Description
0.360	49	50-75% Grass cover, Fair, HSG A
0.120	69	50-75% Grass cover, Fair, HSG B
0.400	98	Paved parking, HSG A
0.880	74	Weighted Average
0.480		54.55% Pervious Area
0.400		45.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	40	0.0200	0.15		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
6.3	690	0.0080	1.82		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
10.9	730	Total			

Subcatchment 11S: North Bypass 1



Summary for Subcatchment 12S: North Bypass 2

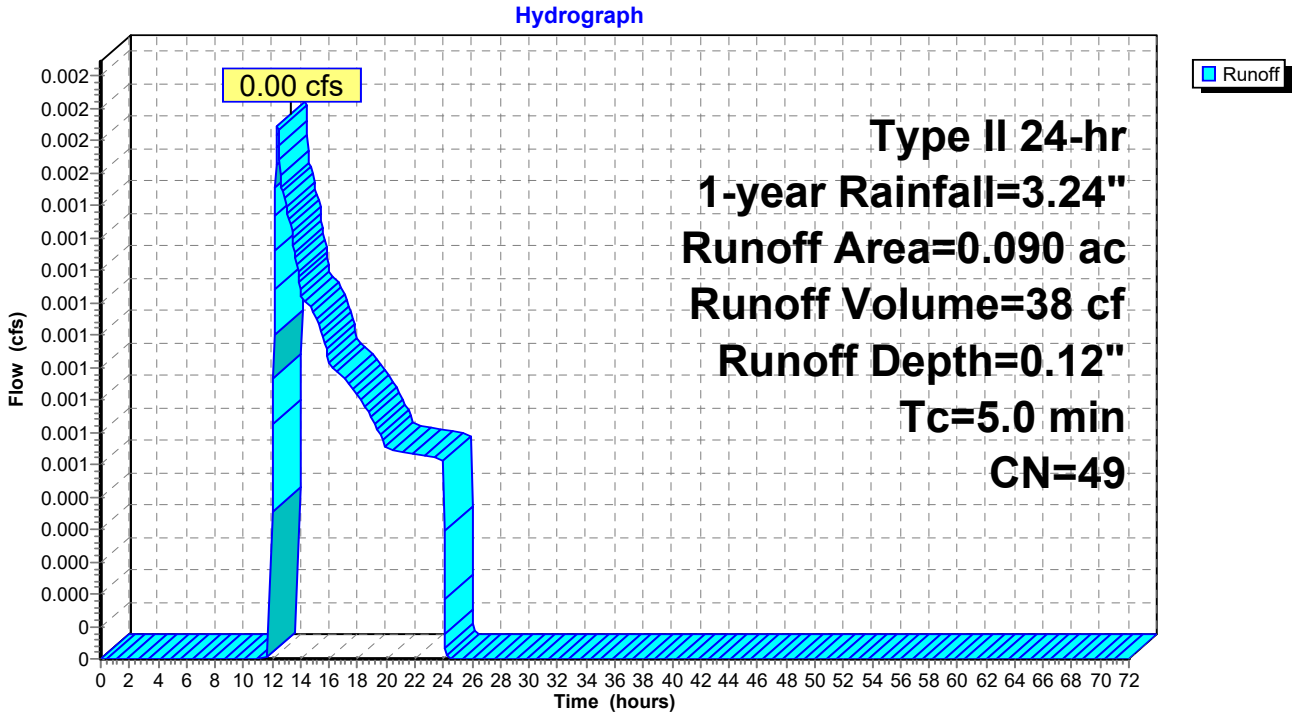
Runoff = 0.00 cfs @ 12.39 hrs, Volume= 38 cf, Depth= 0.12"
Routed to Pond 3P : (new Pond)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 1-year Rainfall=3.24"

Area (ac)	CN	Description
0.090	49	50-75% Grass cover, Fair, HSG A
0.090		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 12S: North Bypass 2



Summary for Pond 3P: (new Pond)

[79] Warning: Submerged Pond 9P Primary device # 1 OUTLET by 0.16'

Inflow Area = 45,302 sf, 55.77% Impervious, Inflow Depth = 0.83" for 1-year event
Inflow = 1.40 cfs @ 11.98 hrs, Volume= 3,132 cf
Outflow = 0.46 cfs @ 12.11 hrs, Volume= 3,132 cf, Atten= 67%, Lag= 7.7 min
Primary = 0.46 cfs @ 12.11 hrs, Volume= 3,132 cf
Routed to Link 2L : Outfall #1

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 691.90' @ 12.11 hrs Surf.Area= 866 sf Storage= 485 cf

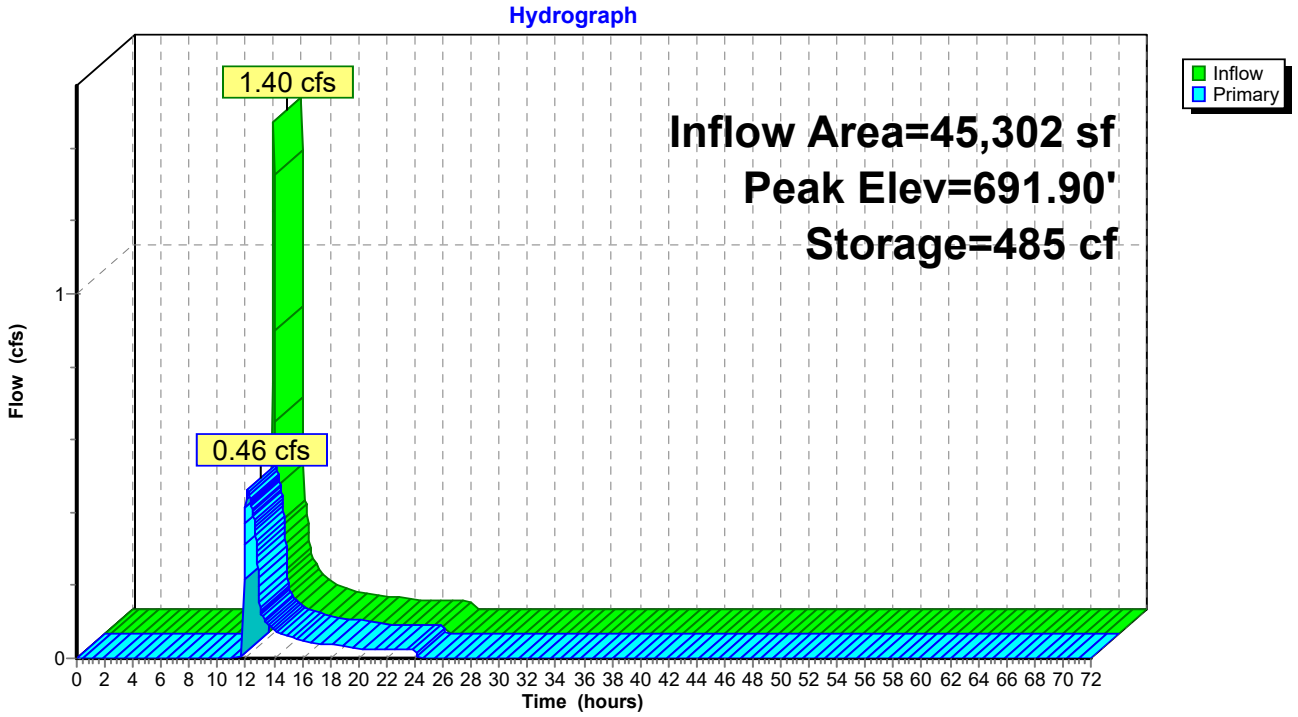
Plug-Flow detention time= 5.5 min calculated for 3,132 cf (100% of inflow)
Center-of-Mass det. time= 5.5 min (895.0 - 889.4)

Volume	Invert	Avail.Storage	Storage Description
#1	690.54'	10,996 cf	**60.0" Round CMP_Round 60"** L= 560.0' S= 0.0050 '/'

Device	Routing	Invert	Outlet Devices
#1	Primary	690.54'	**18.0" Round RCP_Round 18"** L= 20.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 690.54' / 690.44' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	690.54'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	695.00'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=0.46 cfs @ 12.11 hrs HW=691.90' (Free Discharge)
└**1=RCP_Round 18"** (Passes 0.46 cfs of 5.08 cfs potential flow)
└**2=Orifice/Grate** (Orifice Controls 0.46 cfs @ 5.26 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 3P: (new Pond)



Summary for Pond 7P: FocalPoint 7

[92] Warning: Device #3 is above defined storage

Inflow Area = 19,602 sf, 62.22% Impervious, Inflow Depth = 1.79" for 1-year event
Inflow = 1.47 cfs @ 11.96 hrs, Volume= 2,927 cf
Outflow = 1.40 cfs @ 11.98 hrs, Volume= 2,287 cf, Atten= 5%, Lag= 1.3 min
Primary = 1.40 cfs @ 11.98 hrs, Volume= 2,287 cf
Routed to Pond 3P : (new Pond)

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 700.64' @ 11.98 hrs Surf.Area= 1,143 sf Storage= 792 cf

Plug-Flow detention time= 128.8 min calculated for 2,287 cf (78% of inflow)
Center-of-Mass det. time= 41.1 min (862.6 - 821.5)

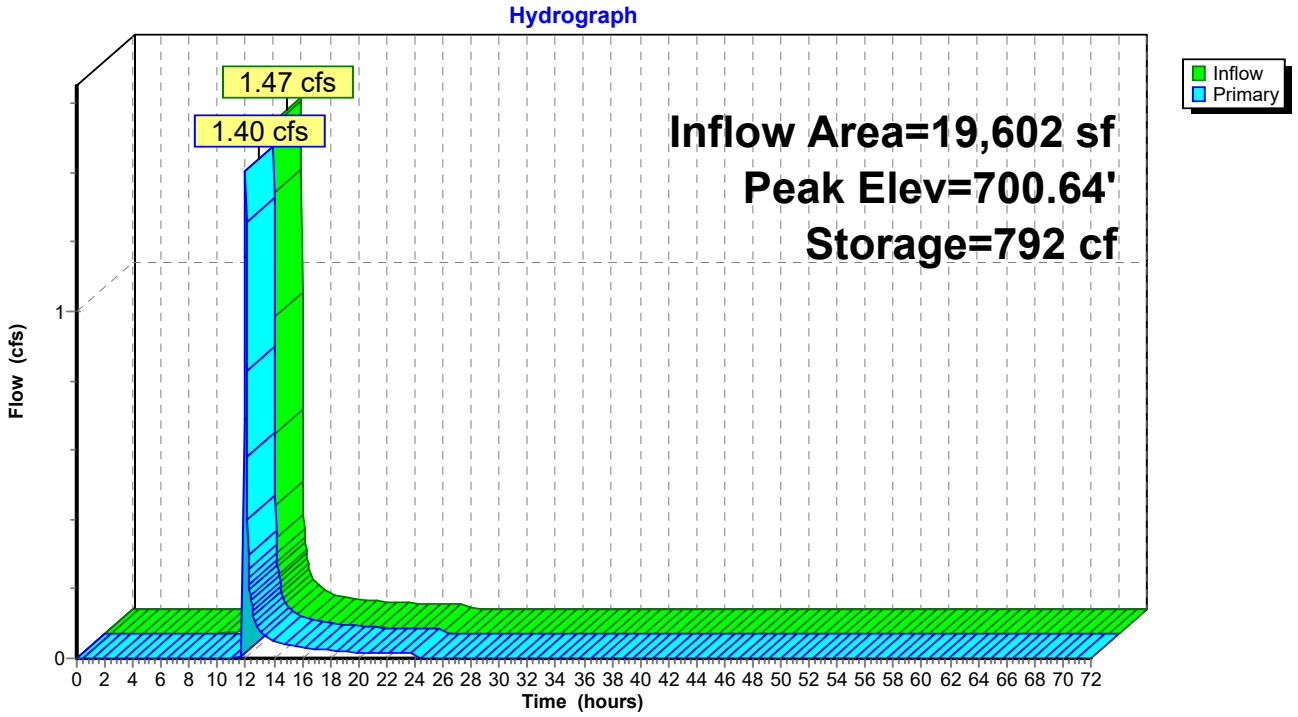
Volume	Invert	Avail.Storage	Storage Description
#1	697.00'	3,154 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
697.00	461	0.0	0	0
700.00	461	20.0	277	277
701.00	1,521	100.0	991	1,268
702.00	2,252	100.0	1,887	3,154

Device	Routing	Invert	Outlet Devices
#1	Primary	697.00'	**18.0" Round Culvert** L= 16.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 697.00' / 696.20' S= 0.0500 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	700.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	702.00'	**65.0' long x 11.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.53 2.59 2.70 2.68 2.67 2.68 2.66 2.64

Primary OutFlow Max=1.36 cfs @ 11.98 hrs HW=700.64' (Free Discharge)
└**1=Culvert** (Passes 1.36 cfs of 14.47 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 1.36 cfs @ 1.23 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 7P: FocalPoint 7



Summary for Pond 8P: FocalPoint 8

[92] Warning: Device #3 is above defined storage

Inflow Area = 8,712 sf, 55.00% Impervious, Inflow Depth = 1.18" for 1-year event
Inflow = 0.44 cfs @ 11.97 hrs, Volume= 857 cf
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 100%, Lag= 0.0 min
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Pond 3P : (new Pond)

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 698.41' @ 24.30 hrs Surf.Area= 1,003 sf Storage= 857 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
Center-of-Mass det. time= (not calculated: no outflow)

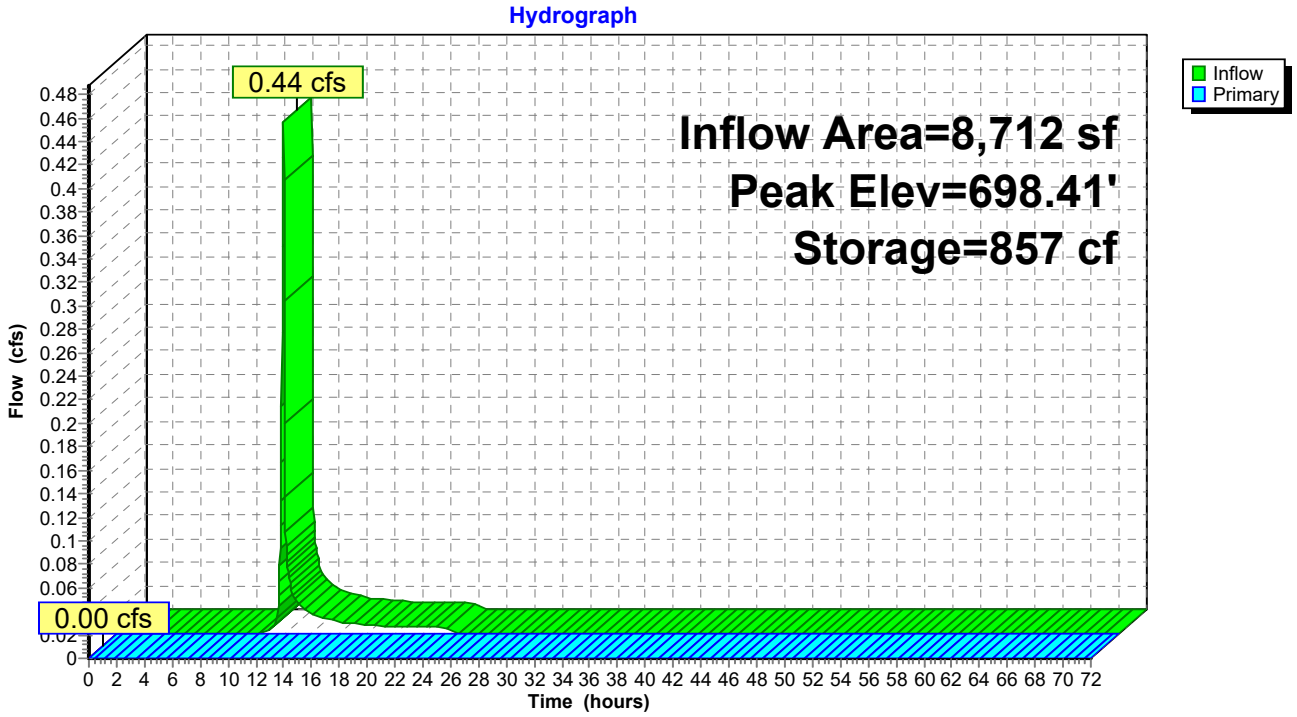
Volume	Invert	Avail.Storage	Storage Description
#1	695.00'	3,154 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.00	803	0.0	0	0
698.00	803	20.0	482	482
699.00	1,285	100.0	1,044	1,526
700.00	1,971	100.0	1,628	3,154

Device	Routing	Invert	Outlet Devices
#1	Primary	695.00'	**18.0" Round Culvert** L= 26.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 695.00' / 693.05' S= 0.0750 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	698.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**57.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=695.00' (Free Discharge)
- **1=Culvert** (Controls 0.00 cfs)
  - **2=Orifice/Grate** (Controls 0.00 cfs)
- **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 8P: FocalPoint 8



Summary for Pond 9P: FocalPoint 9

[92] Warning: Device #3 is above defined storage

Inflow Area = 13,068 sf, 63.33% Impervious, Inflow Depth = 1.43" for 1-year event
Inflow = 0.79 cfs @ 11.96 hrs, Volume= 1,560 cf
Outflow = 0.10 cfs @ 12.31 hrs, Volume= 807 cf, Atten= 88%, Lag= 20.6 min
Primary = 0.10 cfs @ 12.31 hrs, Volume= 807 cf
Routed to Pond 3P : (new Pond)

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 697.52' @ 12.31 hrs Surf.Area= 842 sf Storage= 769 cf

Plug-Flow detention time= 246.5 min calculated for 806 cf (52% of inflow)
Center-of-Mass det. time= 121.3 min (959.2 - 837.9)

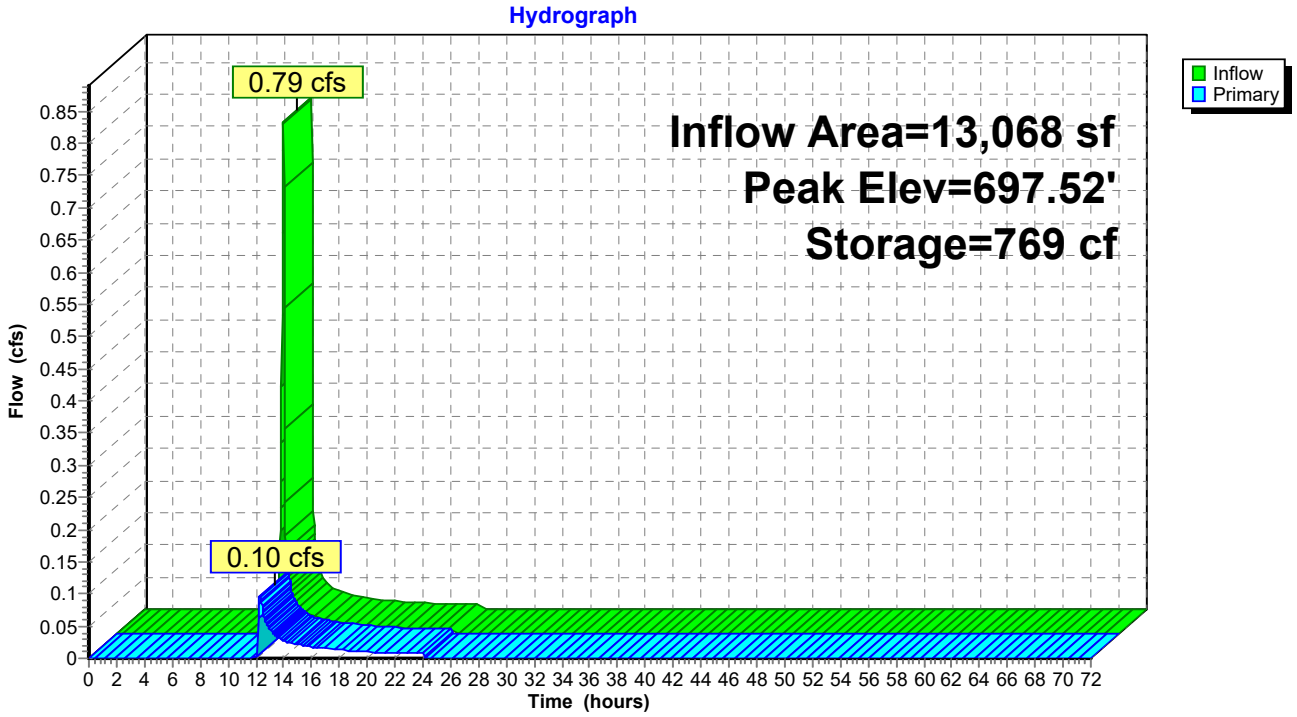
Volume	Invert	Avail.Storage	Storage Description
#1	694.00'	4,192 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.00	641	0.0	0	0
697.00	641	20.0	385	385
698.00	1,028	100.0	835	1,219
699.00	1,472	100.0	1,250	2,469
700.00	1,973	100.0	1,723	4,192

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 32.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 691.74' S= 0.0706 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	697.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**54.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=0.07 cfs @ 12.31 hrs HW=697.52' (Free Discharge)
- **1=Culvert** (Passes 0.07 cfs of 14.16 cfs potential flow)
  - **2=Orifice/Grate** (Weir Controls 0.07 cfs @ 0.45 fps)
- **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 9P: FocalPoint 9

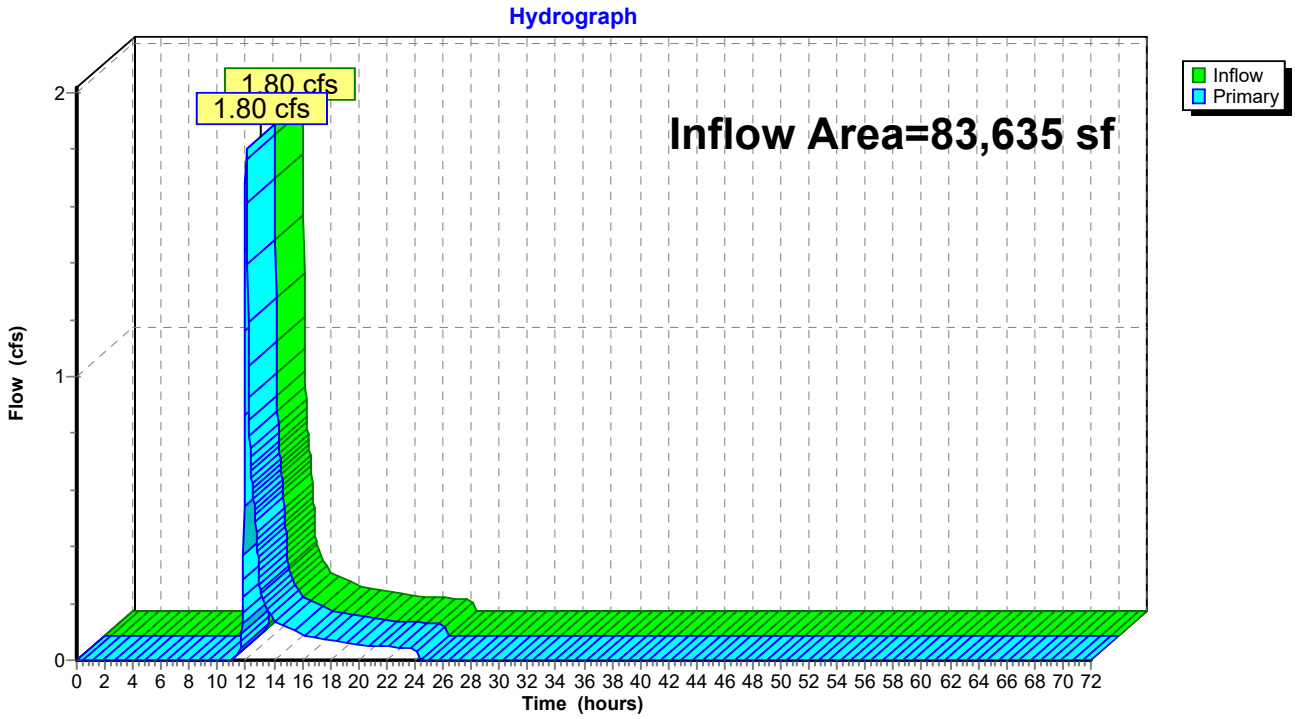


Summary for Link 2L: Outfall #1

Inflow Area = 83,635 sf, 51.04% Impervious, Inflow Depth = 0.94" for 1-year event
Inflow = 1.80 cfs @ 12.04 hrs, Volume= 6,531 cf
Primary = 1.80 cfs @ 12.04 hrs, Volume= 6,531 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs

Link 2L: Outfall #1



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment7S: Area 7	Runoff Area=0.450 ac 62.22% Impervious Runoff Depth=2.34" Tc=5.0 min CN=85 Runoff=1.90 cfs 3,826 cf
Subcatchment8S: Area 8	Runoff Area=0.200 ac 55.00% Impervious Runoff Depth=1.64" Tc=5.0 min CN=76 Runoff=0.61 cfs 1,190 cf
Subcatchment9S: Area 9	Runoff Area=0.300 ac 63.33% Impervious Runoff Depth=1.93" Tc=5.0 min CN=80 Runoff=1.07 cfs 2,107 cf
Subcatchment11S: North Bypass 1	Runoff Area=0.880 ac 45.45% Impervious Runoff Depth=1.50" Flow Length=730' Tc=10.9 min CN=74 Runoff=1.95 cfs 4,797 cf
Subcatchment12S: North Bypass 2	Runoff Area=0.090 ac 0.00% Impervious Runoff Depth=0.26" Tc=5.0 min CN=49 Runoff=0.02 cfs 86 cf
Pond 3P: (new Pond)	Peak Elev=692.47' Storage=1,121 cf Inflow=2.25 cfs 4,872 cf Outflow=0.56 cfs 4,872 cf
Pond 7P: FocalPoint 7	Peak Elev=700.67' Storage=825 cf Inflow=1.90 cfs 3,826 cf Outflow=1.83 cfs 3,186 cf
Pond 8P: FocalPoint 8	Peak Elev=698.50' Storage=946 cf Inflow=0.61 cfs 1,190 cf Outflow=0.01 cfs 247 cf
Pond 9P: FocalPoint 9	Peak Elev=697.59' Storage=831 cf Inflow=1.07 cfs 2,107 cf Outflow=0.72 cfs 1,353 cf
Link 2L: Outfall #1	Inflow=2.47 cfs 9,669 cf Primary=2.47 cfs 9,669 cf

Total Runoff Area = 83,635 sf Runoff Volume = 12,005 cf Average Runoff Depth = 1.72"
48.96% Pervious = 40,946 sf 51.04% Impervious = 42,689 sf

Summary for Subcatchment 7S: Area 7

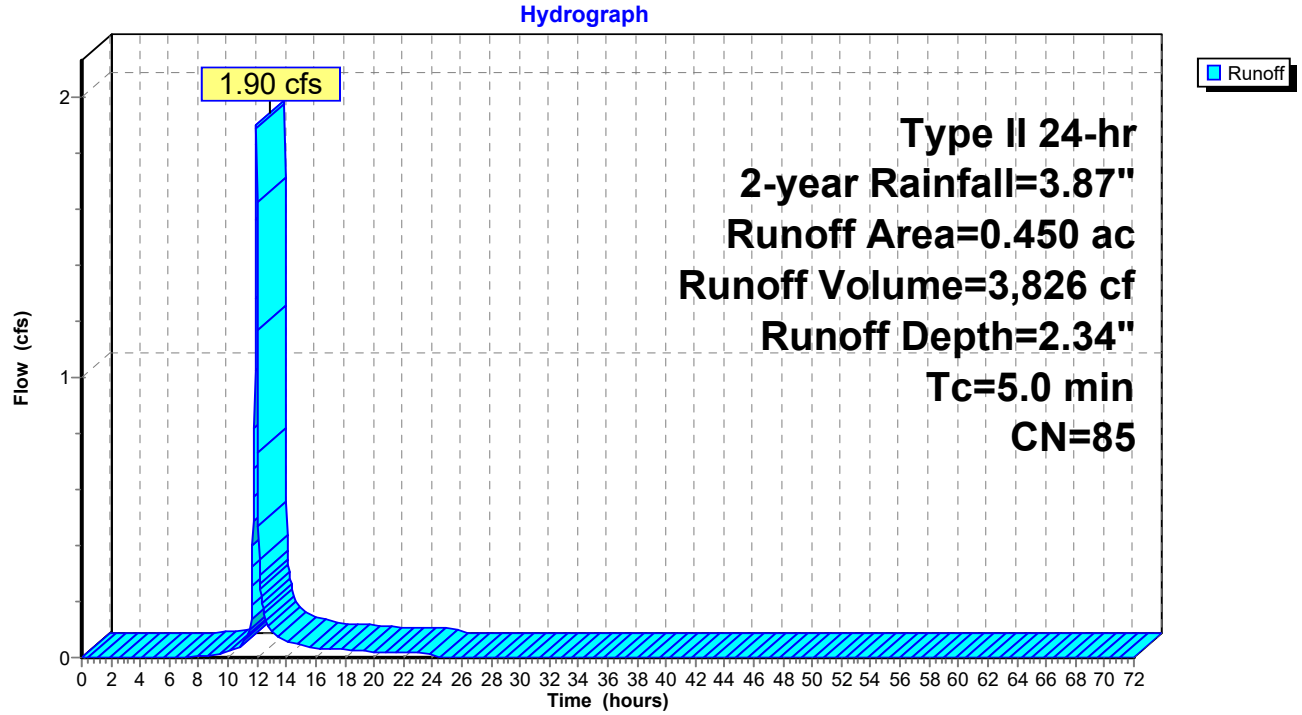
Runoff = 1.90 cfs @ 11.96 hrs, Volume= 3,826 cf, Depth= 2.34"
Routed to Pond 7P : FocalPoint 7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 2-year Rainfall=3.87"

Area (ac)	CN	Description
0.040	49	50-75% Grass cover, Fair, HSG A
0.130	69	50-75% Grass cover, Fair, HSG B
0.280	98	Paved parking, HSG A
0.450	85	Weighted Average
0.170		37.78% Pervious Area
0.280		62.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 7S: Area 7



Summary for Subcatchment 8S: Area 8

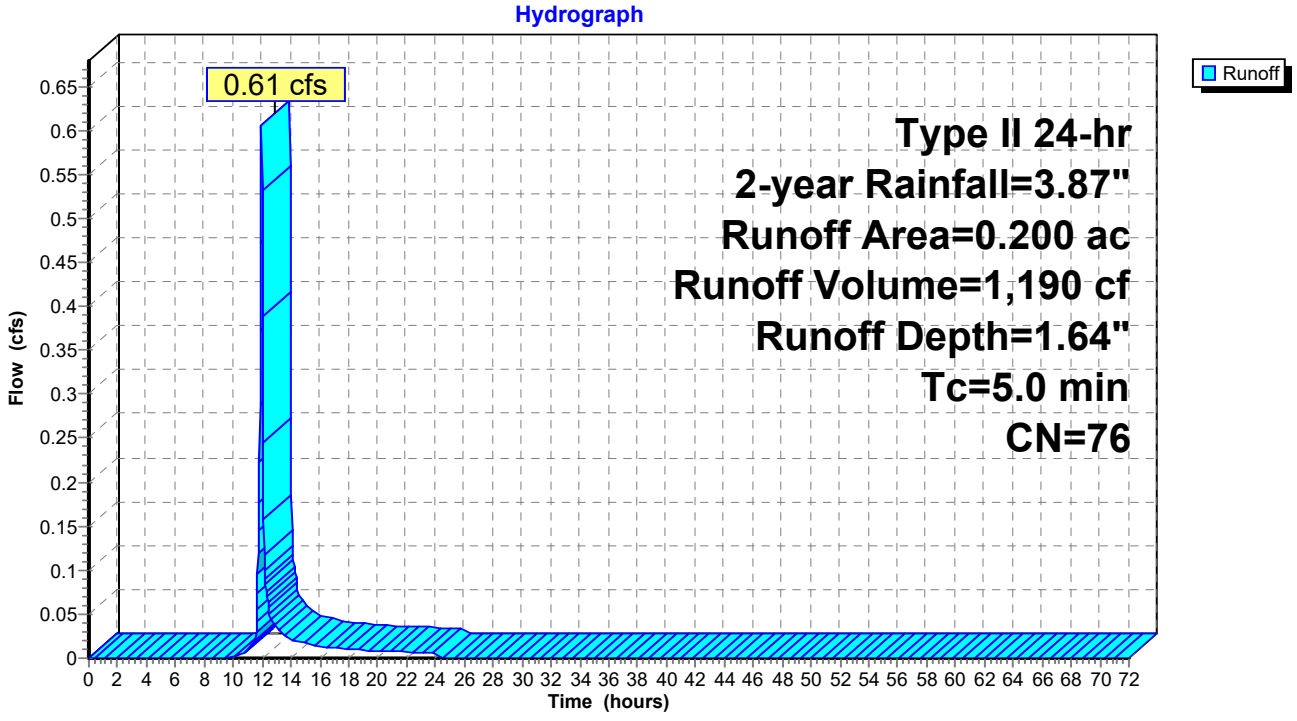
Runoff = 0.61 cfs @ 11.96 hrs, Volume= 1,190 cf, Depth= 1.64"
Routed to Pond 8P : FocalPoint 8

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 2-year Rainfall=3.87"

Area (ac)	CN	Description
0.090	49	50-75% Grass cover, Fair, HSG A
0.110	98	Paved parking, HSG A
0.200	76	Weighted Average
0.090		45.00% Pervious Area
0.110		55.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 8S: Area 8



Summary for Subcatchment 9S: Area 9

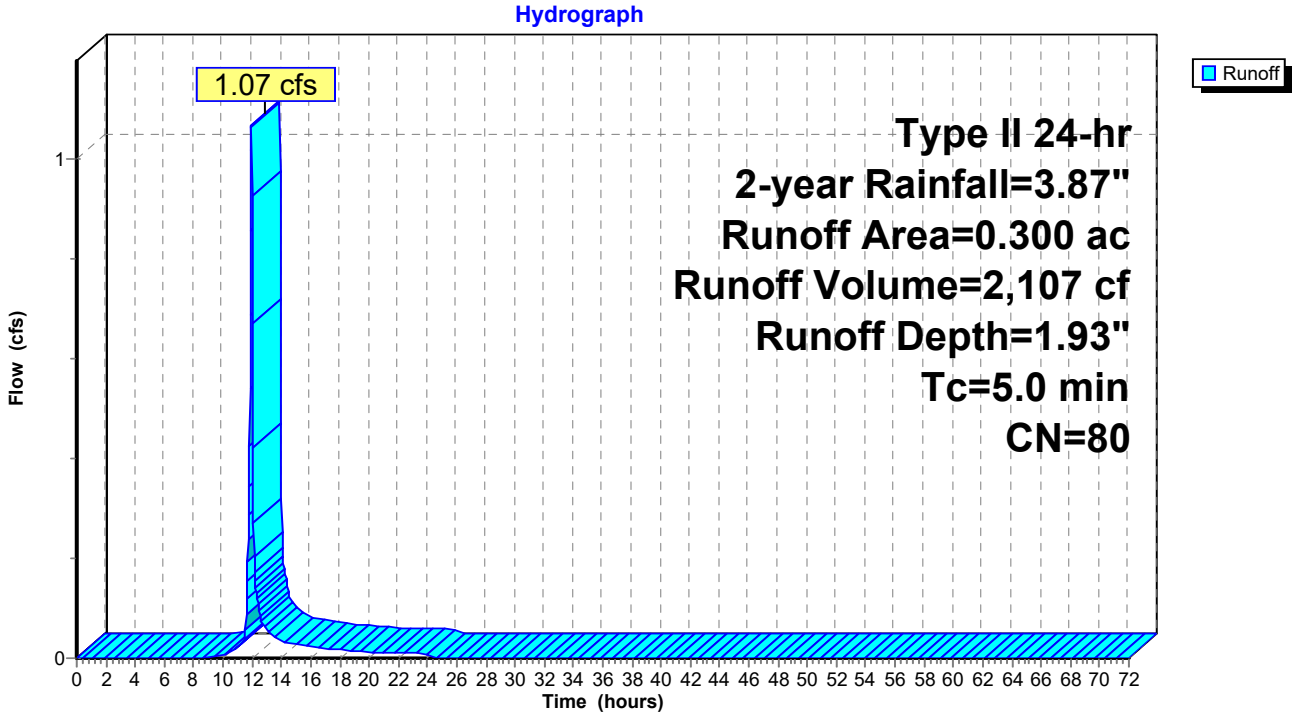
Runoff = 1.07 cfs @ 11.96 hrs, Volume= 2,107 cf, Depth= 1.93"
Routed to Pond 9P : FocalPoint 9

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 2-year Rainfall=3.87"

Area (ac)	CN	Description
0.110	49	50-75% Grass cover, Fair, HSG A
0.190	98	Paved parking, HSG A
0.300	80	Weighted Average
0.110		36.67% Pervious Area
0.190		63.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 9S: Area 9



Summary for Subcatchment 11S: North Bypass 1

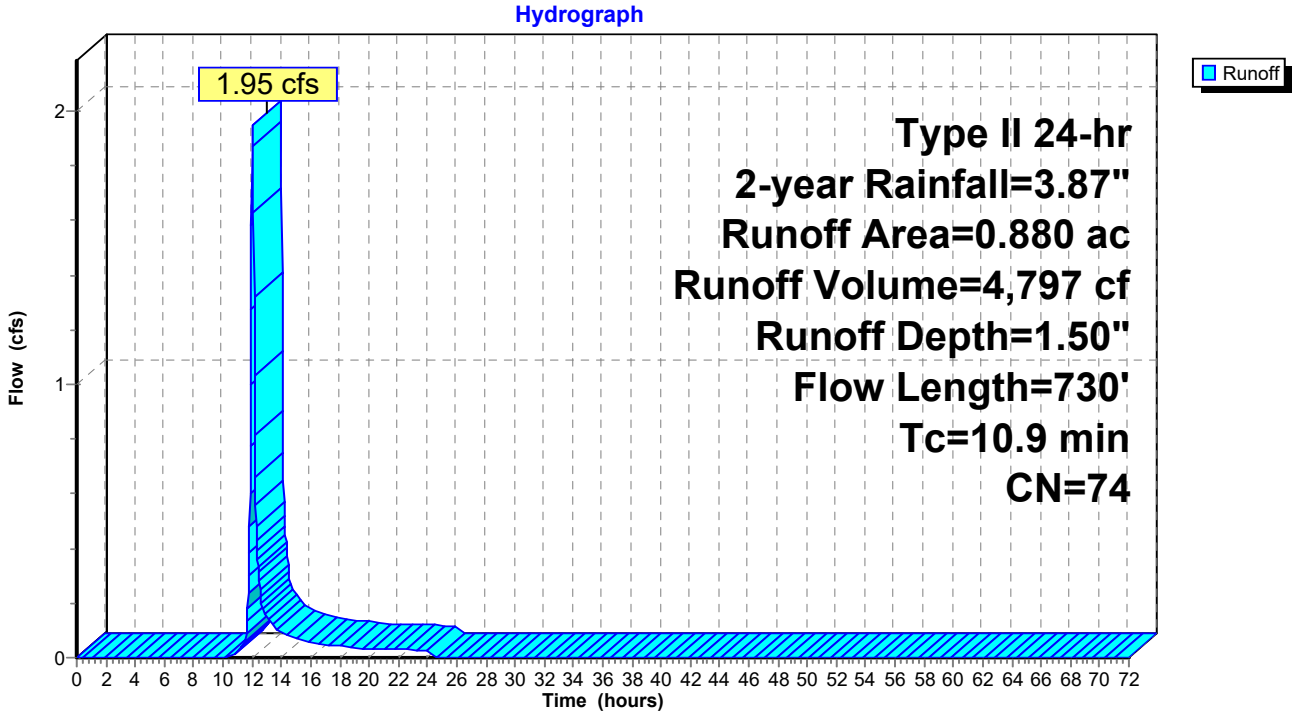
Runoff = 1.95 cfs @ 12.03 hrs, Volume= 4,797 cf, Depth= 1.50"
Routed to Link 2L : Outfall #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 2-year Rainfall=3.87"

Area (ac)	CN	Description
0.360	49	50-75% Grass cover, Fair, HSG A
0.120	69	50-75% Grass cover, Fair, HSG B
0.400	98	Paved parking, HSG A
0.880	74	Weighted Average
0.480		54.55% Pervious Area
0.400		45.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	40	0.0200	0.15		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
6.3	690	0.0080	1.82		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
10.9	730	Total			

Subcatchment 11S: North Bypass 1



Summary for Subcatchment 12S: North Bypass 2

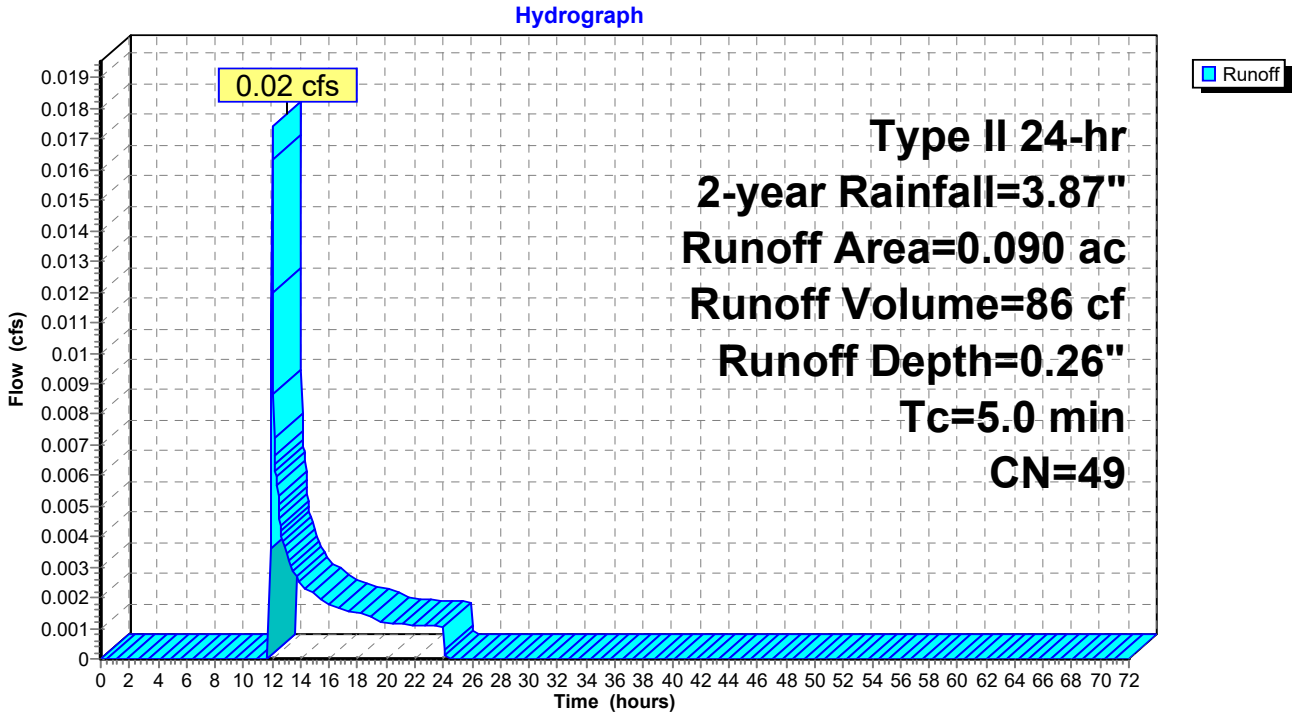
Runoff = 0.02 cfs @ 12.01 hrs, Volume= 86 cf, Depth= 0.26"
Routed to Pond 3P : (new Pond)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 2-year Rainfall=3.87"

Area (ac)	CN	Description
0.090	49	50-75% Grass cover, Fair, HSG A
0.090		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 12S: North Bypass 2



Summary for Pond 3P: (new Pond)

[79] Warning: Submerged Pond 9P Primary device # 1 OUTLET by 0.73'

Inflow Area = 45,302 sf, 55.77% Impervious, Inflow Depth = 1.29" for 2-year event
Inflow = 2.25 cfs @ 12.01 hrs, Volume= 4,872 cf
Outflow = 0.56 cfs @ 12.16 hrs, Volume= 4,872 cf, Atten= 75%, Lag= 8.9 min
Primary = 0.56 cfs @ 12.16 hrs, Volume= 4,872 cf
Routed to Link 2L : Outfall #1

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 692.47' @ 12.16 hrs Surf.Area= 1,395 sf Storage= 1,121 cf

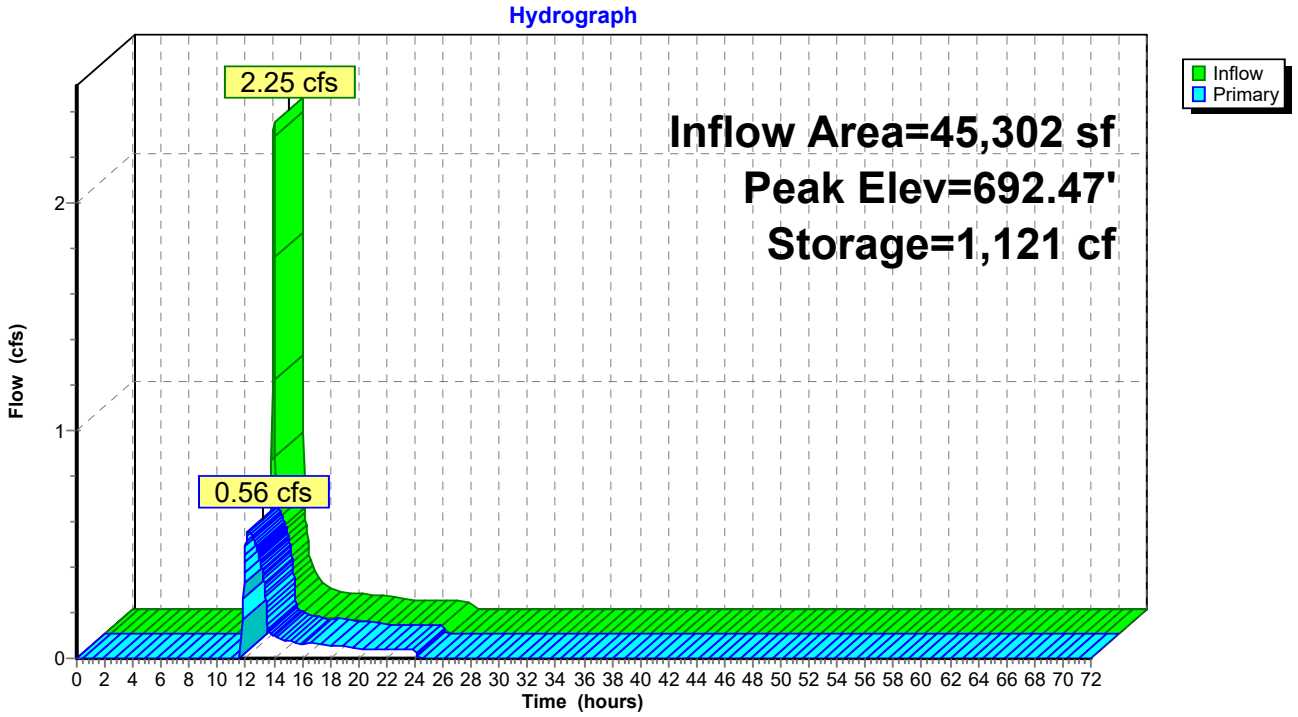
Plug-Flow detention time= 12.2 min calculated for 4,870 cf (100% of inflow)
Center-of-Mass det. time= 12.2 min (893.5 - 881.3)

Volume	Invert	Avail.Storage	Storage Description
#1	690.54'	10,996 cf	**60.0" Round CMP_Round 60"** L= 560.0' S= 0.0050 '/'

Device	Routing	Invert	Outlet Devices
#1	Primary	690.54'	**18.0" Round RCP_Round 18"** L= 20.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 690.54' / 690.44' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	690.54'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	695.00'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=0.56 cfs @ 12.16 hrs HW=692.47' (Free Discharge)
└─**1=RCP_Round 18"** (Passes 0.56 cfs of 7.94 cfs potential flow)
  ├─**2=Orifice/Grate** (Orifice Controls 0.56 cfs @ 6.39 fps)
  └─**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 3P: (new Pond)



Summary for Pond 7P: FocalPoint 7

[92] Warning: Device #3 is above defined storage

Inflow Area = 19,602 sf, 62.22% Impervious, Inflow Depth = 2.34" for 2-year event
Inflow = 1.90 cfs @ 11.96 hrs, Volume= 3,826 cf
Outflow = 1.83 cfs @ 11.98 hrs, Volume= 3,186 cf, Atten= 4%, Lag= 1.1 min
Primary = 1.83 cfs @ 11.98 hrs, Volume= 3,186 cf
Routed to Pond 3P : (new Pond)

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 700.67' @ 11.98 hrs Surf.Area= 1,173 sf Storage= 825 cf

Plug-Flow detention time= 106.7 min calculated for 3,186 cf (83% of inflow)
Center-of-Mass det. time= 32.9 min (846.7 - 813.9)

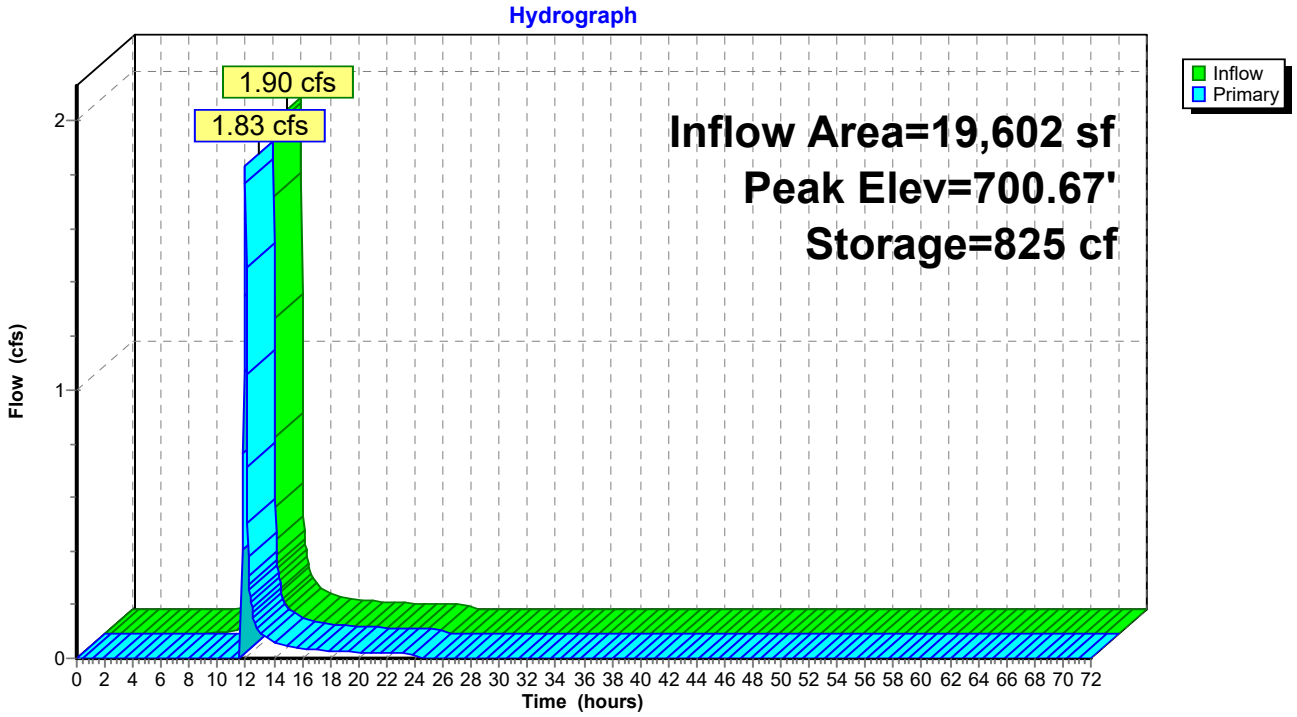
Volume	Invert	Avail.Storage	Storage Description
#1	697.00'	3,154 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
697.00	461	0.0	0	0
700.00	461	20.0	277	277
701.00	1,521	100.0	991	1,268
702.00	2,252	100.0	1,887	3,154

Device	Routing	Invert	Outlet Devices
#1	Primary	697.00'	**18.0" Round Culvert** L= 16.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 697.00' / 696.20' S= 0.0500 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	700.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	702.00'	**65.0' long x 11.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.53 2.59 2.70 2.68 2.67 2.68 2.66 2.64

Primary OutFlow Max=1.80 cfs @ 11.98 hrs HW=700.67' (Free Discharge)
- **1=Culvert** (Passes 1.80 cfs of 14.54 cfs potential flow)
  - **2=Orifice/Grate** (Weir Controls 1.80 cfs @ 1.35 fps)
- **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 7P: FocalPoint 7



Summary for Pond 8P: FocalPoint 8

[92] Warning: Device #3 is above defined storage

Inflow Area = 8,712 sf, 55.00% Impervious, Inflow Depth = 1.64" for 2-year event
Inflow = 0.61 cfs @ 11.96 hrs, Volume= 1,190 cf
Outflow = 0.01 cfs @ 16.38 hrs, Volume= 247 cf, Atten= 98%, Lag= 265.2 min
Primary = 0.01 cfs @ 16.38 hrs, Volume= 247 cf
Routed to Pond 3P : (new Pond)

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 698.50' @ 16.38 hrs Surf.Area= 1,045 sf Storage= 946 cf

Plug-Flow detention time= 478.7 min calculated for 247 cf (21% of inflow)
Center-of-Mass det. time= 338.5 min (1,179.3 - 840.8)

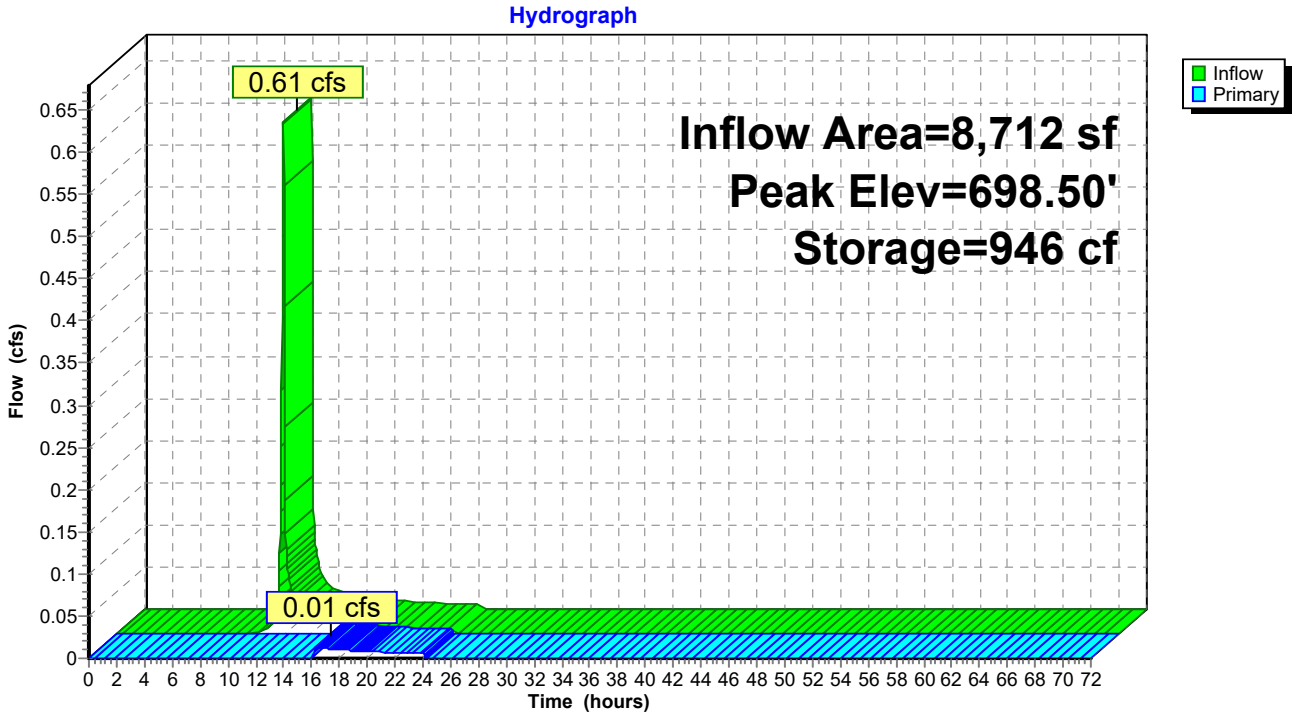
Volume	Invert	Avail.Storage	Storage Description
#1	695.00'	3,154 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.00	803	0.0	0	0
698.00	803	20.0	482	482
699.00	1,285	100.0	1,044	1,526
700.00	1,971	100.0	1,628	3,154

Device	Routing	Invert	Outlet Devices
#1	Primary	695.00'	**18.0" Round Culvert** L= 26.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 695.00' / 693.05' S= 0.0750 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	698.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**57.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=0.00 cfs @ 16.38 hrs HW=698.50' (Free Discharge)
└**1=Culvert** (Passes 0.00 cfs of 14.12 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 0.00 cfs @ 0.15 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 8P: FocalPoint 8



Summary for Pond 9P: FocalPoint 9

[92] Warning: Device #3 is above defined storage

Inflow Area = 13,068 sf, 63.33% Impervious, Inflow Depth = 1.93" for 2-year event
Inflow = 1.07 cfs @ 11.96 hrs, Volume= 2,107 cf
Outflow = 0.72 cfs @ 12.04 hrs, Volume= 1,353 cf, Atten= 32%, Lag= 4.4 min
Primary = 0.72 cfs @ 12.04 hrs, Volume= 1,353 cf
Routed to Pond 3P : (new Pond)

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 697.59' @ 12.04 hrs Surf.Area= 870 sf Storage= 831 cf

Plug-Flow detention time= 186.1 min calculated for 1,353 cf (64% of inflow)
Center-of-Mass det. time= 73.6 min (902.8 - 829.3)

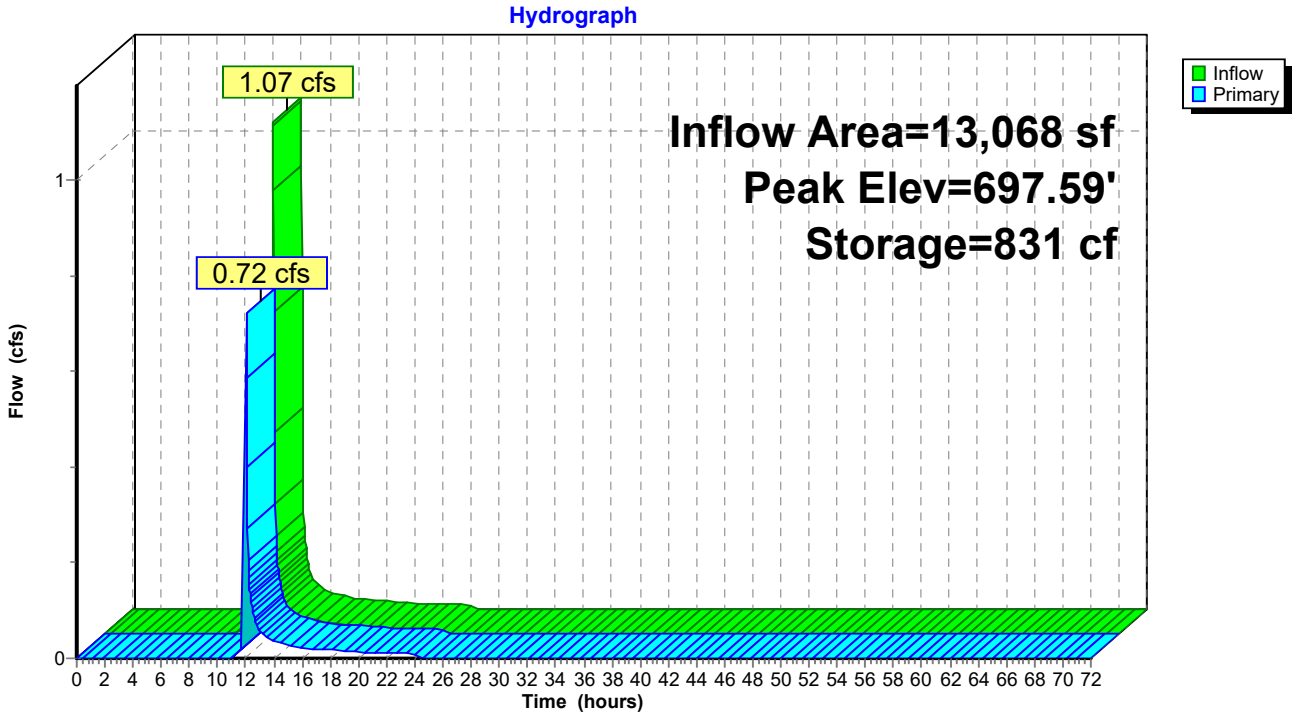
Volume	Invert	Avail.Storage	Storage Description
#1	694.00'	4,192 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.00	641	0.0	0	0
697.00	641	20.0	385	385
698.00	1,028	100.0	835	1,219
699.00	1,472	100.0	1,250	2,469
700.00	1,973	100.0	1,723	4,192

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 32.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 691.74' S= 0.0706 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	697.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**54.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=0.67 cfs @ 12.04 hrs HW=697.59' (Free Discharge)
- **1=Culvert** (Passes 0.67 cfs of 14.33 cfs potential flow)
- **2=Orifice/Grate** (Weir Controls 0.67 cfs @ 0.97 fps)
- **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 9P: FocalPoint 9

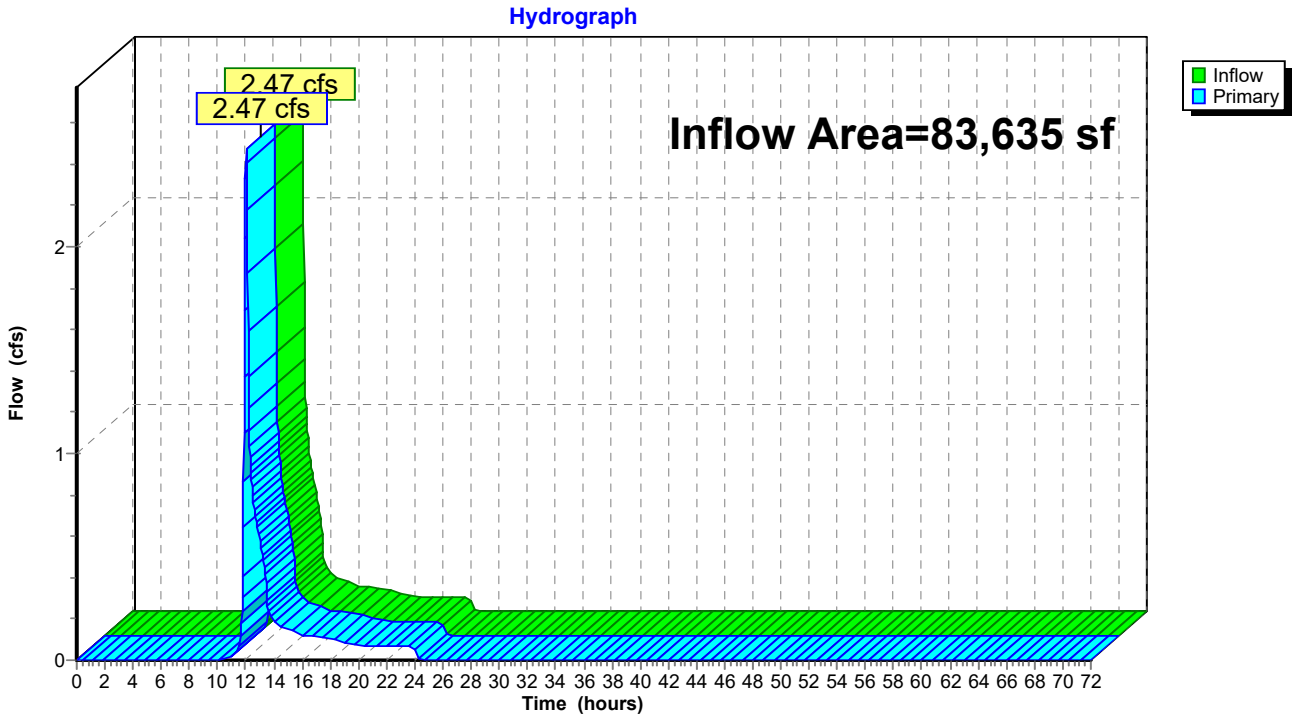


Summary for Link 2L: Outfall #1

Inflow Area = 83,635 sf, 51.04% Impervious, Inflow Depth = 1.39" for 2-year event
Inflow = 2.47 cfs @ 12.04 hrs, Volume= 9,669 cf
Primary = 2.47 cfs @ 12.04 hrs, Volume= 9,669 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs

Link 2L: Outfall #1



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment7S: Area 7 Runoff Area=0.450 ac 62.22% Impervious Runoff Depth=3.10"
Tc=5.0 min CN=85 Runoff=2.49 cfs 5,066 cf

Subcatchment8S: Area 8 Runoff Area=0.200 ac 55.00% Impervious Runoff Depth=2.30"
Tc=5.0 min CN=76 Runoff=0.85 cfs 1,669 cf

Subcatchment9S: Area 9 Runoff Area=0.300 ac 63.33% Impervious Runoff Depth=2.64"
Tc=5.0 min CN=80 Runoff=1.44 cfs 2,877 cf

Subcatchment11S: North Bypass 1 Runoff Area=0.880 ac 45.45% Impervious Runoff Depth=2.14"
Flow Length=730' Tc=10.9 min CN=74 Runoff=2.79 cfs 6,821 cf

Subcatchment12S: North Bypass 2 Runoff Area=0.090 ac 0.00% Impervious Runoff Depth=0.53"
Tc=5.0 min CN=49 Runoff=0.06 cfs 173 cf

Pond 3P: (new Pond) Peak Elev=693.06' Storage=2,118 cf Inflow=3.87 cfs 7,447 cf
Outflow=0.64 cfs 7,447 cf

Pond 7P: FocalPoint 7 Peak Elev=700.71' Storage=866 cf Inflow=2.49 cfs 5,066 cf
Outflow=2.40 cfs 4,426 cf

Pond 8P: FocalPoint 8 Peak Elev=698.51' Storage=954 cf Inflow=0.85 cfs 1,669 cf
Outflow=0.06 cfs 725 cf

Pond 9P: FocalPoint 9 Peak Elev=697.64' Storage=877 cf Inflow=1.44 cfs 2,877 cf
Outflow=1.41 cfs 2,123 cf

Link 2L: Outfall #1 Inflow=3.41 cfs 14,268 cf
Primary=3.41 cfs 14,268 cf

Total Runoff Area = 83,635 sf Runoff Volume = 16,605 cf Average Runoff Depth = 2.38"
48.96% Pervious = 40,946 sf 51.04% Impervious = 42,689 sf

Summary for Subcatchment 7S: Area 7

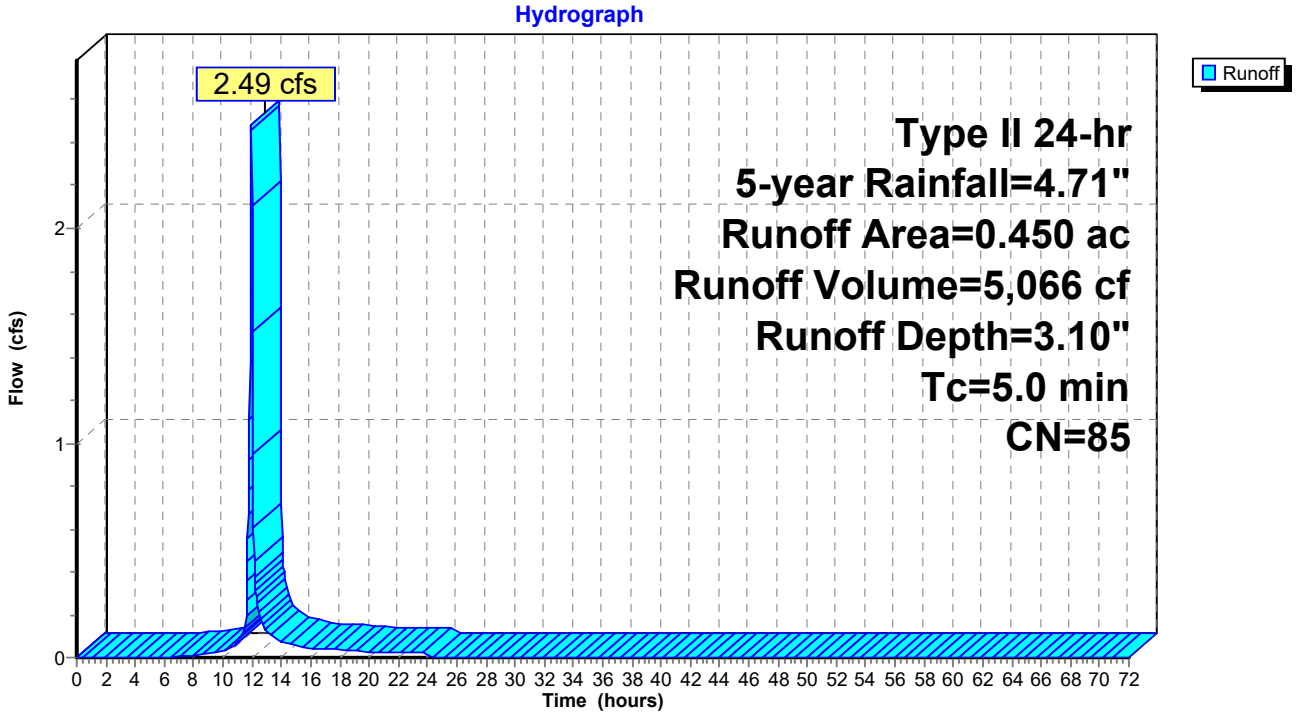
Runoff = 2.49 cfs @ 11.96 hrs, Volume= 5,066 cf, Depth= 3.10"
Routed to Pond 7P : FocalPoint 7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 5-year Rainfall=4.71"

Area (ac)	CN	Description
0.040	49	50-75% Grass cover, Fair, HSG A
0.130	69	50-75% Grass cover, Fair, HSG B
0.280	98	Paved parking, HSG A
0.450	85	Weighted Average
0.170		37.78% Pervious Area
0.280		62.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 7S: Area 7



Summary for Subcatchment 8S: Area 8

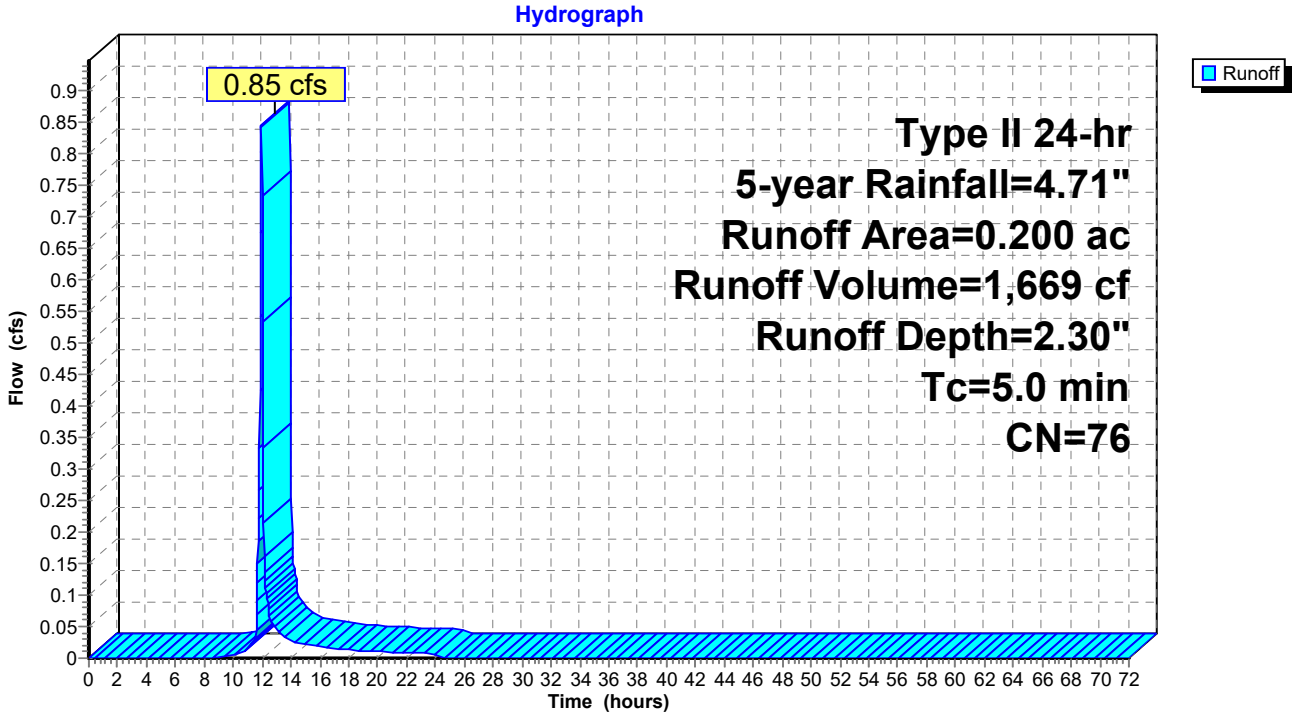
Runoff = 0.85 cfs @ 11.96 hrs, Volume= 1,669 cf, Depth= 2.30"
Routed to Pond 8P : FocalPoint 8

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 5-year Rainfall=4.71"

Area (ac)	CN	Description
0.090	49	50-75% Grass cover, Fair, HSG A
0.110	98	Paved parking, HSG A
0.200	76	Weighted Average
0.090		45.00% Pervious Area
0.110		55.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 8S: Area 8



Summary for Subcatchment 9S: Area 9

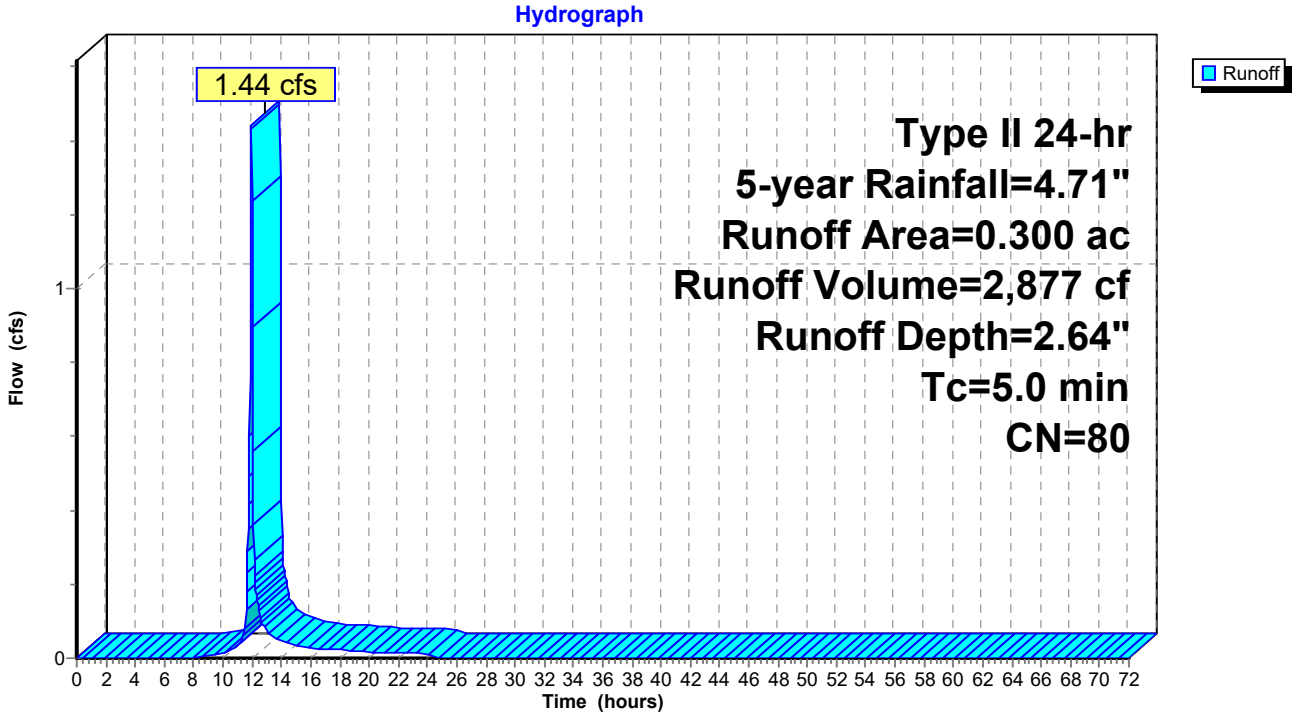
Runoff = 1.44 cfs @ 11.96 hrs, Volume= 2,877 cf, Depth= 2.64"
Routed to Pond 9P : FocalPoint 9

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 5-year Rainfall=4.71"

Area (ac)	CN	Description
0.110	49	50-75% Grass cover, Fair, HSG A
0.190	98	Paved parking, HSG A
0.300	80	Weighted Average
0.110		36.67% Pervious Area
0.190		63.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 9S: Area 9



Summary for Subcatchment 11S: North Bypass 1

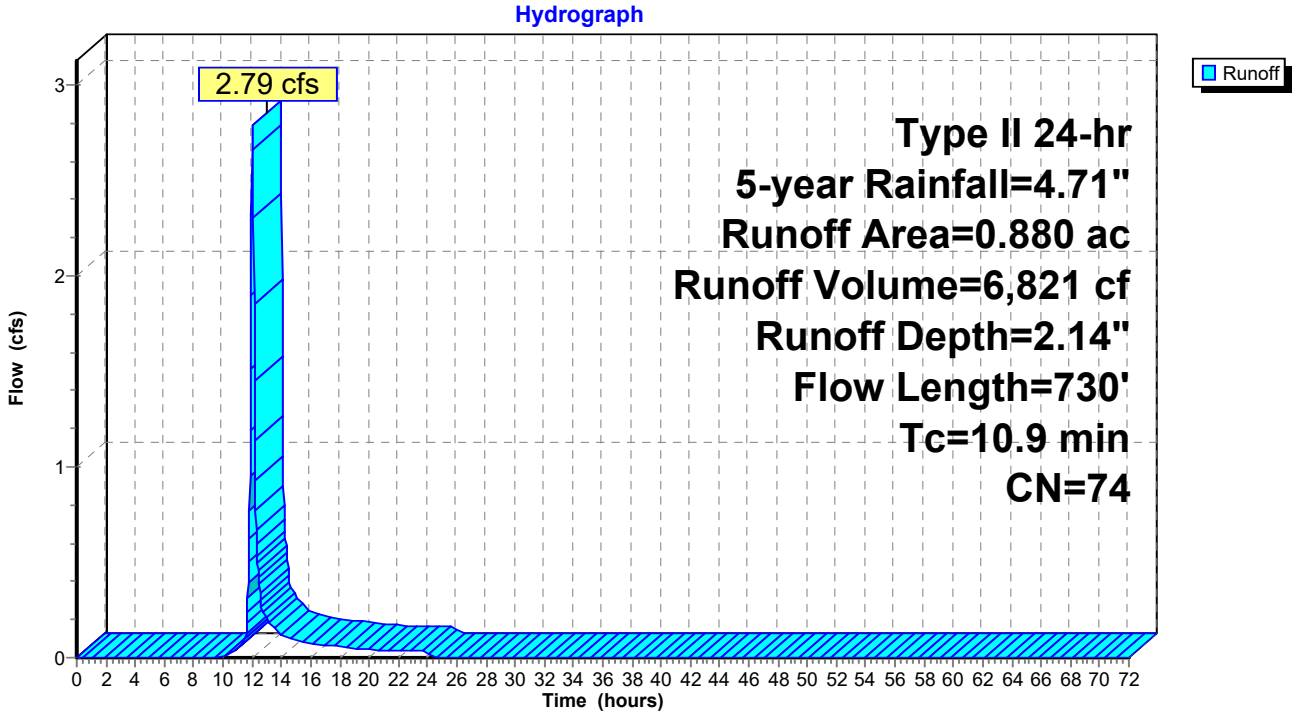
Runoff = 2.79 cfs @ 12.03 hrs, Volume= 6,821 cf, Depth= 2.14"
Routed to Link 2L : Outfall #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 5-year Rainfall=4.71"

Area (ac)	CN	Description
0.360	49	50-75% Grass cover, Fair, HSG A
0.120	69	50-75% Grass cover, Fair, HSG B
0.400	98	Paved parking, HSG A
0.880	74	Weighted Average
0.480		54.55% Pervious Area
0.400		45.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	40	0.0200	0.15		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
6.3	690	0.0080	1.82		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
10.9	730	Total			

Subcatchment 11S: North Bypass 1



Summary for Subcatchment 12S: North Bypass 2

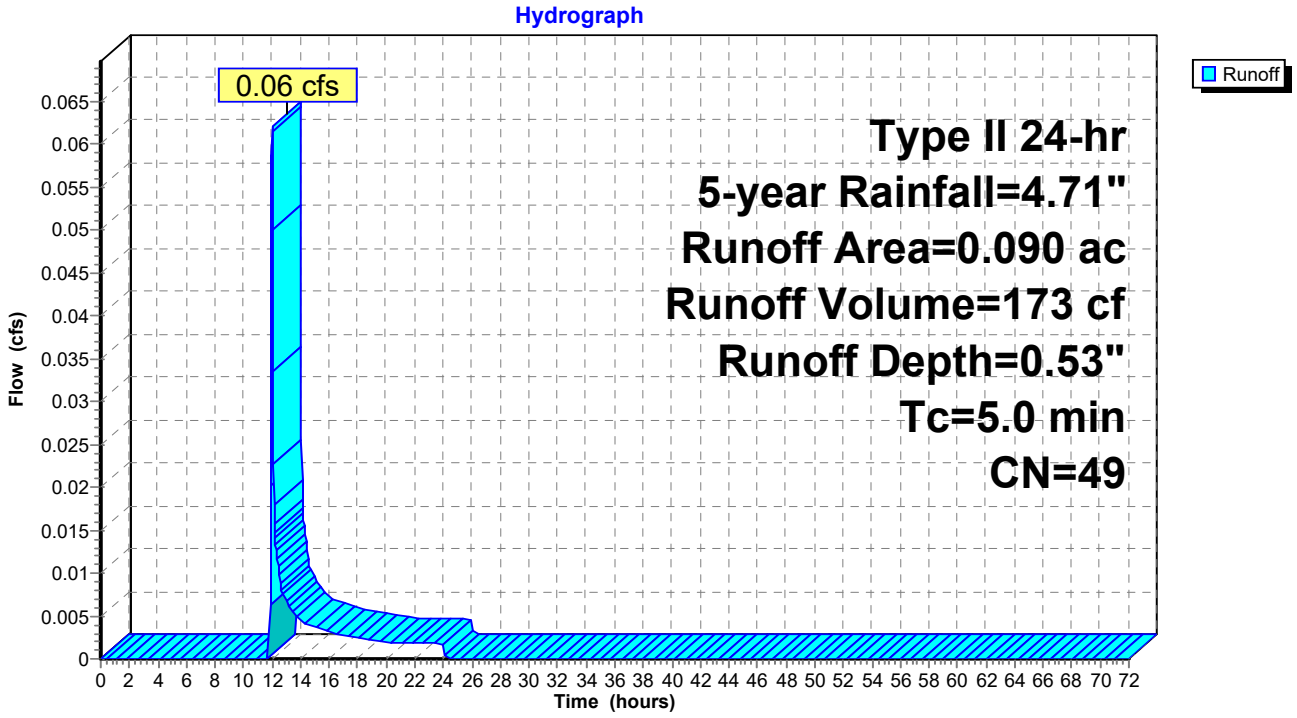
Runoff = 0.06 cfs @ 11.99 hrs, Volume= 173 cf, Depth= 0.53"
Routed to Pond 3P : (new Pond)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 5-year Rainfall=4.71"

Area (ac)	CN	Description
0.090	49	50-75% Grass cover, Fair, HSG A
0.090		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 12S: North Bypass 2



Summary for Pond 3P: (new Pond)

[79] Warning: Submerged Pond 8P Primary device # 1 OUTLET by 0.01'
[79] Warning: Submerged Pond 9P Primary device # 1 OUTLET by 1.32'

Inflow Area = 45,302 sf, 55.77% Impervious, Inflow Depth = 1.97" for 5-year event
Inflow = 3.87 cfs @ 11.98 hrs, Volume= 7,447 cf
Outflow = 0.64 cfs @ 12.18 hrs, Volume= 7,447 cf, Atten= 83%, Lag= 12.1 min
Primary = 0.64 cfs @ 12.18 hrs, Volume= 7,447 cf
Routed to Link 2L : Outfall #1

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 693.06' @ 12.18 hrs Surf.Area= 1,981 sf Storage= 2,118 cf

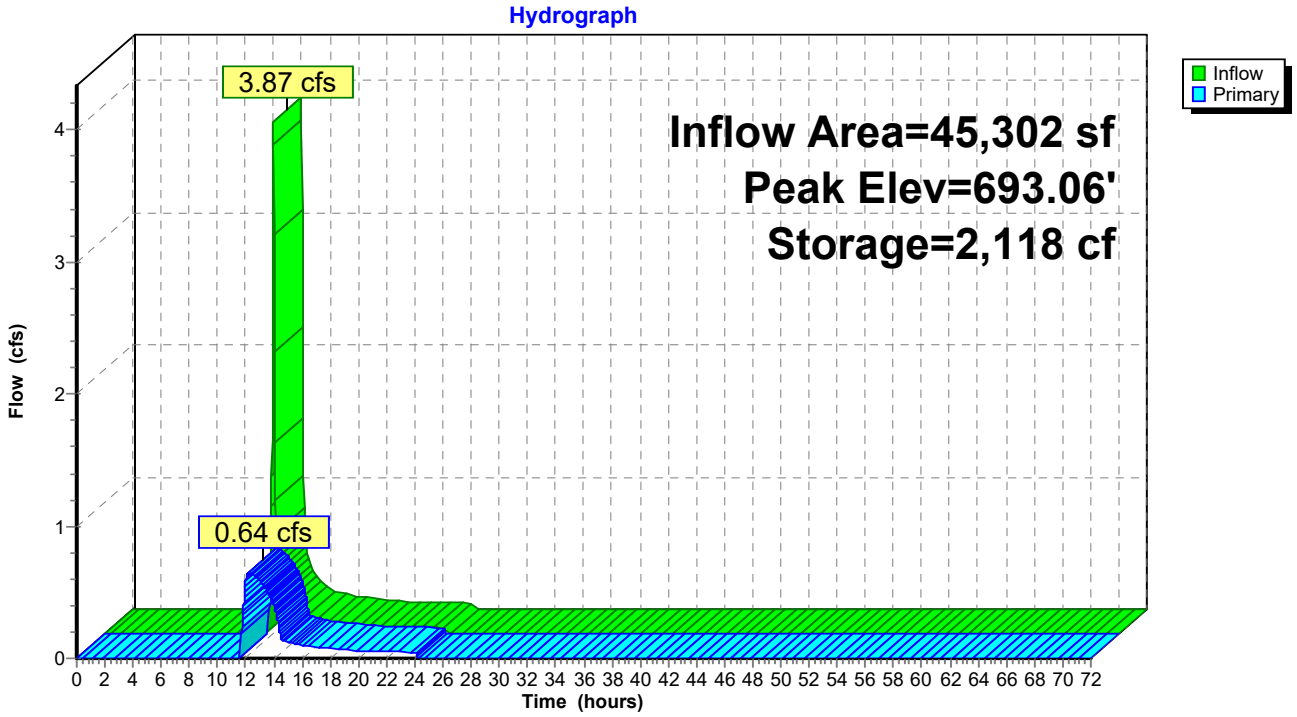
Plug-Flow detention time= 22.9 min calculated for 7,447 cf (100% of inflow)
Center-of-Mass det. time= 22.9 min (884.3 - 861.5)

Volume	Invert	Avail.Storage	Storage Description
#1	690.54'	10,996 cf	**60.0" Round CMP_Round 60"** L= 560.0' S= 0.0050 '/'

Device	Routing	Invert	Outlet Devices
#1	Primary	690.54'	**18.0" Round RCP_Round 18"** L= 20.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 690.54' / 690.44' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	690.54'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	695.00'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=0.64 cfs @ 12.18 hrs HW=693.06' (Free Discharge)
└**1=RCP_Round 18"** (Passes 0.64 cfs of 10.97 cfs potential flow)
├**2=Orifice/Grate** (Orifice Controls 0.64 cfs @ 7.38 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 3P: (new Pond)



Summary for Pond 7P: FocalPoint 7

[92] Warning: Device #3 is above defined storage

Inflow Area = 19,602 sf, 62.22% Impervious, Inflow Depth = 3.10" for 5-year event
Inflow = 2.49 cfs @ 11.96 hrs, Volume= 5,066 cf
Outflow = 2.40 cfs @ 11.98 hrs, Volume= 4,426 cf, Atten= 3%, Lag= 1.0 min
Primary = 2.40 cfs @ 11.98 hrs, Volume= 4,426 cf
Routed to Pond 3P : (new Pond)

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 700.71' @ 11.98 hrs Surf.Area= 1,209 sf Storage= 866 cf

Plug-Flow detention time= 88.6 min calculated for 4,424 cf (87% of inflow)
Center-of-Mass det. time= 28.1 min (833.9 - 805.9)

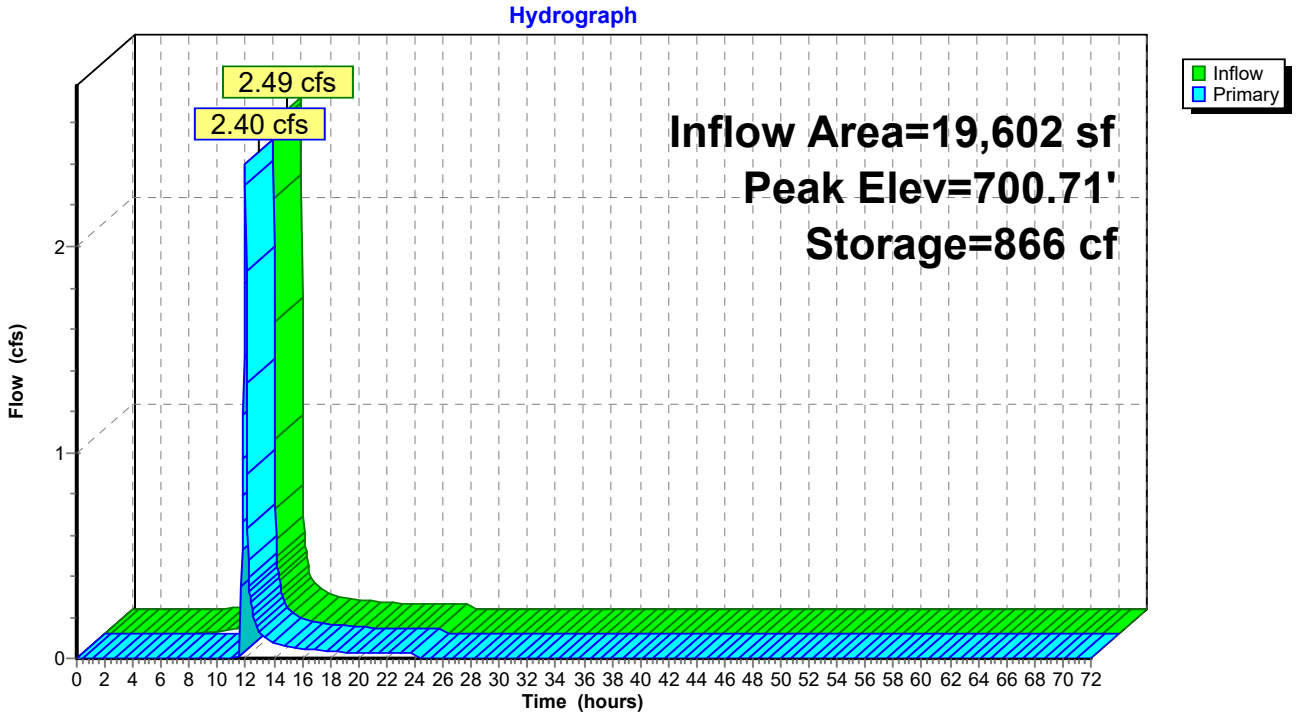
Volume	Invert	Avail.Storage	Storage Description
#1	697.00'	3,154 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
697.00	461	0.0	0	0
700.00	461	20.0	277	277
701.00	1,521	100.0	991	1,268
702.00	2,252	100.0	1,887	3,154

Device	Routing	Invert	Outlet Devices
#1	Primary	697.00'	**18.0" Round Culvert** L= 16.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 697.00' / 696.20' S= 0.0500 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	700.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	702.00'	**65.0' long x 11.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.53 2.59 2.70 2.68 2.67 2.68 2.66 2.64

Primary OutFlow Max=2.37 cfs @ 11.98 hrs HW=700.70' (Free Discharge)
- **1=Culvert** (Passes 2.37 cfs of 14.63 cfs potential flow)
  - **2=Orifice/Grate** (Weir Controls 2.37 cfs @ 1.48 fps)
- **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 7P: FocalPoint 7



Summary for Pond 8P: FocalPoint 8

[92] Warning: Device #3 is above defined storage

Inflow Area = 8,712 sf, 55.00% Impervious, Inflow Depth = 2.30" for 5-year event
Inflow = 0.85 cfs @ 11.96 hrs, Volume= 1,669 cf
Outflow = 0.06 cfs @ 12.61 hrs, Volume= 725 cf, Atten= 93%, Lag= 39.0 min
Primary = 0.06 cfs @ 12.61 hrs, Volume= 725 cf
Routed to Pond 3P : (new Pond)

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 698.51' @ 12.61 hrs Surf.Area= 1,049 sf Storage= 954 cf

Plug-Flow detention time= 282.9 min calculated for 725 cf (43% of inflow)
Center-of-Mass det. time= 158.1 min (989.1 - 831.0)

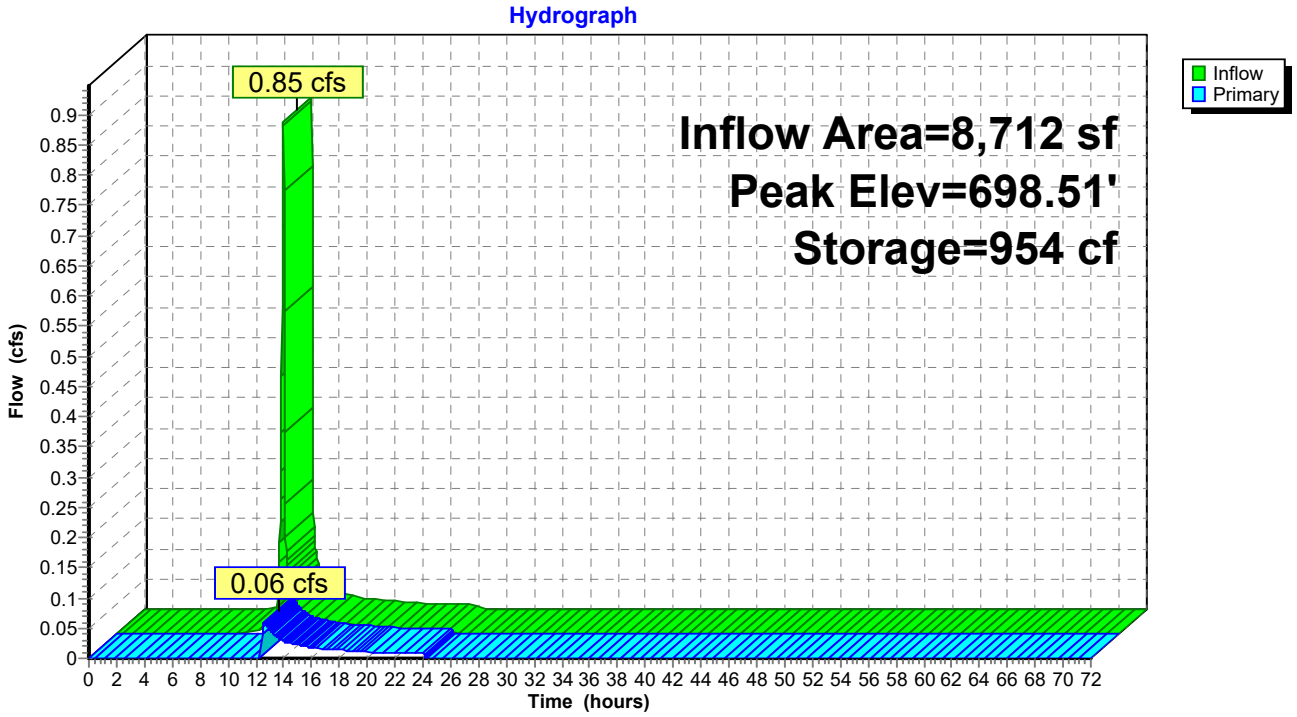
Volume	Invert	Avail.Storage	Storage Description
#1	695.00'	3,154 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.00	803	0.0	0	0
698.00	803	20.0	482	482
699.00	1,285	100.0	1,044	1,526
700.00	1,971	100.0	1,628	3,154

Device	Routing	Invert	Outlet Devices
#1	Primary	695.00'	**18.0" Round Culvert** L= 26.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 695.00' / 693.05' S= 0.0750 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	698.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**57.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=0.03 cfs @ 12.61 hrs HW=698.51' (Free Discharge)
└**1=Culvert** (Passes 0.03 cfs of 14.14 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 0.03 cfs @ 0.33 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 8P: FocalPoint 8



Summary for Pond 9P: FocalPoint 9

[92] Warning: Device #3 is above defined storage

Inflow Area = 13,068 sf, 63.33% Impervious, Inflow Depth = 2.64" for 5-year event
Inflow = 1.44 cfs @ 11.96 hrs, Volume= 2,877 cf
Outflow = 1.41 cfs @ 11.98 hrs, Volume= 2,123 cf, Atten= 2%, Lag= 1.3 min
Primary = 1.41 cfs @ 11.98 hrs, Volume= 2,123 cf
Routed to Pond 3P : (new Pond)

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 697.64' @ 11.98 hrs Surf.Area= 890 sf Storage= 877 cf

Plug-Flow detention time= 145.4 min calculated for 2,122 cf (74% of inflow)
Center-of-Mass det. time= 49.5 min (869.8 - 820.4)

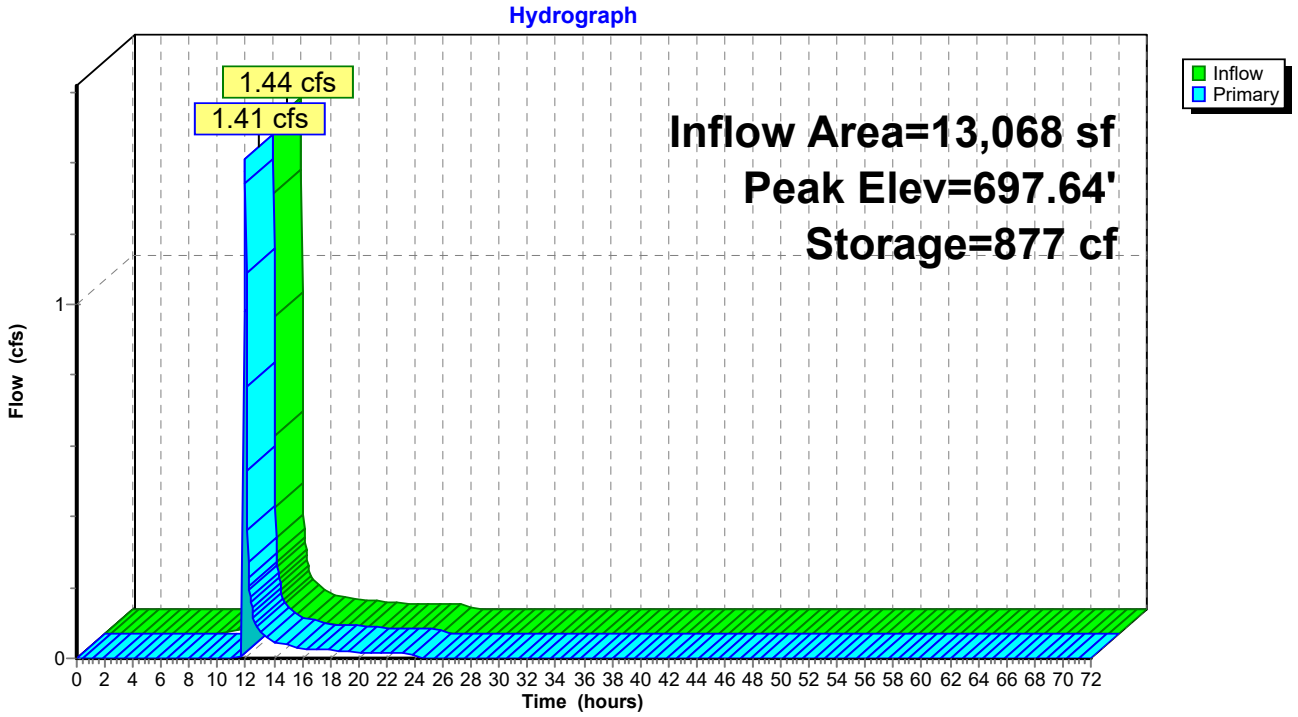
Volume	Invert	Avail.Storage	Storage Description
#1	694.00'	4,192 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.00	641	0.0	0	0
697.00	641	20.0	385	385
698.00	1,028	100.0	835	1,219
699.00	1,472	100.0	1,250	2,469
700.00	1,973	100.0	1,723	4,192

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 32.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 691.74' S= 0.0706 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	697.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**54.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=1.34 cfs @ 11.98 hrs HW=697.64' (Free Discharge)
- **1=Culvert** (Passes 1.34 cfs of 14.46 cfs potential flow)
  - **2=Orifice/Grate** (Weir Controls 1.34 cfs @ 1.22 fps)
- **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 9P: FocalPoint 9

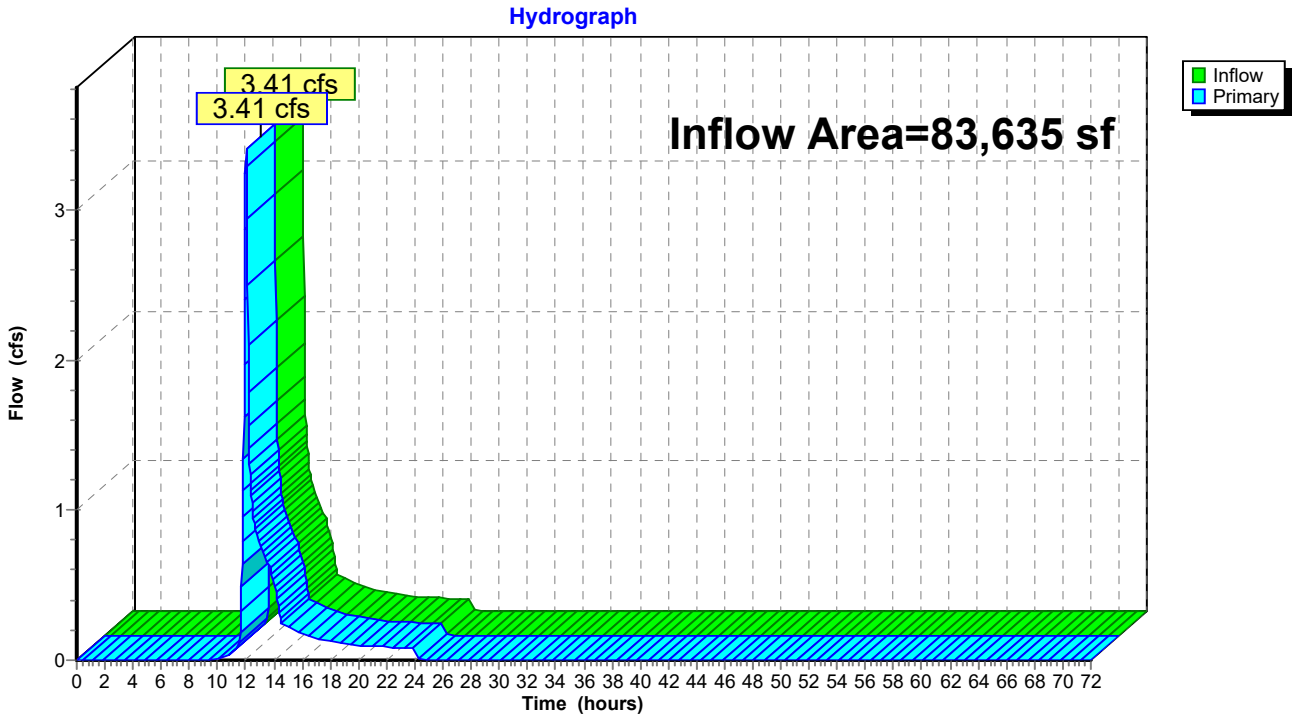


Summary for Link 2L: Outfall #1

Inflow Area = 83,635 sf, 51.04% Impervious, Inflow Depth = 2.05" for 5-year event
Inflow = 3.41 cfs @ 12.03 hrs, Volume= 14,268 cf
Primary = 3.41 cfs @ 12.03 hrs, Volume= 14,268 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs

Link 2L: Outfall #1



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment7S: Area 7	Runoff Area=0.450 ac 62.22% Impervious Runoff Depth=3.72" Tc=5.0 min CN=85 Runoff=2.95 cfs 6,078 cf
Subcatchment8S: Area 8	Runoff Area=0.200 ac 55.00% Impervious Runoff Depth=2.85" Tc=5.0 min CN=76 Runoff=1.05 cfs 2,070 cf
Subcatchment9S: Area 9	Runoff Area=0.300 ac 63.33% Impervious Runoff Depth=3.23" Tc=5.0 min CN=80 Runoff=1.75 cfs 3,514 cf
Subcatchment11S: North Bypass 1	Runoff Area=0.880 ac 45.45% Impervious Runoff Depth=2.67" Flow Length=730' Tc=10.9 min CN=74 Runoff=3.50 cfs 8,532 cf
Subcatchment12S: North Bypass 2	Runoff Area=0.090 ac 0.00% Impervious Runoff Depth=0.79" Tc=5.0 min CN=49 Runoff=0.11 cfs 259 cf
Pond 3P: (new Pond)	Peak Elev=693.49' Storage=3,075 cf Inflow=4.68 cfs 9,585 cf Outflow=0.70 cfs 9,585 cf
Pond 7P: FocalPoint 7	Peak Elev=700.73' Storage=897 cf Inflow=2.95 cfs 6,078 cf Outflow=2.86 cfs 5,438 cf
Pond 8P: FocalPoint 8	Peak Elev=698.54' Storage=990 cf Inflow=1.05 cfs 2,070 cf Outflow=0.25 cfs 1,127 cf
Pond 9P: FocalPoint 9	Peak Elev=697.66' Storage=895 cf Inflow=1.75 cfs 3,514 cf Outflow=1.70 cfs 2,761 cf
Link 2L: Outfall #1	Inflow=4.16 cfs 18,117 cf Primary=4.16 cfs 18,117 cf

Total Runoff Area = 83,635 sf Runoff Volume = 20,454 cf Average Runoff Depth = 2.93"
48.96% Pervious = 40,946 sf 51.04% Impervious = 42,689 sf

Summary for Subcatchment 7S: Area 7

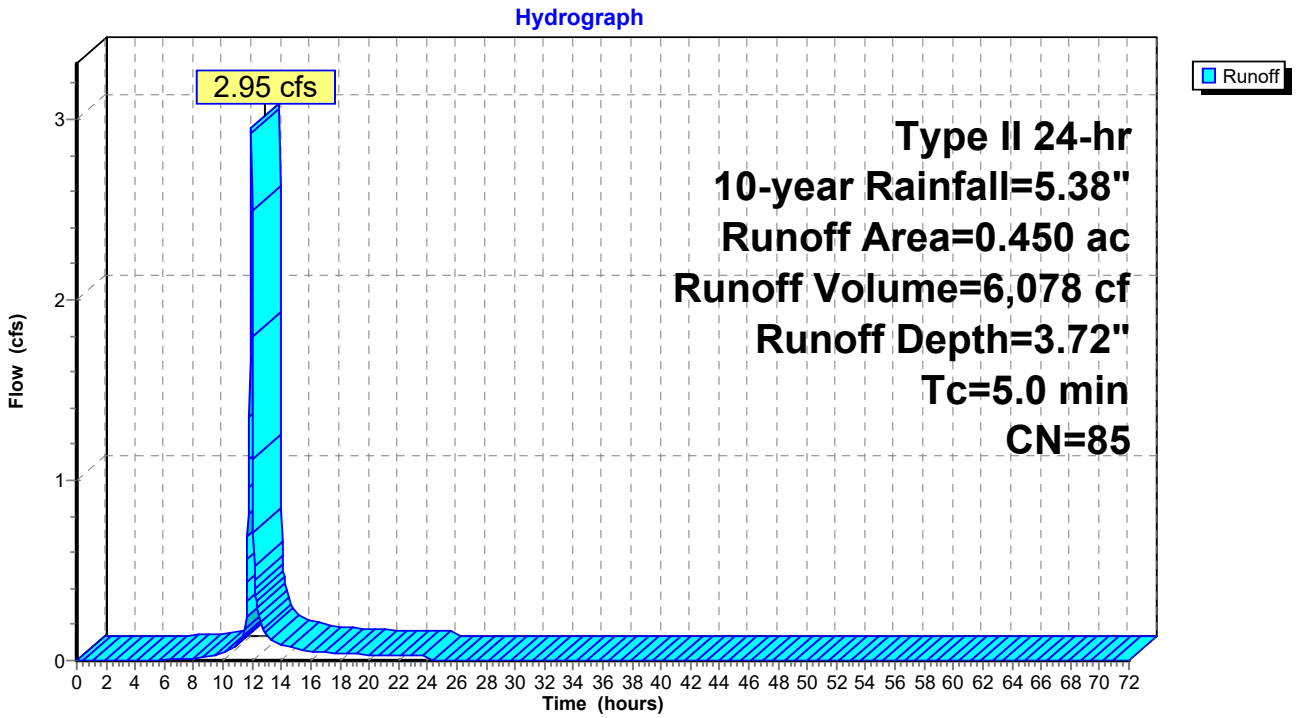
Runoff = 2.95 cfs @ 11.96 hrs, Volume= 6,078 cf, Depth= 3.72"
Routed to Pond 7P : FocalPoint 7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 10-year Rainfall=5.38"

Area (ac)	CN	Description
0.040	49	50-75% Grass cover, Fair, HSG A
0.130	69	50-75% Grass cover, Fair, HSG B
0.280	98	Paved parking, HSG A
0.450	85	Weighted Average
0.170		37.78% Pervious Area
0.280		62.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 7S: Area 7



Summary for Subcatchment 8S: Area 8

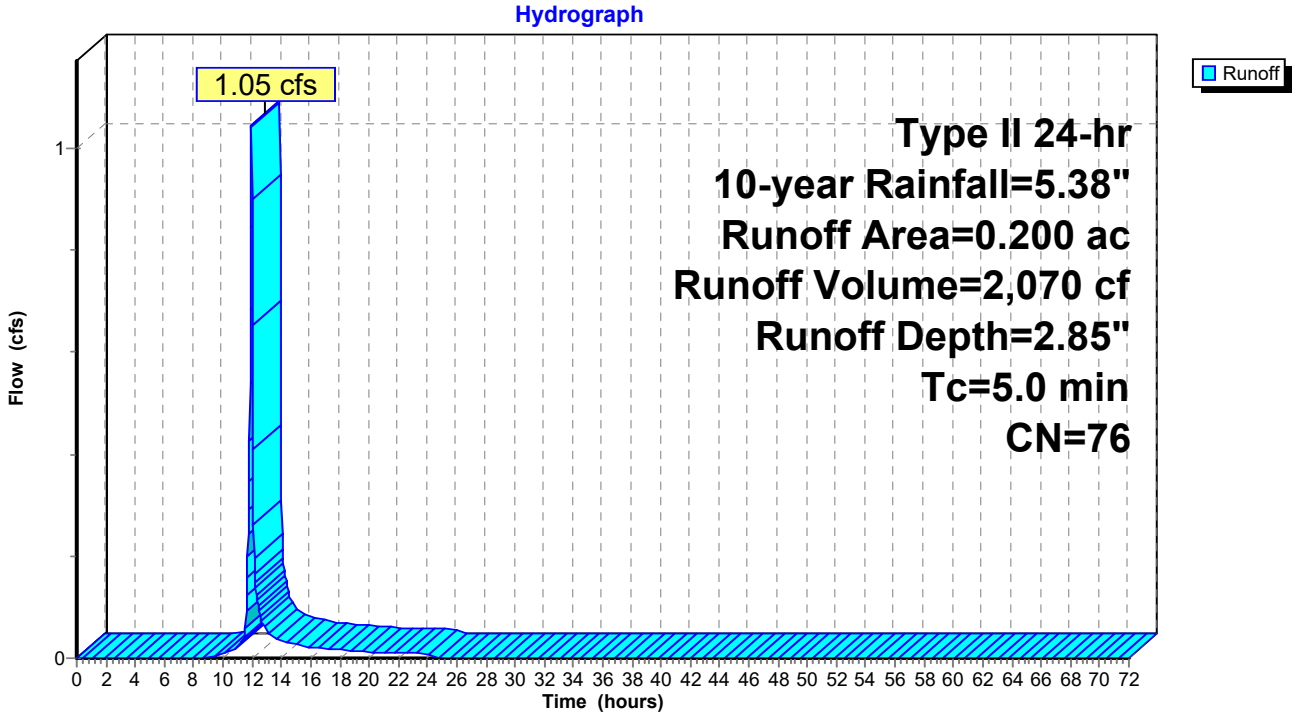
Runoff = 1.05 cfs @ 11.96 hrs, Volume= 2,070 cf, Depth= 2.85"
Routed to Pond 8P : FocalPoint 8

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 10-year Rainfall=5.38"

Area (ac)	CN	Description
0.090	49	50-75% Grass cover, Fair, HSG A
0.110	98	Paved parking, HSG A
0.200	76	Weighted Average
0.090		45.00% Pervious Area
0.110		55.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 8S: Area 8



Summary for Subcatchment 9S: Area 9

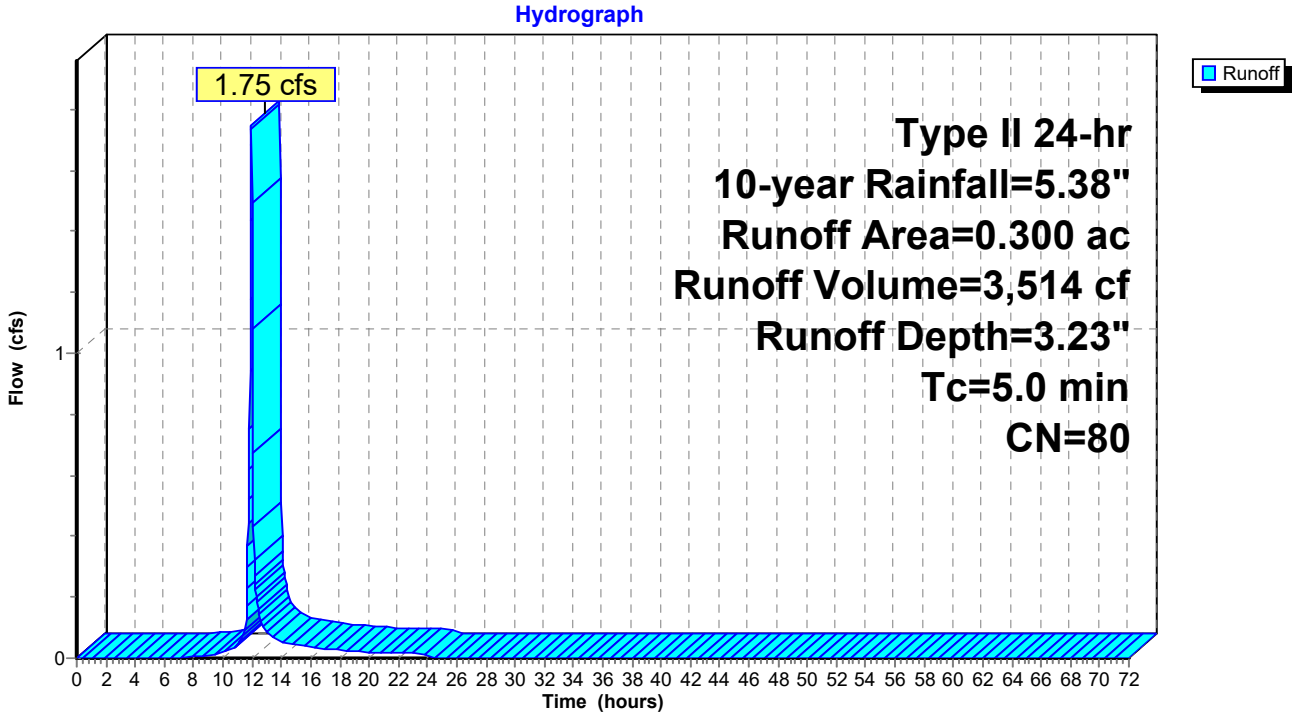
Runoff = 1.75 cfs @ 11.96 hrs, Volume= 3,514 cf, Depth= 3.23"
Routed to Pond 9P : FocalPoint 9

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 10-year Rainfall=5.38"

Area (ac)	CN	Description
0.110	49	50-75% Grass cover, Fair, HSG A
0.190	98	Paved parking, HSG A
0.300	80	Weighted Average
0.110		36.67% Pervious Area
0.190		63.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 9S: Area 9



Summary for Subcatchment 11S: North Bypass 1

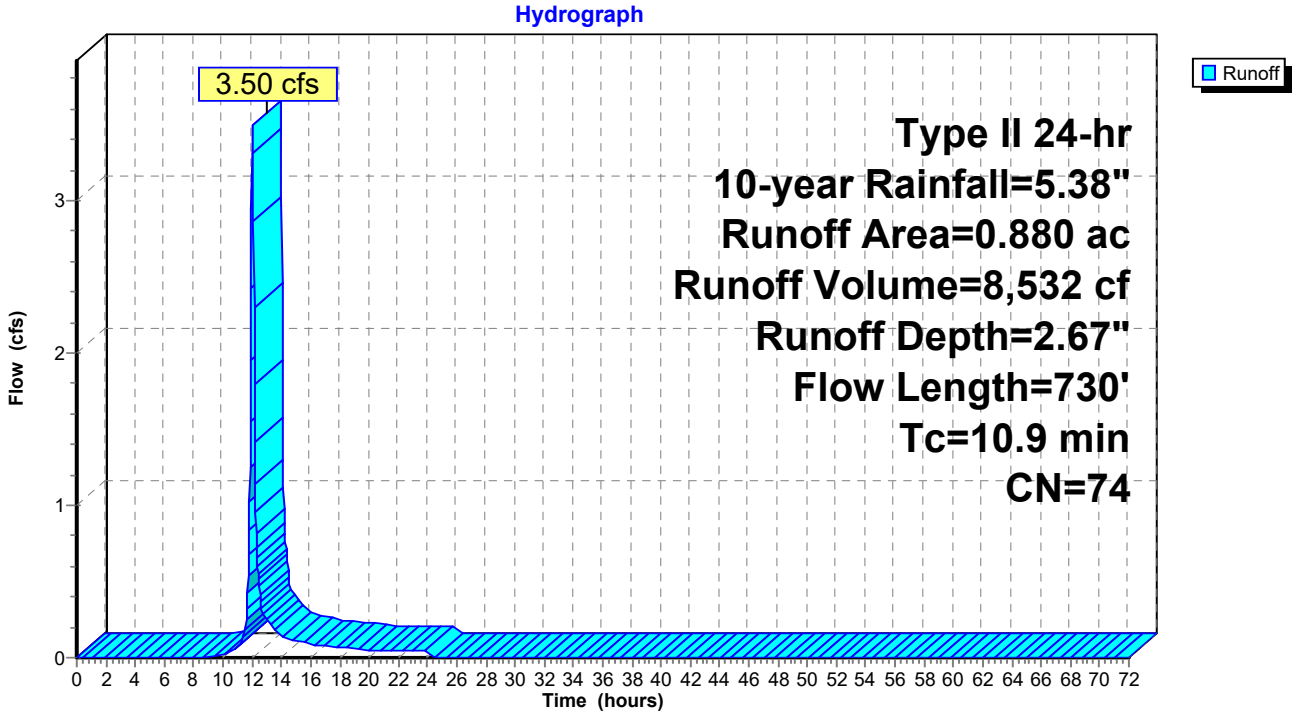
Runoff = 3.50 cfs @ 12.03 hrs, Volume= 8,532 cf, Depth= 2.67"
Routed to Link 2L : Outfall #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 10-year Rainfall=5.38"

Area (ac)	CN	Description
0.360	49	50-75% Grass cover, Fair, HSG A
0.120	69	50-75% Grass cover, Fair, HSG B
0.400	98	Paved parking, HSG A
0.880	74	Weighted Average
0.480		54.55% Pervious Area
0.400		45.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	40	0.0200	0.15		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
6.3	690	0.0080	1.82		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
10.9	730	Total			

Subcatchment 11S: North Bypass 1



Summary for Subcatchment 12S: North Bypass 2

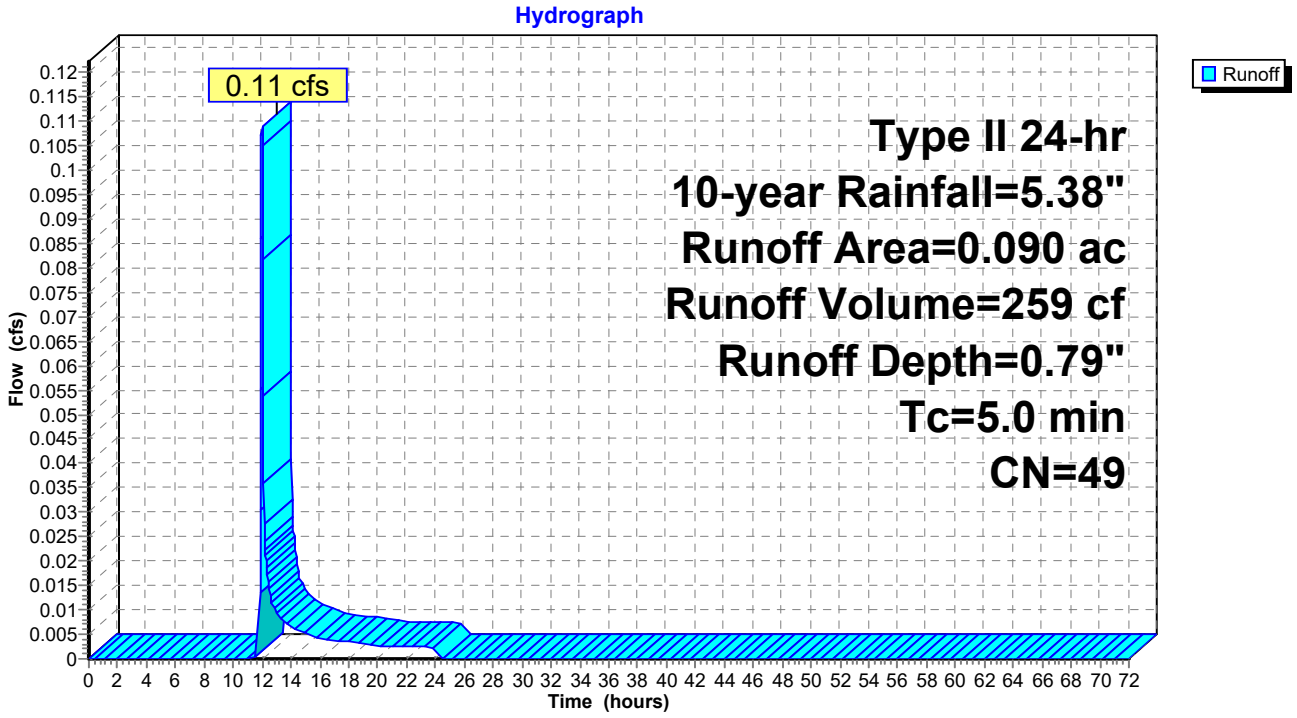
Runoff = 0.11 cfs @ 11.98 hrs, Volume= 259 cf, Depth= 0.79"
Routed to Pond 3P : (new Pond)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 10-year Rainfall=5.38"

Area (ac)	CN	Description
0.090	49	50-75% Grass cover, Fair, HSG A
0.090		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 12S: North Bypass 2



Summary for Pond 3P: (new Pond)

[79] Warning: Submerged Pond 8P Primary device # 1 OUTLET by 0.44'
[79] Warning: Submerged Pond 9P Primary device # 1 OUTLET by 1.75'

Inflow Area = 45,302 sf, 55.77% Impervious, Inflow Depth = 2.54" for 10-year event
Inflow = 4.68 cfs @ 11.97 hrs, Volume= 9,585 cf
Outflow = 0.70 cfs @ 12.30 hrs, Volume= 9,585 cf, Atten= 85%, Lag= 19.4 min
Primary = 0.70 cfs @ 12.30 hrs, Volume= 9,585 cf
Routed to Link 2L : Outfall #1

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 693.49' @ 12.30 hrs Surf.Area= 2,379 sf Storage= 3,075 cf

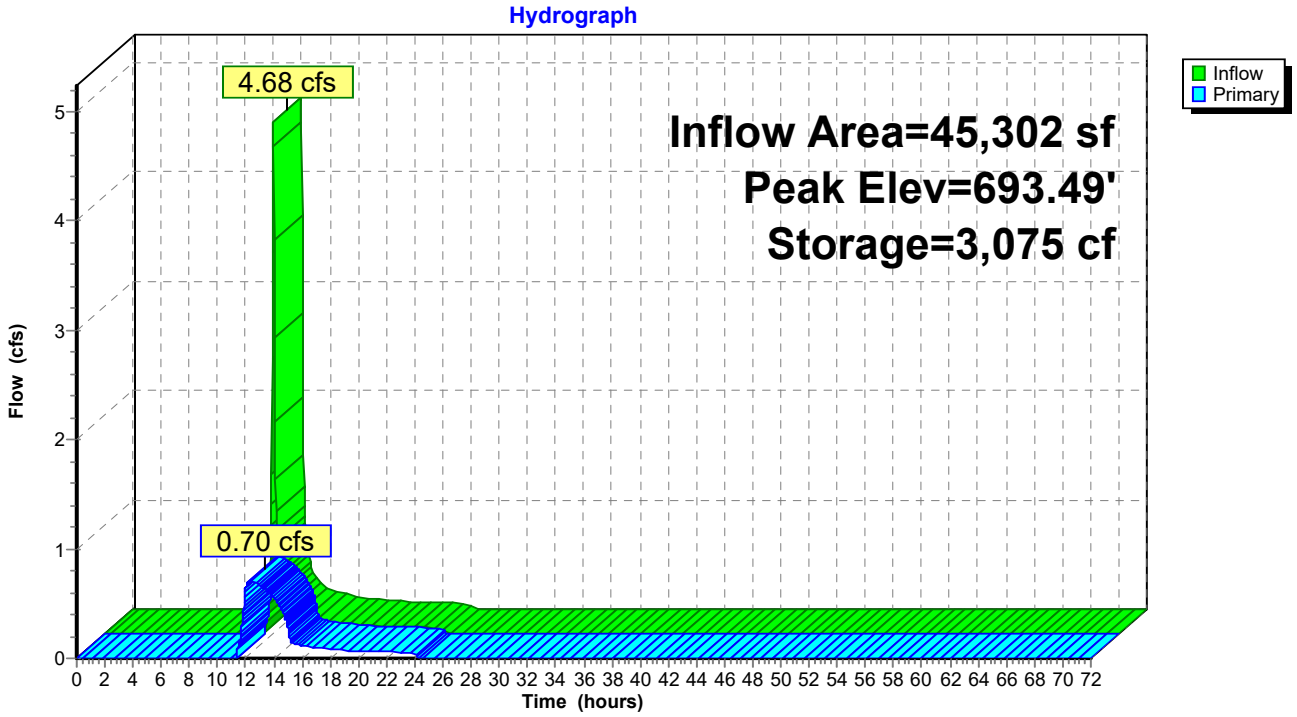
Plug-Flow detention time= 33.6 min calculated for 9,581 cf (100% of inflow)
Center-of-Mass det. time= 33.5 min (882.9 - 849.3)

Volume	Invert	Avail.Storage	Storage Description
#1	690.54'	10,996 cf	**60.0" Round CMP_Round 60"** L= 560.0' S= 0.0050 '/'

Device	Routing	Invert	Outlet Devices
#1	Primary	690.54'	**18.0" Round RCP_Round 18"** L= 20.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 690.54' / 690.44' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	690.54'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	695.00'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=0.70 cfs @ 12.30 hrs HW=693.49' (Free Discharge)
└**1=RCP_Round 18"** (Passes 0.70 cfs of 12.63 cfs potential flow)
  ├**2=Orifice/Grate** (Orifice Controls 0.70 cfs @ 8.04 fps)
  └**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 3P: (new Pond)



Summary for Pond 7P: FocalPoint 7

[92] Warning: Device #3 is above defined storage

Inflow Area = 19,602 sf, 62.22% Impervious, Inflow Depth = 3.72" for 10-year event
Inflow = 2.95 cfs @ 11.96 hrs, Volume= 6,078 cf
Outflow = 2.86 cfs @ 11.97 hrs, Volume= 5,438 cf, Atten= 3%, Lag= 1.0 min
Primary = 2.86 cfs @ 11.97 hrs, Volume= 5,438 cf
Routed to Pond 3P : (new Pond)

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 700.73' @ 11.97 hrs Surf.Area= 1,236 sf Storage= 897 cf

Plug-Flow detention time= 79.1 min calculated for 5,436 cf (89% of inflow)
Center-of-Mass det. time= 26.2 min (826.9 - 800.7)

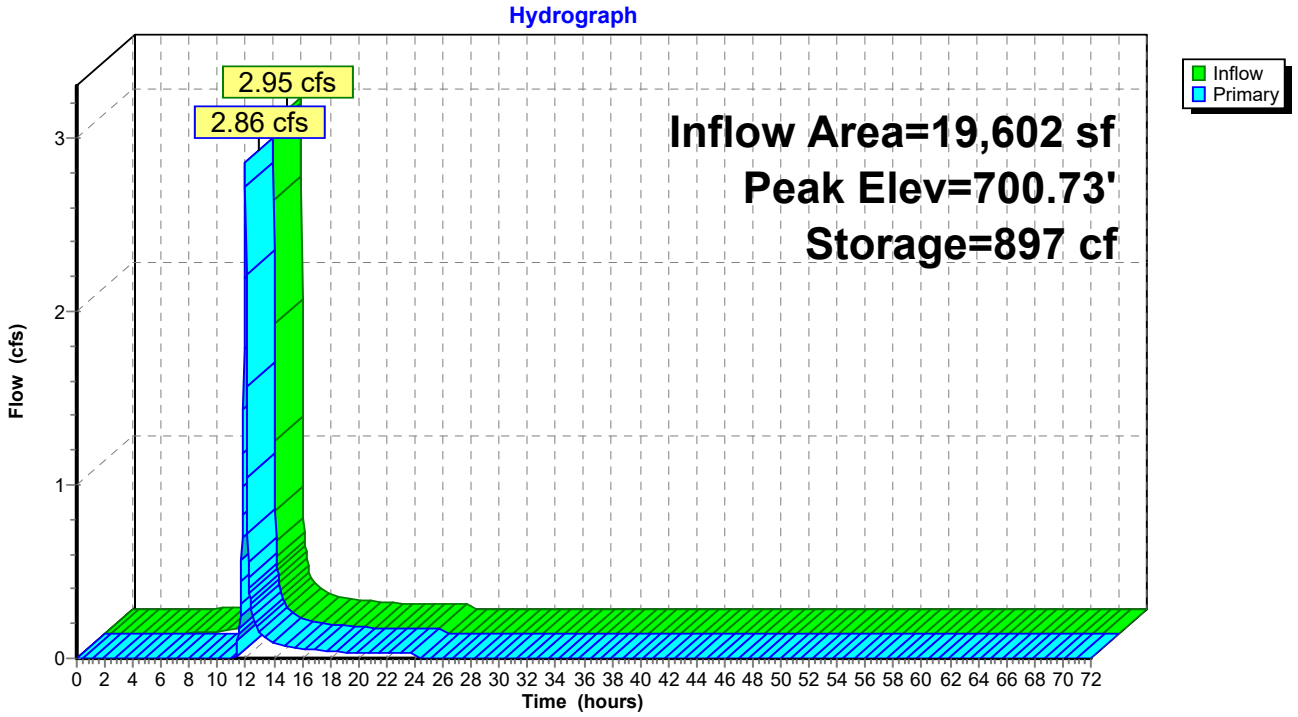
Volume	Invert	Avail.Storage	Storage Description
#1	697.00'	3,154 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
697.00	461	0.0	0	0
700.00	461	20.0	277	277
701.00	1,521	100.0	991	1,268
702.00	2,252	100.0	1,887	3,154

Device	Routing	Invert	Outlet Devices
#1	Primary	697.00'	**18.0" Round Culvert** L= 16.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 697.00' / 696.20' S= 0.0500 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	700.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	702.00'	**65.0' long x 11.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.53 2.59 2.70 2.68 2.67 2.68 2.66 2.64

Primary OutFlow Max=2.83 cfs @ 11.97 hrs HW=700.73' (Free Discharge)
└**1=Culvert** (Passes 2.83 cfs of 14.69 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 2.83 cfs @ 1.57 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 7P: FocalPoint 7



Summary for Pond 8P: FocalPoint 8

[92] Warning: Device #3 is above defined storage

Inflow Area = 8,712 sf, 55.00% Impervious, Inflow Depth = 2.85" for 10-year event
Inflow = 1.05 cfs @ 11.96 hrs, Volume= 2,070 cf
Outflow = 0.25 cfs @ 12.10 hrs, Volume= 1,127 cf, Atten= 76%, Lag= 8.4 min
Primary = 0.25 cfs @ 12.10 hrs, Volume= 1,127 cf
Routed to Pond 3P : (new Pond)

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 698.54' @ 12.10 hrs Surf.Area= 1,065 sf Storage= 990 cf

Plug-Flow detention time= 222.6 min calculated for 1,127 cf (54% of inflow)
Center-of-Mass det. time= 104.8 min (929.7 - 824.8)

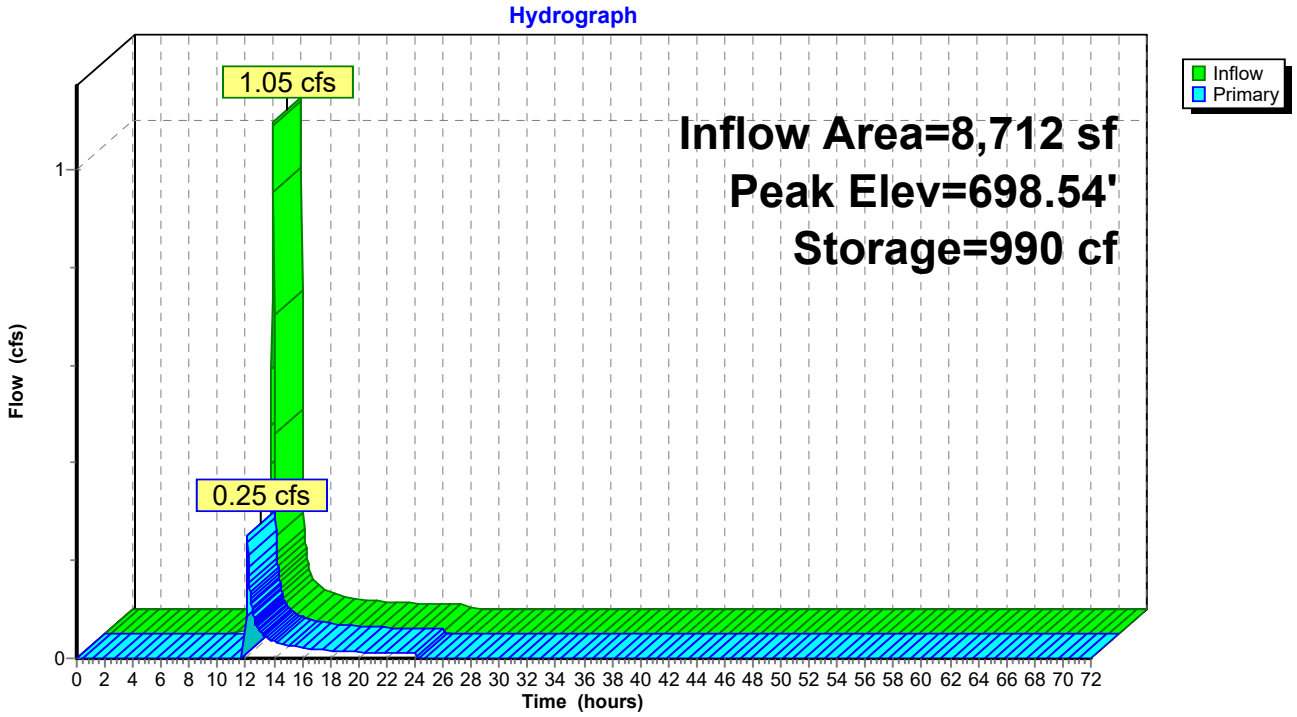
Volume	Invert	Avail.Storage	Storage Description
#1	695.00'	3,154 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.00	803	0.0	0	0
698.00	803	20.0	482	482
699.00	1,285	100.0	1,044	1,526
700.00	1,971	100.0	1,628	3,154

Device	Routing	Invert	Outlet Devices
#1	Primary	695.00'	**18.0" Round Culvert** L= 26.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 695.00' / 693.05' S= 0.0750 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	698.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**57.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=0.22 cfs @ 12.10 hrs HW=698.54' (Free Discharge)
└**1=Culvert** (Passes 0.22 cfs of 14.22 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 0.22 cfs @ 0.67 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 8P: FocalPoint 8



Summary for Pond 9P: FocalPoint 9

[92] Warning: Device #3 is above defined storage

Inflow Area = 13,068 sf, 63.33% Impervious, Inflow Depth = 3.23" for 10-year event
Inflow = 1.75 cfs @ 11.96 hrs, Volume= 3,514 cf
Outflow = 1.70 cfs @ 11.98 hrs, Volume= 2,761 cf, Atten= 3%, Lag= 0.9 min
Primary = 1.70 cfs @ 11.98 hrs, Volume= 2,761 cf
Routed to Pond 3P : (new Pond)

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 697.66' @ 11.98 hrs Surf.Area= 898 sf Storage= 895 cf

Plug-Flow detention time= 126.2 min calculated for 2,759 cf (79% of inflow)
Center-of-Mass det. time= 40.6 min (855.3 - 814.7)

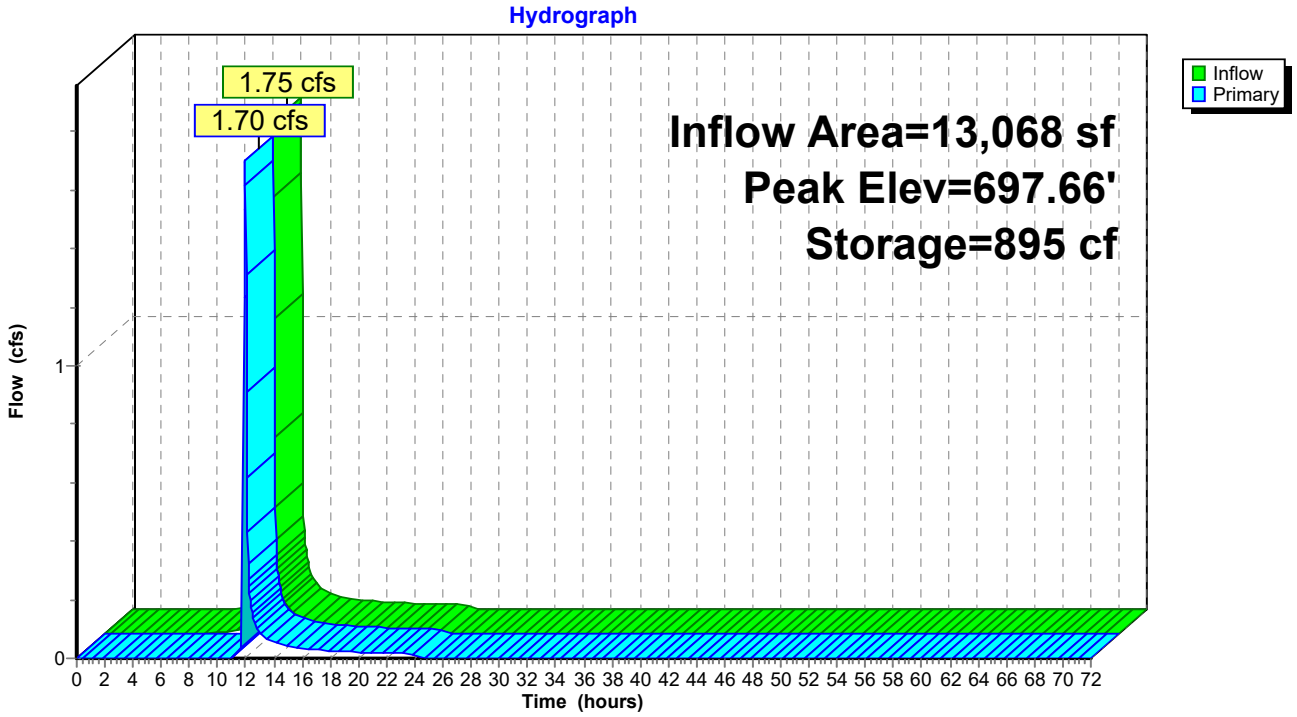
Volume	Invert	Avail.Storage	Storage Description
#1	694.00'	4,192 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.00	641	0.0	0	0
697.00	641	20.0	385	385
698.00	1,028	100.0	835	1,219
699.00	1,472	100.0	1,250	2,469
700.00	1,973	100.0	1,723	4,192

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 32.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 691.74' S= 0.0706 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	697.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**54.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=1.68 cfs @ 11.98 hrs HW=697.66' (Free Discharge)
└**1=Culvert** (Passes 1.68 cfs of 14.52 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 1.68 cfs @ 1.32 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 9P: FocalPoint 9

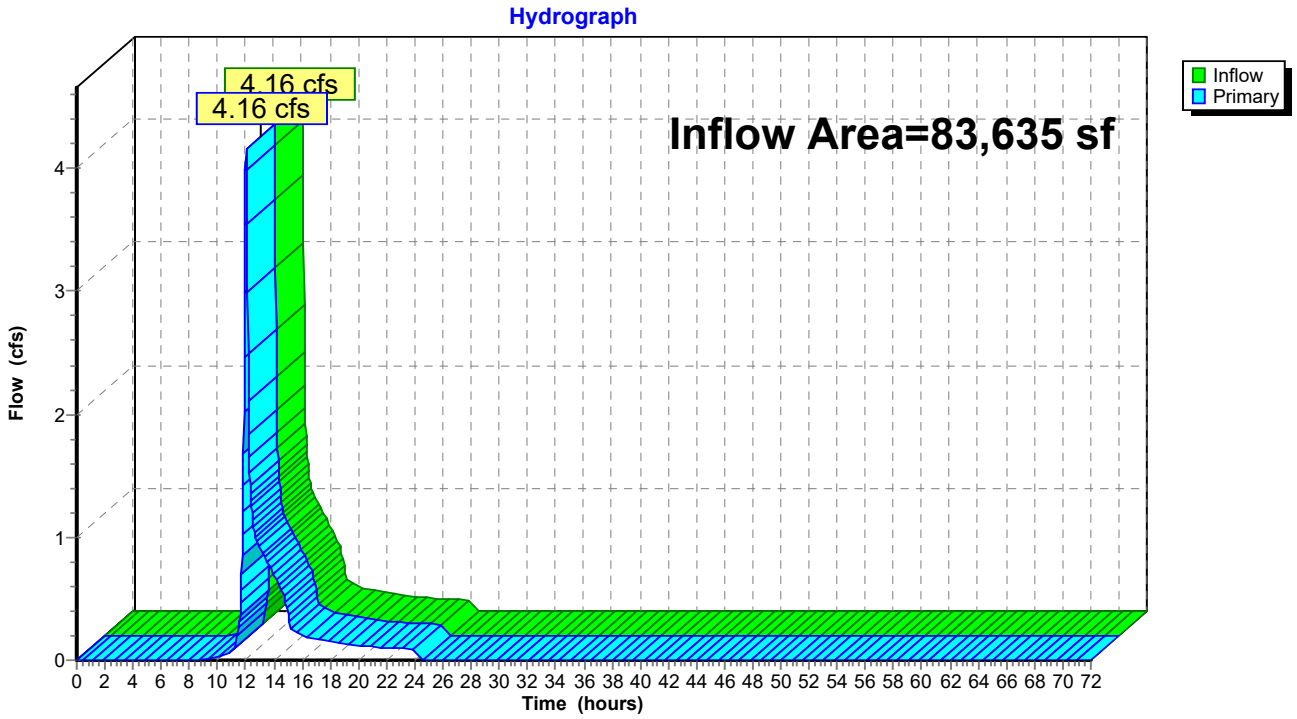


Summary for Link 2L: Outfall #1

Inflow Area = 83,635 sf, 51.04% Impervious, Inflow Depth = 2.60" for 10-year event
Inflow = 4.16 cfs @ 12.03 hrs, Volume= 18,117 cf
Primary = 4.16 cfs @ 12.03 hrs, Volume= 18,117 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs

Link 2L: Outfall #1



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment7S: Area 7 Runoff Area=0.450 ac 62.22% Impervious Runoff Depth=4.59"
Tc=5.0 min CN=85 Runoff=3.59 cfs 7,492 cf

Subcatchment8S: Area 8 Runoff Area=0.200 ac 55.00% Impervious Runoff Depth=3.64"
Tc=5.0 min CN=76 Runoff=1.32 cfs 2,643 cf

Subcatchment9S: Area 9 Runoff Area=0.300 ac 63.33% Impervious Runoff Depth=4.05"
Tc=5.0 min CN=80 Runoff=2.18 cfs 4,414 cf

Subcatchment11S: North Bypass 1 Runoff Area=0.880 ac 45.45% Impervious Runoff Depth=3.44"
Flow Length=730' Tc=10.9 min CN=74 Runoff=4.49 cfs 10,985 cf

Subcatchment12S: North Bypass 2 Runoff Area=0.090 ac 0.00% Impervious Runoff Depth=1.22"
Tc=5.0 min CN=49 Runoff=0.18 cfs 397 cf

Pond 3P: (new Pond) Peak Elev=694.10' Storage=4,610 cf Inflow=6.42 cfs 12,609 cf
Outflow=0.77 cfs 12,609 cf

Pond 7P: FocalPoint 7 Peak Elev=700.76' Storage=938 cf Inflow=3.59 cfs 7,492 cf
Outflow=3.49 cfs 6,852 cf

Pond 8P: FocalPoint 8 Peak Elev=698.61' Storage=1,063 cf Inflow=1.32 cfs 2,643 cf
Outflow=0.97 cfs 1,699 cf

Pond 9P: FocalPoint 9 Peak Elev=697.69' Storage=918 cf Inflow=2.18 cfs 4,414 cf
Outflow=2.13 cfs 3,660 cf

Link 2L: Outfall #1 Inflow=5.21 cfs 23,594 cf
Primary=5.21 cfs 23,594 cf

Total Runoff Area = 83,635 sf Runoff Volume = 25,930 cf Average Runoff Depth = 3.72"
48.96% Pervious = 40,946 sf 51.04% Impervious = 42,689 sf

Summary for Subcatchment 7S: Area 7

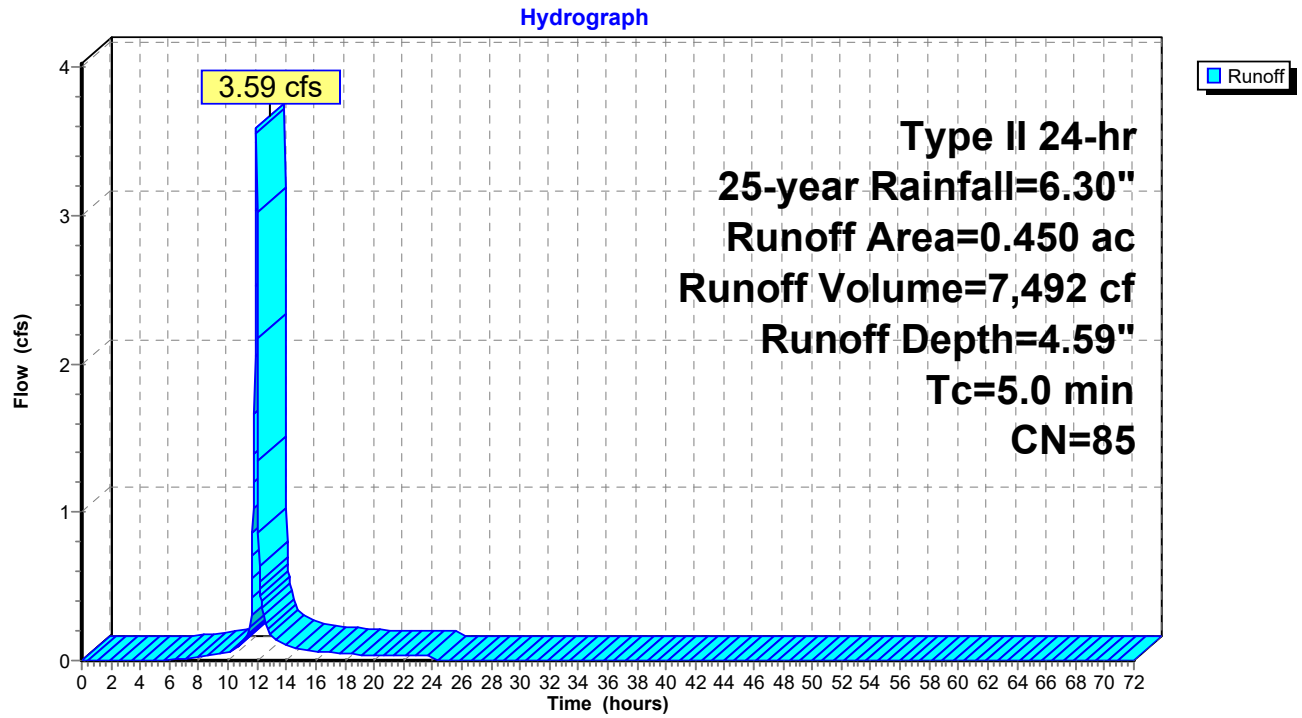
Runoff = 3.59 cfs @ 11.96 hrs, Volume= 7,492 cf, Depth= 4.59"
Routed to Pond 7P : FocalPoint 7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 25-year Rainfall=6.30"

Area (ac)	CN	Description
0.040	49	50-75% Grass cover, Fair, HSG A
0.130	69	50-75% Grass cover, Fair, HSG B
0.280	98	Paved parking, HSG A
0.450	85	Weighted Average
0.170		37.78% Pervious Area
0.280		62.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 7S: Area 7



Summary for Subcatchment 8S: Area 8

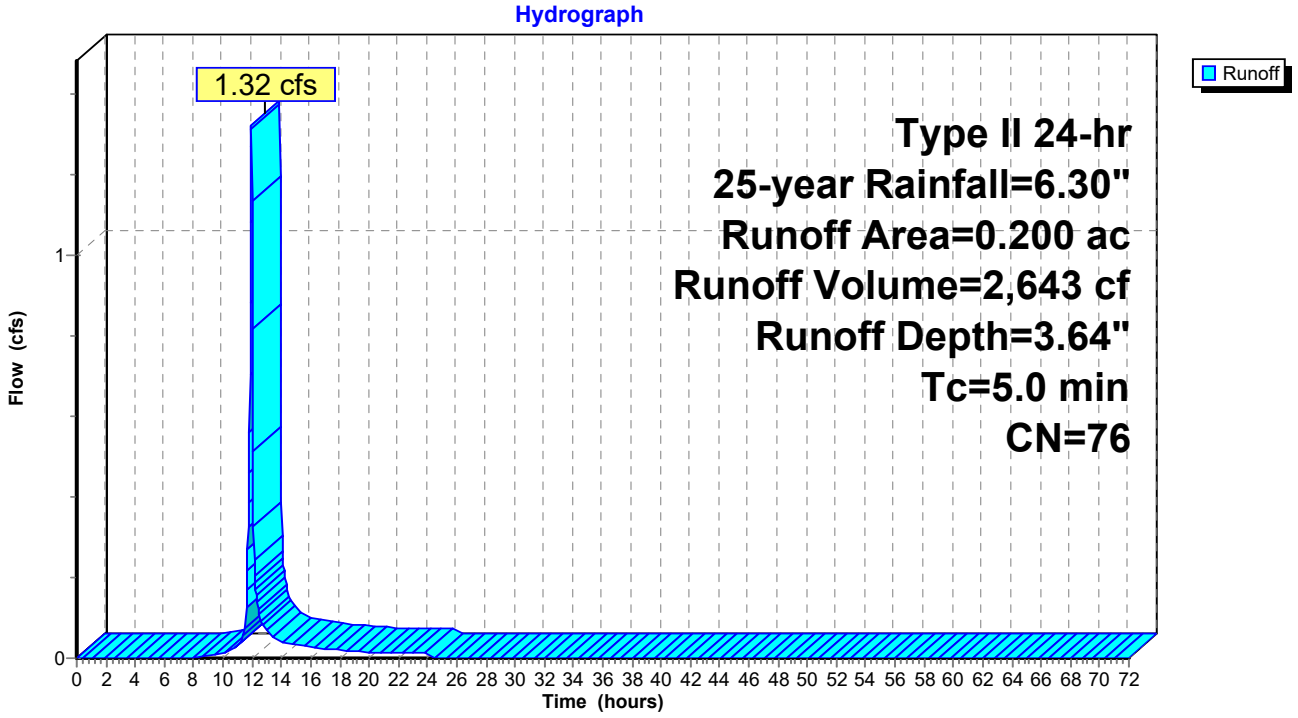
Runoff = 1.32 cfs @ 11.96 hrs, Volume= 2,643 cf, Depth= 3.64"
Routed to Pond 8P : FocalPoint 8

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 25-year Rainfall=6.30"

Area (ac)	CN	Description
0.090	49	50-75% Grass cover, Fair, HSG A
0.110	98	Paved parking, HSG A
0.200	76	Weighted Average
0.090		45.00% Pervious Area
0.110		55.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 8S: Area 8



Summary for Subcatchment 9S: Area 9

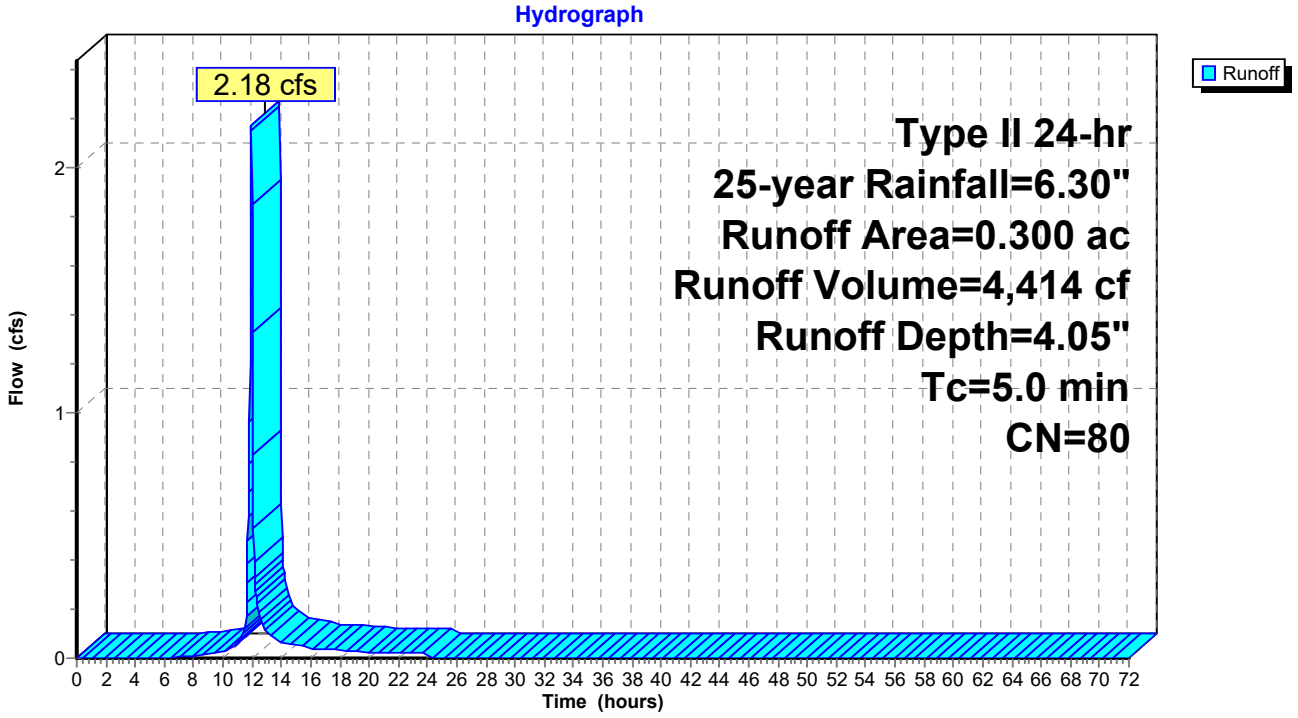
Runoff = 2.18 cfs @ 11.96 hrs, Volume= 4,414 cf, Depth= 4.05"
Routed to Pond 9P : FocalPoint 9

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 25-year Rainfall=6.30"

Area (ac)	CN	Description
0.110	49	50-75% Grass cover, Fair, HSG A
0.190	98	Paved parking, HSG A
0.300	80	Weighted Average
0.110		36.67% Pervious Area
0.190		63.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 9S: Area 9



Summary for Subcatchment 11S: North Bypass 1

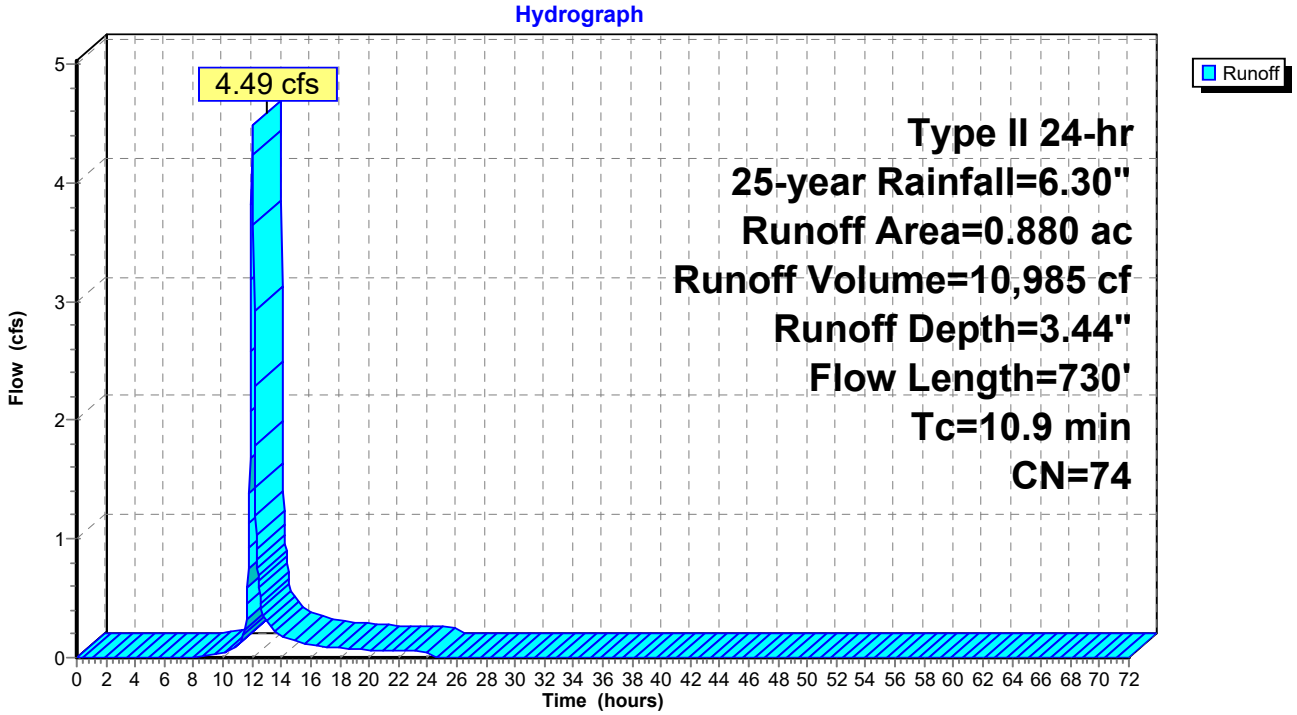
Runoff = 4.49 cfs @ 12.03 hrs, Volume= 10,985 cf, Depth= 3.44"
Routed to Link 2L : Outfall #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 25-year Rainfall=6.30"

Area (ac)	CN	Description
0.360	49	50-75% Grass cover, Fair, HSG A
0.120	69	50-75% Grass cover, Fair, HSG B
0.400	98	Paved parking, HSG A
0.880	74	Weighted Average
0.480		54.55% Pervious Area
0.400		45.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	40	0.0200	0.15		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
6.3	690	0.0080	1.82		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
10.9	730	Total			

Subcatchment 11S: North Bypass 1



Summary for Subcatchment 12S: North Bypass 2

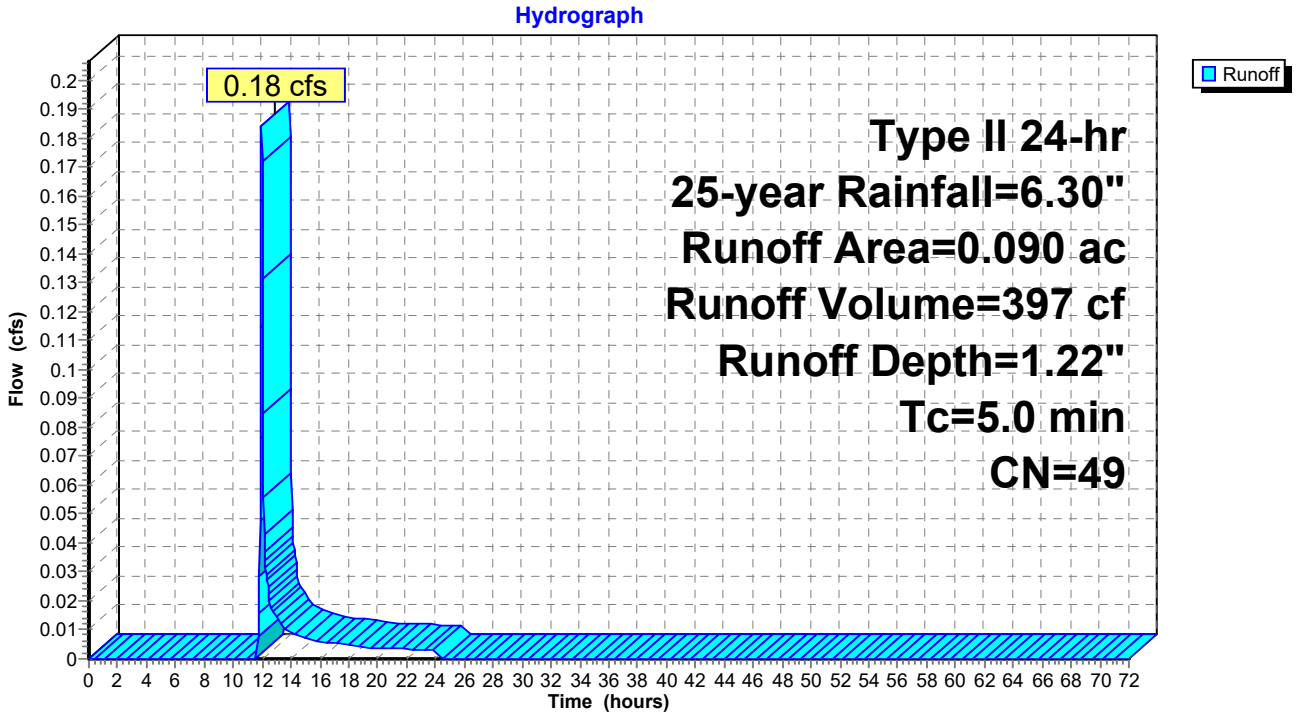
Runoff = 0.18 cfs @ 11.98 hrs, Volume= 397 cf, Depth= 1.22"
Routed to Pond 3P : (new Pond)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 25-year Rainfall=6.30"

Area (ac)	CN	Description
0.090	49	50-75% Grass cover, Fair, HSG A
0.090		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 12S: North Bypass 2



Summary for Pond 3P: (new Pond)

[79] Warning: Submerged Pond 8P Primary device # 1 OUTLET by 1.05'
[79] Warning: Submerged Pond 9P Primary device # 1 INLET by 0.10'

Inflow Area = 45,302 sf, 55.77% Impervious, Inflow Depth = 3.34" for 25-year event
Inflow = 6.42 cfs @ 11.99 hrs, Volume= 12,609 cf
Outflow = 0.77 cfs @ 12.36 hrs, Volume= 12,609 cf, Atten= 88%, Lag= 22.3 min
Primary = 0.77 cfs @ 12.36 hrs, Volume= 12,609 cf
Routed to Link 2L : Outfall #1

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 694.10' @ 12.36 hrs Surf.Area= 2,615 sf Storage= 4,610 cf

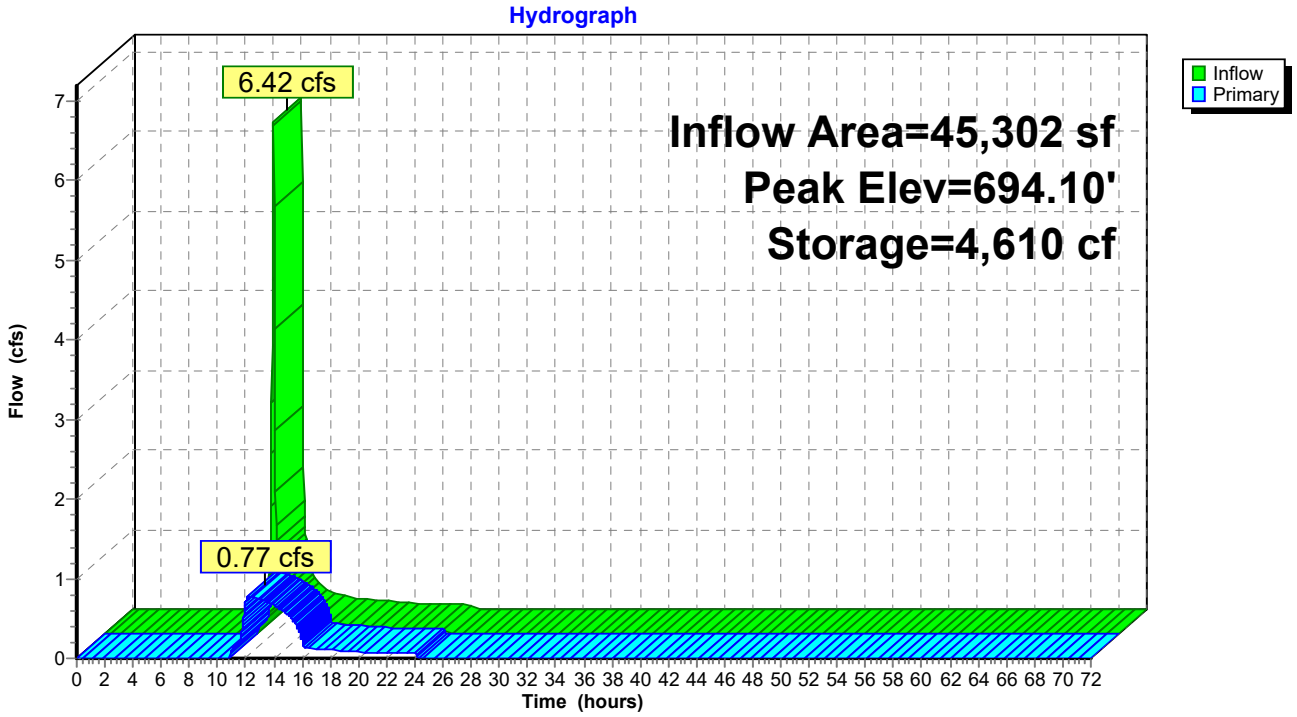
Plug-Flow detention time= 48.3 min calculated for 12,604 cf (100% of inflow)
Center-of-Mass det. time= 48.3 min (886.0 - 837.7)

Volume	Invert	Avail.Storage	Storage Description
#1	690.54'	10,996 cf	**60.0" Round CMP_Round 60"** L= 560.0' S= 0.0050 '/'

Device	Routing	Invert	Outlet Devices
#1	Primary	690.54'	**18.0" Round RCP_Round 18"** L= 20.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 690.54' / 690.44' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	690.54'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	695.00'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=0.77 cfs @ 12.36 hrs HW=694.10' (Free Discharge)
└**1=RCP_Round 18"** (Passes 0.77 cfs of 14.27 cfs potential flow)
  ├**2=Orifice/Grate** (Orifice Controls 0.77 cfs @ 8.87 fps)
  └**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 3P: (new Pond)



Summary for Pond 7P: FocalPoint 7

[92] Warning: Device #3 is above defined storage

Inflow Area = 19,602 sf, 62.22% Impervious, Inflow Depth = 4.59" for 25-year event
Inflow = 3.59 cfs @ 11.96 hrs, Volume= 7,492 cf
Outflow = 3.49 cfs @ 11.97 hrs, Volume= 6,852 cf, Atten= 3%, Lag= 0.9 min
Primary = 3.49 cfs @ 11.97 hrs, Volume= 6,852 cf
Routed to Pond 3P : (new Pond)

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 700.76' @ 11.97 hrs Surf.Area= 1,271 sf Storage= 938 cf

Plug-Flow detention time= 69.6 min calculated for 6,849 cf (91% of inflow)
Center-of-Mass det. time= 24.5 min (819.3 - 794.8)

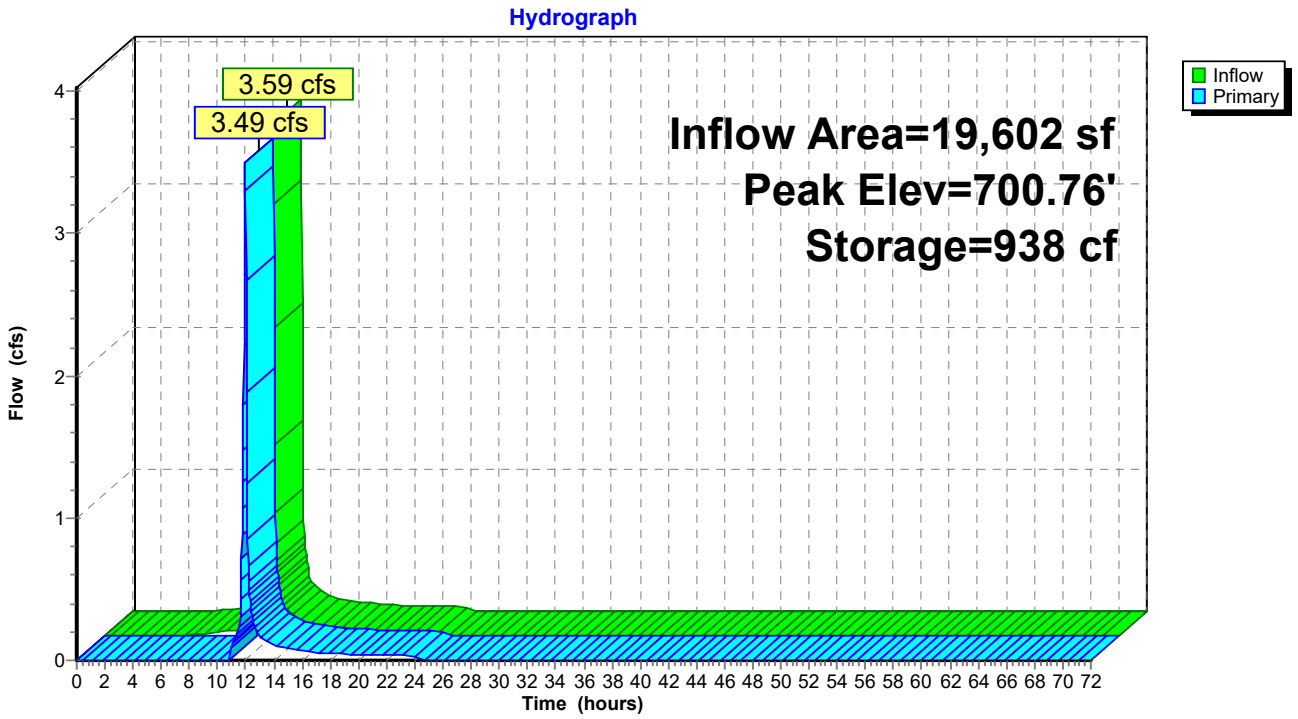
Volume	Invert	Avail.Storage	Storage Description
#1	697.00'	3,154 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
697.00	461	0.0	0	0
700.00	461	20.0	277	277
701.00	1,521	100.0	991	1,268
702.00	2,252	100.0	1,887	3,154

Device	Routing	Invert	Outlet Devices
#1	Primary	697.00'	**18.0" Round Culvert** L= 16.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 697.00' / 696.20' S= 0.0500 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	700.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	702.00'	**65.0' long x 11.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.53 2.59 2.70 2.68 2.67 2.68 2.66 2.64

Primary OutFlow Max=3.46 cfs @ 11.97 hrs HW=700.76' (Free Discharge)
- **1=Culvert** (Passes 3.46 cfs of 14.77 cfs potential flow)
  - **2=Orifice/Grate** (Weir Controls 3.46 cfs @ 1.68 fps)
- **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 7P: FocalPoint 7



Summary for Pond 8P: FocalPoint 8

[92] Warning: Device #3 is above defined storage

Inflow Area = 8,712 sf, 55.00% Impervious, Inflow Depth = 3.64" for 25-year event
Inflow = 1.32 cfs @ 11.96 hrs, Volume= 2,643 cf
Outflow = 0.97 cfs @ 12.02 hrs, Volume= 1,699 cf, Atten= 27%, Lag= 3.6 min
Primary = 0.97 cfs @ 12.02 hrs, Volume= 1,699 cf
Routed to Pond 3P : (new Pond)

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 698.61' @ 12.02 hrs Surf.Area= 1,098 sf Storage= 1,063 cf

Plug-Flow detention time= 180.1 min calculated for 1,699 cf (64% of inflow)
Center-of-Mass det. time= 72.2 min (890.0 - 817.9)

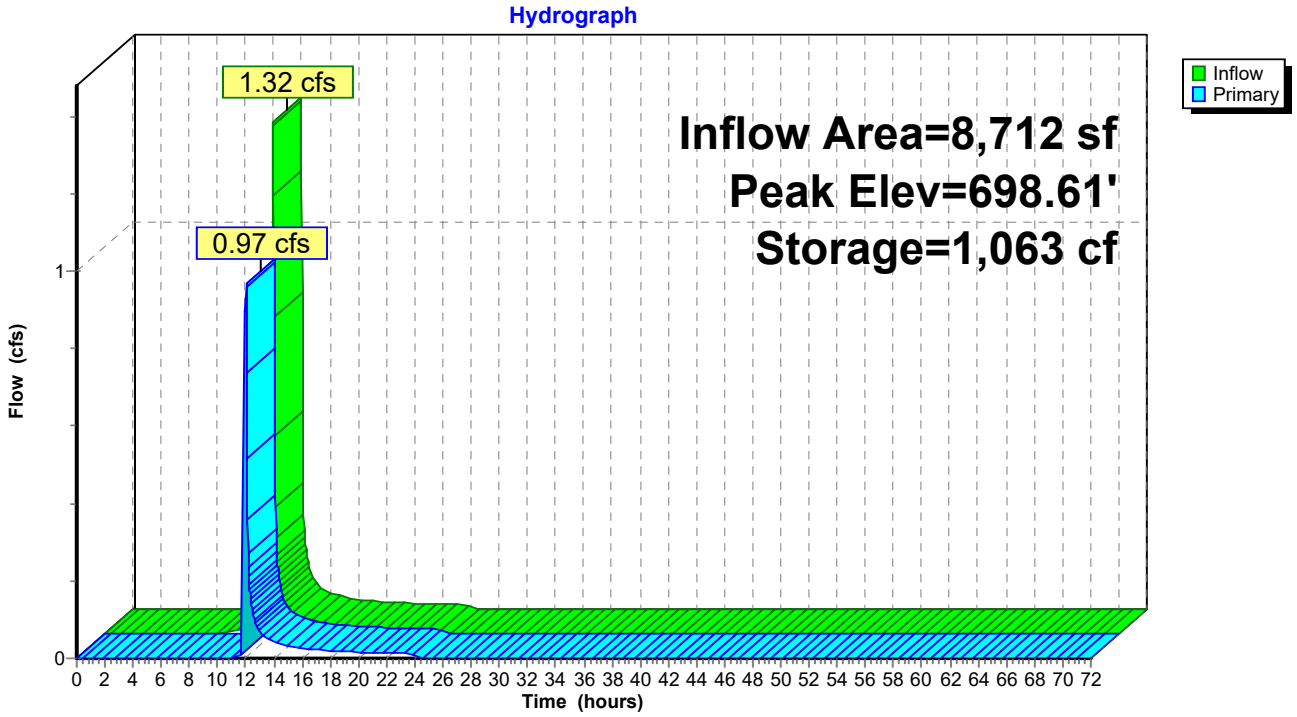
Volume	Invert	Avail.Storage	Storage Description
#1	695.00'	3,154 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.00	803	0.0	0	0
698.00	803	20.0	482	482
699.00	1,285	100.0	1,044	1,526
700.00	1,971	100.0	1,628	3,154

Device	Routing	Invert	Outlet Devices
#1	Primary	695.00'	**18.0" Round Culvert** L= 26.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 695.00' / 693.05' S= 0.0750 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	698.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**57.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=0.93 cfs @ 12.02 hrs HW=698.61' (Free Discharge)
└**1=Culvert** (Passes 0.93 cfs of 14.39 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 0.93 cfs @ 1.08 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 8P: FocalPoint 8



Summary for Pond 9P: FocalPoint 9

[92] Warning: Device #3 is above defined storage

Inflow Area = 13,068 sf, 63.33% Impervious, Inflow Depth = 4.05" for 25-year event
Inflow = 2.18 cfs @ 11.96 hrs, Volume= 4,414 cf
Outflow = 2.13 cfs @ 11.97 hrs, Volume= 3,660 cf, Atten= 2%, Lag= 0.8 min
Primary = 2.13 cfs @ 11.97 hrs, Volume= 3,660 cf
Routed to Pond 3P : (new Pond)

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 697.69' @ 11.97 hrs Surf.Area= 908 sf Storage= 918 cf

Plug-Flow detention time= 108.6 min calculated for 3,660 cf (83% of inflow)
Center-of-Mass det. time= 34.2 min (842.4 - 808.2)

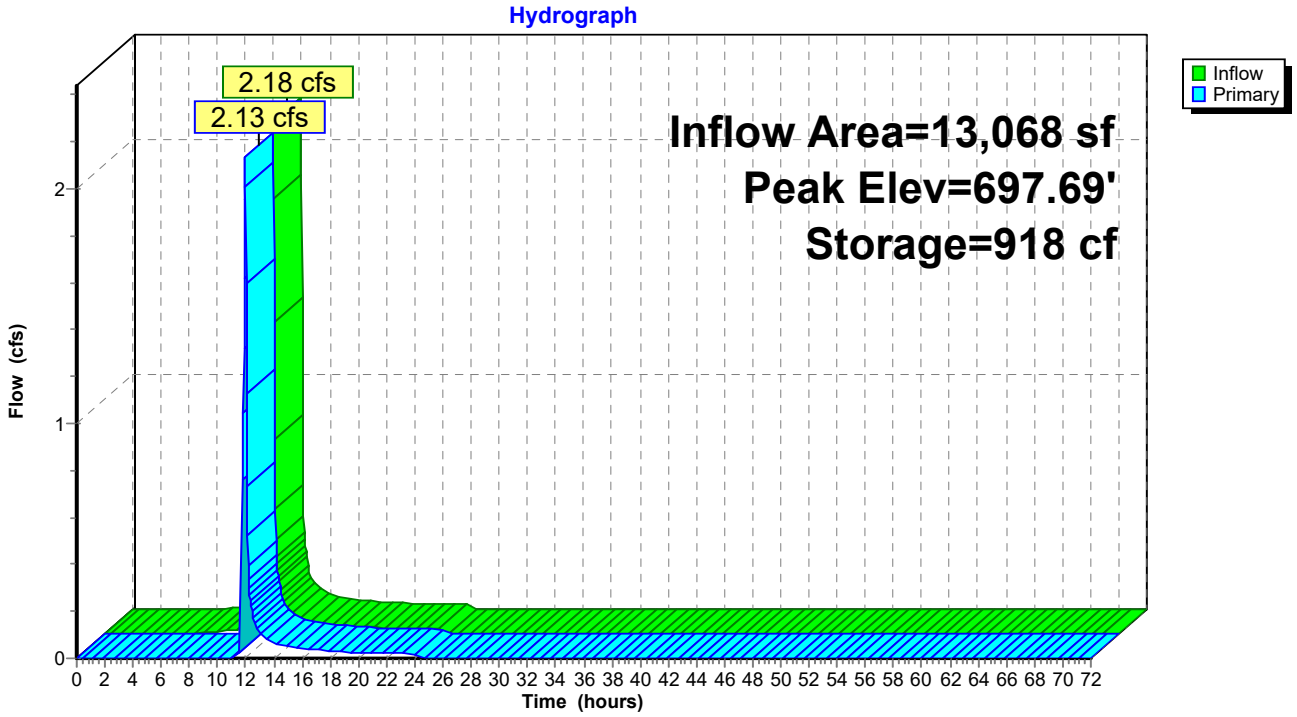
Volume	Invert	Avail.Storage	Storage Description
#1	694.00'	4,192 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.00	641	0.0	0	0
697.00	641	20.0	385	385
698.00	1,028	100.0	835	1,219
699.00	1,472	100.0	1,250	2,469
700.00	1,973	100.0	1,723	4,192

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 32.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 691.74' S= 0.0706 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	697.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**54.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=2.10 cfs @ 11.97 hrs HW=697.69' (Free Discharge)
- **1=Culvert** (Passes 2.10 cfs of 14.58 cfs potential flow)
  - **2=Orifice/Grate** (Weir Controls 2.10 cfs @ 1.42 fps)
- **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 9P: FocalPoint 9

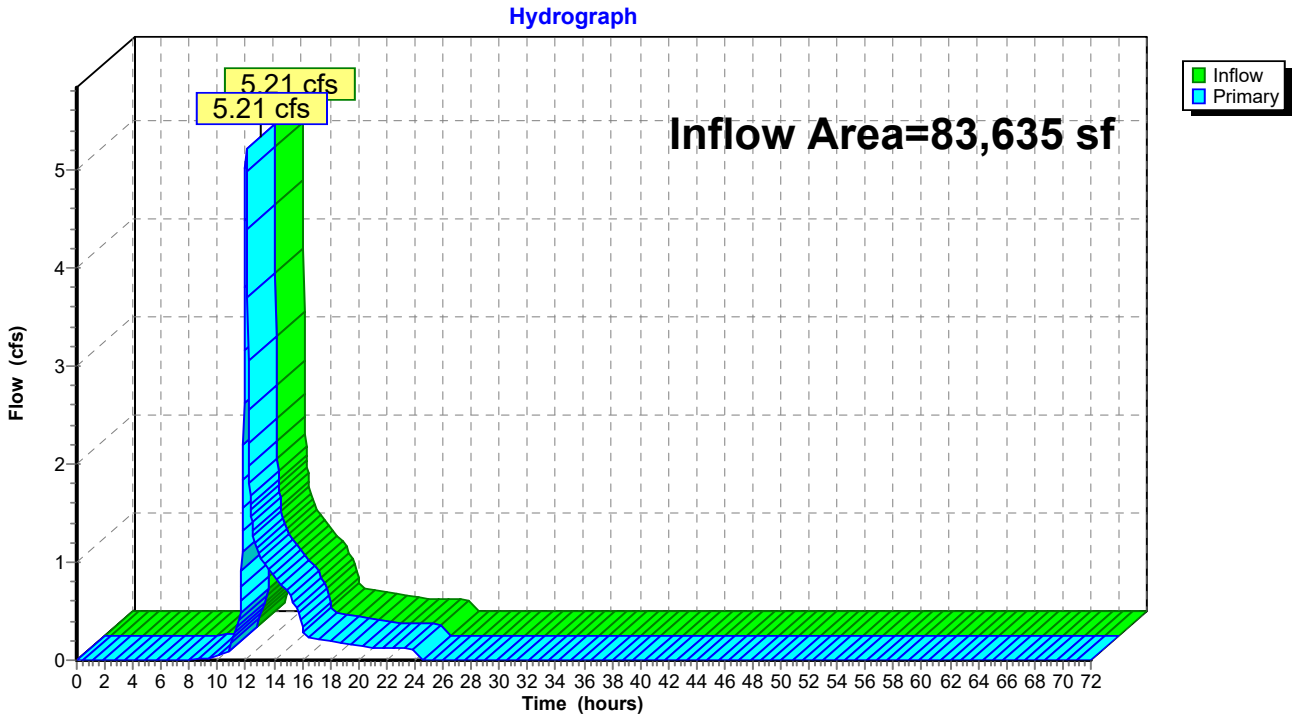


Summary for Link 2L: Outfall #1

Inflow Area = 83,635 sf, 51.04% Impervious, Inflow Depth = 3.39" for 25-year event
Inflow = 5.21 cfs @ 12.03 hrs, Volume= 23,594 cf
Primary = 5.21 cfs @ 12.03 hrs, Volume= 23,594 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs

Link 2L: Outfall #1



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment7S: Area 7 Runoff Area=0.450 ac 62.22% Impervious Runoff Depth=5.27"
Tc=5.0 min CN=85 Runoff=4.09 cfs 8,611 cf

Subcatchment8S: Area 8 Runoff Area=0.200 ac 55.00% Impervious Runoff Depth=4.28"
Tc=5.0 min CN=76 Runoff=1.54 cfs 3,104 cf

Subcatchment9S: Area 9 Runoff Area=0.300 ac 63.33% Impervious Runoff Depth=4.71"
Tc=5.0 min CN=80 Runoff=2.51 cfs 5,132 cf

Subcatchment11S: North Bypass 1 Runoff Area=0.880 ac 45.45% Impervious Runoff Depth=4.06"
Flow Length=730' Tc=10.9 min CN=74 Runoff=5.29 cfs 12,968 cf

Subcatchment12S: North Bypass 2 Runoff Area=0.090 ac 0.00% Impervious Runoff Depth=1.59"
Tc=5.0 min CN=49 Runoff=0.25 cfs 519 cf

Pond 3P: (new Pond) Peak Elev=694.58' Storage=5,867 cf Inflow=8.04 cfs 15,030 cf
Outflow=0.83 cfs 15,030 cf

Pond 7P: FocalPoint 7 Peak Elev=700.79' Storage=969 cf Inflow=4.09 cfs 8,611 cf
Outflow=3.98 cfs 7,972 cf

Pond 8P: FocalPoint 8 Peak Elev=698.64' Storage=1,098 cf Inflow=1.54 cfs 3,104 cf
Outflow=1.40 cfs 2,160 cf

Pond 9P: FocalPoint 9 Peak Elev=697.71' Storage=936 cf Inflow=2.51 cfs 5,132 cf
Outflow=2.46 cfs 4,379 cf

Link 2L: Outfall #1 Inflow=6.06 cfs 27,998 cf
Primary=6.06 cfs 27,998 cf

Total Runoff Area = 83,635 sf Runoff Volume = 30,334 cf Average Runoff Depth = 4.35"
48.96% Pervious = 40,946 sf 51.04% Impervious = 42,689 sf

Summary for Subcatchment 7S: Area 7

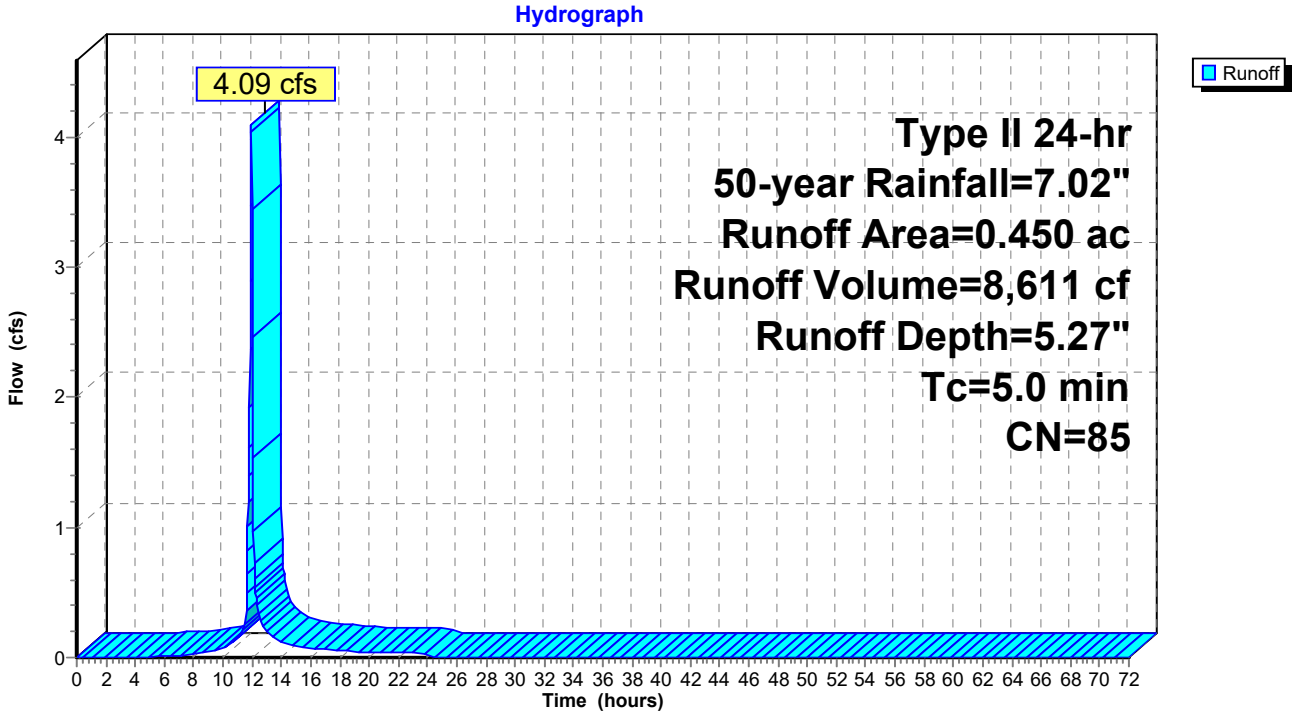
Runoff = 4.09 cfs @ 11.96 hrs, Volume= 8,611 cf, Depth= 5.27"
Routed to Pond 7P : FocalPoint 7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 50-year Rainfall=7.02"

Area (ac)	CN	Description
0.040	49	50-75% Grass cover, Fair, HSG A
0.130	69	50-75% Grass cover, Fair, HSG B
0.280	98	Paved parking, HSG A
0.450	85	Weighted Average
0.170		37.78% Pervious Area
0.280		62.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 7S: Area 7



Summary for Subcatchment 8S: Area 8

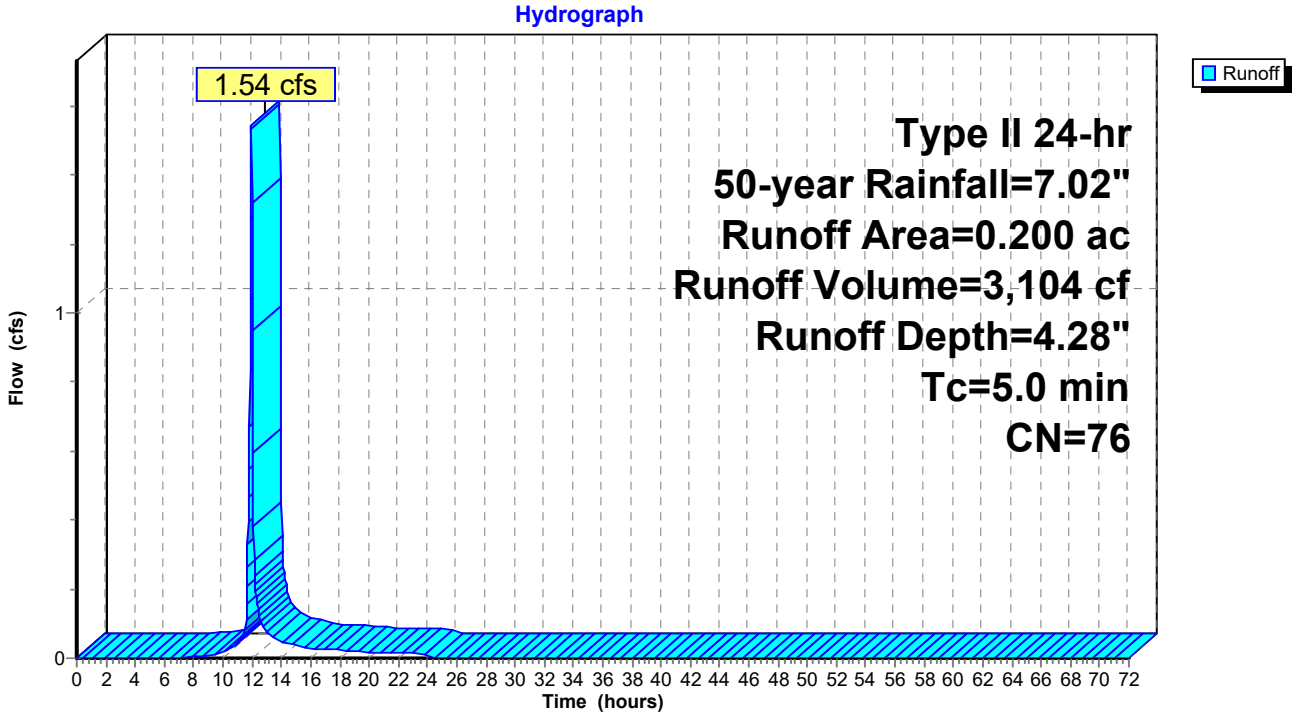
Runoff = 1.54 cfs @ 11.96 hrs, Volume= 3,104 cf, Depth= 4.28"
Routed to Pond 8P : FocalPoint 8

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 50-year Rainfall=7.02"

Area (ac)	CN	Description
0.090	49	50-75% Grass cover, Fair, HSG A
0.110	98	Paved parking, HSG A
0.200	76	Weighted Average
0.090		45.00% Pervious Area
0.110		55.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 8S: Area 8



Summary for Subcatchment 9S: Area 9

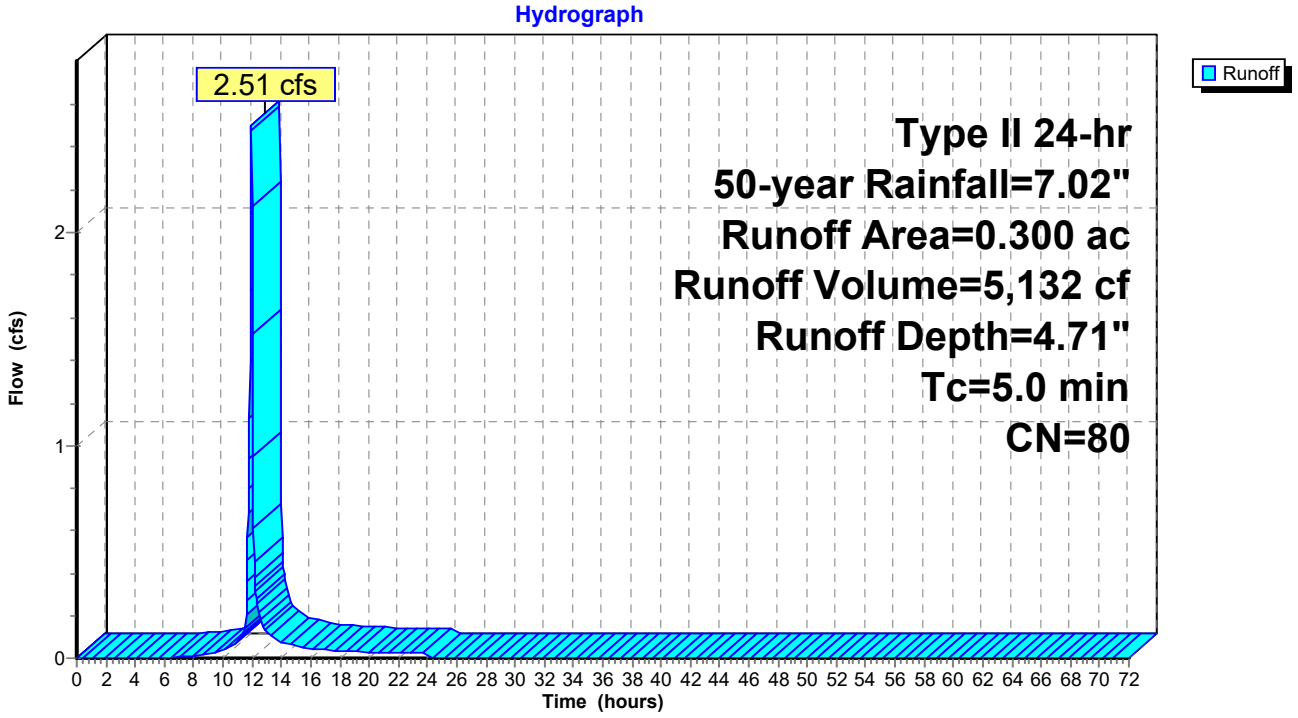
Runoff = 2.51 cfs @ 11.96 hrs, Volume= 5,132 cf, Depth= 4.71"
Routed to Pond 9P : FocalPoint 9

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 50-year Rainfall=7.02"

Area (ac)	CN	Description
0.110	49	50-75% Grass cover, Fair, HSG A
0.190	98	Paved parking, HSG A
0.300	80	Weighted Average
0.110		36.67% Pervious Area
0.190		63.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 9S: Area 9



Summary for Subcatchment 11S: North Bypass 1

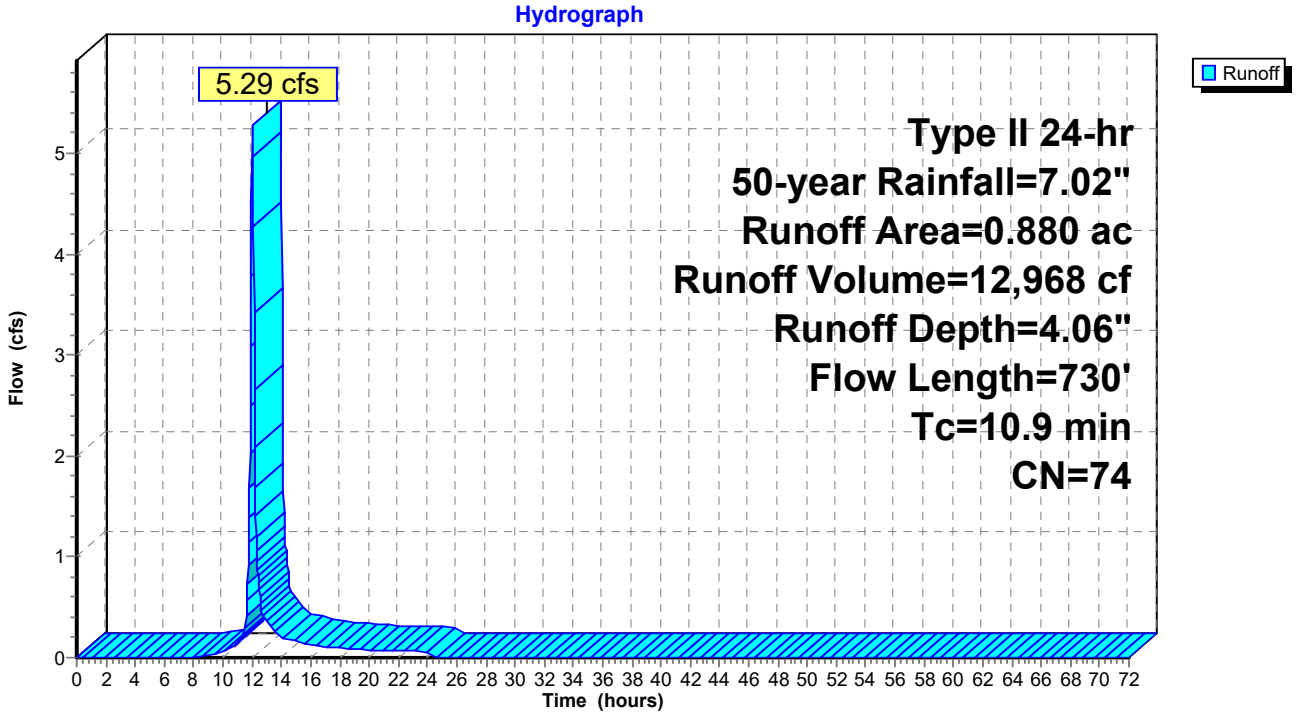
Runoff = 5.29 cfs @ 12.03 hrs, Volume= 12,968 cf, Depth= 4.06"
Routed to Link 2L : Outfall #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 50-year Rainfall=7.02"

Area (ac)	CN	Description
0.360	49	50-75% Grass cover, Fair, HSG A
0.120	69	50-75% Grass cover, Fair, HSG B
0.400	98	Paved parking, HSG A
0.880	74	Weighted Average
0.480		54.55% Pervious Area
0.400		45.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	40	0.0200	0.15		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
6.3	690	0.0080	1.82		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
10.9	730	Total			

Subcatchment 11S: North Bypass 1



Summary for Subcatchment 12S: North Bypass 2

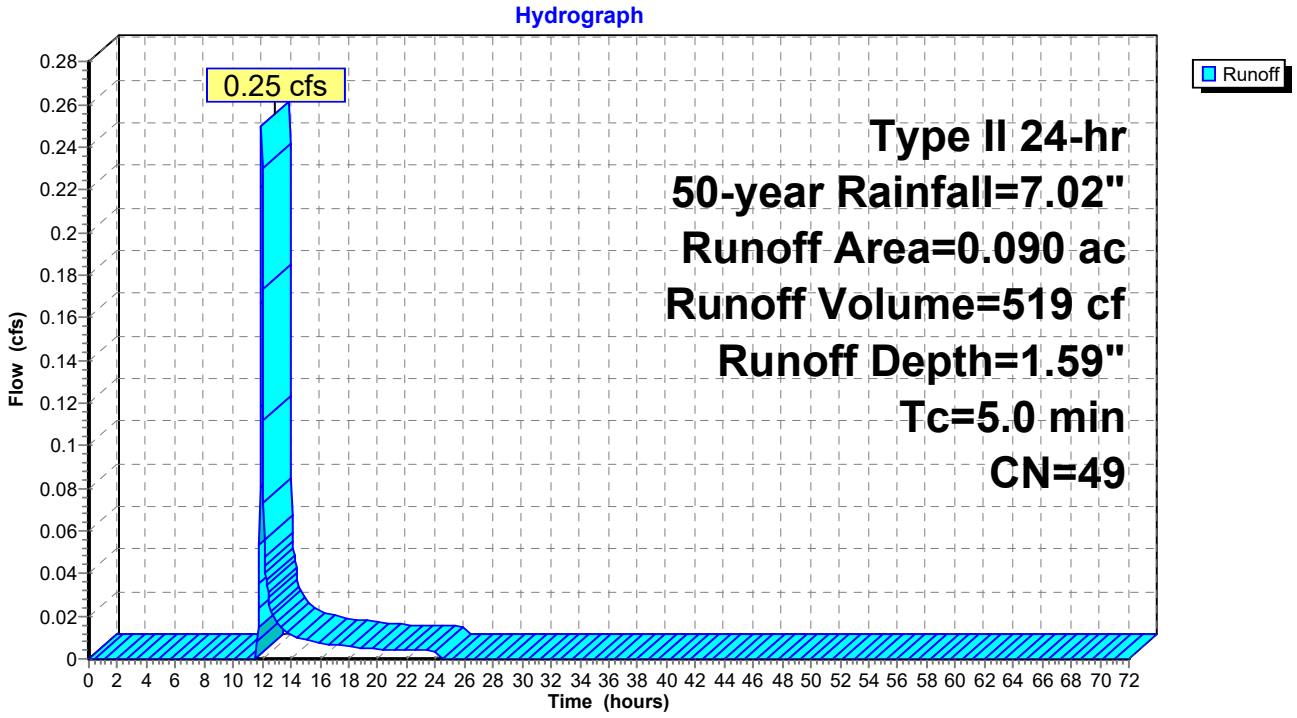
Runoff = 0.25 cfs @ 11.97 hrs, Volume= 519 cf, Depth= 1.59"
Routed to Pond 3P : (new Pond)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 50-year Rainfall=7.02"

Area (ac)	CN	Description
0.090	49	50-75% Grass cover, Fair, HSG A
0.090		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 12S: North Bypass 2



Summary for Pond 3P: (new Pond)

[79] Warning: Submerged Pond 8P Primary device # 1 OUTLET by 1.53'
[79] Warning: Submerged Pond 9P Primary device # 1 INLET by 0.58'

Inflow Area = 45,302 sf, 55.77% Impervious, Inflow Depth = 3.98" for 50-year event
Inflow = 8.04 cfs @ 11.98 hrs, Volume= 15,030 cf
Outflow = 0.83 cfs @ 12.41 hrs, Volume= 15,030 cf, Atten= 90%, Lag= 25.5 min
Primary = 0.83 cfs @ 12.41 hrs, Volume= 15,030 cf
Routed to Link 2L : Outfall #1

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 694.58' @ 12.41 hrs Surf.Area= 2,641 sf Storage= 5,867 cf

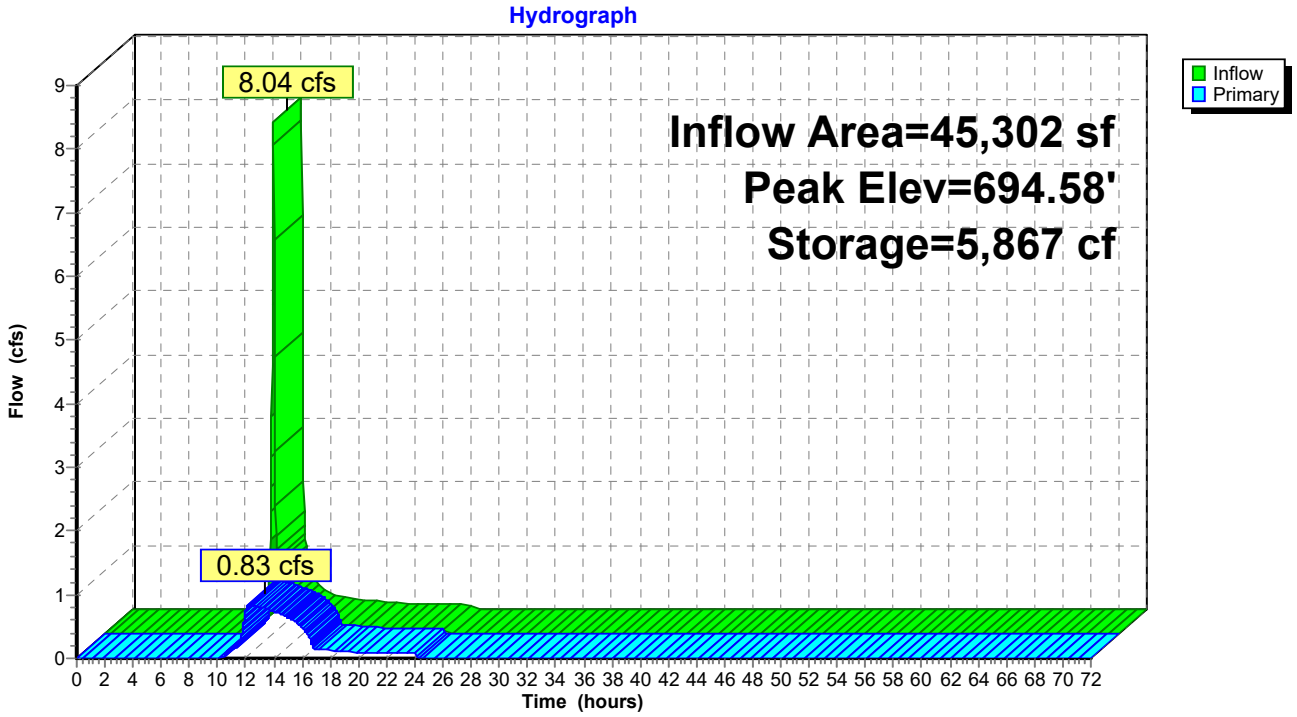
Plug-Flow detention time= 59.7 min calculated for 15,030 cf (100% of inflow)
Center-of-Mass det. time= 59.7 min (890.8 - 831.0)

Volume	Invert	Avail.Storage	Storage Description
#1	690.54'	10,996 cf	**60.0" Round CMP_Round 60"** L= 560.0' S= 0.0050 '/'

Device	Routing	Invert	Outlet Devices
#1	Primary	690.54'	**18.0" Round RCP_Round 18"** L= 20.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 690.54' / 690.44' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	690.54'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	695.00'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=0.83 cfs @ 12.41 hrs HW=694.58' (Free Discharge)
└**1=RCP_Round 18"** (Passes 0.83 cfs of 15.43 cfs potential flow)
  ├**2=Orifice/Grate** (Orifice Controls 0.83 cfs @ 9.48 fps)
  └**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 3P: (new Pond)



Summary for Pond 7P: FocalPoint 7

[92] Warning: Device #3 is above defined storage

Inflow Area = 19,602 sf, 62.22% Impervious, Inflow Depth = 5.27" for 50-year event
Inflow = 4.09 cfs @ 11.96 hrs, Volume= 8,611 cf
Outflow = 3.98 cfs @ 11.97 hrs, Volume= 7,972 cf, Atten= 3%, Lag= 0.9 min
Primary = 3.98 cfs @ 11.97 hrs, Volume= 7,972 cf
Routed to Pond 3P : (new Pond)

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 700.79' @ 11.97 hrs Surf.Area= 1,297 sf Storage= 969 cf

Plug-Flow detention time= 63.9 min calculated for 7,972 cf (93% of inflow)
Center-of-Mass det. time= 23.4 min (814.3 - 790.9)

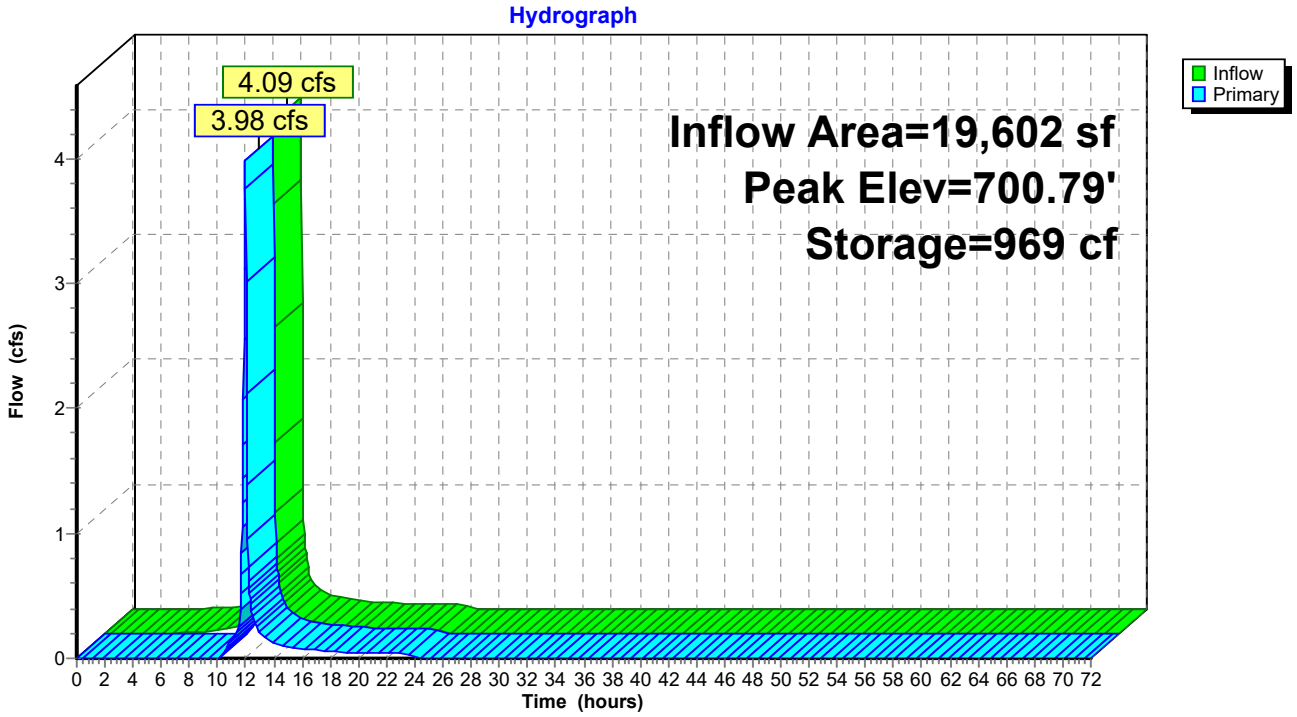
Volume	Invert	Avail.Storage	Storage Description
#1	697.00'	3,154 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
697.00	461	0.0	0	0
700.00	461	20.0	277	277
701.00	1,521	100.0	991	1,268
702.00	2,252	100.0	1,887	3,154

Device	Routing	Invert	Outlet Devices
#1	Primary	697.00'	**18.0" Round Culvert** L= 16.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 697.00' / 696.20' S= 0.0500 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	700.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	702.00'	**65.0' long x 11.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.53 2.59 2.70 2.68 2.67 2.68 2.66 2.64

Primary OutFlow Max=3.95 cfs @ 11.97 hrs HW=700.79' (Free Discharge)
- **1=Culvert** (Passes 3.95 cfs of 14.83 cfs potential flow)
  - **2=Orifice/Grate** (Weir Controls 3.95 cfs @ 1.75 fps)
- **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 7P: FocalPoint 7



Summary for Pond 8P: FocalPoint 8

[92] Warning: Device #3 is above defined storage

Inflow Area = 8,712 sf, 55.00% Impervious, Inflow Depth = 4.28" for 50-year event
Inflow = 1.54 cfs @ 11.96 hrs, Volume= 3,104 cf
Outflow = 1.40 cfs @ 12.00 hrs, Volume= 2,160 cf, Atten= 10%, Lag= 2.2 min
Primary = 1.40 cfs @ 12.00 hrs, Volume= 2,160 cf
Routed to Pond 3P : (new Pond)

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 698.64' @ 12.00 hrs Surf.Area= 1,113 sf Storage= 1,098 cf

Plug-Flow detention time= 160.0 min calculated for 2,160 cf (70% of inflow)
Center-of-Mass det. time= 59.2 min (872.5 - 813.3)

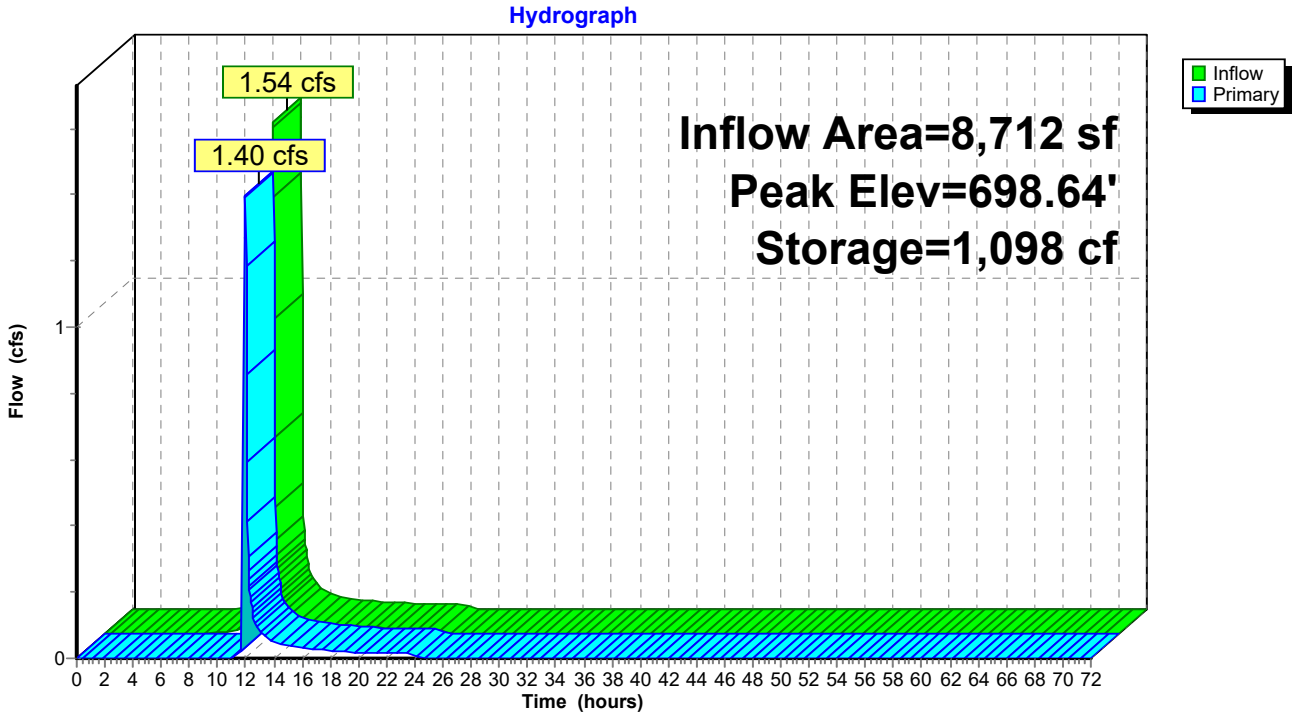
Volume	Invert	Avail.Storage	Storage Description
#1	695.00'	3,154 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.00	803	0.0	0	0
698.00	803	20.0	482	482
699.00	1,285	100.0	1,044	1,526
700.00	1,971	100.0	1,628	3,154

Device	Routing	Invert	Outlet Devices
#1	Primary	695.00'	**18.0" Round Culvert** L= 26.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 695.00' / 693.05' S= 0.0750 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	698.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**57.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=1.37 cfs @ 12.00 hrs HW=698.64' (Free Discharge)
└**1=Culvert** (Passes 1.37 cfs of 14.47 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 1.37 cfs @ 1.23 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 8P: FocalPoint 8



Summary for Pond 9P: FocalPoint 9

[92] Warning: Device #3 is above defined storage

Inflow Area = 13,068 sf, 63.33% Impervious, Inflow Depth = 4.71" for 50-year event
Inflow = 2.51 cfs @ 11.96 hrs, Volume= 5,132 cf
Outflow = 2.46 cfs @ 11.97 hrs, Volume= 4,379 cf, Atten= 2%, Lag= 0.8 min
Primary = 2.46 cfs @ 11.97 hrs, Volume= 4,379 cf
Routed to Pond 3P : (new Pond)

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 697.71' @ 11.97 hrs Surf.Area= 915 sf Storage= 936 cf

Plug-Flow detention time= 98.6 min calculated for 4,377 cf (85% of inflow)
Center-of-Mass det. time= 31.4 min (835.3 - 803.9)

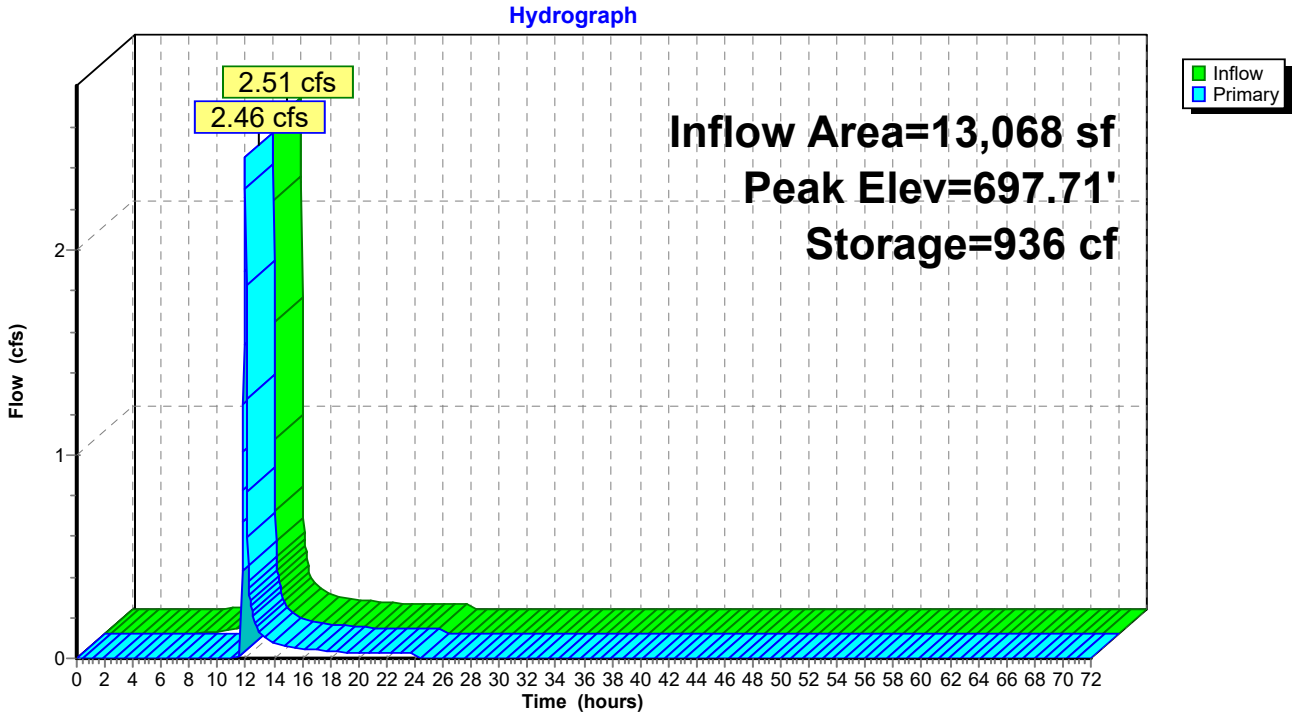
Volume	Invert	Avail.Storage	Storage Description
#1	694.00'	4,192 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.00	641	0.0	0	0
697.00	641	20.0	385	385
698.00	1,028	100.0	835	1,219
699.00	1,472	100.0	1,250	2,469
700.00	1,973	100.0	1,723	4,192

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 32.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 691.74' S= 0.0706 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	697.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**54.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=2.43 cfs @ 11.97 hrs HW=697.71' (Free Discharge)
└**1=Culvert** (Passes 2.43 cfs of 14.63 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 2.43 cfs @ 1.49 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 9P: FocalPoint 9

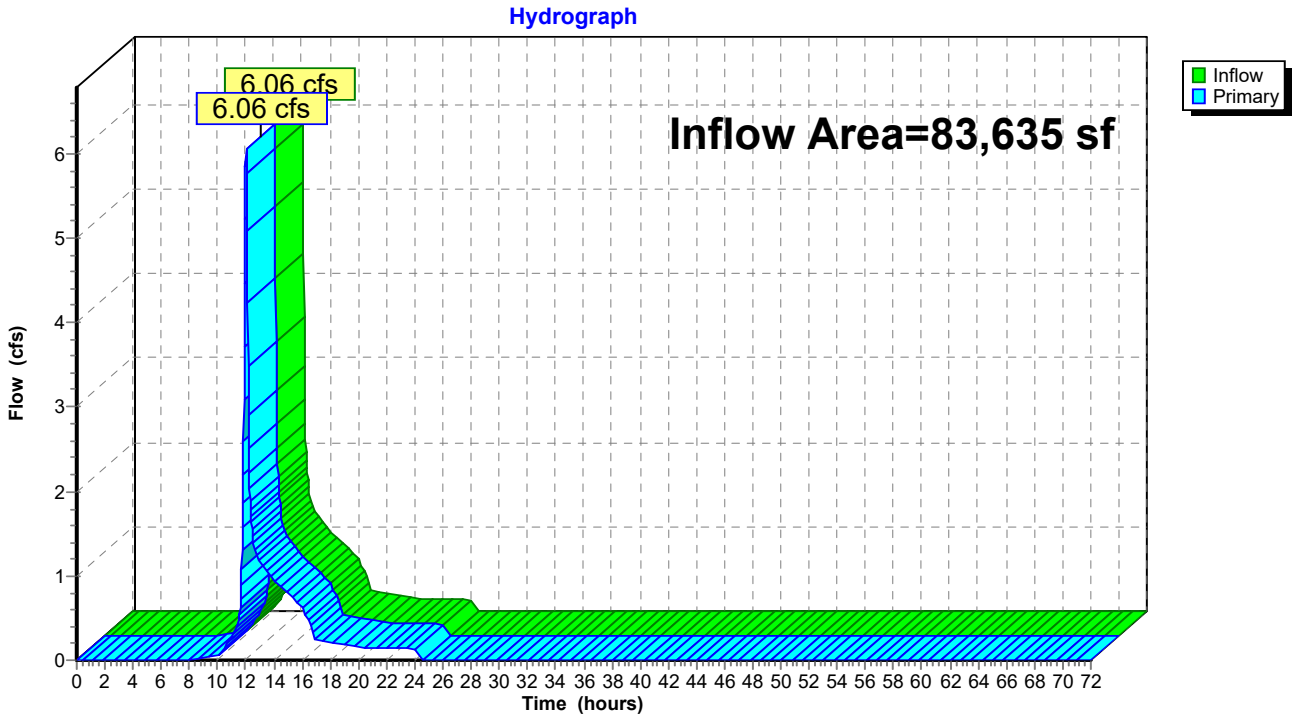


Summary for Link 2L: Outfall #1

Inflow Area = 83,635 sf, 51.04% Impervious, Inflow Depth = 4.02" for 50-year event
Inflow = 6.06 cfs @ 12.03 hrs, Volume= 27,998 cf
Primary = 6.06 cfs @ 12.03 hrs, Volume= 27,998 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs

Link 2L: Outfall #1



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment7S: Area 7 Runoff Area=0.450 ac 62.22% Impervious Runoff Depth=5.99"
Tc=5.0 min CN=85 Runoff=4.61 cfs 9,787 cf

Subcatchment8S: Area 8 Runoff Area=0.200 ac 55.00% Impervious Runoff Depth=4.95"
Tc=5.0 min CN=76 Runoff=1.77 cfs 3,593 cf

Subcatchment9S: Area 9 Runoff Area=0.300 ac 63.33% Impervious Runoff Depth=5.41"
Tc=5.0 min CN=80 Runoff=2.86 cfs 5,891 cf

Subcatchment11S: North Bypass 1 Runoff Area=0.880 ac 45.45% Impervious Runoff Depth=4.72"
Flow Length=730' Tc=10.9 min CN=74 Runoff=6.12 cfs 15,079 cf

Subcatchment12S: North Bypass 2 Runoff Area=0.090 ac 0.00% Impervious Runoff Depth=2.01"
Tc=5.0 min CN=49 Runoff=0.32 cfs 657 cf

Pond 3P: (new Pond) Peak Elev=695.06' Storage=7,111 cf Inflow=9.32 cfs 17,591 cf
Outflow=1.04 cfs 17,591 cf

Pond 7P: FocalPoint 7 Peak Elev=700.81' Storage=1,001 cf Inflow=4.61 cfs 9,787 cf
Outflow=4.50 cfs 9,148 cf

Pond 8P: FocalPoint 8 Peak Elev=698.66' Storage=1,121 cf Inflow=1.77 cfs 3,593 cf
Outflow=1.71 cfs 2,649 cf

Pond 9P: FocalPoint 9 Peak Elev=697.73' Storage=954 cf Inflow=2.86 cfs 5,891 cf
Outflow=2.80 cfs 5,138 cf

Link 2L: Outfall #1 Inflow=6.94 cfs 32,671 cf
Primary=6.94 cfs 32,671 cf

Total Runoff Area = 83,635 sf Runoff Volume = 35,007 cf Average Runoff Depth = 5.02"
48.96% Pervious = 40,946 sf 51.04% Impervious = 42,689 sf

Summary for Subcatchment 7S: Area 7

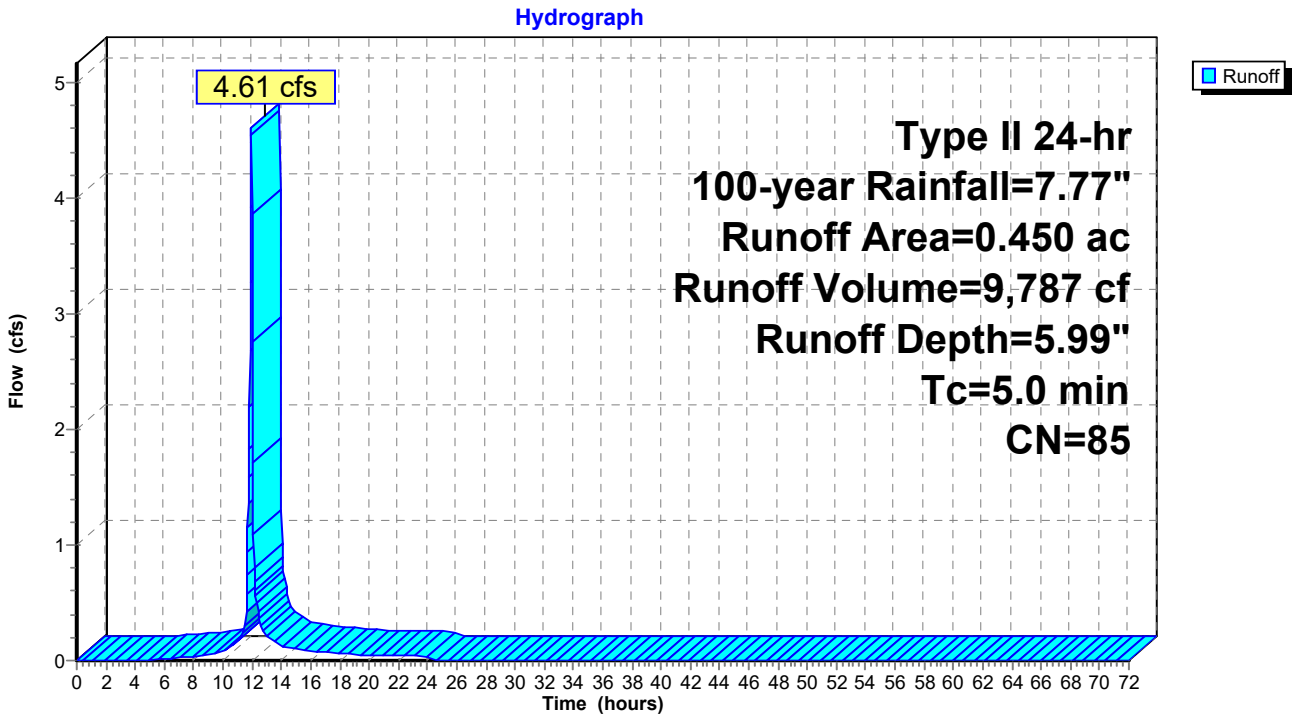
Runoff = 4.61 cfs @ 11.96 hrs, Volume= 9,787 cf, Depth= 5.99"
Routed to Pond 7P : FocalPoint 7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 100-year Rainfall=7.77"

Area (ac)	CN	Description
0.040	49	50-75% Grass cover, Fair, HSG A
0.130	69	50-75% Grass cover, Fair, HSG B
0.280	98	Paved parking, HSG A
0.450	85	Weighted Average
0.170		37.78% Pervious Area
0.280		62.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 7S: Area 7



Summary for Subcatchment 8S: Area 8

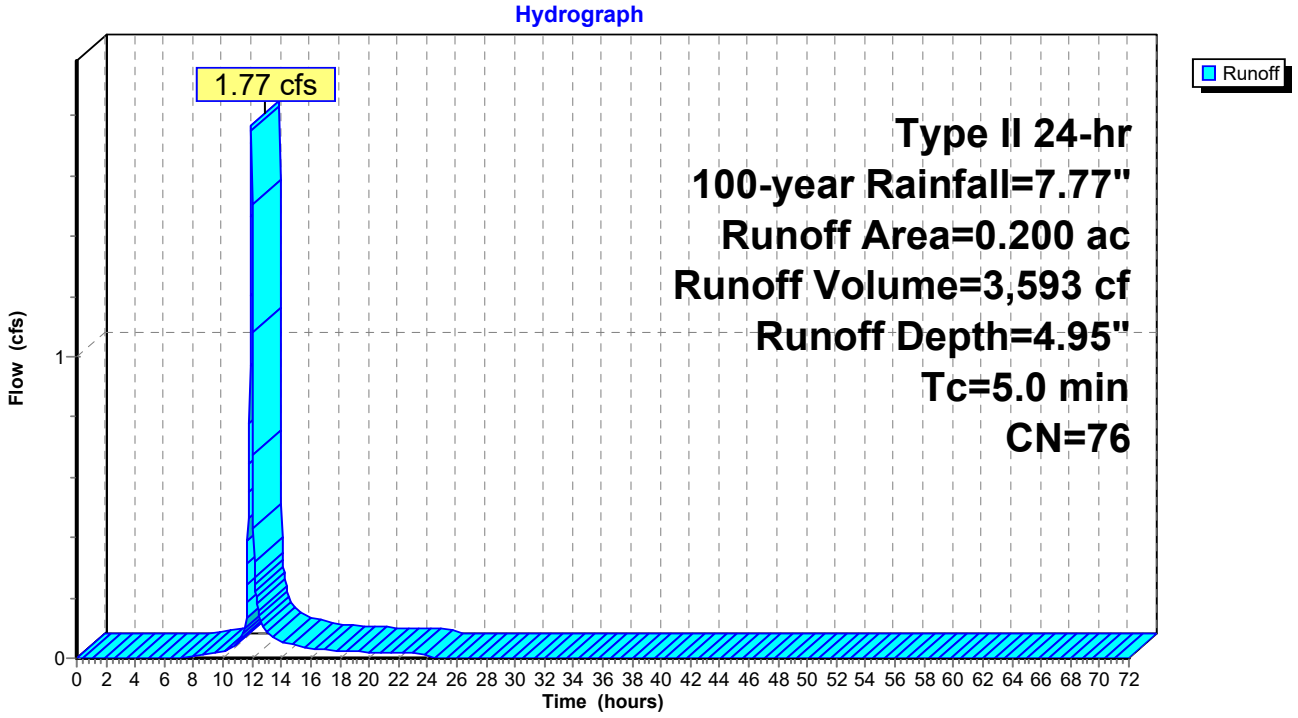
Runoff = 1.77 cfs @ 11.96 hrs, Volume= 3,593 cf, Depth= 4.95"
Routed to Pond 8P : FocalPoint 8

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 100-year Rainfall=7.77"

Area (ac)	CN	Description
0.090	49	50-75% Grass cover, Fair, HSG A
0.110	98	Paved parking, HSG A
0.200	76	Weighted Average
0.090		45.00% Pervious Area
0.110		55.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 8S: Area 8



Summary for Subcatchment 9S: Area 9

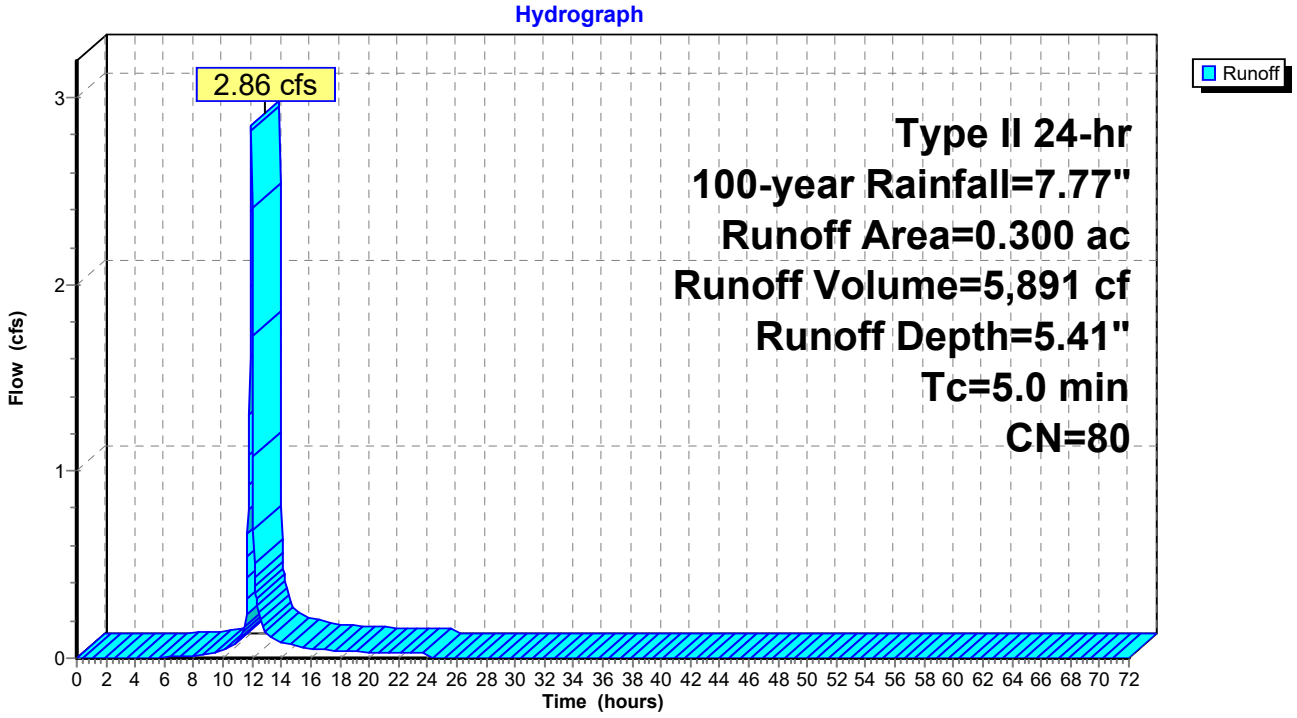
Runoff = 2.86 cfs @ 11.96 hrs, Volume= 5,891 cf, Depth= 5.41"
Routed to Pond 9P : FocalPoint 9

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 100-year Rainfall=7.77"

Area (ac)	CN	Description
0.110	49	50-75% Grass cover, Fair, HSG A
0.190	98	Paved parking, HSG A
0.300	80	Weighted Average
0.110		36.67% Pervious Area
0.190		63.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 9S: Area 9



Summary for Subcatchment 11S: North Bypass 1

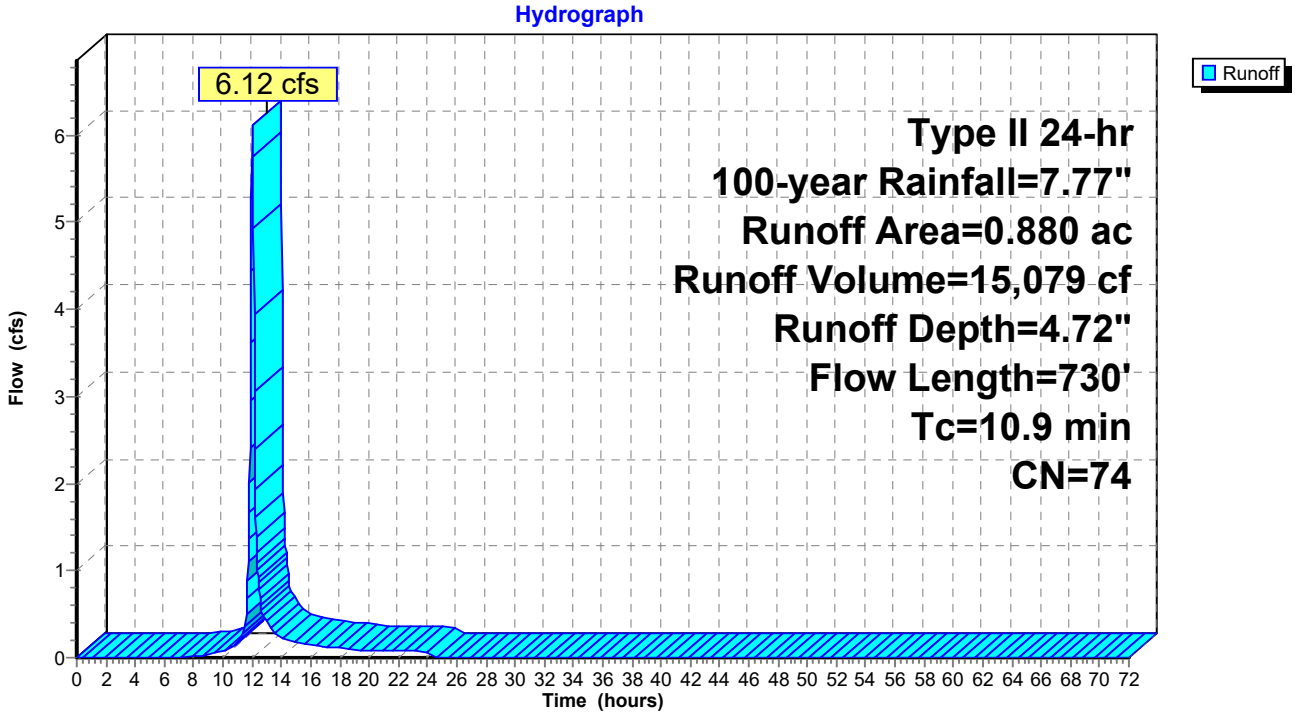
Runoff = 6.12 cfs @ 12.03 hrs, Volume= 15,079 cf, Depth= 4.72"
Routed to Link 2L : Outfall #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 100-year Rainfall=7.77"

Area (ac)	CN	Description
0.360	49	50-75% Grass cover, Fair, HSG A
0.120	69	50-75% Grass cover, Fair, HSG B
0.400	98	Paved parking, HSG A
0.880	74	Weighted Average
0.480		54.55% Pervious Area
0.400		45.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.6	40	0.0200	0.15		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
6.3	690	0.0080	1.82		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
10.9	730	Total			

Subcatchment 11S: North Bypass 1



Summary for Subcatchment 12S: North Bypass 2

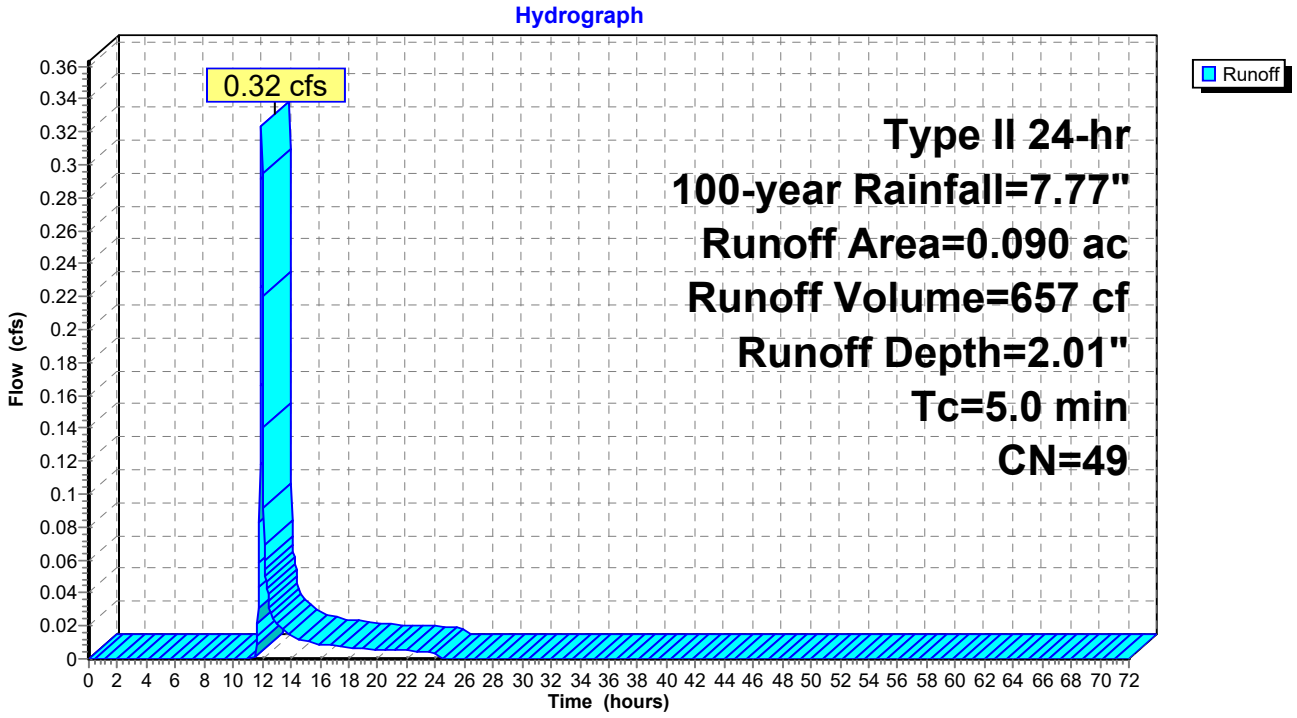
Runoff = 0.32 cfs @ 11.97 hrs, Volume= 657 cf, Depth= 2.01"
Routed to Pond 3P : (new Pond)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 100-year Rainfall=7.77"

Area (ac)	CN	Description
0.090	49	50-75% Grass cover, Fair, HSG A
0.090		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**

Subcatchment 12S: North Bypass 2



Summary for Pond 3P: (new Pond)

[79] Warning: Submerged Pond 8P Primary device # 1 INLET by 0.06'
[79] Warning: Submerged Pond 9P Primary device # 1 INLET by 1.06'

Inflow Area = 45,302 sf, 55.77% Impervious, Inflow Depth = 4.66" for 100-year event
Inflow = 9.32 cfs @ 11.97 hrs, Volume= 17,591 cf
Outflow = 1.04 cfs @ 12.34 hrs, Volume= 17,591 cf, Atten= 89%, Lag= 22.0 min
Primary = 1.04 cfs @ 12.34 hrs, Volume= 17,591 cf
Routed to Link 2L : Outfall #1

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 695.06' @ 12.34 hrs Surf.Area= 2,539 sf Storage= 7,111 cf

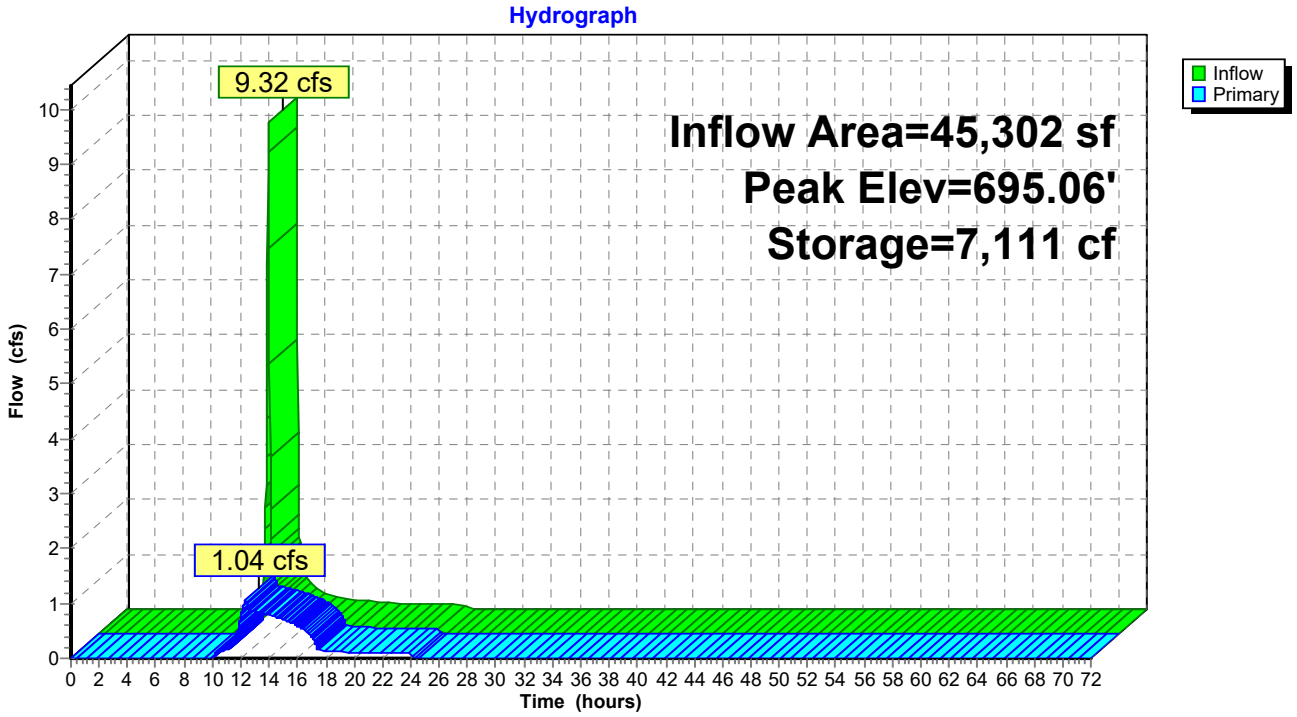
Plug-Flow detention time= 69.4 min calculated for 17,591 cf (100% of inflow)
Center-of-Mass det. time= 69.3 min (894.7 - 825.4)

Volume	Invert	Avail.Storage	Storage Description
#1	690.54'	10,996 cf	**60.0" Round CMP_Round 60"** L= 560.0' S= 0.0050 '/'

Device	Routing	Invert	Outlet Devices
#1	Primary	690.54'	**18.0" Round RCP_Round 18"** L= 20.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 690.54' / 690.44' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	690.54'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	695.00'	**4.0' long x 0.5' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=1.03 cfs @ 12.34 hrs HW=695.06' (Free Discharge)
└**1=RCP_Round 18"** (Passes 1.03 cfs of 16.52 cfs potential flow)
├**2=Orifice/Grate** (Orifice Controls 0.88 cfs @ 10.04 fps)
└**3=Broad-Crested Rectangular Weir** (Weir Controls 0.15 cfs @ 0.67 fps)

Pond 3P: (new Pond)



Summary for Pond 7P: FocalPoint 7

[92] Warning: Device #3 is above defined storage

Inflow Area = 19,602 sf, 62.22% Impervious, Inflow Depth = 5.99" for 100-year event
Inflow = 4.61 cfs @ 11.96 hrs, Volume= 9,787 cf
Outflow = 4.50 cfs @ 11.97 hrs, Volume= 9,148 cf, Atten= 3%, Lag= 0.9 min
Primary = 4.50 cfs @ 11.97 hrs, Volume= 9,148 cf
Routed to Pond 3P : (new Pond)

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 700.81' @ 11.97 hrs Surf.Area= 1,322 sf Storage= 1,001 cf

Plug-Flow detention time= 58.9 min calculated for 9,144 cf (93% of inflow)
Center-of-Mass det. time= 22.5 min (809.8 - 787.3)

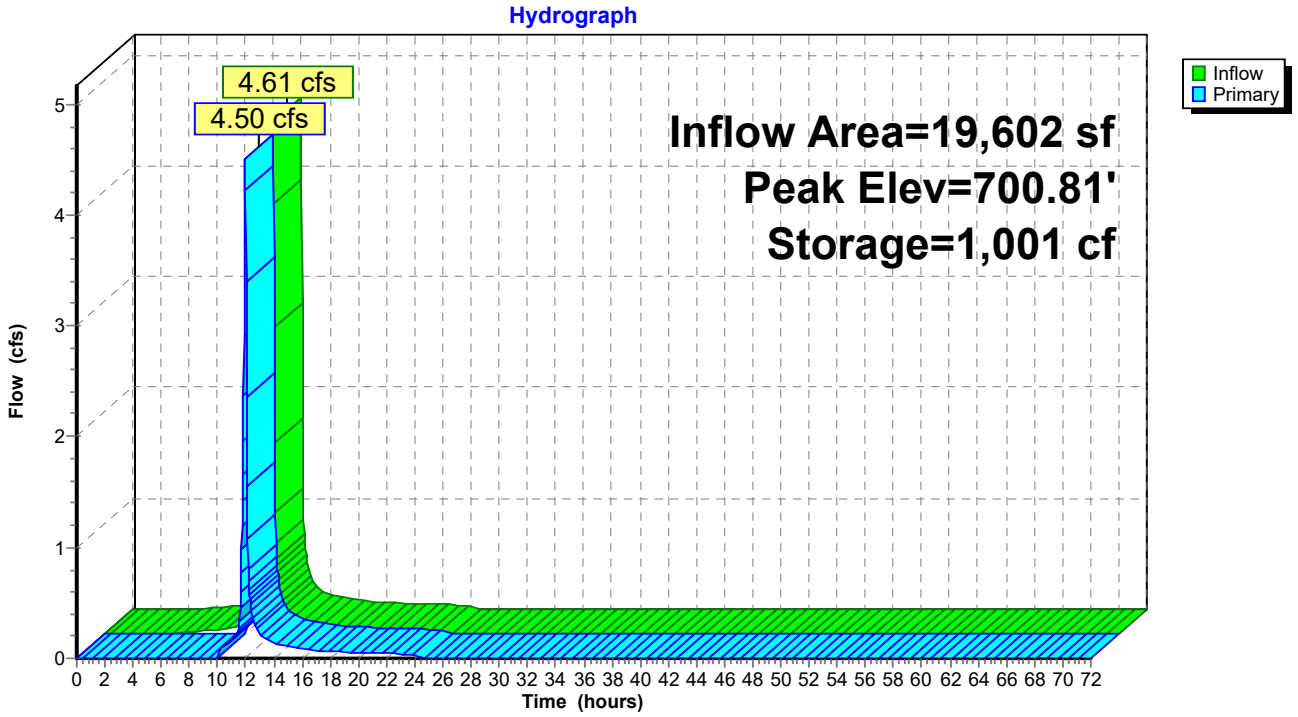
Volume	Invert	Avail.Storage	Storage Description
#1	697.00'	3,154 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
697.00	461	0.0	0	0
700.00	461	20.0	277	277
701.00	1,521	100.0	991	1,268
702.00	2,252	100.0	1,887	3,154

Device	Routing	Invert	Outlet Devices
#1	Primary	697.00'	**18.0" Round Culvert** L= 16.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 697.00' / 696.20' S= 0.0500 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	700.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	702.00'	**65.0' long x 11.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.53 2.59 2.70 2.68 2.67 2.68 2.66 2.64

Primary OutFlow Max=4.47 cfs @ 11.97 hrs HW=700.81' (Free Discharge)
- **1=Culvert** (Passes 4.47 cfs of 14.89 cfs potential flow)
  - **2=Orifice/Grate** (Weir Controls 4.47 cfs @ 1.83 fps)
- **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 7P: FocalPoint 7



Summary for Pond 8P: FocalPoint 8

[92] Warning: Device #3 is above defined storage

Inflow Area = 8,712 sf, 55.00% Impervious, Inflow Depth = 4.95" for 100-year event
Inflow = 1.77 cfs @ 11.96 hrs, Volume= 3,593 cf
Outflow = 1.71 cfs @ 11.98 hrs, Volume= 2,649 cf, Atten= 4%, Lag= 1.2 min
Primary = 1.71 cfs @ 11.98 hrs, Volume= 2,649 cf
Routed to Pond 3P : (new Pond)

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 698.66' @ 11.98 hrs Surf.Area= 1,123 sf Storage= 1,121 cf

Plug-Flow detention time= 144.9 min calculated for 2,649 cf (74% of inflow)
Center-of-Mass det. time= 50.8 min (860.0 - 809.1)

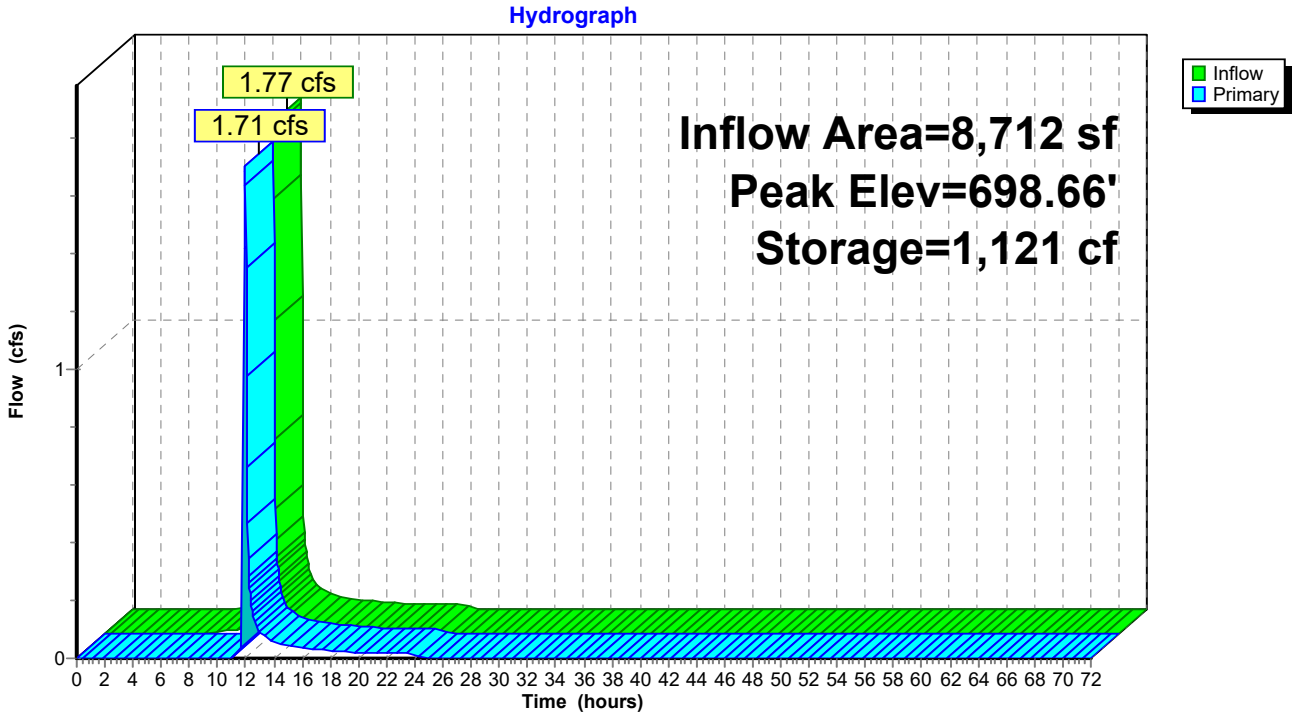
Volume	Invert	Avail.Storage	Storage Description
#1	695.00'	3,154 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.00	803	0.0	0	0
698.00	803	20.0	482	482
699.00	1,285	100.0	1,044	1,526
700.00	1,971	100.0	1,628	3,154

Device	Routing	Invert	Outlet Devices
#1	Primary	695.00'	**18.0" Round Culvert** L= 26.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 695.00' / 693.05' S= 0.0750 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	698.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**57.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=1.66 cfs @ 11.98 hrs HW=698.66' (Free Discharge)
└**1=Culvert** (Passes 1.66 cfs of 14.52 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 1.66 cfs @ 1.31 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 8P: FocalPoint 8



Summary for Pond 9P: FocalPoint 9

[92] Warning: Device #3 is above defined storage

Inflow Area = 13,068 sf, 63.33% Impervious, Inflow Depth = 5.41" for 100-year event
Inflow = 2.86 cfs @ 11.96 hrs, Volume= 5,891 cf
Outflow = 2.80 cfs @ 11.97 hrs, Volume= 5,138 cf, Atten= 2%, Lag= 0.8 min
Primary = 2.80 cfs @ 11.97 hrs, Volume= 5,138 cf
Routed to Pond 3P : (new Pond)

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 697.73' @ 11.97 hrs Surf.Area= 923 sf Storage= 954 cf

Plug-Flow detention time= 90.6 min calculated for 5,136 cf (87% of inflow)
Center-of-Mass det. time= 29.6 min (829.6 - 800.0)

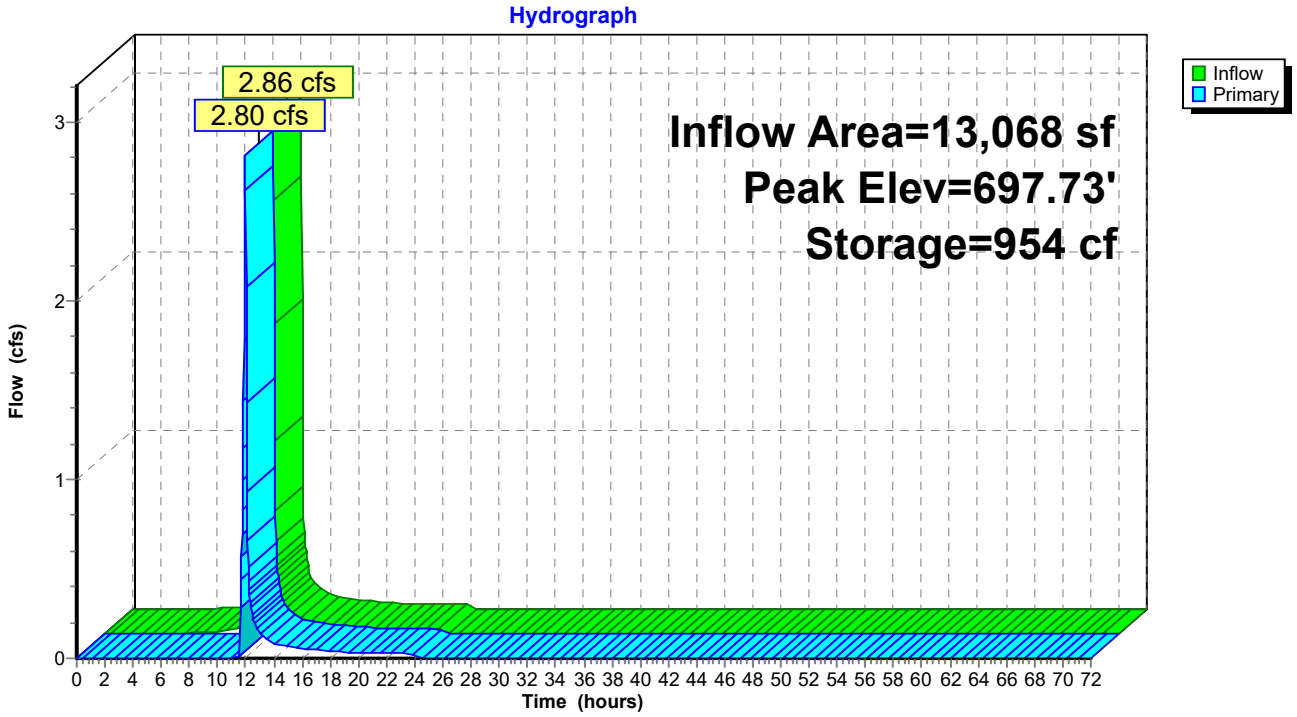
Volume	Invert	Avail.Storage	Storage Description
#1	694.00'	4,192 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
694.00	641	0.0	0	0
697.00	641	20.0	385	385
698.00	1,028	100.0	835	1,219
699.00	1,472	100.0	1,250	2,469
700.00	1,973	100.0	1,723	4,192

Device	Routing	Invert	Outlet Devices
#1	Primary	694.00'	**18.0" Round Culvert** L= 32.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 694.00' / 691.74' S= 0.0706 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	697.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**54.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=2.79 cfs @ 11.97 hrs HW=697.73' (Free Discharge)
- **1=Culvert** (Passes 2.79 cfs of 14.68 cfs potential flow)
  - **2=Orifice/Grate** (Weir Controls 2.79 cfs @ 1.56 fps)
- **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 9P: FocalPoint 9

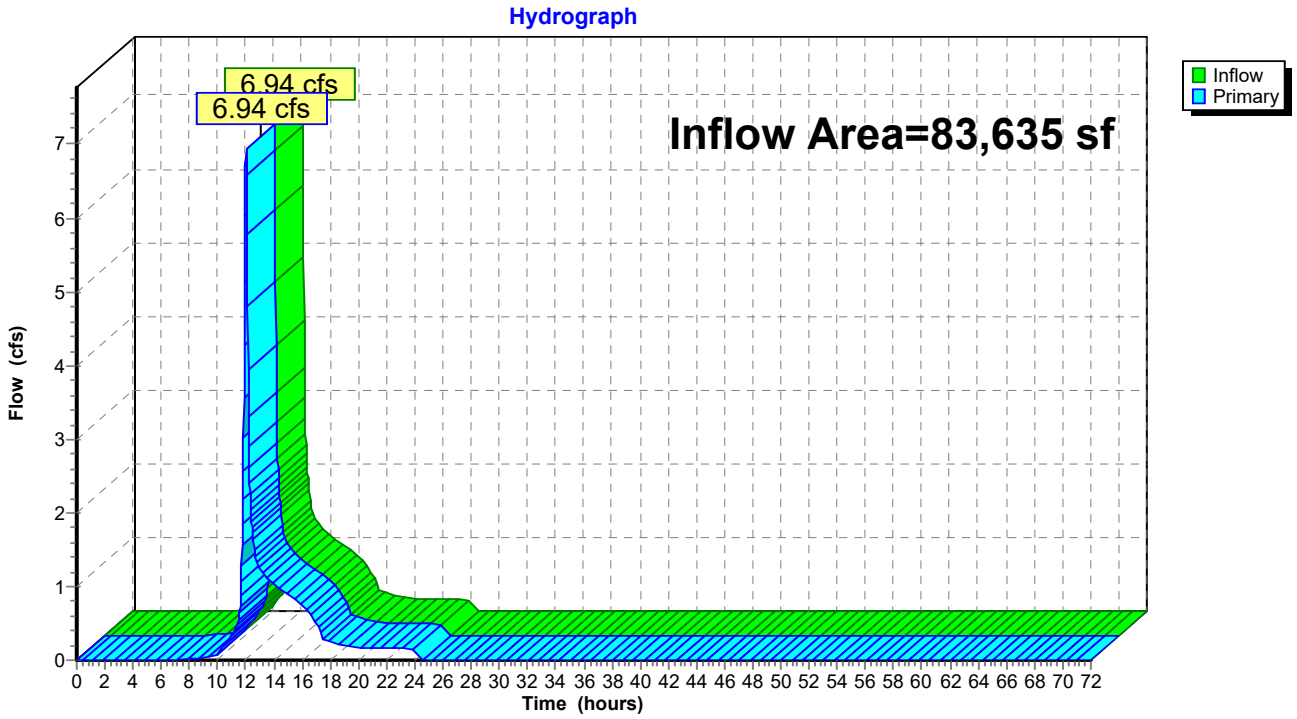


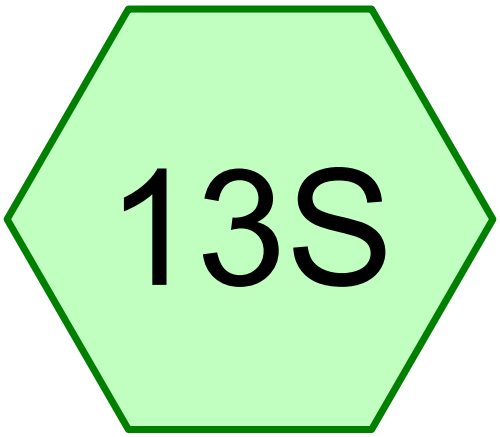
Summary for Link 2L: Outfall #1

Inflow Area = 83,635 sf, 51.04% Impervious, Inflow Depth = 4.69" for 100-year event
Inflow = 6.94 cfs @ 12.03 hrs, Volume= 32,671 cf
Primary = 6.94 cfs @ 12.03 hrs, Volume= 32,671 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs

Link 2L: Outfall #1





Outfall #2

Subcat Reach Pond Link

Routing Diagram for Stormwater Calculations - Proposed - Outfall 2
Prepared by Fulmer Lucas, Printed 4/20/2026
HydroCAD® 10.20-8a s/n 11448 © 2025 HydroCAD Software Solutions LLC

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-year	Type II 24-hr		Default	24.00	1	3.24	2
2	2-year	Type II 24-hr		Default	24.00	1	3.87	2
3	5-year	Type II 24-hr		Default	24.00	1	4.71	2
4	10-year	Type II 24-hr		Default	24.00	1	5.38	2
5	25-year	Type II 24-hr		Default	24.00	1	6.30	2
6	50-year	Type II 24-hr		Default	24.00	1	7.02	2
7	100-year	Type II 24-hr		Default	24.00	1	7.77	2

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
20,473	49	50-75% Grass cover, Fair, HSG A (13S)
24,394	36	Woods, Fair, HSG A (13S)
44,867	**42**	**TOTAL AREA**

Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
44,867	HSG A	13S
0	HSG B	
0	HSG C	
0	HSG D	
0	Other	
44,867		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover	Su Nu
20,473	0	0	0	0	20,473	50-75% Grass cover, Fair	
24,394	0	0	0	0	24,394	Woods, Fair	
44,867	**0**	**0**	**0**	**0**	**44,867**	**TOTAL AREA**	

Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment13S: Outfall #2 Runoff Area=1.030 ac 0.00% Impervious Runoff Depth=0.02"
Flow Length=416' Tc=8.7 min CN=42 Runoff=0.00 cfs 60 cf

Total Runoff Area = 44,867 sf Runoff Volume = 60 cf Average Runoff Depth = 0.02"
100.00% Pervious = 44,867 sf 0.00% Impervious = 0 sf

Summary for Subcatchment 13S: Outfall #2

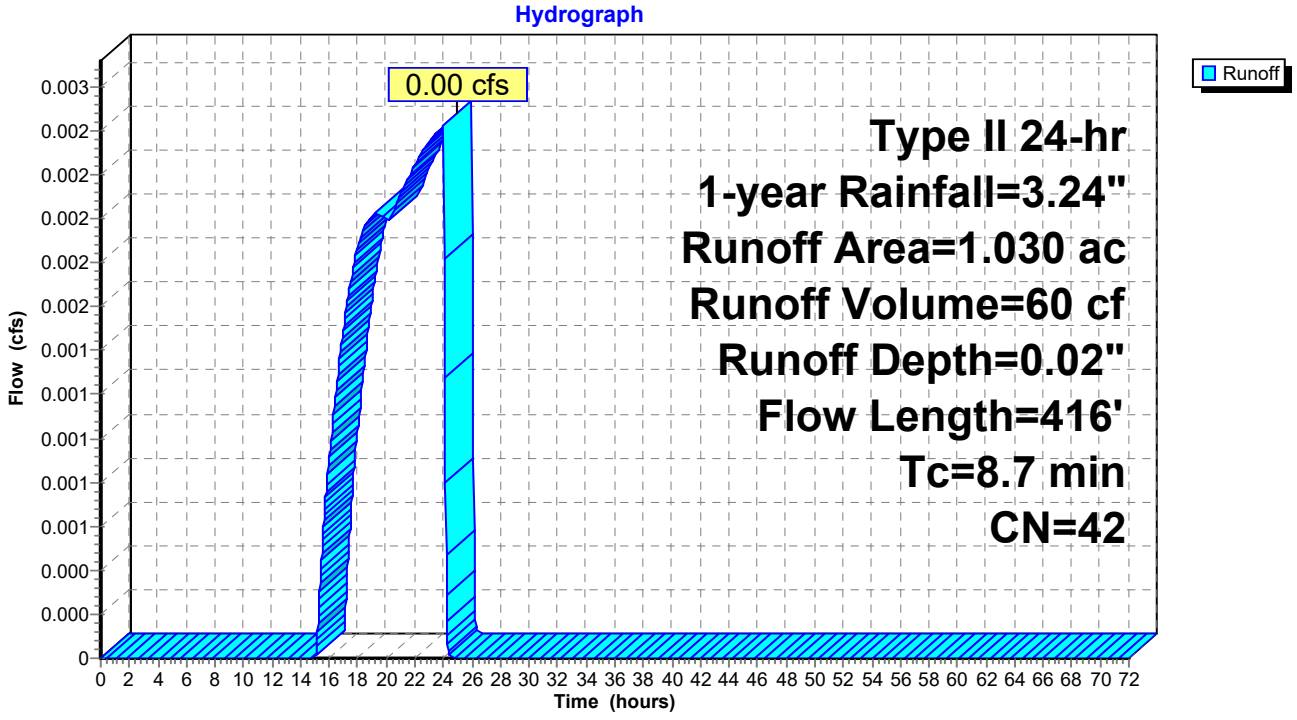
Runoff = 0.00 cfs @ 24.00 hrs, Volume= 60 cf, Depth= 0.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 1-year Rainfall=3.24"

Area (ac)	CN	Description
0.470	49	50-75% Grass cover, Fair, HSG A
0.560	36	Woods, Fair, HSG A
1.030	42	Weighted Average
1.030		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.6	100	0.0500	0.25		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
2.1	316	0.0250	2.55		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
8.7	416	Total			

Subcatchment 13S: Outfall #2



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment13S: Outfall #2 Runoff Area=1.030 ac 0.00% Impervious Runoff Depth=0.08"
Flow Length=416' Tc=8.7 min CN=42 Runoff=0.01 cfs 308 cf

Total Runoff Area = 44,867 sf Runoff Volume = 308 cf Average Runoff Depth = 0.08"
100.00% Pervious = 44,867 sf 0.00% Impervious = 0 sf

Summary for Subcatchment 13S: Outfall #2

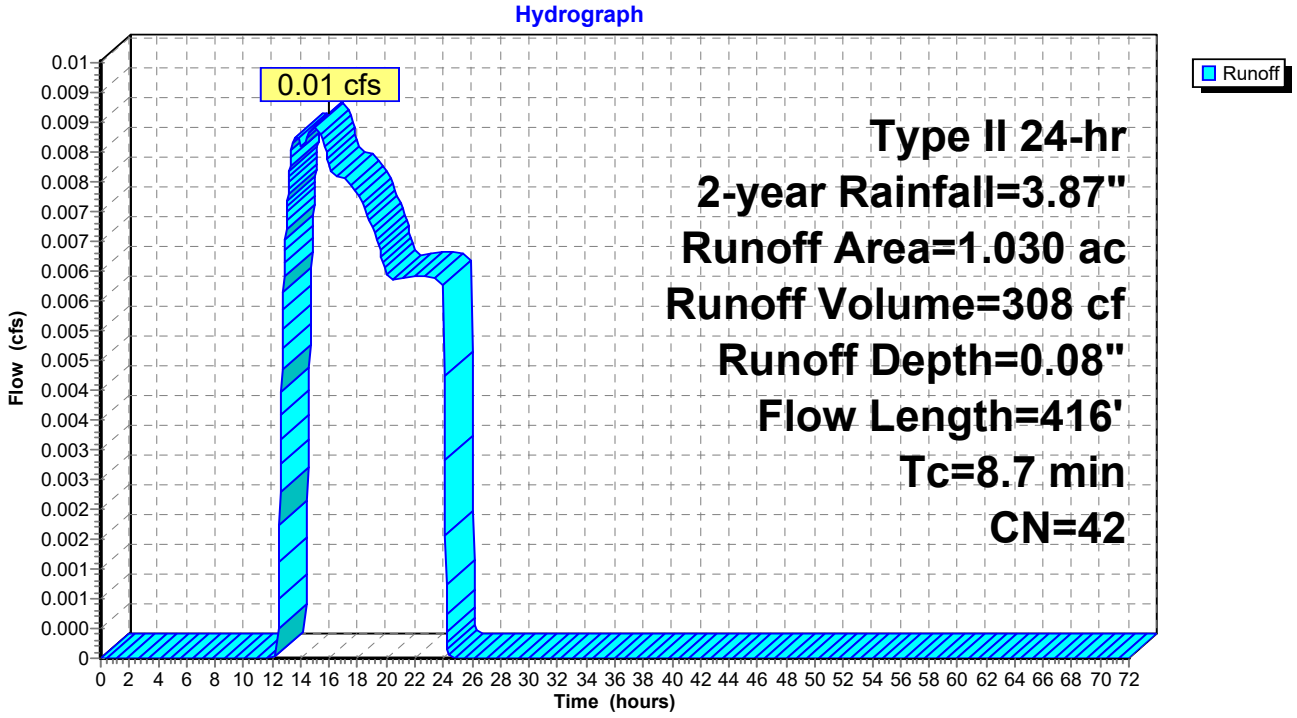
Runoff = 0.01 cfs @ 14.92 hrs, Volume= 308 cf, Depth= 0.08"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 2-year Rainfall=3.87"

Area (ac)	CN	Description
0.470	49	50-75% Grass cover, Fair, HSG A
0.560	36	Woods, Fair, HSG A
1.030	42	Weighted Average
1.030		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.6	100	0.0500	0.25		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
2.1	316	0.0250	2.55		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
8.7	416	Total			

Subcatchment 13S: Outfall #2



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment13S: Outfall #2 Runoff Area=1.030 ac 0.00% Impervious Runoff Depth=0.24"
Flow Length=416' Tc=8.7 min CN=42 Runoff=0.07 cfs 900 cf

Total Runoff Area = 44,867 sf Runoff Volume = 900 cf Average Runoff Depth = 0.24"
100.00% Pervious = 44,867 sf 0.00% Impervious = 0 sf

Summary for Subcatchment 13S: Outfall #2

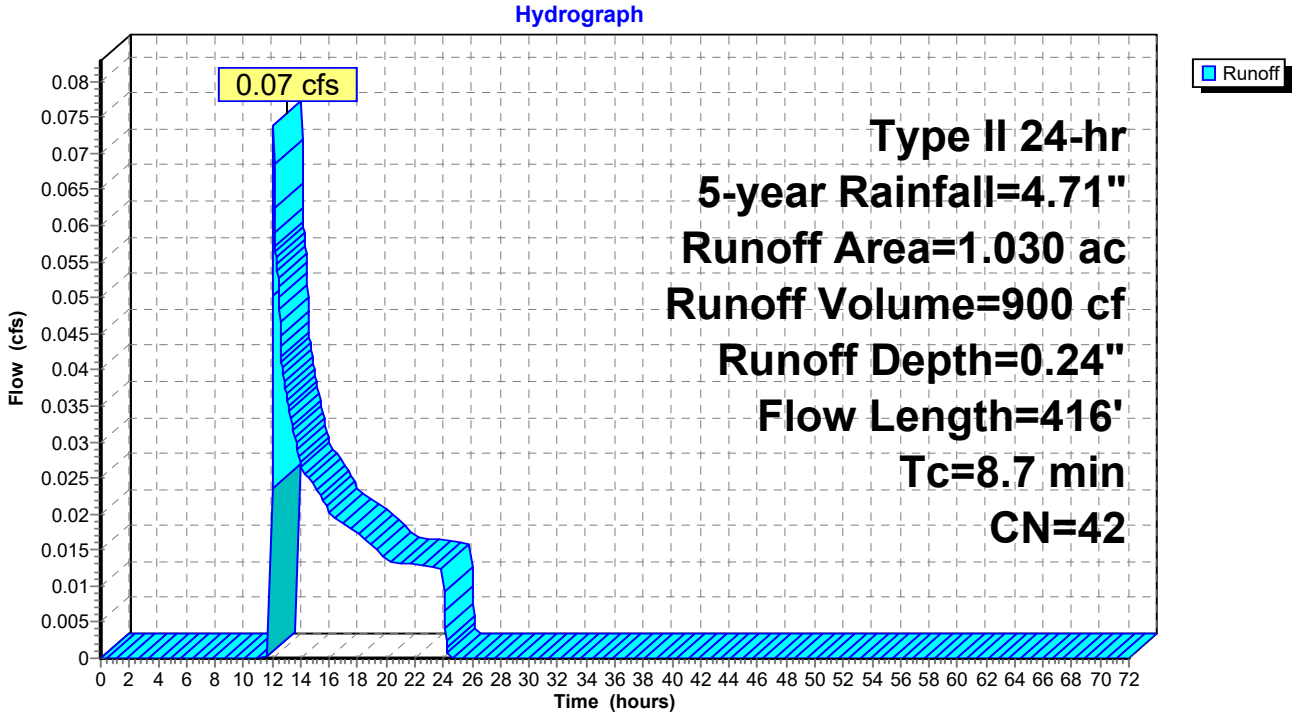
Runoff = 0.07 cfs @ 12.09 hrs, Volume= 900 cf, Depth= 0.24"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 5-year Rainfall=4.71"

Area (ac)	CN	Description
0.470	49	50-75% Grass cover, Fair, HSG A
0.560	36	Woods, Fair, HSG A
1.030	42	Weighted Average
1.030		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.6	100	0.0500	0.25		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
2.1	316	0.0250	2.55		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
8.7	416	Total			

Subcatchment 13S: Outfall #2



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment13S: Outfall #2 Runoff Area=1.030 ac 0.00% Impervious Runoff Depth=0.42"
Flow Length=416' Tc=8.7 min CN=42 Runoff=0.30 cfs 1,560 cf

Total Runoff Area = 44,867 sf Runoff Volume = 1,560 cf Average Runoff Depth = 0.42"
100.00% Pervious = 44,867 sf 0.00% Impervious = 0 sf

Summary for Subcatchment 13S: Outfall #2

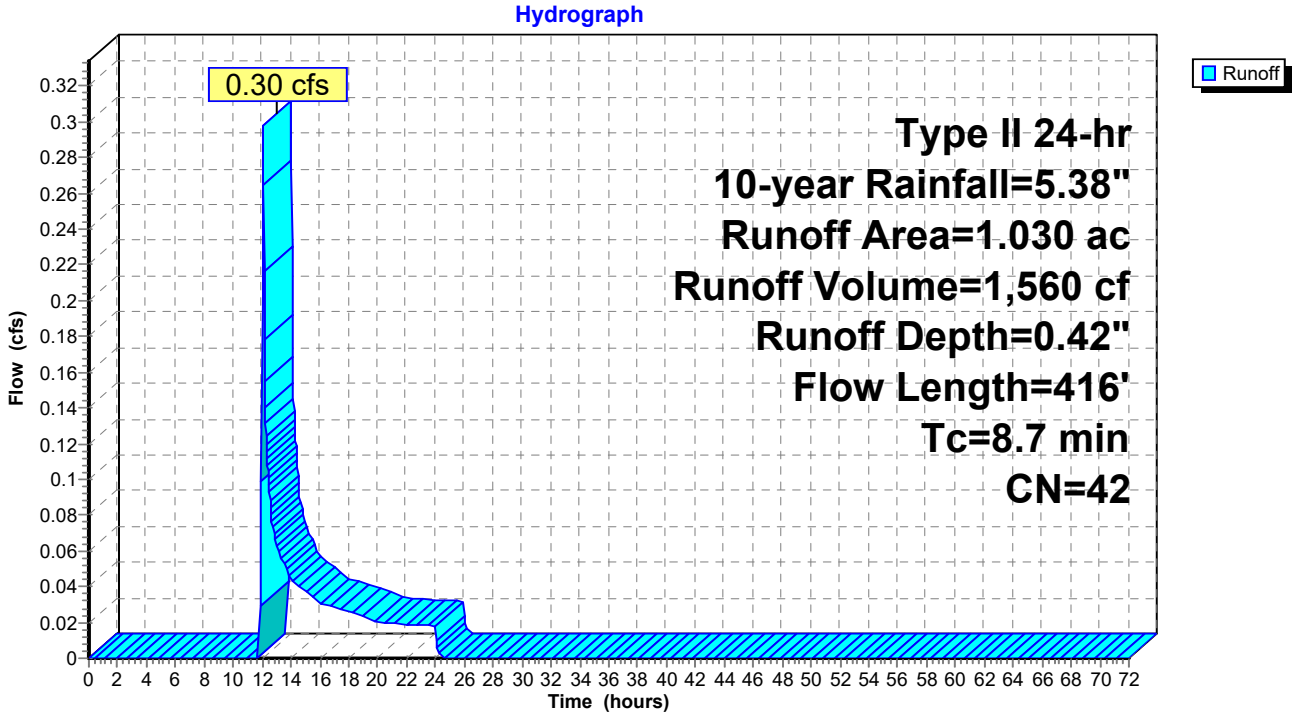
Runoff = 0.30 cfs @ 12.06 hrs, Volume= 1,560 cf, Depth= 0.42"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 10-year Rainfall=5.38"

Area (ac)	CN	Description
0.470	49	50-75% Grass cover, Fair, HSG A
0.560	36	Woods, Fair, HSG A
1.030	42	Weighted Average
1.030		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.6	100	0.0500	0.25		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
2.1	316	0.0250	2.55		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
8.7	416	Total			

Subcatchment 13S: Outfall #2



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment13S: Outfall #2 Runoff Area=1.030 ac 0.00% Impervious Runoff Depth=0.72"
Flow Length=416' Tc=8.7 min CN=42 Runoff=0.79 cfs 2,698 cf

Total Runoff Area = 44,867 sf Runoff Volume = 2,698 cf Average Runoff Depth = 0.72"
100.00% Pervious = 44,867 sf 0.00% Impervious = 0 sf

Summary for Subcatchment 13S: Outfall #2

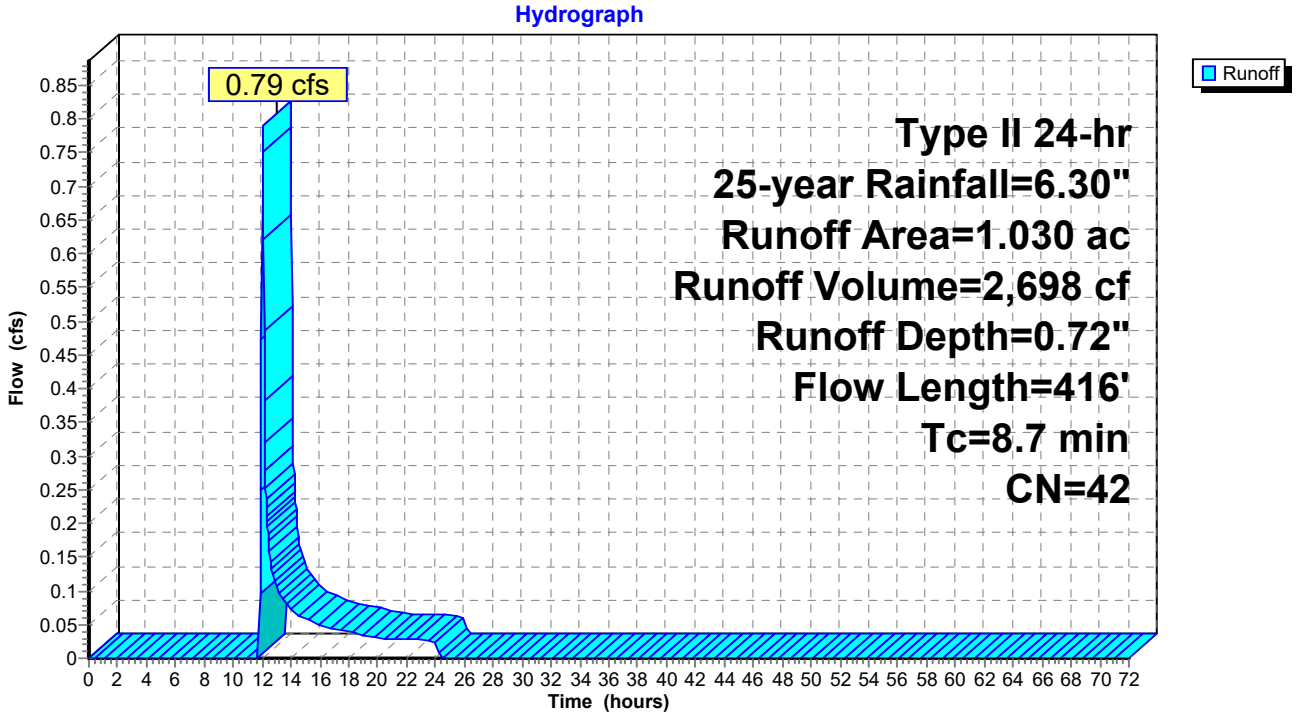
Runoff = 0.79 cfs @ 12.04 hrs, Volume= 2,698 cf, Depth= 0.72"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 25-year Rainfall=6.30"

Area (ac)	CN	Description
0.470	49	50-75% Grass cover, Fair, HSG A
0.560	36	Woods, Fair, HSG A
1.030	42	Weighted Average
1.030		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.6	100	0.0500	0.25		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
2.1	316	0.0250	2.55		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
8.7	416	Total			

Subcatchment 13S: Outfall #2



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment13S: Outfall #2 Runoff Area=1.030 ac 0.00% Impervious Runoff Depth=1.00"
Flow Length=416' Tc=8.7 min CN=42 Runoff=1.28 cfs 3,752 cf

Total Runoff Area = 44,867 sf Runoff Volume = 3,752 cf Average Runoff Depth = 1.00"
100.00% Pervious = 44,867 sf 0.00% Impervious = 0 sf

Summary for Subcatchment 13S: Outfall #2

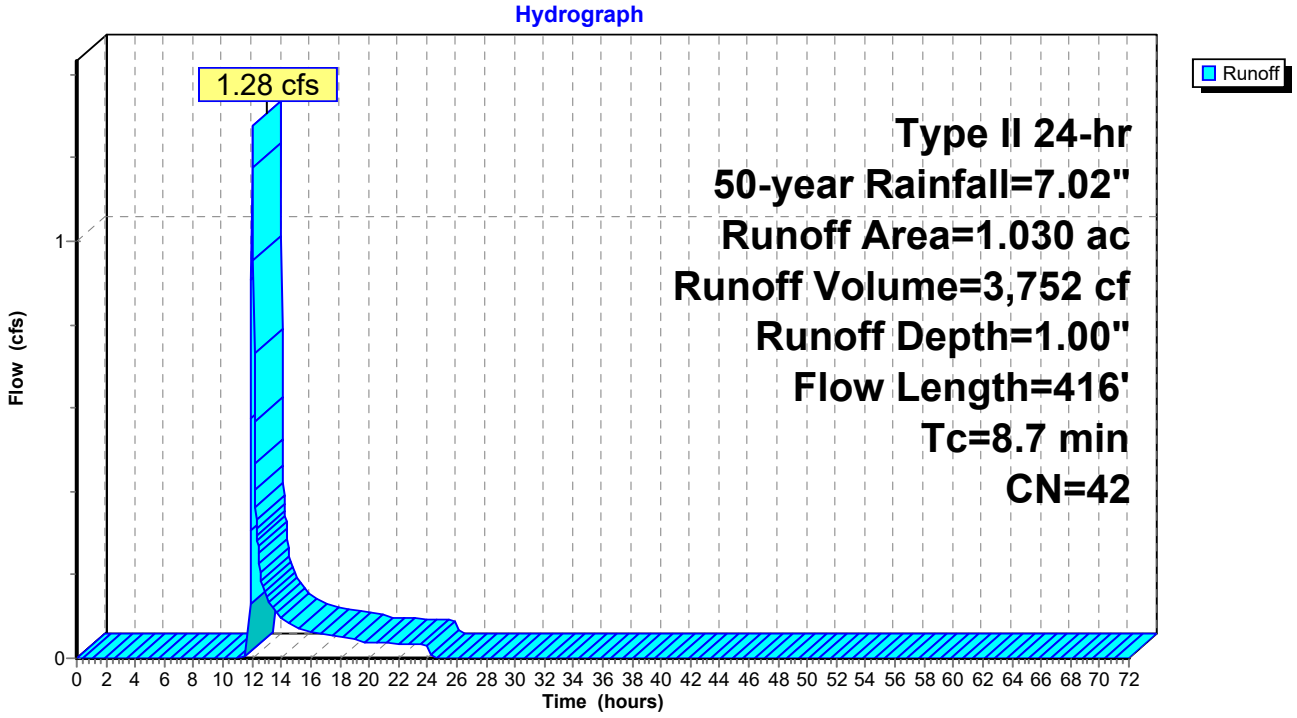
Runoff = 1.28 cfs @ 12.03 hrs, Volume= 3,752 cf, Depth= 1.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 50-year Rainfall=7.02"

Area (ac)	CN	Description
0.470	49	50-75% Grass cover, Fair, HSG A
0.560	36	Woods, Fair, HSG A
1.030	42	Weighted Average
1.030		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.6	100	0.0500	0.25		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
2.1	316	0.0250	2.55		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
8.7	416	Total			

Subcatchment 13S: Outfall #2



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment13S: Outfall #2 Runoff Area=1.030 ac 0.00% Impervious Runoff Depth=1.33"
Flow Length=416' Tc=8.7 min CN=42 Runoff=1.86 cfs 4,983 cf

Total Runoff Area = 44,867 sf Runoff Volume = 4,983 cf Average Runoff Depth = 1.33"
100.00% Pervious = 44,867 sf 0.00% Impervious = 0 sf

Summary for Subcatchment 13S: Outfall #2

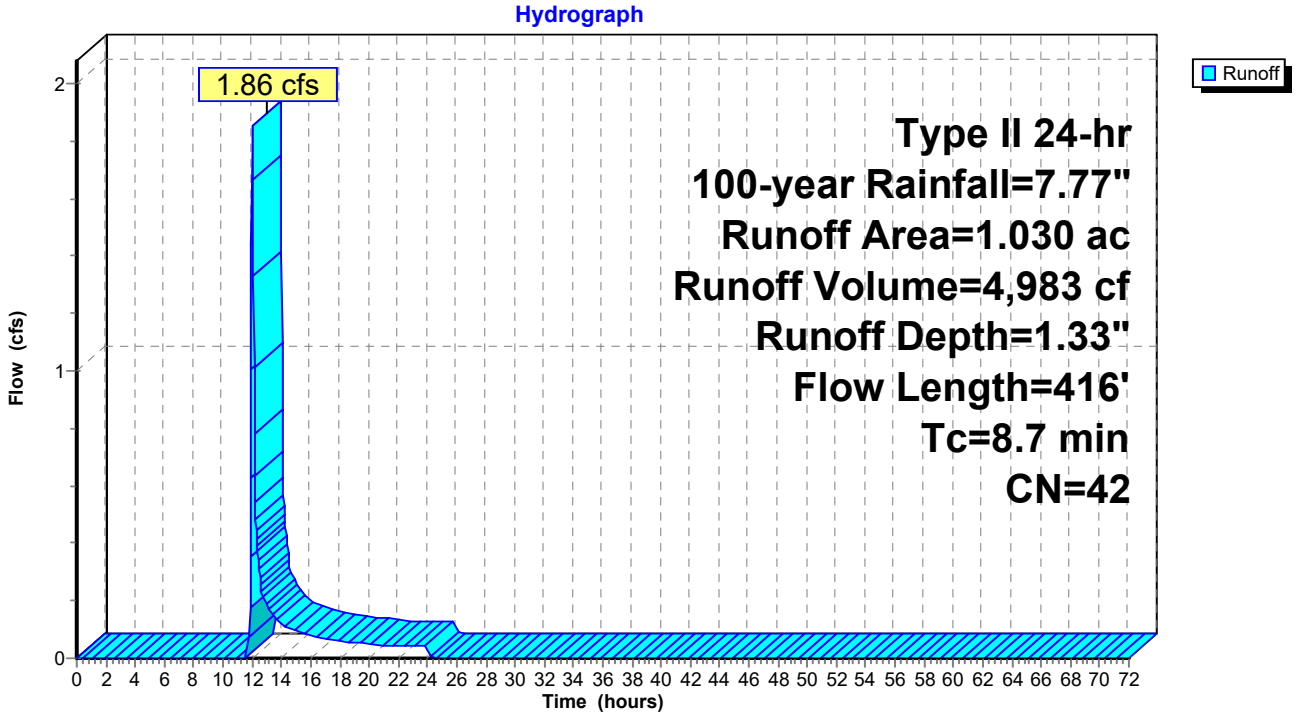
Runoff = 1.86 cfs @ 12.02 hrs, Volume= 4,983 cf, Depth= 1.33"

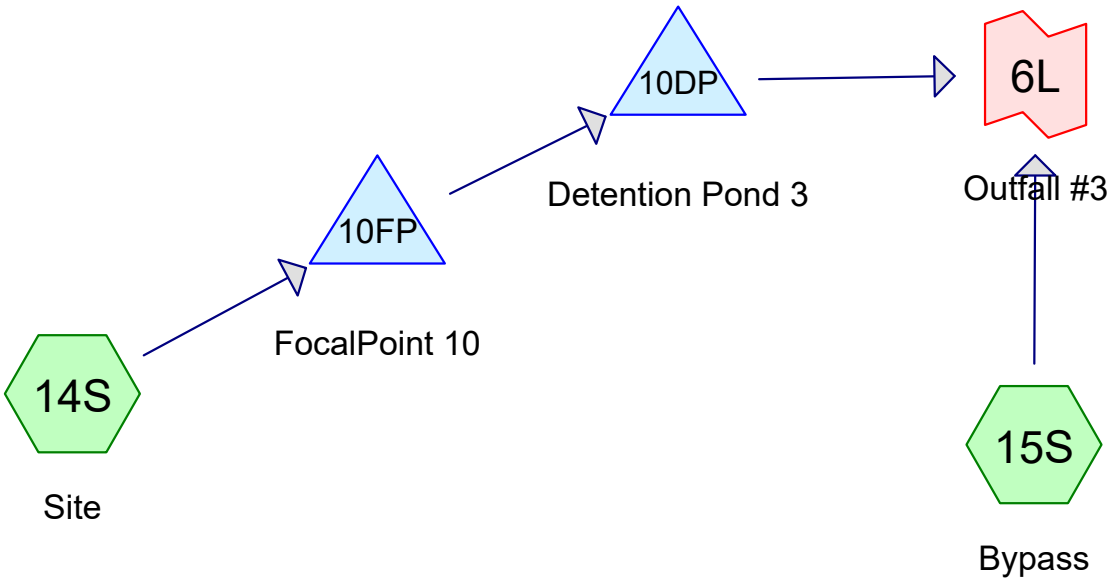
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 100-year Rainfall=7.77"

Area (ac)	CN	Description
0.470	49	50-75% Grass cover, Fair, HSG A
0.560	36	Woods, Fair, HSG A
1.030	42	Weighted Average
1.030		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.6	100	0.0500	0.25		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
2.1	316	0.0250	2.55		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
8.7	416	Total			

Subcatchment 13S: Outfall #2





Subcat Reach Pond Link

Routing Diagram for Stormwater Calculations - Proposed - Outfall 3
Prepared by Fulmer Lucas, Printed 4/20/2026
HydroCAD® 10.20-8a s/n 11448 © 2025 HydroCAD Software Solutions LLC

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-year	Type II 24-hr		Default	24.00	1	3.24	2
2	2-year	Type II 24-hr		Default	24.00	1	3.87	2
3	5-year	Type II 24-hr		Default	24.00	1	4.71	2
4	10-year	Type II 24-hr		Default	24.00	1	5.38	2
5	25-year	Type II 24-hr		Default	24.00	1	6.30	2
6	50-year	Type II 24-hr		Default	24.00	1	7.02	2
7	100-year	Type II 24-hr		Default	24.00	1	7.77	2

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
114,127	49	50-75% Grass cover, Fair, HSG A (14S, 15S)
3,049	69	50-75% Grass cover, Fair, HSG B (14S)
93,218	98	Paved parking, HSG A (14S, 15S)
9,583	36	Woods, Fair, HSG A (14S, 15S)
219,978	**69**	**TOTAL AREA**

Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
216,929	HSG A	14S, 15S
3,049	HSG B	14S
0	HSG C	
0	HSG D	
0	Other	
219,978		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover	Su Nu
114,127	3,049	0	0	0	117,176	50-75% Grass cover, Fair	
93,218	0	0	0	0	93,218	Paved parking	
9,583	0	0	0	0	9,583	Woods, Fair	
216,929	**3,049**	**0**	**0**	**0**	**219,978**	**TOTAL AREA**	

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
1	14S	0.00	0.00	78.0	0.0050	0.013	0.0	18.0	0.0	
2	10DP	695.33	695.00	64.0	0.0052	0.013	0.0	18.0	0.0	
3	10FP	696.00	695.88	23.0	0.0052	0.013	0.0	18.0	0.0	

Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment14S: Site Runoff Area=2.220 ac 64.41% Impervious Runoff Depth=1.50"
Flow Length=960' Tc=11.8 min CN=81 Runoff=4.79 cfs 12,092 cf

Subcatchment15S: Bypass Runoff Area=2.830 ac 25.09% Impervious Runoff Depth=0.46"
Flow Length=599' Tc=11.2 min CN=61 Runoff=1.41 cfs 4,730 cf

Pond 10DP: Detention Pond 3 Peak Elev=698.28' Storage=4,215 cf Inflow=4.74 cfs 11,407 cf
Outflow=0.70 cfs 11,407 cf

Pond 10FP: FocalPoint 10 Peak Elev=699.82' Storage=1,037 cf Inflow=4.79 cfs 12,092 cf
Outflow=4.74 cfs 11,407 cf

Link 6L: Outfall #3 Inflow=2.03 cfs 16,137 cf
Primary=2.03 cfs 16,137 cf

Total Runoff Area = 219,978 sf Runoff Volume = 16,822 cf Average Runoff Depth = 0.92"
57.62% Pervious = 126,760 sf 42.38% Impervious = 93,218 sf

Summary for Subcatchment 14S: Site

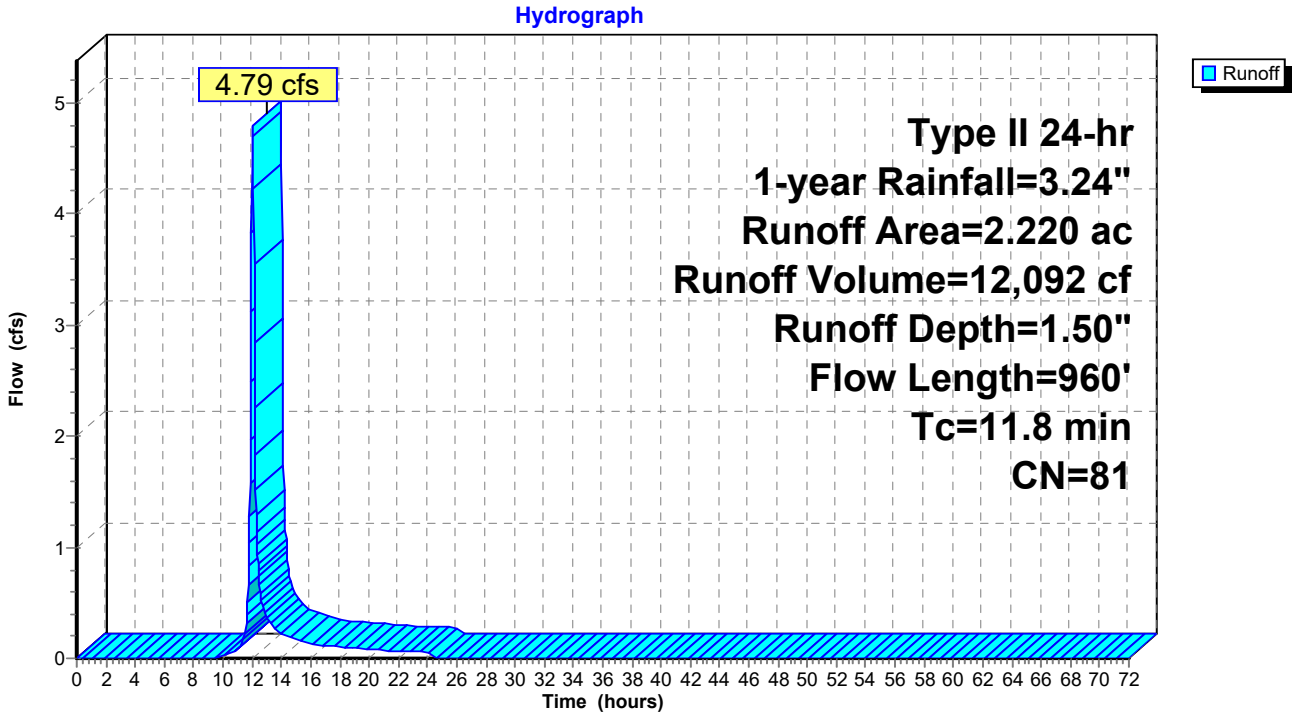
Runoff = 4.79 cfs @ 12.04 hrs, Volume= 12,092 cf, Depth= 1.50"
Routed to Pond 10FP : FocalPoint 10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 1-year Rainfall=3.24"

Area (ac)	CN	Description
0.610	49	50-75% Grass cover, Fair, HSG A
0.070	69	50-75% Grass cover, Fair, HSG B
0.110	36	Woods, Fair, HSG A
1.430	98	Paved parking, HSG A
2.220	81	Weighted Average
0.790		35.59% Pervious Area
1.430		64.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	69	0.0140	0.14		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
0.1	28	0.2860	8.61		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
1.2	165	0.0220	2.39		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.3	78	0.0050	4.20	7.43	**Pipe Channel,** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013
2.0	620	0.0160	5.21	15.63	**Channel Flow,** Area= 3.0 sf Perim= 6.3' r= 0.48' n= 0.022 Earth, clean & straight
11.8	960	Total			

Subcatchment 14S: Site



Summary for Subcatchment 15S: Bypass

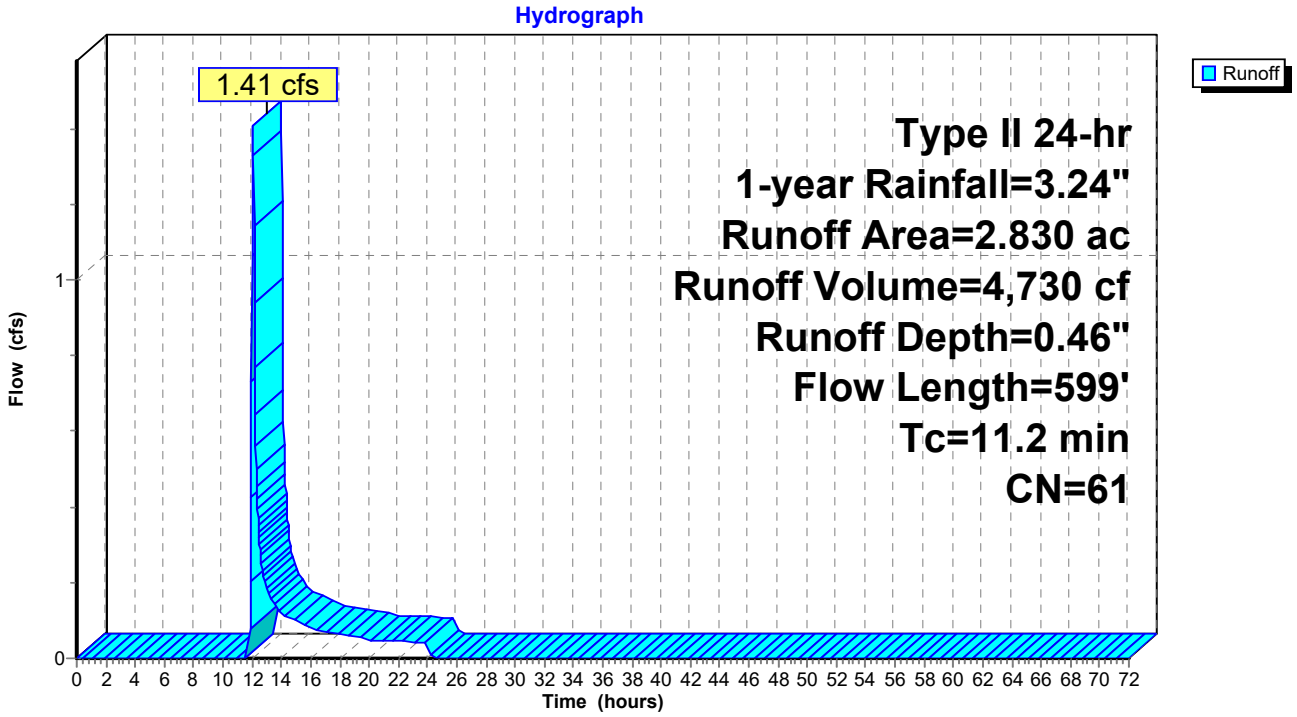
Runoff = 1.41 cfs @ 12.06 hrs, Volume= 4,730 cf, Depth= 0.46"
Routed to Link 6L : Outfall #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 1-year Rainfall=3.24"

Area (ac)	CN	Description
2.010	49	50-75% Grass cover, Fair, HSG A
0.110	36	Woods, Fair, HSG A
0.710	98	Paved parking, HSG A
2.830	61	Weighted Average
2.120		74.91% Pervious Area
0.710		25.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.7	69	0.0120	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
2.2	434	0.0420	3.30		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.0	16	0.1562	6.36		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.3	80	0.0160	4.66	11.66	**Channel Flow,** Area= 2.5 sf Perim= 6.2' r= 0.40' n= 0.022 Earth, clean & straight
11.2	599	Total			

Subcatchment 15S: Bypass



Summary for Pond 10DP: Detention Pond 3

[44] Hint: Outlet device #2 is below defined storage
[79] Warning: Submerged Pond 10FP Primary device # 1 INLET by 2.28'

Inflow Area = 96,703 sf, 64.41% Impervious, Inflow Depth = 1.42" for 1-year event
Inflow = 4.74 cfs @ 12.05 hrs, Volume= 11,407 cf
Outflow = 0.70 cfs @ 12.50 hrs, Volume= 11,407 cf, Atten= 85%, Lag= 26.7 min
Primary = 0.70 cfs @ 12.50 hrs, Volume= 11,407 cf
Routed to Link 6L : Outfall #3

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 698.28' @ 12.50 hrs Surf.Area= 3,679 sf Storage= 4,215 cf

Plug-Flow detention time= 49.4 min calculated for 11,407 cf (100% of inflow)
Center-of-Mass det. time= 49.4 min (903.1 - 853.7)

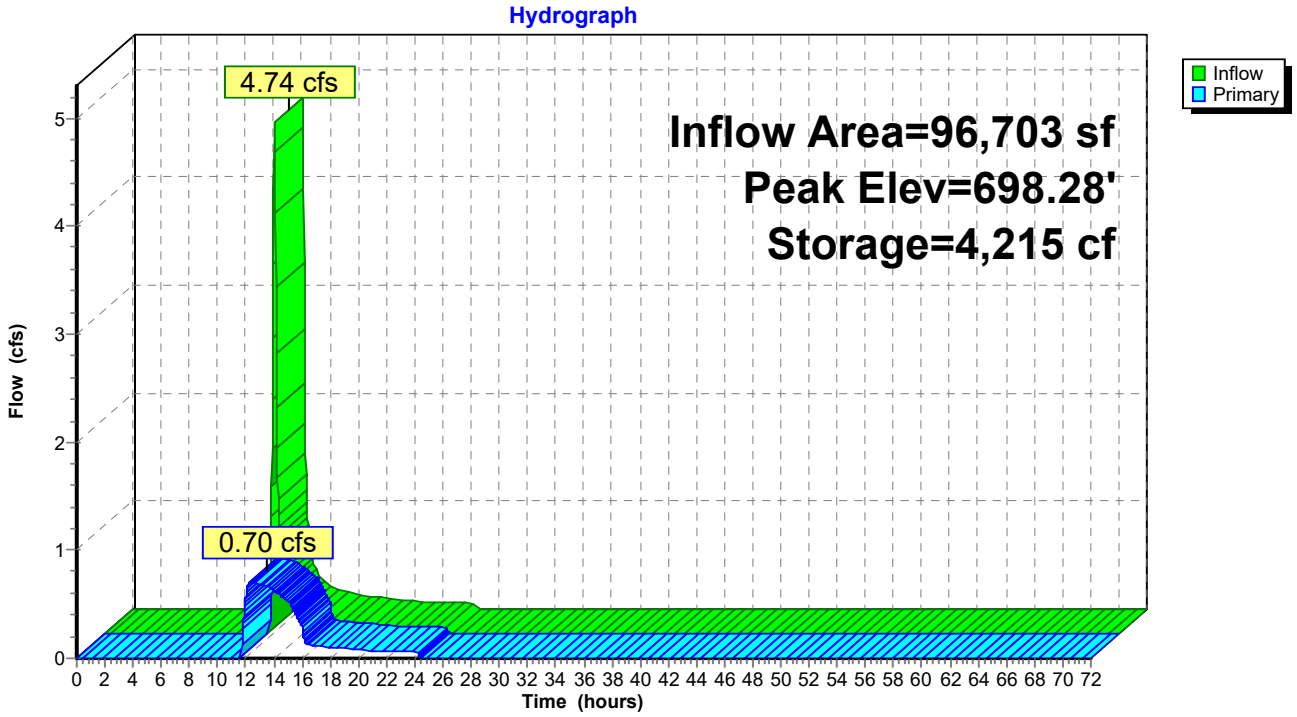
Volume	Invert	Avail.Storage	Storage Description
#1	695.44'	22,040 cf	**Custom Stage Data (Prismatic)** Listed below

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.44	0	0	0
696.00	292	82	82
697.00	1,309	801	882
698.00	2,953	2,131	3,013
699.00	5,510	4,232	7,245
700.00	6,790	6,150	13,395
701.00	10,501	8,646	22,040

Device	Routing	Invert	Outlet Devices
#1	Primary	695.33'	**18.0" Round Culvert** L= 64.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 695.33' / 695.00' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	695.33'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	700.00'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Primary	700.50'	**6.0' long x 9.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.46 2.55 2.70 2.69 2.68 2.68 2.67 2.64 2.64 2.64 2.65 2.64 2.65 2.65 2.66 2.67 2.69

Primary OutFlow Max=0.70 cfs @ 12.50 hrs HW=698.28' TW=565.00' (Fixed TW Elev= 565.00')
- **1=Culvert** (Passes 0.70 cfs of 11.59 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.70 cfs @ 8.04 fps)
  - **3=Orifice/Grate** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 10DP: Detention Pond 3



Summary for Pond 10FP: FocalPoint 10

[92] Warning: Device #3 is above defined storage

Inflow Area = 96,703 sf, 64.41% Impervious, Inflow Depth = 1.50" for 1-year event
Inflow = 4.79 cfs @ 12.04 hrs, Volume= 12,092 cf
Outflow = 4.74 cfs @ 12.05 hrs, Volume= 11,407 cf, Atten= 1%, Lag= 1.0 min
Primary = 4.74 cfs @ 12.05 hrs, Volume= 11,407 cf
Routed to Pond 10DP : Detention Pond 3

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 699.82' @ 12.05 hrs Surf.Area= 1,224 sf Storage= 1,037 cf

Plug-Flow detention time= 44.0 min calculated for 11,407 cf (94% of inflow)
Center-of-Mass det. time= 12.6 min (853.7 - 841.0)

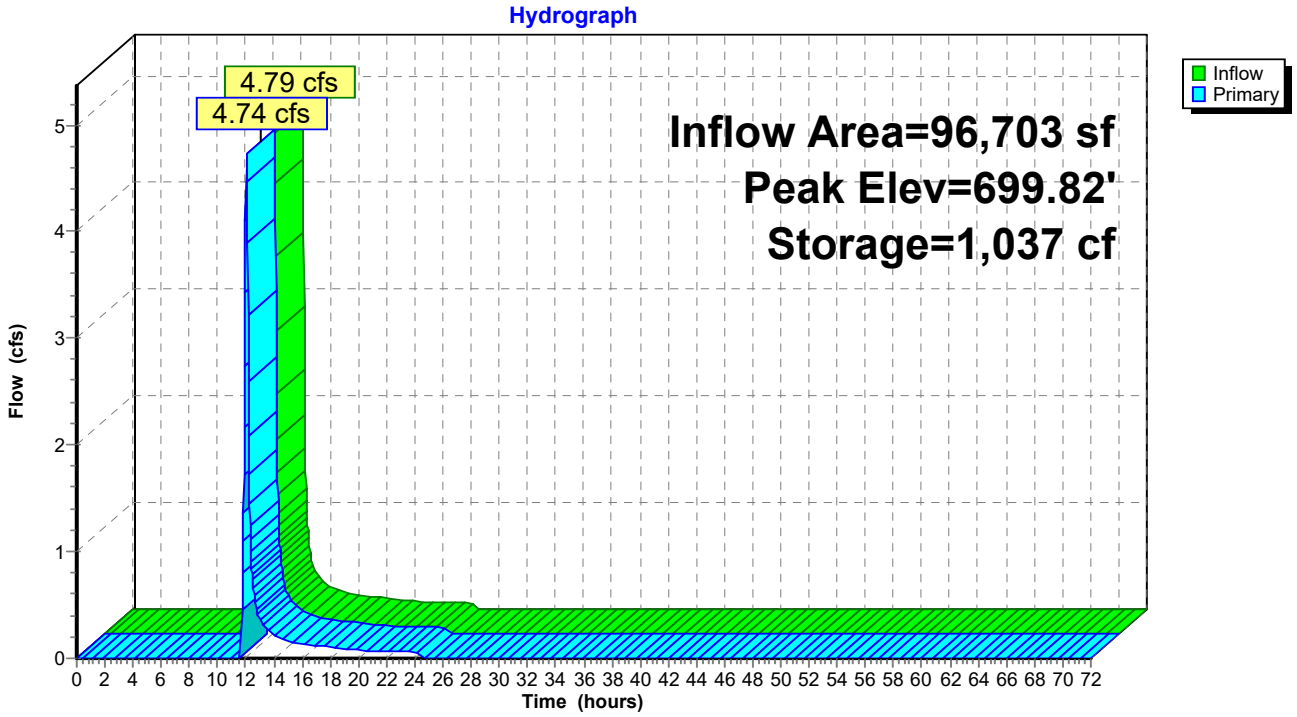
Volume	Invert	Avail.Storage	Storage Description
#1	696.00'	1,266 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
696.00	527	0.0	0	0
699.00	527	20.0	316	316
700.00	1,373	100.0	950	1,266

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 23.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 695.88' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**103.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=4.70 cfs @ 12.05 hrs HW=699.82' (Free Discharge)
└**1=Culvert** (Passes 4.70 cfs of 14.91 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 4.70 cfs @ 1.86 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 10FP: FocalPoint 10

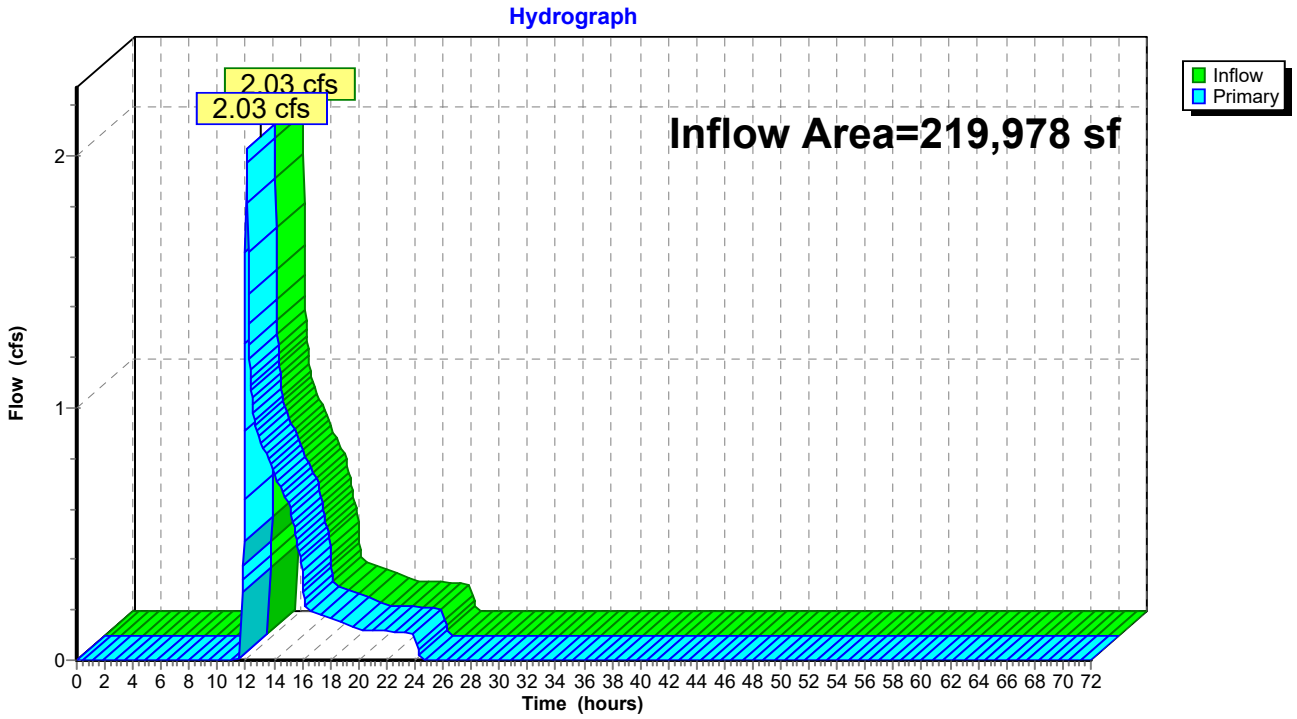


Summary for Link 6L: Outfall #3

Inflow Area = 219,978 sf, 42.38% Impervious, Inflow Depth = 0.88" for 1-year event
Inflow = 2.03 cfs @ 12.07 hrs, Volume= 16,137 cf
Primary = 2.03 cfs @ 12.07 hrs, Volume= 16,137 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs

Link 6L: Outfall #3



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment14S: Site Runoff Area=2.220 ac 64.41% Impervious Runoff Depth=2.01"
Flow Length=960' Tc=11.8 min CN=81 Runoff=6.43 cfs 16,219 cf

Subcatchment15S: Bypass Runoff Area=2.830 ac 25.09% Impervious Runoff Depth=0.75"
Flow Length=599' Tc=11.2 min CN=61 Runoff=2.66 cfs 7,678 cf

Pond 10DP: Detention Pond 3 Peak Elev=698.78' Storage=6,313 cf Inflow=6.37 cfs 15,534 cf
Outflow=0.76 cfs 15,534 cf

Pond 10FP: FocalPoint 10 Peak Elev=699.89' Storage=1,126 cf Inflow=6.43 cfs 16,219 cf
Outflow=6.37 cfs 15,534 cf

Link 6L: Outfall #3 Inflow=3.34 cfs 23,211 cf
Primary=3.34 cfs 23,211 cf

Total Runoff Area = 219,978 sf Runoff Volume = 23,897 cf Average Runoff Depth = 1.30"
57.62% Pervious = 126,760 sf 42.38% Impervious = 93,218 sf

Summary for Subcatchment 14S: Site

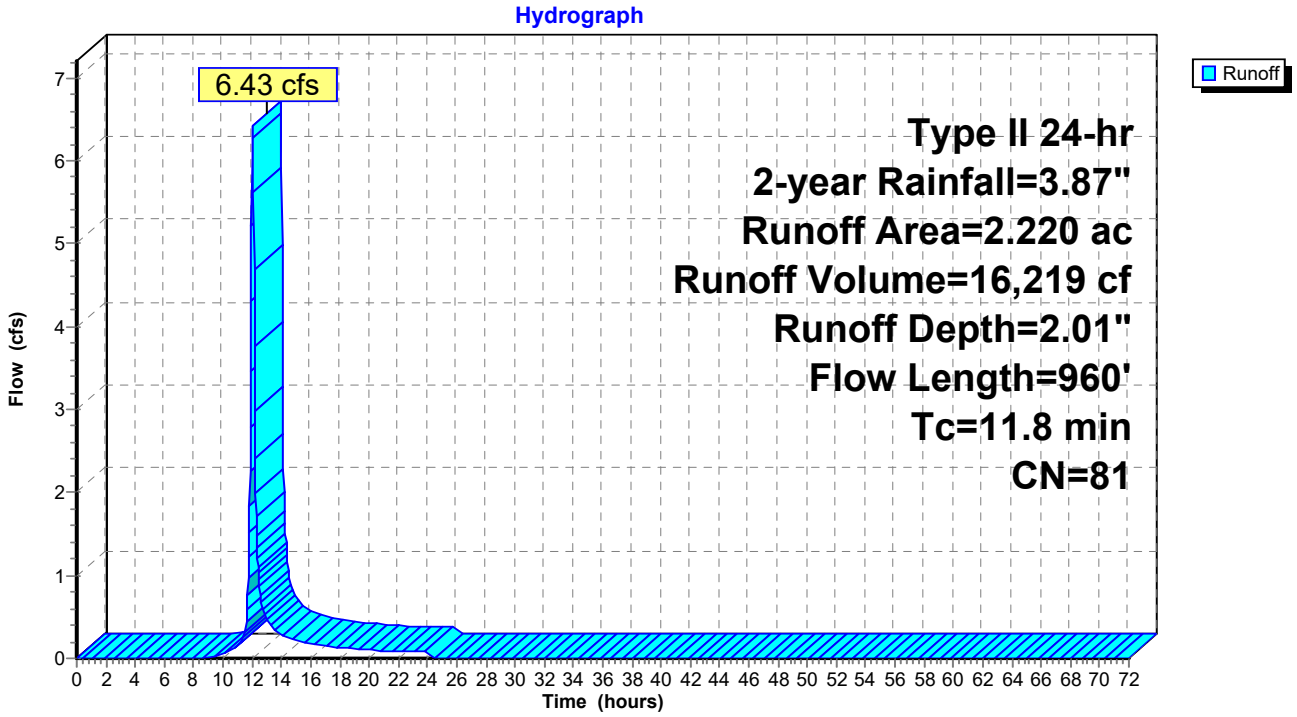
Runoff = 6.43 cfs @ 12.04 hrs, Volume= 16,219 cf, Depth= 2.01"
Routed to Pond 10FP : FocalPoint 10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 2-year Rainfall=3.87"

Area (ac)	CN	Description
0.610	49	50-75% Grass cover, Fair, HSG A
0.070	69	50-75% Grass cover, Fair, HSG B
0.110	36	Woods, Fair, HSG A
1.430	98	Paved parking, HSG A
2.220	81	Weighted Average
0.790		35.59% Pervious Area
1.430		64.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	69	0.0140	0.14		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
0.1	28	0.2860	8.61		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
1.2	165	0.0220	2.39		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.3	78	0.0050	4.20	7.43	**Pipe Channel,** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013
2.0	620	0.0160	5.21	15.63	**Channel Flow,** Area= 3.0 sf Perim= 6.3' r= 0.48' n= 0.022 Earth, clean & straight
11.8	960	Total			

Subcatchment 14S: Site



Summary for Subcatchment 15S: Bypass

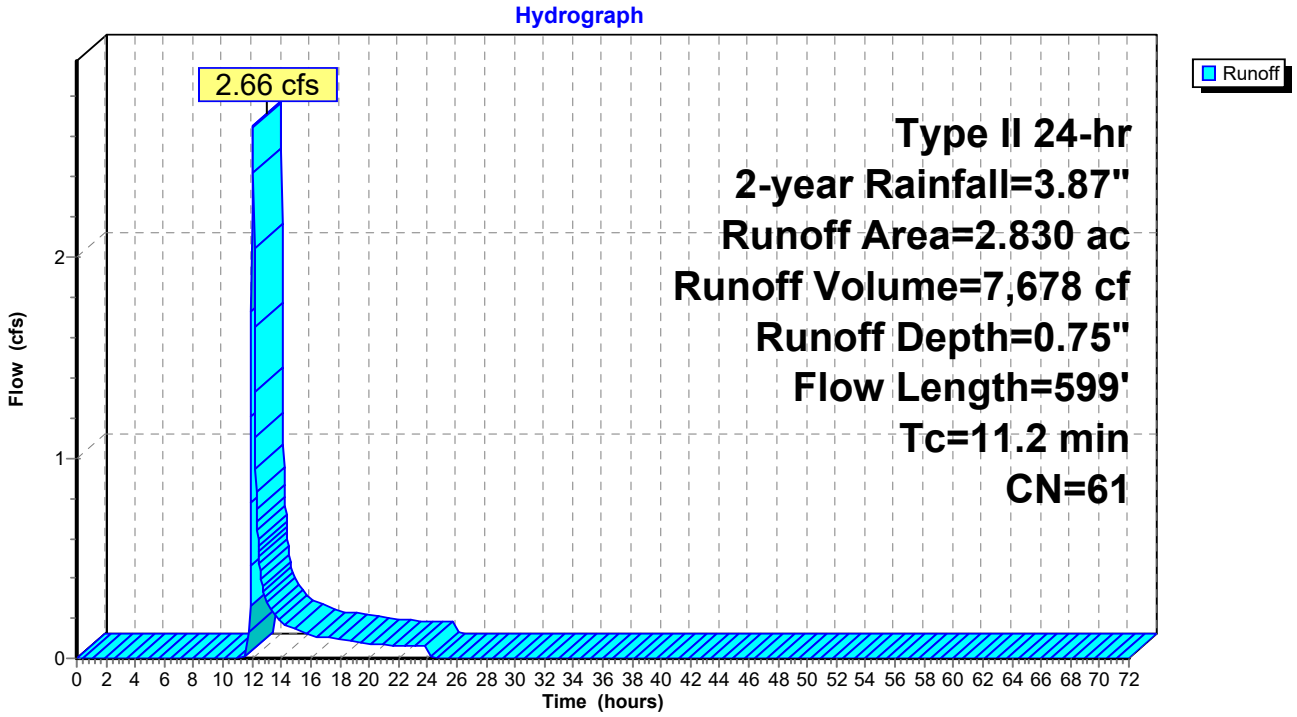
Runoff = 2.66 cfs @ 12.05 hrs, Volume= 7,678 cf, Depth= 0.75"
Routed to Link 6L : Outfall #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 2-year Rainfall=3.87"

Area (ac)	CN	Description
2.010	49	50-75% Grass cover, Fair, HSG A
0.110	36	Woods, Fair, HSG A
0.710	98	Paved parking, HSG A
2.830	61	Weighted Average
2.120		74.91% Pervious Area
0.710		25.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.7	69	0.0120	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
2.2	434	0.0420	3.30		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.0	16	0.1562	6.36		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.3	80	0.0160	4.66	11.66	**Channel Flow,** Area= 2.5 sf Perim= 6.2' r= 0.40' n= 0.022 Earth, clean & straight
11.2	599	Total			

Subcatchment 15S: Bypass



Summary for Pond 10DP: Detention Pond 3

[44] Hint: Outlet device #2 is below defined storage
[79] Warning: Submerged Pond 10FP Primary device # 1 INLET by 2.78'

Inflow Area = 96,703 sf, 64.41% Impervious, Inflow Depth = 1.93" for 2-year event
Inflow = 6.37 cfs @ 12.05 hrs, Volume= 15,534 cf
Outflow = 0.76 cfs @ 12.58 hrs, Volume= 15,534 cf, Atten= 88%, Lag= 31.7 min
Primary = 0.76 cfs @ 12.58 hrs, Volume= 15,534 cf
Routed to Link 6L : Outfall #3

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 698.78' @ 12.58 hrs Surf.Area= 4,947 sf Storage= 6,313 cf

Plug-Flow detention time= 72.0 min calculated for 15,534 cf (100% of inflow)
Center-of-Mass det. time= 72.0 min (915.6 - 843.6)

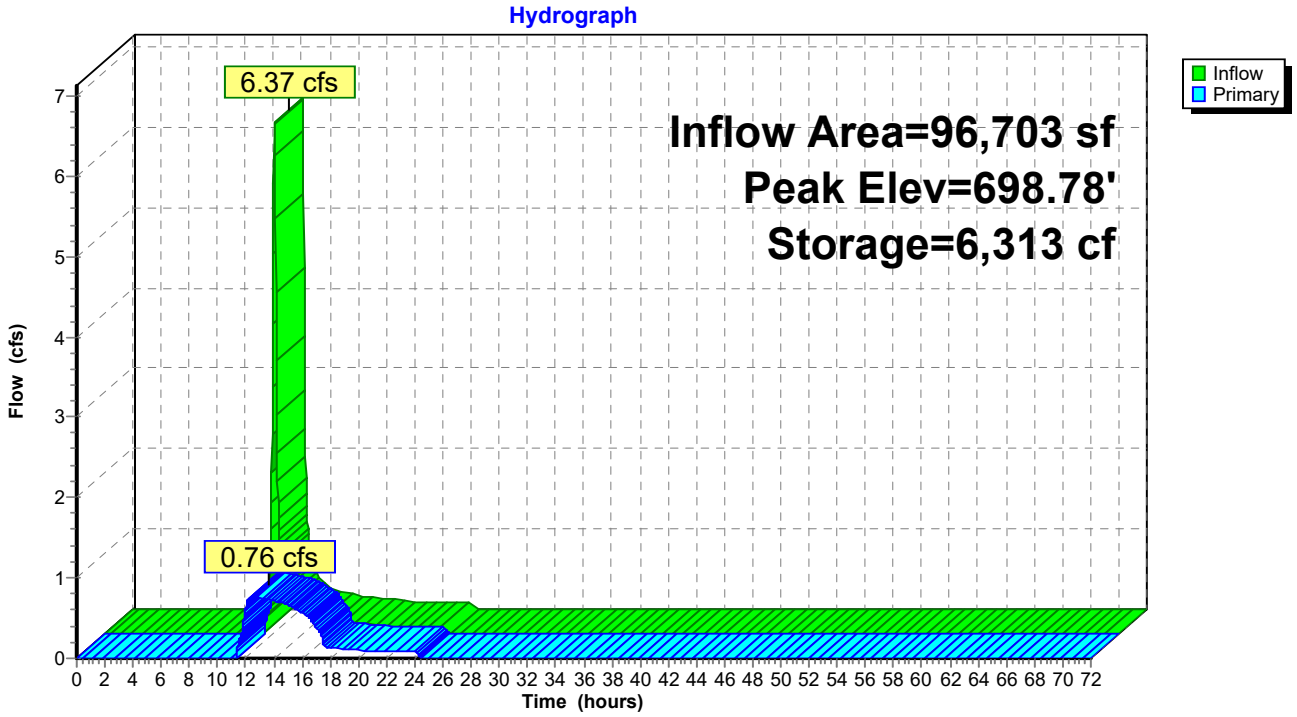
Volume	Invert	Avail.Storage	Storage Description
#1	695.44'	22,040 cf	**Custom Stage Data (Prismatic)** Listed below

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.44	0	0	0
696.00	292	82	82
697.00	1,309	801	882
698.00	2,953	2,131	3,013
699.00	5,510	4,232	7,245
700.00	6,790	6,150	13,395
701.00	10,501	8,646	22,040

Device	Routing	Invert	Outlet Devices
#1	Primary	695.33'	**18.0" Round Culvert** L= 64.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 695.33' / 695.00' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	695.33'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	700.00'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Primary	700.50'	**6.0' long x 9.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.46 2.55 2.70 2.69 2.68 2.68 2.67 2.64 2.64 2.64 2.65 2.64 2.65 2.65 2.66 2.67 2.69

Primary OutFlow Max=0.76 cfs @ 12.58 hrs HW=698.78' TW=565.00' (Fixed TW Elev= 565.00')
- **1=Culvert** (Passes 0.76 cfs of 13.10 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.76 cfs @ 8.72 fps)
  - **3=Orifice/Grate** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 10DP: Detention Pond 3



Summary for Pond 10FP: FocalPoint 10

[92] Warning: Device #3 is above defined storage

Inflow Area = 96,703 sf, 64.41% Impervious, Inflow Depth = 2.01" for 2-year event
Inflow = 6.43 cfs @ 12.04 hrs, Volume= 16,219 cf
Outflow = 6.37 cfs @ 12.05 hrs, Volume= 15,534 cf, Atten= 1%, Lag= 0.9 min
Primary = 6.37 cfs @ 12.05 hrs, Volume= 15,534 cf
Routed to Pond 10DP : Detention Pond 3

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 699.89' @ 12.05 hrs Surf.Area= 1,284 sf Storage= 1,126 cf

Plug-Flow detention time= 35.1 min calculated for 15,534 cf (96% of inflow)
Center-of-Mass det. time= 10.9 min (843.6 - 832.6)

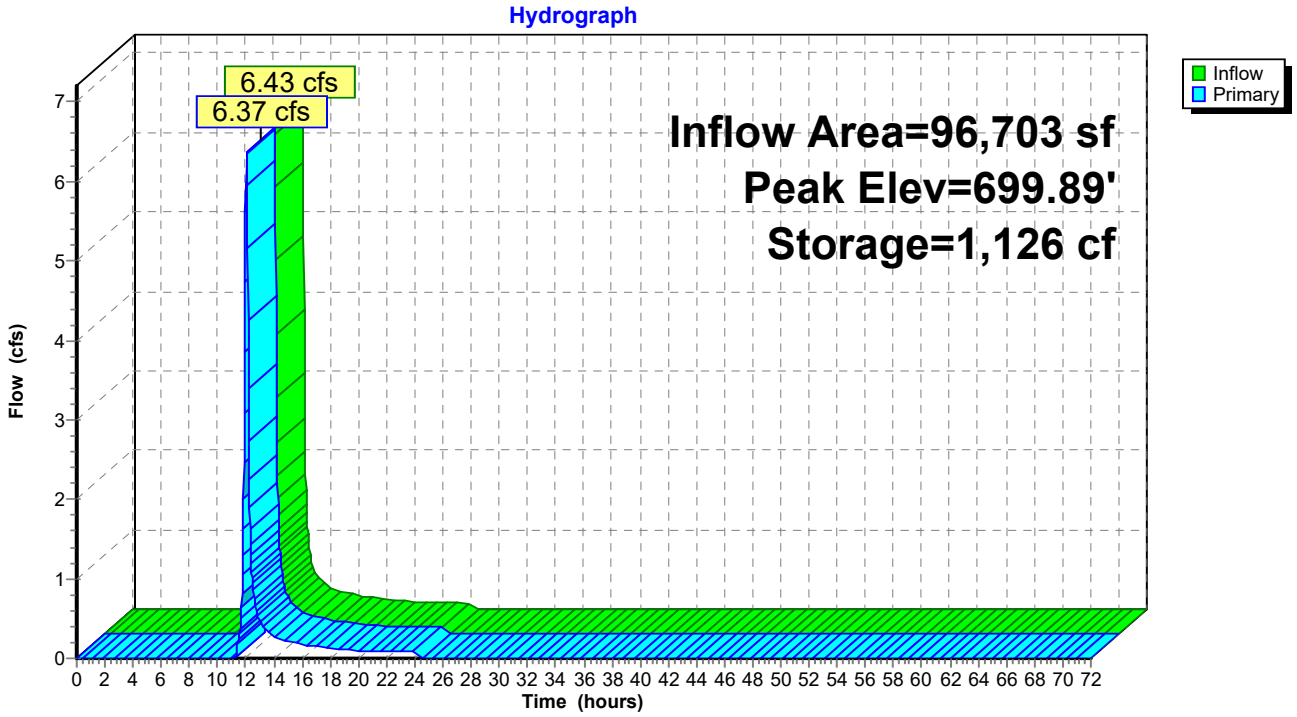
Volume	Invert	Avail.Storage	Storage Description
#1	696.00'	1,266 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
696.00	527	0.0	0	0
699.00	527	20.0	316	316
700.00	1,373	100.0	950	1,266

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 23.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 695.88' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**103.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=6.31 cfs @ 12.05 hrs HW=699.89' (Free Discharge)
└**1=Culvert** (Passes 6.31 cfs of 15.08 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 6.31 cfs @ 2.05 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 10FP: FocalPoint 10

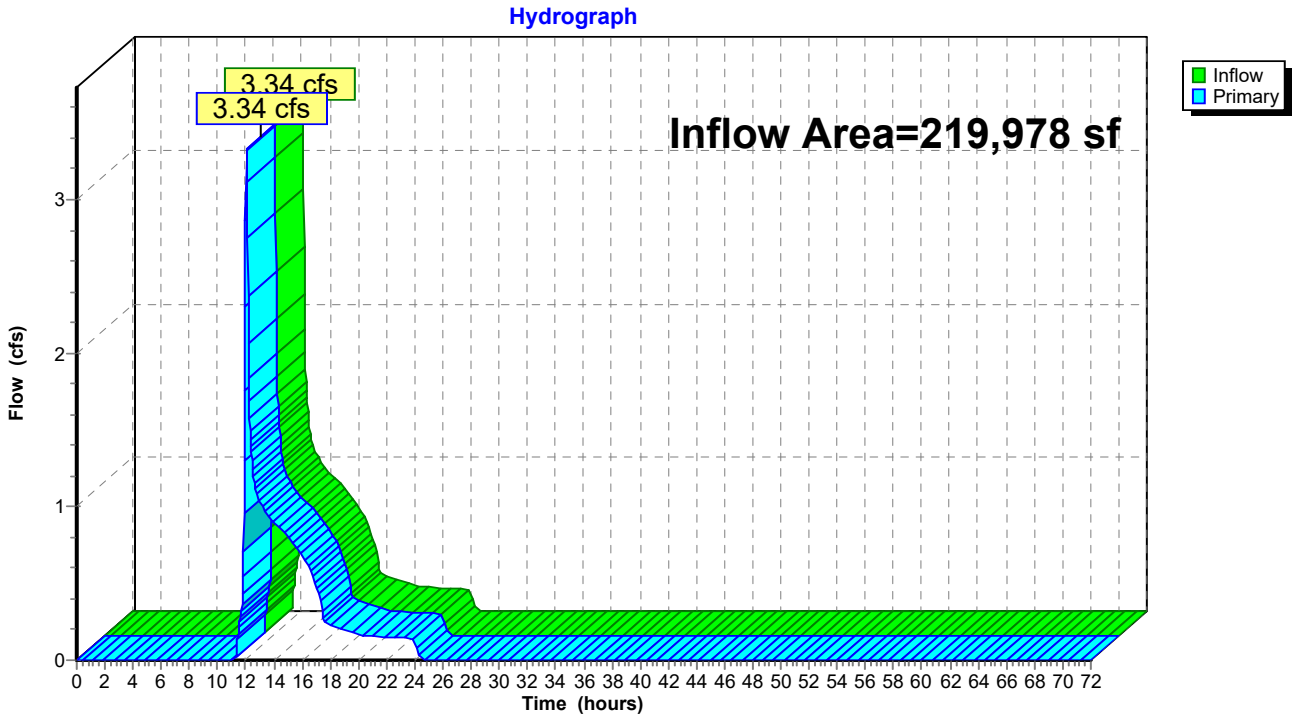


Summary for Link 6L: Outfall #3

Inflow Area = 219,978 sf, 42.38% Impervious, Inflow Depth = 1.27" for 2-year event
Inflow = 3.34 cfs @ 12.05 hrs, Volume= 23,211 cf
Primary = 3.34 cfs @ 12.05 hrs, Volume= 23,211 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs

Link 6L: Outfall #3



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment14S: Site Runoff Area=2.220 ac 64.41% Impervious Runoff Depth=2.73"
Flow Length=960' Tc=11.8 min CN=81 Runoff=8.69 cfs 22,004 cf

Subcatchment15S: Bypass Runoff Area=2.830 ac 25.09% Impervious Runoff Depth=1.20"
Flow Length=599' Tc=11.2 min CN=61 Runoff=4.65 cfs 12,311 cf

Pond 10DP: Detention Pond 3 Peak Elev=699.33' Storage=9,301 cf Inflow=8.61 cfs 21,319 cf
Outflow=0.82 cfs 21,319 cf

Pond 10FP: FocalPoint 10 Peak Elev=699.98' Storage=1,242 cf Inflow=8.69 cfs 22,004 cf
Outflow=8.61 cfs 21,319 cf

Link 6L: Outfall #3 Inflow=5.36 cfs 33,630 cf
Primary=5.36 cfs 33,630 cf

Total Runoff Area = 219,978 sf Runoff Volume = 34,315 cf Average Runoff Depth = 1.87"
57.62% Pervious = 126,760 sf 42.38% Impervious = 93,218 sf

Summary for Subcatchment 14S: Site

[47] Hint: Peak is 117% of capacity of segment #4

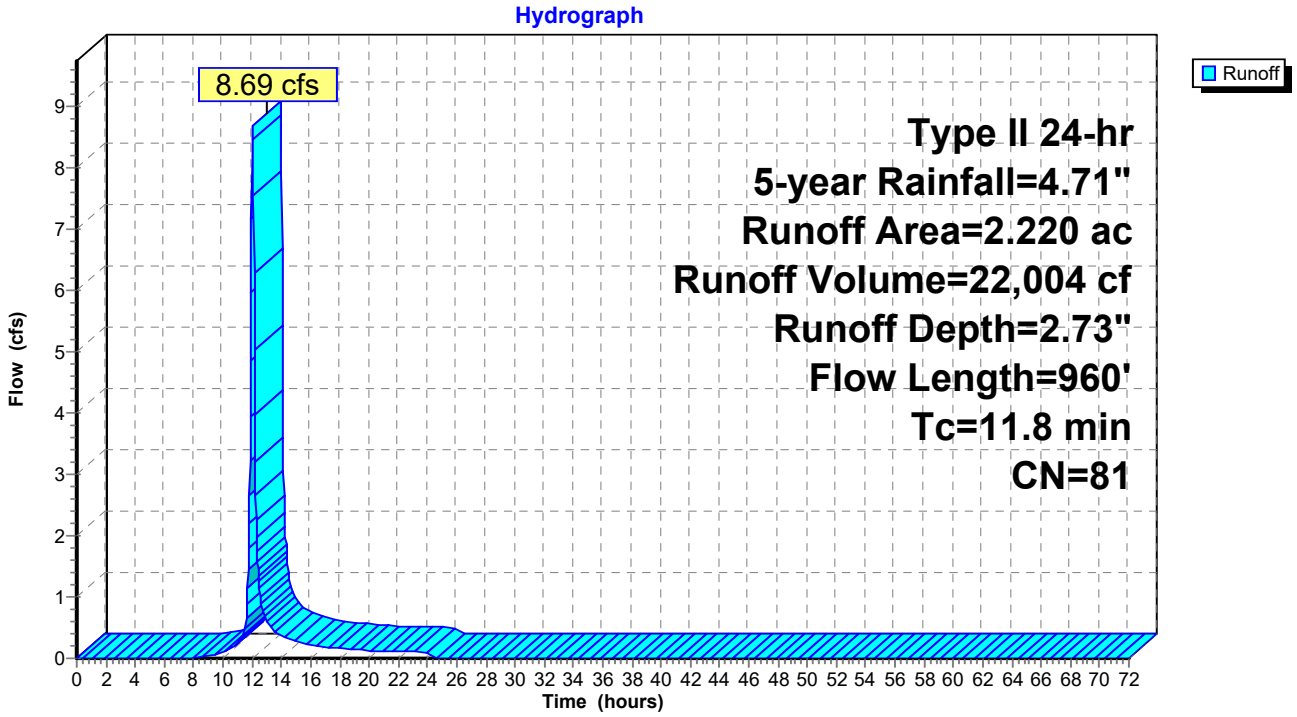
Runoff = 8.69 cfs @ 12.04 hrs, Volume= 22,004 cf, Depth= 2.73"
Routed to Pond 10FP : FocalPoint 10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 5-year Rainfall=4.71"

Area (ac)	CN	Description
0.610	49	50-75% Grass cover, Fair, HSG A
0.070	69	50-75% Grass cover, Fair, HSG B
0.110	36	Woods, Fair, HSG A
1.430	98	Paved parking, HSG A
2.220	81	Weighted Average
0.790		35.59% Pervious Area
1.430		64.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	69	0.0140	0.14		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
0.1	28	0.2860	8.61		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
1.2	165	0.0220	2.39		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.3	78	0.0050	4.20	7.43	**Pipe Channel,** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013
2.0	620	0.0160	5.21	15.63	**Channel Flow,** Area= 3.0 sf Perim= 6.3' r= 0.48' n= 0.022 Earth, clean & straight
11.8	960	Total			

Subcatchment 14S: Site



Summary for Subcatchment 15S: Bypass

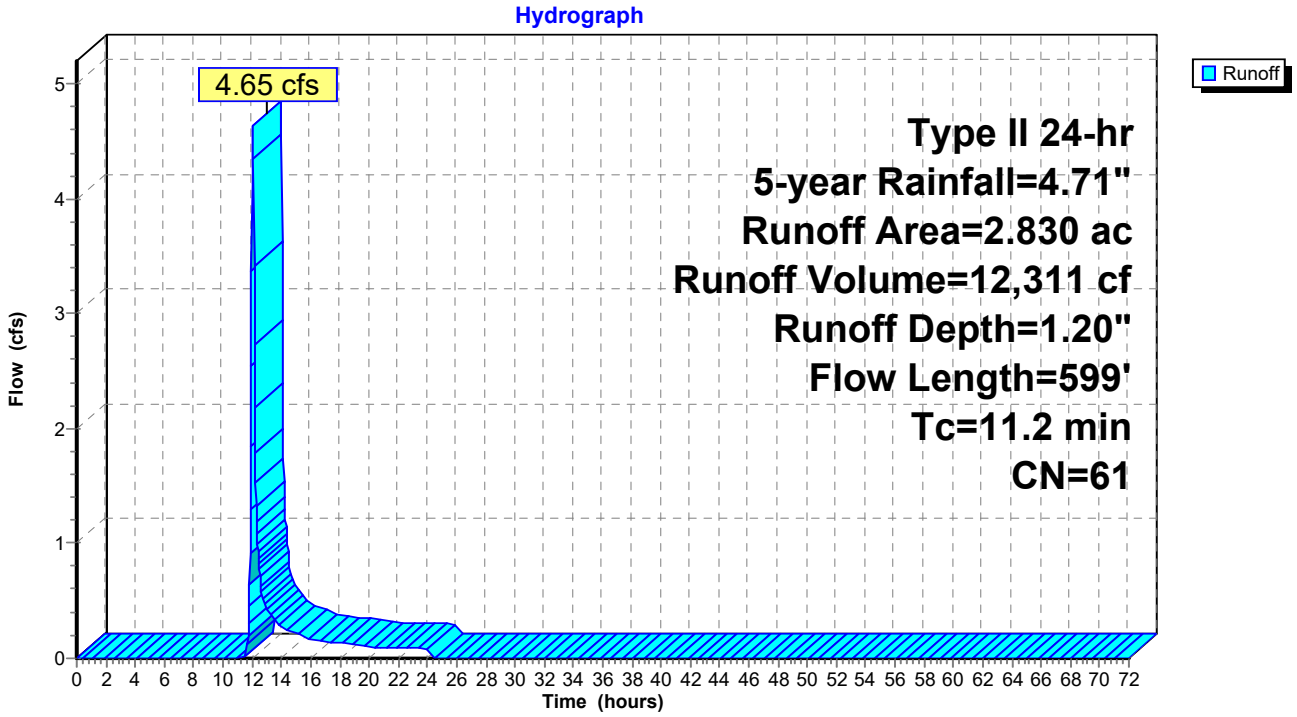
Runoff = 4.65 cfs @ 12.04 hrs, Volume= 12,311 cf, Depth= 1.20"
Routed to Link 6L : Outfall #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 5-year Rainfall=4.71"

Area (ac)	CN	Description
2.010	49	50-75% Grass cover, Fair, HSG A
0.110	36	Woods, Fair, HSG A
0.710	98	Paved parking, HSG A
2.830	61	Weighted Average
2.120		74.91% Pervious Area
0.710		25.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.7	69	0.0120	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
2.2	434	0.0420	3.30		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.0	16	0.1562	6.36		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.3	80	0.0160	4.66	11.66	**Channel Flow,** Area= 2.5 sf Perim= 6.2' r= 0.40' n= 0.022 Earth, clean & straight
11.2	599	Total			

Subcatchment 15S: Bypass



Summary for Pond 10DP: Detention Pond 3

[44] Hint: Outlet device #2 is below defined storage
[79] Warning: Submerged Pond 10FP Primary device # 1 INLET by 3.33'

Inflow Area = 96,703 sf, 64.41% Impervious, Inflow Depth = 2.65" for 5-year event
Inflow = 8.61 cfs @ 12.05 hrs, Volume= 21,319 cf
Outflow = 0.82 cfs @ 12.68 hrs, Volume= 21,319 cf, Atten= 90%, Lag= 37.7 min
Primary = 0.82 cfs @ 12.68 hrs, Volume= 21,319 cf
Routed to Link 6L : Outfall #3

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 699.33' @ 12.68 hrs Surf.Area= 5,938 sf Storage= 9,301 cf

Plug-Flow detention time= 102.4 min calculated for 21,310 cf (100% of inflow)
Center-of-Mass det. time= 102.4 min (936.0 - 833.6)

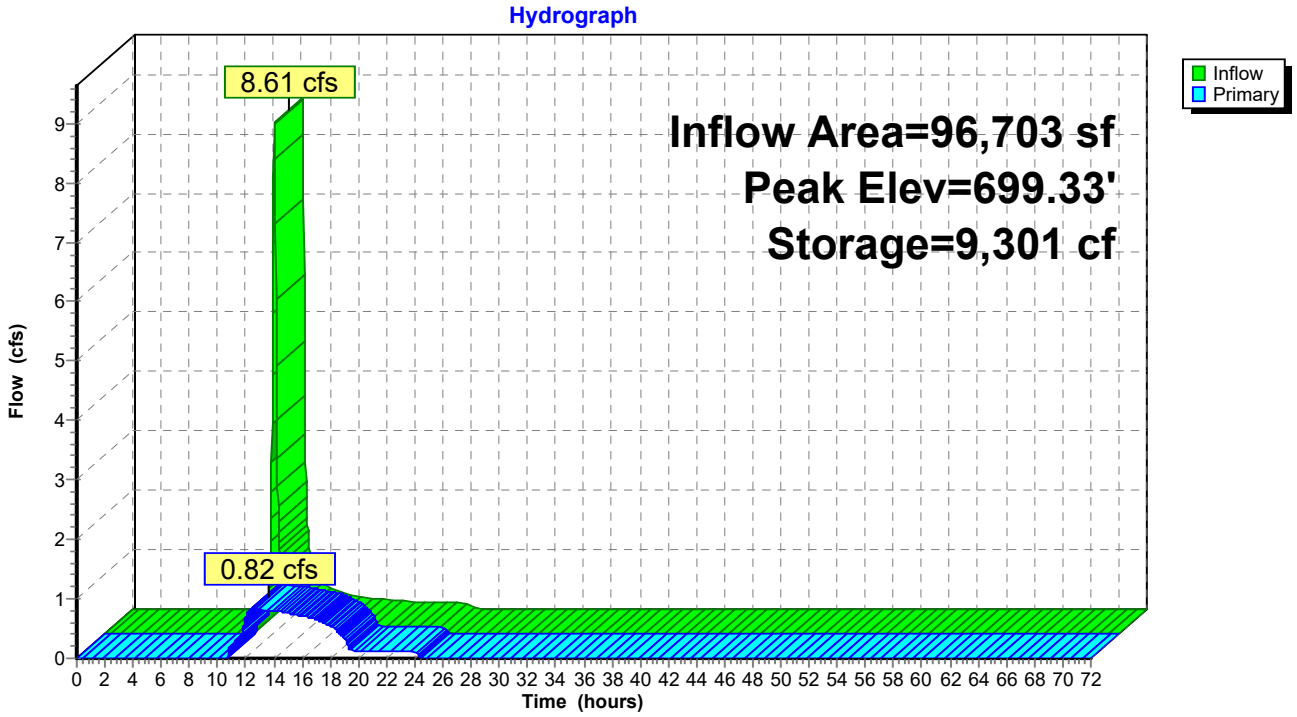
Volume	Invert	Avail.Storage	Storage Description
#1	695.44'	22,040 cf	**Custom Stage Data (Prismatic)** Listed below

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.44	0	0	0
696.00	292	82	82
697.00	1,309	801	882
698.00	2,953	2,131	3,013
699.00	5,510	4,232	7,245
700.00	6,790	6,150	13,395
701.00	10,501	8,646	22,040

Device	Routing	Invert	Outlet Devices
#1	Primary	695.33'	**18.0" Round Culvert** L= 64.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 695.33' / 695.00' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	695.33'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	700.00'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Primary	700.50'	**6.0' long x 9.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.46 2.55 2.70 2.69 2.68 2.68 2.67 2.64 2.64 2.64 2.65 2.64 2.65 2.65 2.66 2.67 2.69

Primary OutFlow Max=0.82 cfs @ 12.68 hrs HW=699.33' TW=565.00' (Fixed TW Elev= 565.00')
- **1=Culvert** (Passes 0.82 cfs of 14.61 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.82 cfs @ 9.43 fps)
  - **3=Orifice/Grate** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 10DP: Detention Pond 3



Summary for Pond 10FP: FocalPoint 10

[92] Warning: Device #3 is above defined storage

Inflow Area = 96,703 sf, 64.41% Impervious, Inflow Depth = 2.73" for 5-year event
Inflow = 8.69 cfs @ 12.04 hrs, Volume= 22,004 cf
Outflow = 8.61 cfs @ 12.05 hrs, Volume= 21,319 cf, Atten= 1%, Lag= 0.9 min
Primary = 8.61 cfs @ 12.05 hrs, Volume= 21,319 cf
Routed to Pond 10DP : Detention Pond 3

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 699.98' @ 12.05 hrs Surf.Area= 1,358 sf Storage= 1,242 cf

Plug-Flow detention time= 28.0 min calculated for 21,310 cf (97% of inflow)
Center-of-Mass det. time= 9.7 min (833.6 - 823.9)

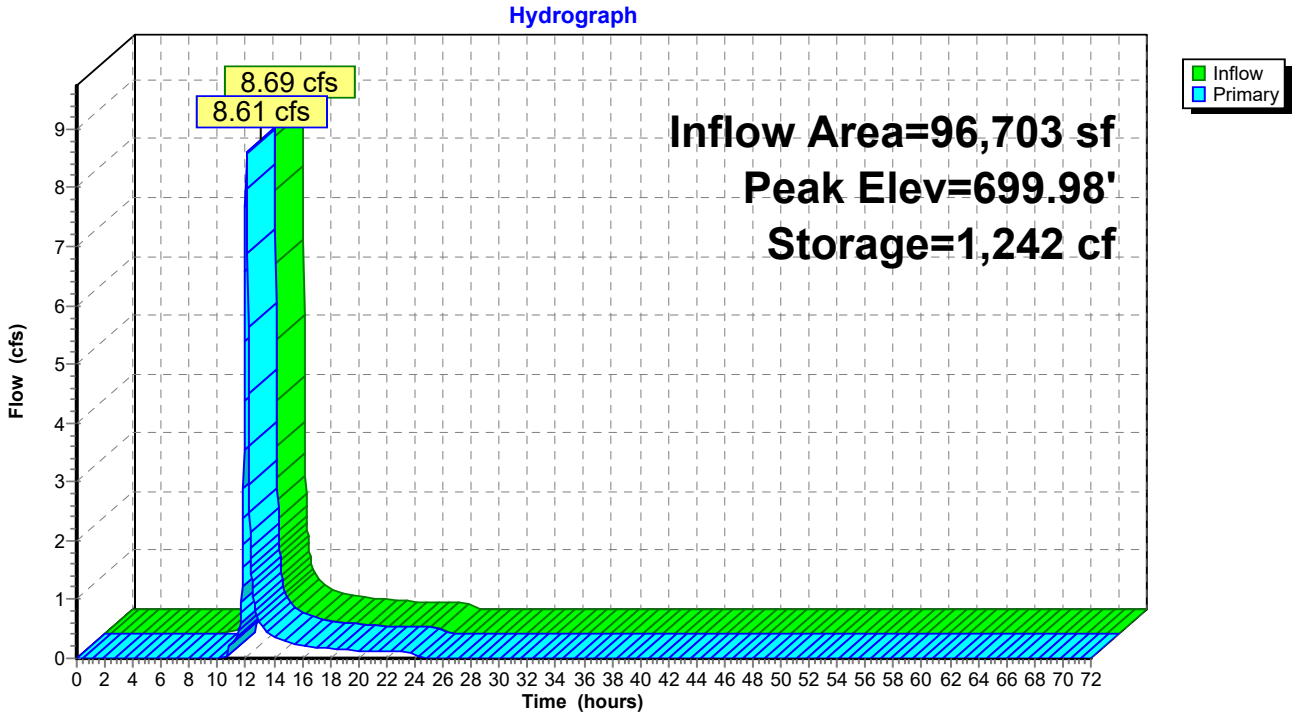
Volume	Invert	Avail.Storage	Storage Description
#1	696.00'	1,266 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
696.00	527	0.0	0	0
699.00	527	20.0	316	316
700.00	1,373	100.0	950	1,266

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 23.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 695.88' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**103.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=8.52 cfs @ 12.05 hrs HW=699.98' (Free Discharge)
└**1=Culvert** (Passes 8.52 cfs of 15.29 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 8.52 cfs @ 2.26 fps)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 10FP: FocalPoint 10

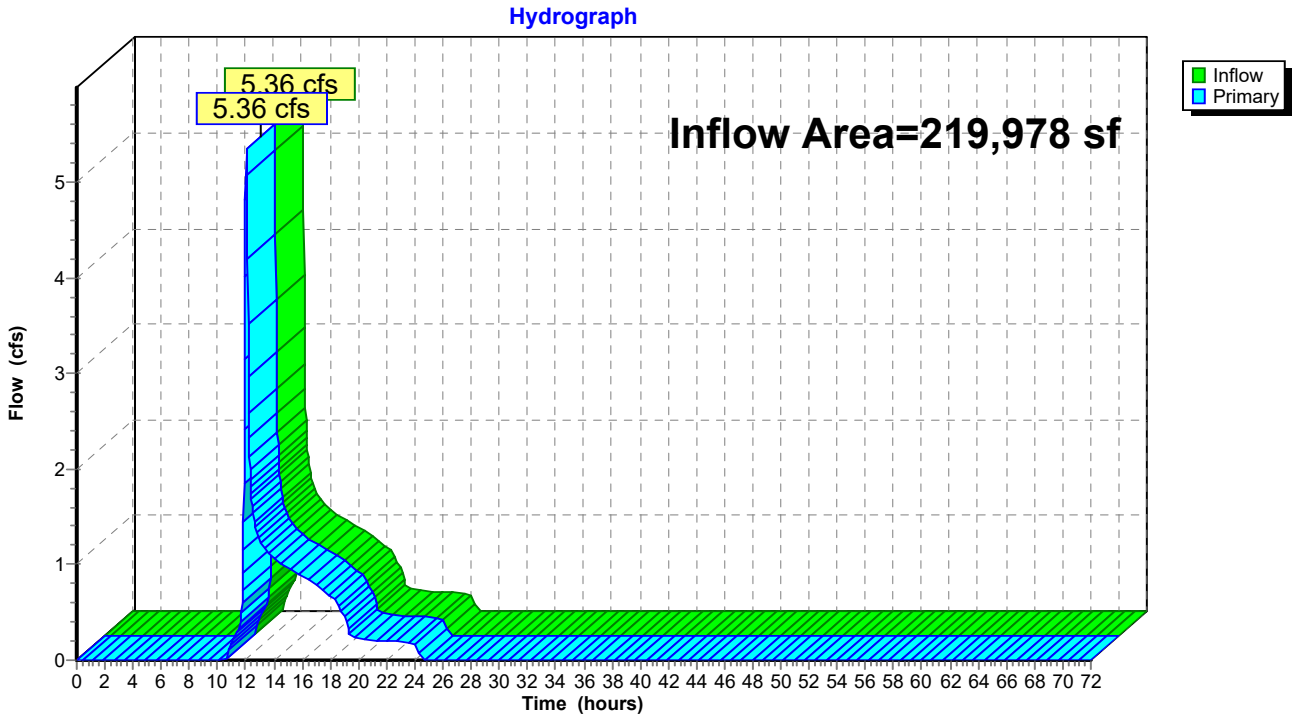


Summary for Link 6L: Outfall #3

Inflow Area = 219,978 sf, 42.38% Impervious, Inflow Depth = 1.83" for 5-year event
Inflow = 5.36 cfs @ 12.05 hrs, Volume= 33,630 cf
Primary = 5.36 cfs @ 12.05 hrs, Volume= 33,630 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs

Link 6L: Outfall #3



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment14S: Site Runoff Area=2.220 ac 64.41% Impervious Runoff Depth=3.32"
Flow Length=960' Tc=11.8 min CN=81 Runoff=10.53 cfs 26,782 cf

Subcatchment15S: Bypass Runoff Area=2.830 ac 25.09% Impervious Runoff Depth=1.60"
Flow Length=599' Tc=11.2 min CN=61 Runoff=6.41 cfs 16,465 cf

Pond 10DP: Detention Pond 3 Peak Elev=699.75' Storage=11,867 cf Inflow=10.79 cfs 26,097 cf
Outflow=0.87 cfs 26,097 cf

Pond 10FP: FocalPoint 10 Peak Elev=700.02' Storage=1,266 cf Inflow=10.53 cfs 26,782 cf
Outflow=10.79 cfs 26,097 cf

Link 6L: Outfall #3 Inflow=7.16 cfs 42,562 cf
Primary=7.16 cfs 42,562 cf

Total Runoff Area = 219,978 sf Runoff Volume = 43,247 cf Average Runoff Depth = 2.36"
57.62% Pervious = 126,760 sf 42.38% Impervious = 93,218 sf

Summary for Subcatchment 14S: Site

[47] Hint: Peak is 142% of capacity of segment #4

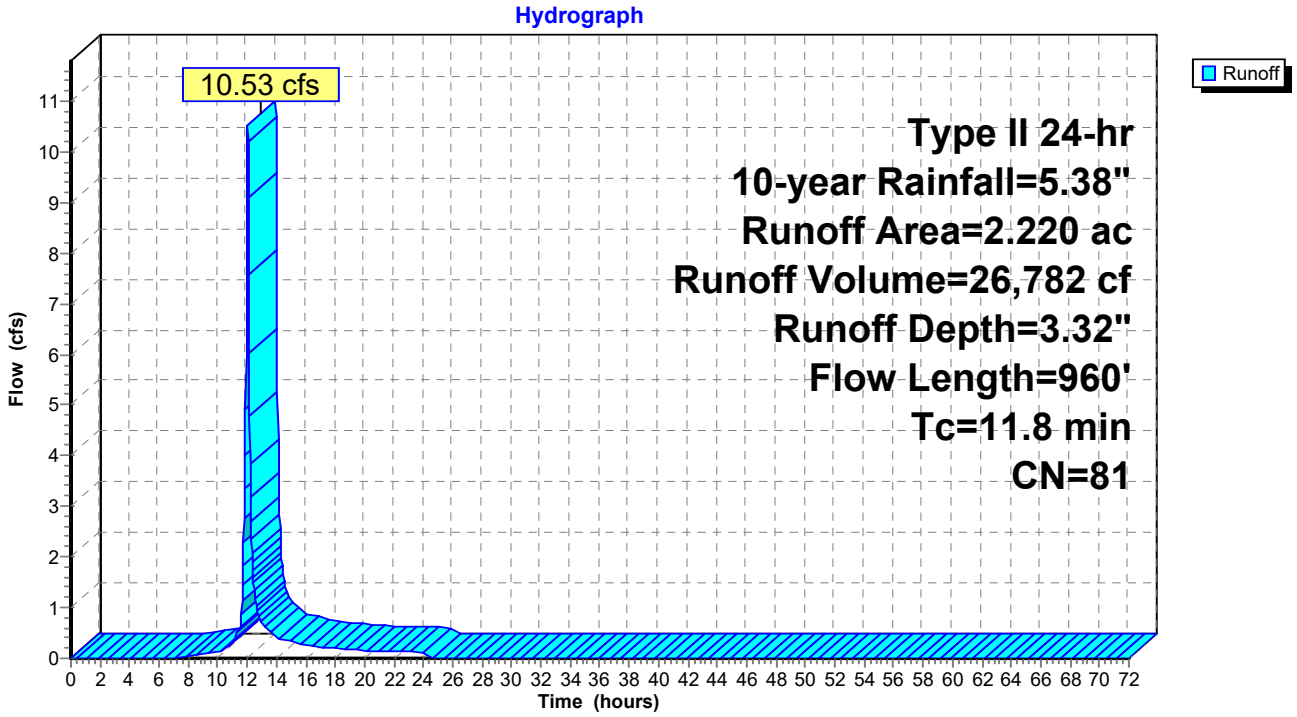
Runoff = 10.53 cfs @ 12.03 hrs, Volume= 26,782 cf, Depth= 3.32"
Routed to Pond 10FP : FocalPoint 10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 10-year Rainfall=5.38"

Area (ac)	CN	Description
0.610	49	50-75% Grass cover, Fair, HSG A
0.070	69	50-75% Grass cover, Fair, HSG B
0.110	36	Woods, Fair, HSG A
1.430	98	Paved parking, HSG A
2.220	81	Weighted Average
0.790		35.59% Pervious Area
1.430		64.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	69	0.0140	0.14		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
0.1	28	0.2860	8.61		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
1.2	165	0.0220	2.39		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.3	78	0.0050	4.20	7.43	**Pipe Channel,** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013
2.0	620	0.0160	5.21	15.63	**Channel Flow,** Area= 3.0 sf Perim= 6.3' r= 0.48' n= 0.022 Earth, clean & straight
11.8	960	Total			

Subcatchment 14S: Site



Summary for Subcatchment 15S: Bypass

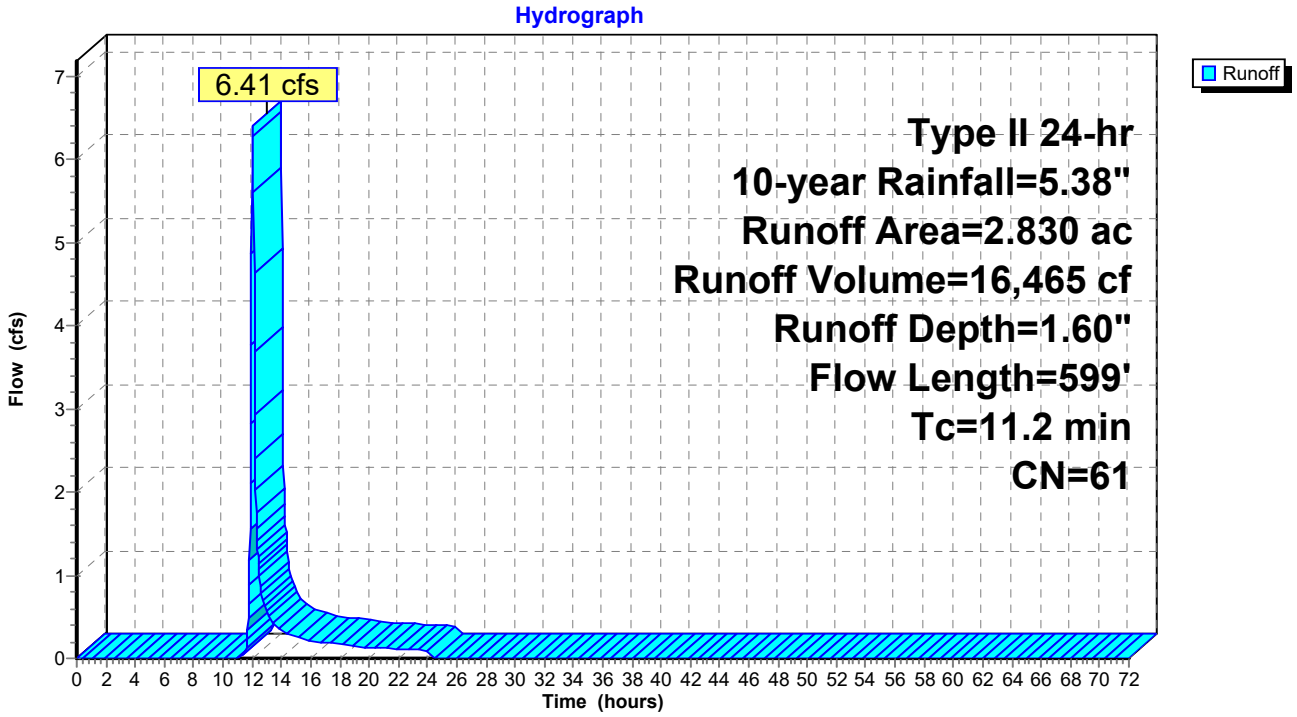
Runoff = 6.41 cfs @ 12.04 hrs, Volume= 16,465 cf, Depth= 1.60"
Routed to Link 6L : Outfall #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 10-year Rainfall=5.38"

Area (ac)	CN	Description
2.010	49	50-75% Grass cover, Fair, HSG A
0.110	36	Woods, Fair, HSG A
0.710	98	Paved parking, HSG A
2.830	61	Weighted Average
2.120		74.91% Pervious Area
0.710		25.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.7	69	0.0120	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
2.2	434	0.0420	3.30		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.0	16	0.1562	6.36		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.3	80	0.0160	4.66	11.66	**Channel Flow,** Area= 2.5 sf Perim= 6.2' r= 0.40' n= 0.022 Earth, clean & straight
11.2	599	Total			

Subcatchment 15S: Bypass



Summary for Pond 10DP: Detention Pond 3

[44] Hint: Outlet device #2 is below defined storage
[81] Warning: Exceeded Pond 10FP by 0.15' @ 12.90 hrs

Inflow Area = 96,703 sf, 64.41% Impervious, Inflow Depth = 3.24" for 10-year event
Inflow = 10.79 cfs @ 12.03 hrs, Volume= 26,097 cf
Outflow = 0.87 cfs @ 12.78 hrs, Volume= 26,097 cf, Atten= 92%, Lag= 44.7 min
Primary = 0.87 cfs @ 12.78 hrs, Volume= 26,097 cf
Routed to Link 6L : Outfall #3

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 699.75' @ 12.78 hrs Surf.Area= 6,472 sf Storage= 11,867 cf

Plug-Flow detention time= 128.1 min calculated for 26,097 cf (100% of inflow)
Center-of-Mass det. time= 127.9 min (955.3 - 827.4)

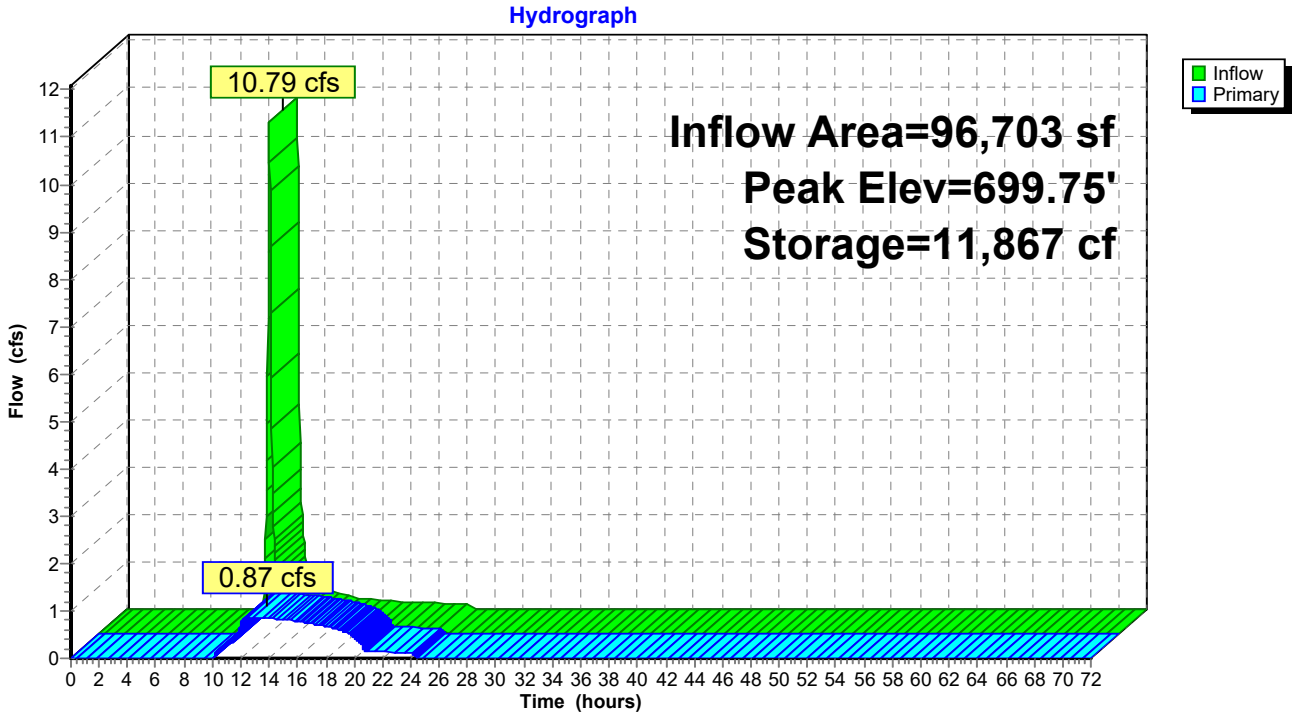
Volume	Invert	Avail.Storage	Storage Description
#1	695.44'	22,040 cf	**Custom Stage Data (Prismatic)** Listed below

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.44	0	0	0
696.00	292	82	82
697.00	1,309	801	882
698.00	2,953	2,131	3,013
699.00	5,510	4,232	7,245
700.00	6,790	6,150	13,395
701.00	10,501	8,646	22,040

Device	Routing	Invert	Outlet Devices
#1	Primary	695.33'	**18.0" Round Culvert** L= 64.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 695.33' / 695.00' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	695.33'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	700.00'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Primary	700.50'	**6.0' long x 9.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.46 2.55 2.70 2.69 2.68 2.68 2.67 2.64 2.64 2.64 2.65 2.64 2.65 2.65 2.66 2.67 2.69

Primary OutFlow Max=0.87 cfs @ 12.78 hrs HW=699.75' TW=565.00' (Fixed TW Elev= 565.00')
- **1=Culvert** (Passes 0.87 cfs of 15.65 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.87 cfs @ 9.93 fps)
  - **3=Orifice/Grate** (Controls 0.00 cfs)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 10DP: Detention Pond 3



Summary for Pond 10FP: FocalPoint 10

[92] Warning: Device #3 is above defined storage
[93] Warning: Storage range exceeded by 0.02'
[88] Warning: Qout>Qin may require smaller dt or Finer Routing

Inflow Area = 96,703 sf, 64.41% Impervious, Inflow Depth = 3.32" for 10-year event
Inflow = 10.53 cfs @ 12.03 hrs, Volume= 26,782 cf
Outflow = 10.79 cfs @ 12.03 hrs, Volume= 26,097 cf, Atten= 0%, Lag= 0.0 min
Primary = 10.79 cfs @ 12.03 hrs, Volume= 26,097 cf
Routed to Pond 10DP : Detention Pond 3

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 700.02' @ 12.03 hrs Surf.Area= 1,373 sf Storage= 1,266 cf

Plug-Flow detention time= 24.4 min calculated for 26,097 cf (97% of inflow)
Center-of-Mass det. time= 9.1 min (827.4 - 818.3)

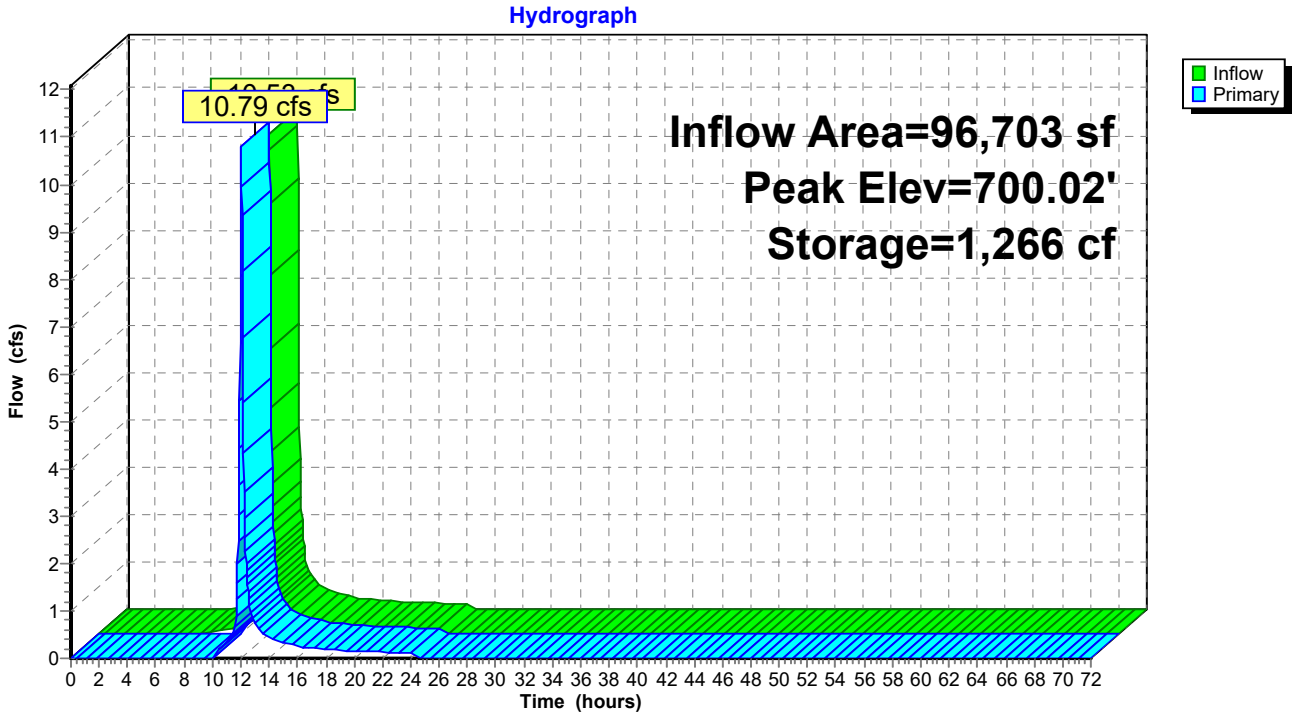
Volume	Invert	Avail.Storage	Storage Description
#1	696.00'	1,266 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
696.00	527	0.0	0	0
699.00	527	20.0	316	316
700.00	1,373	100.0	950	1,266

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 23.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 695.88' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**103.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=10.45 cfs @ 12.03 hrs HW=700.02' (Free Discharge)
└**1=Culvert** (Passes 9.68 cfs of 15.39 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 9.68 cfs @ 2.36 fps)
└**3=Broad-Crested Rectangular Weir** (Weir Controls 0.78 cfs @ 0.35 fps)

Pond 10FP: FocalPoint 10

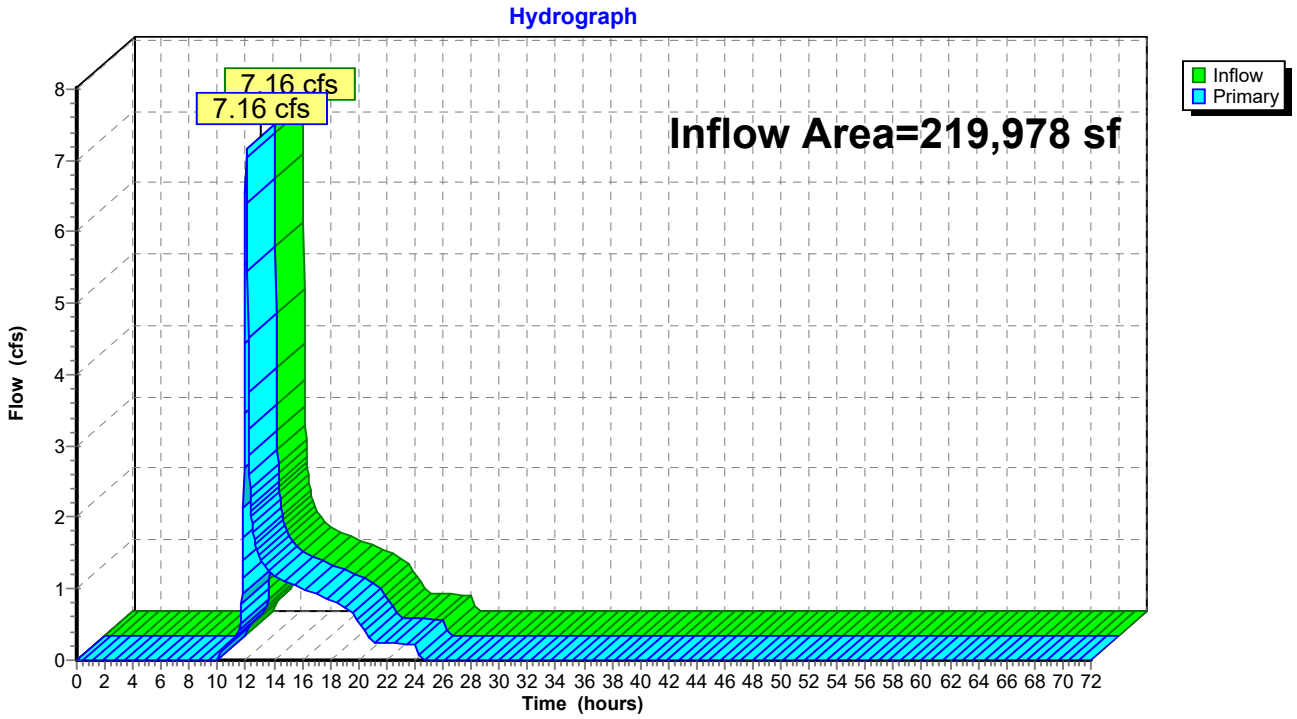


Summary for Link 6L: Outfall #3

Inflow Area = 219,978 sf, 42.38% Impervious, Inflow Depth = 2.32" for 10-year event
Inflow = 7.16 cfs @ 12.04 hrs, Volume= 42,562 cf
Primary = 7.16 cfs @ 12.04 hrs, Volume= 42,562 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs

Link 6L: Outfall #3



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment14S: Site Runoff Area=2.220 ac 64.41% Impervious Runoff Depth=4.16"
Flow Length=960' Tc=11.8 min CN=81 Runoff=13.08 cfs 33,509 cf

Subcatchment15S: Bypass Runoff Area=2.830 ac 25.09% Impervious Runoff Depth=2.21"
Flow Length=599' Tc=11.2 min CN=61 Runoff=9.03 cfs 22,691 cf

Pond 10DP: Detention Pond 3 Peak Elev=700.12' Storage=14,424 cf Inflow=13.26 cfs 32,823 cf
Outflow=1.97 cfs 32,823 cf

Pond 10FP: FocalPoint 10 Peak Elev=700.05' Storage=1,266 cf Inflow=13.08 cfs 33,509 cf
Outflow=13.26 cfs 32,823 cf

Link 6L: Outfall #3 Inflow=9.83 cfs 55,514 cf
Primary=9.83 cfs 55,514 cf

Total Runoff Area = 219,978 sf Runoff Volume = 56,200 cf Average Runoff Depth = 3.07"
57.62% Pervious = 126,760 sf 42.38% Impervious = 93,218 sf

Summary for Subcatchment 14S: Site

[47] Hint: Peak is 176% of capacity of segment #4

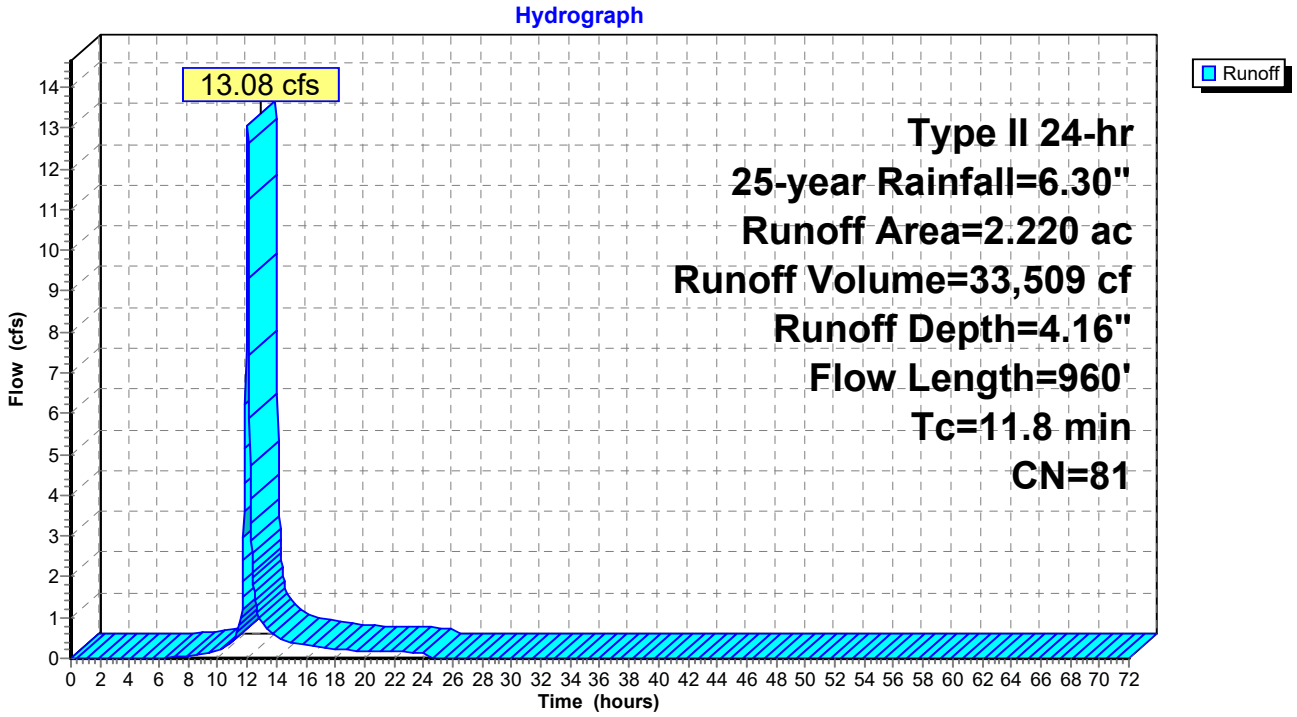
Runoff = 13.08 cfs @ 12.03 hrs, Volume= 33,509 cf, Depth= 4.16"
Routed to Pond 10FP : FocalPoint 10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 25-year Rainfall=6.30"

Area (ac)	CN	Description
0.610	49	50-75% Grass cover, Fair, HSG A
0.070	69	50-75% Grass cover, Fair, HSG B
0.110	36	Woods, Fair, HSG A
1.430	98	Paved parking, HSG A
2.220	81	Weighted Average
0.790		35.59% Pervious Area
1.430		64.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	69	0.0140	0.14		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
0.1	28	0.2860	8.61		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
1.2	165	0.0220	2.39		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.3	78	0.0050	4.20	7.43	**Pipe Channel,** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013
2.0	620	0.0160	5.21	15.63	**Channel Flow,** Area= 3.0 sf Perim= 6.3' r= 0.48' n= 0.022 Earth, clean & straight
11.8	960	Total			

Subcatchment 14S: Site



Summary for Subcatchment 15S: Bypass

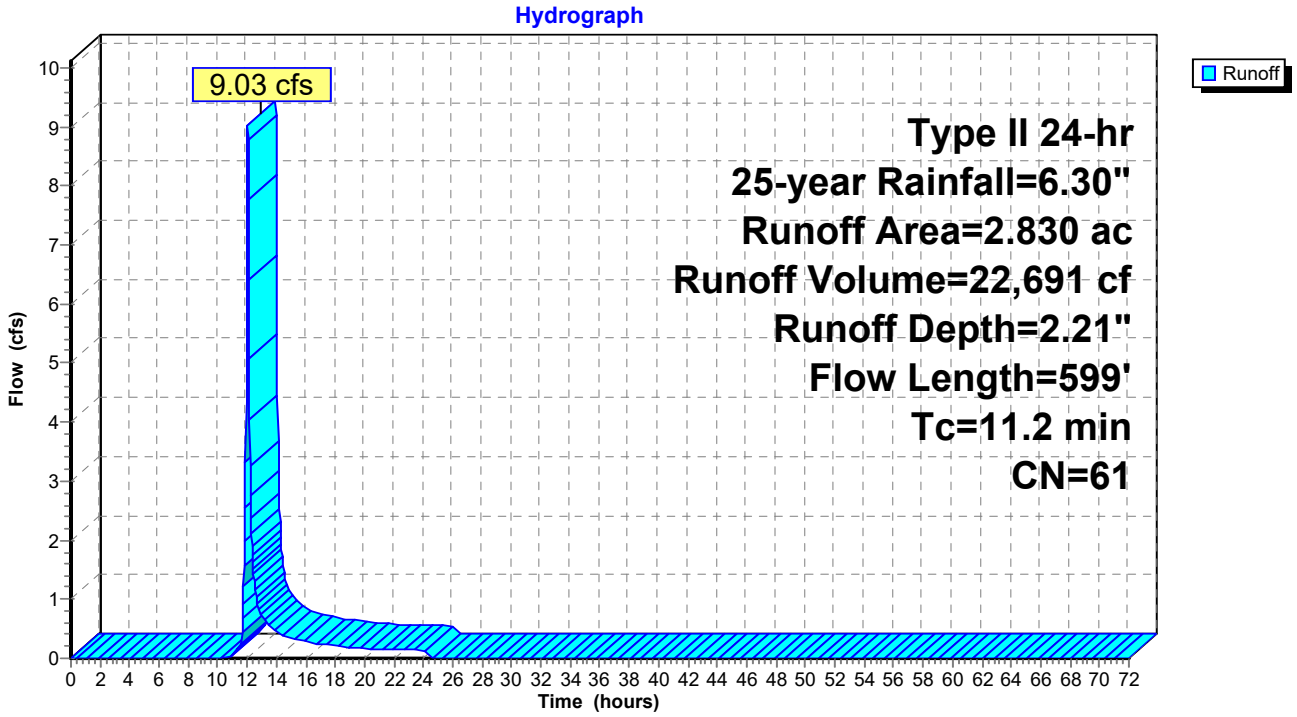
Runoff = 9.03 cfs @ 12.04 hrs, Volume= 22,691 cf, Depth= 2.21"
Routed to Link 6L : Outfall #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 25-year Rainfall=6.30"

Area (ac)	CN	Description
2.010	49	50-75% Grass cover, Fair, HSG A
0.110	36	Woods, Fair, HSG A
0.710	98	Paved parking, HSG A
2.830	61	Weighted Average
2.120		74.91% Pervious Area
0.710		25.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.7	69	0.0120	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
2.2	434	0.0420	3.30		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.0	16	0.1562	6.36		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.3	80	0.0160	4.66	11.66	**Channel Flow,** Area= 2.5 sf Perim= 6.2' r= 0.40' n= 0.022 Earth, clean & straight
11.2	599	Total			

Subcatchment 15S: Bypass



Summary for Pond 10DP: Detention Pond 3

[44] Hint: Outlet device #2 is below defined storage
[81] Warning: Exceeded Pond 10FP by 0.46' @ 12.63 hrs

Inflow Area = 96,703 sf, 64.41% Impervious, Inflow Depth = 4.07" for 25-year event
Inflow = 13.26 cfs @ 12.03 hrs, Volume= 32,823 cf
Outflow = 1.97 cfs @ 12.44 hrs, Volume= 32,823 cf, Atten= 85%, Lag= 24.4 min
Primary = 1.97 cfs @ 12.44 hrs, Volume= 32,823 cf
Routed to Link 6L : Outfall #3

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 700.12' @ 12.44 hrs Surf.Area= 7,232 sf Storage= 14,424 cf

Plug-Flow detention time= 137.7 min calculated for 32,809 cf (100% of inflow)
Center-of-Mass det. time= 137.7 min (957.9 - 820.2)

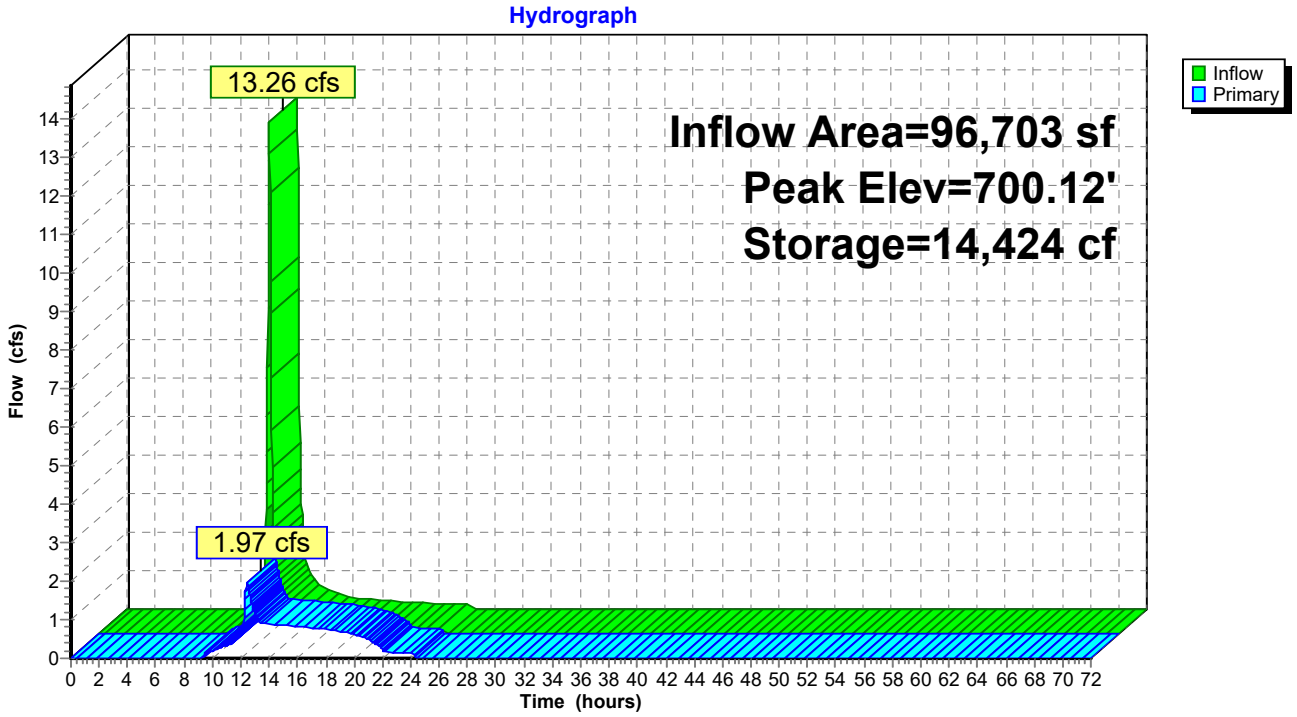
Volume	Invert	Avail.Storage	Storage Description
#1	695.44'	22,040 cf	**Custom Stage Data (Prismatic)** Listed below

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.44	0	0	0
696.00	292	82	82
697.00	1,309	801	882
698.00	2,953	2,131	3,013
699.00	5,510	4,232	7,245
700.00	6,790	6,150	13,395
701.00	10,501	8,646	22,040

Device	Routing	Invert	Outlet Devices
#1	Primary	695.33'	**18.0" Round Culvert** L= 64.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 695.33' / 695.00' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	695.33'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	700.00'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Primary	700.50'	**6.0' long x 9.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.46 2.55 2.70 2.69 2.68 2.68 2.67 2.64 2.64 2.64 2.65 2.64 2.65 2.65 2.66 2.67 2.69

Primary OutFlow Max=1.96 cfs @ 12.44 hrs HW=700.12' TW=565.00' (Fixed TW Elev= 565.00')
- **1=Culvert** (Passes 1.96 cfs of 16.51 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.90 cfs @ 10.35 fps)
  - **3=Orifice/Grate** (Weir Controls 1.05 cfs @ 1.13 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 10DP: Detention Pond 3



Summary for Pond 10FP: FocalPoint 10

[92] Warning: Device #3 is above defined storage
[93] Warning: Storage range exceeded by 0.05'
[88] Warning: Qout>Qin may require smaller dt or Finer Routing

Inflow Area = 96,703 sf, 64.41% Impervious, Inflow Depth = 4.16" for 25-year event
Inflow = 13.08 cfs @ 12.03 hrs, Volume= 33,509 cf
Outflow = 13.26 cfs @ 12.03 hrs, Volume= 32,823 cf, Atten= 0%, Lag= 0.0 min
Primary = 13.26 cfs @ 12.03 hrs, Volume= 32,823 cf
Routed to Pond 10DP : Detention Pond 3

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 700.05' @ 12.03 hrs Surf.Area= 1,373 sf Storage= 1,266 cf

Plug-Flow detention time= 20.8 min calculated for 32,823 cf (98% of inflow)
Center-of-Mass det. time= 8.3 min (820.2 - 811.9)

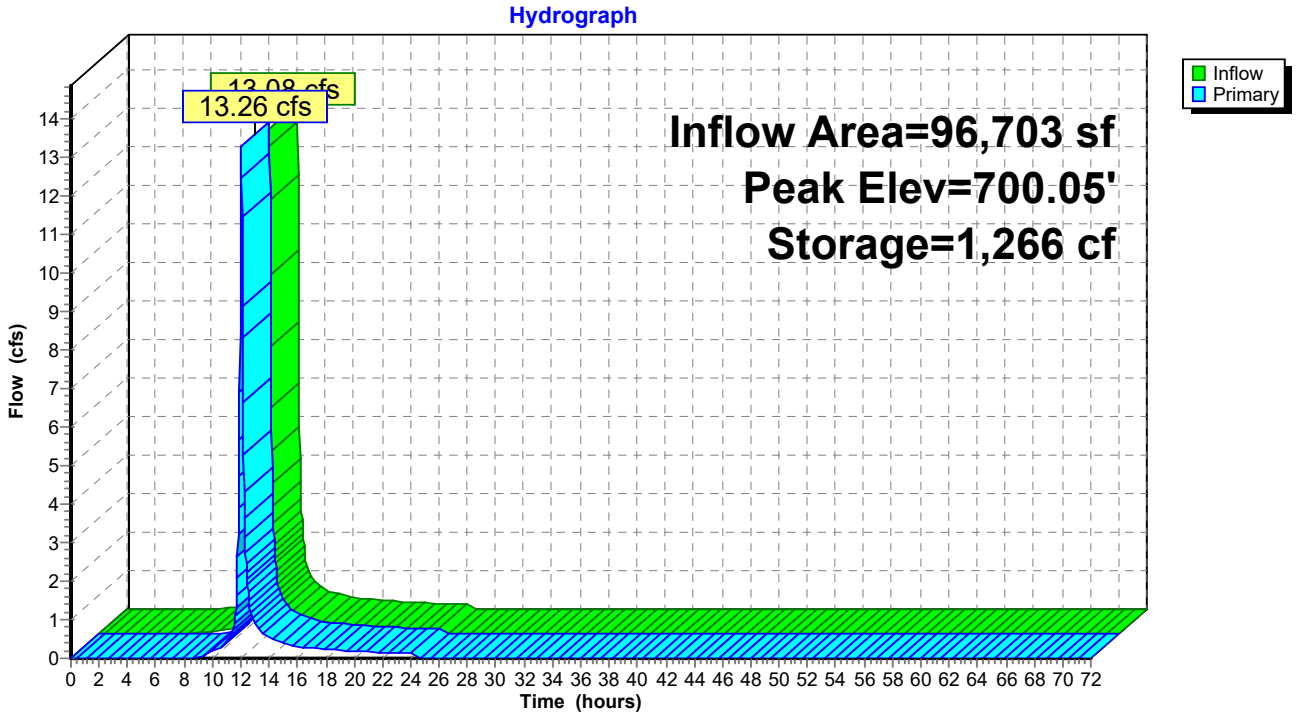
Volume	Invert	Avail.Storage	Storage Description
#1	696.00'	1,266 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
696.00	527	0.0	0	0
699.00	527	20.0	316	316
700.00	1,373	100.0	950	1,266

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 23.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 695.88' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**103.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=13.09 cfs @ 12.03 hrs HW=700.05' (Free Discharge)
└**1=Culvert** (Passes 10.45 cfs of 15.45 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 10.45 cfs @ 2.42 fps)
└**3=Broad-Crested Rectangular Weir** (Weir Controls 2.65 cfs @ 0.52 fps)

Pond 10FP: FocalPoint 10

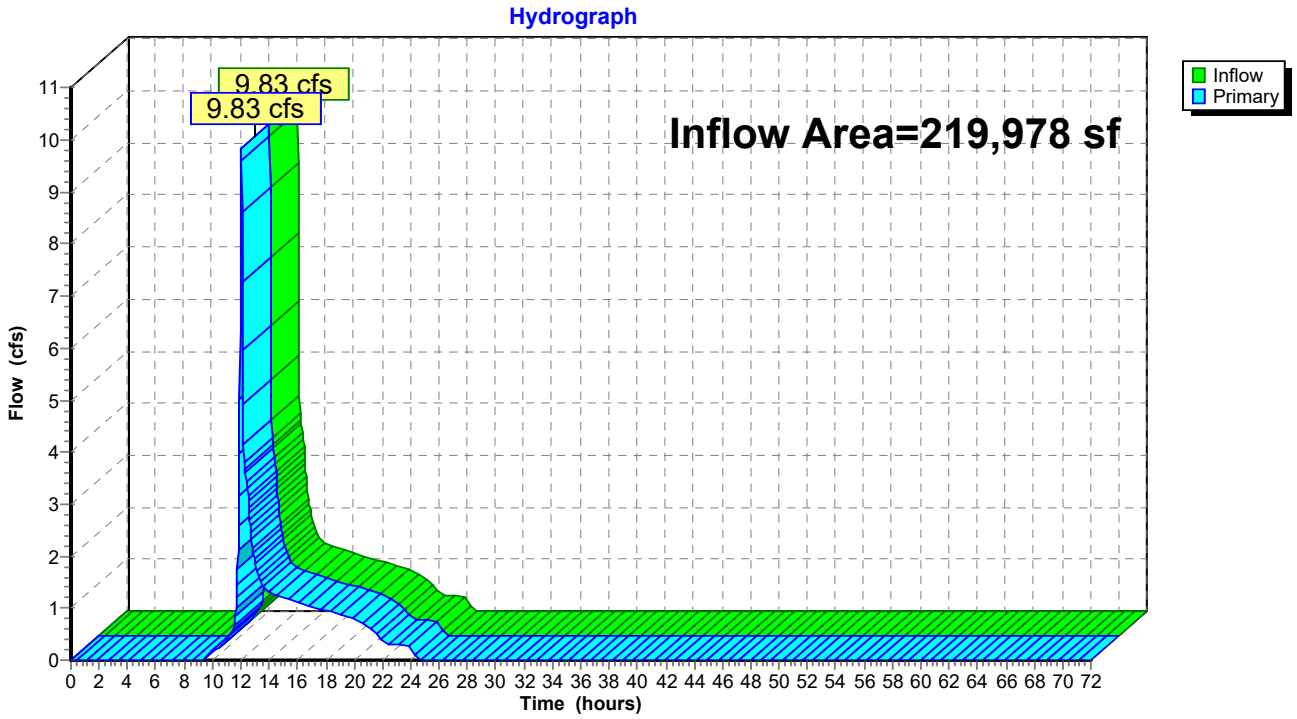


Summary for Link 6L: Outfall #3

Inflow Area = 219,978 sf, 42.38% Impervious, Inflow Depth = 3.03" for 25-year event
Inflow = 9.83 cfs @ 12.04 hrs, Volume= 55,514 cf
Primary = 9.83 cfs @ 12.04 hrs, Volume= 55,514 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs

Link 6L: Outfall #3



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment14S: Site Runoff Area=2.220 ac 64.41% Impervious Runoff Depth=4.82"
Flow Length=960' Tc=11.8 min CN=81 Runoff=15.08 cfs 38,872 cf

Subcatchment15S: Bypass Runoff Area=2.830 ac 25.09% Impervious Runoff Depth=2.72"
Flow Length=599' Tc=11.2 min CN=61 Runoff=11.21 cfs 27,905 cf

Pond 10DP: Detention Pond 3 Peak Elev=700.25' Storage=15,516 cf Inflow=15.24 cfs 38,186 cf
Outflow=4.05 cfs 38,186 cf

Pond 10FP: FocalPoint 10 Peak Elev=700.07' Storage=1,266 cf Inflow=15.08 cfs 38,872 cf
Outflow=15.24 cfs 38,186 cf

Link 6L: Outfall #3 Inflow=12.04 cfs 66,092 cf
Primary=12.04 cfs 66,092 cf

Total Runoff Area = 219,978 sf Runoff Volume = 66,777 cf Average Runoff Depth = 3.64"
57.62% Pervious = 126,760 sf 42.38% Impervious = 93,218 sf

Summary for Subcatchment 14S: Site

[47] Hint: Peak is 203% of capacity of segment #4

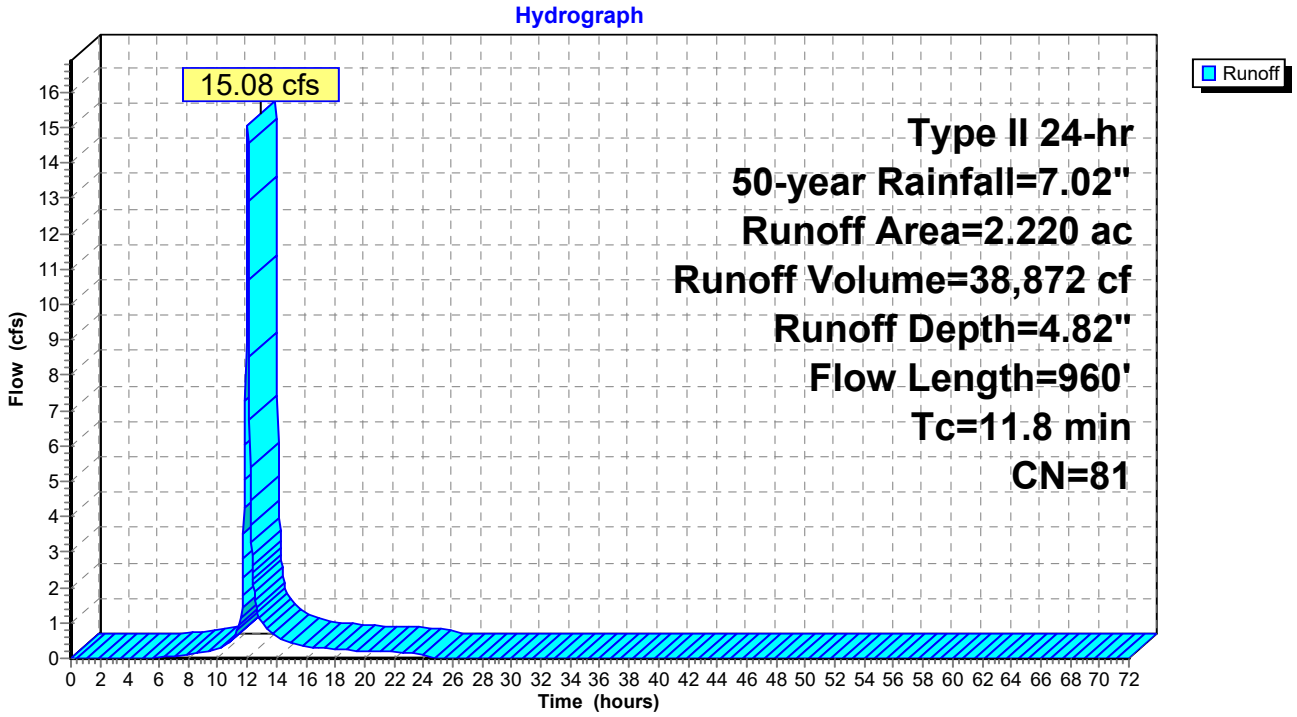
Runoff = 15.08 cfs @ 12.03 hrs, Volume= 38,872 cf, Depth= 4.82"
Routed to Pond 10FP : FocalPoint 10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 50-year Rainfall=7.02"

Area (ac)	CN	Description
0.610	49	50-75% Grass cover, Fair, HSG A
0.070	69	50-75% Grass cover, Fair, HSG B
0.110	36	Woods, Fair, HSG A
1.430	98	Paved parking, HSG A
2.220	81	Weighted Average
0.790		35.59% Pervious Area
1.430		64.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	69	0.0140	0.14		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
0.1	28	0.2860	8.61		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
1.2	165	0.0220	2.39		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.3	78	0.0050	4.20	7.43	**Pipe Channel,** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013
2.0	620	0.0160	5.21	15.63	**Channel Flow,** Area= 3.0 sf Perim= 6.3' r= 0.48' n= 0.022 Earth, clean & straight
11.8	960	Total			

Subcatchment 14S: Site



Summary for Subcatchment 15S: Bypass

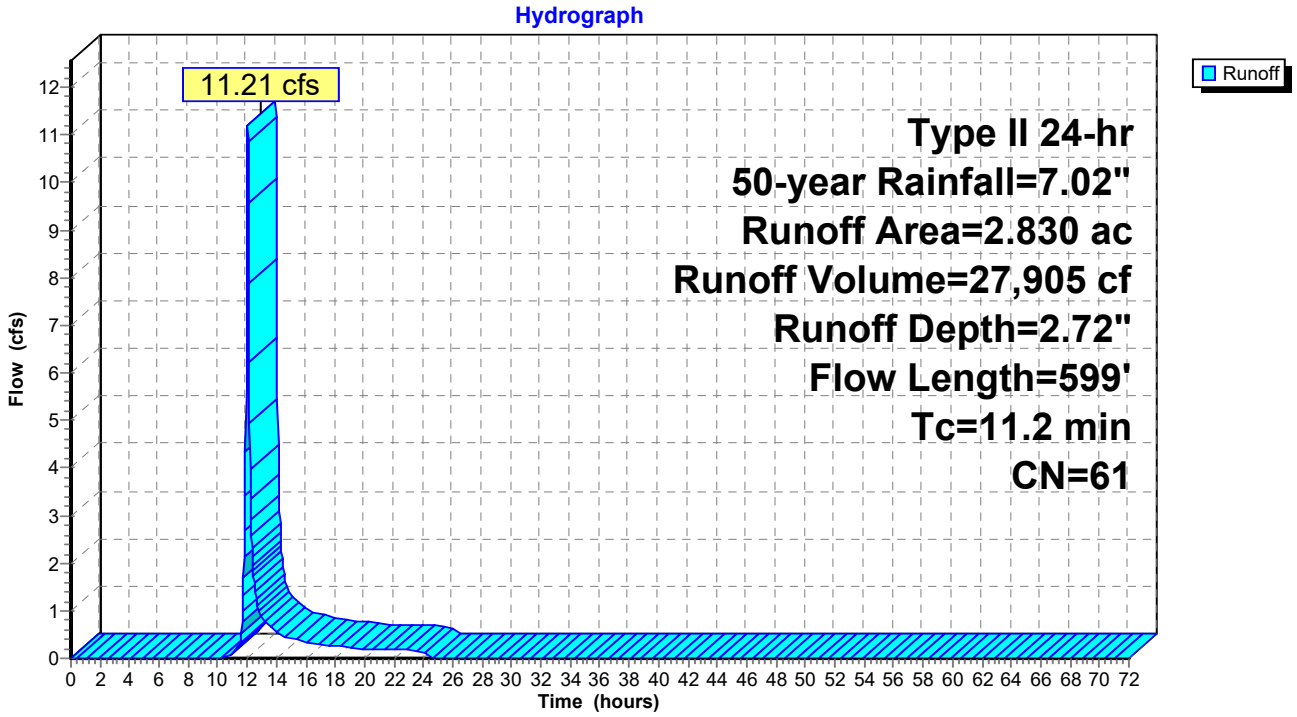
Runoff = 11.21 cfs @ 12.04 hrs, Volume= 27,905 cf, Depth= 2.72"
Routed to Link 6L : Outfall #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 50-year Rainfall=7.02"

Area (ac)	CN	Description
2.010	49	50-75% Grass cover, Fair, HSG A
0.110	36	Woods, Fair, HSG A
0.710	98	Paved parking, HSG A
2.830	61	Weighted Average
2.120		74.91% Pervious Area
0.710		25.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.7	69	0.0120	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
2.2	434	0.0420	3.30		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.0	16	0.1562	6.36		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.3	80	0.0160	4.66	11.66	**Channel Flow,** Area= 2.5 sf Perim= 6.2' r= 0.40' n= 0.022 Earth, clean & straight
11.2	599	Total			

Subcatchment 15S: Bypass



Summary for Pond 10DP: Detention Pond 3

[44] Hint: Outlet device #2 is below defined storage
[81] Warning: Exceeded Pond 10FP by 0.50' @ 12.42 hrs

Inflow Area = 96,703 sf, 64.41% Impervious, Inflow Depth = 4.74" for 50-year event
Inflow = 15.24 cfs @ 12.03 hrs, Volume= 38,186 cf
Outflow = 4.05 cfs @ 12.28 hrs, Volume= 38,186 cf, Atten= 73%, Lag= 14.8 min
Primary = 4.05 cfs @ 12.28 hrs, Volume= 38,186 cf
Routed to Link 6L : Outfall #3

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 700.25' @ 12.28 hrs Surf.Area= 7,700 sf Storage= 15,516 cf

Plug-Flow detention time= 128.8 min calculated for 38,171 cf (100% of inflow)
Center-of-Mass det. time= 128.7 min (944.3 - 815.5)

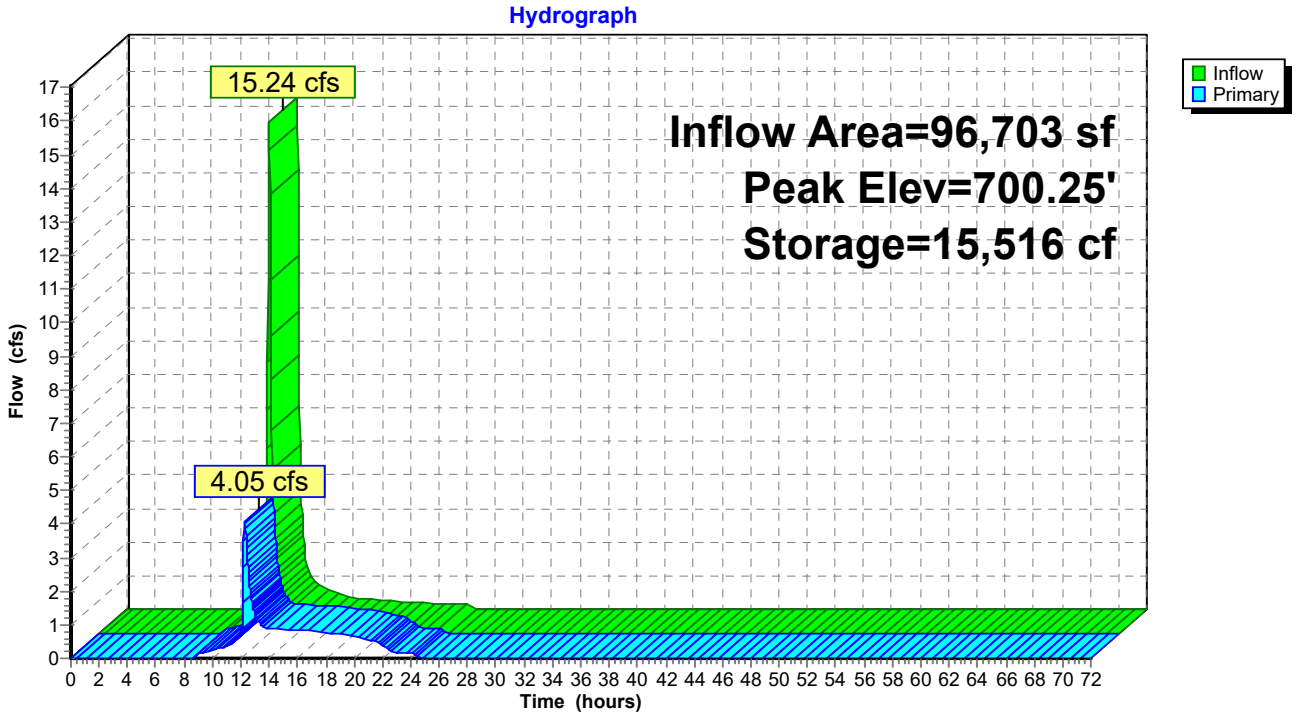
Volume	Invert	Avail.Storage	Storage Description
#1	695.44'	22,040 cf	**Custom Stage Data (Prismatic)** Listed below

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.44	0	0	0
696.00	292	82	82
697.00	1,309	801	882
698.00	2,953	2,131	3,013
699.00	5,510	4,232	7,245
700.00	6,790	6,150	13,395
701.00	10,501	8,646	22,040

Device	Routing	Invert	Outlet Devices
#1	Primary	695.33'	**18.0" Round Culvert** L= 64.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 695.33' / 695.00' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	695.33'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	700.00'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Primary	700.50'	**6.0' long x 9.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.46 2.55 2.70 2.69 2.68 2.68 2.67 2.64 2.64 2.64 2.65 2.64 2.65 2.65 2.66 2.67 2.69

Primary OutFlow Max=4.02 cfs @ 12.28 hrs HW=700.24' TW=565.00' (Fixed TW Elev= 565.00')
- **1=Culvert** (Passes 4.02 cfs of 16.79 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.92 cfs @ 10.49 fps)
  - **3=Orifice/Grate** (Weir Controls 3.10 cfs @ 1.62 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 10DP: Detention Pond 3



Summary for Pond 10FP: FocalPoint 10

[92] Warning: Device #3 is above defined storage
[93] Warning: Storage range exceeded by 0.07'
[88] Warning: Qout>Qin may require smaller dt or Finer Routing

Inflow Area = 96,703 sf, 64.41% Impervious, Inflow Depth = 4.82" for 50-year event
Inflow = 15.08 cfs @ 12.03 hrs, Volume= 38,872 cf
Outflow = 15.24 cfs @ 12.03 hrs, Volume= 38,186 cf, Atten= 0%, Lag= 0.0 min
Primary = 15.24 cfs @ 12.03 hrs, Volume= 38,186 cf
Routed to Pond 10DP : Detention Pond 3

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 700.07' @ 12.03 hrs Surf.Area= 1,373 sf Storage= 1,266 cf

Plug-Flow detention time= 18.7 min calculated for 38,171 cf (98% of inflow)
Center-of-Mass det. time= 7.8 min (815.5 - 807.7)

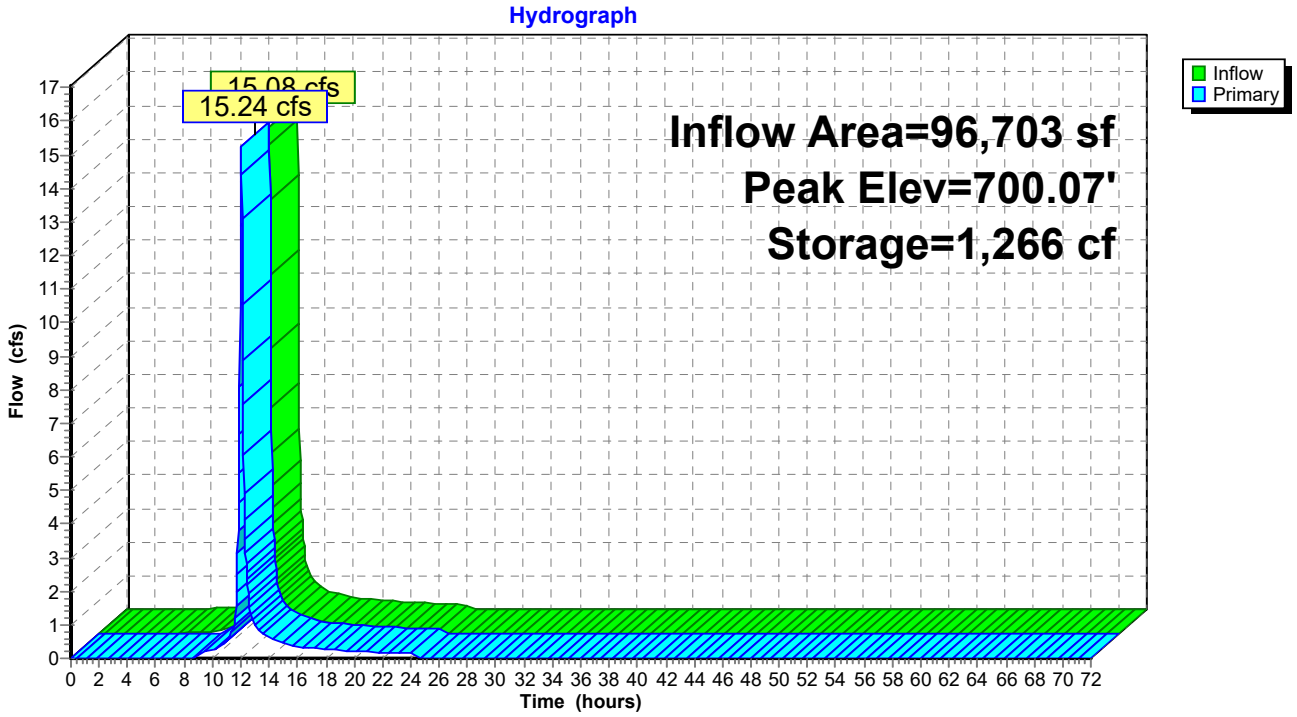
Volume	Invert	Avail.Storage	Storage Description
#1	696.00'	1,266 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
696.00	527	0.0	0	0
699.00	527	20.0	316	316
700.00	1,373	100.0	950	1,266

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 23.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 695.88' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**103.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=15.05 cfs @ 12.03 hrs HW=700.07' (Free Discharge)
└**1=Culvert** (Passes 10.93 cfs of 15.49 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 10.93 cfs @ 2.46 fps)
└**3=Broad-Crested Rectangular Weir** (Weir Controls 4.12 cfs @ 0.61 fps)

Pond 10FP: FocalPoint 10

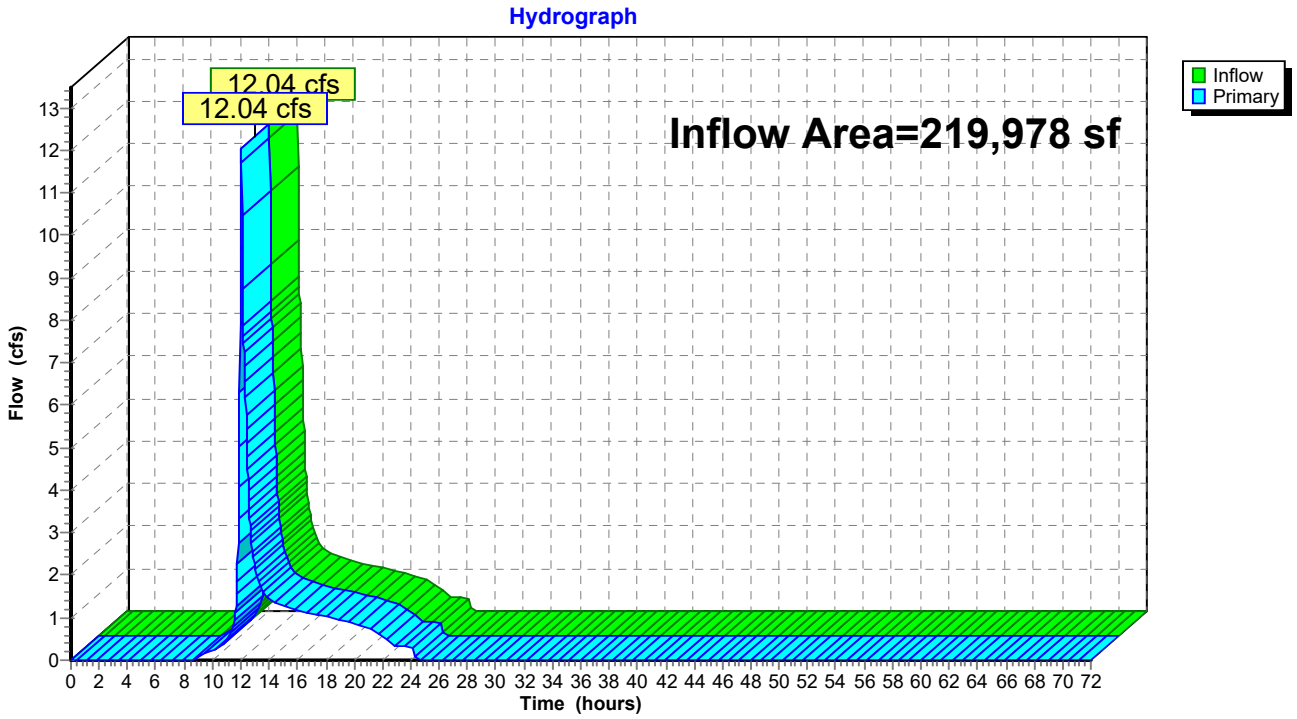


Summary for Link 6L: Outfall #3

Inflow Area = 219,978 sf, 42.38% Impervious, Inflow Depth = 3.61" for 50-year event
Inflow = 12.04 cfs @ 12.04 hrs, Volume= 66,092 cf
Primary = 12.04 cfs @ 12.04 hrs, Volume= 66,092 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs

Link 6L: Outfall #3



Time span=0.00-72.00 hrs, dt=0.03 hrs, 2401 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment14S: Site Runoff Area=2.220 ac 64.41% Impervious Runoff Depth=5.53"
Flow Length=960' Tc=11.8 min CN=81 Runoff=17.17 cfs 44,528 cf

Subcatchment15S: Bypass Runoff Area=2.830 ac 25.09% Impervious Runoff Depth=3.27"
Flow Length=599' Tc=11.2 min CN=61 Runoff=13.57 cfs 33,596 cf

Pond 10DP: Detention Pond 3 Peak Elev=700.37' Storage=16,568 cf Inflow=17.13 cfs 43,843 cf
Outflow=6.65 cfs 43,843 cf

Pond 10FP: FocalPoint 10 Peak Elev=700.08' Storage=1,266 cf Inflow=17.17 cfs 44,528 cf
Outflow=17.13 cfs 43,843 cf

Link 6L: Outfall #3 Inflow=14.43 cfs 77,438 cf
Primary=14.43 cfs 77,438 cf

Total Runoff Area = 219,978 sf Runoff Volume = 78,124 cf Average Runoff Depth = 4.26"
57.62% Pervious = 126,760 sf 42.38% Impervious = 93,218 sf

Summary for Subcatchment 14S: Site

[47] Hint: Peak is 231% of capacity of segment #4
[47] Hint: Peak is 110% of capacity of segment #5

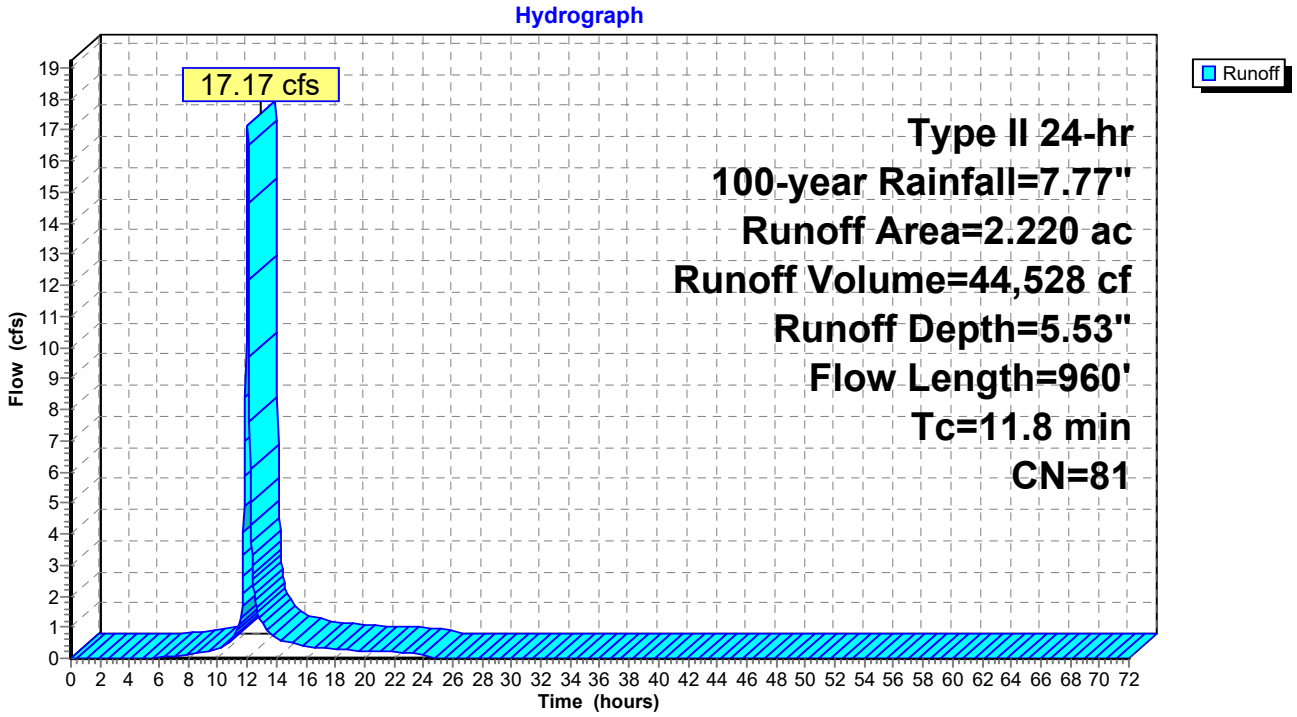
Runoff = 17.17 cfs @ 12.03 hrs, Volume= 44,528 cf, Depth= 5.53"
Routed to Pond 10FP : FocalPoint 10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 100-year Rainfall=7.77"

Area (ac)	CN	Description
0.610	49	50-75% Grass cover, Fair, HSG A
0.070	69	50-75% Grass cover, Fair, HSG B
0.110	36	Woods, Fair, HSG A
1.430	98	Paved parking, HSG A
2.220	81	Weighted Average
0.790		35.59% Pervious Area
1.430		64.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.2	69	0.0140	0.14		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
0.1	28	0.2860	8.61		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
1.2	165	0.0220	2.39		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.3	78	0.0050	4.20	7.43	**Pipe Channel,** 18.0" Round Area= 1.8 sf Perim= 4.7' r= 0.38' n= 0.013
2.0	620	0.0160	5.21	15.63	**Channel Flow,** Area= 3.0 sf Perim= 6.3' r= 0.48' n= 0.022 Earth, clean & straight
11.8	960	Total			

Subcatchment 14S: Site



Summary for Subcatchment 15S: Bypass

[47] Hint: Peak is 116% of capacity of segment #4

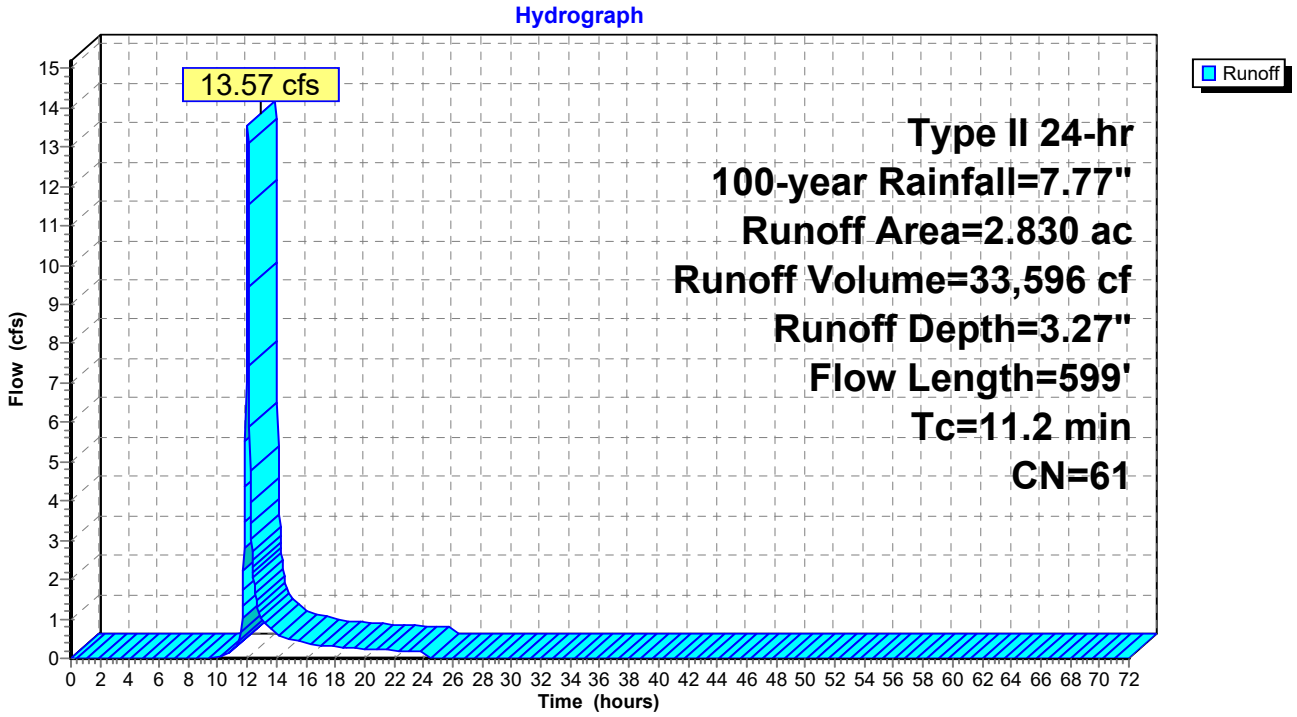
Runoff = 13.57 cfs @ 12.03 hrs, Volume= 33,596 cf, Depth= 3.27"
Routed to Link 6L : Outfall #3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Type II 24-hr 100-year Rainfall=7.77"

Area (ac)	CN	Description
2.010	49	50-75% Grass cover, Fair, HSG A
0.110	36	Woods, Fair, HSG A
0.710	98	Paved parking, HSG A
2.830	61	Weighted Average
2.120		74.91% Pervious Area
0.710		25.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.7	69	0.0120	0.13		**Sheet Flow,** Grass: Short n= 0.150 P2= 3.39"
2.2	434	0.0420	3.30		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.0	16	0.1562	6.36		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.3	80	0.0160	4.66	11.66	**Channel Flow,** Area= 2.5 sf Perim= 6.2' r= 0.40' n= 0.022 Earth, clean & straight
11.2	599	Total			

Subcatchment 15S: Bypass



Summary for Pond 10DP: Detention Pond 3

[44] Hint: Outlet device #2 is below defined storage
[81] Warning: Exceeded Pond 10FP by 0.54' @ 12.33 hrs

Inflow Area = 96,703 sf, 64.41% Impervious, Inflow Depth = 5.44" for 100-year event
Inflow = 17.13 cfs @ 12.06 hrs, Volume= 43,843 cf
Outflow = 6.65 cfs @ 12.22 hrs, Volume= 43,843 cf, Atten= 61%, Lag= 9.5 min
Primary = 6.65 cfs @ 12.22 hrs, Volume= 43,843 cf
Routed to Link 6L : Outfall #3

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 700.37' @ 12.22 hrs Surf.Area= 8,152 sf Storage= 16,568 cf

Plug-Flow detention time= 121.3 min calculated for 43,825 cf (100% of inflow)
Center-of-Mass det. time= 121.3 min (932.5 - 811.2)

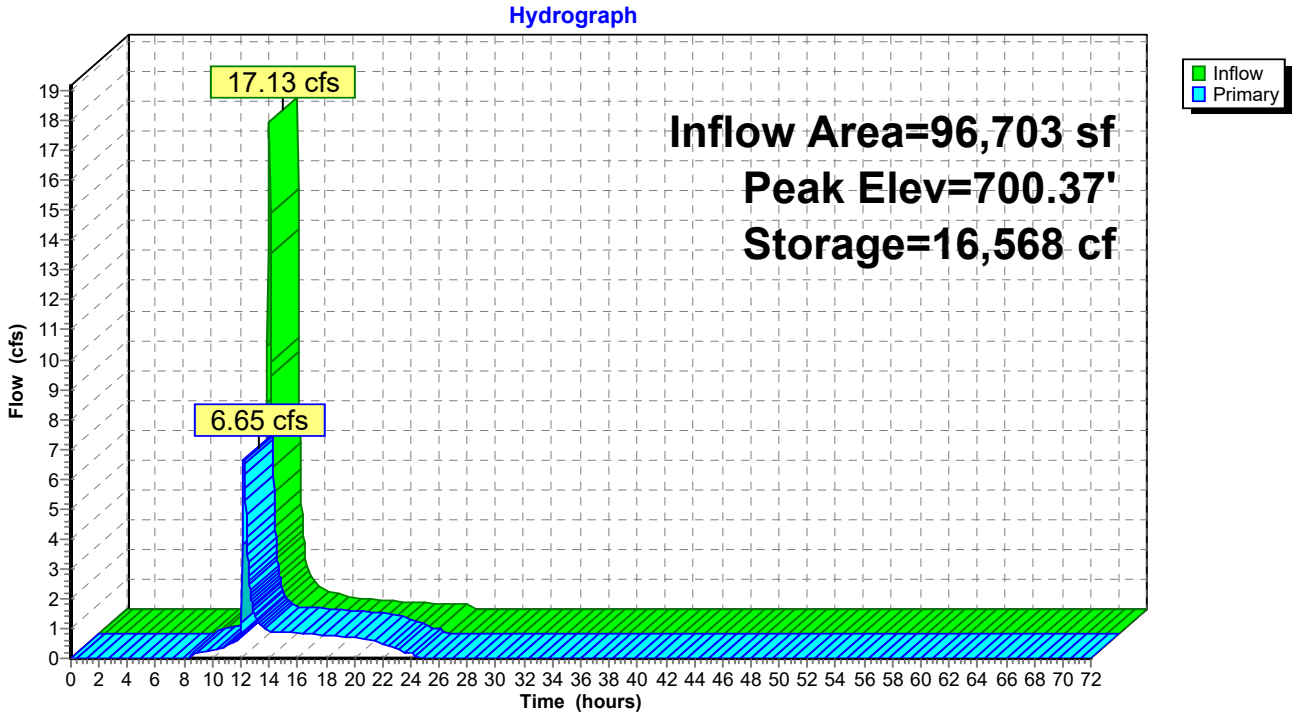
Volume	Invert	Avail.Storage	Storage Description
#1	695.44'	22,040 cf	**Custom Stage Data (Prismatic)** Listed below

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
695.44	0	0	0
696.00	292	82	82
697.00	1,309	801	882
698.00	2,953	2,131	3,013
699.00	5,510	4,232	7,245
700.00	6,790	6,150	13,395
701.00	10,501	8,646	22,040

Device	Routing	Invert	Outlet Devices
#1	Primary	695.33'	**18.0" Round Culvert** L= 64.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 695.33' / 695.00' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	695.33'	**4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	700.00'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Primary	700.50'	**6.0' long x 9.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.46 2.55 2.70 2.69 2.68 2.68 2.67 2.64 2.64 2.64 2.65 2.64 2.65 2.65 2.66 2.67 2.69

Primary OutFlow Max=6.59 cfs @ 12.22 hrs HW=700.37' TW=565.00' (Fixed TW Elev= 565.00')
- **1=Culvert** (Passes 6.59 cfs of 17.06 cfs potential flow)
  - **2=Orifice/Grate** (Orifice Controls 0.93 cfs @ 10.62 fps)
  - **3=Orifice/Grate** (Weir Controls 5.66 cfs @ 1.98 fps)
- **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 10DP: Detention Pond 3



Summary for Pond 10FP: FocalPoint 10

[92] Warning: Device #3 is above defined storage
[93] Warning: Storage range exceeded by 0.08'

Inflow Area = 96,703 sf, 64.41% Impervious, Inflow Depth = 5.53" for 100-year event
Inflow = 17.17 cfs @ 12.03 hrs, Volume= 44,528 cf
Outflow = 17.13 cfs @ 12.06 hrs, Volume= 43,843 cf, Atten= 0%, Lag= 1.7 min
Primary = 17.13 cfs @ 12.06 hrs, Volume= 43,843 cf
Routed to Pond 10DP : Detention Pond 3

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs
Peak Elev= 700.08' @ 12.06 hrs Surf.Area= 1,373 sf Storage= 1,266 cf

Plug-Flow detention time= 17.0 min calculated for 43,825 cf (98% of inflow)
Center-of-Mass det. time= 7.4 min (811.2 - 803.9)

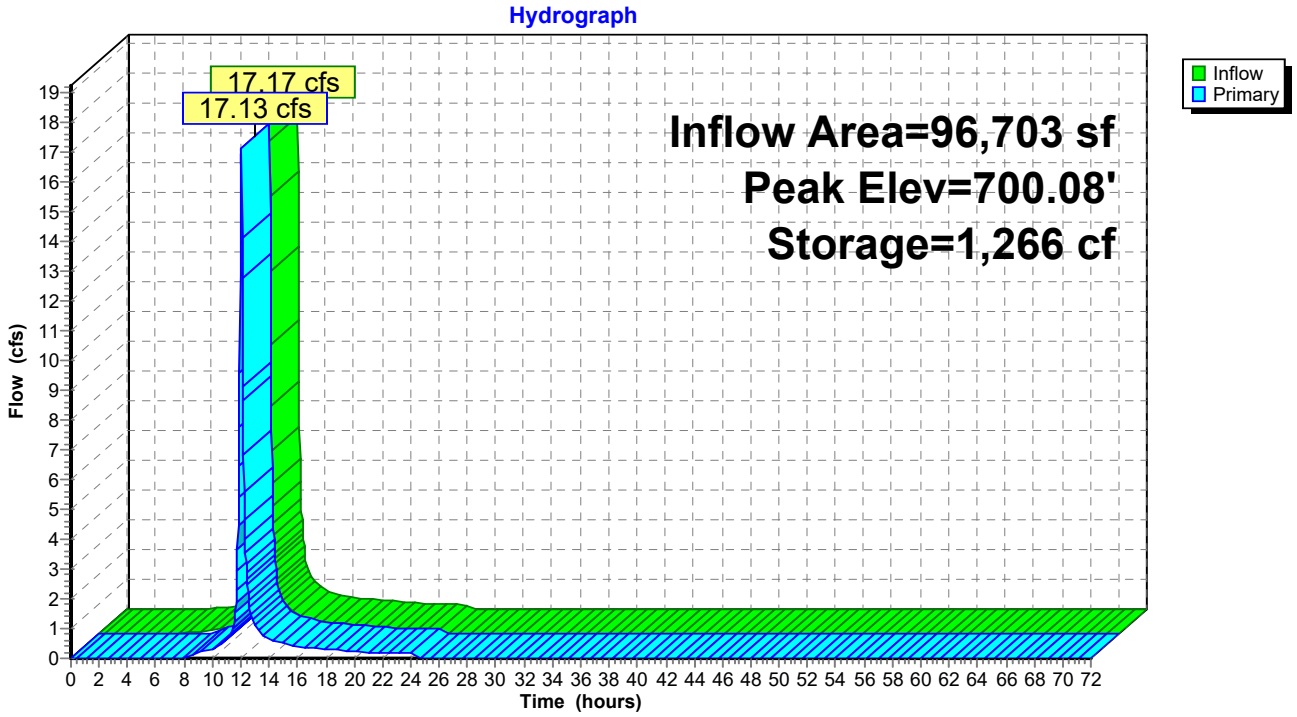
Volume	Invert	Avail.Storage	Storage Description
#1	696.00'	1,266 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
696.00	527	0.0	0	0
699.00	527	20.0	316	316
700.00	1,373	100.0	950	1,266

Device	Routing	Invert	Outlet Devices
#1	Primary	696.00'	**18.0" Round Culvert** L= 23.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 696.00' / 695.88' S= 0.0052 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Device 1	699.50'	**30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	700.00'	**103.0' long x 6.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Primary OutFlow Max=17.11 cfs @ 12.06 hrs HW=700.08' (Free Discharge)
└**1=Culvert** (Passes 11.40 cfs of 15.53 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 11.40 cfs @ 2.49 fps)
└**3=Broad-Crested Rectangular Weir** (Weir Controls 5.71 cfs @ 0.68 fps)

Pond 10FP: FocalPoint 10

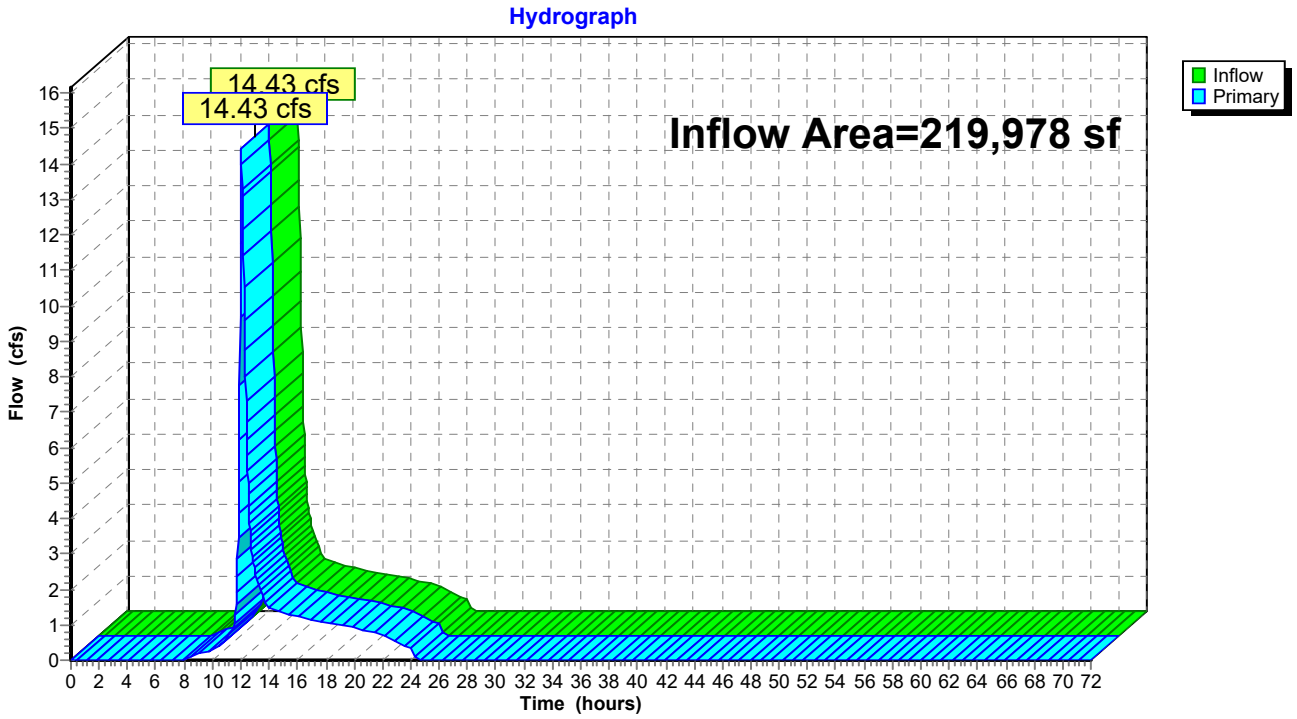


Summary for Link 6L: Outfall #3

Inflow Area = 219,978 sf, 42.38% Impervious, Inflow Depth = 4.22" for 100-year event
Inflow = 14.43 cfs @ 12.03 hrs, Volume= 77,438 cf
Primary = 14.43 cfs @ 12.03 hrs, Volume= 77,438 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.03 hrs

Link 6L: Outfall #3



USDA Web Soil Survey

Map—Hydrologic Soil Group (Morning Pointe - Columbia)



Map Scale: 1:3,570 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

Table—Hydrologic Soil Group (Morning Pointe - Columbia)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Ae	Armour silt loam, eroded gently sloping phase	B	1.6	10.5%
Hp	Huntington silt loam, depressional phosphatic phase	B	0.7	4.7%
Mb	Maury silt loam, eroded gently sloping phase	A	9.6	64.3%
Me	Maury silty clay loam, eroded sloping phase	A	3.1	20.5%
Totals for Area of Interest			**15.0**	**100.0%**

Rating Options—Hydrologic Soil Group (Morning Pointe - Columbia)

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

This Instrument Prepared By
and Upon Recording Return To:
Miller & Martin PLLC (RGD)
832 Georgia Avenue, Suite 1200
Chattanooga, Tennessee 37402

Name and Address:	**Send Tax Bills For _____ Property:**	**Tax Parcel No.**
_____	_____	Part of Tax Parcel No. _____
_____	_____	
_____	_____	

Name and Address:	**Send Tax Bills For _____ Property:**	**Tax Parcel No.**
_____	_____	Part of Tax Parcel No. _____
_____	_____	
_____		

DECLARATION OF EASEMENTS

THIS DECLARATION OF EASEMENTS (the "Declaration") is made and entered into to be effective as of the _____ day of _____, 2026, by _____, a _____ ("_____ PropCo"), and _____, a _____ ("_____ Development" and with _____PropCo, collectively, the "Declarants").

W I T N E S S E T H:

WHEREAS, _____ is the owner of that certain parcel of land located in Columbia, Maury County, Tennessee containing approximately _____ acres, as more particularly described on **Exhibit "A"** attached hereto and made a part hereof (the "_____ Development Property"); and

WHEREAS, _____ is the owner of that certain parcel of land also located in Columbia, Maury County, Tennessee containing approximately _____ acres, and adjacent to the _____ Property, as more particularly described on **Exhibit "B"** attached hereto and made a part hereof (the "_____ Property"); and

WHEREAS, Declarants wish to establish certain easements for the benefit of their respective properties as such easements are more particularly set forth herein (the _____ Development Property and the _____ Property being collectively, the "Property");

NOW, THEREFORE, Declarants, as the owners of the Property, hereby agree as follows for the benefit of the Property:

A. **INCORPORATION OF RECITALS.** The foregoing recitals are incorporated herein and made a part hereof.

B. **DEFINITIONS.** The following terms shall have the following meanings as used in this Declaration:

(1) "Common Properties" shall mean and refer to those easements, facilities, properties, tracts of land (or portions thereof) and any improvements thereon which are designated by the Owners as Common Properties, or used for the benefit of the Property as a whole, and which include, without limitation, those certain areas and existing or proposed improvements designated on the Site Plan (as hereinafter defined) as common areas or Common Properties. The Common Properties may include, but shall not be limited to, streets, street lights, parks, ponds, common drainage system (and related facilities), medians, driving lanes, parking spaces, sidewalks, roadways, trails, pathways, curbs, landscaping, irrigation systems and all equipment and facilities related thereto, historic structures and markers, all benches, markers and other park type structures, items and improvements, all fountains located in any detention, retention or other ponds located on the Property, and signs (including street signs and other identification signs) constructed or installed within any of the aforementioned easements for the benefit of the Property. The term "Common Properties" shall also include any personal property acquired by the Declarants if said personal property is designated as a Common Property or otherwise used for the common benefit of the Property. Notwithstanding the foregoing, the terms of the specific easements contained herein shall control in the event of any conflict with easements related to Common Properties.

(2) "Lot" shall mean each individual tract, lot or parcel comprising the Property and identified on the Site Plan. The individual parcels are referred to herein collectively as the "Lots". A Lot may not be further subdivided without the consent of all Owners and, if consented to by all Owners, the Lots shall include the individual lots created from the approved subdivision of a Lot.

(3) "Owner" (whether such term is capitalized or not) of a Lot shall mean the record owner or owners, whether one or more persons, firms, associations, corporations, or other legal entities, of the fee simple title to such property, but, notwithstanding any applicable theory of a deed of trust or mortgage, shall not mean or refer to a beneficiary (or trustee) under a deed of trust or any mortgagee, unless and until such beneficiary or mortgagee has acquired fee simple ownership pursuant to foreclosure or deed in lieu of foreclosure, nor shall the term Owner mean or refer to any lessee or tenant of any Owner.

(4) "Site Plan" shall mean that certain Site Plan prepared for _____ by _____ dated _____, 2026, a copy of which is attached hereto as **Exhibit "C"** and made a part hereof, which Site Plan is also incorporated herein by reference. [VERIFY MOST CURRENT SITE PLAN]

(5) "Survey" shall mean the survey titled _____ prepared by _____, dated _____, 2026, a reduced copy of which is attached hereto as **Exhibit "D"** and made apart hereof, which survey is incorporated herein by reference.

C. EASEMENTS.

(1) **Temporary Construction Easements; Cooperation**. Subject to the terms and conditions set forth herein, Declarants hereby grant and convey unto to the Owners of the Lots, and their respective successors and assigns, a non-exclusive temporary construction easement and right-of-way for the benefit of each Lot (as applicable) to the extent needed in accordance with good construction practices, but only during a period of construction on the Lot (as applicable), on, over, across and through a location or locations reasonably approved by the Owner of the burdened Lot for the purposes of facilitating construction on the benefited Lot and providing a temporary means of access for construction vehicles to and from the benefited Lot and facilitating construction of such improvements thereon. Such construction activities shall be performed in such a manner as to cause as little disturbance to the use of the burdened Lot (as applicable) as is practicable under the circumstances and the benefited Owner shall diligently pursue completion of such construction activity in a timely manner and without delay. The temporary construction easements reserved unto each Owner expire upon the completion of construction of improvements on the benefited Lot.

(2) **Access Easements.**

(a) **Shared Entrance Drive and Sidewalk Easements**.

(1) The Declarants hereby grant, declare, establish and create for the benefit of the Property and each Lot a perpetual, non-exclusive easement for vehicular and pedestrian access, ingress and egress on, over and across the area in the general location of the "____" Shared Entrance Drive" (the "Shared Entrance Drive") identified and shown on the Site Plan (the "Shared Entrance Easement"). At the time commercial improvements are constructed on the _____ Property, _____ shall, at its sole cost and expense, construct the Shared Entrance Drive and curb cuts connecting _____ to the driving lanes on each Property in the locations shown on the Site Plan. Upon construction of the Shared Entrance Drive and related improvements, the Shared Entrance Easement shall apply to the area where the Shared Entrance Drive and curb cuts are actually constructed (the "Shared Entrance Easement Area"). After the initial construction and continuing thereafter, the Owner of the _____ Property shall be responsible for maintaining, repairing, restoring or replacing the driving lanes, access drives, and curb cuts within the Shared Entrance Easement Area. The Owners shall share equally all reasonable costs incurred to maintain, repair, restore or replace the driving lanes, access drives and curb cuts located within the Shared Entrance Easement Area in accordance with Section D hereof. Unless all Owners agree in writing, any repaving of the access drive located in the Shared Entrance Easement Area shall not occur more often than once every eight (8) years following the effective date of this Declaration. All capital expenses incurred in connection with the maintenance, repair and replacement of the Shared Entrance Drive and related improvements must be approved in advance by the Owners which approval shall not be unreasonably withheld, conditioned or delayed.

(2) The Declarants hereby grant, declare, establish and create for the benefit of the Property and each Lot a perpetual, non-exclusive easement for pedestrian access, ingress and egress on, over and across the areas in the general location of the shared sidewalks (the "Shared Sidewalks") identified and shown on the Site Plan (the "Shared Sidewalks Easement"). The Owner

of the _____ Property shall be responsible for constructing, maintaining, and repairing the Shared Sidewalks in accordance with Section D hereof. Upon construction of the Shared Sidewalks, the Shared Sidewalks Easement shall apply to the area where the Shared Sidewalks are actually constructed (the "Shared Sidewalks Easement Area"), and the Owners shall share equally all reasonable costs incurred to maintain, repair, restore or replace the Shared Sidewalks in accordance with Section D hereof.

(b) **Mutual Cross Access Easement**. The Declarants hereby declare and establish for the benefit of the Property and each Lot, a perpetual, non-exclusive easement for vehicular (but excluding construction vehicles and equipment which are specifically prohibited) and pedestrian access, ingress and egress on, over and across the driving lanes and sidewalks constructed on the Lots, which provide connectivity both between the Lots and to and from adjacent public or private rights-of-way and driveways, including without limitation the Shared Entrance Drive and Highland Church Road (the "Cross Access Easement"). The Cross Access Easement shall apply to the areas on each Lot where driving lanes and sidewalks are located and relocated from time to time (the "Cross Access Easement Area"). The Owners shall not materially modify or relocate driving lanes and sidewalks in a manner so as to prevent the cross access so described, without the express written consent of the other Owner. The Owner of the _____ Property shall be responsible for maintaining and repairing any access drives and sidewalks. The Owners shall share equally all reasonable costs incurred to maintain, repair, restore or replace the access drives and sidewalks. No fence or other barrier which would prevent or obstruct the passage of pedestrian or vehicular travel for the purposes herein specified shall be erected or permitted.

(c) **Common Properties**. _____ and _____ hereby establish and grant to one another a perpetual, non-exclusive reciprocal easement over, across, upon, and within all improvements and areas designated as Common Properties, together with all related accessways, utilities, and appurtenances, for purposes of vehicular and pedestrian access, circulation, parking, ingress, egress, and use consistent with the development and operation of the Owners' respective Lots. Each Owner, and its tenants, employees, invitees, agents, contractors, and successors, shall have the right to use the Common Properties located on the other Owner's Lot in a manner consistent with this Declaration and the identified intended use of the Common Properties, provided such use does not unreasonably interfere with the other Owner's use and enjoyment of its property. At the time that commercial improvements are constructed on the _____ Property, the Owner of the _____ Property shall be responsible for constructing the Common Properties as shown on the Site Plan, including all associated paving, curbing, sidewalks, lighting, landscaping, drainage, and related improvements, in compliance with applicable laws and the standards set forth in this Declaration. Upon completion, the Common Properties shall be maintained by the Owner of the _____ Property in accordance with Section D hereof, and no Owner shall obstruct, modify,

or impair the Common Properties in a manner that materially interferes with the reciprocal access rights granted herein. The Common Properties shall include, without limitation, all parking spaces identified on the Site Plan (the "Common Parking Spaces"). This reciprocal easement shall run with the land, burden and benefit each Owner's property, and inure to the benefit of the Owners and their respective successors and assigns.

(d) **Self-Help Rights**. In the event that an Owner does not maintain and repair the driving lanes, access drives, Shared Sidewalks, Common Properties, and curb cuts as provided herein in a good and proper condition as required for the use thereof, the other Owner shall have the right after thirty (30) days written notice and the failure of the Owner to make any such required maintenance and repairs within said 30-day period to enter the Property to complete all necessary maintenance and repairs as detailed in the written notice provided to the Owner. Upon completion of such maintenance and repairs, the Owner exercising this self-help right shall send written notice to the other Owner detailing such costs incurred with supporting documentation and such other Owner shall pay to the Owner its share of such sum within thirty (30) days thereafter.

(3) **Grading**. _____ hereby declares, establishes, and grants for the benefit of the _____ Property, and in favor of _____, a temporary, non-exclusive easement over, across, upon, and within that approximately ____ foot portion of the _____ Property parallel to and along the shared boundary of the _____ Property and the _____ Property shown on the Survey (the "Grading Easement Area") for the purpose of performing all grading, sloping, contouring, earthwork, soil stabilization, drainage shaping, and related activities reasonably necessary to achieve the final approved grades, elevations, and contours required for the development, use, and operation of the _____ Property. This easement includes the right of _____, its employees, agents, contractors, and assigns to enter upon the Grading Easement Area to cut, fill, remove, place, compact, or otherwise manipulate soil; install temporary or permanent erosion-control measures; construct and maintain slopes, embankments, retaining structures, and drainage improvements; and perform any other grading-related work reasonably necessary to support the structural integrity, access, drainage, and functionality of the _____ Property. _____ shall restore disturbed areas to a neat and stable condition upon completion of grading activities. _____ shall not interfere with or impair _____'s exercise of this easement and shall not alter grades within the Grading Easement Area in a manner that adversely affects the _____ Property. This grading easement shall expire upon the completion of construction of commercial improvements on the _____ Property and completion of shared improvements which _____ has the responsibility to construct pursuant to this Declaration.

(4) **Drainage Easements**. The Declarants hereby declare and establish for the benefit of the Property and each Lot, a perpetual, non-exclusive easement to connect with and to drain storm and surface waters from the _____ Property and the _____ Property to the Private Drainage Detention Area (the "Detention Area") as shown on the Site Plan

(the "Drainage Easement"). At the time that commercial improvements are constructed on the _____ Property, _____ shall, at its sole cost and expense, construct the Detention Area. Upon construction of the Detention Area and related improvements, the Drainage Easement shall apply to the area where the Detention Area is actually constructed. After construction, and pursuant to such Drainage Easement, each Owner shall have the right at its sole expense to install within an area approved in writing by the other Owner in its reasonable discretion, such lines, facilities and other improvements as may be necessary to connect to and to receive the benefit of the Drainage Easement (any such lines, facilities and other improvements installed by an Owner being collectively the "Drainage Facilities"), upon and subject to the following terms and conditions:

(a) The Owner of each Lot shall be responsible for the connection of the Drainage Facilities on such Lot to the Detention Area.

(b) All work done in completing any Drainage Facilities shall be done expeditiously and in such a manner so as not to cause undue interference with the business being conducted on the Property, so as to minimize any disruption to the other Owner's business, and so as not to interrupt or interfere with utility services to any improvements on the other Lot.

(c) After completion of the installation, repair or replacement of any of the Drainage Facilities by an Owner, such Owner shall, at such Owner's cost and expense, promptly restore all property and improvements affected thereby to the same or as good a condition as existed immediately prior to the commencement of any such work.

(d) The Owner of the _____ Property shall be solely responsible for constructing the Detention Area and maintaining and repairing, with cost sharing from the Owner of the _____ Property as provided in Section D hereof, the area of land comprising the Drainage Easement, including, without limitation, the Detention Area and all surrounding landscaping, but not any Drainage Facilities installed on the _____ Property by the Owner of the _____ Property. The cost to maintain and repair the Detention Area, including, without limitation, all landscaping, shall be shared equally by the Owners in accordance with Section D hereof. Further, any costs incurred by the Owner of the _____ Property to repair any damage to the Drainage Facilities which is caused by or is attributable to the gross negligence, misuse or willful acts of Owner of the _____ Property or such Owner's invitees, agents or contractors shall be paid in full by the Owner of _____ Property.

(e) In the event the volume of the Detention Area must be enlarged to accommodate the storm and surface water drainage from the _____ Property such enlargement must be approved by the Owner of the _____ Property and shall be completed only in accordance with the plans and specifications approved by the Owner of the

_____ Property and all costs and expenses for any such enlargement shall be the sole responsibility of the Owner of the _____ Property without contribution from the Owner of the _____ Property.

(f) The Lots shall be graded to provide positive drainage to the Detention Area, or to storm sewer lines that have been sized to receive storm water discharge. All necessary erosion control methods will be utilized to avoid siltation onto adjacent properties and into pipelines. Stockpiling of topsoil or excessive material shall be done so as not to interfere with drainage before, during or after construction. Existing drainage areas will not be altered during or after the grading sequence unless approved by the Owner of the affected Lot or Lots. Parking lot slopes shall be a minimum 1.5 percent and maximum 4 percent. All trenches and excavation near or adjacent to existing curbs, sidewalks, and pavement shall be backfilled with trench backfill material.

(5) **General Utility Easements**. The Declarants hereby declare, create, and establish for the benefit of the Property and each Lot, a perpetual, non-exclusive easement (the "Utility Easement") for the purpose of installing, connecting to, maintaining, repairing, replacing and using water, electric, gas, telephone, sewer, irrigation and other utility lines on, over, across and under portions of each Lot being (10) feet in width for each utility line so installed and being five (5) feet on either side of the center line of the utility line so installed, but only in such locations as may be approved in writing by the Owner of the burdened Lot in its reasonable discretion (each area within which a utility line are constructed and installed pursuant hereto being an "Utility Easement Area"). Once installed, a utility line shall not be relocated without the written approval of the Owner of the burdened Lot, and the Utility Easement shall apply to the area where the utility line(s) is actually installed. As part of the Utility Easement as granted hereby, each Owner shall have a right of access on, over and across so much of the other Owner's Lot within the area of the Utility Easement and on, over and across such portions of the other Owner's Lot as may be necessary for access to the respective Utility Easement Area from time to time to install, maintain, repair or replace any such utility line so installed. Upon completion of any work to install, maintain, repair or replace any such utility line, the party performing such work shall repair and restore the portion of the Property so disturbed to the condition existing immediately prior to such work. Prior to entry onto another Owner's Lot for such purposes, the Owner performing work shall coordinate such entry and work with the Owner of the burdened Lot as is reasonably necessary to avoid any disruption to the business operated on such Lot.

(6) **Signage; Sign Easement to _____**. Upon construction of improvements on the _____ Property, _____ shall construct, and thereafter shall maintain, repair, and replace (i) the monument sign located along _____ Road generally shown on the Site Plan, and any replacements thereof (the "Monument Sign"), and (ii) directional signage bordering the Shared Entrance Drive; provided, however, _____ shall be responsible for any construction of directional signage on the _____ Property during the construction of improvements thereon. _____ shall reimburse _____ for _____'s share of the reasonable costs incurred to perform sign maintenance, utilities used by signage, and the cost to insure any signage (collectively, "Sign Costs") within thirty

(30) days after receipt of an invoice therefor, which shall include reasonable supporting documentation evidencing the Sign Costs incurred. _____ hereby grants to _____ a non-exclusive, perpetual easement over, across, and upon the portions of the _____ Property shown on the Site Plan (the "Sign Easement Area") for the construction, operation, and use of the Monument Sign and the directional signage, together with all necessary access rights for _____.

D. COST SHARING.

(1) **General**. Notwithstanding any provision to the contrary in this Declaration, the Owners shall equally share all reasonable costs incurred to maintain, repair, restore or replace the driving lanes, access drives, curb cuts, Shared Entrance Drive, Shared Sidewalks, Common Properties, Monument Sign, Common Parking Spaces, and Detention Area. All such maintenance, repairs, restoration, and replacement shall be the responsibility of the Owner of the _____ Property except as otherwise set forth herein, and all such shared costs shall be paid by the Owner of the _____ Property within thirty (30) days after receipt of written demand therefor together with documentation supporting the reasonable costs so incurred. All work shall be performed in a commercially reasonable manner, consistent with good property-management practices, and at reasonable cost.

(2) **Misuse**. Notwithstanding any provision to the contrary in this Declaration, an Owner of a Lot (the "Responsible Owner") shall be solely responsible, without any cost sharing with any other Owner, to repair any damage caused by or attributable to the misuse, gross negligence or willful misconduct of the Responsible Owner, or the Responsible Owner's invitees, agents or contractors, such repairs to be completed promptly following occurrence of such damage. If the Responsible Owner does not complete any such required repair, any other Owner may exercise such remedies or self-help rights as provided in this Declaration.

E. INDEMNIFICATION AND INSURANCE.

(1) **Indemnification**. Subject to the provisions hereof, each Owner shall indemnify, defend, and save the other Owners harmless for, from and against any and all demands, liabilities, damages, expenses, causes of action, suits, claims, and judgments, including reasonable attorneys' fees and costs, arising from injury or death to person or damage to property that occurs on the indemnifying Owner's Lot. An Owner shall not be entitled to such indemnification for any damage caused to such Owner by reason of its negligence, recklessness or willful misconduct or the negligence, recklessness or willful misconduct of such Owner or its agents, servants, contractors or employees.

(2) **Liability Insurance**. Each Owner shall at all times during the term of this Declaration, maintain or cause to be maintained in full force and effect an "Occurrence Based" commercial general liability insurance policy covering its Lot, with an insurance company or companies having an A.M. Best (or equivalent) rating of A- or better, including coverage for any accident resulting in bodily injury to or the death of any person and consequential damages arising therefrom, and a comprehensive property damage insurance policy, each in an amount not less than $3,000,000, as such amount is adjusted to pursuant hereto, per occurrence and including coverage of the contractual liability contained in Section E(1) above. Each Owner shall name as additional insureds on its respective commercial general liability policy with respect to its Lot (a) the other Owners and (b)

upon receipt of written notice from an Owner, such Owner's mortgagee and any other party required by a mortgage. Each Owner shall furnish to the other Owners upon request evidence that the insurance referred to in this Section is in full force and effect. Such insurance shall provide that the same may not be canceled, reduced below the required minimum or materially amended without at least thirty (30) days prior written notice being given by the insurer to the Owners.

(3) **Property Insurance**. Each Owner shall at all times during the term of this Declaration, maintain or cause to be maintained in full force and effect a property insurance policy covering such Owner's Lot in the form of the Insurance Services Offices' ISO Property form 1030 Causes of Loss Special Form or equivalent ("Property Insurance"). All Property Insurance shall be in the amount of the full replacement cost of the insured improvements, excluding foundations and footings but including demolition costs. Each Owner shall furnish to the other Owners upon request evidence that the insurance referred to in this Section is in full force and effect.

(4) **Blanket Insurance**. Any insurance required to be carried pursuant to this Section may be carried under a policy or policies covering other liabilities and locations of an Owner; provided, however, that such policy or policies apply to the Owner's Lot required to be insured by this Section in an amount not less than the amount of insurance required to be carried by the Owner with respect thereto, pursuant to this Section which shall contain a per location endorsement.

(5) **Release and Waiver of Subrogation**. Each Owner hereby releases the other Owners from and, to the extent legally possible for it to do so on behalf of its insurer, hereby waives any liability for any loss or damage to its property located upon such Owner's Lot, which loss or damage is of the type covered by fire and extended coverage insurance described in this Section, irrespective of any negligence on the part of the indemnified Owners which may have contributed to or caused such loss. If the waiver of subrogation is not effective, each Owner covenants that it will obtain for the benefit of the indemnified Owners an express waiver of any right of subrogation which the insurer of the Owner may acquire against the indemnified Owners by virtue of the payment of any such loss covered by such insurance.

F. **ASSIGNMENT**. Each Owner may assign or delegate any or all of its responsibilities, duties, and obligations under this Declaration to a tenant or other lawful occupant of the Owner's Lot, provided that the assignment is made in writing and delivered to the other Owner. Notwithstanding the foregoing, no assignment to such a tenant or occupant shall relieve an Owner of liability for compliance with this Declaration, and the Owner shall remain jointly and severally liable with the tenant or occupant for all assigned obligations. Each Owner may enforce this Declaration against the assigning Owner, the tenant or occupant, or both, in its discretion.

G. **AMENDMENT.** This Declaration may be amended by the written amendment of the Owners of the Lots affected by any such amendment, or their respective designees, without the joinder of any other person or entity.

H. **NOTICES.** Any notices to be sent pursuant to this Declaration shall be in writing and sent to the address of the Owner to which such notice is to be sent as such address is maintained in the county tax records for the Property and shall be sent (i) hand-delivery, (ii) certified

U.S. Mail, return receipt requested, or (iii) via overnight delivery by a nationally recognized delivery service.

I. **COUNTERPARTS.** This Declaration may be executed in counterparts which when taken together shall constitute this document in its entirety.

J. **NO THIRD PARTY BENEFICIARIES.** The easements and rights created pursuant to this Declaration are for the benefit of the Owners of the Lots and their respective invitees, tenants, employees and residents and are not intended to and shall not be construed to dedicate any easements to or create any rights in favor of any other person, entity or the general public. The easements created pursuant to this Declaration shall not be maintained by the public and such maintenance obligation shall be the responsibility of the Owners pursuant to the provisions of this Declaration.

K. **TAXES.** The Owner of each Lot shall be solely responsible for paying all taxes, and assessments imposed on such Owner's Lot, including any value attributable to such Owner's Lot for the easements benefiting such Lot as created pursuant hereto.

L. **PERPETUAL EASEMENTS.** The easements created hereby are perpetual, non-exclusive easements for the benefit of the Lots and shall run with title to the Lots and shall be binding upon and inure to the benefit of the Owners of the Lots and each such Owner's successors and/or assigns.

M. **REMEDIES.** In the event an Owner fails to perform the maintenance, repair or other work required by this Declaration or fails to perform the work in accordance with the requirements of this Declaration or otherwise breaches the terms of this Declaration, the non-defaulting Owner shall have the right to correct such deficiencies or perform the work to cure the breach, and recover its reasonable out-of-pocket costs and expenses incurred to cure such deficiency or breach. Any amounts due and payable to an Owner pursuant to this Declaration shall be paid within thirty (30) days from the date the defaulting Owner is notified of the amounts due.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the parties have executed this Declaration to be effective as of the date first above written.

_____, a
_____

By: _____
Title: _____
Print Name: _____

[Acknowledgment To Be Added]

_____, a
_____

By: _____
Title: _____
Print Name: _____

[Acknowledgment To Be Added]

STATE OF TENNESSEE)
COUNTY OF _____)

AFFIDAVIT OF VALUE

The undersigned _____, a _____, hereby swears or affirms that the actual consideration for this transfer or value of the property transferred, whichever is greater, is $100.00, which amount is equal to or greater than the amount which the property transferred would command at a fair and voluntary sale.

_____, a
_____

By: _____
Title: _____
Print Name: _____

Subscribed and Sworn to before me
this ___ day of _____, 2026

_____
Notary Public
My Commission Expires: _____

[AFFIX SEAL]

EXHIBIT "A"

Property

Located in Columbia, Maury County, Tennessee:

[INSERT PLAT LEGAL DESCRIPTION]

EXHIBIT "B"

Property

Located in Columbia, Maury County, Tennessee:

[INSERT PLAT LEGAL DESCRIPTION]

EXHIBIT "C"

Site Plan

See Attached

EXHIBIT "D"

Survey

See Attached

CPWS
Columbia Power & Water Systems

201 Pickens Lane
P.O. Box 379
Columbia, TN 38402

P 931.388.4833
F 931.388.5287
www.cpws.com

October 21, 2025

Jay Fulmer, PE
Fulmer Lucas
2002 Richard Jones Rd Ste B200
Nashville, TN 37215

jay@fulmerlucas.com

Re: Rutherford Lane & Westfield Dr, being Tax Map: 112F Group: C Parcel: 3.07. Assisted living facility with 145 beds split between two buildings.

Dear Sir:

Columbia Power System has an existing power line near your proposed residential development.

We are willing to serve this development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction.

- **Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development.**

Yours truly,

COLUMBIA POWER SYSTEM

Trevor Gilmer
Power Engineering Manager

so

CITY OF COLUMBIA
TENNESSEE

WASTEWATER DEPARTMENT

23 October 2025

Jay Fulmer
Fulmer Lucas Engineering, LLC
2002 Richard Jones Rd, B200
Nashville, TN 37215

RE: Rutherford Ln Map 112 Parcel 3.07, Columbia, TN 38401; Morning Pointe 145 Bed Assisted Living Facility

Jay,

This letter serves as confirmation that the City of Columbia Wastewater Department has the available capacity to service the subject development. Any extension to the existing sewer infrastructure will be initiated by the owner/developer, reviewed by our department and approved by the State of Tennessee. The project must be advanced in accordance with local, state and federal rules, regulations and policies. Funding and construction of those improvements will remain the responsibility of the owner/developer. New customers will be required to pay all fees applicable at the time of connection. Any Final Plat approval and Dedication are both subject to installation and function, as determined by our Department. No detailed design plan for an extension of the sewer has been proposed at this time.

Donnie Boshers, Director
City of Columbia, TN
Wastewater Department

November 19, 2025

Mr. Jay Fulmer
Fulmer Lucas Engineering
2002 Richard Jones Rd., Suite B200
Nashville, TN 37215
Sent via email: jay@fulmerlucas.com

RE: Water Availability Letter Expires: 5/19/2026
Morning Pointe Assisted Living
Rutherford Lane at Westfield Drive (southwest corner)
Tax Map & Parcel 11200307000
Columbia, TN

Dear Mr. Lucas:

Columbia Power & Water Systems ("the Utility"/CPWS) is a municipal corporation authorized to provide water services in accordance with State law. CPWS has adopted rules, regulations, and standard operation procedures, prescribing the conditions under which CPWS will furnish water service. In addition, certain State laws delegate authority to the Tennessee Department of Environment and Conservation (TDEC), various Planning Commissions, and other authorities in Cities and Counties. These Cities and Counties have also adopted rules and regulations. Water service will be made available on a first-come, first-served basis, subject to the payment of all charges and fees imposed by CPWS and the approval of any and all required governmental agencies. Water service is subject to availability of all CPWS furnished equipment and materials appropriate for the development and provided the applicant complies with all rules and regulations of CPWS and conditions set out herein.

The proposed development is a 145 bed assisted living facility in two buildings. CPWS has evaluated the projected water demands for the proposed development in the water system hydraulic model. CPWS can provide water for the proposed development according to the following criteria and requirements:

- Source water capacity is vested when CPWS has provided approval to proceed to construction and appropriate Impact Fees are paid.
- The current CPWS system is only able to support a fire flow up to 750 gpm at this location until (planned) additional improvements in the Southside distribution area are completed.
    - After completion of the Southside distribution area improvements, available fire flow will be up to 1,250 gpm.

- The number and sizes of service meters assumed for this letter is based on Applicant's description of the project features. Actual meter count and sizing will be updated or verified during the Design Review phase of the Project:
    - 114,340 sf of commercial assisted living space (two buildings)
    - Assume Fire Service meter: One (1) at 6-inch
    - Assumed Commercial Service meters: Two (2) at 2-inch
    - Assumed Landscape Irrigation meter: One (1) at ¾-inch
- The above request translates to a 41 Single Family Unit (SFU) flow demand equivalent.
- Separate irrigation meters with backflow devices will be required to serve the proposed Project.
- If fire sprinkler systems are requested or required, separate fire meters with backflow devices will be required to serve the proposed Project.

All of the above requirements up to and including the meter(s) are to be constructed and paid for by the Applicant and dedicated to CPWS once complete. No construction of water infrastructure shall be initiated until final construction plans have been approved by CPWS (including TDEC approval, if required).

This Water Availability Letter will expire in six months unless vested by payment of water service fees and impact fees for the proposed project. Any request for water availability after the expiration date of this letter will be considered a new application.

Once you have received this Water Availability Letter, next steps in the process to vest water service from CPWS are as follows:

- Remit to CPWS new water service fees for plan review, TDEC coordination, and inspection as follows: $1,500 + $370 per SFU equivalent
- Applicant will prepare design drawings for review and approval by CPWS for construction of the proposed water system improvements.
    - Provide design drawings in AutoCAD and .pdf format for CPWS review of proposed development. Include design drawings for grading, drainage, roadway improvements, buried (wet and dry) utilities, water systems, and surface improvements.
    - Once CPWS approves the Construction Drawings for the proposed system improvements, Applicant will submit proposed improvements design to TDEC for review and approval (if TDEC review required).
    - CPWS will prepare hydraulic calculations and a Utility Approval Letter to accompany the plans submittal to TDEC.
- Current water service fees due prior to CPWS review of design plans are listed in the table below. *Note that payment of Water Service Fees will extend the expiration of this*

Water Availability Letter for one year, while the applicant is working with CPWS on design and review of the improvement drawings.

New Water Service Fees	SFUs	Total
$1,500 + 370 per SFU	41	**$16,670**

- Upon Construction Drawing approval by CPWS, applicant may then pay Impact Fees and Meter Fees and schedule the pre-construction meeting. Pre-construction meeting will be canceled and re-scheduled unless all impact fees are paid at least 48 hours prior, or surety is provided in lieu of full payment.
- Water meters will be ordered by CPWS once meter fees are paid by the Applicant.
    - Meter fees are subject to change based on final design and the prevailing Board-approved rates at time of payment.
    - If surety is provided in lieu of payment, meters are not ordered until fees are paid and may result in extended lead-times.
- Applicants will be charged Impact Fees and Meter Fees in effect at time of payment. Please see CPWS website for schedule of impact fees and timing of planned fee escalations. Anticipated meter costs and impact fees for this project are according to the following table:

Impact Fees and Meter Costs	Number	$ / Unit	Total
¾" Landscape Irrigation Meter Cost	1	$540	$540
2" Service Meter Cost	2	Current Price	Deferred
6" Fire Meter Cost	1	Current Price	Deferred
Current Impact Fee for ¾" Service Meter	1	$5,500	$5,500
Current Impact Fee for 2" Service Meter	2	$30,000	$60,000
Estimate of Fees Due Prior to Pre-Construction Meeting =			**$66,040**

- After the pre-construction meeting, CPWS will then issue a formal Notice to Proceed.
- Applicant is required to construct all public water infrastructure per CPWS standard specifications and provide CPWS personnel unregulated access to the site to inspect the construction of the water infrastructure.
- No construction of water improvements may take place prior to the Notice to Proceed or without a CPWS inspector present.

Please feel free to contact me at 931-388-4833 x7655 or Matt.Wheeler@cpws.com if you have questions or would like to discuss.

Sincerely,



Matthew J. Wheeler, P.E.
Vice President of Water Resources, CPWS

cc: Franklin Farrow, Morning Pointe
Bart Anderson, CPWS
File 25-036

FULMER LUCAS

MEMORANDUM

To: City of Columbia Planning Department
From: Jay Fulmer, PE
Date: November 17, 2025
Subject: Morning Pointe – Master Plan Application
Project Description

A master plan for approximately 9.3 acres of the greater tract along the western side of Rutherford Lane between Westfield Drive and Trotwood Avenue is being submitted to allow an assisted living and memory care campus within the existing PUD zoning.

The project is intended to include two buildings constructed in two phases. The property will ultimately be subdivided for each building to be on its own parcel for operational purposes.

The first building is approximately 62,600 square feet and contains 77 units (83 beds). The building will serve both assisted living and memory care purposes. The second building is approximately 48,400 square feet and contains 60 units (68 beds). Upon completion of building 2, the memory care patients from building 1 will be transferred to building 2 so each building can function independently.

The parking proposed is based on operational needs from existing facilities as well as staffing projections. The central parking lot will be constructed with the first building.

Morning Pointe is the owner and operator of the campus, and they have an established facility within the City of Columbia. This campus is intended to support the growing population of those in need of assisted living and memory care facilities.

Please send any further questions or comments to jay@fulmerlucas.com.

Jay Fulmer

CITY OF COLUMBIA TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

Preliminary Plat, Site Development Plan, and PUD Checklist

Development: Morning Pointe

This checklist shall be completed, and included with the submittal documents. If the submittal does not contain a completed checklist, it shall be deemed incomplete. All below listed items shall be included in the submittal documents and plans, as well as any further information required by the City of Columbia to evaluate compliance and to perform a full and complete review. See Zoning Ordinance Article 8 and Subdivision Regulations.

General

- ☒ Name of development
- ☒ Contact info for the owner and licensed design professional(s) preparing plan: name, address, email, phone
- ☒ Plan sealed by a design professional licensed in the State of Tennessee.
- ☒ North Arrow, legend, and site vicinity map
- ☒ Graphic Scale: between 1 in. = 10 ft. and 1 in. =100 ft.
- ☒ Survey stamped by a State of Tennessee Licensed Professional Land Surveyor, with all project boundaries including bearings and angles to the nearest hundredth, utilities, and existing streets and rights-of-way.
- ☒ Note referencing Tennessee State Plane Coordinate System, NAD 83 Datum
- ☒ All property boundaries, existing easements, and encumbrances
- ☒ Parcel identification, owner, and deed and plat references of adjoining properties
- ☒ Proposed phasing and timetable for all phases of development

N/A ☐ x Traffic Impact Study, as required. Less than 75 peak hour trips (approximately 38)

- ☒ The substance of all existing and proposed covenants, easements, or other restrictions.
  Draft easement is included for your reference. Proposed easements will likely be recorded via the Final Plat.
  If easements are not recorded via Final Plat, they will be recorded via instrument with this document.

Lots and Land-Use

- ☒ The size of total property to be developed in square feet and acres
- ☒ Lot numbers of all proposed lots, with dimensions, locations, and square footage
- ☒ A tabulation of the land area to be devoted to various uses and activities and overall densities.

N/A ☐ Typical lot layout depicting proposed setbacks, yards, and easements, where applicable

Structures

- ☒ Location and approximate dimensions of all existing and proposed structures.
- ☒ Location of all earth retaining structures, with approximate top and bottom of wall elevations.
- ☒ Existing and intended use of all buildings and structures on site, including the number of dwelling units and density, where applicable
- ☒ Location, type, and size of proposed signs
- ☒ Approximate height, bulk, and the utilization of structures including activities and the number of living units.

CITY OF COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

Grading, Drainage, and Storm

- ☒ Existing conditions and contours at vertical intervals of not more than two (2) feet
- ☒ General proposed contours at vertical intervals of not more than two (2) feet
- ☒ FEMA Special Flood Hazard Area (SFHA), 100-year Floodplain (F-P), and Floodway (F-W) boundaries with elevations and the exact location of the nearest benchmark. Indicate the Flood Insurance Rate Map (FIRM) panel number, its effective date, and flood insurance zones
- N/A ❑ Location and dimension of aquatic buffer zones
- ☒ General layout of the proposed storm drainage system including surface and subsurface drainage systems, areas for detention, and water quality devices.
- N/A ❑ Identification of all critical lots

Streets, Parking, and Pedestrian Elements

- N/A ❑ Proposed street and alley rights-of-way, typical sections, widths, classification, names, and proposed ownership and maintenance responsibility
- ☒ Proposed connections to existing and proposed streets (including classification) located outside the development
- N/A ❑ Proposed improvements as identified in the Traffic Impact Study, as required
- ☒ Existing and proposed sidewalks, trails, and other pedestrian elements
- ☒ Existing and proposed on-street and off-street parking and loading areas
- ☒ Summary of all provided and required parking

Landscaping, Open Space, and Amenities

- ☒ Natural features on site including, but not limited to, wetlands, streams, ponds, springs, sinkholes, wells, rock outcroppings, excessive slopes, and forested areas
- ☒ Landscaped areas and buffers with details on proposed plantings, existing vegetation, and other features.
- N/A ❑ The location and size of all common open space, parkland dedications, and dedications and reservations of land for public uses.
- ☒ Any amenity features and structures for private or public benefit.
- ☒ Location, dimension, and materials of fences and walls
- ☒ Tree Canopy retention

Utilities

- ☒ General layout and location of existing and proposed utilities and utility features including, but not limited to potable water, fire hydrants, sanitary sewer, storm sewer, and power and communication facilities.
- ☒ Acknowledgement from water, sewer, and power utility providers that the proposed development may be adequately served with existing infrastructure, or if improvements are required to adequately serve the development, a general statement of the improvements.

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PUD Specific Items

- ☒ List of all deviations from PUD Standards requested
- ☒ The nature of the landholder's interest in the land proposed to be developed and a written statement of concurrence from all parties having a beneficial interest in the affected property.
- ☒ Location and approximate dimensions of all existing and proposed structures including approximate height, bulk, and the utilization of structures including activities and the number of living units. Include architectural renderings of all proposed structures with materials listed.
- ☒ The substance of covenants, grants of easements or other restrictions to be imposed upon the use of the land, buildings and structures including proposed easements for public utilities on the property or documentation of off-site easements.
- ☒ Exterior lighting plan.

If the application is deemed incomplete by the Zoning Administrator, a written request shall be made within ten days after the original submittal, for further information. In such case the application shall be held in abeyance until deemed complete for final review. No plan shall be formally presented for Planning Commission action until such plan is found complete, compliant with City standards, and ready for review.

Checklist Completed By:

Jason Morelock		04/20/2026
Print Name	Signature	Date

Jay Fulmer

From: Andy Crichton <acrichton@athensins.com>
Sent: Tuesday, November 11, 2025 3:57 PM
To: Franklin Farrow
Cc: Jay Fulmer; 'Chae Hart-Whitworth'
Subject: Property on Rutherford Lane

November, 11th 2025

City Of Columbia
Development Services
700 North Garden Street
Columbia, TN 38401

To Whom It May Concern:

CBP, LLC the Crichton brothers currently own property fronting on Rutherford Lane. Approximately 9 acres of the property is being sold to the principals of Morning Pointe Senior Living Greg Vital and Franklin Farrow.
Moring Pointe had been a provider of assisted living services in Columbia for the past 20+ years and is seeking to expand their services at this new wonderful location.

Vital and Farrow are the owners and co-founders of Morning Pointe which is a Tennessee base senior living company with 27 years of experience in this sector. CBP, LLC the Crichton brothers are pleased to sell this
property once approvals are all received.

Kind Regards,

Andy Crichton, *Agent ~ CBP, LLC Managaing Member*
Columbia, TN 38401
Office: 931.398.5533
Cell: 615.714.2452
www.athensins.com

FULMER LUCAS

April 20, 2026

Mr. Austin Brass, AICP
CITY OF COLUMBIA
Development Services Department
700 N Garden Street
Columbia, TN 38401

Re: Morning Pointe Final PUD Master Plan Submittal

Dear Austin,

Fulmer Lucas Engineering, LLC, on behalf of Morning Pointe Senior Living, respectfully submits the following items for your review:

- Planning Commission Project Development Application
- Preliminary Plat, Site Development Plan, and PUD Checklist
- Owner Agent Authorization and Acknowledgement
- Power, Sewer and Water Will Serve Letters
- Declaration of Easements (Draft)
- Pre-Application Meeting (Receipt)
- Pre-Application Meeting Summary
- Project Description
- Drainage Report
- One (1) folded 24" x 36" hard copy of Site Plans
- Final Development plan (PUD-MU): $300.00 (to be paid upon confirmation of fee amount by City)

This request is for a Final PUD Master Plan submittal to allow an assisted living and memory care campus. The Preliminary PUD Master Plan was approved by City Council st the 03/12/2026 meeting. This Final PUD Master Plan submitted does not deviate substantively from the approved Preliminary PUD Master Plan.

Please place this item on the June 10, 2026 Columbia Municipal Planning Commission agenda.

If you have any questions or require additional information, please contact me via email (jason@fulmerlucas.com) or phone (615-300-6486).

Sincerely,

Jason Morelock, PE

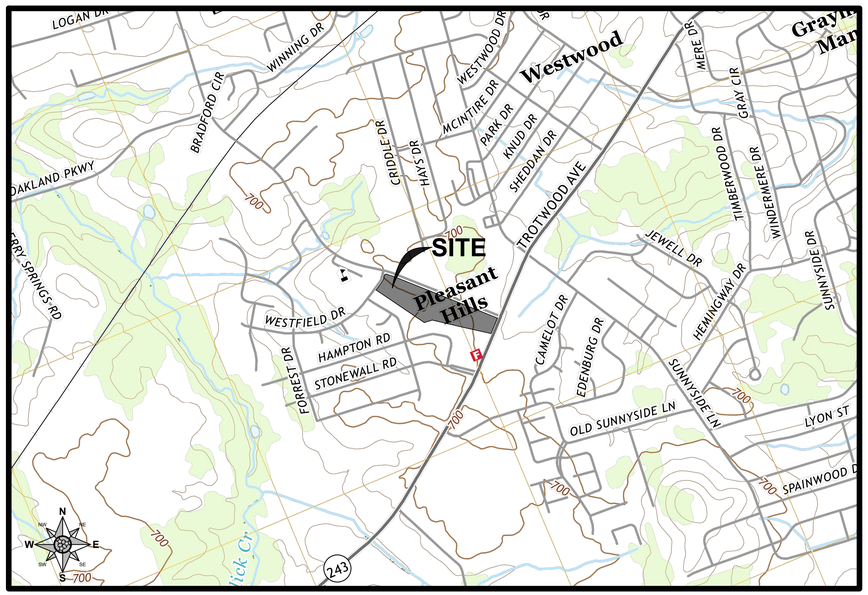
Cc: Franklin Farrow, Morning Pointe Senior Living

Enclosure

GENERAL NOTES:

1. THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION OR EARTH MOVING OPERATIONS. INFORM ENGINEER OF ANY CONFLICTS DETRIMENTAL TO THE DESIGN INTENT.
2. 72 HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES: TENNESSEE 811 AND ALL OTHER AGENCIES THAT MAY HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NON-MEMBERS OF TENNESSEE 811.
3. THE CONTRACTOR AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR COMPLYING WITH APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS, TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SUBCONTRACTORS TO INITIATE, MAINTAIN AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.
4. THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER AND OWNER'S REPRESENTATIVE FOR ANY AND ALL INJURIES AND/OR DAMAGES TO PERSONNEL, EQUIPMENT AND/OR EXISTING FACILITIES OCCURRING IN THE COURSE OF THE DEMOLITION AND CONSTRUCTION DESCRIBED IN THE PLANS AND SPECIFICATIONS.
5. CONTRACTOR SHALL OBTAIN A PERMIT FOR ALL CONSTRUCTION ACTIVITIES AND PERFORM SAID ACTIVITIES IN ACCORDANCE WITH ALL LOCAL, STATE, FEDERAL & OSHA REGULATIONS.
6. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL CODES, OBTAIN ALL APPLICABLE PERMITS, AND PAY ALL REQUIRED FEES PRIOR TO BEGINNING WORK.
7. ANY WORK PERFORMED IN THE LOCAL RIGHT OF WAYS SHALL BE IN ACCORDANCE WITH THE APPLICABLE LOCAL REQUIREMENTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE NECESSARY PERMITS FOR THE WORK, SCHEDULE NECESSARY INSPECTIONS, AND PROVIDE THE NECESSARY TRAFFIC CONTROL MEASURES AND DEVICES, ETC., FOR WORK PERFORMED IN THE RIGHT OF WAYS.
8. THE PROPOSED SITE IMPROVEMENTS WILL REQUIRE COVERAGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT AS THE TOTAL SITE DISTURBANCE IS MORE THAN 1.0 ACRE.
9. CONTRACTOR SHALL IMPLEMENT ALL SOIL AND EROSION CONTROL, PRACTICES REQUIRED BY THE CITY OF COLUMBIA AND TDEC.
10. ALL GROUND SURFACE AREAS THAT HAVE BEEN EXPOSED OR LEFT BARE AS A RESULT OF CONSTRUCTION AND ARE TO FINAL GRADE AND ARE TO REMAIN SO, SHALL BE PERMANENTLY STABILIZED AS SOON AS PRACTICAL IN ACCORDANCE WITH SPECIFICATIONS.
11. ALL WORK SHALL COMPLY WITH CITY OF COLUMBIA SPECIFICATIONS, AND ALL CONSTRUCTION WORK SHALL BE DONE ACCORDING TO SAID SPECIFICATIONS AND IN ACCORDANCE WITH APPLICABLE STANDARDS OF THE CITY OF COLUMBIA.
12. ALL WORK PERFORMED BY THE CONTRACTOR SHALL CONFORM TO THE LATEST REGULATIONS OF THE AMERICANS WITH DISABILITIES ACT.
13. CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT INFORMATION. IT IS NOT THE ENGINEER'S INTENT THAT ANY SINGLE PLAN SHEET IN THIS SET OF DOCUMENTS FULLY DEPICT ALL WORK ASSOCIATED WITH THE PROJECT.
14. BEFORE INSTALLATION OF STORM OR SANITARY SEWER, OR OTHER UTILITY THE CONTRACTOR SHALL VERIFY ALL CROSSINGS, BY EXCAVATION WHERE NECESSARY, AND INFORM THE OWNER AND THE ENGINEER OF ANY CONFLICTS. THE ENGINEER WILL BE HELD HARMLESS IN THE EVENT THEY ARE NOT NOTIFIED OF DESIGN CONFLICTS PRIOR TO CONSTRUCTION.
15. WHERE CURB IS PRESENT, DIMENSIONS ARE SHOWN TO THE FACE OF CURB, OTHERWISE DIMENSIONS ARE SHOWN TO THE EDGE OF PAVEMENT AND/OR EDGE OF BUILDING UNLESS OTHERWISE NOTED.
16. SITE SIGNAGE AND STRIPING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.).
17. CONSTRUCTION OF ALL ROADWAYS AND SIDEWALKS SHALL MEET THE REQUIREMENTS OF CITY OF COLUMBIA PUBLIC WORKS ROADWAY CONSTRUCTION CRITERIA AND STANDARD DETAILS.
18. CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH STATE DEPARTMENT OF TRANSPORTATION REGULATIONS AND AS REQUIRED BY LOCAL AGENCIES WHEN WORKING IN AND/OR ALONG STREETS, ROADS, HIGHWAYS, ETC. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN APPROVAL AND COORDINATE WITH LOCAL AND/OR STATE AGENCIES REGARDING THE NEED, EXTENT AND LIMITATIONS ASSOCIATED WITH INSTALLING AND MAINTAINING TRAFFIC CONTROL MEASURES.
19. ALL TRENCHING, PIPE LAYING AND BACKFILLING SHALL BE IN ACCORDANCE WITH ALL FEDERAL OSHA REGULATIONS. CONTRACTOR TO PAY PARTICULAR ATTENTION TO 29 CFR PART 1926, SUBPARTS M AND P.
20. BEARINGS ARE BASED ON THE TENNESSEE STATE PLANE COORDINATE SYSTEM (NAD83, 2011).
21. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88, GEOID 18). CONTOURS ARE SHOWN AT 1-FOOT INTERVALS.
22. THE PROPERTY SHOWN HEREON IS THE SAME PROPERTY AS REFERENCED IN THE FIRST AMERICAN TITLE INSURANCE COMPANY, TITLE COMMITMENT NO. NAS-1277668-NAS.
23. THE FIELD SURVEY WAS COMPLETED BY M2 GROUP, LLC ON SEPTEMBER 11, 2025.
24. THIS SURVEY WAS PREPARED USING THE TITLE COMMITMENT, AS REFERENCED HEREON, ALONG WITH CURRENT DEEDS AND PLATS OF RECORD.
25. ALL DEED BOOK AND PLAT REFERENCES PERTAIN TO THE REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE.
26. ADJOINING PROPERTY LINES SHOWN WERE PLOTTED FROM INFORMATION TAKEN FROM EITHER DEED DESCRIPTION, RECORD PLATS, OR TAX MAPS.
27. PROPERTY CORNERS SET THIS SURVEY ARE 18" #4 REBAR WITH ORANGE PLASTIC CAP STAMPED "M2 GROUP", 18" #5 REBAR WITH YELLOW PLASTIC CAP STAMPED "M2 GROUP, LLC", OR PK NAIL WITH STAINLESS STEEL WASHER STAMPED "M2 GROUP, LLC", UNLESS NOTED OTHERWISE.
28. UTILITIES SHOWN HEREON WERE COMPILED FROM VISIBLE STRUCTURES AT THE SITE, INFORMATION FROM PLANS, AND PHYSICAL MARKINGS AND COMBINED TO DEVELOP A VIEW OF THE UNDERGROUND UTILITIES. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY, AND RELIABLY DEPICTED. IN ADDITION, IN SOME JURISDICTIONS, 811 OR OTHER SIMILAR UTILITY LOCATE REQUESTS FROM SURVEYORS MAY BE IGNORED OR RESULT IN AN INCOMPLETE RESPONSE. THIS SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THIS SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. VERIFICATION OF EXISTENCE, LOCATIONS, AND DEPTH SHOULD BE MADE BEFORE CONDUCTING ANY EXCAVATION IN THE VICINITY OF THE UTILITY.
29. THE PROPERTY SHOWN HEREON IS LOCATED IN A FLOOD HAZARD ZONE "X" (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN) ACCORDING TO F.I.R.M. MAP "MAURY COUNTY, TENNESSEE" PANEL 280 OF 440, MAP NUMBER 47119C0280E, EFFECTIVE APRIL 16, 2007.
30. THE SUBJECT PROPERTY IS CURRENTLY ZONED "PUD" (PLANNED UNIT DEVELOPMENT) , BASED ON THE OFFICIAL ZONING MAP FOR CITY OF COLUMBIA, TENNESSEE. A CURRENT ZONING REPORT AN/OR ZONING LETTER HAS NOT BEEN PROVIDED TO THE SURVEYOR. THE MINIMUM BUILDING SETBACK REQUIREMENTS FOR "PUD" ZONING SHOULD BE CONFIRMED WITH THE CONTROLLING JURISDICTION.
31. THE SUBJECT PROPERTY HAS DIRECT AND CONTIGUOUS ACCESS TO RUTHERFORD LANE, A 80-FOOT PUBLIC RIGHT-OF-WAY, TROTWOOD AVENUE, A 60-FOOT PUBLIC RIGHT-OF-WAY, AND WESTFIELD DRIVE, A 50-FOOT PUBLIC RIGHT-OF-WAY.
32. THERE WAS NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS OBSERVED DURING THE COURSE OF FIELD SURVEY.
33. NO EVIDENCE OF PROPOSED CHANGES IN THE STREET RIGHT OF WAY LINES, OR OF RECENT STREET OR SIDEWALK CONSTRUCTION, OR REPAIRS, WAS OBSERVED DURING THE COURSE OF FIELD SURVEY.
34. THE SUBJECT PROPERTY SHOWN HEREON IS CONTIGUOUS ALONG ALL COMMON BOUNDARIES, WITHOUT GAP, GORE, OR OVERLAP.

PRELIMINARY PLAT FOR
MORNING POINTE
RUTHERFORD LANE @ WESTFIELD DRIVE
CITY OF COLUMBIA
MAURY COUNTY, TENNESSEE 38401
PARCEL ID: 112 00307 000
APRIL 2026



VICINITY MAP
SCALE: 1" = 1,000'
SOURCE: USGS

SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
C0.0	COVER SHEET
C1.0	OVERALL EXISTING CONDITIONS
SV-01	BOUNDARY & TOPOGRAPHIC SURVEY
C2.0	PRELIMINARY PLAT
C2.1	PRELIMINARY PLAT
C2.2	PRELIMINARY PLAT
L1.0	TREE PRESERVATION PLAN
L1.1	LANDSCAPE PLAN

SITE DATA TABLE		
ZONING	PUD/CD-4C	
TOTAL PROJECT AREA	12.86	AC
TOTAL PROJECT AREA	560,245	SF
PARKING SPACES REQUIRED	51	EA
PARKING SPACES PROVIDED	140	EA
FRONT YARD SETBACK	20' BUILD TO ZONE	LF
SIDE YARD SETBACK	10'	LF
REAR YARD SETBACK	50' RESIDENTIAL BUFFER	LF

SUBJECT PROPERTY INFORMATION

ADDRESS:	PARCEL NUMBER:	OWNER:
RUTHERFORD LANE	P/O 112 00307 000	CBP, LLC

OWNER:
CBP, LLC
700 NORTH MAIN STREET
COLUMBIA, TN 38401
CONTACT NAME: ANDY CRICHTON
PHONE NO.: 931-398-5533
EMAIL: ACRICHTON@ATHENSINC.COM

SURVEYOR:
M2 GROUP, LLC
P.O. BOX 2543
BRENTWOOD, TN 37024-2543
CONTACT NAME: STEPHEN VANDER HORST, RLS, CFS
PHONE NO.: 615-656-0257
EMAIL: STEPHEN@M2GROUPLLC.COM

DEVELOPER:
MORNING POINTE SENIOR LIVING
2050 UNION PLACE
COLUMBIA, TN 38401
CONTACT NAME: FRANKLIN FARROW
PHONE NO.: 423-322-3446
EMAIL: FFARROW@IHPLLC.COM

ARCHITECT:
NEUHOFF TAYLOR ARCHITECTS, AIA
699 DALLAS ROAD
CHATTANOOGA, TN 37405
CONTACT NAME: RANDALL TAYLOR
PHONE NO.: 423-265-3272
EMAIL: RANDALL.TAYLOR@NEUHOFFTAYLOR.COM

CIVIL ENGINEER:
FULMER LUCAS ENGINEERING, LLC
2002 RICHARD JONES ROAD - SUITE B200
NASHVILLE, TN 37215
CONTACT NAME: JASON MORELOCK
PHONE NO.: 615-516-8477
EMAIL: JASON@FULMERLUCAS.COM

811 Know what's below. Call before you dig.

SURVEY INFO
PROVIDED BY: M2 GROUP, LLC
DATUM: TENNESSEE STATE PLANE (NAD83 & NAVD 88)

FULMER LUCAS
2002 RICHARD JONES RD - SUITE B200
NASHVILLE, TENNESSEE 37215
INFO@FULMERLUCAS.COM - (615) 345-3770

PRELIMINARY PLAT FOR:
MORNING POINTE
RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401

DR.	DATE	DESCRIPTION

COVER SHEET

C0.0

1421-01 MORNING POINTE

GENERAL NOTES:

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2. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88, GEOID 18). CONTOURS ARE SHOWN AT 1-FOOT INTERVALS.
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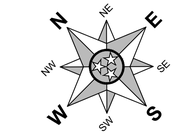
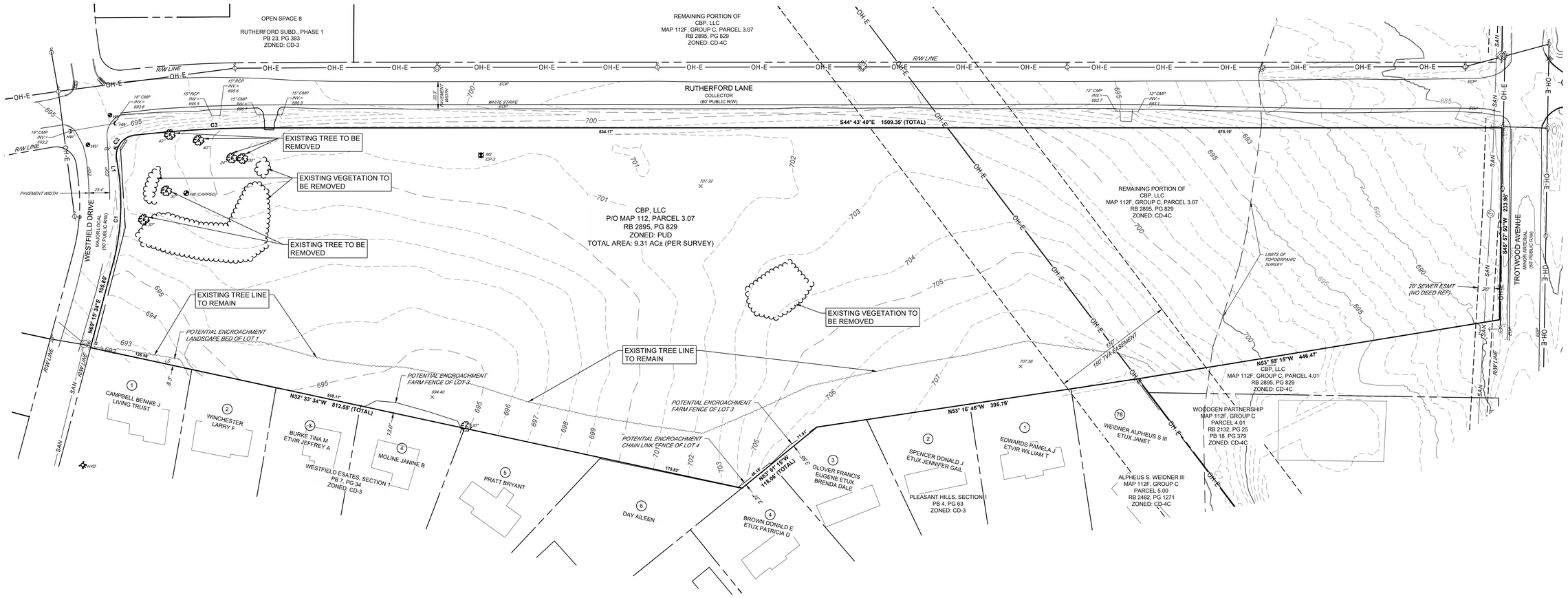
LEGEND:

EXISTING PROPERTY LINE		HB	HOSE BIB
EXISTING RIGHT-OF-WAY		S	SANITARY SEWER MANHOLE
EXISTING ADJACENT PROPERTY LINE			CURB INLET
EXISTING EASEMENT			INLET (SQUARE)
MBSL MINIMUM BUILDING SETBACK LINE		GV	GAS BOX (GAS VALVE)
700 EXISTING INDEX CONTOUR			HIGH TENSION TOWER
EXISTING INTERMEDIATE CONTOUR			POWER POLE
EXISTING FARM FENCE			GUY WIRE
EXISTING WOOD FENCE			TRAFFIC PULL BOX
EXISTING CHAIN-LINK FENCE			COMMUNICATION PEDESTAL
SAN EXISTING SANITARY SEWER LINE			FIBER OPTIC PULL BOX
W EXISTING WATER LINE			TREE, DECIDUOUS
OHE EXISTING OVERHEAD ELECTRIC		700.00	EXISTING SPOT ELEVATION
EXISTING TREELINE		(POI)	POINT OF INSERTION
IRON REBAR FOUND (IRF)		HW	HEADWALL
IRON PIPE FOUND (IPF)		LS	LANDSCAPE BED
IRON REBAR SET W/CAP (IRS)		EOP	EDGE OF PAVEMENT
BENCHMARK / SURVEY CONTROL		1	LOT NUMBER
WV WATER VALVE		EXC. #3	SCHEDULE B PART II EXCEPTION
FIRE HYDRANT			



60' 0 60' 120'
GRAPHIC SCALE



Know what's below. Call before you dig.

SURVEY INFO
PROVIDED BY: M2 GROUP, LLC
DATUM: TENNESSEE STATE PLANE (NAD83 & NAVD 88)

FULMER LUCAS
2002 RICHARD JONES RD - SUITE B200
NASHVILLE, TENNESSEE 37215
INFO@FULMERLUCAS.COM - (615) 345-3770

PRELIMINARY PLAT FOR:
MORNING POINTE
RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401

DR.	DATE	DESCRIPTION

OVERALL EXISTING CONDITIONS

C1.0

1421-01 MORNING POINTE

LEGAL DESCRIPTION (PER TITLE COMMITMENT)

THE LAND REFERRED TO HEREIN BELOW IN SITUATED IN THE COUNTY OF MAURY, STATE OF TENNESSEE, AND DESCRIBED AS FOLLOWS:

TRACT III:

PARCEL NO. 1:

BOUNDED ON THE NORTH BY L AND N RAILROAD AND RUTHERFORD LANE; EAST BY CRIDDLE MEADOWS SUBDIVISION AND DR. DAN GRAY; SOUTH BY MT. PLEASANT PIKE OR U.S. NO. 43 HIGHWAY, PLEASANT HILLS SUBDIVISION, J.A. MORGAN AND OTHERS; WEST BY RIDLEY BROTHERS. BEGINNING AT AN IRON PIN IN THE RIDLEY BROTHERS TRACT AT THE SOUTHWEST CORNER OF THE HEREIN DESCRIBED TRACT: THENCE WITH RIDLEY BROTHERS AND GENERALLY FOLLOWING A FENCE NORTH 5 DEGREES 16 MINUTES EAST, 1,127.65 FEET TO AN IRON PIN; THENCE WITH SAME NORTH 87 DEGREES 32 MINUTES WEST, 946.15 FEET TO AN IRON PIN; THENCE WITH SAME NORTH 0 DEGREES 50 MINUTES EAST, 359.97 FEET TO A SPIKE IN THE CENTER LINE OF L AND N RAILROAD; THENCE FOLLOWING A STAKED LINE WITH IRON PINS ALONG CENTER LINE OF L AND N RAILROAD AS FOLLOWS: NORTH 53 DEGREES 29 MINUTES EAST, 2,326.46 FEET, NORTH 56 DEGREES 09 MINUTES EAST, 352.0 FEET; NORTH 59 DEGREES 31 MINUTES EAST, 326.96 FEET; NORTH 62 DEGREES 32 MINUTES EAST, 264.30 FEET; NORTH 65 DEGREES 18 MINUTES EAST, 278.60 FEET; NORTH 67 DEGREES 39 MINUTES EAST, 221.60 FEET TO AN IRON PIN; THENCE LEAVING RAILROAD AND GENERALLY FOLLOWING A FENCE ALONG THE SOUTH MARGIN OF RUTHERFORD LANE SOUTH 87 DEGREES 27 MINUTES EAST, 916.74 FEET TO AN IRON PIN; THENCE WITH SAME SOUTH 86 DEGREES 19 MINUTES EAST, 149.18 FEET TO A STAKE; THENCE WITH THE WEST LINE OF CRIDDLE MEADOWS SUBDIVISION SOUTH 4 DEGREES 04 MINUTES WEST, 2,743.39 FEET TO AN IRON PIN; THENCE WITH THE SOUTH LINE OF CRIDDLE MEADOWS SUBDIVISION SOUTH 85 DEGREES 56 MINUTES EAST, 400.0 FEET TO AN IRON PIN; THENCE WITH SAME SOUTH 84 DEGREES 29 MINUTES EAST, 221.98 FEET TO AN IRON PIN; THENCE WITH DR. DAN GRAY SOUTH 13 DEGREES 46 MINUTES EAST, 24.80 FEET TO AN IRON PIN; THENCE WITH SAME SOUTH 55 DEGREES 24 MINUTES WEST, 95.22 FEET TO AN IRON PIN; THENCE WITH SAME SOUTH 42 DEGREES 15 MINUTES EAST, 93.35 FEET TO AN IRON PIN; THENCE WITH SAME SOUTH 24 DEGREES 43 MINUTES EAST, 99.95 FEET TO AN IRON PIN; THENCE WITH SAME SOUTH 55 DEGREES 50 MINUTES WEST, 178.04 FEET TO AN IRON PIN; THENCE WITH SAME SOUTH 39 DEGREES 27 MINUTES EAST, 820.80 FEET TO AN IRON PIN; THENCE WITH THE NORTH MARGIN OF MT. PLEASANT PIKE SOUTH 42 DEGREES 32 MINUTES WEST, 506.57 FEET TO AN IRON PIN; THENCE WITH J. A. MORGAN AND OTHERS NORTH 58 DEGREES 05 MINUTES WEST, 429.19 FEET TO AN IRON PIN; THENCE WITH SAME AND WITH PLEASANT HILLS SUBDIVISION NORTH 57 DEGREES 35 MINUTES WEST, 418.17 FEET TO AN IRON PIN; THENCE WITH PLEASANT HILLS SUBDIVISION NORTH 88 DEGREES 01 MINUTES WEST, 680.26 FEET TO AN IRON PIN; THENCE WITH SAME NORTH 88 DEGREES 21 MINUTES WEST, 514.0 FEET TO AN IRON PIN; THENCE WITH SAME NORTH 88 DEGREES 01 MINUTES WEST, 308.0 FEET TO AN IRON PIN; THENCE WITH SAME NORTH 87 DEGREES 37 MINUTES WEST, 431.0 FEET TO AN IRON PIN; THENCE WITH PROPOSED PLEASANT HILLS SUBDIVISION, SECTION 4; AND J. A. MORGAN AND OTHERS NORTH 87 DEGREES 23 MINUTES WEST, 919.68 FEET TO AN IRON PIN; THENCE WITH J. A. MORGAN AND OTHERS NORTH 86 DEGREES 26 MINUTES WEST, 310.82 FEET TO THE POINT OF BEGINNING.

THERE IS A TVA POWER LINE HAVING A 250 RIGHT-OF-WAY ACROSS THE EAST PORTION OF THE ABOVE DESCRIBED TRACT. THERE IS A 100-FOOT CHARTERED RAILROAD RIGHT-OF- WAY ON THIS TRACT ALONG THE RAILROAD LINE.

PARCEL NO. 2:

BOUNDED ON THE NORTH BY RAYMOND MCMEEN AND TOM BURT; C. C. PINCKNEY; W. CLYDE BAKER AND RUTHERFORD LANE; EAST AND SOUTH BY L AND N RAILROAD AND WEST BY RIDLEY BROTHERS. BEGINNING AT AN IRON PIN IN MCMEEN AND BURT'S SOUTH LINE; SAID POINT BEING THE NORTHWEST CORNER OF THE HEREIN DESCRIBED TRACT; THENCE WITH MCMEEN AND BURT FARM, C. C. PINCKNEY AND W. CLYDE BAKER GENERALLY FOLLOWING A FENCE SOUTH 87 DEGREES 52 MINUTES EAST, 1079.03 FEET TO AN IRON PIN; THENCE WITH BAKER GENERALLY FOLLOWING A FENCE SOUTH 85 DEGREES 57 MINUTES EAST, 400.23 FEET TO AN IRON PIN; THENCE WITH SAME SOUTH 85 DEGREES 46 MINUTES EAST, 371.10 FEET TO AN IRON PIN; THENCE WITH SAME NORTH 5 DEGREES 29 MINUTES EAST, 342.33 FEET TO AN IRON PIN; THENCE WITH SAME SOUTH 87 DEGREES 35 MINUTES EAST, 504.44 FEET TO AN IRON PIN; THENCE WITH SAME SOUTH 88 DEGREES 15 MINUTES EAST, 300.05 FEET TO AN IRON PIN; THENCE WITH THE SOUTH MARGIN OF RUTHERFORD LANE SOUTH 89 DEGREES 17 MINUTES EAST, 1,160.19 FEET TO AN IRON PIN; THENCE WITH SAME SOUTH 87 DEGREES 27 MINUTES EAST, 13.46 FEET TO AN IRON PIN IN CENTER LINE OF L AND N RAILROAD; THENCE WITH THE CENTER LINE OF L AND N RAILROAD FOLLOWING A STAKED LINE WITH IRON PINS AS FOLLOWS: SOUTH 67 DEGREES 39 MINUTES WEST, 221.60 FEET; SOUTH 65 DEGREES 18 MINUTES WEST, 278.60 FEET; SOUTH 62 DEGREES 32 MINUTES WEST, 264.30 FEET; SOUTH 59 DEGREES 31 MINUTES WEST, 326.96 FEET; SOUTH 56 DEGREES 09 MINUTES WEST, 252.0 FEET; SOUTH 53 DEGREES 29 MINUTES WEST, 2,305.30 FEET; THENCE LEAVING RAILROAD AND WITH RIDLEY BROTHERS GENERALLY FOLLOWING A FENCE AS FOLLOWS: NORTH 20 DEGREES 46 MINUTES WEST, 328.63 FEET TO AN IRON PIN; NORTH 32 DEGREES 52 MINUTES WEST, 326.42 FEET TO AN IRON PIN; NORTH 23 DEGREES 49 MINUTES WEST, 428.85 FEET TO AN IRON PIN; NORTH 17 DEGREES 02 MINUTES WEST, 922.55 FEET TO THE POINT OF BEGINNING, THERE IS A 100-FOOT CHARTERED RIGHT-OF-WAY ON THIS TRACT ALONG THE RAILROAD LINE.

TRACT IV:

LOCATED IN THE NINTH (9TH) CIVIL DISTRICT OF MAURY COUNTY, TENNESSEE, NEAR THE INTERSECTION OF WEST PARK DRIVE AND THE L AND N RAILROAD. BOUNDED ON THE NORTH BY L AND N RAILROAD; EAST BY WEST PARK DRIVE; SOUTH AND WEST BY A. D. CRICHTON AND OTHERS, AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A SPIKE IN THE CENTER OF L AND N RAILROAD, SAID POINT IS ALSO IN THE WEST MARGIN OF WEST PARK DRIVE; SAID POINT IS IN THE NORTHEAST CORNER OF THE HEREIN DESCRIBED TRACT; THENCE WITH THE WEST MARGIN OF WEST PARK DRIVE SOUTH 34 DEGREES 10 MINUTES EAST, 517.77 FEET TO AN IRON PIN AT POINT OF CURVE; THENCE ON A CHORD TO A 5 DEGREES 11 MINUTES CURVE HAVING A CENTRAL ANGLE OF 22 DEGREES 09 MINUTES FEET SOUTH 30 DEGREES 56 MINUTES EAST, 125.0 FEET TO AN IRON PIN; THENCE WITH A. D. CRICHTON AND OTHERS SOUTH 53 DEGREES 29 MINUTES WEST, 644.71 FEET TO AN IRON PIN; THENCE WITH SAME NORTH 36 DEGREES 31 MINUTES WEST, 660.91 FEET TO A SPIKE IN THE CENTER OF L AND N RAILROAD; THENCE WITH L AND N RAILROAD NORTH 53 DEGREES 29 MINUTES EAST, 287.17 FEET TO A SPIKE; THENCE WITH SAME ON A CHORD TO A 1 DEGREES CURVE NORTH 56 DEGREES 04 MINUTES EAST 352.0 FEET TO A SPIKE; THENCE WITH SAME ON A CHORD TO CURVE NORTH 57 DEGREES 57 MINUTES EAST, 39.21 FEET TO THE POINT OF BEGINNING.

TRACT V:

THIS IS A TRACT OR PARCEL OF LAND LOCATED IN THE NINTH CIVIL DISTRICT OF MAURY COUNTY, TENNESSEE BOUNDED ON THE NORTH BY DON CRICHTON AND OTHERS; EAST BY PROPOSED NEW ROAD; SOUTH AND WEST BY DON CRICHTON AND OTHERS AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT AN IRON PIN IN THE WEST MARGIN OF NEW PROPOSED ROAD AT THE SOUTHWEST CORNER OF THE HEREIN DESCRIBED TRACT, SAID POINT BEING NORTH 48 DEGREES 53 MINUTES WEST, 1,473.45 FEET FROM THE NORTH MARGIN OF U. S. HIGHWAY NO. 43 OR MT. PLEASANT PIKE, SAID POINT IN NORTH MARGIN OF HIGHWAY IS SOUTH 41 DEGREES 57 MINUTES WEST, 236.16 FEET FROM THE MOST SOUTHERLY SOUTHWEST CORNER OF THE DON CRICHTON AND OTHERS FARM; THENCE WITH DON CRICHTON AND OTHERS SOUTH 56 DEGREES 07 MINUTES WEST, 255.0 FEET TO AN IRON PIN; THENCE WITH SAME, NORTH 48 DEGREES 53 MINUTES WEST, 175.0 FEET TO AN IRON PIN, THENCE WITH SAME NORTH 56 DEGREES 07 MINUTES EAST, 246.70 FEET TO AN IRON PIN; THENCE WITH THE WEST MARGIN OF THE NEW PROPOSED ROAD ON A 4 DEGREES 07 MINUTES CURVE HAVING A CENTRAL ANGLE OF 9 DEGREES 54 MINUTES A DISTANCE ON CURVE OF 149.30 FEET TO P.C. OF CURVE; THENCE WITH SAME ON A TANGENT SOUTH 48 DEGREES 53 MINUTES EAST, 28.0 FEET TO THE POINT OF BEGINNING.

TRACT VI:

ANY PORTION OF OLD RUTHERFORD LANE THAT BOUNDS SAID PROPERTY OWNED BY ANDREW D. CRICHTON, JOHN B. JEWELL, III, AND JAMES W. JEWELL, UP TO THE CENTERLINE OF SAID LANE.

FIRST PARTY ALSO QUITCLAIMS ANY AND ALL RIGHTS IN AND TO OLD RUTHERFORD LANE ACQUIRED BY VIRTUE OF THE FOREGOING DEED OR OTHERWISE.

INCLUDED IN THE FOREGOING DESCRIPTION, BUT EXPRESSLY EXCLUDED THEREFROM, IS PROPERTY CONVEYED BY THE FOLLOWING; ALL OF RECORD IN THE REGISTER'S OFFICE OF MAURY COUNTY, TENNESSEE.

1. ALL LOTS IN WESTFIELD SUBDIVISION, SECTIONS 1, 2,3, 4, AND 4A, WITH THE EXCEPTION OF LOT 114 WESTFIELD SUBDIVISION, SECTION 4 AS SHOWN ON PLAT OF RECORD IN PLAT BOOK 8, PAGE 21, REGISTER'S OFFICE OF MAURY COUNTY, TENNESSEE.
2. DEED TO THE INDUSTRIAL DEVELOPMENT BOARD OF MAURY COUNTY, TENNESSEE IN BOOK 563, PAGE 204;
3. DEED TO MAURY COUNTY, TENNESSEE IN BOOK 591, PAGE 180;
4. DEED TO HERMAN L. LEWIS IN BOOK 607, PAGE 512;
5. DEED TO COLCO, INC., A TENNESSEE CORPORATION IN BOOK 655, PAGE 709;
6. DEED TO RICHARD A. BRICKNER AND WIFE, JUDITH BRICKNER, AS TENANTS IN THE ENTIRETY IN BOOK 675, PAGE 50;
7. DEED TO MAURY COUNTY, TENNESSEE IN BOOK 675, PAGE 354;
8. DEED TO GAITHER FRIERSON GARY IN BOOK 679, PAGE 508;
9. DEED TO STEVEN G. HALL IN BOOK 711, PAGE 531;
10. DEED TO MAURY COUNTY BOARD OF EDUCATION IN BOOK 803, PAGE 174;
11. DEED TO DAVID L. SCHWAB AND JOHN G. MITCHELL, AS EQUAL TENANTS IN COMMON IN BOOK 1114, PAGE 276;
12. DEED EUGENE L. HELLER IN BOOK 1145, PAGE 580; AND
13. DEED TO MAURY COUNTY, STATE OF TENNESSEE IN BOOK R2839, PAGE 368.

BEING PART OF THE SAME PROPERTY CONVEYED TO CBP, LLC, A TENNESSEE LIMITED LIABILITY COMPANY, BY DEED FROM CRICHTON WELTON PARTNERS, G.P., A TENNESSEE GENERAL PARTNERSHIP, OF RECORD IN BOOK R2895, PAGE 1276, IN THE REGISTER'S OFFICE OF MAURY COUNTY, TENNESSEE.

LEGAL DESCRIPTION (PER SURVEY)

LOCATED IN THE 9TH CIVIL DISTRICT OF MAURY COUNTY, TENNESSEE, BEING A PORTION OF THE CBP, LLC PROPERTY, AS REFERENCED IN RECORD BOOK 2895, PAGE 829 OF THE REGISTER'S OFFICE OF MAURY COUNTY, TENNESSEE (ROMCT) AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT AN IRON REBAR (SET), ON THE EASTERLY RIGHT-OF-WAY LINE OF WESTFIELD DRIVE AND THE NORTHEASTERLY CORNER OF LOT 1, WESTFIELD ESTATES, SECTION 1 PROPERTY, PLAT BOOK 7, PAGE 34 (ROMCT), HAVING A TENNESSEE STATE PLANE COORDINATE VALUE OF NORTH: 460,158.17 US FEET, EAST: 1,640,747.93 US FEET (NAD83, 2011);

THENCE, WITH WESTFIELD DRIVE, THE FOLLOWING FOUR (4) CALLS:
1. NORTH 60° 15' 34" EAST 105.85 FEET TO AN IRON PIPE (FOUND);
2. ALONG A CURVE TO THE LEFT, HAVING A RADIUS OF 282.23 FEET, AN ARC LENGTH OF 108.50 FEET, AND A CHORD BEARING OF NORTH 49° 15' 42" EAST 107.83 FEET TO AN IRON PIPE (FOUND);
3. NORTH 36° 46' 42" EAST 18.65 FEET TO AN IRON PIPE (FOUND);
4. ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 25.00 FEET, AN ARC LENGTH OF 42.59 FEET, AND A CHORD BEARING OF NORTH 80° 41' 30" EAST 37.63 FEET TO AN IRON PIPE (FOUND) IN THE WESTERLY RIGHT-OF-WAY OF RUTHERFORD LANE;

THENCE, WITH RUTHERFORD LANE, THE FOLLOWING TWO (2) CALLS:
1. ALONG A CURVE TO THE RIGHT, HAVING A RADIUS OF 1392.39 FEET, AN ARC LENGTH OF 157.80 FEET, AND A CHORD BEARING OF SOUTH 47° 58' 28" EAST 157.71 FEET TO AN IRON REBAR (SET);
2. SOUTH 44° 43' 40" EAST 834.17 FEET TO AN IRON REBAR (SET) BEING IN THE CENTERLINE OF A 150' TVA EASEMENT;

THENCE, SEVERING CBP, LLC, SOUTH 08° 07' 07" WEST 383.66 FEET TO AN IRON PIPE (FOUND) BEING THE NORTHEAST CORNER OF THE ALPHEUS S. WEIDNER III PROPERTY, RECORD BOOK 2482, PAGE 1271 (ROMCT);

THENCE, WITH WEIDNER AND THE NORTHERLY LINE OF PLEASANT HILLS, SECTION 1, PLAT BOOK 4, PAGE 63 (ROMCT), THE FOLLOWING TWO (2) CALLS:
1. NORTH 53° 16' 46" WEST 395.79 FEET TO AN IRON REBAR (FOUND);
2. NORTH 83° 51 15" WEST 118.06 FEET TO THE SOUTHEAST CORNER OF LOT 6 OF SAID WESTFIELD ESTATES, SECTION 1;

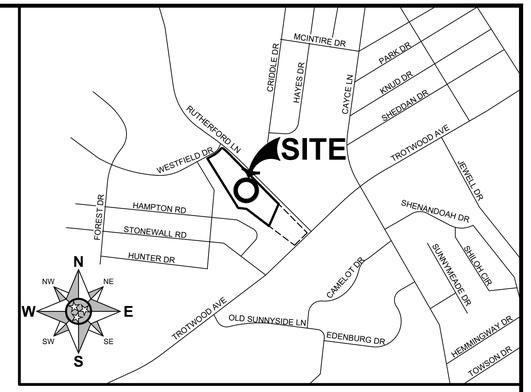
THENCE WITH WESTFIELD ESTATES, NORTH 32° 33 34" WEST 812.55 FEET TO THE POINT OF BEGINNING, CONTAINING IN ALL 9.13 ACRES, MORE OR LESS.

GENERAL NOTES:

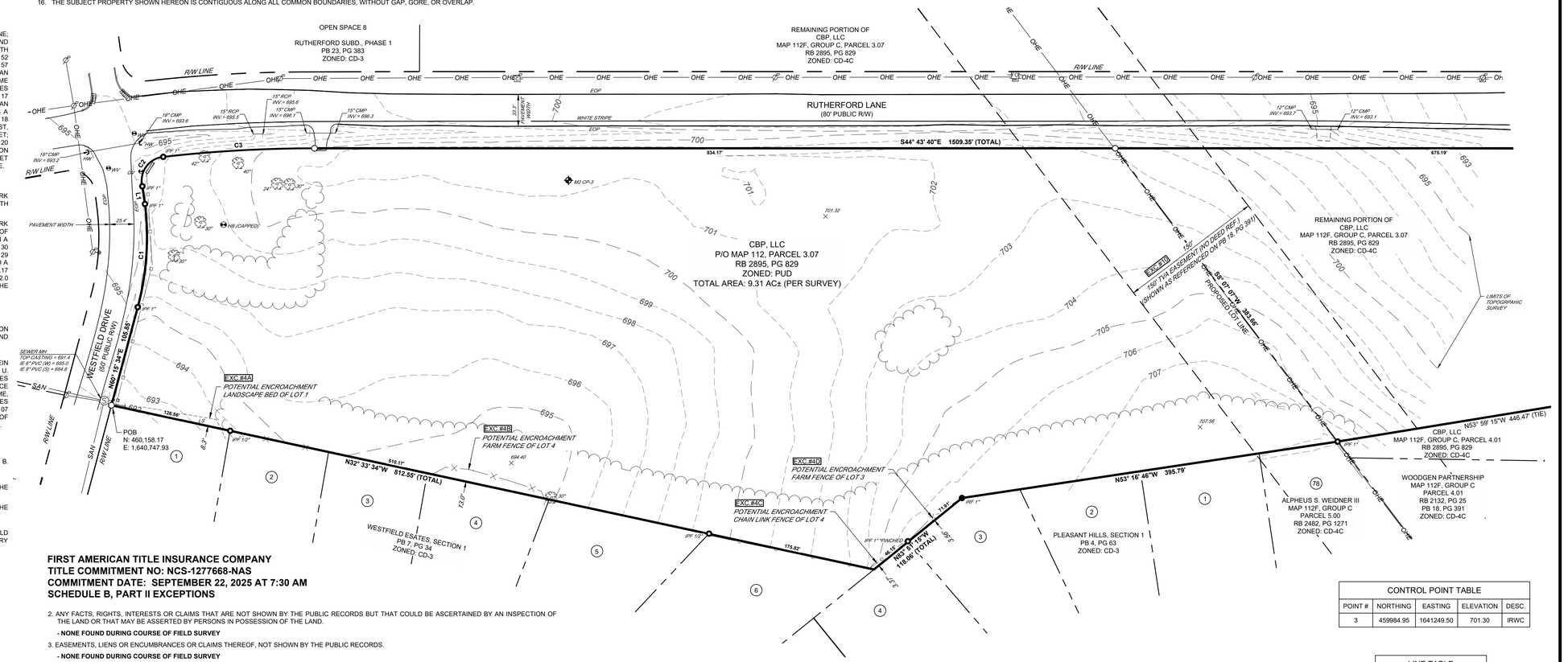
1. BEARINGS ARE BASED ON THE TENNESSEE STATE PLANE COORDINATE SYSTEM (NAD83, 2011).
2. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88, GEOID 18). CONTOURS ARE SHOWN AT 1-FOOT INTERVALS.
3. THE PROPERTY SHOWN HEREON IS THE SAME PROPERTY AS REFERENCED IN THE FIRST AMERICAN TITLE INSURANCE COMPANY, TITLE COMMITMENT NO. NAS-1277668-NAS.
4. THE FIELD SURVEY WAS COMPLETED ON SEPTEMBER 11, 2025.
5. THIS SURVEY WAS PREPARED USING THE TITLE COMMITMENT, AS REFERENCED HEREON, ALONG WITH CURRENT DEEDS AND PLATS OF RECORD.
6. ALL DEED BOOK AND PLAT REFERENCES PERTAIN TO THE REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE.
7. ADJOINING PROPERTY LINES SHOWN WERE PLOTTED FROM INFORMATION TAKEN FROM EITHER DEED DESCRIPTION, RECORD PLATS, OR TAX MAPS.
8. PROPERTY CORNERS SET THIS SURVEY ARE 18" #4 REBAR WITH ORANGE PLASTIC CAP STAMPED "M2 GROUP", 18" #5 REBAR WITH YELLOW PLASTIC CAP STAMPED "M2 GROUP, LLC", OR PK NAIL WITH STAINLESS STEEL WASHER STAMPED "M2 GROUP, LLC", UNLESS NOTED OTHERWISE.
9. UTILITIES SHOWN HEREON WERE COMPILED FROM VISIBLE STRUCTURES AT THE SITE, INFORMATION FROM PLANS, AND PHYSICAL MARKINGS AND COMBINED TO DEVELOP A VIEW OF THE UNDERGROUND UTILITIES. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY, AND RELIABLY DEPICTED. IN ADDITION, IN SOME JURISDICTIONS, 811 OR OTHER SIMILAR UTILITY LOCATE REQUESTS FROM SURVEYORS MAY BE IGNORED OR RESULT IN AN INCOMPLETE RESPONSE. THIS SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THIS SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. VERIFICATION OF EXISTENCE, LOCATIONS, AND DEPTH SHOULD BE MADE BEFORE CONDUCTING ANY EXCAVATION IN THE VICINITY OF THE UTILITY.
10. THE PROPERTY SHOWN HEREON IS LOCATED IN A FLOOD HAZARD ZONE "X" (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN) ACCORDING TO F.I.R.M. MAP "MAURY COUNTY, TENNESSEE" PANEL 280 OF 440, MAP NUMBER 47119C0280E, EFFECTIVE APRIL 16, 2007.
11. THE SUBJECT PROPERTY IS CURRENTLY ZONED "PUD" (PLANNED UNIT DEVELOPMENT) , BASED ON THE OFFICIAL ZONING MAP FOR CITY OF COLUMBIA, TENNESSEE. A CURRENT ZONING REPORT ANOR ZONING LETTER HAS NOT BEEN PROVIDED TO THE SURVEYOR. THE MINIMUM BUILDING SETBACK REQUIREMENTS FOR "PUD" ZONING SHOULD BE CONFIRMED WITH THE CONTROLLING JURISDICTION.
13. THE SUBJECT PROPERTY HAS DIRECT AND CONTIGUOUS ACCESS TO RUTHERFORD LANE, A 80-FOOT PUBLIC RIGHT-OF-WAY, TROTWOOD AVENUE, A 60-FOOT PUBLIC RIGHT-OF-WAY, AND WESTFIELD DRIVE, A 50-FOOT PUBLIC RIGHT-OF-WAY.
14. THERE WAS NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS OBSERVED DURING THE COURSE OF FIELD SURVEY.
15. NO EVIDENCE OF PROPOSED CHANGES IN THE STREET RIGHT OF WAY LINES, OR OF RECENT STREET OR SIDEWALK CONSTRUCTION, OR REPAIRS, WAS OBSERVED DURING THE COURSE OF FIELD SURVEY.
16. THE SUBJECT PROPERTY SHOWN HEREON IS CONTIGUOUS ALONG ALL COMMON BOUNDARIES, WITHOUT GAP, GORE, OR OVERLAP.

LEGEND:

EXISTING PROPERTY LINE	HB	HOSE BIB
EXISTING RIGHT-OF-WAY	S	SANITARY SEWER MANHOLE
EXISTING ADJACENT PROPERTY LINE		CURB INLET
EXISTING EASEMENT		INLET (SQUARE)
MBSL MINIMUM BUILDING SETBACK LINE	GV	GAS BOX (GAS VALVE)
700 EXISTING INDEX CONTOUR		HIGH TENSION TOWER
EXISTING INTERMEDIATE CONTOUR		POWER POLE
EXISTING FARM FENCE		GUY WIRE
EXISTING WOOD FENCE		TRAFFIC PULL BOX
EXISTING CHAIN-LINK FENCE		COMMUNICATION PEDESTAL
SAN EXISTING SANITARY SEWER LINE		FIBER OPTIC PULL BOX
W EXISTING WATER LINE		TREE, DECIDUOUS
OHE EXISTING OVERHEAD ELECTRIC	700.00	EXISTING SPOT ELEVATION
EXISTING TREELINE	(POI)	POINT OF INSERTION
IRON REBAR FOUND (IRF)	HW	HEADWALL
IRON PIPE FOUND (IPF)	LS	LANDSCAPE BED
IRON REBAR SET W/CAP (IRS)	EOP	EDGE OF PAVEMENT
BENCHMARK / SURVEY CONTROL	1	LOT NUMBER
WV WATER VALVE	EXC. #3	SCHEDULE B PART II EXCEPTION
FIRE HYDRANT		



VICINITY MAP
SCALE: 1"=1000'



CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESC.
3	459984.95	1641249.50	701.30	IRWC

LINE TABLE		
LINE #	LENGTH	DIRECTION
L1	18.65	N36° 46' 42"E

CURVE TABLE				
CURVE #	LENGTH	RADIUS	CHORD BRNG	CHORD LENGTH
C1	108.50	282.23	N49° 15' 42"E	107.83
C2	42.59	25.00	N80° 41' 30"E	37.63
C3	157.80	1392.39	S47° 58' 28"E	157.71

FIRST AMERICAN TITLE INSURANCE COMPANY
TITLE COMMITMENT NO: NCS-1277668-NAS
COMMITMENT DATE: SEPTEMBER 22, 2025 AT 7:30 AM
SCHEDULE B, PART II EXCEPTIONS

2. ANY FACTS, RIGHTS, INTERESTS OR CLAIMS THAT ARE NOT SHOWN BY THE PUBLIC RECORDS BUT THAT COULD BE ASCERTAINED BY AN INSPECTION OF THE LAND OR THAT MAY BE ASSERTED BY PERSONS IN POSSESSION OF THE LAND.
   - NONE FOUND DURING COURSE OF FIELD SURVEY
3. EASEMENTS, LIENS OR ENCUMBRANCES OR CLAIMS THEREOF, NOT SHOWN BY THE PUBLIC RECORDS.
   - NONE FOUND DURING COURSE OF FIELD SURVEY
4. ANY ENCROACHMENT, ENCUMBRANCE, VIOLATION, VARIATION, OR ADVERSE CIRCUMSTANCE AFFECTING THE TITLE THAT WOULD BE DISCLOSED BY AN ACCURATE AND COMPLETE LAND SURVEY OF THE LAND AND NOT SHOWN BY THE PUBLIC RECORDS.
   (A) - ENCROACHMENT OF LANDSCAPE BED FROM LOT 1, WESTFIELD ESTATES, SECT. 1, AS SHOWN AND NOTED HEREON
   (B) - ENCROACHMENT OF FARM FENCE FROM LOT 4, WESTFIELD ESTATES, SECT. 1, AS SHOWN AND NOTED HEREON
   (C) - ENCROACHMENT OF CHAIN LINK FENCE FROM LOT 4, PLEASANT HILLS, SECT. 1, AS SHOWN AND NOTED HEREON
   (D) - ENCROACHMENT OF FARM FENCE FROM LOT 3, PLEASANT HILLS, SECT. 1, AS SHOWN AND NOTED HEREON
10. ALL MATTERS SHOWN ON PLAT(S) OF RECORD IN BOOK 8, PAGE 21; PLAT BOOK P18, PAGE 379; AND PLAT BOOK P23, PAGE 348, IN THE REGISTER'S OFFICE OF MAURY COUNTY, TENNESSEE.
   - PLAT BOOK 8, PAGE 21 AND PLAT BOOK 23, PAGE 348, DO NOT AFFECT THE SUBJECT PROPERTY
   - PLAT BOOK 18, PAGE 379, REFERENCES A 150' TVA OVERHEAD POWER LINE EASEMENT THAT DOES AFFECT THE SUBJECT PROPERTY AS SHOWN AND NOTED HEREON
   - PLAT BOOK 18, PAGE 391, IS NOT LISTED IN EXCEPTION ABOVE, BUT DOES REFERENCE SAME 150' TVA OVERHEAD POWER LINE EASEMENT THAT DOES AFFECT THE SUBJECT PROPERTY AS SHOWN AND NOTED HEREON
11. RIGHT OF WAY AND LIFE ESTATE CONTAINED IN DEED OF RECORDED IN BOOK 595, PAGE 486, IN THE REGISTER'S OFFICE OF MAURY COUNTY, TENNESSEE.
   - DOES NOT AFFECT THE SUBJECT PROPERTY
12. TERMS AND PROVISIONS OF RIGHT OF WAY OR EASEMENT, BY AND BETWEEN THOMAS J. BURT AND RAYMOND MCMEEN AND CITY OF COLUMBIA, TENNESSEE, A MUNICIPAL CORPORATION, OF RECORD IN BOOK 609, PAGE 309, IN THE REGISTER'S OFFICE OF MAURY COUNTY, TENNESSEE.
   - DOES NOT AFFECT THE SUBJECT PROPERTY
13. TERMS AND PROVISIONS OF RIGHT-OF-WAY OR EASEMENT, BY AND BETWEEN ANDREW DON CRICHTON, JAMES W. JEWELL AND JOHN B. JEWELL, III AND CITY OF COLUMBIA, ITS SUCCESSORS AND ASSIGNS, OF RECORD IN BOOK R1924, PAGE 1092, IN THE REGISTER'S OFFICE OF MAURY COUNTY, TENNESSEE.
   - DOES NOT AFFECT THE SUBJECT PROPERTY
15. TERMS AND PROVISIONS OF GRADING AND CONSTRUCTION EASEMENT AGREEMENT, BY AND BETWEEN WELTON INVESTMENTS, LLC, A TENNESSEE LIMITED LIABILITY COMPANY AND COLUMBIA RETAIL PARTNERS, A TENNESSEE GENERAL PARTNERSHIP, OF RECORD IN BOOK R2113, PAGE 557, IN THE REGISTER'S OFFICE OF MAURY COUNTY, TENNESSEE.
   - DOES NOT AFFECT THE SUBJECT PROPERTY
17. TERMS AND PROVISIONS OF SANITARY SEWER EASEMENT, BY AND BETWEEN CBP, LLC, A TENNESSEE LIMITED LIABILITY COMPANY AND CITY OF COLUMBIA, STATE OF TENNESSEE, ITS SUCCESSORS AND ASSIGNS, OF RECORD IN BOOK R2931, PAGE 1096, IN THE REGISTER'S OFFICE OF MAURY COUNTY, TENNESSEE.
   - DOES NOT AFFECT THE SUBJECT PROPERTY
20. RIGHTS OF THE RAILROAD COMPANY TO EXPAND ITS RIGHT OF WAY TO ITS FULL CHARTER WIDTH.
   - DOES NOT AFFECT THE SUBJECT PROPERTY



GPS SURVEY DATA INFORMATION:

- TYPE OF GPS SURVEY: RTK
- POSITIONAL ACCURACY: 0.07 FEET
- DATUM/EPOCH: NAD83 (2011) EPOCH 2010.00
- PUBLISHED/FIXED CONTROL USED: TGRN
- GEOID MODEL: GEOID 18
- COMBINED GRID SCALE FACTOR: 0.9999285106
- UNITS: (US FEET)(GRID)

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THE INFORMATION SHOWN HEREON IS TRUE AND ACCURATE TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF. THE SURVEY SHOWN HEREON REPRESENTS A CATEGORY I SURVEY, HAVING A LINEAR ERROR OF CLOSURE WHICH IS EQUAL TO OR LESS THAN 1 FOOT PER 10,000 FEET OF LAND (1:10,000). THIS SURVEY WAS MADE IN COMPLIANCE WITH THE CURRENT TENNESSEE MINIMUM STANDARDS OF PRACTICE.

60' 0 60' 120'
GRAPHIC SCALE

REVISION #	DATE	DESCRIPTION

BOUNDARY & TOPOGRAPHIC SURVEY
P/O MAP 112, PARCEL 3.07
RUTHERFORD LANE
CITY OF COLUMBIA
9TH CIVIL DISTRICT
MAURY COUNTY, TENNESSEE

DATE :	OCTOBER 22, 2025	DRAWN BY :	PMK
PROJECT NUMBER :	25-215	CHECKED BY :	EDC

M2 GROUP
P.O. BOX 2543
BRENTWOOD, TN 37024-2543
615-656-0257 / M2GROUPLLC.COM

CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESC.
3	459984.95	1641249.50	701.30	IRWC

LINE TABLE		
LINE #	LENGTH	DIRECTION
L1	18.65	N36° 46' 42"E

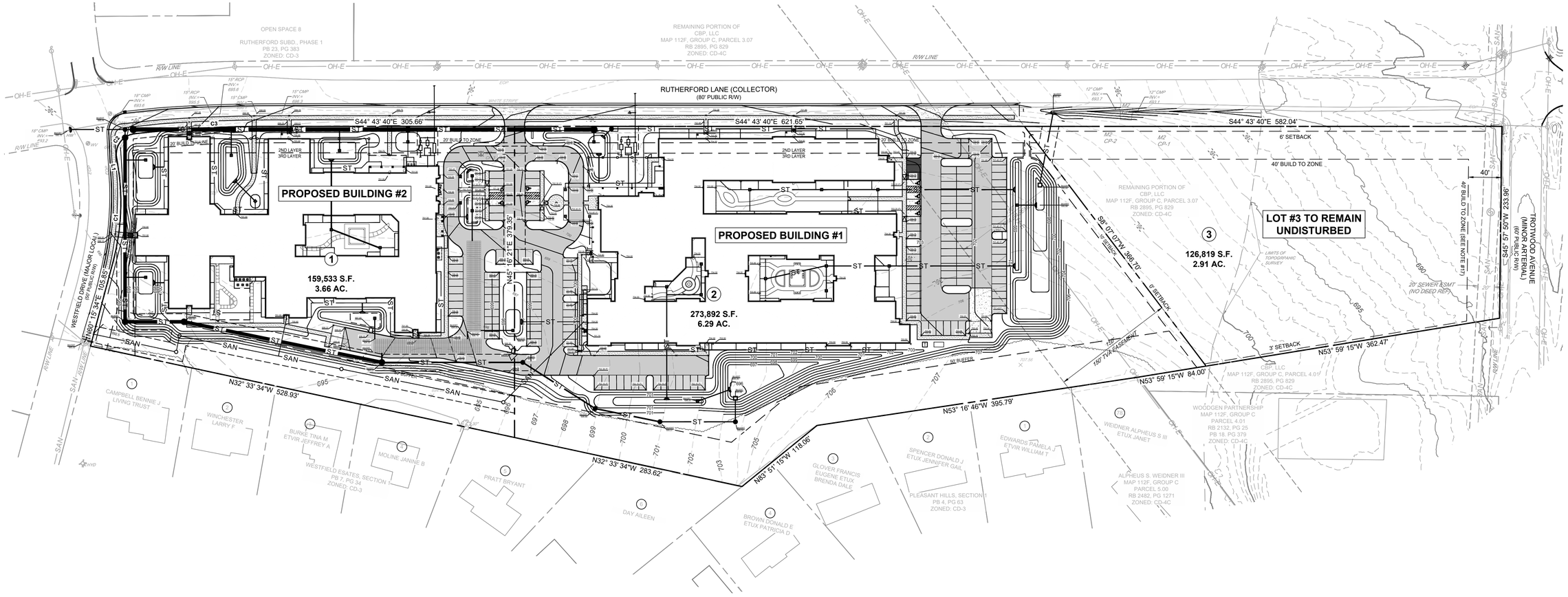
CURVE TABLE				
CURVE #	LENGTH	RADIUS	CHORD BRNG	CHORD LENGTH
C1	108.50	282.23	N49° 15' 42"E	107.83
C2	42.59	25.00	N80° 41' 30"E	37.63
C3	157.80	1392.39	S47° 58' 28"E	157.71

GENERAL NOTES:

1. BEARINGS ARE BASED ON THE TENNESSEE STATE PLANE COORDINATE SYSTEM (NAD83, 2011).
2. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88, GEOID 18). CONTOURS ARE SHOWN AT 1-FOOT INTERVALS.
3. THE PROPERTY SHOWN HEREON IS THE SAME PROPERTY AS REFERENCED IN THE FIRST AMERICAN TITLE INSURANCE COMPANY, TITLE COMMITMENT NO. NAS-1277668-NAS.
4. THE FIELD SURVEY WAS COMPLETED ON SEPTEMBER 11, 2025.
5. THIS SURVEY WAS PREPARED USING THE TITLE COMMITMENT, AS REFERENCED HEREON, ALONG WITH CURRENT DEEDS AND PLATS OF RECORD.
6. ALL DEED BOOK AND PLAT REFERENCES PERTAIN TO THE REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE.
7. ADJOINING PROPERTY LINES SHOWN WERE PLOTTED FROM INFORMATION TAKEN FROM EITHER DEED DESCRIPTION, RECORD PLATS, OR TAX MAPS.
8. PROPERTY CORNERS SET THIS SURVEY ARE 18" #4 REBAR WITH ORANGE PLASTIC CAP STAMPED "M2 GROUP", 18" #5 REBAR WITH YELLOW PLASTIC CAP STAMPED "M2 GROUP, LLC", OR PK NAIL WITH STAINLESS STEEL WASHER STAMPED "M2 GROUP, LLC", UNLESS NOTED OTHERWISE.
9. UTILITIES SHOWN HEREON WERE COMPILED FROM VISIBLE STRUCTURES AT THE SITE, INFORMATION FROM PLANS, AND PHYSICAL MARKINGS AND COMBINED TO DEVELOP A VIEW OF THE UNDERGROUND UTILITIES. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY, AND RELIABLY DEPICTED. IN ADDITION, IN SOME JURISDICTIONS, 811 OR OTHER SIMILAR UTILITY LOCATE REQUESTS FROM SURVEYORS MAY BE IGNORED OR RESULT IN AN INCOMPLETE RESPONSE. THIS SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THIS SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. VERIFICATION OF EXISTENCE, LOCATIONS, AND DEPTH SHOULD BE MADE BEFORE CONDUCTING ANY EXCAVATION IN THE VICINITY OF THE UTILITY.
10. THE PROPERTY SHOWN HEREON IS LOCATED IN A FLOOD HAZARD ZONE "X" (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN) ACCORDING TO F.I.R.M. MAP "MAURY COUNTY, TENNESSEE" PANEL 280 OF 440, MAP NUMBER 47119C0280E, EFFECTIVE APRIL 16, 2007.
11. THE SUBJECT PROPERTY IS CURRENTLY ZONED "PUD" (PLANNED UNIT DEVELOPMENT) , BASED ON THE OFFICIAL ZONING MAP FOR CITY OF COLUMBIA, TENNESSEE. A CURRENT ZONING REPORT AND/OR ZONING LETTER HAS NOT BEEN PROVIDED TO THE SURVEYOR. THE MINIMUM BUILDING SETBACK REQUIREMENTS FOR "PUD" ZONING SHOULD BE CONFIRMED WITH THE CONTROLLING JURISDICTION.
13. THE SUBJECT PROPERTY HAS DIRECT AND CONTIGUOUS ACCESS TO RUTHERFORD LANE, A 80-FOOT PUBLIC RIGHT-OF-WAY, TROTWOOD AVENUE, A 60-FOOT PUBLIC RIGHT-OF-WAY, AND WESTFIELD DRIVE, A 50-FOOT PUBLIC RIGHT-OF-WAY.
14. THERE WAS NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS OBSERVED DURING THE COURSE OF FIELD SURVEY.
15. NO EVIDENCE OF PROPOSED CHANGES IN THE STREET RIGHT OF WAY LINES, OR OF RECENT STREET OR SIDEWALK CONSTRUCTION, OR REPAIRS, WAS OBSERVED DURING THE COURSE OF FIELD SURVEY.
16. THE SUBJECT PROPERTY SHOWN HEREON IS CONTIGUOUS ALONG ALL COMMON BOUNDARIES, WITHOUT GAP, GORE, OR OVERLAP.
17. LOT#3 - 40' BUILD-TO-ZONE ALONG TROTWOOD AVENUE MAY BE EXTENDED TO 85' WHEN PARKING DESIGN IS LOCATED IN THE FIRST LAYER, PER CITY OF COLUMBIA ZONING ORDINANCE TABLE 4.3.1-E (EFFECTIVE DATE 07/14/2022).

LEGEND:

- EXISTING PROPERTY LINE
- EXISTING RIGHT-OF-WAY
- EXISTING ADJACENT PROPERTY LINE
- EXISTING EASEMENT
- MINIMUM BUILDING SETBACK LINE (MBSL)
- EXISTING INDEX CONTOUR (700)
- EXISTING INTERMEDIATE CONTOUR
- EXISTING FARM FENCE
- EXISTING WOOD FENCE
- EXISTING CHAIN-LINK FENCE
- EXISTING SANITARY SEWER LINE (SAN)
- EXISTING WATER LINE (W)
- EXISTING OVERHEAD ELECTRIC (OHE)
- EXISTING TREELINE
- IRON REBAR FOUND (IRF)
- IRON PIPE FOUND (IPF)
- IRON REBAR SET W/CAP (IRS)
- BENCHMARK / SURVEY CONTROL
- WATER VALVE (WV)
- FIRE HYDRANT (HYD)
- HOSE BIB (HB)
- SANITARY SEWER MANHOLE (S)
- CURB INLET
- INLET (SQUARE)
- GAS BOX (GAS VALVE) (GV)
- HIGH TENSION TOWER
- POWER POLE
- GUY WIRE
- TRAFFIC PULL BOX
- COMMUNICATION PEDESTAL
- FIBER OPTIC PULL BOX
- TREE, DECIDUOUS
- EXISTING SPOT ELEVATION (700.00)
- POINT OF INSERTION (POI)
- HEADWALL (HW)
- LANDSCAPE BED (LS)
- EDGE OF PAVEMENT (EOP)
- LOT NUMBER (1)
- SCHEDULE B PART II EXCEPTION (EXC. #3)





60' 0 60' 120'
GRAPHIC SCALE

LOT AREA TABLE		
Lot #	Area (s.f.)	Area (ac.)
1	159,533	3.66
2	273,892	6.29
3	126,819	2.91

Know what's below. Call before you dig.

SURVEY INFO
PROVIDED BY: M2 GROUP, LLC
DATUM: TENNESSEE STATE PLANE (NAD83 & NAVD 88)

FULMER LUCAS
2002 RICHARD JONES RD - SUITE B200
NASHVILLE, TENNESSEE 37215
INFO@FULMERLUCAS.COM - (615) 345-3770

PRELIMINARY PLAT FOR:
MORNING POINTE
RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401

DR.	DATE	DESCRIPTION

PRELIMINARY PLAT

C2.0

1421-01 MORNING POINTE

CONTROL POINT TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESC.
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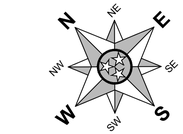

30' 0 30' 60'
GRAPHIC SCALE

OPEN SPACE 8

RUTHERFORD SUBD., PHASE 1
PB 23, PG 383
ZONED: CD-3

PROPOSED CONNECTION TO EXISTING WATERLINE, NOT FIELD LOCATED. FINAL CONNECTION TO BE COORDINATED WITH CPWS.

FIRE HYDRANT, TYP.

MONUMENT SIGN

STORMWATER MANAGEMENT AREA

20' BUILD TO ZONE

2ND LAYER
3RD LAYER

FIRE DEPARTMENT CONNECTION

PROPOSED BUILDING #1

PROPOSED BUILDING #2

159,533 S.F.
3.66 AC.

UNDERGROUND STORMWATER MANAGEMENT AREA

DUMPSTER ENCLOSURE (SEE ARCHITECTURAL PLANS FOR DETAIL)

50' BUFFER

MATCHLINE - SEE SHEET C2.2

WESTFIELD DRIVE (MAJOR LOCAL)
(50' PUBLIC R/W)

CAMPBELL BENNIE J LIVING TRUST

WINCHESTER LARRY F

BURKE TINA M
ETVIR JEFFREY A

WESTFIELD ESATES, SECTION 1
PB 7, PG 34
ZONED: CD-3

MOLINE JANINE B

PRATT BRYANT

S44° 43' 40"E 305.66'

N45° 16' 21"E 379.35'

N32° 33' 34"W 528.93'

N32° 33' 34"W 283.62'

SURVEY INFO
PROVIDED BY: M2 GROUP, LLC
DATUM: TENNESSEE STATE PLANE (NAD83 & NAVD 88)

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PRELIMINARY PLAT FOR:

MORNING POINTE

RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401

DR.	DATE	DESCRIPTION

PRELIMINARY PLAT

C2.1

1421-01 MORNING POINTE

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GRAPHIC SCALE
30' 0 30' 60'

PROPOSED CONNECTION TO EXISTING WATERLINE, NOT FIELD LOCATED. FINAL CONNECTION TO BE COORDINATED WITH CPWS.

REMAINING PORTION OF
CBP, LLC
MAP 112F, GROUP C, PARCEL 3.07
RB 2895, PG 829
ZONED: CD-4C

R/W LINE

RUTHERFORD LANE (COLLECTOR)
(80' PUBLIC R/W)

FIRE HYDRANT, TYP.

S44° 43' 40"E 621.65'

20' BUILD TO ZONE

2ND LAYER
3RD LAYER

PROPOSED BUILDING #1

FIRE DEPARTMENT CONNECTION

STORMWATER MANAGEMENT AREA

MATCHLINE - SEE SHEET C2.1

N45° 16' 21"E 379.35'

2
273,892 S.F.
6.29 AC.

STORMWATER MANAGEMENT AREA

DUMPSTER ENCLOSURE (SEE ARCHITECTURAL PLANS FOR DETAIL)

12" CMP
INV.= 693.7

12" CMP
INV.= 693.1

M2 CP-2

M2 CP-1

6' SETBACK

40' BUILD TO ZONE

20' P.U.D.E.

S44° 43' 40"E

3
126,819 S.F.
2.91 AC.

S8° 07' 07"W 366.70'

10' SETBACK

0' SETBACK

150' TVA EASEMENT

50' BUFFER

3' SETBACK

N53° 59' 15"W 84.00'

N53° 16' 46"W 395.79'

N32° 33' 34"W 283.62'

N63° 51' 15"W 118.06'

REMAINING PORTION OF
CBP, LLC
MAP 112F, GROUP C, PARCEL 3.07
RB 2895, PG 829
ZONED: CD-4C

78
WEIDNER ALPHEUS S III
ETUX JANET

1
EDWARDS PAMELA J
ETVIR WILLIAM T

2
SPENCER DONALD J
ETUX JENNIFER GAIL

3
GLOVER FRANCIS
EUGENE ETUX
BRENDA DALE

4
BROWN DONALD E
ETUX PATRICIA D

5
BRYANT

6
DAY AILEEN

Know what's below.
Call before you dig.

SURVEY INFO
PROVIDED BY: M2 GROUP, LLC
DATUM: TENNESSEE STATE PLANE (NAD83 & NAVD 88)

FULMER LUCAS
2002 RICHARD JONES RD - SUITE B200
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INFO@FULMERLUCAS.COM - (615) 345-3770

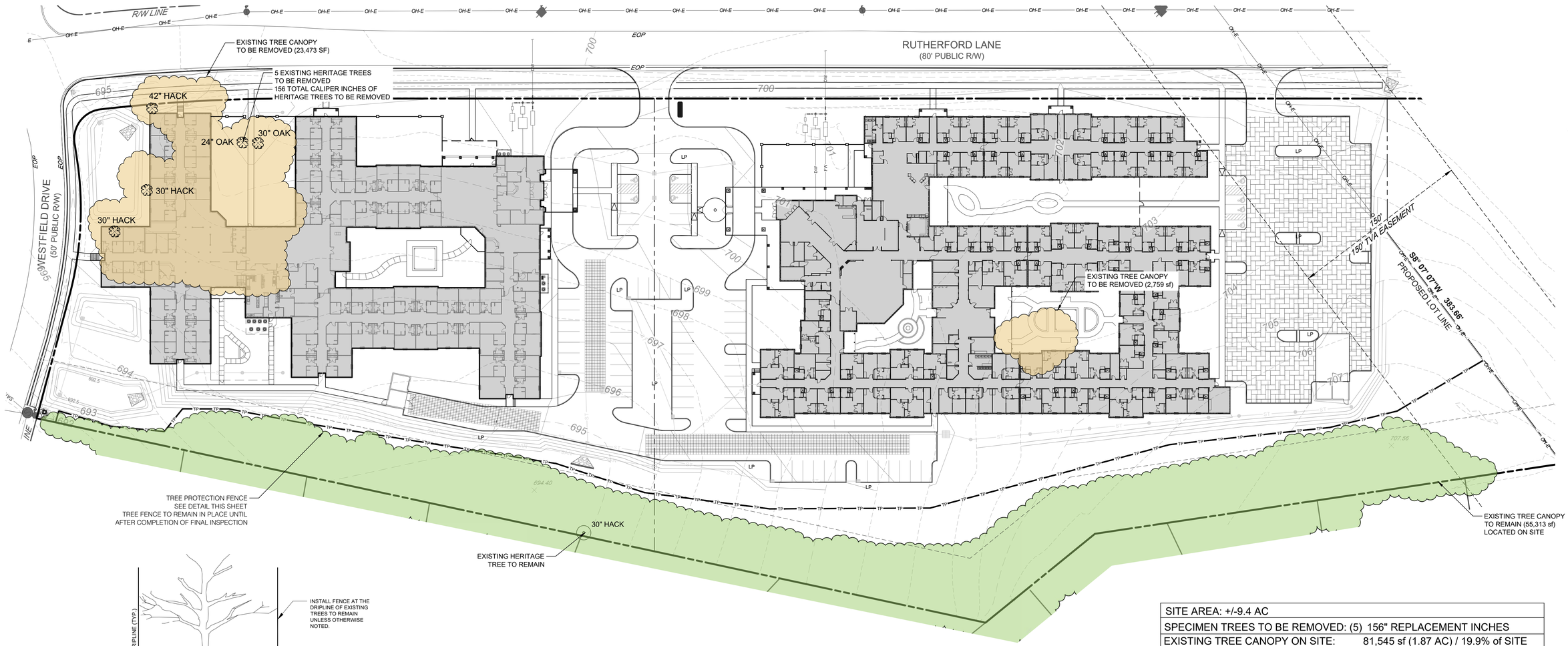
PRELIMINARY PLAT FOR:
MORNING POINTE
RUTHERFORD LANE @ WESTFIELD DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE 38401

DR.	DATE	DESCRIPTION

PRELIMINARY PLAT

C2.2

1421-01 MORNING POINTE



CHAIN LINK FENCING TREE PROTECTION

TREE PROTECTION NOTES:

1. The tree protection barriers shall be constructed before the issuance of any permits, and shall remain intact throughout the entire period of construction.
2. The tree protection barrier shall be installed as labeled on this plan or a distance to the radius of the dripline, whichever is greatest, as measured from the trunk of the protected tree.
3. Any required excavation in or around the protection zone to accommodate underground services, footings, etc; shall be indicated on the plan, and shall be excavated by hand. In addition, related root pruning shall be accomplished via ANSI A-300 standard so as to minimize compact on the general root system. Root prunning to occur prior to grading.
4. The storage of building materials or stockpiling shall not be permitted within the limits of or against the protection barriers.
5. Trees within the protection barriers must be adequately cared for throughout the construction pro cess (i.e., they must be watered sufficiently, particularly if the tree's root system has been disturbed by excavation.) Fill shall not be placed upon the root system as to endanger the health or life of the affected tree.
6. Heavy accumulation of dust from construction activity may occur on the surface of tree foliage. To control dust, tree foliage may be hosed down upon the request of the Landscape Architect or Owners Representative.
7. Removal of all tree protection fencing will be done by the Contractor. Restoration of all areas disturbed by the fencing will be the Contractor's responsibility. All tree fence to remain intact until final completion of the project.

SITE AREA: +/-9.4 AC
SPECIMEN TREES TO BE REMOVED: (5) 156" REPLACEMENT INCHES
EXISTING TREE CANOPY ON SITE: 81,545 sf (1.87 AC) / 19.9% of SITE
REQ. CANOPY RETENTION (24% OF EXISTING COVER) 19,571 sf (0.45 AC)
PROPOSED CANOPY RETENTION (67.9% EX. COVER) 55,313 sf (1.27 AC)

0 40 80 120 feet

SCALE: 1" = 40'

NORTH

HB LAND DESIGN
106 MISSION CRT. STE 403B
Franklin, TN 37067
615.376.2421
hblanddesign.com

PROPOSED SITE FOR:
MORNING POINTE
COLUMBIA, TENNESSEE

CONNOR L. BALL
REGISTERED
ARCHITECT
NOT FOR CONSTRUCTION
12/15/2026

Job # - 25277
BY: cb

TREE PRESERVATION PLAN

L1.0



R/W LINE

36" ht BRICK COLUMNS
30" ht DECORATIVE ALUMINUM FENCE

36" ht BRICK COLUMNS
30" ht DECORATIVE ALUMINUM FENCE

36" ht BRICK COLUMNS
30" ht DECORATIVE ALUMINUM FENCE

RUTHERFORD LANE
(80' PUBLIC R/W)

PARKING LOT SCREENING

150' TVA EASEMENT
NO LANDSCAPE THAT WILL GROW TALLER THAN 15' IS ALLOWED IN THE EASEMENT
ANY REQUIRED CANOPY TREES ARE REPLACED WITH SMALL ORNAMENTAL TREES

150' TVA EASEMENT

WESTFIELD DRIVE
(50' PUBLIC R/W)

EOP

EXISTING TREE CANOPY TO REMAIN

TREE PROTECTION FENCE
TREE FENCE TO REMAIN IN PLACE UNTIL AFTER COMPLETION OF FINAL INSPECTION

50' LANDSCAPE BUFFER MET WITH EXISTING UNDISTURBED CANOPY AND UNDERSTORY VEGETATION
ADDITIONAL EVERGREEN TREES WILL BE ADDED TO SUPPLEMENT IN AREAS OF SPARSE EXISTING VEGETATION

30" HACK

0 40 80 120 feet
SCALE: 1" = 40'

EXISTING PRESERVED CANOPY AND UNDERSTORY VEGETATION IN THE WINTER





- 1 TREE PER 50 FT OF FRONTAGE
  1,237 LF / 50 = 25 STREET TREES
- HERITAGE TREE REPLACEMENT: 156"
  PROVIDED: >157.5" (63 - 2.5" TREES)
- 1 CANOPY TREE PER 2,000 SF OF PARKING AREA
  64,369sf PARKING AREA / 2,000 = 32 PARKING LOT TREES
- MIN. SIZE: 2.5" / MIN. SPECIES: 4 / MAX GENERA 40%
- FOUNDATION PLANTINGS
- ALL TREES TO BE INSTALLED AT A MIX. 6' FROM ANY WATER MAIN OR PUBLIC WATER SYSTEM INFRASTRUCTURE

PLANT SCHEDULE

SYMBOL	QTY	COMMON / BOTANICAL NAME	CONT	CAL	SIZE
BUFFER TREES					
	27	Supplimental Buffer Trees 6'-8' Evergreen Trees Mix of Holly, Magnolia, Arborvitae	B & B		6`-8` HT
PARKING LOT TREES					
	12	Black Diamond Best Red Crape Myrtle / Lagerstroemia indica 'Black Diamond Best Red' 3 Cane. Min. Evenly Branched. Matched. See Tree Specifications	#15 Container	CLUMP	8` HT
	12	Willow Oak / Quercus phellos 5` Clear Trunk. Evenly Branched. Matched. See Tree Specifications	B & B	2.5"Cal	Per ANSI
	8	Village Green Zelkova / Zelkova serrata `Village Green` 5` Clear Trunk. Evenly Branched. Matched. See Tree Specifications	B & B	2.5"Cal	Per ANSI
REPLACEMENT TREES					
	21	2.5" Canopy Tree Mix of Oak, Poplar, Maple, Elm, etc.	B & B	2.5"Cal	Per ANSI
	42	2.5" Ornimental Tree Mix of Cherry, Redbud, Dogwood, etc	B & B	2.5"Cal	Per ANSI
STREET TREES					
	6	Summer Red Red Maple / Acer rubrum `HOSR` 5` Clear Trunk. Evenly Branched. Matched. See Tree Specifications	B & B	2.5"Cal	Per ANSI
	15	Kentucky Coffeetree / Gymnocladus dioica 'Espresso' 5` Clear Trunk. Evenly Branched. Matched. See Tree Specifications	B & B	2.5"Cal	Per ANSI
	4	Black Diamond Blush Crape Myrtle / Lagerstroemia indica 'Black Diamond Blush' 3 Cane. Min. Evenly Branched. Matched. See Tree Specifications	#15 Container	CLUMP	8` HT
SYMBOL	QTY	COMMON / BOTANICAL NAME	HT / CONT.	WIDTH	
SHRUBS					
	404	Foundation Shrubs. 1st Layer Foundation Shrubs Min. 1 shrub per 5' of building facade.	B & B		
SYMBOL	QTY	COMMON / BOTANICAL NAME	CONT		
SHRUB AREAS					
	34,898 sf	Foundation Landscape Layered Mix of Evergreen and flowering shrubs, & ornamental grasses layered to enhance the aesthetics of the building.	Vanes		

LAND DESIGN
106 MISSION CRT. STE 403B
Franklin, TN 37067
615.376.2421
hblanddesign.com

PROPOSED SITE FOR:
MORNING POINTE
COLUMBIA, TENNESSEE

CONNER L. BALL
REGISTERED
AGRICULTURE
TENNESSEE

NOT FOR CONSTRUCTION
12/15/2020

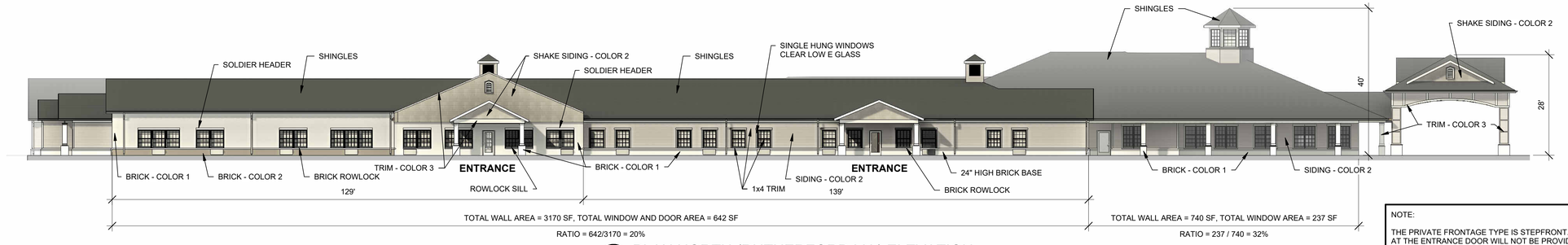
Job # - 25277

BY: cb

NORTH

L1.1

LANDSCAPE PLAN



2 PLAN NORTH (RUTHERFORD LN) ELEVATION
1/16" = 1'-0"

NOTE:

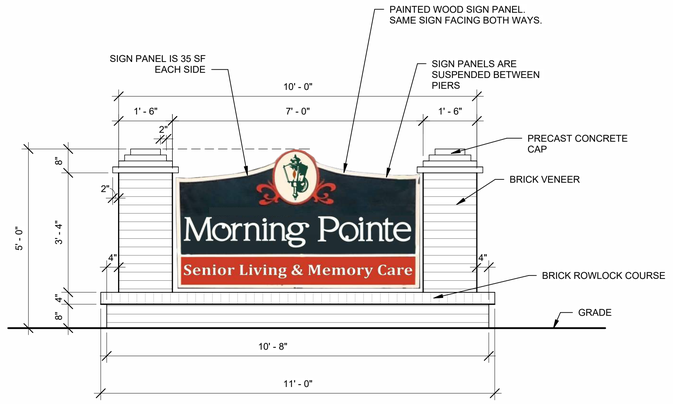
THE PRIVATE FRONTAGE TYPE IS STEPFRONT. A STEP AT THE ENTRANCE DOOR WILL NOT BE PROVIDED TO COMPLY THE BUILDING CODE REQUIREMENT FOR A LEVEL EGRESS.

ALL ROOF SLOPES TO BE BETWEEN 6:12 AND 14:12.

ALL CEILING HEIGHTS WILL BE LESS THAN 25 FEET.



1 PLAN SOUTH (FACING LANDSCAPE BUFFER) ELEVATION
1/16" = 1'-0"



5 MORNING POINTE SIGN
1/2" = 1'-0"



3 PLAN WEST ELEVATION
1/16" = 1'-0"



4 PLAN EAST ELEVATION
1/16" = 1'-0"

REVISIONS

699 DALLAS ROAD
CHATTANOOGA, TN 37405
(423) 265-3272
FAX (423)266-5502

NEUHOFF TAYLOR ARCHITECTS

MORNING POINTE OF COLUMBIA
ASSISTED LIVING AND MEMORY CARE FACILITY
RUTHERFORD LANE
COLUMBIA, TENNESSEE

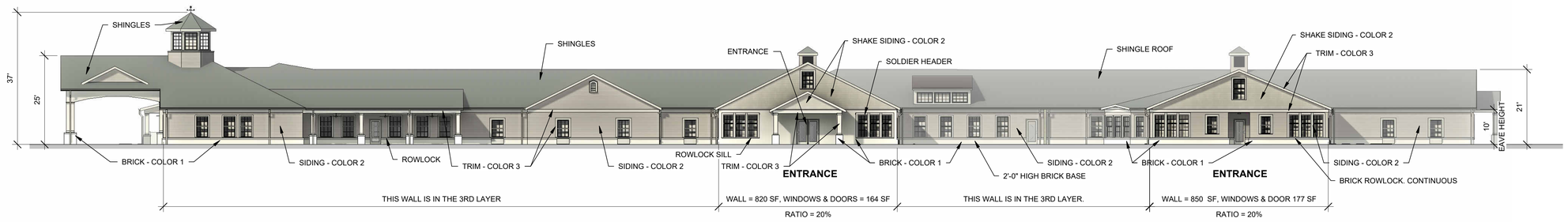
RANDALL P. TAYLOR
REGISTERED ARCHITECT
AGENT
NUMBER 102671
STATE OF TENNESSEE
12-23-25

PROJECT #
25049

DATE
12-15-25

DRAWING NAME
ELEVATIONS

SHEET #
A2



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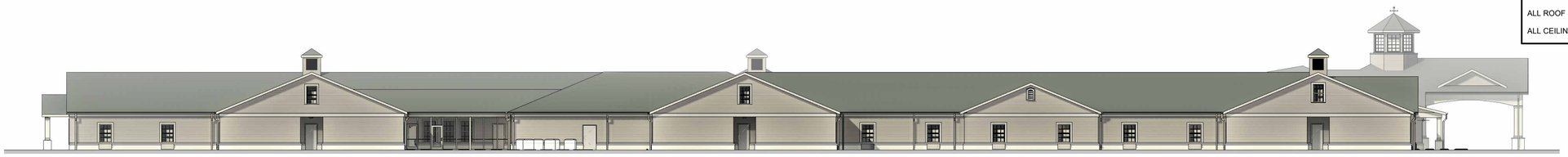

2 PLAN SOUTH (FACING LANDSCAPE BUFFER) ELEVATION
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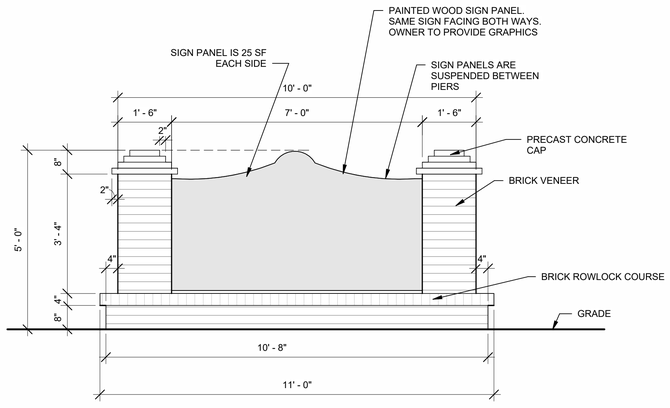

5 MORNING POINTE SIGN
1/2" = 1'-0"



3 PLAN WEST (WESTFIELD) ELEVATION
1/16" = 1'-0"



4 PLAN EAST ELEVATION
1/16" = 1'-0"

REVISIONS

699 DALLAS ROAD
CHATTANOOGA, TN 37405
(423) 265-3272
FAX (423)266-5502

NEUHOFF TAYLOR ARCHITECTS

THE LANTERN AT MORNING POINTE
ALZHEIMER'S CENTER OF EXCELLENCE COLUMBIA

RUTHERFORD LANE
COLUMBIA, TN

RANDALL P. TAYLOR
REGISTERED ARCHITECT
STATE OF TENNESSEE
No. 16021
1-23-26

PROJECT #
25048

DATE
1-23-26

DRAWING NAME
ELEVATIONS

SHEET #
A4

November 19, 2025

Mr. Jay Fulmer
Fulmer Lucas Engineering
2002 Richard Jones Rd., Suite B200
Nashville, TN 37215
Sent via email: jay@fulmerlucas.com

RE: **Water Availability Letter** Expires: 5/19/2026
Morning Pointe Assisted Living
Rutherford Lane at Westfield Drive (southwest corner)
Tax Map & Parcel 11200307000
Columbia, TN

Dear Mr. Lucas:

Columbia Power & Water Systems ("the Utility"/CPWS) is a municipal corporation authorized to provide water services in accordance with State law. CPWS has adopted rules, regulations, and standard operation procedures, prescribing the conditions under which CPWS will furnish water service. In addition, certain State laws delegate authority to the Tennessee Department of Environment and Conservation (TDEC), various Planning Commissions, and other authorities in Cities and Counties. These Cities and Counties have also adopted rules and regulations. Water service will be made available on a first-come, first-served basis, subject to the payment of all charges and fees imposed by CPWS and the approval of any and all required governmental agencies. Water service is subject to availability of all CPWS furnished equipment and materials appropriate for the development and provided the applicant complies with all rules and regulations of CPWS and conditions set out herein.

The proposed development is a 145 bed assisted living facility in two buildings. CPWS has evaluated the projected water demands for the proposed development in the water system hydraulic model. CPWS can provide water for the proposed development according to the following criteria and requirements:

- Source water capacity is vested when CPWS has provided approval to proceed to construction and appropriate Impact Fees are paid.
- The current CPWS system is only able to support a fire flow up to 750 gpm at this location until (planned) additional improvements in the Southside distribution area are completed.
    - After completion of the Southside distribution area improvements, available fire flow will be up to 1,250 gpm.

- The number and sizes of service meters assumed for this letter is based on Applicant's description of the project features. Actual meter count and sizing will be updated or verified during the Design Review phase of the Project:
    - 114,340 sf of commercial assisted living space (two buildings)
    - Assume Fire Service meter: One (1) at 6-inch
    - Assumed Commercial Service meters: Two (2) at 2-inch
    - Assumed Landscape Irrigation meter: One (1) at ¾-inch
- The above request translates to a 41 Single Family Unit (SFU) flow demand equivalent.
- Separate irrigation meters with backflow devices will be required to serve the proposed Project.
- If fire sprinkler systems are requested or required, separate fire meters with backflow devices will be required to serve the proposed Project.

All of the above requirements up to and including the meter(s) are to be constructed and paid for by the Applicant and dedicated to CPWS once complete. No construction of water infrastructure shall be initiated until final construction plans have been approved by CPWS (including TDEC approval, if required).

This Water Availability Letter will expire in six months unless vested by payment of water service fees and impact fees for the proposed project. Any request for water availability after the expiration date of this letter will be considered a new application.

Once you have received this Water Availability Letter, next steps in the process to vest water service from CPWS are as follows:

- Remit to CPWS new water service fees for plan review, TDEC coordination, and inspection as follows: $1,500 + $370 per SFU equivalent
- Applicant will prepare design drawings for review and approval by CPWS for construction of the proposed water system improvements.
    - Provide design drawings in AutoCAD and .pdf format for CPWS review of proposed development. Include design drawings for grading, drainage, roadway improvements, buried (wet and dry) utilities, water systems, and surface improvements.
    - Once CPWS approves the Construction Drawings for the proposed system improvements, Applicant will submit proposed improvements design to TDEC for review and approval (if TDEC review required).
    - CPWS will prepare hydraulic calculations and a Utility Approval Letter to accompany the plans submittal to TDEC.
- Current water service fees due prior to CPWS review of design plans are listed in the table below. *Note that payment of Water Service Fees will extend the expiration of this*

Water Availability Letter for one year, while the applicant is working with CPWS on design and review of the improvement drawings.

New Water Service Fees	SFUs	Total
$1,500 + 370 per SFU	41	**$16,670**

- Upon Construction Drawing approval by CPWS, applicant may then pay Impact Fees and Meter Fees and schedule the pre-construction meeting. Pre-construction meeting will be canceled and re-scheduled unless all impact fees are paid at least 48 hours prior, or surety is provided in lieu of full payment.
- Water meters will be ordered by CPWS once meter fees are paid by the Applicant.
    - Meter fees are subject to change based on final design and the prevailing Board-approved rates at time of payment.
    - If surety is provided in lieu of payment, meters are not ordered until fees are paid and may result in extended lead-times.
- Applicants will be charged Impact Fees and Meter Fees in effect at time of payment. Please see CPWS website for schedule of impact fees and timing of planned fee escalations. Anticipated meter costs and impact fees for this project are according to the following table:

Impact Fees and Meter Costs	Number	$ / Unit	Total
¾" Landscape Irrigation Meter Cost	1	$540	$540
2" Service Meter Cost	2	Current Price	Deferred
6" Fire Meter Cost	1	Current Price	Deferred
Current Impact Fee for ¾" Service Meter	1	$5,500	$5,500
Current Impact Fee for 2" Service Meter	2	$30,000	$60,000
Estimate of Fees Due Prior to Pre-Construction Meeting =			**$66,040**

- After the pre-construction meeting, CPWS will then issue a formal Notice to Proceed.
- Applicant is required to construct all public water infrastructure per CPWS standard specifications and provide CPWS personnel unregulated access to the site to inspect the construction of the water infrastructure.
- No construction of water improvements may take place prior to the Notice to Proceed or without a CPWS inspector present.

Please feel free to contact me at 931-388-4833 x7655 or Matt.Wheeler@cpws.com if you have questions or would like to discuss.

Sincerely,



Matthew J. Wheeler, P.E.
Vice President of Water Resources, CPWS

cc: Franklin Farrow, Morning Pointe
Bart Anderson, CPWS
File 25-036

CITY OF COLUMBIA
TENNESSEE

WASTEWATER DEPARTMENT

23 October 2025

Jay Fulmer
Fulmer Lucas Engineering, LLC
2002 Richard Jones Rd, B200
Nashville, TN 37215

RE: Rutherford Ln Map 112 Parcel 3.07, Columbia, TN 38401; Morning Pointe 145 Bed Assisted Living Facility

Jay,

This letter serves as confirmation that the City of Columbia Wastewater Department has the available capacity to service the subject development. Any extension to the existing sewer infrastructure will be initiated by the owner/developer, reviewed by our department and approved by the State of Tennessee. The project must be advanced in accordance with local, state and federal rules, regulations and policies. Funding and construction of those improvements will remain the responsibility of the owner/developer. New customers will be required to pay all fees applicable at the time of connection. Any Final Plat approval and Dedication are both subject to installation and function, as determined by our Department. No detailed design plan for an extension of the sewer has been proposed at this time.

Donnie Boshers, Director
City of Columbia, TN
Wastewater Department

CITY OF COLUMBIA TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

Preliminary Plat, Site Development Plan, and PUD Checklist

Development: MORNING POINTE

This checklist shall be completed, and included with the submittal documents. If the submittal does not contain a completed checklist, it shall be deemed incomplete. All below listed items shall be included in the submittal documents and plans, as well as any further information required by the City of Columbia to evaluate compliance and to perform a full and complete review. See Zoning Ordinance Article 8 and Subdivision Regulations.

General

- ☑ Name of development
- ☑ Contact info for the owner and licensed design professional(s) preparing plan: name, address, email, phone
- ☑ Plan sealed by a design professional licensed in the State of Tennessee.
- ☑ North Arrow, legend, and site vicinity map
- ☑ Graphic Scale: between 1 in. = 10 ft. and 1 in. =100 ft.
- ☑ Survey stamped by a State of Tennessee Licensed Professional Land Surveyor, with all project boundaries including bearings and angles to the nearest hundredth, utilities, and existing streets and rights-of-way.
- ☑ Note referencing Tennessee State Plane Coordinate System, NAD 83 Datum
- ☑ All property boundaries, existing easements, and encumbrances
- ☑ Parcel identification, owner, and deed and plat references of adjoining properties
- ☑ Proposed phasing and timetable for all phases of development
- ☐ Traffic Impact Study, as required.
- ☑ The substance of all existing and proposed covenants, easements, or other restrictions.

Lots and Land-Use

- ☑ The size of total property to be developed in square feet and acres
- ☑ Lot numbers of all proposed lots, with dimensions, locations, and square footage
- ☑ A tabulation of the land area to be devoted to various uses and activities and overall densities.
- ☐ Typical lot layout depicting proposed setbacks, yards, and easements, where applicable

Structures

- ☑ Location and approximate dimensions of all existing and proposed structures.
- ☐ Location of all earth retaining structures, with approximate top and bottom of wall elevations.
- ☑ Existing and intended use of all buildings and structures on site, including the number of dwelling units and density, where applicable
- ☑ Location, type, and size of proposed signs
- ☑ Approximate height, bulk, and the utilization of structures including activities and the number of living units.

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TENNESSEE

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Grading, Drainage, and Storm

- ☑ Existing conditions and contours at vertical intervals of not more than two (2) feet
- ☑ General proposed contours at vertical intervals of not more than two (2) feet
- ☑ FEMA Special Flood Hazard Area (SFHA), 100-year Floodplain (F-P), and Floodway (F-W) boundaries with elevations and the exact location of the nearest benchmark. Indicate the Flood Insurance Rate Map (FIRM) panel number, its effective date, and flood insurance zones
- ☐ Location and dimension of aquatic buffer zones
- ☑ General layout of the proposed storm drainage system including surface and subsurface drainage systems, areas for detention, and water quality devices.
- ☐ Identification of all critical lots

Streets, Parking, and Pedestrian Elements

- ☑ Proposed street and alley rights-of-way, typical sections, widths, classification, names, and proposed ownership and maintenance responsibility
- ☑ Proposed connections to existing and proposed streets (including classification) located outside the development
- ☐ Proposed improvements as identified in the Traffic Impact Study, as required
- ☑ Existing and proposed sidewalks, trails, and other pedestrian elements
- ☑ Existing and proposed on-street and off-street parking and loading areas
- ☑ Summary of all provided and required parking

Landscaping, Open Space, and Amenities

- ☑ Natural features on site including, but not limited to, wetlands, streams, ponds, springs, sinkholes, wells, rock outcroppings, excessive slopes, and forested areas
- ☑ Landscaped areas and buffers with details on proposed plantings, existing vegetation, and other features.
- ☑ The location and size of all common open space, parkland dedications, and dedications and reservations of land for public uses.
- ☑ Any amenity features and structures for private or public benefit.
- ☑ Location, dimension, and materials of fences and walls
- ☑ Tree Canopy retention

Utilities

- ☑ General layout and location of existing and proposed utilities and utility features including, but not limited to potable water, fire hydrants, sanitary sewer, storm sewer, and power and communication facilities.
- ☑ Acknowledgement from water, sewer, and power utility providers that the proposed development may be adequately served with existing infrastructure, or if improvements are required to adequately serve the development, a general statement of the improvements.

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PUD Specific Items

- ❑ List of all deviations from PUD Standards requested
- ❑ The nature of the landholder's interest in the land proposed to be developed and a written statement of concurrence from all parties having a beneficial interest in the affected property.
- ❑ Location and approximate dimensions of all existing and proposed structures including approximate height, bulk, and the utilization of structures including activities and the number of living units. Include architectural renderings of all proposed structures with materials listed.
- ❑ The substance of covenants, grants of easements or other restrictions to be imposed upon the use of the land, buildings and structures including proposed easements for public utilities on the property or documentation of off-site easements.
- ❑ Exterior lighting plan.

If the application is deemed incomplete by the Zoning Administrator, a written request shall be made within ten days after the original submittal, for further information. In such case the application shall be held in abeyance until deemed complete for final review. No plan shall be formally presented for Planning Commission action until such plan is found complete, compliant with City standards, and ready for review.

Checklist Completed By:

STEPHEN VANDER HORST		04/20/2026
Print Name	Signature	Date

BK/PG:R2895/829-838
23000133

10 PGS : QUITCLAIM DEED	
NANCY MCMEEN 295732 - 23000133	
01/04/2023 - 08:10 AM	
VALUE	
MORTGAGE TAX	0.00
TRANSFER TAX	0.00
RECORDING FEE	50.00
DP FEE	2.00
REGISTER'S FEE	0.00
TOTAL AMOUNT	52.00

STATE OF TENNESSEE, MAURY COUNTY
JOHN FLEMING
REGISTER OF DEEDS

QUITCLAIM DEED

MICHELLE MARIE MONTAGUE NOTARY PUBLIC STATE OF TENNESSEE DAVIDSON COUNTY MY COMMISSION EXPIRES JULY 6, 2026

STATE OF TENNESSEE, COUNTY OF DAVIDSON

THE ACTUAL CONSIDERATION OR VALUE, WHICHEVER IS GREATER FOR THIS TRANSFER IS $0.00.

Affiant

Subscribed and sworn to me on this 7th day of December 2022.

NOTARY PUBLIC

My Commission Expires:

THIS INSTRUMENT WAS PREPARED BY:

ORTALE KELLEY (JHC)
330 Commerce Street, Suite 110
Nashville, TN 37201

NOTE: THIS QUITCLAIM DEED WAS PREPARED BY INFORMATION PROVIDED BY THE PARTIES. NO TITLE SEARCH WAS PERFORMED BY THE PREPARER

NAME/ADDRESS OF NEW OWNER:	SEND TAX BILLS TO:	MAP – PARCEL #
Crichton Welton Partners, G.P. 6471 Ridley Jewell Road Columbia, TN 38401	NEW OWNER	073-018.04 073-018.06 073-018.08 073-018.09 073-018.10 073-018.11 112-003.00 112-003.00-001 112F-C-004.01

FOR AND IN CONSIDERATION of Ten ($10.00) Dollars, cash in hand paid by the hereinafter named Grantees, and other good and valuable considerations, the receipt and sufficiency of which are hereby acknowledged, WELTON INVESTMENTS, LLC, a Tennessee limited liability company, hereinafter called **"GRANTOR,"** does hereby quitclaim and convey all of his rights, title and interest unto CRICHTON WELTON PARTNERS, G.P., a Tennessee general partnership, hereinafter called **"GRANTEE,"** its successors and assigns, certain tracts or parcels of land in Maury County, State of Tennessee, and more fully described as follows:

SEE EXHIBIT A ATTACHED

IN WITNESS WHEREOF, the Grantor, by its duly authorized officer, has caused its name to be affixed hereto on this 31st day of December, 2022.

WELTON INVESTMENTS, LLC

By: _____
John B. Jewell, IV,
Managing Member

STATE OF TENNESSEE)
COUNTY OF Davidson)

Before me, a Notary Public of said County and State, personally appeared John B. Jewell, IV, with whom I am personally acquainted (or proved to me on the basis of satisfactory evidence), and who, upon oath, acknowledged himself to be the Managing Member of Welton Investments, LLC, a Tennessee limited liability company (the "Company"), the within named bargainor, and that he, as the Managing Member of the Company executed the foregoing instrument for the purposes therein contained.

Witness my hand and seal, this 7th day of December, 2022.

_____
Notary Public, State of Tennessee

My Commission Expires: 11-5-2025

J. WALKER LEWIS
STATE OF TENNESSEE NOTARY PUBLIC
DAVIDSON COUNTY
MY COMMISSION EXPIRES NOVEMBER 5, 2025

EXHIBIT A
Legal Description

Located in the Ninth (9th) Civil District of Maury County, Tennessee, and more particularly described as follows:

Tract I (Map 112F, Group C, Parcel 4.01):

Parcel 1: Located in the Ninth (9th) Civil District of Maury County, Tennessee, and more particularly described as follows:

Being a tract as shown on the J.A. Morgan and Katherine S. Morgan Plat, containing 0.85 acre as shown in Plat Book 6, Page 564-B, Register's Office of Maury County, Tennessee.

Being the same property conveyed to Andrew D. Crichton, John B. Jewell, III, and James W. Jewell, as equal tenants in common, by deed of record in Book 1407, Page 349, Register's Office of Maury County, Tennessee and also referred to in Deed of Trust of record in Book 1678, Page 162, Register's Office of Maury County, Tennessee.

Parcel 2: Bounded on the North by Crichton, on the South by Morgan and others, on the East by Mt. Pleasant Pike, and on the West by Lot 78, Pleasant Hills Subdivision, and being more particularly described as follows:

Beginning at a post in the Western margin of the Mt. Pleasant Pike, 30 feet from the centerline of said road, said point also being the Southeast corner of what is now the Crichton property; thence with the Western margin of the MI. Pleasant Pike, South 41 degrees 51 minutes West 152.28 feet to an iron pin, Morgan and others corner; thence leaving highway and with Morgan, North 58 degrees 05 minutes West, 339.94 feet to an iron pin, said point being in the Eastern line of Lot 78 of Pleasant Hills S/D; thence with the Eastern line of Lot 78, North 3 degrees 50 minutes East, 170.24 feet to an iron pin in Crichton's South line; thence with Crichton's South line, South 57 degrees 35 minutes East, 22.16 feet to a post; thence with same, South 58 degrees 05 minutes East, 424.19 feet to the point of beginning, and containing 1.35 acres, by survey made November 16, 1968, by Paul J. Boatright, Registered Land Surveyor No. 244.

Being the same properly conveyed to Andrew D. Crichton, James W. Jewell, and John B. Jewell, Ill, as equal tenants in common, by deed of record in Book 1340, Page 102, Register's Office of Maury County, Tennessee and also referred to in Deed of Trust of record in Book 1678, Page 162, Register's Office of Maury County, Tennessee.

Less and Except that portion of the above described property conveyed in Book 2113, Page 537, Register's Office of Maury County, Tennessee

Tract III (Part of Map 112, Parcel 003.00)

Parcel No. 1:

Bounded on the North by L and N Railroad and Rutherford Lane; East by Criddle Meadows Subdivision and Dr. Dan Gray; South by Mt. Pleasant Pike or U.S. No. 43 Highway, Pleasant Hills Subdivision, J.A. Morgan and Others; West by Ridley brothers. Beginning at an iron pin in the East line of Ridley brothers tract at the Southwest corner of the herein described tract: thence with Ridley brothers and generally following a fence North 5 degrees 16 minutes East, 1,127.65 feet to an iron pin; thence with same North 87 degrees 32 minutes West, 946.15 feet to an iron pin; thence with same North 0 degrees 50 minutes East, 359.97 feet to a spike in the center line of L and N Railroad; thence following a staked line with iron pins along center line of L and N Railroad as follows: North 53 degrees 29 minutes East, 2,326.46 feet, North 56 degrees 09 minutes East, 352.0 feet; North 59 degrees 31 minutes East, 326.96 feet; North 62 degrees 32 minutes East, 264.30 feet; North 65 degrees 18 minutes East, 278.60 feet; North 67 degrees 39 minutes East, 221.60 feet to an iron pin; thence leaving railroad and generally following a fence along the South margin of Rutherford Lane South 87 degrees 27 minutes East, 916.74 feet to an iron pin; thence with same South 86 degrees 19 minutes East, 149.18 feet to a stake; thence with the West line of Criddle Meadows Subdivision South 4 degrees 04 minutes West, 2,743.39 feet to an iron pin; thence with the South line of Criddle Meadows Subdivision South 85 degrees 56 minutes East, 400.0 feet to an iron pin; thence with same South 84 degrees 29 minutes East, 221.98 feet to an iron pin; thence with Dr. Dan Gray South 13 degrees 46 minutes East, 24.80 feet to an iron pin; thence with same South 55 degrees 24 minutes West, 95.22 feet to an iron pin; thence with same South 42 degrees 15 minutes East, 93..35 feet to an iron pin; thence with same South 24 degrees 43 minutes East, 99.95 feet to an iron pin; thence with same South 55 degrees 50 minutes West, 178.04 feet to an iron pin: thence with same South 39 degrees 27 minutes East, 820.80 feet to an iron pin; thence with the North margin of Mt. Pleasant Pike South 42 degrees 32 minutes West, 506.57 feet to an iron pin; thence with J. A. Morgan and others North 58 degrees 05 minutes West, 424.19 feet to an iron pin; thence with same and with Pleasant Hills Subdivision North 57 degrees 35 minutes West, 418.17 feet to an iron pin; thence with Pleasant Hills Subdivision North 88 degrees 01 minutes West, 680.26 feet to an iron pin; thence with same North 88 degrees 21 minutes West, 514.0 feet to an iron pin; thence with same North 88 degrees 01 minutes West, 308.0 feet to an iron pin; thence with same North 87 degrees 37 minutes West, 431.0 feet to an iron pin; thence with proposed Pleasant Hills Subdivision, Section 4; and J. A. Morgan and Others North 87 degrees 23 minutes West, 919.68 feet to an iron pin; thence with J. A. Morgan and Others North 86 degrees 26 minutes West, 310.82 feet to the point of beginning, containing by survey 269.70 acres.

There is a TVA power line having a 250 right-of-way across the East portion of the above described tract. There is a 100-foot chartered railroad right-of- way on this tract along the railroad line.

Parcel No. 2:

Bounded on the North by Raymond McMeen and Tom Burt; C. C. Pinckney; W. Clyde Baker and Rutherford Lane; East and South by L and N Railroad and West by Ridley brothers.

Beginning at an iron pin in McMeen and Burt's South line, said point being the Northwest corner of the herein described tract; thence with McMeen and Burt farm, C. C. Pinckney and W. Clyde Baker generally following a fence South 87 degrees 52 minutes East, 1079.03 feet to an iron pin; thence with Baker generally following a fence South 85 degrees 57 minutes Fast, 400.23 feet to an iron pin; thence with same South 85 degrees 46 minutes East, 371.10 feet to an iron pin; thence with same North 5 degrees 29 minutes East, 342.33 feet to an iron pin; thence with same South 87 degrees 35 minutes East, 504.44 feet to an iron pin; thence with same South 88 degrees 15 minutes East, 300.05 feet to an iron pin; thence with the South margin of Rutherford Lane South 89 degrees 17 minutes East, 1,160.19 feet to an iron pin; thence with same South 87 degrees 27 minutes East, 13.46 feet to an iron pin in center line of L and N Railroad; thence with the center line of L and N Railroad following a staked line with iron pins as follows: South 67 degrees 39 minutes West, 221.60 feet; South 65 degrees 18 minutes West, 278.60 feet; South 62 degrees 32 minutes West, 264.30 feet; South 59 degrees 31 minutes West, 326.96 feet; South 56 degrees 09 minutes West, 252.0 feet; South 53 degrees 29 minutes West, 2,305.30 feet; thence leaving railroad and with Ridley brothers generally following a fence as follows: North 20 degrees 46 minutes West, 328.63 feet to an iron pin; North 32 degrees 52 minutes West, 326.42 feet to an iron pin; North 23 degrees 49 minutes West, 428.85 feet to an iron pin; North 17 degrees 02 minutes West, 922.55 feet to the point of beginning, containing by survey 78.34 acres. There is a 100-foot chartered right-of-way on this tract along the railroad line. The above descriptions are according to a survey made on June 15, 1973 by John J. Harris, Registered Land Surveyor, Maury County, Tennessee.

Exclusions from Tract III, Parcel No. 1:

1. 7.93 acres conveyed in Book 607, page 512, Register's Office of Maury County, Tennessee.

2. 10.0 acres conveyed in Book 655, Page 709, Register's Office of Maury County, Tennessee.

3. 10.0 acres conveyed in Book 711, Page 531, Register's Office of Maury County, Tennessee.

4. 12.1 acres conveyed in Book 803, Page 174, register's Office of Maury County, Tennessee.

5. 0.52 acres conveyed in Book 675, Page 50, Register's Office of Maury County, Tennessee.

6. 0.36 acres conveyed in Book 679, Page 508, Register's Office of Maury County, Tennessee.

7. 2.55 acres conveyed in Book 679, Page 511, Register's Office of Maury County, Tennessee.

8. All Lots in Westfield Subdivision, Sections 1, 2,3, 4, and 4A, with the exception of Lot

114 Westfield Subdivision, Section 4 as shown on plat of record in Plat Book 8, Page 21, Register's Office of Maury County, Tennessee.

Exclusion from Tract III, Parcel No. 2:

1. 25.53 acres conveyed in Book 563, Page 204, Register's Office of Maury County, Tennessee.

Exclusions from Tract III, Parcel Nos. 1 and 2:

1. 9.4 acres conveyed in Book 591, Page 180, Register's Office of Maury County, Tennessee.

2. 1.356 acres conveyed in Book 675, Page 374, Register's Office of Maury County, Tennessee.

3. 17.55 acres conveyed in Book 1114, Page 276, Register's Office of Maury County, Tennessee.

4. 65.65 acres conveyed in Book 2839, Page 368, Register's Office of Maury County, Tennessee.

Being the same property conveyed to Andrew Donelson Crichton, James W. Jewell and John B. Jewell, III, as equal tenants in common, by deed of record in Book 559, Page 698, Register's Office of Maury County, Tennessee and also referred to in Deed of Trust of record in Book 1678, Page 162, Register's Office of Maury County, Tennessee.

Tract IV (Part of Map 112, Parcel 003.00)

Located in the Ninth (9th) Civil District of Maury County, Tennessee, near the intersection of West Park Drive and the L and N Railroad. Bounded on the North by L and N Railroad; East by West Park Drive; South and West by A. D. Crichton and others, and more particularly described as follows:

Beginning at a spike in the center of L and N Railroad, said point is also in the West margin of West Park Drive, said point is in the Northeast corner of the herein described tract; thence with the West margin of West Park Drive South 34 degrees 10 minutes East, 517.77 feet to an iron pin at point of curve; thence on a chord to a 5 degrees 11 minutes curve having a central angle of 22 degrees 09 minutes feet South 30 degrees 56 minutes East, 125.0 feet to an iron pin; thence with A. D. Crichton and others South 53 degrees 29 minutes West, 644.71 feet to an iron pin; thence with same North 36 degrees 31 minutes West, 660.91 feet to a spike in the center of L and N Railroad; thence with L and N Railroad North 53 degrees 29 minutes East, 287.17 feet to a spike; thence with same on a chord to a 1 degrees curve North 56 degrees 04 minutes East 352.0 feet to a spike; thence with same on a chord to curve North 57 degrees 57 minutes East, 39.21 feet to the point of beginning, containing by Survey of John J. Harris dated October 1, 1979, 10.0 acres.

Being the same property conveyed to John B. Jewell, III, Andrew D. Crichton, and James W.

Jewell, as equal tenants in common, by deed of record in Book R1913, Page 123, Register's Office of Maury County, Tennessee.

Tract V (Part of Map 112, Parcel 003.00)

This is a tract or parcel of land located in the Ninth Civil District of Maury County, Tennessee bounded on the North by Don Crichton and Others; East by proposed new road; South and West by Don Crichton and Others and more particularly described as follows:

Beginning at an iron pin in the West margin of new proposed Road at the Southwest corner of the herein described tract, said point being North 48 degrees 53 minutes West, 1,473.45 feet from the North margin of U. S. Highway No. 43 or Mt. Pleasant Pike, said point in North margin of highway is South 41 degrees 57 minutes West, 236.16 feet from the most Southerly Southwest corner of the Don Crichton and Others farm; thence with Don Crichton and Others South 56 degrees 07 minutes West, 255.0 feet to an iron pin; thence with same, North 48 degrees 53 minutes West, 175.0 feet to an iron pin, thence with same North 56 degrees 07 minutes East, 246.70 feet to an iron pin; thence with the West margin of the new proposed road on a 4 degrees 07 minutes curve having a central angle of 9 degrees 54 minutes a distance on curve of 149.30 feet to P.C. of curve; thence with same on a tangent South 48 degrees 53 minutes East, 28.0 feet to the Point of beginning, containing by survey 1.0 acre.

Being the same property conveyed to Andrew Donelson Crichton, James W. Jewell and John B. Jewell, III, as tenants in common, by deed of record in Book 559, Page 698, Register's Office of Maury County, Tennessee.

Being the same property conveyed to Porter House and wife, Linnie Louise Rose House, by deed of life estate of record in Book 595, Page 486, Register's Office of Maury County, Tennessee. Both Porter House and wife, Linnie Louise Rose House are deceased.

Tract VI (Part of Map 112, Parcel 003.00)

Any portion of Old Rutherford Lane that bounds said property owned by Andrew D. Crichton, John B. Jewell, III, and James W. Jewell, up to the centerline of said Lane.

First party also quitclaims any and all rights in and to Old Rutherford lane acquired by virtue of the foregoing deed or otherwise.

Being the same property conveyed to Andrew D. Crichton, John B. Jewell, Ill, and James W. Jewell, as equal tenants in common, by deed of record in Book 819, Page 53, Register's Office of Maury County, Tennessee.

Being a portion of the same property conveyed to Welton Investments, LLC by Quitclaim deed from John B. Jewell, III, Andrew D. Crichton and James W. Jewell, as equal tenants in common of record in Book R2077, page 1007 Register's Office for Maury County, Tennessee, dated April 28, 2009 and recorded on April 06, 2009.

Tract VII:

Tract 1: (Map 73, Parcel 18.04)

Located in the Fourth (4th) Civil District of Maury County, Tennessee, and being Tract 3 on the plat of survey for Barker Enterprises, Inc., containing 1.64 acres, as shown on plat of record in Plat Book 5, Page 182, Register's Office of Maury County, Tennessee.

Being the same property conveyed to Welton Investments, a Tennessee General Partnership, by deed of record in Book 1245, Page 299, Register's Office of Maury County, Tennessee. Being a portion of the same property conveyed Welton Investments, a Tennessee General Partnership, by deed of record in Book 1518, Page 557, Register's Office of Maury County, Tennessee.

Tract VIII: (Map 73, Parcel 18.06)

Located in the Fourth (4th) Civil District of Maury County, Tennessee, and being Tract 5 of the plat of survey for Barker Enterprises, Inc., containing 2.37 acres, as shown on plat of record in Plat Book 5, Page 182, Register's Office of Maury County, Tennessee.

Being the same property conveyed to Welton Investments, by deed of record in Book 1245, Page 637, Register's Office of Maury County, Tennessee.

Being a portion of the same property conveyed to Welton Investment, LLC, a Limited Liability Company by Quitclaim deed from Welton Investments, a Tennessee Partnership of record in Book R1518, page 557 Register's Office for Maury County, Tennessee, dated January 18, 2001 and recorded on January 23, 2001.

Tract IX:

Parcel 1: (Map 73, Parcel 18.10)

Located in the Fourth (4th) Civil District of Maury County, Tennessee, and being Tract 6 on the plat of survey for Barker Enterprises, Inc., containing 0.77 acres, as shown on plat of record in Plat Book 5, Page 182, Register's Office of Maury County, Tennessee.

Parcel 2: (Map 73, Parcel 18.11)

Located in the Fourth (4th) Civil District of Maury County, Tennessee, and being Tract 4 on the plat of survey for Barker Enterprises, Inc., containing 1.98 acres, as shown on plat of record in Plat Book 5, Page 182, Register's Office of Maury County, Tennessee.

Being the same property conveyed to Welton Investments by deed of record in Book 1245, Page 635, Register's Office of Maury County, Tennessee. Being a portion of the same property conveyed to Welton Investment, LLC, a Limited Liability Company by Quitclaim deed from Welton Investments, a Tennessee Partnership of record in Book R1518, page 557 Register's Office for Maury County, Tennessee, dated January 18, 2001 and recorded on January 23, 2001.

Tract X:

Located in the Fourth (4th) Civil District of Maury County, Tennessee, more particularly described as follows:

Parcel 1: (Map 73, Parcels 18.08)

Being Tract No. 8, as shown on plat of survey for Baker Enterprises, Inc., containing 2.03 acres, as shown on plat of record in Plat Book 5, Page 182, Register's Office of Maury County, Tennessee.

Parcel 2: (Map 73, Parcels 18.09)

Being Tract No. 7, as shown on plat of survey for Baker Enterprises, Inc., containing 2.17 acres, as shown on plat of record in Plat Book 5, Page 182, Register's Office of Maury County, Tennessee.

Being a portion of the same property conveyed to Welton Investment, LLC by Warranty deed from Rayburn C. Barker of record in Book R1508, page 534 Register's Office for Maury County, Tennessee, dated October 26, 2000 and recorded on October 27, 2000.

Tennessee Certification of Electronic Document

I, Jeremy H. Cherry, do hereby make oath that I am a licensed attorney and/or the custodian of the original version of the electronic document tendered for registration herewith and that this electronic document is a true and exact copy of the original document executed and authenticated according to law on December 31, 2022 (date of document).

Affiant Signature

January 3, 2023
Date

State of Tennessee

County of Davidson

Sworn to and subscribed before me this 3rd day of January, 2023.

Notary's Signature

MY COMMISSION EXPIRES:

NOTARY'S SEAL

MICHELLE MARIE MONTAGUE
STATE OF TENNESSEE NOTARY PUBLIC
DAVIDSON COUNTY
MY COMMISSION EXPIRES JULY 6, 2026

Jay Fulmer

From: Andy Crichton <acrichton@athensins.com>
Sent: Tuesday, November 11, 2025 3:57 PM
To: Franklin Farrow
Cc: Jay Fulmer; 'Chae Hart-Whitworth'
Subject: Property on Rutherford Lane

November, 11th 2025

City Of Columbia
Development Services
700 North Garden Street
Columbia, TN 38401

To Whom It May Concern:

CBP, LLC the Crichton brothers currently own property fronting on Rutherford Lane. Approximately 9 acres of the property is being sold to the principals of Morning Pointe Senior Living Greg Vital and Franklin Farrow.
Moring Pointe had been a provider of assisted living services in Columbia for the past 20+ years and is seeking to expand their services at this new wonderful location.

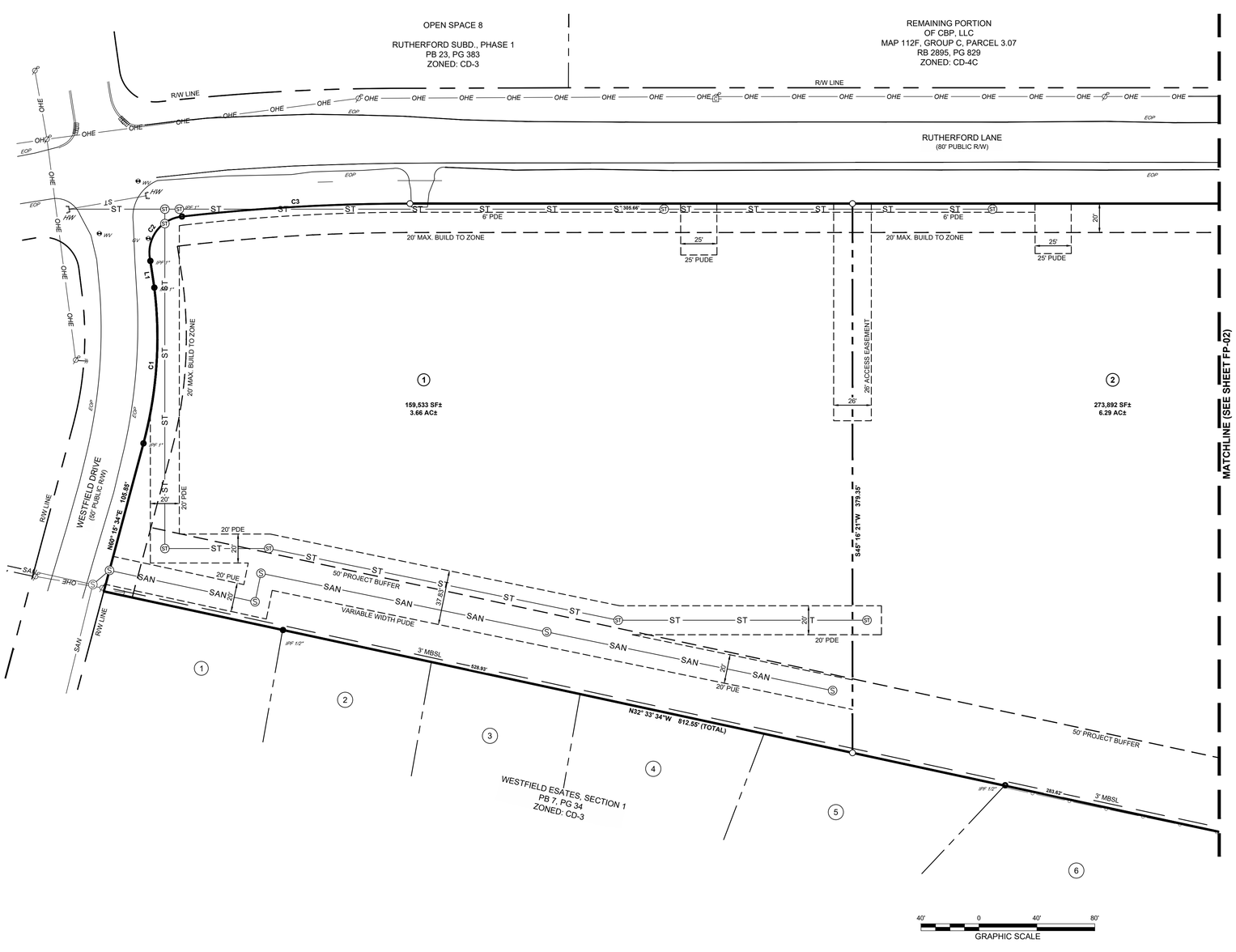
Vital and Farrow are the owners and co-founders of Morning Pointe which is a Tennessee base senior living company with 27 years of experience in this sector. CBP, LLC the Crichton brothers are pleased to sell this
property once approvals are all received.

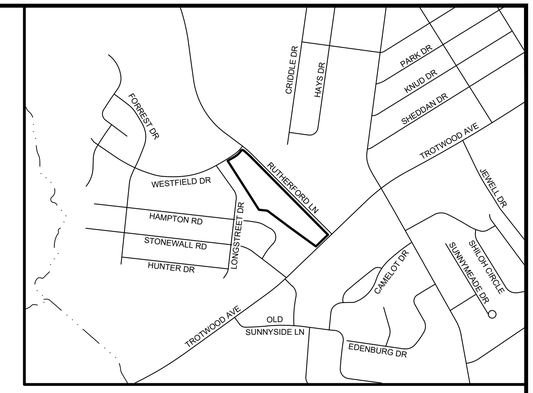
Kind Regards,

Andy Crichton, *Agent ~ CBP, LLC Managaing Member*
Columbia, TN 38401
Office: 931.398.5533
Cell: 615.714.2452
www.athensins.com

SUBJECT PROPERTY INFORMATION:

- OWNER: CBP LLC
- TAX MAP 112, PARCEL 3.07
- INSTRUMENT: DB 2895, PG 829
- TOTAL AREA = 12.86 AC (560,245 SF) ±
- ZONING: PUD (PLANNED UNIT DEVELOPMENT)





VICINITY MAP
SCALE: 1"=1000'

GENERAL NOTES:

1. BEARINGS ARE BASED ON THE TENNESSEE STATE PLANE COORDINATE SYSTEM (NAD83, 2011).
2. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88, GEOID 18). CONTOURS ARE SHOWN AT 1-FOOT INTERVALS.
3. THE FIELD SURVEY WAS COMPLETED ON SEPTEMBER 11, 2025.
4. ALL DEED BOOK AND PLAT REFERENCES PERTAIN TO THE REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE.
5. ADJOINING PROPERTY LINES SHOWN WERE PLOTTED FROM INFORMATION TAKEN FROM EITHER DEED DESCRIPTION, RECORD PLATS, OR TAX MAPS.
6. PROPERTY CORNERS SET THIS SURVEY ARE 18" #4 REBAR WITH ORANGE PLASTIC CAP STAMPED "M2 GROUP", 18" #5 REBAR WITH YELLOW PLASTIC CAP STAMPED "M2 GROUP, LLC", OR PK NAIL WITH STAINLESS STEEL WASHER STAMPED "M2 GROUP, LLC", UNLESS NOTED OTHERWISE.
7. UTILITIES SHOWN HEREON WERE COMPILED FROM VISIBLE STRUCTURES AT THE SITE, INFORMATION FROM PLANS, AND PHYSICAL MARKINGS AND COMBINED TO DEVELOP A VIEW OF THE UNDERGROUND UTILITIES. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY, AND RELIABLY DEPICTED. IN ADDITION, IN SOME JURISDICTIONS, 811 OR OTHER SIMILAR UTILITY LOCATE REQUESTS FROM SURVEYORS MAY BE IGNORED OR RESULT IN AN INCOMPLETE RESPONSE. THIS SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THIS SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. VERIFICATION OF EXISTENCE, LOCATIONS, AND DEPTH SHOULD BE MADE BEFORE CONDUCTING ANY EXCAVATION IN THE VICINITY OF THE UTILITY.
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11. THERE WAS NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS OBSERVED DURING THE COURSE OF FIELD SURVEY.
12. NO EVIDENCE OF PROPOSED CHANGES IN THE STREET RIGHT OF WAY LINES, OR OF RECENT STREET OR SIDEWALK CONSTRUCTION, OR REPAIRS, WAS OBSERVED DURING THE COURSE OF FIELD SURVEY.
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LINE TABLE		
LINE #	DIRECTION	LENGTH
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CURVE TABLE				
CURVE #	RADIUS	LENGTH	CHORD BRNG	CHORD LENGTH
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LEGEND:

EXISTING PROPERTY LINE		FIRE HYDRANT	
EXISTING RIGHT-OF-WAY	HB	HOSE BIB	
EXISTING ADJACENT PROPERTY LINE	S	SANITARY SEWER MANHOLE	
EXISTING EASEMENT	ST	STORM MANHOLE	
MINIMUM BUILDING SETBACK LINE	MBSL	CURB INLET	
EXISTING FARM FENCE		INLET (SQUARE)	
EXISTING WOOD FENCE	GV	GAS BOX (GAS VALVE)	
EXISTING CHAIN-LINK FENCE		HIGH TENSION TOWER	
EXISTING SANITARY SEWER LINE	SAN	POWER POLE	
EXISTING WATER LINE	W	GUY WIRE	
EXISTING OVERHEAD ELECTRIC	OHE	TRAFFIC PULL BOX	
PROPOSED SANITARY SEWER LINE	SAN	COMMUNICATION PEDESTAL	
PROPOSED STORM SEWER LINE	ST	FIBER OPTIC PULL BOX	
EXISTING TREELINE		TREE, DECIDUOUS	
IRON REBAR FOUND (IRF)	(POI)	POINT OF INSERTION	
IRON PIPE FOUND (IPF)	HW	HEADWALL	
IRON REBAR SET W/CAP (IRS)	EOP	EDGE OF PAVEMENT	
WATER VALVE	1	LOT NUMBER	

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (WE) HEREBY CERTIFY THAT I AM (WE ARE) THE OWNER(S) OF THE PROPERTY SHOWN AND DESCRIBED HEREON AS EVIDENCED IN BOOK 2895, PAGE 1276, MAURY COUNTY REGISTERS OFFICE, AND ADOPT THIS FINAL SUBDIVISION PLAT OF THE PROPERTY AS SHOWN HEREON AND DEDICATE ALL PUBLIC WAYS AND EASEMENTS AS NOTED WITH MY (OUR) FREE CONSENT.

OWNER(S) DATE

TITLE (IF ACTING FOR CORPORATION OR PARTNERSHIP)

CERTIFICATE OF SANITARY SEWER SYSTEM

I HEREBY CERTIFY THAT THE SANITARY SEWER SYSTEM OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAS BEEN INSTALLED IN ACCORDANCE WITH THE CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS, OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

DIRECTOR OF WASTEWATER DEPARTMENT DATE
COLUMBIA, TENNESSEE

CERTIFICATE OF SUBDIVISION NAME AND STREET NAMES

SUBDIVISION NAME AND STREET NAMES APPROVED BY THE CITY ENGINEERING DEPARTMENT AND BY E-911 MAURY COUNTY.

MAURY COUNTY E-911 DATE

CERTIFICATE OF SURVEY ACCURACY

I (WE) HEREBY CERTIFY THAT TO THE BEST OF MY (OUR) KNOWLEDGE AND BELIEF THIS IS A TRUE AND ACCURATE SURVEY OF THE PROPERTY SHOWN HEREON; THAT THIS IS A CLASS " " LAND SURVEY AS DEFINED IN TITLE 62, CHAPTER 18, TENNESSEE CODE ANNOTATED, AND THAT THE RATIO OF PRECISION IS GREATER THAN OR EQUAL TO 1: ____.

REGISTERED LAND SURVEYOR DATE

NUMBER

CERTIFICATE OF COMPLIANCE

I HEREBY CERTIFY THAT THE FINAL SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE CITY OF COLUMBIA SUBDIVISION REGULATIONS AND OTHER ADOPTED ORDINANCES AND POLICIES.

CITY ENGINEER DATE
COLUMBIA, TENNESSEE

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I HEREBY CERTIFY THAT THE WATER SYSTEM(S) OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAS/HAVE BEEN INSTALLED IN ACCORDANCE WITH CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS, OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

NAME DATE

TITLE AUTHORIZING AGENCY

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CITY ENGINEER DATE
COLUMBIA, TENNESSEE

CERTIFICATE OF APPROVAL OF RECORDING

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PLANNING DIRECTOR DATE
COLUMBIA, TENNESSEE

REVISION #	DATE	DESCRIPTION

FINAL PLAT
MORNING POINTE
RUTHERFORD LANE
CITY OF COLUMBIA
9TH CIVIL DISTRICT
MAURY COUNTY, TENNESSEE

M2 GROUP
P.O. BOX 2543
BRENTWOOD, TN 37024-2543
615-656-0257 / M2GROUPLLC.COM

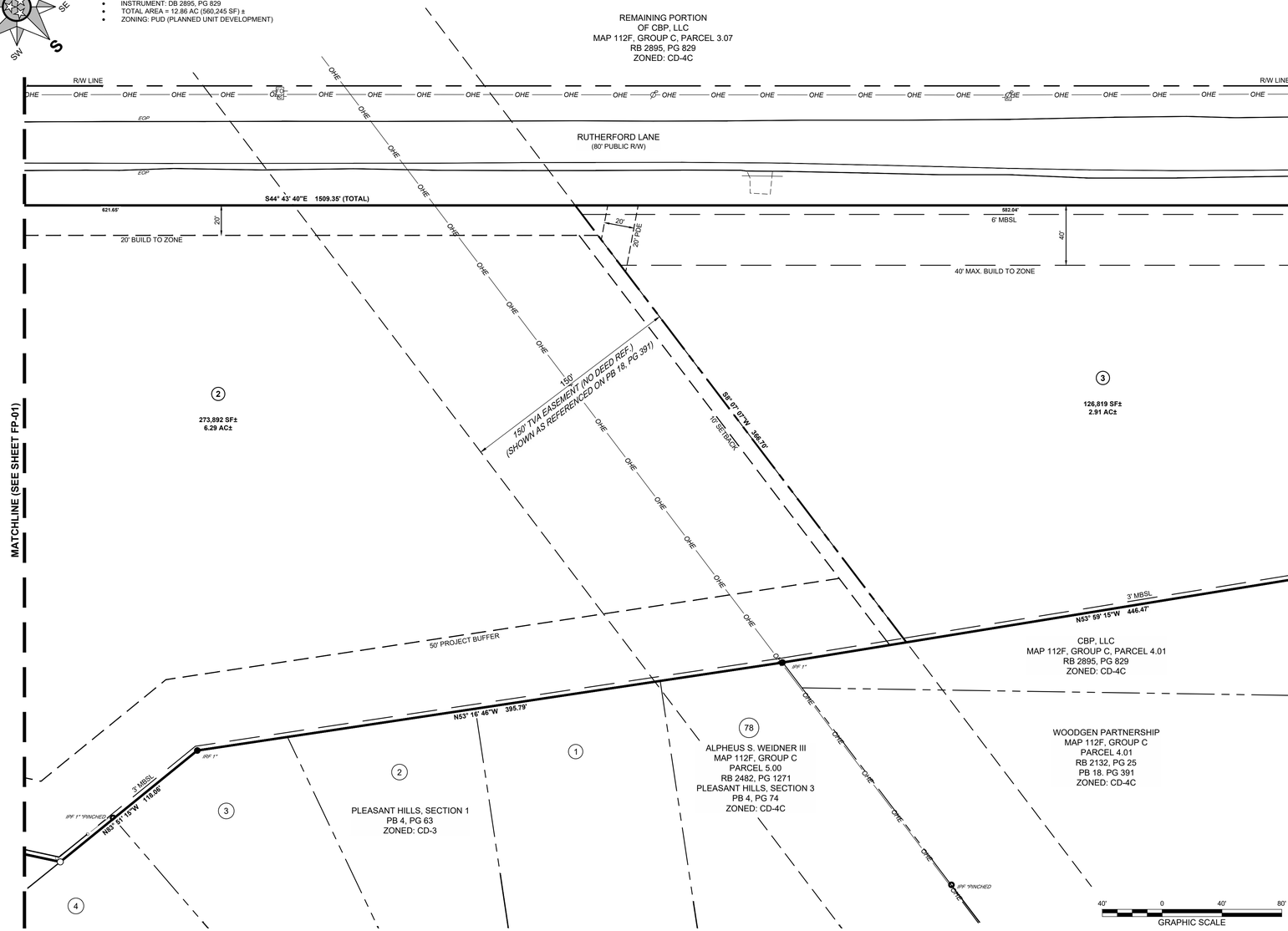
DATE :	APRIL 20, 2026	DRAWN BY :	ERG
PROJECT NUMBER :	25-215	CHECKED BY :	SVH

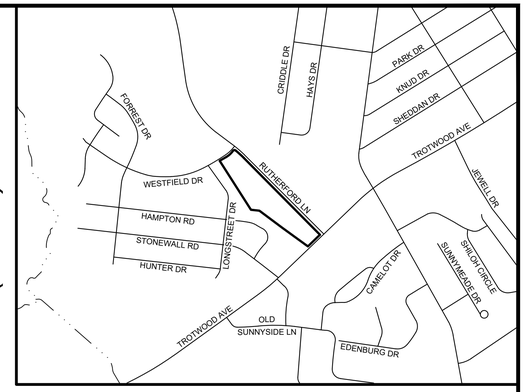
SHEET NUMBER: FP-01

25-215_MORNING POINTE_FP.DWG | Friday, April 17, 2026 4:35:26 PM

SUBJECT PROPERTY INFORMATION:

- OWNER: CBP LLC
- TAX MAP 112, PARCEL 3.07
- INSTRUMENT: DB 2895, PG 829
- TOTAL AREA = 12.86 AC (560,245 SF) ±
- ZONING: PUD (PLANNED UNIT DEVELOPMENT)





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LEGEND:

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EXISTING RIGHT-OF-WAY		HOSE BIB	HB
EXISTING ADJACENT PROPERTY LINE		SANITARY SEWER MANHOLE	S
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WATER VALVE	WV	LOT NUMBER	1

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DIRECTOR OF WASTEWATER DEPARTMENT DATE
COLUMBIA, TENNESSEE

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SUBDIVISION NAME AND STREET NAMES APPROVED BY THE CITY ENGINEERING DEPARTMENT AND BY E-911 MAURY COUNTY.

MAURY COUNTY E-911 DATE

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REGISTERED LAND SURVEYOR DATE

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CITY ENGINEER DATE
COLUMBIA, TENNESSEE

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NAME DATE

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PLANNING DIRECTOR DATE
COLUMBIA, TENNESSEE

REVISION #	DATE	DESCRIPTION

FINAL PLAT
MORNING POINTE
RUTHERFORD LANE
CITY OF COLUMBIA
9TH CIVIL DISTRICT
MAURY COUNTY, TENNESSEE

M2 GROUP
P.O. BOX 2543
BRENTWOOD, TN 37024-2543
615-656-0257 / M2GROUPLLC.COM

DATE :	APRIL 20, 2026	DRAWN BY :	ERG
PROJECT NUMBER :	25-215	CHECKED BY :	SVH

SHEET NUMBER: FP-02

25-215_MORNING POINTE_FP.DWG | Friday, April 17, 2026 4:35:27 PM

Development Agreement to be provided on re-submittal, not available at this time

Jay Fulmer

From: Andy Crichton <acrichton@athensins.com>
Sent: Tuesday, November 11, 2025 3:57 PM
To: Franklin Farrow
Cc: Jay Fulmer; 'Chae Hart-Whitworth'
Subject: Property on Rutherford Lane

November, 11th 2025

City Of Columbia
Development Services
700 North Garden Street
Columbia, TN 38401

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property once approvals are all received.

Kind Regards,

Andy Crichton, *Agent ~ CBP, LLC Managaing Member*
Columbia, TN 38401
Office: 931.398.5533
Cell: 615.714.2452
www.athensins.com

CITY OF COLUMBIA
TENNESSEE

WASTEWATER DEPARTMENT

23 October 2025

Jay Fulmer
Fulmer Lucas Engineering, LLC
2002 Richard Jones Rd, B200
Nashville, TN 37215

RE: Rutherford Ln Map 112 Parcel 3.07, Columbia, TN 38401; Morning Pointe 145 Bed Assisted Living Facility

Jay,

This letter serves as confirmation that the City of Columbia Wastewater Department has the available capacity to service the subject development. Any extension to the existing sewer infrastructure will be initiated by the owner/developer, reviewed by our department and approved by the State of Tennessee. The project must be advanced in accordance with local, state and federal rules, regulations and policies. Funding and construction of those improvements will remain the responsibility of the owner/developer. New customers will be required to pay all fees applicable at the time of connection. Any Final Plat approval and Dedication are both subject to installation and function, as determined by our Department. No detailed design plan for an extension of the sewer has been proposed at this time.

Donnie Boshers, Director
City of Columbia, TN
Wastewater Department

November 19, 2025

Mr. Jay Fulmer
Fulmer Lucas Engineering
2002 Richard Jones Rd., Suite B200
Nashville, TN 37215
Sent via email: jay@fulmerlucas.com

RE: **Water Availability Letter** Expires: 5/19/2026
Morning Pointe Assisted Living
Rutherford Lane at Westfield Drive (southwest corner)
Tax Map & Parcel 11200307000
Columbia, TN

Dear Mr. Lucas:

Columbia Power & Water Systems ("the Utility"/CPWS) is a municipal corporation authorized to provide water services in accordance with State law. CPWS has adopted rules, regulations, and standard operation procedures, prescribing the conditions under which CPWS will furnish water service. In addition, certain State laws delegate authority to the Tennessee Department of Environment and Conservation (TDEC), various Planning Commissions, and other authorities in Cities and Counties. These Cities and Counties have also adopted rules and regulations. Water service will be made available on a first-come, first-served basis, subject to the payment of all charges and fees imposed by CPWS and the approval of any and all required governmental agencies. Water service is subject to availability of all CPWS furnished equipment and materials appropriate for the development and provided the applicant complies with all rules and regulations of CPWS and conditions set out herein.

The proposed development is a 145 bed assisted living facility in two buildings. CPWS has evaluated the projected water demands for the proposed development in the water system hydraulic model. CPWS can provide water for the proposed development according to the following criteria and requirements:

- Source water capacity is vested when CPWS has provided approval to proceed to construction and appropriate Impact Fees are paid.
- The current CPWS system is only able to support a fire flow up to 750 gpm at this location until (planned) additional improvements in the Southside distribution area are completed.
    - After completion of the Southside distribution area improvements, available fire flow will be up to 1,250 gpm.

- The number and sizes of service meters assumed for this letter is based on Applicant's description of the project features. Actual meter count and sizing will be updated or verified during the Design Review phase of the Project:
    - 114,340 sf of commercial assisted living space (two buildings)
    - Assume Fire Service meter: One (1) at 6-inch
    - Assumed Commercial Service meters: Two (2) at 2-inch
    - Assumed Landscape Irrigation meter: One (1) at ¾-inch
- The above request translates to a 41 Single Family Unit (SFU) flow demand equivalent.
- Separate irrigation meters with backflow devices will be required to serve the proposed Project.
- If fire sprinkler systems are requested or required, separate fire meters with backflow devices will be required to serve the proposed Project.

All of the above requirements up to and including the meter(s) are to be constructed and paid for by the Applicant and dedicated to CPWS once complete. No construction of water infrastructure shall be initiated until final construction plans have been approved by CPWS (including TDEC approval, if required).

This Water Availability Letter will expire in six months unless vested by payment of water service fees and impact fees for the proposed project. Any request for water availability after the expiration date of this letter will be considered a new application.

Once you have received this Water Availability Letter, next steps in the process to vest water service from CPWS are as follows:

- Remit to CPWS new water service fees for plan review, TDEC coordination, and inspection as follows: $1,500 + $370 per SFU equivalent
- Applicant will prepare design drawings for review and approval by CPWS for construction of the proposed water system improvements.
    - Provide design drawings in AutoCAD and .pdf format for CPWS review of proposed development. Include design drawings for grading, drainage, roadway improvements, buried (wet and dry) utilities, water systems, and surface improvements.
    - Once CPWS approves the Construction Drawings for the proposed system improvements, Applicant will submit proposed improvements design to TDEC for review and approval (if TDEC review required).
    - CPWS will prepare hydraulic calculations and a Utility Approval Letter to accompany the plans submittal to TDEC.
- Current water service fees due prior to CPWS review of design plans are listed in the table below. *Note that payment of Water Service Fees will extend the expiration of this*

Water Availability Letter for one year, while the applicant is working with CPWS on design and review of the improvement drawings.

New Water Service Fees	SFUs	Total
$1,500 + 370 per SFU	41	**$16,670**

- Upon Construction Drawing approval by CPWS, applicant may then pay Impact Fees and Meter Fees and schedule the pre-construction meeting. Pre-construction meeting will be canceled and re-scheduled unless all impact fees are paid at least 48 hours prior, or surety is provided in lieu of full payment.
- Water meters will be ordered by CPWS once meter fees are paid by the Applicant.
    - Meter fees are subject to change based on final design and the prevailing Board-approved rates at time of payment.
    - If surety is provided in lieu of payment, meters are not ordered until fees are paid and may result in extended lead-times.
- Applicants will be charged Impact Fees and Meter Fees in effect at time of payment. Please see CPWS website for schedule of impact fees and timing of planned fee escalations. Anticipated meter costs and impact fees for this project are according to the following table:

Impact Fees and Meter Costs	Number	$ / Unit	Total
¾" Landscape Irrigation Meter Cost	1	$540	$540
2" Service Meter Cost	2	Current Price	Deferred
6" Fire Meter Cost	1	Current Price	Deferred
Current Impact Fee for ¾" Service Meter	1	$5,500	$5,500
Current Impact Fee for 2" Service Meter	2	$30,000	$60,000
Estimate of Fees Due Prior to Pre-Construction Meeting =			**$66,040**

- After the pre-construction meeting, CPWS will then issue a formal Notice to Proceed.
- Applicant is required to construct all public water infrastructure per CPWS standard specifications and provide CPWS personnel unregulated access to the site to inspect the construction of the water infrastructure.
- No construction of water improvements may take place prior to the Notice to Proceed or without a CPWS inspector present.

Please feel free to contact me at 931-388-4833 x7655 or Matt.Wheeler@cpws.com if you have questions or would like to discuss.

Sincerely,



Matthew J. Wheeler, P.E.
Vice President of Water Resources, CPWS

cc: Franklin Farrow, Morning Pointe
Bart Anderson, CPWS
File 25-036

BK/PG:R2895/829-838
23000133

10 PGS : QUITCLAIM DEED	
NANCY MCMEEN 295732 - 23000133	
01/04/2023 - 08:10 AM	
VALUE	
MORTGAGE TAX	0.00
TRANSFER TAX	0.00
RECORDING FEE	50.00
DP FEE	2.00
REGISTER'S FEE	0.00
TOTAL AMOUNT	52.00

STATE of TENNESSEE, MAURY COUNTY
JOHN FLEMING
REGISTER OF DEEDS

QUITCLAIM DEED

MICHELLE MARIE MONTAGUE NOTARY PUBLIC STATE OF TENNESSEE DAVIDSON COUNTY MY COMMISSION EXPIRES JULY 6, 2026

STATE OF TENNESSEE, COUNTY OF DAVIDSON

THE ACTUAL CONSIDERATION OR VALUE, WHICHEVER IS GREATER FOR THIS TRANSFER IS $0.00.

Affiant

Subscribed and sworn to me on this 7th day of December 2022.

NOTARY PUBLIC

My Commission Expires:

THIS INSTRUMENT WAS PREPARED BY:

ORTALE KELLEY (JHC)
330 Commerce Street, Suite 110
Nashville, TN 37201

NOTE: THIS QUITCLAIM DEED WAS PREPARED BY INFORMATION PROVIDED BY THE PARTIES. NO TITLE SEARCH WAS PERFORMED BY THE PREPARER

NAME/ADDRESS OF NEW OWNER:	SEND TAX BILLS TO:	MAP – PARCEL #
Crichton Welton Partners, G.P. 6471 Ridley Jewell Road Columbia, TN 38401	NEW OWNER	073-018.04 073-018.06 073-018.08 073-018.09 073-018.10 073-018.11 112-003.00 112-003.00-001 112F-C-004.01

FOR AND IN CONSIDERATION of Ten ($10.00) Dollars, cash in hand paid by the hereinafter named Grantees, and other good and valuable considerations, the receipt and sufficiency of which are hereby acknowledged, WELTON INVESTMENTS, LLC, a Tennessee limited liability company, hereinafter called **"GRANTOR,"** does hereby quitclaim and convey all of his rights, title and interest unto CRICHTON WELTON PARTNERS, G.P., a Tennessee general partnership, hereinafter called **"GRANTEE,"** its successors and assigns, certain tracts or parcels of land in Maury County, State of Tennessee, and more fully described as follows:

SEE EXHIBIT A ATTACHED

IN WITNESS WHEREOF, the Grantor, by its duly authorized officer, has caused its name to be affixed hereto on this 31st day of December, 2022.

WELTON INVESTMENTS, LLC

By:_____
John B. Jewell, IV,
Managing Member

STATE OF TENNESSEE)
COUNTY OF Davidson)

Before me, a Notary Public of said County and State, personally appeared John B. Jewell, IV, with whom I am personally acquainted (or proved to me on the basis of satisfactory evidence), and who, upon oath, acknowledged himself to be the Managing Member of Welton Investments, LLC, a Tennessee limited liability company (the "Company"), the within named bargainor, and that he, as the Managing Member of the Company executed the foregoing instrument for the purposes therein contained.

Witness my hand and seal, this 7th day of December, 2022.

J. WALKER LEWIS
STATE OF TENNESSEE NOTARY PUBLIC
DAVIDSON COUNTY
MY COMMISSION EXPIRES NOVEMBER 5, 2025

_____
Notary Public, State of Tennessee

My Commission Expires: 11-5-2025

EXHIBIT A
Legal Description

Located in the Ninth (9th) Civil District of Maury County, Tennessee, and more particularly described as follows:

Tract I (Map 112F, Group C, Parcel 4.01):

Parcel 1: Located in the Ninth (9th) Civil District of Maury County, Tennessee, and more particularly described as follows:

Being a tract as shown on the J.A. Morgan and Katherine S. Morgan Plat, containing 0.85 acre as shown in Plat Book 6, Page 564-B, Register's Office of Maury County, Tennessee.

Being the same property conveyed to Andrew D. Crichton, John B. Jewell, III, and James W. Jewell, as equal tenants in common, by deed of record in Book 1407, Page 349, Register's Office of Maury County, Tennessee and also referred to in Deed of Trust of record in Book 1678, Page 162, Register's Office of Maury County, Tennessee.

Parcel 2: Bounded on the North by Crichton, on the South by Morgan and others, on the East by Mt. Pleasant Pike, and on the West by Lot 78, Pleasant Hills Subdivision, and being more particularly described as follows:

Beginning at a post in the Western margin of the Mt. Pleasant Pike, 30 feet from the centerline of said road, said point also being the Southeast corner of what is now the Crichton property; thence with the Western margin of the MI. Pleasant Pike, South 41 degrees 51 minutes West 152.28 feet to an iron pin, Morgan and others corner; thence leaving highway and with Morgan, North 58 degrees 05 minutes West, 339.94 feet to an iron pin, said point being in the Eastern line of Lot 78 of Pleasant Hills S/D; thence with the Eastern line of Lot 78, North 3 degrees 50 minutes East, 170.24 feet to an iron pin in Crichton's South line; thence with Crichton's South line, South 57 degrees 35 minutes East, 22.16 feet to a post; thence with same, South 58 degrees 05 minutes East, 424.19 feet to the point of beginning, and containing 1.35 acres, by survey made November 16, 1968, by Paul J. Boatright, Registered Land Surveyor No. 244.

Being the same properly conveyed to Andrew D. Crichton, James W. Jewell, and John B. Jewell, Ill, as equal tenants in common, by deed of record in Book 1340, Page 102, Register's Office of Maury County, Tennessee and also referred to in Deed of Trust of record in Book 1678, Page 162, Register's Office of Maury County, Tennessee.

Less and Except that portion of the above described property conveyed in Book 2113, Page 537, Register's Office of Maury County, Tennessee

Tract III (Part of Map 112, Parcel 003.00)

Parcel No. 1:

Bounded on the North by L and N Railroad and Rutherford Lane; East by Criddle Meadows Subdivision and Dr. Dan Gray; South by Mt. Pleasant Pike or U.S. No. 43 Highway, Pleasant Hills Subdivision, J.A. Morgan and Others; West by Ridley brothers. Beginning at an iron pin in the East line of Ridley brothers tract at the Southwest corner of the herein described tract: thence with Ridley brothers and generally following a fence North 5 degrees 16 minutes East, 1,127.65 feet to an iron pin; thence with same North 87 degrees 32 minutes West, 946.15 feet to an iron pin; thence with same North 0 degrees 50 minutes East, 359.97 feet to a spike in the center line of L and N Railroad; thence following a staked line with iron pins along center line of L and N Railroad as follows: North 53 degrees 29 minutes East, 2,326.46 feet, North 56 degrees 09 minutes East, 352.0 feet; North 59 degrees 31 minutes East, 326.96 feet; North 62 degrees 32 minutes East, 264.30 feet; North 65 degrees 18 minutes East, 278.60 feet; North 67 degrees 39 minutes East, 221.60 feet to an iron pin; thence leaving railroad and generally following a fence along the South margin of Rutherford Lane South 87 degrees 27 minutes East, 916.74 feet to an iron pin; thence with same South 86 degrees 19 minutes East, 149.18 feet to a stake; thence with the West line of Criddle Meadows Subdivision South 4 degrees 04 minutes West, 2,743.39 feet to an iron pin; thence with the South line of Criddle Meadows Subdivision South 85 degrees 56 minutes East, 400.0 feet to an iron pin; thence with same South 84 degrees 29 minutes East, 221.98 feet to an iron pin; thence with Dr. Dan Gray South 13 degrees 46 minutes East, 24.80 feet to an iron pin; thence with same South 55 degrees 24 minutes West, 95.22 feet to an iron pin; thence with same South 42 degrees 15 minutes East, 93..35 feet to an iron pin; thence with same South 24 degrees 43 minutes East, 99.95 feet to an iron pin; thence with same South 55 degrees 50 minutes West, 178.04 feet to an iron pin: thence with same South 39 degrees 27 minutes East, 820.80 feet to an iron pin; thence with the North margin of Mt. Pleasant Pike South 42 degrees 32 minutes West, 506.57 feet to an iron pin; thence with J. A. Morgan and others North 58 degrees 05 minutes West, 424.19 feet to an iron pin; thence with same and with Pleasant Hills Subdivision North 57 degrees 35 minutes West, 418.17 feet to an iron pin; thence with Pleasant Hills Subdivision North 88 degrees 01 minutes West, 680.26 feet to an iron pin; thence with same North 88 degrees 21 minutes West, 514.0 feet to an iron pin; thence with same North 88 degrees 01 minutes West, 308.0 feet to an iron pin; thence with same North 87 degrees 37 minutes West, 431.0 feet to an iron pin; thence with proposed Pleasant Hills Subdivision, Section 4; and J. A. Morgan and Others North 87 degrees 23 minutes West, 919.68 feet to an iron pin; thence with J. A. Morgan and Others North 86 degrees 26 minutes West, 310.82 feet to the point of beginning, containing by survey 269.70 acres.

There is a TVA power line having a 250 right-of-way across the East portion of the above described tract. There is a 100-foot chartered railroad right-of- way on this tract along the railroad line.

Parcel No. 2:

Bounded on the North by Raymond McMeen and Tom Burt; C. C. Pinckney; W. Clyde Baker and Rutherford Lane; East and South by L and N Railroad and West by Ridley brothers.

Beginning at an iron pin in McMeen and Burt's South line, said point being the Northwest corner of the herein described tract; thence with McMeen and Burt farm, C. C. Pinckney and W. Clyde Baker generally following a fence South 87 degrees 52 minutes East, 1079.03 feet to an iron pin; thence with Baker generally following a fence South 85 degrees 57 minutes Fast, 400.23 feet to an iron pin; thence with same South 85 degrees 46 minutes East, 371.10 feet to an iron pin; thence with same North 5 degrees 29 minutes East, 342.33 feet to an iron pin; thence with same South 87 degrees 35 minutes East, 504.44 feet to an iron pin; thence with same South 88 degrees 15 minutes East, 300.05 feet to an iron pin; thence with the South margin of Rutherford Lane South 89 degrees 17 minutes East, 1,160.19 feet to an iron pin; thence with same South 87 degrees 27 minutes East, 13.46 feet to an iron pin in center line of L and N Railroad; thence with the center line of L and N Railroad following a staked line with iron pins as follows: South 67 degrees 39 minutes West, 221.60 feet; South 65 degrees 18 minutes West, 278.60 feet; South 62 degrees 32 minutes West, 264.30 feet; South 59 degrees 31 minutes West, 326.96 feet; South 56 degrees 09 minutes West, 252.0 feet; South 53 degrees 29 minutes West, 2,305.30 feet; thence leaving railroad and with Ridley brothers generally following a fence as follows: North 20 degrees 46 minutes West, 328.63 feet to an iron pin; North 32 degrees 52 minutes West, 326.42 feet to an iron pin; North 23 degrees 49 minutes West, 428.85 feet to an iron pin; North 17 degrees 02 minutes West, 922.55 feet to the point of beginning, containing by survey 78.34 acres. There is a 100-foot chartered right-of-way on this tract along the railroad line. The above descriptions are according to a survey made on June 15, 1973 by John J. Harris, Registered Land Surveyor, Maury County, Tennessee.

Exclusions from Tract III, Parcel No. 1:

1. 7.93 acres conveyed in Book 607, page 512, Register's Office of Maury County, Tennessee.

2. 10.0 acres conveyed in Book 655, Page 709, Register's Office of Maury County, Tennessee.

3. 10.0 acres conveyed in Book 711, Page 531, Register's Office of Maury County, Tennessee.

4. 12.1 acres conveyed in Book 803, Page 174, register's Office of Maury County, Tennessee.

5. 0.52 acres conveyed in Book 675, Page 50, Register's Office of Maury County, Tennessee.

6. 0.36 acres conveyed in Book 679, Page 508, Register's Office of Maury County, Tennessee.

7. 2.55 acres conveyed in Book 679, Page 511, Register's Office of Maury County, Tennessee.

8. All Lots in Westfield Subdivision, Sections 1, 2,3, 4, and 4A, with the exception of Lot

114 Westfield Subdivision, Section 4 as shown on plat of record in Plat Book 8, Page 21, Register's Office of Maury County, Tennessee.

Exclusion from Tract III, Parcel No. 2:

1. 25.53 acres conveyed in Book 563, Page 204, Register's Office of Maury County, Tennessee.

Exclusions from Tract III, Parcel Nos. 1 and 2:

1. 9.4 acres conveyed in Book 591, Page 180, Register's Office of Maury County, Tennessee.

2. 1.356 acres conveyed in Book 675, Page 374, Register's Office of Maury County, Tennessee.

3. 17.55 acres conveyed in Book 1114, Page 276, Register's Office of Maury County, Tennessee.

4. 65.65 acres conveyed in Book 2839, Page 368, Register's Office of Maury County, Tennessee.

Being the same property conveyed to Andrew Donelson Crichton, James W. Jewell and John B. Jewell, III, as equal tenants in common, by deed of record in Book 559, Page 698, Register's Office of Maury County, Tennessee and also referred to in Deed of Trust of record in Book 1678, Page 162, Register's Office of Maury County, Tennessee.

Tract IV (Part of Map 112, Parcel 003.00)

Located in the Ninth (9th) Civil District of Maury County, Tennessee, near the intersection of West Park Drive and the L and N Railroad. Bounded on the North by L and N Railroad; East by West Park Drive; South and West by A. D. Crichton and others, and more particularly described as follows:

Beginning at a spike in the center of L and N Railroad, said point is also in the West margin of West Park Drive, said point is in the Northeast corner of the herein described tract; thence with the West margin of West Park Drive South 34 degrees 10 minutes East, 517.77 feet to an iron pin at point of curve; thence on a chord to a 5 degrees 11 minutes curve having a central angle of 22 degrees 09 minutes feet South 30 degrees 56 minutes East, 125.0 feet to an iron pin; thence with A. D. Crichton and others South 53 degrees 29 minutes West, 644.71 feet to an iron pin; thence with same North 36 degrees 31 minutes West, 660.91 feet to a spike in the center of L and N Railroad; thence with L and N Railroad North 53 degrees 29 minutes East, 287.17 feet to a spike; thence with same on a chord to a 1 degrees curve North 56 degrees 04 minutes East 352.0 feet to a spike; thence with same on a chord to curve North 57 degrees 57 minutes East, 39.21 feet to the point of beginning, containing by Survey of John J. Harris dated October 1, 1979, 10.0 acres.

Being the same property conveyed to John B. Jewell, III, Andrew D. Crichton, and James W.

Jewell, as equal tenants in common, by deed of record in Book R1913, Page 123, Register's Office of Maury County, Tennessee.

Tract V (Part of Map 112, Parcel 003.00)

This is a tract or parcel of land located in the Ninth Civil District of Maury County, Tennessee bounded on the North by Don Crichton and Others; East by proposed new road; South and West by Don Crichton and Others and more particularly described as follows:

Beginning at an iron pin in the West margin of new proposed Road at the Southwest corner of the herein described tract, said point being North 48 degrees 53 minutes West, 1,473.45 feet from the North margin of U. S. Highway No. 43 or Mt. Pleasant Pike, said point in North margin of highway is South 41 degrees 57 minutes West, 236.16 feet from the most Southerly Southwest corner of the Don Crichton and Others farm; thence with Don Crichton and Others South 56 degrees 07 minutes West, 255.0 feet to an iron pin; thence with same, North 48 degrees 53 minutes West, 175.0 feet to an iron pin, thence with same North 56 degrees 07 minutes East, 246.70 feet to an iron pin; thence with the West margin of the new proposed road on a 4 degrees 07 minutes curve having a central angle of 9 degrees 54 minutes a distance on curve of 149.30 feet to P.C. of curve; thence with same on a tangent South 48 degrees 53 minutes East, 28.0 feet to the Point of beginning, containing by survey 1.0 acre.

Being the same property conveyed to Andrew Donelson Crichton, James W. Jewell and John B. Jewell, III, as tenants in common, by deed of record in Book 559, Page 698, Register's Office of Maury County, Tennessee.

Being the same property conveyed to Porter House and wife, Linnie Louise Rose House, by deed of life estate of record in Book 595, Page 486, Register's Office of Maury County, Tennessee. Both Porter House and wife, Linnie Louise Rose House are deceased.

Tract VI (Part of Map 112, Parcel 003.00)

Any portion of Old Rutherford Lane that bounds said property owned by Andrew D. Crichton, John B. Jewell, III, and James W. Jewell, up to the centerline of said Lane.

First party also quitclaims any and all rights in and to Old Rutherford lane acquired by virtue of the foregoing deed or otherwise.

Being the same property conveyed to Andrew D. Crichton, John B. Jewell, Ill, and James W. Jewell, as equal tenants in common, by deed of record in Book 819, Page 53, Register's Office of Maury County, Tennessee.

Being a portion of the same property conveyed to Welton Investments, LLC by Quitclaim deed from John B. Jewell, III, Andrew D. Crichton and James W. Jewell, as equal tenants in common of record in Book R2077, page 1007 Register's Office for Maury County, Tennessee, dated April 28, 2009 and recorded on April 06, 2009.

Tract VII:

Tract 1: (Map 73, Parcel 18.04)

Located in the Fourth (4th) Civil District of Maury County, Tennessee, and being Tract 3 on the plat of survey for Barker Enterprises, Inc., containing 1.64 acres, as shown on plat of record in Plat Book 5, Page 182, Register's Office of Maury County, Tennessee.

Being the same property conveyed to Welton Investments, a Tennessee General Partnership, by deed of record in Book 1245, Page 299, Register's Office of Maury County, Tennessee. Being a portion of the same property conveyed Welton Investments, a Tennessee General Partnership, by deed of record in Book 1518, Page 557, Register's Office of Maury County, Tennessee.

Tract VIII: (Map 73, Parcel 18.06)

Located in the Fourth (4th) Civil District of Maury County, Tennessee, and being Tract 5 of the plat of survey for Barker Enterprises, Inc., containing 2.37 acres, as shown on plat of record in Plat Book 5, Page 182, Register's Office of Maury County, Tennessee.

Being the same property conveyed to Welton Investments, by deed of record in Book 1245, Page 637, Register's Office of Maury County, Tennessee.

Being a portion of the same property conveyed to Welton Investment, LLC, a Limited Liability Company by Quitclaim deed from Welton Investments, a Tennessee Partnership of record in Book R1518, page 557 Register's Office for Maury County, Tennessee, dated January 18, 2001 and recorded on January 23, 2001.

Tract IX:

Parcel 1: (Map 73, Parcel 18.10)

Located in the Fourth (4th) Civil District of Maury County, Tennessee, and being Tract 6 on the plat of survey for Barker Enterprises, Inc., containing 0.77 acres, as shown on plat of record in Plat Book 5, Page 182, Register's Office of Maury County, Tennessee.

Parcel 2: (Map 73, Parcel 18.11)

Located in the Fourth (4th) Civil District of Maury County, Tennessee, and being Tract 4 on the plat of survey for Barker Enterprises, Inc., containing 1.98 acres, as shown on plat of record in Plat Book 5, Page 182, Register's Office of Maury County, Tennessee.

Being the same property conveyed to Welton Investments by deed of record in Book 1245, Page 635, Register's Office of Maury County, Tennessee. Being a portion of the same property conveyed to Welton Investment, LLC, a Limited Liability Company by Quitclaim deed from Welton Investments, a Tennessee Partnership of record in Book R1518, page 557 Register's Office for Maury County, Tennessee, dated January 18, 2001 and recorded on January 23, 2001.

Tract X:

Located in the Fourth (4th) Civil District of Maury County, Tennessee, more particularly described as follows:

Parcel 1: (Map 73, Parcels 18.08)

Being Tract No. 8, as shown on plat of survey for Baker Enterprises, Inc., containing 2.03 acres, as shown on plat of record in Plat Book 5, Page 182, Register's Office of Maury County, Tennessee.

Parcel 2: (Map 73, Parcels 18.09)

Being Tract No. 7, as shown on plat of survey for Baker Enterprises, Inc., containing 2.17 acres, as shown on plat of record in Plat Book 5, Page 182, Register's Office of Maury County, Tennessee.

Being a portion of the same property conveyed to Welton Investment, LLC by Warranty deed from Rayburn C. Barker of record in Book R1508, page 534 Register's Office for Maury County, Tennessee, dated October 26, 2000 and recorded on October 27, 2000.

Tennessee Certification of Electronic Document

I, Jeremy H. Cherry, do hereby make oath that I am a licensed attorney and/or the custodian of the original version of the electronic document tendered for registration herewith and that this electronic document is a true and exact copy of the original document executed and authenticated according to law on December 31, 2022 (date of document).

Affiant Signature

January 3, 2023
Date

State of Tennessee

County of Davidson

Sworn to and subscribed before me this 3rd day of January, 2023.

Notary's Signature

MICHELLE MARIE MONTAGUE
STATE OF TENNESSEE NOTARY PUBLIC
DAVIDSON COUNTY
MY COMMISSION EXPIRES JULY 6, 2026

MY COMMISSION EXPIRES:

NOTARY'S SEAL

FINAL PLAT FOR:

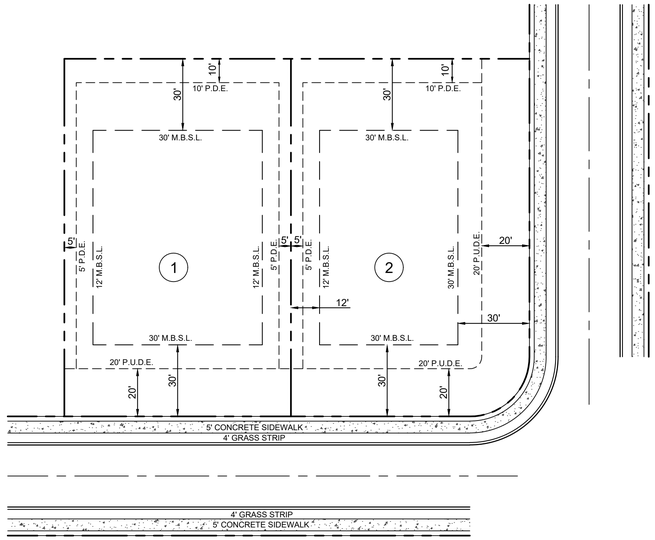
IDLEWILD FARMS

HIWASSEE DRIVE
CITY OF COLUMBIA
MAURY COUNTY, TENNESSEE
MAP 89, PARCELS 23.01 & 23.02
JUNE 16, 2025

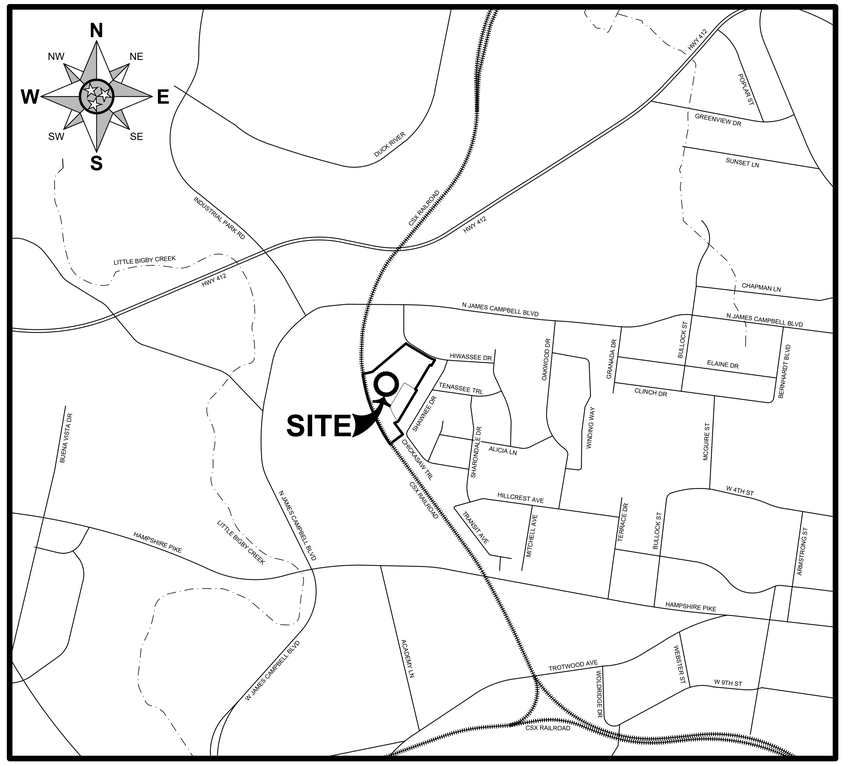
LOT AREA TABLE		
Lot #	Area (s.f.)	Area (ac.)
1	28,866	0.66
2	38,245	0.88
3	22,790	0.52
4	20,000	0.46
5	20,000	0.46
6	20,000	0.46
7	20,000	0.46
8	20,000	0.46
9	22,236	0.51
10	24,542	0.56
11	22,122	0.51
12	22,083	0.51
13	22,424	0.51
14	20,333	0.47
15	20,307	0.47
16	25,816	0.59

OPEN SPACE AREA TABLE		
O.S. #	AREA (S.F.)	AREA (AC.)
"A"	210,433	4.83
"B"	43,728	1.00

SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
FP-01	COVER SHEET
FP-02	FINAL PLAT



TYPICAL LOT LAYOUT
SCALE: 1"=30'
(TYPICAL UNLESS NOTED OTHERWISE)



VICINITY MAP
SCALE: 1"=1000'

FINAL SUBDIVISION PLAT MAURY COUNTY, TENNESSEE	
TOTAL ACRES: 15.61	TOTAL LOTS: 16
ACRES NEW STREETS: 1.28	FEET NEW STREETS: 1,330
CIVIL DISTRICT: 4TH	CLOSURE ERROR: 1:10,000±
MILES OF NEW ROADS: 0.25	DATE: JUNE 16, 2025

GENERAL NOTES:

1. THE PURPOSE OF THIS PLAT IS TO ABANDON LOTS 82 & 83, AS REFERENCED IN IDLEWILD SUBDIVISION, SECTION 3, PB 4, PG 15, CREATE 16 LOTS AND 2 OPEN SPACES.
2. THE RECORDING OF THIS PLAT SHALL VOID, VACATE, AND SUPERCEDE THE PREVIOUSLY RECORDED PLAT(S), PLAT OF SURVEY FOR IDLEWILD SUBDIVISION, SECTION 3, PB 4, PG 15. ALL OTHER INFORMATION ON SAID PLATS SHALL REMAIN THE SAME.
3. BEARINGS ARE BASED ON THE TENNESSEE STATE PLANE COORDINATE SYSTEM (NAD83).
4. SURVEY FIELD WORK WAS COMPLETED ON JANUARY 26, 2024.
5. THIS SURVEY WAS PREPARED USING THE CURRENT DEEDS AND PLATS OF RECORD FOR THE SUBJECT PROPERTY.
6. ALL DEED BOOK AND PLAT REFERENCES PERTAIN TO THE REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE.
7. ADJOINING PROPERTY LINES SHOWN WERE PLOTTED FROM INFORMATION TAKEN FROM EITHER DEED DESCRIPTION, RECORD PLATS, OR TAX MAPS.
8. PROPERTY CORNERS SET THIS SURVEY ARE 18" #4 REBAR WITH ORANGE PLASTIC CAP STAMPED "M2 GROUP", 18" #5 REBAR WITH YELLOW PLASTIC CAP STAMPED "M2 GROUP, LLC", OR PK NAIL WITH STAINLESS STEEL WASHER STAMPED "M2 GROUP, LLC", UNLESS NOTED OTHERWISE.
9. UNDERGROUND UTILITIES, IF SHOWN, HAVE BEEN PLOTTED FROM PLANS AND MARKINGS COMBINED WITH OBSERVED EVIDENCE OF UTILITIES TO DEVELOP A VIEW OF THOSE UNDERGROUND UTILITIES (CI/ASCE 38-2, QUALITY LEVEL C). OTHER UNDERGROUND UTILITIES MAY EXIST WHICH ARE NOT SHOWN AS A RESULT OF INFORMATION NOT BEING PROVIDED BY THE UTILITY OWNER. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY AND RELIABLY DEPICTED. WHERE ADDITIONAL OR MORE DETAILED INFORMATION IS REQUIRED, THE CLIENT OR CONTRACTOR IS ADVISED THAT EXCAVATION MAY BE NECESSARY. CALL 811 BEFORE YOU DIG.
10. THE PROPERTY SHOWN HEREON IS LOCATED IN A FLOOD HAZARD ZONE "X" (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN) ACCORDING TO F.I.R.M. MAP "MAURY COUNTY, TENNESSEE" PANELS 170 & 285 OF 440, MAP NUMBER 47119C0170E & 47119C0285E, REVISED APRIL 16, 2007.
11. THE SUBJECT PROPERTY SHOWN HEREON HAS A VESTED ZONING DESIGNATION OF "R-20", ACCORDING TO THE PREVIOUS CITY OF COLUMBIA OFFICIAL ZONING ORDINANCE, ADOPTED AUGUST 2006 . SETBACK REQUIREMENTS ARE AS FOLLOWS:
    FRONT = 30 FEET
    SIDE = 12 FEET
    REAR = 30 FEET
12. DEVELOPMENT IS TO BE SERVED BY A MAIL KIOSK LOCATED IN OS-2.
13. THE OVERALL PROPERTY BOUNDARY SHOWN HEREON IS BASED ON A SURVEY BY WES ENGINEERS AND SURVEYORS, DATE OF SURVEY IS UNKNOWN.
14. ALL OPEN SPACE IS TO SERVE AS A PUBLIC UTILITY, DRAINAGE, AND ACCESS EASEMENT (PUDAE).
15. ALL PUBLIC UTILITY AND DRAINAGE EASEMENTS LOCATED ON PROPOSED LOTS ARE TO BE MAINTAINED BY THE INDIVIDUAL PROPERTY OWNER FOR SAID LOT.
16. PROPERTY IS SUBJECT TO A STORMWATER MAINTENANCE AGREEMENT, RECORD BOOK 3073, PAGE 1054 RECORDED WITH THE MAURY COUNTY REGISTER OF DEEDS.

SUBJECT PROPERTY INFORMATION:

- OWNER: HABITAT FOR HUMANITY WILLIAMSON-MAURY
- PARCEL ID: TAX MAP 89, PARCEL 23.01 & 23.02
- INSTRUMENT: RB R2892, PG 825
- PLAT INSTRUMENT: PB 4, PG 15
- TOTAL AREA = 15.60 AC. (679,753 S.F.)
- ZONING: CD-3L

CONTACT LIST

OWNER/DEVELOPER

HABITAT FOR HUMANITY WILLIAMSON-MAURY
109 NOAH DRIVE
FRANKLIN, TN 37064
(615) 690-8090
CONTACT: JENNEE GALLAND, PRESIDENT & COO
E-MAIL: jgalland@hfhwm.org

SURVEYOR

M2 GROUP, LLC
P.O. BOX 2543
BRENTWOOD, TN 37024
PHONE: (931) 623-8913
CONTACT: STEPHEN VANDER HORST, RLS, CFS
E-MAIL: stephen@m2groupllc.com

I (WE) HEREBY CERTIFY THAT I AM (WE ARE) THE OWNER(S) OF THE PROPERTY SHOWN AND DESCRIBED HEREON AS EVIDENCED IN BOOK R2892, PAGE 825, MAURY COUNTY REGISTERS OFFICE, AND ADOPT THIS FINAL SUBDIVISION PLAT OF THE PROPERTY AS SHOWN HEREON AND DEDICATE ALL PUBLIC WAYS AND EASEMENTS AS NOTED WITH MY (OUR) FREE CONSENT.

OWNER(S) _____ DATE _____

TITLE (IF ACTION FOR CORPORATION OR PARTNERSHIP) _____

CERTIFICATE OF APPROVAL OF WATER SYSTEM

I HEREBY CERTIFY THAT THE WATER SYSTEM(S) OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAS/HAVE BEEN INSTALLED IN ACCORDANCE WITH CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS, OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

NAME _____ DATE _____

TITLE _____ AUTHORIZING AGENCY _____

CERTIFICATE OF APPROVAL OF STREETS, DRAINAGE, AND UTILITIES

I HEREBY CERTIFY THAT THE STREETS, DRAINAGE, AND UTILITIES OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAVE BEEN INSTALLED IN ACCORDANCE WITH CITY SPECIFICATIONS, OR A PERFORMANCE SURETY IN THE AMOUNT OF $ _____ FOR STREETS AND DRAINAGE HAS BEEN POSTED WITH THE CITY OF COLUMBIA, TENNESSEE, TO ASSURE COMPLETION OF SUCH IMPROVEMENTS.

CITY ENGINEER _____ DATE _____
COLUMBIA, TENNESSEE

CERTIFICATE OF APPROVAL FOR RECORDING

I HEREBY CERTIFY THAT THE FINAL SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE CITY OF COLUMBIA SUBDIVISION REGULATIONS, WITH THE EXCEPTION OF SUCH VARIANCES, IF ANY, AS NOTED IN THE MINUTES OF THE COLUMBIA MUNICIPAL PLANNING COMMISSION, AND THAT IT HAS BEEN APPROVED FOR RECORDING IN THE OFFICE OF THE MAURY COUNTY REGISTER OF DEEDS.

PLANNING DIRECTOR _____ DATE _____
COLUMBIA, TENNESSEE

CERTIFICATE OF SUBDIVISION NAME AND STREET NAMES

SUBDIVISION NAME AND STREET NAMES APPROVED BY THE CITY ENGINEERING DEPARTMENT AND BY E-911 MAURY COUNTY.

MAURY COUNTY E-911 _____ DATE _____

CERTIFICATE OF ACCURACY

I (WE) HEREBY CERTIFY THAT TO THE BEST OF MY (OUR) KNOWLEDGE AND BELIEF THIS IS A TRUE AND ACCURATE SURVEY OF THE PROPERTY SHOWN HEREON; THAT THIS IS A CLASS "I" LAND SURVEY AS DEFINED IN TITLE 62, CHAPTER 18, TENNESSEE CODE ANNOTATED, AND THAT THE RATIO OF PRECISION IS GREATER THAN OR EQUAL TO 1:10,000.

REGISTERED LAND SURVEYOR _____ NUMBER _____ DATE _____

CERTIFICATE OF SANITARY SEWER SYSTEM

I HEREBY CERTIFY THAT THE SANITARY SEWER SYSTEM OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAS BEEN INSTALLED IN ACCORDANCE WITH THE CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS, OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

DIRECTOR OF WASTEWATER DEPARTMENT _____ DATE _____
COLUMBIA, TENNESSEE

CERTIFICATE OF COMPLIANCE

I HEREBY CERTIFY THAT THE FINAL SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE CITY OF COLUMBIA SUBDIVISION REGULATIONS AND OTHER ADOPTED ORDINANCES AND POLICIES.

CITY ENGINEER _____ DATE _____
COLUMBIA, TENNESSEE

DRAWING1.DWG / Wednesday, January 10, 2018 12:04:03 PM

REVISION #	DATE	DESCRIPTION

FINAL PLAT
IDLEWILD FARMS
HIWASSEE DRIVE
CITY OF COLUMBIA
MAURY COUNTY, TENNESSEE

M2 GROUP
P.O. BOX 2543
BRENTWOOD, TN 37024-2543
WWW.M2GROUPLLC.COM

COVER SHEET

DRAWN BY :	ERG
CHECKED BY :	SVH
DATE :	JUNE 16, 2025
PROJECT NO. :	23-070

SHEET NUMBER:
FP-01

SUBJECT PROPERTY INFORMATION:

- OWNER: HABITAT FOR HUMANITY WILLIAMSON-MAURY
- PARCEL ID: TAX MAP 89, PARCEL 23.01 & 23.02
- INSTRUMENT: RB R2892, PG 825
- PLAT INSTRUMENT: PB 4, PG 15
- TOTAL AREA = 15.60 AC. (679,753 S.F.)
- ZONING: R-20 (PER PREVIOUS ZONING)

50 0 50 100
GRAPHIC SCALE

GENERAL NOTES:

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    FRONT = 30 FEET
    SIDE = 12 FEET
    REAR = 30 FEET
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13. THE OVERALL PROPERTY BOUNDARY SHOWN HEREON IS BASED ON A SURVEY BY WES ENGINEERS AND SURVEYORS, DATE OF SURVEY IS UNKNOWN.
14. ALL OPEN SPACE IS TO SERVE AS A PUBLIC UTILITY, DRAINAGE, AND ACCESS EASEMENT (PUDAE) AND TO BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION (HOA).
15. ALL PUBLIC UTILITY AND DRAINAGE EASEMENTS LOCATED ON PROPOSED LOTS ARE TO BE MAINTAINED BY THE INDIVIDUAL PROPERTY OWNER FOR SAID LOT.
16. PROPERTY IS SUBJECT TO A STORMWATER MAINTENANCE AGREEMENT, RECORD BOOK 3073, PAGE 1054 RECORDED WITH THE MAURY COUNTY REGISTER OF DEEDS.

LINE TABLE		
LINE #	DIRECTION	LENGTH
L1	S72° 13' 06"W	52.46
L2	N49° 45' 38"E	4.55
L3	N66° 08' 05"W	25.02
L4	S59° 07' 45"E	25.50

CURVE TABLE				
CURVE #	LENGTH	RADIUS	CHORD DIRECTION	CHORD LENGTH
C1	34.29	175.00	N30° 53' 42"W	34.24
C2	123.91	175.00	N4° 59' 50"W	121.34
C3	48.06	175.00	N23° 09' 20"E	47.91
C4	39.33	25.00	N14° 02' 30"W	35.40
C5	39.21	25.00	S75° 57' 30"W	35.31
C6	147.33	125.00	S2° 44' 32"E	138.95
C7	200.69	2301.59	N31° 59' 47"W	200.62
C8	165.12	2301.59	N27° 26' 35"W	165.08
C9	162.85	2301.59	N23° 21' 39"W	162.82
C10	528.11	2301.59	N14° 45' 38"W	526.95
C11	46.68	206.10	S52° 37' 10"E	46.58
C12	127.63	543.54	S65° 50' 03"E	127.34

CSX TRANSPORTATION
RIGHT-OF-WAY CHARTER
MAP 099, PARCEL 403.00

N76° 50' 38"E 139.85'

MILLIKEN NONWOVENS LLC
MAP 089, PARCEL 23.03
DB R2260, PG 919

N49° 45' 38"E 611.89'

STORMWATER MANAGEMENT AREA

OS-1
OPEN SPACE "A"
4.83 AC.

150' TVA TRANSMISSION EASEMENT
(REFERENCED PER PB 4, PG 15)

N31° 01' 25"E 1043.63' (TOTAL)

114.69' 164.30' 125.00' 125.00' 125.00' 125.00' 125.00' 139.63'

150' TVA TRANSMISSION EASEMENT
(REFERENCED PER PB 4, PG 15)

N31° 01' 25"E 809.85' (TOTAL)

S31° 01' 25"W 810.08' (TOTAL)

BESSER SPRINGS WAY
(50' PUBLIC R/W - MINOR LOCAL)

N30° 52' 41"E 513.19' (TOTAL)

N30° 56' 22"E 396.77' (TOTAL)

S30° 50' 35"W 94.69'

HIWASSEE DRIVE
(50' PUBLIC R/W - MINOR LOCAL)

SHAWNEE DRIVE
(50' PUBLIC R/W - MINOR LOCAL)

1	28,866 S.F. 0.66 AC.	1264		
2	38,245 S.F. 0.88 AC.	1256		
3	22,790 S.F. 0.52 AC.	1248		
4	20,000 S.F. 0.46 AC.	1240		
5	20,000 S.F. 0.46 AC.	1232		
6	20,000 S.F. 0.46 AC.	1224		
7	20,000 S.F. 0.46 AC.	1216		
8	20,000 S.F. 0.46 AC.	1208		
9	22,236 S.F. 0.51 AC.	1200		
10	24,542 S.F. 0.56 AC.	1255		
11	22,122 S.F. 0.51 AC.	1241		
12	22,083 S.F. 0.51 AC.	1233		
13	22,424 S.F. 0.51 AC.	1225		
14	20,333 S.F. 0.47 AC.	1217		
15	20,307 S.F. 0.47 AC.	1209		
16	25,816 S.F. 0.59 AC.	1201		

OS-2
OPEN SPACE "B"
1.00 AC.

**SEE NOTE #14

LOT LINES TO BE ABANDONED WITH THE RECORDING OF THIS PLAT. LOTS FORMERLY KNOWN AS 82 & 83 ON THE IDLEWILD, SECTION 3 FINAL PLAT WILL NOW SERVE AS OPEN SPACE "B" AS SHOWN AND NOTED HEREON.

STORMWATER MANAGEMENT AREA

71B AMANDA NICOLE POTTS HOUSER, ET VIR
MAP 089K, GROUP B
PARCEL 23.00
DB R2662, PG 1309
MINOR PLAT SUBDIVISION OF PROPERTY OF KENT CARVELL
PB 8, PG 135

71A AMANDA NICOLE POTTS
MAP 089K, GROUP B
PARCEL 22.00
DB R2097, PG 1107
MINOR PLAT SUBDIVISION OF PROPERTY OF KENT CARVELL
PB 8, PG 135

81 THREE LITTLE BEES LLC
MAP 089K, GROUP A
PARCEL 10.00
DB R2608, PG 358
IDLEWILD SECTION 3
PB 4, PG 15

80 NOLAN PATEE
MAP 089K, GROUP A
PARCEL 9.00
DB R2641, PG 619
IDLEWILD SECTION 3
PB 4, PG 15

79 LETOURNEAU PROPERTIES TN LLC
MAP 089K, GROUP A
PARCEL 8.00
DB R2579, PG 99
IDLEWILD SECTION 3
PB 4, PG 15

78 SHERRY D TAYLOR
MAP 089K, GROUP A
PARCEL 7.00
DB R2263, PG 667
IDLEWILD SECTION 3
PB 4, PG 15

77 MARION PATRICK REAVES
MAP 089K, GROUP A
PARCEL 6.00
DB 1367, PG 918
IDLEWILD SECTION 3
PB 4, PG 15

76 G & R CONSTRUCTION, INC
MAP 089K, GROUP A
PARCEL 5.00
DB R2842, PG 63
IDLEWILD SECTION 3
PB 4, PG 15

75 KRISTIN G COGGIN
MAP 089K, GROUP A
PARCEL 4.00
DB R2338, PG 193
IDLEWILD SECTION 3
PB 4, PG 15

74 ADAM RYAN ETUX
MAP 089K, GROUP A
PARCEL 3.00
DB 2207, PG 708
IDLEWILD SECTION 3
PB 4, PG 15

73 ERNEST NEAL BRADY ETUX
MAP 089K, GROUP A
PARCEL 2.00
DB R2439, PG 1195
IDLEWILD SECTION 3
PB 4, PG 15

72 STEPHEN TAYLOR ELLIS
MAP 089K, GROUP A
PARCEL 1.00
DB R2559, PG 1097
IDLEWILD SECTION 3
PB 4, PG 15

84 LARON M TAYLOR
MAP 089N, GROUP F
PARCEL 3.00
DB R1416, PG 403
IDLEWILD SECTION 3
PB 4, PG 15

LEGEND:

PROPOSED PROPERTY LINE	SAN	EXISTING SANITARY SEWER LINE	FH	FIRE HYDRANT	LS	LIGHT STANDARD
PROPOSED RIGHT-OF-WAY	ST	EXISTING STORM SEWER LINE	WM	WATER METER	CP	COMMUNICATION PEDESTAL
EXISTING ADJACENT PROPERTY LINE	W W	EXISTING WATER LINE	S	SANITARY MANHOLE	MBSL	MINIMUM BUILDING SETBACK LINE
PROPOSED EASEMENT	OHE	EXISTING OVERHEAD ELECTRIC	SB	SEWER BOX	PDE	PERMANENT DRAINAGE EASEMENT
EXISTING EASEMENT	G G	EXISTING GAS LINE	CI	CURB INLET	PUDE	PERMANENT UTILITY & DRAINAGE EASEMENT
MBSL MINIMUM BUILDING SETBACK LINE		EXISTING RAILROAD TRACKS	PP	POWER POLE	HW	HEADWALL
SAN PROPOSED SANITARY SEWER LINE	●	IRON REBAR FOUND (IRF)	→	GUY WIRE	1	LOT NUMBER
ST PROPOSED STORM SEWER LINE	■	CONCRETE MONUMENT FOUND (CMF)	HT	HIGH TENSION TOWER	1201	ADDRESS
W PROPOSED WATER LINE	⊙	IRON PIPE FOUND (IPF)	ET	TRANSFORMER		
OH-E PROPOSED OVERHEAD ELECTRIC	○	IRON REBAR SET W/CAP (IRS)	EP	ELECTRIC PEDESTAL		

Know what's below. Call before you dig.

REVISION #	DATE	DESCRIPTION

FINAL PLAT
IDLEWILD FARMS
HIWASSEE DRIVE
CITY OF COLUMBIA
MAURY COUNTY, TENNESSEE

M2 GROUP
P.O. BOX 2543
BRENTWOOD, TN 37024-2543
WWW.M2GROUPLLC.COM

FINAL PLAT

DATE: JUNE 16, 2025 | DRAWN BY: ERG | CHECKED BY: SVH
PROJECT NO. : 23-070

SHEET NUMBER:
FP-02

DRAWING1.DWG | Wednesday, January 10, 2018 12:04:03 PM

Appendix B: Subdivision Development Agreement

This DEVELOPMENT AGREEMENT is made and entered into on this

_____ day of _____, 20_____ ,
between THE CITY OF COLUMBIA, TENNESSEE, (hereinafter the "CITY"), and

Habitat for Humanity Williamson - Maury, the DEVELOPER (hereinafter the "DEVELOPER") named on the Addendum to this Agreement attached hereto and by this reference made a part hereof (hereinafter the "ADDENDUM").

WITNESSETH:

WHEREAS, the DEVELOPER desires to develop the property described on the ADDENDUM (hereinafter the "PROJECT"); and,

WHEREAS, the Development Plan of the PROJECT has been approved by the Columbia Municipal Planning Commission (hereinafter the "CMPC") on the

21st day of January, 20 22 , Control # 21-0227
pursuant to Tennessee Code Annotated Title 13, Chapter 4, and the Subdivision Regulations of Columbia, Tennessee (hereinafter the "SUBDIVISION REGULATIONS"); and,

WHEREAS, the DEVELOPER is the owner of the PROJECT and has authority to engage in such development; and,

WHEREAS, the DEVELOPER desires to develop and improve said PROJECT; and,

WHEREAS, in order to provide for the health, safety, and welfare of future residents of the PROJECT, it will be necessary for certain improvements to the CITY'S utility systems, public infrastructure, and common areas to be constructed within and to serve the PROJECT including but not be limited to roads, bridges, sidewalks, pedestrian facilities, stormwater facilities, street signs, markings, signals, street lighting, recreation and park facilities, landscaping, and the like (hereinafter the "IMPROVEMENTS"); and,

WHEREAS, in order for the IMPROVEMENTS to be fully integrated with the utility systems and public infrastructure of the CITY and to function in a satisfactory manner, the DEVELOPER has agreed to construct, in accordance with the Subdivision Regulations and other rules, regulations, and ordinances of the CITY, the IMPROVEMENTS in said PROJECT and extend utilities to the PROJECT at their own cost; and,

WHEREAS, the CITY is willing to accept the dedication of the streets, utilities, and other improvements as determined in the Development Plan of the PROJECT, subject to the City of Columbia City Council approval by resolution, and subject to the applicant's compliance with all requirements in this agreement and applicable existing laws of the CITY of Columbia and the State of Tennessee,

NOW, THEREFORE, it is agreed and understood as follows:

B1 General Conditions

B1.1 Construction Costs

The DEVELOPER shall pay for all material and labor necessary to install and complete the roads, sidewalks, sewers, utilities, and other facilities in accordance with this agreement.

B1.2 City Ordinances, Rules and Regulations

All currently existing CITY ordinances, rules and regulations, and the Subdivision Regulations adopted by the CMPC are made a part of this agreement. In the event of a conflict between the terms of this agreement and a CITY ordinance, the ordinance shall prevail. In the event of a conflict between the terms of this agreement and the Subdivision Regulations, the Subdivision Regulations shall prevail. All work done under this agreement is to be performed in accordance with plans and specifications approved by the City and made a part, hereof.

B1.3 Fees

Review fees, inspection fees, and other amounts established by the CITY shall be paid prior to any review of the plans. If the DEVELOPER fails to install the facilities in accordance with the terms of this Agreement, no portion of the review fees, inspection fees, or other amounts paid to the CITY shall be refundable to the DEVELOPER.

B1.4 Inspection

The CITY shall have a continuous right to inspect the work and facilities to assure that the work and facilities are in accordance with the Subdivision Regulations, approved Construction Plans, and other rules, regulations, and ordinances of the CITY.

B1.5 Right of Entry

The CITY shall have the right, in case of breach of the Performance Agreement, to enter upon any property of the DEVELOPER and take all necessary actions to complete the work and obligations not completed.

B1.6 Easements

The DEVELOPER shall obtain and dedicate to the CITY or cause to be dedicated to the CITY, either by dedication on the plat or by easement deed, in either case in a form acceptable to the CITY, permanent easements of such widths as required by the CITY and noted on the Plans. The DEVELOPER further agrees to grant the necessary easements and rights-of-way across the DEVELOPER's properties without expense to the CITY and waive any claim for damages.

B1.7 Stormwater Maintenance Agreement

If the PROJECT includes any detention or retention ponds, common drainage ditches, water quality facilities, or stormwater facilities outside of the CITY rights-of-way, the DEVELOPER will submit a Stormwater Maintenance Agreement, to be filed with and recorded with the Final Plat.

B1.8 Attorney Fees and Other Expenses

The DEVELOPER shall pay all reasonable costs and expenses incurred by the CITY in enforcing or completing this agreement. The DEVELOPER shall pay all costs and expenses, including the CITY'S attorney fees, of any legal proceedings brought by the CITY against the DEVELOPER seeking remedies for the DEVELOPER'S failure to perform any of its obligations hereunder, whether or not any proceedings are prosecuted to judgment.

B1.9 Agreement Not Assignable

No third party shall obtain any benefits or rights under this agreement nor shall the rights or duties be assigned by either party.

B1.10 Revocation and Interpretation

This agreement shall bind the DEVELOPER when executed by the DEVELOPER and may not be revoked by the DEVELOPER without permission of the CITY, even if the agreement has not been executed by the CITY, or does not bind CITY, for other reasons. This agreement shall be interpreted in accordance with Tennessee law and may only be enforced in the Chancery Court or Circuit Court or Court of competent jurisdiction of Maury County, Tennessee, and Tennessee Appellate Courts.

B1.11 No Oral Agreement

This agreement may not be orally amended and supersedes all prior negotiations, commitments, or understandings.

B1.12 Separability

If any portion of this agreement is held to be unenforceable, the CITY shall have the right to determine whether the remainder of the agreement shall remain in effect, or whether the agreement shall be void and all rights of the DEVELOPER pursuant to this agreement terminated.

B 1.13 Transferability

The DEVELOPER agrees to not transfer the property on which this PROJECT is to be located without first providing the CITY with written notice. The transferee shall provide the CITY an Assumption Agreement of this Agreement, whereby the transferee agrees to perform the IMPROVEMENTS required under this agreement and to provide a performance surety. The DEVELOPER understands that if the DEVELOPER transfers said property without providing the notice of transfer and Assumption Agreement as required herein, they will be in breach of this agreement and in violation of the Subdivision Regulations.

B1.14 Indemnity

The DEVELOPER shall indemnify and hold the CITY harmless from all loss, costs, expenses, liability, money damages, penalties, or claims arising out of any work covered by this agreement, including any attorney fees incurred by the CITY in connection therewith. Inspection of the IMPROVEMENTS by an authorized representative of the CITY shall not constitute a waiver by the CITY of any defect or of any of the DEVELOPER'S obligations hereunder.

B1.15 Binding Effect

This agreement shall be binding upon the DEVELOPER and the DEVELEPOR's heirs, administrators, executors, assigns, and any other successors in interest.

B1.16 Entire Agreement

This document contains the entire agreement between the parties, and there are no collateral understandings or agreements between them. No variations or alterations of the terms of this agreement shall be binding upon either of the parties, unless the same be reduced to writing and made an amendment to this agreement.

B1.17 Headings

Paragraph titles and headings contained herein are inserted for convenience only and shall not be deemed a part of the agreement and in no way shall define, limit, extend, or describe the scope or intent of any provision, hereof.

B2 Performance Surety

At the time of execution of this agreement, the DEVELOPER shall provide the CITY a performance surety, in an amount determined by the City Engineer for the IMPROVEMENTS and other items specified by the Construction Plans, plats, and plans approved by the CMPC. This performance surety shall secure performance of all obligations of the DEVELOPER under this agreement. The performance surety shall meet all requirements established in Chapter 4: Performance Agreement of the Subdivision Regulations and secure full compliance with all terms and conditions of this agreement. The performance surety may be called for failure to comply with the provisions of this agreement in whole or in part according to the terms of the performance surety. The performance surety will not be released, except and until there has been full compliance with this agreement.

B3 Construction

B3.1 Construction Plans

The DEVELOPER shall submit to the CITY, Construction Plans describing in reasonable detail all utility systems, all storm water management systems, all street systems, pedestrian facilities, and all IMPROVEMENTS. The Construction Plans shall be designed according to the Engineering Standards and Specifications, all other codes and ordinances enforced by the City, and sound engineering judgment. The design of all utility systems shall follow the State of Tennessee and utility provider design criteria and specifications. In the event of a disagreement as to compliance with or interpretation of the Construction Plans and the CITY'S specifications, the decision of the CITY shall be final and binding on the DEVELOPER. The Construction Plans shall be prepared by a design professional licensed by the State of Tennessee to design all systems and shall bear the seal, signature, date, and license number of the professional preparing the Construction Plans.

B3.2 Commencement of Construction

Construction of IMPROVEMENTS may not begin until the following events have occurred:

A. The Preliminary Plat has been approved by the CMPC;
B. The Construction Plans are approved by the CITY;
C. The Tennessee Department of Environment and Conservation has approved the applicable portions of the Plans and has confirmed its approval to the CITY and/or DEVELOPER in writing;
D. The CITY shall have received an appropriately executed Development Agreement; and
E. The DEVELOPER shall give the CITY notice of commencement of construction, in writing at least one (1) working day prior to commencement.

B3.3 Site Grading

The DEVELOPER, hereby, agrees to construct all site grading to comply with the approved Construction Plans, including the approved Erosion Control Plan for the PROJECT and to comply with the Engineering Standards and Specifications, Stormwater Ordinance, and all other codes and ordinances enforced by the CITY.

B3.4 Storm Water Management Systems

The DEVELOPER shall be responsible for all storm water management work made necessary by the development of this PROJECT. It is understood and agreed that the CITY in its proprietary function is not and could not be expected to oversee, supervise, or direct the construction of all drainage improvements, and the excavation incident thereto. Neither is the CITY vested with the original design responsibility nor the means to formally survey elevations or the locations of improvements at every stage of the construction process. The CITY is vested with the right of periodic inspections, stop work order, and final approval as a measure of secondary or subsequent enforcement. The DEVELOPER has and shall retain the responsibility to properly anticipate, survey, design and construct the subdivision storm water improvements and give full assurance that same shall not adversely affect the flow or quality of surface water from or upon any property. In providing technical assistance, plan and design review, the CITY does not and shall not relieve or accept any liability from the DEVELOPER.

B3.5 Street Construction

The DEVELOPER, hereby, agrees to construct and improve the streets shown on the Construction Plans to comply with the CITY's specifications and to the satisfaction and approval of the City Engineer by grading, draining, subgrade preparation, base preparation, curbing, signage, striping, signalization, sidewalk installation, and paving with the required preparation, amounts, and types of material. The DEVELOPER further agrees to pay the cost of all engineering, inspection and laboratory cost incidental to the construction of subdivision streets including but not limited to material and density testing. The DEVELOPER further agrees to make all necessary adjustments to manholes and valve boxes to meet finished surface grade and to repair subsurface or base material, as required, in areas directed by the CITY Engineer, prior to application of final surface.

B3.6 Time Period for Construction

The DEVELOPER agrees to be bound to complete, within three (3) years of commencement of construction, all IMPROVEMENTS shown on the plat and plans and all things required by this agreement.

The DEVELOPER further agrees that if due to unforeseen circumstances, he is unable to complete all work included in this agreement within the time specified above, but desires to complete said agreement to the satisfaction of the CITY, the DEVELOPER shall submit a written request for extension of the agreement period to the CITY at least sixty (60) days prior to the expiration of the existing agreement period, specifying the reason for the DEVELOPER's failure to complete the work as agreed and a prospective date for such completion. The DEVELOPER further agrees that if the performance surety executed to secure the value of the work to be performed under this agreement, due to inflation or rising costs, is determined to be inadequate by the City Engineer to secure the cost of said IMPROVEMENTS at the time an extension is sought, the DEVELOPER will provide the additional security to bring the performance surety amount in line with current cost projections as made by the CITY. The DEVELOPER understands that the DEVELOPER's failure to follow the extension procedure constitutes a breach of this agreement and places the DEVELOPER in violation of the Subdivision Regulations. The DEVELOPER further understands, that should the DEVELOPER fail to complete any part of the work outlined in this agreement in a good and workmanlike manner as approved, the CITY shall reserve the right to withhold and withdraw all building permits within the PROJECT until all items of this Agreement have been fulfilled by the DEVELOPER.

B3.7 Off-Site Improvements

The DEVELOPER shall construct any and all off-site facilities that may be required to serve the PROJECT. Unless specifically noted in the Construction Plans and made a part of separate agreement with the CITY, the CITY shall not be required to reimburse the DEVELOPER for construction of off-site improvements.

B3.9 Inspection and Compliance

After construction begins, the CITY shall provide on-site construction inspection as the CITY deems necessary to ensure that all work is performed and completed in accordance with the Construction Plans, CITY specifications, and the contents of this agreement. In the event of a disagreement as to compliance with or interpretation of the Construction Plans and the CITY'S specifications, the decision of the CITY shall be final and binding on the DEVELOPER. If the DEVELOPER fails to construct in accordance with the approved Construction Plans or to comply with the CITY'S specifications, the CITY may issue a stop-work order and DEVELOPER, hereby, agrees to be bound by such order.

B3.10 Testing

The DEVELOPER agrees to pay the cost of all engineering, inspection, and laboratory cost incidental to construction of the streets, sidewalks, utilities, sewers, compacted fill material, and other facilities included within this agreement. Such testing includes, but is not limited to, material and density testing.

B3.11 Scrap Removal

The DEVELOPER agrees to comply with all local, state, and federal rules and regulations regarding waste material and debris disposal.

B3.12 Traffic Control

The DEVELOPER, hereby, agrees to prepare a traffic control/detour plan where required and shall submit said plan to the CITY for review and approval. All traffic control and safety devices, including

signs, lane markings, and barriers necessitated by construction activity undertaken pursuant to this agreement shall be installed and maintained by the DEVELOPER. All traffic control devices shall meet the standards and be installed in accordance with the latest edition of the Manual on Uniform Traffic Control Devices for Streets and Highways, published by the United States Department of Transportation.

B3.13 Temporary Facilities

The DEVELOPER shall provide all temporary facilities including but not limited to utilities and roadways, that are determined by the CITY to be required in connection with or as a result of interruption of service or access that occurs as a consequence of construction activity associated with the work covered by this agreement. Such temporary services shall in all regards and at all points in time be adequate to assure emergency access and adequate fire flows.

B4 Acceptance of Improvements

B4.1 Completion of Improvements

At such time as the improvements have been constructed and installed, in accordance with the Constructions Plans and specifications, required testing and inspections completed and found satisfactory, and all clean-up and cover-up has been done to the satisfaction the City Engineer, a letter requesting preliminary acceptance of the PROJECT will be provided by the DEVELOPER. Formal acceptance shall follow the procedure established in the Subdivision Regulations.

The DEVELOPER agrees the DEVELOPER shall have no claim, direct or implied, in the title or ownership of the IMPROVEMENTS specified in this agreement when the IMPROVEMENTS are complete and thereafter accepted by the CITY. The DEVELOPER will be responsible for construction failures and defects in PROJECT prior to final acceptance. During this period, it shall remain the responsibility of the DEVELOPER to correct and cure these defects and failures.

B4.2 As-Built Drawings and Post-Completion Items

The DEVELOPER agrees to furnish to the CITY as-built plans, on a reproducible, stable media, of the sanitary sewer, storm water management, water mains and service system, and streets within the subdivision before the CITY shall accept the subdivision.

B4.3 Acceptance of Facilities

Upon final acceptance of all or part of the IMPROVEMENTS in the PROJECT, then those IMPROVEMENTS shall become the property of the CITY free from all claims from any person or entity without the necessity of any further writing, agreement, or deed. The DEVELOPER further agrees that any facilities placed within a public or platted right-of-way or dedicated public easement are irrevocably dedicated to the public use without any right of reimbursement or compensation of any kind.

B4.4 Failure to Install

In the event the DEVELOPER fails to install the facilities in accordance with the terms of this agreement, the CITY may, in its sole discretion, elect to accept all or a portion of the IMPROVEMENTS in the PROJECT. Should the CITY choose to accept all or a portion of these IMPROVEMENTS, the CITY shall become the sole owner of these facilities. The CITY may give notice of acceptance by writing delivered to the DEVELOPER or recorded in the Register's Office of Maury County, Tennessee. No further writing or deed shall be required.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed in multiple originals by persons properly authorized so, to do on or as of the day and year first given.

Idlewild Farms
PROJECT

Completed by the Developer	*Completed by the City*
Habitat for Humanity Williamson - Maury DEVELOPER NAME	
Jennee Galland AUTHORIZED AGENT NAME	CITY ENGINEER
Jen Galland SIGNATURE	SIGNATURE
5/16/25 DATE	DATE
109 Noah Drive STREET	
Franklin, TN 37064 CITY, STATE, ZIP	
615 690-8090 PHONE	
jgalland@hfhwm.org EMAIL	
Attest	*Attest*
ERIN WALKER ATTEST NAME	ATTEST NAME
ATTEST SIGNATURE	ATTEST SIGNATURE
5·16·2025 DATE	DATE

DOCUMENT PREPARED BY:
Name: Kevin Sturgill -pickup:
Company M2 Group, llc
Address: PO Box 2543
Brentwood, TN 37024
After recording return copy to City of Columbia, Development Services

BK/PG: R3073/1054-1071
25008237

16 PGS:AL-AGREEMENT	
NANCY BATCH: 354069	06/09/2025 - 03:29 PM
VALUE	0.00
MORTGAGE TAX	0.00
TRANSFER TAX	0.00
RECORDING FEE	90.00
ARCHIVE FEE	0.00
DP FEE	2.00
REGISTER'S FEE	0.00
TOTAL AMOUNT	92.00

STATE OF TENNESSEE, MAURY COUNTY
JOHN FLEMING
REGISTER OF DEEDS

INSPECTION AND MAINTENANCE AGREEMENT OF PRIVATE STORMWATER MANAGEMENT FACILITIES

Map & Parcel Number: Map 89, Parcels 23.01 & 23.02
Project Name: Idlewild Farms, Hiwassee Drive

Recorded by deed in the Register of Deeds Office of Maury County in Deed Book 2892, Page(s) 825.

THIS AGREEMENT, made this 9TH day of JUNE, 2025, by and between Habitat for Humanity Williamson - Maury hereinafter referred to as the "OWNER(S)" of the following property and City of Columbia, Tennessee, hereinafter referred to as the "CITY",

WE, the OWNER(S), with full authority to execute deeds, mortgages, other covenants, all rights, titles, and interests in the property described above, do hereby covenant with the CITY and agree as follows:

1. The OWNER(S) covenant and agree with the CITY that the OWNER(S) shall provide for adequate long term maintenance and continuation of stormwater control measures described in the Long Term Maintenance Plan and shown on the location map, deed of easement drawing or plat attached hereto to ensure that the facilities, are and remain in proper working condition in accordance with approved design standards, rules and regulations, and applicable laws. The OWNER(S) shall perform preventative maintenance activities at intervals described in the schedule attached hereto along with necessary landscaping (grass cutting, etc.) and trash removal as part of regular maintenance.

2. The OWNER(S) shall perform routine inspections to ensure that all long term stormwater management facilities are properly functioning. These inspections shall be conducted on an annual basis, at a minimum. These inspections shall be conducted by a person familiar with control measures implemented at the site. The OWNER(S) or operators shall maintain documents of these inspections.

3. The OWNER(S) shall perform comprehensive inspections of all stormwater management facilities and practices. These inspections shall be conducted once every five years, at a minimum. Such inspections must be conducted by either a professional engineer or landscape architect.

4. The OWNER(S) shall grant to the CITY or its agent or contractor the right of entry at reasonable times and in a reasonable manner for the purpose of inspecting, operating, installing, constructing, reconstructing, maintaining or repairing the facility within the CITY.

5. The OWNER(S) shall record and grant to the CITY the necessary easements and rights-of-way and maintain perpetual access from public rights-of-way to the facility for the CITY or its agent and contractor.

6. If, upon inspection, the CITY finds that the OWNER(S) has failed to properly maintain the facilities, the CITY may order the work performed within ten (10) days. In the event the work is not performed within the specified time, the ONWER(S) agrees to allow the CITY to enter the property and take whatever steps it deems necessary to maintain the stormwater control facilities. This provision shall not be construed to allow the CITY to erect any structure of a permanent nature on the PROPERTY without first obtaining written approval of the OWNER(S)

7. The CITY is under no obligation to maintain or repair said facilities, and in no event shall this Agreement be construed to impose any obligation on the CITY. The OWNER(S) shall reimburse the CITY upon demand the costs incurred in the maintenance of the facilities.

8. If the OWNER(S) fails to pay the CITY for the above expensive after forty-five (45) days written notice, the OWNER(S) authorizes the CITY to collect said expenses from the OWNER(S) through appropriate legal action and the OWNER(S) shall be liable for the reasonable expenses of collection, court costs, and attorney fees.

9. The OWNER(S) and the OWNER(S) heirs, administrators, executors, assigns, and any other successor in interest shall indemnify and hold harmless the CITY and its officers, agents and employees for any and all damages, accidents, casualties, occurrences, claims or attorney's fees which might arise or be asserted, in whole or in part,

against the CITY from the construction, presence, existence, or maintenance of the stormwater control facilities subject to this AGREEMENT. In the event a claim is asserted against the CITY, its officers, agents or employees, the CITY shall notify OWNER(S) and the OWNER(S) shall defend at OWNER(S) expense any suit based on such claim. If any judgment or claims against the CITY, its officers, agents or employees, shall be allowed, the OWNER(S) shall pay all costs and expenses in connection therewith. The CITY will not indemnify, defend or hold harmless in any fashion the OWNER(S) from any claims arising from any failure, regardless of any language in any attachment or other document that the OWNER(S) may provide

10. The OWNER(S) shall not be able to transfer, assign or modify its responsibilities with respect to this agreement without the CITY's written prior consent. Nothing herein shall be construed to prohibit a transfer by OWNER(S) to subsequent owners and assigns.

11. No waiver of any provision of this AGREEMENT shall affect the right of any party thereafter to enforce such provision or to exercise any right or remedy available to it in the event of any default.

12. The OWNER(S) shall record a plat showing and accurately defining the easements for stormwater control facilities. The plat must reference the Instrument Number where this AGREEMENT and its attachments are recorded and contain a note that the OWNER(S) is responsible for maintaining the stormwater management facilities.

13. The OWNER(S) shall record this AGREEMENT in the office of the Register of Deeds for the county of Maury, Tennessee, and the AGREEMENT shall constitute a covenant running with the land, and shall be binding upon the OWNER(S) and the OWNER(S) heirs, administrators, executors, assigns, and any other successors in interest

ATTEST BY OWNER(S):

Print Name Jennee Galland

Title Peesident + COO - Habitat for Humanity, Williamson - Maury

Signature Jennee Galland

Owner Habitat for Humanity, Williamson - Maury

Address 1908 Noah Drive

City, State ZIP Franklin, TN 37064

STATE OF TENNESSEE
COUNTY OF MAURY

Before me, Jennifer Galland of the state and county mentioned, personally appeared _____, with whom I am personally acquainted and who acknowledged that he/she executed the foregoing instrument of the purposes therein contained.

Witness my hand this the 16 day of May, 20 25.

Notary Public

My Commission Expires: 6-11-28

WILLIAMSON COUNTY ERIN MICHELLE WALKER STATE OF TENNESSEE NOTARY PUBLIC

CITY OF COLUMBIA, TENNESSEE
ENGINEERING DEPARTMENT

APPROVED BY : R Neil Scruggs

STATE OF TENNESSEE
COUNTY OF MAURY

Before me, Regina Connelly of the state and county mentioned, personally appeared Neil Scruggs, with whom I am personally acquainted, and who acknowledged themselves to be the City Engineer of the City of Columbia or his designee and as such, being authorized to do, executed the foregoing instrument of the purposes therein contained.

Witness my hand this the 9th day of June, 20 25.

Notary Public
My Commission Expires: 8/29/2027

REGINA CONNELLY STATE OF TENNESSEE NOTARY PUBLIC MAURY COUNTY

FINAL PLAT FOR:
IDLEWILD FARMS

HIWASSEE DRIVE
CITY OF COLUMBIA
MAURY COUNTY, TENNESSEE
MAP 89, PARCELS 23.01 & 23.02
MARCH 17, 2025

LOT AREA TABLE		
Lot #	Area (s.f.)	Area (ac.)
1	28,856	0.66
2	38,245	0.88
3	22,790	0.52
4	20,000	0.46
5	20,000	0.46
6	20,000	0.46
7	20,000	0.46
8	20,000	0.46
9	22,236	0.51
10	24,542	0.56
11	22,122	0.51
12	22,083	0.51
13	22,424	0.51
14	20,333	0.47
15	20,397	0.47
16	25,816	0.59

SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
FP-01	COVER SHEET
FP-02	FINAL PLAT

FINAL SUBDIVISION PLAT MAURY COUNTY, TENNESSEE	
TOTAL ACRES: 15.51	TOTAL LOTS: 16
ACRES NEW STREETS: 1.28	FEET NEW STREETS: 1,330
CIVIL DISTRICT: 4TH	CLOSURE ERROR: 1:10,000+
MILES OF NEW ROADS: 0.25	DATE: MARCH 17, 2025

SUBJECT PROPERTY INFORMATION:

- OWNER: HABITAT FOR HUMANITY WILLIAMSON-MAURY
- PARCEL ID: TAX MAP 89, PARCEL 23.01 & 23.02
- INSTRUMENT: RB R02892, PG 825
- PLAT INSTRUMENT: PB 4, PG 15
- TOTAL AREA = 15.60 AC. (679,753 S.F.)
- ZONING: CO-3L

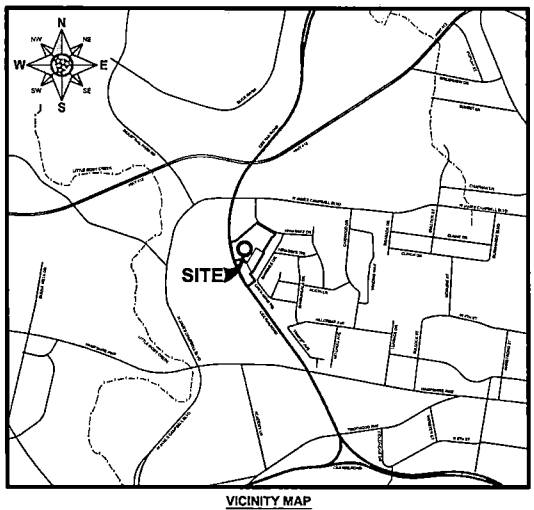
CONTACT LIST

OWNER/DEVELOPER

HABITAT FOR HUMANITY WILLIAMSON-MAURY
109 NOAH DRIVE
FRANKLIN, TN 37064
(615) 590-6090
CONTACT: JENNEE GALLAND, PRESIDENT & COO
E-MAIL: jgalland@hfhwm.org

SURVEYOR

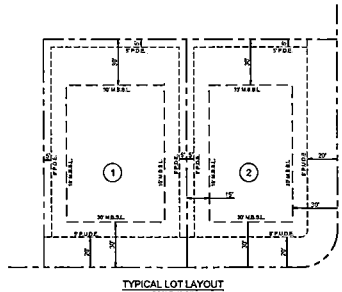
M2 GROUP, LLC
P.O. BOX 2543
BRENTWOOD, TN 37024
PHONE: (931) 623-8913
CONTACT: STEPHEN VANDER HORST, RLS, CFS
E-MAIL: stephen@m2groupllc.com



VICINITY MAP
SCALE: 1"=1000'

GENERAL NOTES:

1. THE PURPOSE OF THIS PLAT IS TO ABANDON LOTS 83 & 91, AS REFERENCED IN IDLEWILD SUBDIVISION, SECTION 5, PB 4, PG 15, CREATE 16 LOTS AND 2 OPEN SPACES.
2. THE RECORDING OF THIS PLAT SHALL VOID, VACATE, AND SUPERCEDE THE PREVIOUSLY RECORDED PLAT(S), PLAT OF SURVEY FOR IDLEWILD SUBDIVISION, SECTION 5, PB 4, PG 15. ALL OTHER INFORMATION ON SAID PLATS SHALL REMAIN THE SAME.
3. BEARINGS ARE BASED ON THE TENNESSEE STATE PLANE COORDINATE SYSTEM (NAD83).
4. SURVEY FIELD WORK WAS COMPLETED ON JANUARY 24, 2024.
5. THIS SURVEY WAS PREPARED USING THE CURRENT DEEDS AND PLATS OF RECORD FOR THE SUBJECT PROPERTY.
6. ALL DEED BOOK AND PLAT REFERENCES PERTAIN TO THE REGISTER'S OFFICE FOR MAURY COUNTY, TENNESSEE.
7. ADJOINING PROPERTY LINES SHOWN WERE PLOTTED FROM INFORMATION TAKEN FROM EITHER DEED OR DESCRIPTION, RECORD PLATS, OR TAX MAPS.
8. PROPERTY CORNERS SET THIS SURVEY ARE 1/2" IN REBAR WITH ORANGE PLASTIC CAP STAMPED "M2 GROUP," 16" #5 REBAR WITH YELLOW PLASTIC CAP STAMPED "M2 GROUP, LLC", OR PK NAIL WITH STAINLESS STEEL WASHER STAMPED "M2 GROUP, LLC" UNLESS NOTED OTHERWISE.
9. UNDERGROUND UTILITIES, IF SHOWN, HAVE BEEN PLOTTED FROM PLANS AND MARKINGS COMBINED WITH OBSERVED EVIDENCE OF UTILITIES TO DEVELOP A VIEW OF THOSE UNDERGROUND UTILITIES (CHAPTER 18-2, QUALITY LEVEL C). OTHER UNDERGROUND UTILITIES MAY EXIST WHICH ARE NOT SHOWN AS A RESULT OF INFORMATION NOT BEING PROVIDED BY THE UTILITY OWNER, NONVISIBLE LOCATION OF THE UTILITY, OR OMISSION OF UNDERGROUND FEATURES CANNOT BE GUARANTEED TO BE COMPLETE. THE ACCURACY OF DEPICTED, POWERS ADDITIONAL OR MORE DETAILED INFORMATION IS REQUIRED, THE CLIENT OR CONTRACTOR IS ADVISED THAT EXCAVATION MAY BE NECESSARY. CALL 811 BEFORE YOU DIG!
10. THE PROPERTY SHOWN HEREON IS LOCATED IN A FLOOD HAZARD ZONE "X" (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN) ACCORDING TO F.I.R.M. MAP "MAURY COUNTY, TENNESSEE" PANELS 175 & 250 OF 445, MAP NUMBER 47119C0175 & 47119C0250, REVISED APRIL 16, 2007.
11. THE SUBJECT PROPERTY SHOWN HEREON HAS A ZONING DESIGNATION OF "CO-3L", NEIGHBORHOOD DISTRICT ACCORDING TO THE CURRENT CITY OF COLUMBIA OFFICIAL ZONING MAP. SETBACK REQUIREMENTS ARE AS FOLLOWS:
FRONT = 30 FEET
SIDE = 12 FEET
REAR = 30 FEET, OR 15 FEET FROM CENTER LINE OF REAR ALLEY
12. DEVELOPMENT IS TO BE SERVED BY A MAILBOX LOCATED IN LOT 2.
13. THE OVERALL PROPERTY BOUNDARY SHOWN HEREON IS BASED ON A SURVEY BY M2S ENGINEERS AND SURVEYORS, DATE OF SURVEY IS UNKNOWN.
14. ALL OPEN SPACE IS TO SERVE AS A PUBLIC UTILITY, DRAINAGE, AND ACCESS EASEMENT (PUOAE).



TYPICAL LOT LAYOUT
SCALE: 1"=30'
(TYPICAL UNLESS NOTED OTHERWISE)

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (WE) HEREBY CERTIFY THAT I AM (WE ARE) THE OWNER(S) OF THE PROPERTY SHOWN AND DESCRIBED HEREON AS EVIDENCED IN BOOK R2892, PAGE 825, MAURY COUNTY REGISTERS OFFICE, AND ADOPT THIS FINAL SUBDIVISION PLAT OF THE PROPERTY AS SHOWN HEREON AND DEDICATE ALL PUBLIC WAYS AND EASEMENTS AS NOTED WITH MY (OUR) FREE CONSENT.

OWNER(S) DATE

TITLE (IF ACTION FOR CORPORATION OR PARTNERSHIP)

CERTIFICATE OF APPROVAL OF WATER SYSTEM

I HEREBY CERTIFY THAT THE WATER SYSTEM(S) OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAS/HAVE BEEN INSTALLED IN ACCORDANCE WITH CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS, OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

NAME DATE

TITLE AUTHORIZING AGENCY

CERTIFICATE OF APPROVAL OF STREETS, DRAINAGE, AND UTILITIES

I HEREBY CERTIFY THAT THE STREETS, DRAINAGE, AND UTILITIES OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAVE BEEN INSTALLED IN ACCORDANCE WITH CITY SPECIFICATIONS, OR A PERFORMANCE SURETY IN THE AMOUNT OF $ _____ FOR STREETS AND DRAINAGE HAS BEEN POSTED WITH THE CITY OF COLUMBIA, TENNESSEE, TO ASSURE COMPLETION OF SUCH IMPROVEMENTS.

CITY ENGINEER DATE
COLUMBIA, TENNESSEE

CERTIFICATE OF APPROVAL, FOR RECORDING

I HEREBY CERTIFY THAT THE FINAL SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE CITY OF COLUMBIA SUBDIVISION REGULATIONS, WITH THE EXCEPTION OF SUCH VARIANCES, IF ANY, AS NOTED IN THE MINUTES OF THE COLUMBIA MUNICIPAL PLANNING COMMISSION, AND THAT IT HAS BEEN APPROVED FOR RECORDING IN THE OFFICE OF THE MAURY COUNTY REGISTER OF DEEDS.

PLANNING DIRECTOR DATE
COLUMBIA, TENNESSEE

CERTIFICATE OF SUBDIVISION NAME AND STREET NAMES

SUBDIVISION NAME AND STREET NAMES APPROVED BY THE CITY ENGINEERING DEPARTMENT AND BY E-911 MAURY COUNTY.

MAURY COUNTY E-911 DATE

CERTIFICATE OF ACCURACY

I (WE) HEREBY CERTIFY THAT TO THE BEST OF MY (OUR) KNOWLEDGE AND BELIEF THIS IS A TRUE AND ACCURATE SURVEY OF THE PROPERTY SHOWN HEREON; THAT THIS IS A CLASS "I" LAND SURVEY AS DEFINED IN TITLE 62, CHAPTER 18, TENNESSEE CODE ANNOTATED, AND THAT THE RATIO OF PRECISION IS GREATER THAN OR EQUAL TO 1:10,000.

REGISTERED LAND SURVEYOR NUMBER DATE

CERTIFICATE OF SANITARY SEWER SYSTEM

I HEREBY CERTIFY THAT THE SANITARY SEWER SYSTEM OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAS BEEN INSTALLED IN ACCORDANCE WITH THE CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS, OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

DIRECTOR OF WASTEWATER DEPARTMENT DATE
COLUMBIA, TENNESSEE

CERTIFICATE OF COMPLIANCE

I HEREBY CERTIFY THAT THE FINAL SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE CITY OF COLUMBIA SUBDIVISION REGULATIONS AND OTHER ADOPTED ORDINANCES AND POLICIES.

CITY ENGINEER DATE
COLUMBIA, TENNESSEE

REVISION #	DATE	DESCRIPTION

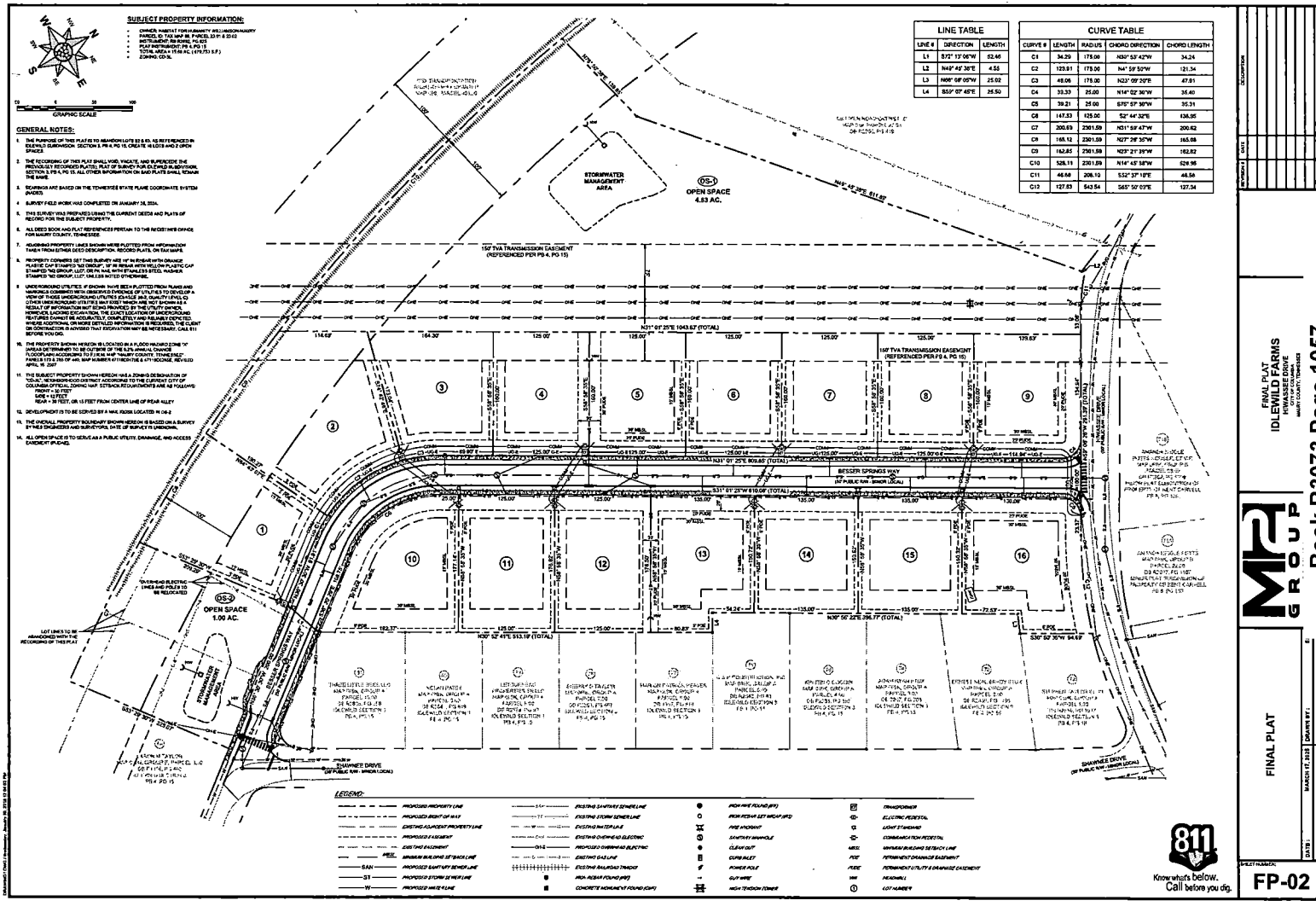
FINAL PLAT
IDLEWILD FARMS
HIWASSEE DRIVE
COLUMBIA, TENNESSEE
MAURY COUNTY, TENNESSEE

M2 GROUP
P.O. BOX 2543
BRENTWOOD, TN 37024-2543

COVER SHEET

DATE: MARCH 17, 2025 | DRAWN BY: BWG

SHEET NUMBER: FP-01



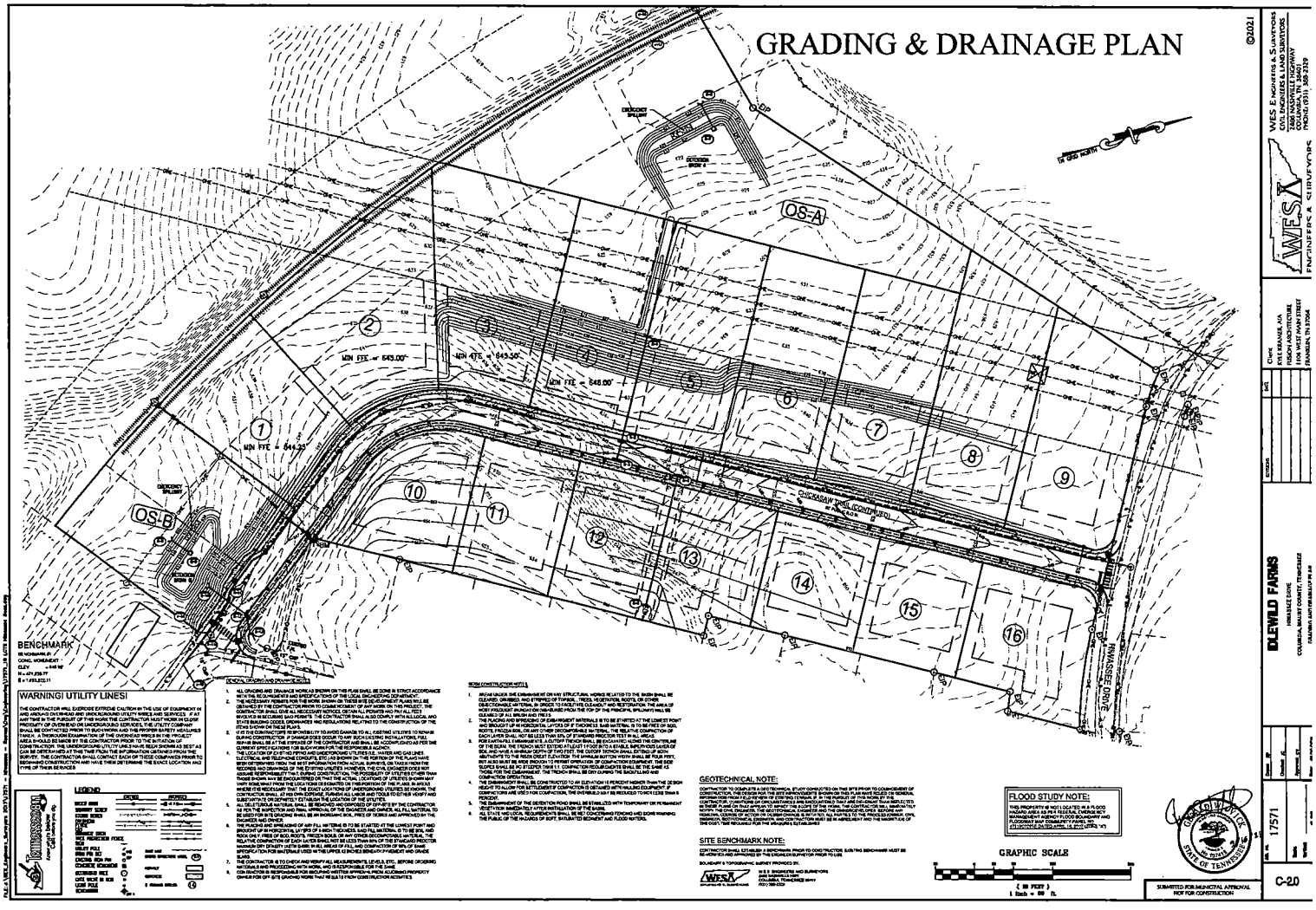
FINAL PLAT
IDLEWILD FARMS
KIWASSEE DRIVE
MAURY COUNTY, TENNESSEE

MHA GROUP

FINAL PLAT

DATE: MARCH 17, 2026 | DRAWN BY: | CHECKED BY:

SHEET NUMBER: FP-02

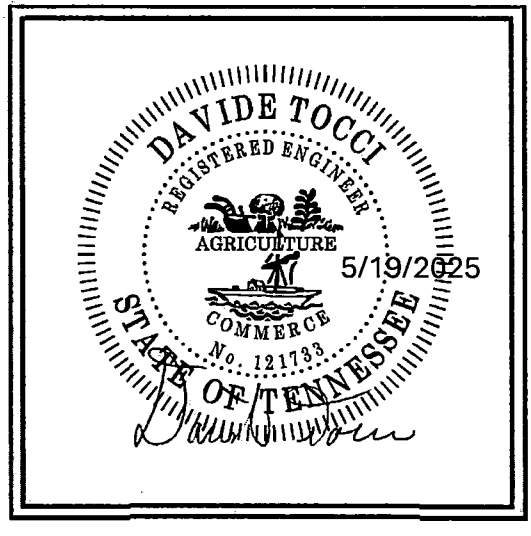

GRADING & DRAINAGE PLAN
©2021
OS-A
OS-B
MIN FFE = 643.00'
MIN FFE = 643.50'
MIN FFE = 648.00'
MIN FFE = 644.25'
CHICKASAW TRAIL (CONTINUED)
PAWASSEE DRIVE
BENCHMARK
WARNING! UTILITY LINES!
LEGEND
GEOTECHNICAL NOTE:
SITE BENCHMARK NOTE:
FLOOD STUDY NOTE:
GRAPHIC SCALE
WES ENGINEERS & SURVEYORS
CIVIL ENGINEERS & LAND SURVEYORS
2806 NASHVILLE HIGHWAY
COLUMBIA, TN 38401
PHONE: (931) 388-2329
WES
ENGINEERS & SURVEYORS
Client
KYLE KRAMER, AIA
HIBSON ARCHITECTURE
1104 WEST MAIN STREET
FRANKLIN, TN 37064
DLEWILD FARMS
HIWASSEE DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE
17571
C-20
SUBMITTED FOR MUNICIPAL APPROVAL
NOT FOR CONSTRUCTION

Stormwater Facilities
Long Term Maintenance Plan

Project: Idlewild Farms
Address: Hiwassee Drive, Columbia, Tennessee Tax Map 89,
Parcel 23.01 & 23.02
M2 Project #: 23-070

Prepared By: Quentin L. Payne
Reviewed By: Kevin Sturgill.

Submittal Date: 05/19/2025



M2 GROUP

M2 GROUP

May, 2025

City of Columbia – Long Term Maintenance Plan (LTMP)

Overview

This project is to construct 16 residential lots development in Columbia, Maury County, Tennessee. This post construction LTMP addresses the development which consists of 14.61 acres in which utility infrastructures (water, sewer, and storm) will be installed. Proposed construction for Idlewild Farms consists primarily of site grading related to the installation of roadway pavements, curbs sidewalks, residential lots, utility infrastructure, and storm water conveyance system located within the permitted project area.

A LTMP is a component of the Maintenance Document for the development or site. After the new stormwater facilities are constructed at the project site, the property owner is responsible for their ongoing maintenance. This includes upkeep of the stormwater features serving the property. The owner has signed a Storm Water Management Maintenance Agreement as required by the City of Columbia, which mandates long-term maintenance of these facilities along with an annual inspection report. If the owner does not conduct the required inspections and maintenance, the city has the authority to perform these tasks, and the owner will be obligated to reimburse the city for any related expenses.

The LTMP must include or address the following elements:

- Description of the stormwater system components and a site map showing the location of each. Ongoing site inspection and maintenance compliance shall include verification that such areas remain as open space as indicated on the plans.
- Schedule of inspections and the techniques used to inspect and maintain the systems to ensure that they are functioning properly as designed.
- Where and how the trash, sediment and other pollutants removed from the stormwater system will be disposed of.
- Schematics of SCMs are located on the site. Landscape plans should also be included for bioretention areas.
- Person(s) and Phone number(s) of who will be responsible for inspection and maintenance. If the organization that will be responsible if yet to be organized, list the name, address, and phone number of the person or entity with interim responsibility.
- Provisions for permanent access and maintenance easements.

Project Name and Address:

Idlewild Farms

Hiwassee Drive, Columbia, Tennessee; Tax Map 89, Parcel 23.01 & 23.02

Owner /Developer (also responsible for maintenance):

Owner/Developer: Habitat for Humanity Williamson – Maury
109 Noah Drive Franklin, TN 37064

Stormwater Facilities:

- *562.52 LF of 18" RCP Pipe*
- *78.68 LF of 18" CMP Pipe*
- *44.03 LF of 12" Steel Pipe*
- *2 Detention Ponds*
- *4 Double storm inlets*
- *1 Triple storm inlets*
- *6 Headwalls*

Upon Completion of the site construction, 'Record Drawings' in a version not less than AutoCAD 2006 LT (NAD83, NAVD88) of the stormwater controls will be provided to the City of Columbia verification.

*A copy of the **INSPECTION AND MAINTENANCE AGREEMENT OF PRIVATE STORMWATER MANAGEMENT FACILITIES** that has been completed, notarized and recorded in the Land Records of the County of Maury, Tennessee will be kept on site with this document.*

Inspection and Maintenance:

A comprehensive inspection of all stormwater management facilities and practices shall be performed every 5 years on behalf of the owner by a qualified erosion prevention and sediment control (EPSC) professional with expertise in inspecting drainage system components. Such inspections must be conducted by either a professional engineer, professional surveyor, landscape architect, or other qualified EPSC. Results of this inspection must be submitted to the City of Columbia and any recommended maintenance actions undertaken within 45 days of the inspection occurring. Complete inspection reports for these five-year inspections shall include:

a) Facility type
b) Inspection date
c) Latitude and longitude and nearest street address
d) BMP owner information (e.g. name, address, phone number, fax and email)
e) A description of BMP condition including vegetation and soil; inlet and outlet channels and structures; embankments, slopes, and safety benches; spillways, weirs, and other control structures; and any sediment and debris accumulation
f) Photographic documentation of BMPs,
g) Specific maintenance items or violations that need to be corrected by the BMP owner along with deadlines and reinspection dates not to exceed 30 days from the initial inspection.

Scheduled Inspection:

The property owner must designate a person responsible for inspecting and maintaining the stormwater management facility. This individual will keep records of all required inspections and maintenance activities as specified in the Stormwater As-Built Plan. Regular inspections will ensure that the system operates as designed. The owner is required to submit an annual report to the City of Columbia by November first (1st) each year, detailing the inspections conducted and any maintenance performed. Records of inspections, maintenance, and repairs must be kept for a minimum of three (3) years and should be available for city inspection during routine assessments or upon request. The stormwater management facilities outlined in the plan will undergo periodic inspections to verify their effectiveness and to identify necessary maintenance tasks, as detailed below.

1. Inspect stormwater structures every six months. Inspect for clogging, trash or sediment accumulation, breakage, proper function, and blockage.
2. Annual inspection: Perform routine inspections to ensure that the BMP's are properly functioning. These inspections shall be conducted on an annual basis, at a minimum. These inspections shall be conducted by a person familiar with control measures implemented at a site.
3. Comprehensive Inspection: Perform a comprehensive inspection of all stormwater management facilities and practice once every five years, at a minimum. Such inspections must be conducted by either a professional engineer or landscape architect, licensed in the State of Tennessee.

Maintenance Techniques:

Stormwater Detention Ponds

The outlet structure should be checked regularly for clogging and shall be cleaned and repaired as necessary monthly after it is first built, then a regular sequence should be established or at least quarterly or after a large rain event. Check the banks and bottom surface of basin for erosion and correct as necessary. Check at least quarterly and after each extreme storm event, the facility should be cleaned of accumulated debris. The banks of surface ponds should be checked and areas of erosion repaired. Remove nuisance wetland species and take appropriate measures to control mosquitoes. This maintenance typically includes sediment, floatable, and debris removal from inlets, outlets and skimmers. Pond vegetation needs to be trimmed or harvested as appropriate, grassy areas frequently mowed. Grass should be mowed so that it does not get over 6 inches. Remove sediment when accumulation reaches 6 inches, or if re-suspension is observed or probable. Some sediment may contain contaminants which the Tennessee Department of Environment and Conservation (TDEC) requires special disposal procedure. If there is any uncertainty about what the sediment contains or it is known to contain contaminants, then TDEC should be consulted and their disposal recommendations followed. The TDEC Division of Water Pollution Control should be contacted at (931) 380-3371. Generally, special attention or sampling should be given to sediment accumulated in facilities serving industrial, manufacturing or heavy commercial sites, fueling centers or automotive maintenance areas, large parking areas, or other areas where pollutants (other than clean soil) are suspected to accumulate and be conveyed by storm runoff. fueling centers or automotive maintenance areas, large parking areas, or other areas where pollutants (other than clean soil) are suspected to accumulate and be conveyed by storm runoff.

Grass Lined Open Channel

The facility should be checked annually for signs of erosion, vegetation loss, and channelization of the flow. The grass should be mowed when it reaches a height of 8 inches (20.3 cm) and no shorter than 3 inches (7.6 cm). Allowing the grass to grow taller may cause it to thin and become less effective. The clippings should be bagged and removed. Mow grass covered biofilters regularly to promote growth and pollutant uptake. Remove cuttings and dispose of properly (preferably through composting). Remove sediment by hand with a flat-bottomed shovel during dry periods. Remove only the amount of sediment necessary to restore hydraulic capacity, leaving as much of the vegetation in place as possible. Reseed or plug any damaged turf or vegetation. Eventually, sufficient sediment will be trapped that the entire biofilter will need to be removed with sediment and reconstructed to begin a new cycle of stormwater quality control. Roto-till or cultivate the surface of the sand/soil bed of dry swales if the swale does not draw down within 48.

Structures

Storm structure general maintenance will consist of checking for and removing sedimentation or blockages, confirming outlet control structures are functioning, concrete failures, and standing water. The maintenance schedule for these items should be performed on a semi-annual basis. The equipment needed for maintenance will range from shovels to general concrete repair equipment.

Storm Pipes

Storm Pipe general maintenance for culverts/pipes outside of the ROW or drainage easement will consist of debris removal, checking for erosion upstream and downstream, checking for sedimentation at upstream end and within pipes at cleanouts, flushing of pipes to remove sediment, removal of blockages, pipe settlement, joint failures, pipe failures, standing water, and check for consistent flow lines. The maintenance schedule for these items should be performed on a semi-annual basis. The equipment needed for maintenance will range from shovel, water hose, auger, grout work, seed and mulch, backhoe, and replacement pipes.

Maintenance Schedule

A customized maintenance schedule must be prepared for each detention facility, since maintenance tasks will differ depending on scale, the landscaping template chosen, and the type of surface cover. A generalized summary of common maintenance tasks and their frequency is provided below.

Maintenance Tasks	Frequency
Spot weeding, erosion repair, trash removal, and mulch raking	Twice during growing season
Add reinforcement planting to maintain desired vegetation density	As needed
Remove invasive plants using recommended control methods	As needed
Stabilize the contributing drainage area to prevent erosion	As needed
Spring inspection and cleanup	Annually
Prune trees and shrubs	Annually
Remove Sediment in Pretreatment cells and inflow points	Once every 2 to 3 years

Grass Channel Inspections and Maintenance Checklist

Site Name:_____Owner Change since last inspection? Y N

Location: _____

Owner Name:_____

Address:_____Phone Number: _____

Site Status: _____

Date:_____Time:_____Site conditions: _____

Inspection Frequency Key: A=annual; M=monthly; S=after major storms

Inspection Items	Inspection Frequency	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
Debris Removal				
Facility and adjacent area free of debris?	*M*			
Inlets and outlets free of debris?	*M*			
Any dumping of yard wastes into facility?	*M*			
Litter (branches) removed?	*M*			
Vegetation				
Surrounding area fully stabilized? (no evidence of eroding material into swale, channel or filter strip)	*M*			
Grass mowed?	*M*			
Grass height not less than 3 to 4 inches?	*M*			
Fertilized per specifications?	*M*			
Grasses planted according to approved plan?	*M*			
Unauthorized or inappropriate plantings?	*A*			
Grasses healthy? (no diseased or dying vegetation)	*M*			
Evidence of grasses stressed from inadequate watering?	*M*			
Filtration Capacity				
Clogging from oil or grease?	*M*			
Facility dewaters between storms?	*M*			
Check dams and energy dissipaters/sumps				
Any evidence of sedimentation buildup?	*A,S*			
Are sumps greater than 50% full of sediment?	*A,S*			

Inspection Items	Inspection Frequency	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
Any evidence of erosion and downstream toe of drop structures?	*A,S*			
Any trash or blockages at weep holes?	*A,S*			
Sediment Deposition				
Swale clean of sediments?	*A*			
Sediment not > 25% of swale design depth?	*A*			
Outlet/Overflow Spillway				
In good condition?	*A*			
Any evidence of erosion?	*A*			
Any evidence of blockages?	*A*			
Has facility been filled or blocked inappropriately?	*A*			
Hazards				
Have there been complaints from residents?	*M*			
Public hazards noted?	*M*			
Maintenance accesses free of hazards and fully operational?	*M*			

Inspector Comments:_____

_____

_____

_____

Overall Condition of Facility: ☐ Acceptable ☐ Unacceptable

If any of the above Inspection Items are checked "Yes" for "Maintenance Needed," list Maintenance actions and their completion dates below:

Maintenance Action Needed	Due Date

The next routine inspection is scheduled for approximately: _____
(date)

Inspected by: (signature) _____

Inspected by: (printed) _____

Storm Sewer Inspections and Maintenance Checklist

Site Name:_____Owner Change since last inspection? Y N

Location: _____

Owner Name:_____

Address:_____Phone Number: _____

Site Status: _____

Date:_____Time:_____Site conditions: _____

Indicate Features Present: Catch Basins ☐ Storm Pipe ☐ Headwalls ☐ Outfalls ☐ Catch Basin Inlets ☐

Inspection Frequency Key: A=annual; M=monthly; S=after major storms

Inspection Items	Inspection Frequency	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
Catch Basins				
Ensure all are structurally sound and in good condition. Note any deficiencies and repair to proper working condition ensure all are set properly in place over inlets	*A/S*			
Check for sediment, leaf, or debris clogging grates and remove	*A/S*			
Catch Basin Inlets				
Ensure all are structurally sound and in good condition. Note any deficiencies and repair to proper working condition	*A/S*			
Inspect for blockage or sediment accumulation and remove when capacity is diminished by 20% or greater	*A/S*			
Pipes				
Ensure all are structurally sound and in good condition. Note any deficiencies and repair to proper working condition	*A/S*			
Inspect for blockage or sediment accumulation and remove when capacity is diminished by 20% or greater.	*A/S*			
Concrete/masonry condition of pipes and joints? (Cracks or displacement? Spalling?)	*A/S*			

Inspection Items	Inspection Frequency	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
Headwalls and Endwalls				
Ensure all are structurally sound and in good condition. Note any deficiencies and repair to proper working condition	*A/S*			
Inspect for blockage or sediment	*A/S*			
Check for erosion or scouring around headwall inlets and repair	*A/S*			
Evidence of staining?	*A/S*			
If flowing water is present does it appear to contain anything other than stormwater? I.e. Discoloration, odors, sheens, etc? Note location and describe.	*A/S*			
Hazards				
Have there been complaints from residents?	*A/S*			

Inspector Comments:_____

_____

_____

_____

Overall Condition of Facility: ☐ Acceptable ☐ Unacceptable

If any of the above Inspection Items are checked "Yes" for "Maintenance Needed," list Maintenance actions and their completion dates below:

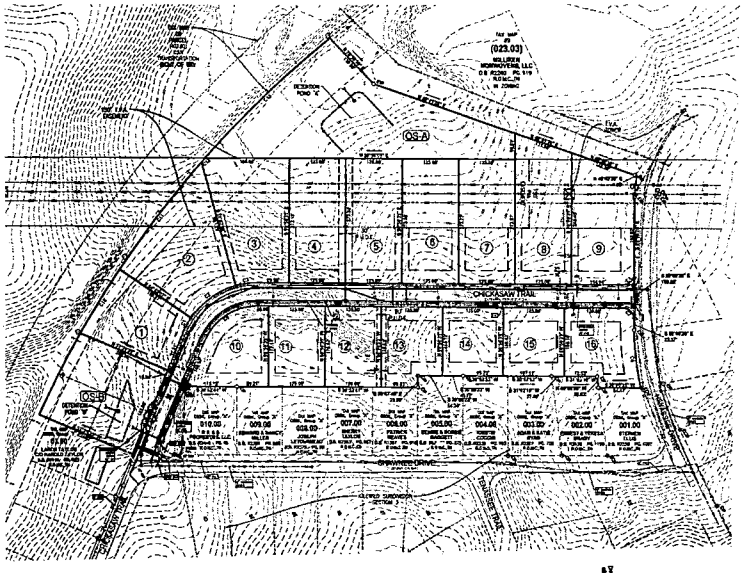
Maintenance Action Needed	Due Date

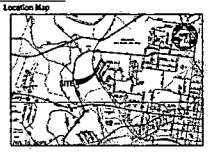
The next routine inspection is scheduled for approximately: _____
(date)

Inspected by: (signature) _____

Inspected by: (printed) _____

PRELIMINARY PLAT





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WES Engineers & Surveyors
CIVIL ENGINEERS & LAND SURVEYORS
1106 NASHVILLE HIGHWAY
COLUMBIA, TN 38401
PHONE: (931) 388-3369

WESX
ENGINEERS & SURVEYORS

Owner
STEVE HAMMER, AIA
HENDRY ARCHITECTURE
1106 WEST MAIN STREET
FRANKLIN, TN 37064

DATE

REVISIONS

SITE DATA:

OWNER: R.A. GWIN HP LLC
118 SAVAGE LANE
FRANKLIN, TN 37064

PARCEL NUMBER: TAX MAP 59 PARCEL 23.01
DEED BOOK R3644 PG 645

TAX MAP 59 PARCEL 23.02
DEED BOOK R3644 PG 649

SUBJECT PARCEL ZONING: R-20

ACREAGE OF SITE: 14.69 ACRES
PREPARED 14.31% AS R.O.W. = 1.29 Ac
RIGHT OF WAY DEDICATION

MINIMUM REQUIRED BUILDING SETBACKS: 30' FRONT (MINOR)
20' REAR
10' SIDE

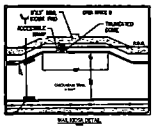
MINIMUM LOT WIDTH: 125'

UTILITY SERVICES: WATER SERVICE
COLUMBIA POWER & WATER SYSTEMS
701 RIVERS LANE
COLUMBIA, TN 38401
(931) 388-4133

ELECTRIC SERVICE
COLUMBIA POWER & WATER SYSTEMS
701 RIVERS LANE
COLUMBIA, TN 38401
(931) 388-4133

PURPOSE NOTE: CONSTRUCT 1,129 ± L.F. OF ROADWAY AND PROVIDE 15 RE ESSENTIAL LOTS.

NOTES:
1. INSTALLATION OF HOME & EQUIPMENT IN P.U.D.S.A. WITH BUILD-PLANS IS PROHIBITED.
2. ALL DRAINAGE SWALES AND BERMS TO BE MAINTAINED BY INDIVIDUAL HOMEOWNERS.



LOT AREA TABLE

LOT	SQ. FT.	ACRES
1	23,141	0.53
2	20,000	0.46
3	20,000	0.46
4	20,000	0.46
5	20,000	0.46
6	20,000	0.46
7	20,000	0.46
8	20,000	0.46
9	20,000	0.46
10	20,000	0.46
11	20,000	0.46
12	20,000	0.46
13	20,000	0.46
14	20,000	0.46
15	20,000	0.46
OS-A	640,000	14.69

CURVE TABLE

CURVE	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C1	31.42'	20.00'	90°00'00"	S 45°00'00" E	28.28'
C2	31.42'	20.00'	90°00'00"	S 45°00'00" W	28.28'
C3	31.42'	20.00'	90°00'00"	N 45°00'00" W	28.28'
C4	31.42'	20.00'	90°00'00"	N 45°00'00" E	28.28'
C5	31.42'	20.00'	90°00'00"	S 45°00'00" E	28.28'
C6	31.42'	20.00'	90°00'00"	S 45°00'00" W	28.28'
C7	31.42'	20.00'	90°00'00"	N 45°00'00" W	28.28'
C8	31.42'	20.00'	90°00'00"	N 45°00'00" E	28.28'
C9	31.42'	20.00'	90°00'00"	S 45°00'00" E	28.28'
C10	31.42'	20.00'	90°00'00"	S 45°00'00" W	28.28'
C11	31.42'	20.00'	90°00'00"	N 45°00'00" W	28.28'
C12	31.42'	20.00'	90°00'00"	N 45°00'00" E	28.28'
C13	31.42'	20.00'	90°00'00"	S 45°00'00" E	28.28'
C14	31.42'	20.00'	90°00'00"	S 45°00'00" W	28.28'
C15	31.42'	20.00'	90°00'00"	N 45°00'00" W	28.28'
C16	31.42'	20.00'	90°00'00"	N 45°00'00" E	28.28'
C17	31.42'	20.00'	90°00'00"	S 45°00'00" E	28.28'
C18	31.42'	20.00'	90°00'00"	S 45°00'00" W	28.28'
C19	31.42'	20.00'	90°00'00"	N 45°00'00" W	28.28'
C20	31.42'	20.00'	90°00'00"	N 45°00'00" E	28.28'
C21	31.42'	20.00'	90°00'00"	S 45°00'00" E	28.28'
C22	31.42'	20.00'	90°00'00"	S 45°00'00" W	28.28'
C23	31.42'	20.00'	90°00'00"	N 45°00'00" W	28.28'
C24	31.42'	20.00'	90°00'00"	N 45°00'00" E	28.28'
C25	31.42'	20.00'	90°00'00"	S 45°00'00" E	28.28'
C26	31.42'	20.00'	90°00'00"	S 45°00'00" W	28.28'
C27	31.42'	20.00'	90°00'00"	N 45°00'00" W	28.28'
C28	31.42'	20.00'	90°00'00"	N 45°00'00" E	28.28'
C29	31.42'	20.00'	90°00'00"	S 45°00'00" E	28.28'
C30	31.42'	20.00'	90°00'00"	S 45°00'00" W	28.28'
C31	31.42'	20.00'	90°00'00"	N 45°00'00" W	28.28'
C32	31.42'	20.00'	90°00'00"	N 45°00'00" E	28.28'
C33	31.42'	20.00'	90°00'00"	S 45°00'00" E	28.28'
C34	31.42'	20.00'	90°00'00"	S 45°00'00" W	28.28'
C35	31.42'	20.00'	90°00'00"	N 45°00'00" W	28.28'
C36	31.42'	20.00'	90°00'00"	N 45°00'00" E	28.28'
C37	31.42'	20.00'	90°00'00"	S 45°00'00" E	28.28'
C38	31.42'	20.00'	90°00'00"	S 45°00'00" W	28.28'
C39	31.42'	20.00'	90°00'00"	N 45°00'00" W	28.28'
C40	31.42'	20.00'	90°00'00"	N 45°00'00" E	28.28'

BENCHMARK

BENCHMARK #1
CONC. MONUMENT
ELEV. = 645' W
N = 121,239.77
E = 1,653,330.51

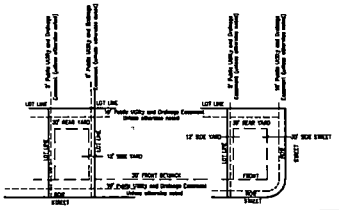
WARNING! UTILITY LINES!

THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN THE USE OF EQUIPMENT IN AND AROUND OVERHEAD AND UNDERGROUND UTILITY WIRES AND SERVICES. IF AT ANY TIME IN THE PURSUIT OF THIS WORK THE CONTRACTOR MUST WORK IN CLOSE PROXIMITY OF OR CONTACT ANY OVERHEAD OR UNDERGROUND SERVICE, THE UTILITY COMPANY SHALL BE CONTACTED AND ARRANGEMENTS MADE FOR DE-ENERGIZING OR OTHER PROTECTIVE MEASURES TAKEN. A THOROUGH EXAMINATION OF THE OVERHEAD WIRES IN THE PROJECT AREA SHOULD BE MADE BY THE CONTRACTOR PRIOR TO THE INITIATION OF CONSTRUCTION. THE UNDERGROUND UTILITY LINES HAVE BEEN SHOWN AS BEST AS CAN BE DETERMINED AT THIS TIME FROM THE INFORMATION OBTAINED FROM THE SURVEY. THE CONTRACTOR SHALL CONTACT EACH OF THESE COMPANIES PRIOR TO BEGINNING CONSTRUCTION AND VERIFY BOTH THE EXACT LOCATION AND TYPE OF THEIR SERVICES.

LEGEND

PROPOSED CONSTRUCTION SCHEDULE FOR THE YEAR 2021

ACTIVITY	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
TEMPORARY SEDIMENT STRUCTURES												
SEDIMENT BASINS												
DIVERSION DITCHES												
CLEARING & GRUBBING												
TOPSOIL STRIPPING AND STORAGE												
ROADWAY GRADING												
PERMANENT STORM SEWER												
UTILITIES												
TEMPORARY VEGETATION												
PAVING												
PERMANENT VEGETATION												
REMOVE TEMPORARY STRUCTURES												



GEOTECHNICAL NOTE:

CONTRACTOR TO COMPLETE A GEOTECHNICAL STUDY CONDUCTED ON THIS SITE PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE DESIGN FOR THE SITE IMPROVEMENTS SHOWN ON THESE PLANS IS NOT INTENDED TO SUPERSEDE THE GEOTECHNICAL REPORT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR PERFORMING THE CONSTRUCTION TO BE FAMILIAR WITH THE GEOTECHNICAL REPORT AND TO ENSURE THAT THE CONSTRUCTION IS PERFORMED IN ACCORDANCE WITH ITS RECOMMENDATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER IN THE EVENT THAT ANY CONDITIONS ENCOUNTERED DURING CONSTRUCTION DIFFER FROM THOSE REPORTED IN THE GEOTECHNICAL REPORT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER IN THE EVENT THAT ANY CONDITIONS ENCOUNTERED DURING CONSTRUCTION DIFFER FROM THOSE REPORTED IN THE GEOTECHNICAL REPORT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER IN THE EVENT THAT ANY CONDITIONS ENCOUNTERED DURING CONSTRUCTION DIFFER FROM THOSE REPORTED IN THE GEOTECHNICAL REPORT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER IN THE EVENT THAT ANY CONDITIONS ENCOUNTERED DURING CONSTRUCTION DIFFER FROM THOSE REPORTED IN THE GEOTECHNICAL REPORT.

SITE BENCHMARK NOTE:

CONTRACTOR SHALL ESTABLISH BENCHMARKS PRIOR TO CONSTRUCTION. EXISTING BENCHMARK MUST BE RE-VERIFIED AND APPROVED BY THE ENGINEER/INSPECTOR PRIOR TO USE.

BOUNDARY & TOPOGRAPHIC SURVEY PROVIDED BY:
WES ENGINEERS AND SURVEYORS
1106 NASHVILLE HWY
COLUMBIA, TN 38401
PHONE: (931) 388-3369

FLOOD STUDY NOTE:

THIS PROPERTY IS NOT LOCATED IN A FLOOD HAZARD AREA AS PER FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD BOUNDARY AND FLOODWAY MAP (COMMUNITY PANEL NO. 47119C0287D DATED APRIL 16, 2007 (ZONE "X")

OPEN SPACE NOTE:

ALL OPEN SPACE AREAS TO BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION, CREATED FOR THE PURPOSE OF MAINTAINING ALL COMMON OPEN SPACE AND GROUNDS INCLUDING THE DETENTION AREAS SHOWN ON THIS PLAT.

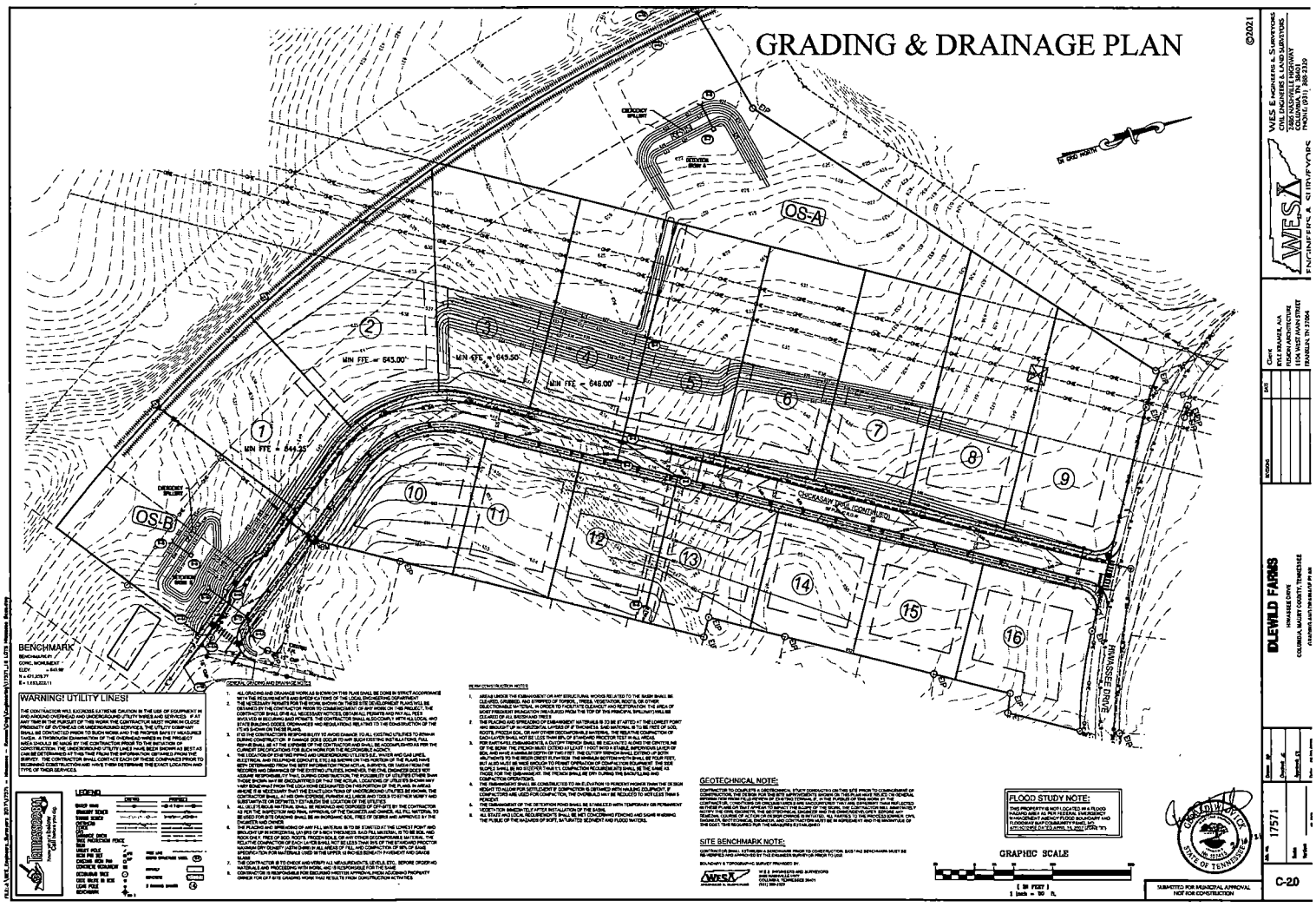
GRAPHIC SCALE
(IN FEET)
1 inch = 100 ft.

DLEWLD FARMS
SUBDIVISION
SEWAGE DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE
PRELIMINARY PLAT

Scale: 1" = 100'
Checked: JT
Approved: JT
Date: 08-26-2021

Job No. 17571
Sheet No. 1 of 1

SUBMITTED FOR MUNICIPAL APPROVAL
NOT FOR CONSTRUCTION


GRADING & DRAINAGE PLAN
©2021
OS-A
OS-B
MIN FFE = 643.00'
MIN FFE = 643.50'
MIN FFE = 646.00'
MIN FFE = 644.25'
CHICKASAW TRAIL (CONTINUED)
HIWASSEE DRIVE
BENCHMARK
WARNING! UTILITY LINES!
LEGEND
GEOTECHNICAL NOTE:
SITE BENCHMARK NOTE:
FLOOD STUDY NOTE:
GRAPHIC SCALE
WES E. ENGINEERS & SURVEYORS
CIVIL ENGINEERS & LAND SURVEYORS
2405 NASHVILLE HIGHWAY
COLUMBIA, TN 38401
PHONE: (931) 388-2329
WESX
ENGINEERS & SURVEYORS
Client
KYLE KRAMER, A/A
RISON ARCHITECTURE
1104 WEST MAIN STREET
FRANKLIN, TN 37064
DLEWILD FARMS
HIWASSEE DRIVE
COLUMBIA, MAURY COUNTY, TENNESSEE
17571
C-20
SUBMITTED FOR MUNICIPAL APPROVAL
NOT FOR CONSTRUCTION

CITY OF
COLUMBIA
TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

EXAMPLE STORMWATER MANAGEMENT INSPECTION/MAINTENANCE FORM

To be kept on site

PROJECT NAME: EXAMPLE DEVELOPMENT
PROJECT LOCATION: 700 NORTH GARDEN STREET
OWNER/LEGAL ENTITY: DOUGLAS TONEY
TELEPHONE: (931) 560-1560
E-MAIL: DTONEY@COLUMBIATN.COM

DATE	ITEM INSPECTED	INSPECTOR	OBSERVATION & REMARKS
08/04/2008	Storm Sewer System	Chuck Hughes	No Sediment Accumulation
08/04/2008	Catch Basin Sumps	Chuck Hughes	No Sediment Accumulation
08/04/2008	Swales	Chuck Hughes	Grass was healthy and an acceptable height. No sediment has accumulated No debris or erosion was present
08/04/2008	Outflow Control Structures	Chuck Hughes	No Sediment accumulated at structure Debris was removed from V-Notched Weir No erosion was evident
08/04/2008	Infiltration Basin	Chuck Hughes	No erosion or sediment Accumulation Debris was removed
08/04/2008	Storm Detention Area	Chuck Hughes	There is no erosion sediment accumulation Grass is browning and shall be watered weekly
08/04/2008	Street Cleaning	Chuck Hughes	Streets have no sediment accumulation
08/04/2008	Catch Basin Inlet Casting	Chuck Hughes	Debris was removed
02/04/2009	Street Cleaning	Chuck Hughes	Streets have no sediment accumulation
08/04/2009	Storm Sewer System	Sid Bream	Sediment was removed
08/04/2009	Catch Basin Sumps	Sid Bream	Sediment was removed
08/04/2009	Outflow Control Structures	Sid Bream	Sediment was removed
08/04/2009	Infiltration Basin	Sid Bream	Sediment was removed

WATERS EDGE

FINAL PUD MASTER DEVELOPMENT PLAN

INTERSECTION OF RIVER ROAD AND TAYLOR BEND ROAD
COLUMBIA, TENNESSEE



LOCATION MAP

0 400 800
GRAPHIC SCALE 1"=400'-0"

SHEET INDEX

C0.0	COVER SHEET
C1.0	SURVEY
C2.0	PRELIMINARY PUD MASTER DEVELOPMENT PLAN
C3.0	CONCEPTUAL GRADING, STORM, UTILITIES
L1.0	TREE CANOPY COVERAGE
L2.0	CODE MINIMUM LANDSCAPE PLAN
L2.1	CODE MINIMUM LANDSCAPE PLAN
A1.0	ARCHITECTURAL ELEVATIONS

OWNER:
BRENT CAMPBELL
1187 GLENBROOK DR
FRANKLIN, TN 37064

DEVELOPER:
CPS LAND
213 OVERLOOK CIRCLE, SUITE B2
BRENTWOOD, TN 37027
CLIFF SMITH
cliff.smith@cpsland.com

APPLICANT/ LAND PLANNER:
GAMBLE DESIGN COLLABORATIVE
3020 STANSBERRY LANE, SUITE 201
FRANKLIN, TN 37064
GREG GAMBLE
615-975-5765
greg.gamble@gdc-tn.com

ENGINEER:
KIMLEY-HORN
4031 ASPEN GROVE DRIVE, SUITE 200
FRANKLIN, TN 37067
GRAY HARRISON, P.E.
615.564.2701
gray.harrison@kimley-horn.com

ARCHITECT:
OPEN ARCHITECTURE
ERIC CLAUS
513.403.7019
ERIC.CLAUS@OPENARCHITECTURE.COM

DRAKE A. REEDER
REGISTERED
LANDSCAPE ARCHITECT
TENNESSEE No. 1218
4/17/26

PRE-APP: FEB. 4, 2026
INITIAL SUBMITTAL: APRIL 20, 2026

GAMBLE DESIGN COLLABORATIVE
DEVELOPMENT PLANNING AND LANDSCAPE ARCHITECTURE



NOTES

1. THE INFORMATION SHOWN ON THIS PLAN IS BASED UPON THE TENNESSEE STATE NAD83 COORDINATE SYSTEM.
2. NO PROPOSED BUILDINGS FALL WITHIN THE 100 YEAR FLOODPLAIN, PER THE FEMA FIRM MAP NUMBER 47119C0170E EFFECTIVE APRIL 16, 2007.
3. PORTIONS OF EXISTING SEWER LINE TO BE ABANDONED. LINE TO BE FILLED WITH CLASS C FLOWABLE FILL AND REMOVED FROM THE EXISTING LIVE SYSTEM WITH PROPER CONCRETE PATCHING.

GRAPHIC SCALE IN FEET
0 15 30 60

NORTH

GAMBLE DESIGN COLLABORATIVE

DEVELOPMENT PLANNING AND LANDSCAPE ARCHITECTURE

THE JAMES PHASE 2
REVISED PRELIMINARY PUD DEVELOPMENT PLAN
RIVER ROAD & TAYLOR BEND RD, COLUMBIA TN

SOPHIA CLOSE
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 131269
STATE OF TENNESSEE
4/16/2026

Date: APRIL 15, 2026

Revision Date
△
△
△

OVERALL EXISTING CONDITIONS

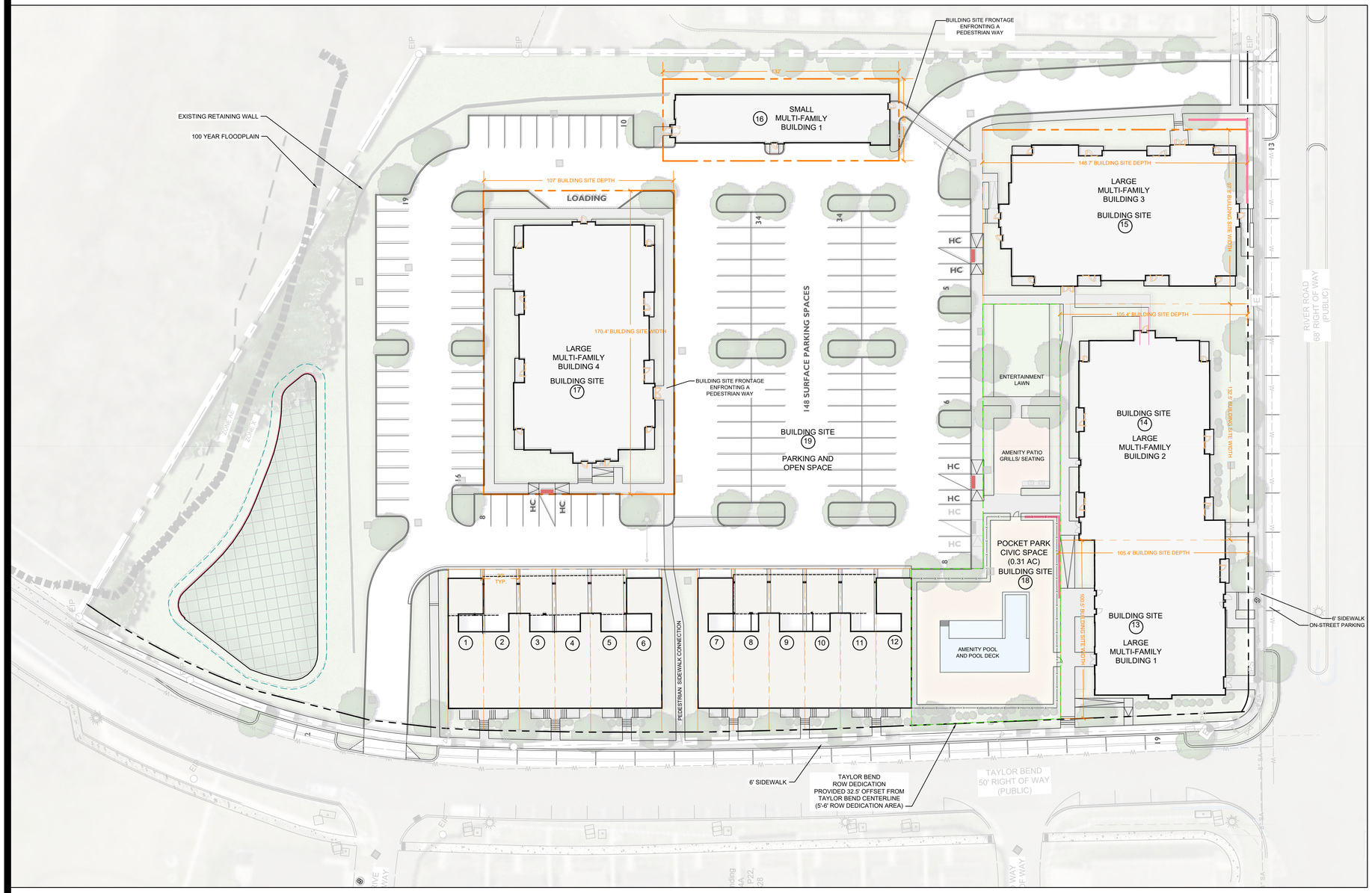
C1.0

LEGAL DESCRIPTION OF PROPERTY:
WATERS EDGE AT TAYLOR BEND
PROPERTY MAP 090, PARCEL 007.03
RIVER ROAD
CITY OF COLUMBIA, MAURY COUNTY, TENNESSEE

Being a certain tract or parcel of land lying and being in the Ninth (9th) Civil District of Maury County, city of Columbia, Tennessee and being more particularly described as follows:

Being Tract 24, a 5.026-acre tract as shown on the final plat entitled "Waters Edge at Taylor Bend" of record in Plat Book P17, page 319, Register's Office for Maury County, Tennessee to which plat reference is hereby made for a more complete description of the subject property.

No field work has been performed by Kimley-Horn Associates to verify the accuracy of the property lines, corners or areas shown on said recorded plats.



FINAL MASTER DEVELOPMENT PLAN SITE DATA:

TOTAL SITE AREA: +/-5.0 AC
EXISTING ZONING: PUD
FUTURE LAND USE: CCUV - CITY CENTER URBAN VILLAGE
PREVIOUS PUD MASTER PLAN: WATERS EDGE PUD; ORDINANCE 4262; NOV. 14, 2019
PRELIMINARY PUD MASTER DEVELOPMENT PLAN: ORDINANCE 4563; APPROVED JAN. 8, 2026

NEW PUDS DEVELOPING IN THE CCUV FUTURE LAND USE DISTRICT ARE REQUIRED TO BE ZONED PUD-MU. IN ORDER TO CREATE A MASTER PLAN IN KEEPING WITH THE FORM AND AESTHETIC OF THIS SURROUNDING AREA, THE PROPOSED PUD MASTER PLAN COMPLIES WITH THE PUD-MU REQUIREMENTS. .

NOTE: THE SUBJECT PARCEL IS LESS THAN 10 ACRES IN SIZE, DOES NOT INCLUDE THE CREATION OF A NEW THOROUGHFARE OR INTERNAL DRIVE, AND THEREFORE IS NOT A DEVELOPMENT PARCEL. AS SUCH, THIS PARCEL IS EXEMPT FROM SOME TYPICAL PUD-MU CRITERIA: DENSITY, BLOCK SIZE, AND CERTAIN CIVIC SPACE REQUIREMENTS.

TOTAL DWELLING UNITS: 94 UNITS
TOTAL DENSITY: 18.8 DUA

BUILDING BREAKDOWN:

TOTAL MULTI-FAMILY UNITS: 82 DWELLING UNITS
- LARGE MULTI-FAMILY BLDG 1: 12 DU
- LARGE MULTI-FAMILY BLDG 2: 18 DU
- LARGE MULTI-FAMILY BLDG 3: 24 DU
- LARGE MULTI-FAMILY BLDG 4: 24 DU
- SMALL MULTI-FAMILY BLDG 1: 4 DU; 7-GARAGE PARKING SPACES

TOWNHOMES: 12 DWELLING UNITS
- TOWNHOME 1, 6, 7, 12: 1 CODE COMPLIANT GARAGE SPACE
- TOWNHOME 2-5; 8-11: 2 COVERED PARKING SPACES

BUILDING SITES:
PRINCIPAL STRUCTURE SETBACKS:
- FRONT SETBACK PUD-MU STANDARD: 0'-20'
  PROVIDED SETBACK: 10'-13' TOWNHOMES; 4'-12' LARGE MULTI-FAMILY;
- FRONT SETBACK SECONDARY PUD-MU STANDARD: 0'-20'
  PROVIDED SETBACK: 9' LARGE MULTI-FAMILY
- SIDE SETBACK PUD-MU STANDARD: 0' MIN. ATTACHED; OTHERWISE 10' - 24'
  PROVIDED SETBACK: 0'; 10' MIN. - 24' MAX.
- REAR SETBACK: NOT REGULATED

ENFRONTMENT PUD-MU STANDARD: UP TO 20% OF BUILDING SITE ARE ALLOWED TO FRONT PEDESTRIAN WAYS INSTEAD OF THOROUGHFARES.
- TOTAL NUMBER OF BUILDING SITES: 17
- BUILDING SITES ENFRONTING PEDESTRIAN WAYS: 2 (12% OF BUILDING SITES)
- BUILDING SITES 16 AND 17 ENFRONT PEDESTRIAN WAYS.

PARKING SUMMARY:
- TOTAL DWELLING UNITS: 94 UNITS
- REQUIRED MINIMUM PARKING RATIO: 2 SPACES PER UNIT
- REQUIRED CIVIC SPACE PARKING: 1 SPACE PER 5,000 SF OF REQUIRED CIVIC SPACE
- TOTAL REQUIRED PARKING: 191 SPACES
  (188 PARKING RESIDENTIAL SPACES; 3 CIVIC PARKING SPACES)
- TOTAL PROVIDED: 194 SPACES
- TOWNHOMES: 20 SPACES TOTAL
  16 COVERED CARPORT SPACES PROVIDED ON-LOT, 4 GARAGE SPACES (10' X 20')
- SMALL MULTI-FAMILY BUILDING 1: 7 GARAGE SPACES (10'X20')
- SURFACE PARKING: 134 SPACES
- ON-STREET PARKING: 33 SPACES

TOTAL CIVIC SPACE: 0.31 AC
- REQUIRED 5% OF GROSS SITE AREA: 0.25 AC
- PROVIDED: 0.31AC (6.2%)
- POCKET PARK - TO INCLUDE COMMUNITY AMENITIES SUCH AS A POOL, PATIO AND GRILLING AREA.

FRONTAGE CALCULATIONS

BUILDING SITE	BUILDING TYPE	BUILDING SITE WIDTH	FRONTAGE BUILD-OUT
1	TOWNHOME	20 LF	20 LF; 100%
2	TOWNHOME	20 LF	20 LF; 100%
3	TOWNHOME	20 LF	20 LF; 100%
4	TOWNHOME	20 LF	20 LF; 100%
5	TOWNHOME	20 LF	20 LF; 100%
6	TOWNHOME	20 LF	20 LF; 100%
7	TOWNHOME	20 LF	20 LF; 100%
8	TOWNHOME	20 LF	20 LF; 100%
9	TOWNHOME	20 LF	20 LF; 100%
10	TOWNHOME	20 LF	20 LF; 100%
11	TOWNHOME	20 LF	20 LF; 100%
12	TOWNHOME	20 LF	20 LF; 100%
13	LARGE MULTI-FAMILY 1	100.5 LF	89 LF; 89%
14	LARGE MULTI-FAMILY 2	132.5 LF	118 LF; 86%
15	LARGE MULTI-FAMILY 3	97.8 LF	79 LF; 81%
16	SMALL MULTI-FAMILY 1	46 LF	28.5 LF; 62%
17	LARGE MULTI-FAMILY 4	170.4 LF	135 LF; 79%

PUD-MU DESIGN STANDARDS DEVIATION REQUESTS:

TABLE 4.3.1-M; FACADE

CURRENT TEXT:
FACADE WINDOW SILL HEIGHT. IF RESIDENTIAL: 5 FT. MIN. ABOVE AVERAGE GRADE AT FACADE.

REQUESTED DEVIATION:
FACADE WINDOW SILL HEIGHT. IF RESIDENTIAL: 4 FT. MIN. ABOVE AVERAGE GRADE AT FACADE.

SEE ARCHITECTURAL SHEETS FOR ADDITIONAL DETAILS.

0 30 60 90
GRAPHIC SCALE 1"=30'-0"

NOTE:

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GAMBLE DESIGN COLLABORATIVE
DEVELOPMENT PLANNING AND LANDSCAPE ARCHITECTURE

WATERS EDGE
FINAL PUD DEVELOPMENT PLAN
RIVER ROAD & TAYLOR BEND RD, COLUMBIA TN

DRAKE A. REEDER REGISTERED LANDSCAPE ARCHITECT TENNESSEE No. 2216

Date: April 20, 2026
Revision Date
△
△
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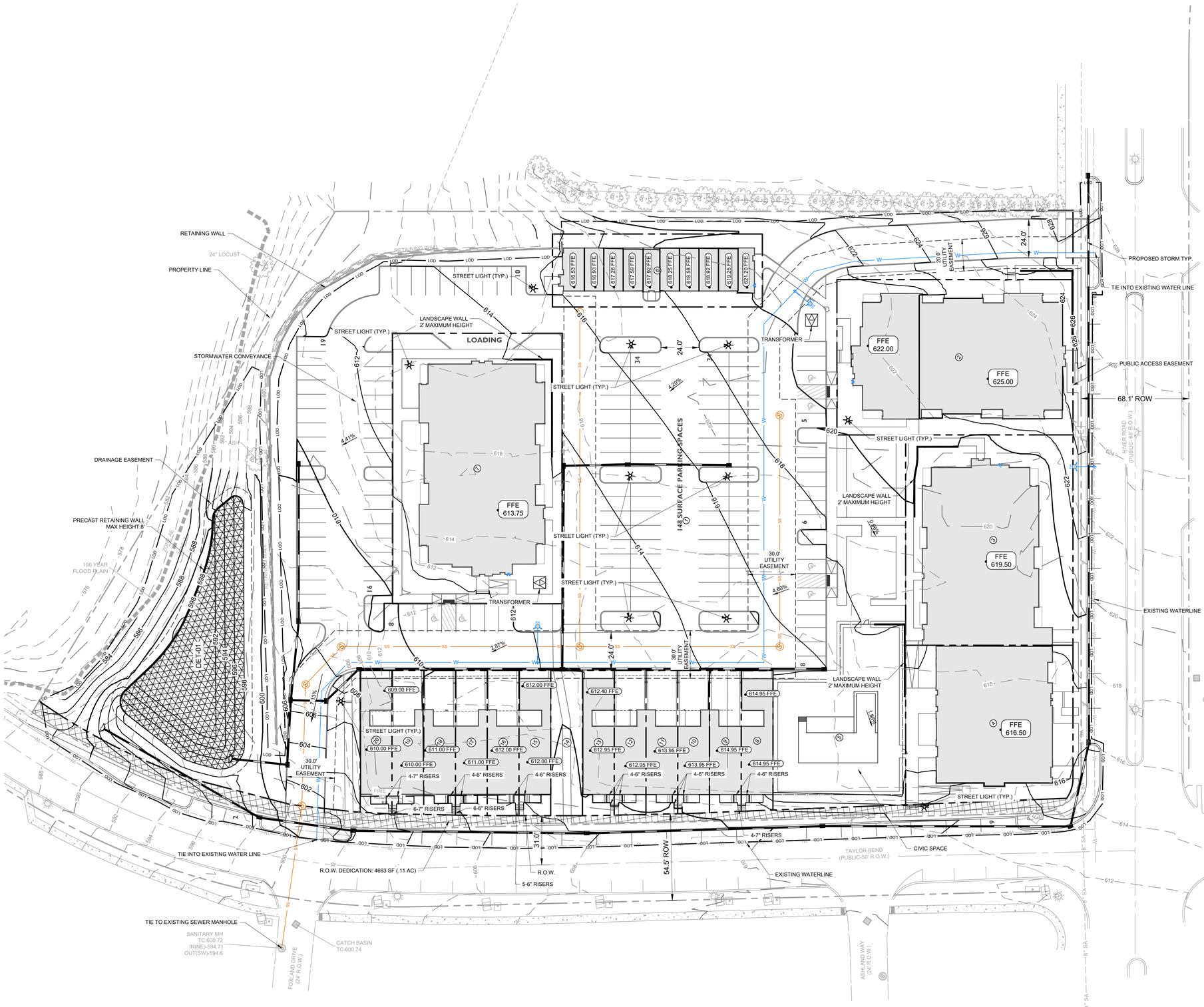
FINAL MASTER DEVELOPMENT PLAN
SHEET
C2.0

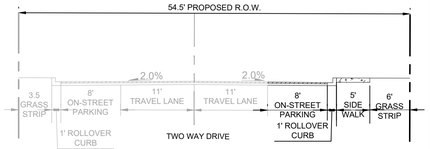


NOTES

1. THE INFORMATION SHOWN ON THIS PLAN IS BASED UPON THE TENNESSEE STATE NAD83 COORDINATE SYSTEM.
2. NO PROPOSED BUILDINGS FALL WITHIN THE 100 YEAR FLOODPLAIN, PER THE FEMA FIRM MAP NUMBER 47119C0170E EFFECTIVE APRIL 16, 2007.
3. SITE TO BE SERVED VIA PRIVATE TRASH SERVICE

RETAINING WALL NOTE

EXISTING RETAINING WALL TO BE EXAMINED AND CERTIFIED PRIOR TO FINAL CONSTRUCTION DOCUMENTS.



TAYLOR'S BEND STREET SECTION
(PUBLIC - 54.5 R.O.W.)

LEGEND

- SANITARY SEWER MANHOLE
- SANITARY SEWER LINE
- WATER LINE
- FIRE WATER LINE
- FIRE HYDRANT ASSEMBLY
- FIRE DEPARTMENT CONNECTION

PARCEL AREA TABLE

PARCEL #	AREA (SF)
1	111039.33
2	15034.07
3	14631.75
4	10805.71
5	14669.57
6	6082.69
7	18233.16
8	1769.29
9	1786.41
10	1804.09
11	1815.14
12	1824.83
13	1815.93
14	1861.26
15	1832.90
16	1838.82
17	1836.77
18	1829.75
19	1822.50
20	1806.37

GRAPHIC SCALE IN FEET
0 15 30 60

NORTH

GAMBLE DESIGN COLLABORATIVE
DEVELOPMENT PLANNING AND LANDSCAPE ARCHITECTURE

THE JAMES PHASE 2
REVISED PRELIMINARY PUD DEVELOPMENT PLAN
RIVER ROAD & TAYLOR BEND RD, COLUMBIA TN

SOPHIA CLOSE REGISTERED ENGINEER AGRICULTURE COMMERCE No. 131268 STATE OF TENNESSEE
4/16/2026

Date: APRIL 15, 2026
Revision Date
△
△
△

CONCEPTUAL GRADING STORM AND UTILITIES

C3.0

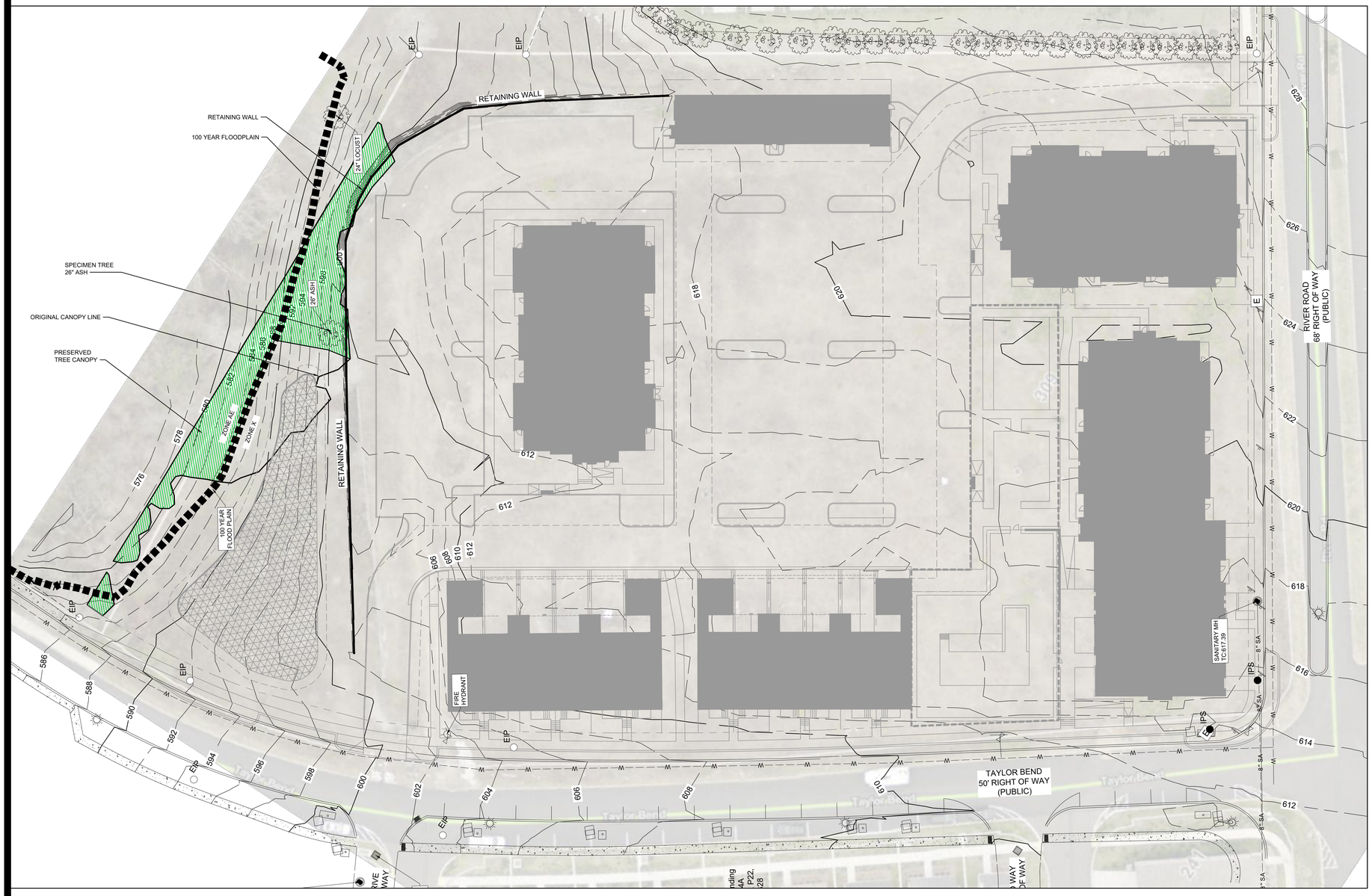
FINAL PUD DEVELOPMENT PLAN SITE DATA:

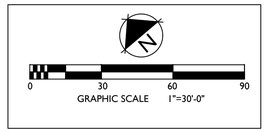
TOTAL SITE AREA: +/-5.0 AC
EXISTING ZONING: PUD
FUTURE LAND USE: CCUV - CITY CENTER URBAN VILLAGE
PREVIOUS PUD MASTER PLAN: WATERS EDGE PUD; ORDINANCE 4262; NOV. 14, 2019
PRELIMINARY PUD MASTER DEVELOPMENT PLAN: ORDINANCE 4563; APPROVED JAN. 8, 2026

THE SITE WAS PREVIOUSLY CLEARED IN ACCORDANCE WITH AN APPROVED SITE PLAN. BRUSH/VOLUNTEER GROWTH HAS OCCURRED IN THE DISTURBED AREA.

SPECIMEN TREES: 1 ON SITE
26" ASH - PRESERVED

EXISTING TREE CANOPY: 8,388.3 SF (0.19 AC); 3.8% OF TOTAL SITE AREA
PUD-MU TREE CANOPY RETENTION STANDARD: 54% PRESERVATION
TREE CANOPY PRESERVATION AREA: 5,817.3 SF (.13 AC) - 70% OF ORIGINAL CANOPY COVER PRESERVED





NOTE:

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GAMBLE DESIGN COLLABORATIVE
DEVELOPMENT PLANNING AND LANDSCAPE ARCHITECTURE

WATERS EDGE
FINAL PUD DEVELOPMENT PLAN
RIVER ROAD & TAYLOR BEND RD, COLUMBIA TN

DRAKE A. REEDER
REGISTERED
LANDSCAPE ARCHITECT
TENNESSEE No. 1218

Date: April 20, 2026
Revision Date

TREE PRESERVATION

SHEET
L1.0

REQUIRED LANDSCAPE CALCULATIONS:

THIS LANDSCAPE PLAN HAS BEEN DESIGNED TO MEET THE MINIMUM REQUIREMENTS FOR THE CITY OF COLUMBIA BASED ON REQUIREMENTS OF SEC 4.3.16, 4.3.12.C, 4.3.1.M, AND 5.2.3.

SEC 4.3.12.C.14 - PARKING AREA REQUIREMENTS	REQUIRED	PROVIDED
1 SHADE TREE PER PARKING ISLAND 2 SHADE TREES PER DOUBLE LENGTH ISLAND	28 SHADE TREES	30 SHADE TREES
1 SHADE TREE PER 2,000 SF OF PARKING AREA TOTAL PARKING AREA: 58,864 SF	30 SHADE TREES	30 SHADE TREES
REQUIRED: NO PARKING SPACE MORE THAN 72' FROM A TREE WITHIN THE LOT PROVIDED: ALL PARKING SPOTS HAVE A TREE WITHIN THE REQUIRED DISTANCE		

SEC 4.3.1.M - PRIVATE LANDSCAPE STANDARDS FOR PUD - MU CHARACTER DISTRICT
REQUIRED: LAYER 1 - > 3 FT, 30% OF LAYER 1 MUST BE LANDSCAPED WITH A CONTINUOUS SHRUB HEDGE ALONG FOUNDATION AT FACADE. PROVIDED: 230 SHURBS TO SATISFY THESE REQUIREMENTS IN LAYER 1 REQUIRED: LAYER 1 - > 15', SOD AND 1 TREE PER 50' OF FRONTAGE. PROVIDED: 0 TREES ALONG TAYLOR BEND ROAD DUE TO LAYER 1 LESS THAN 15 FT 6 TREES ALONG RIVER ROAD 0 TREES BUILDING SITE 16 AND 17 DUE TO DISTANCE BEING LESS THAN 15 FT

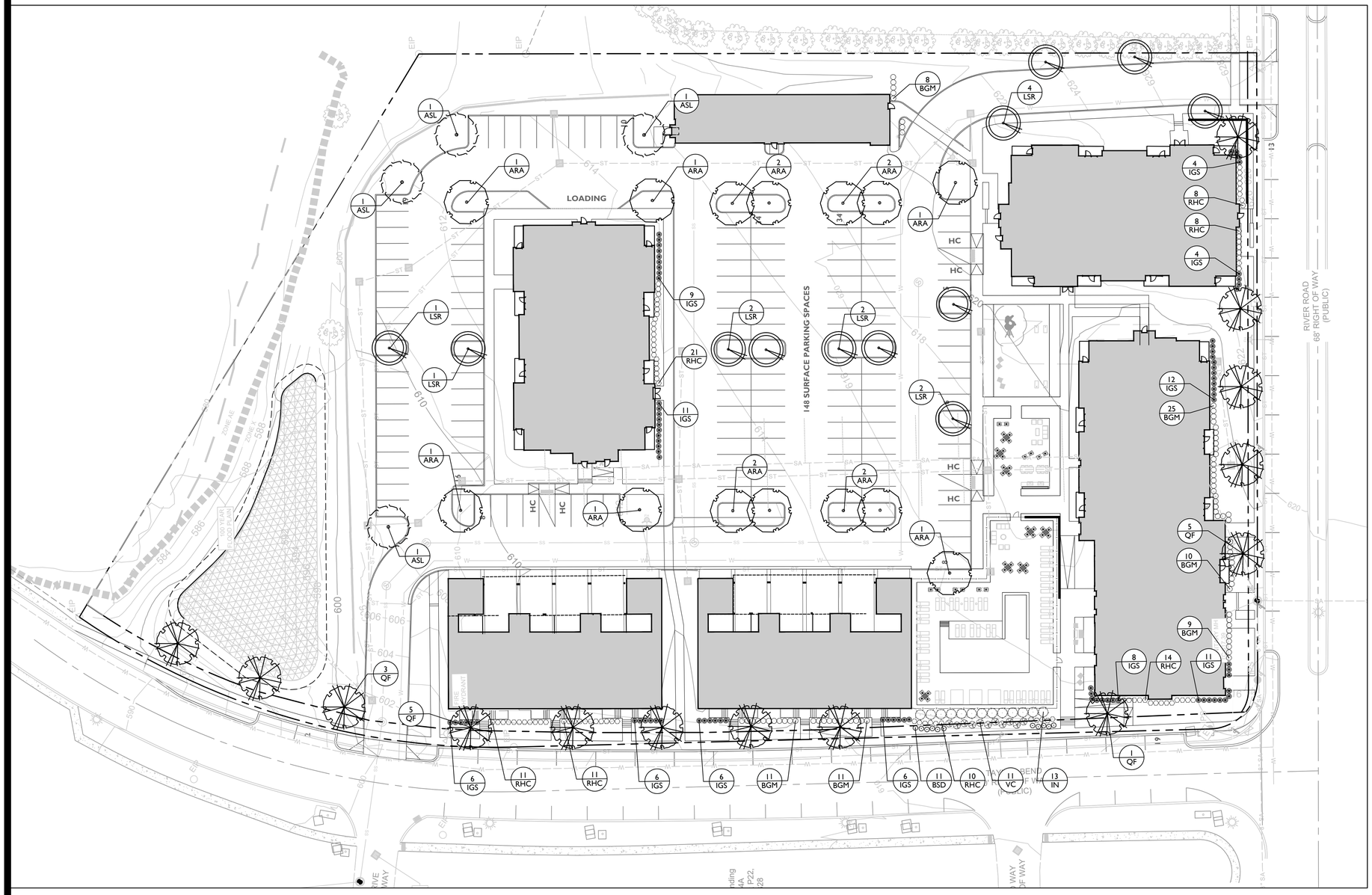
SEC 4.3.11.H PARCEL BUFFER
NOT APPLICABLE: DEVELOPMENT DOES NOT ABUT ANY SINGLE FAMILY OR TWO-FAMILY DETACHED RESIDENTIAL DWELLINGS.

SEC 5.2.3.G PUBLIC FRONTAGES
PUBLIC FRONTAGE TREES SHALL BE PLACED A MIN. 3 FT AWAY FROM WALKWAYS AND 6 FT AWAY FROM PORCH EAVES, AWNINGS, AND SIMILAR OVERHEAD OBSTRUCTIONS
FRONTAGE TREES NOT REQUIRED ADJACENT TO CIVIC SPACE.

PROVIDED: 10 TREES ALONG TAYLOR BEND
0 TREES ALONG RIVER ROAD
ROW IS AT BACK OF SIDEWALK AND DOES NOT ALLOW FOR FRONTAGE TREES.

SEC 5.5 PROJECT BUFFERS
NOT APPLICABLE: PROPOSED PUD DEVELOPMENT IS ADJACENT TO OTHER PUD ZONED PROPERTIES

PER PLANNING COMMISSION'S CONDITIONS OF APPROVAL LANDSCAPE SCREEN BETWEEN AMENITY AND R.O.W.



GRAPHIC SCALE 0 40 80 120 1"=40'-0"

NOTE:

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GAMBLE DESIGN COLLABORATIVE

DEVELOPMENT PLANNING AND LANDSCAPE ARCHITECTURE

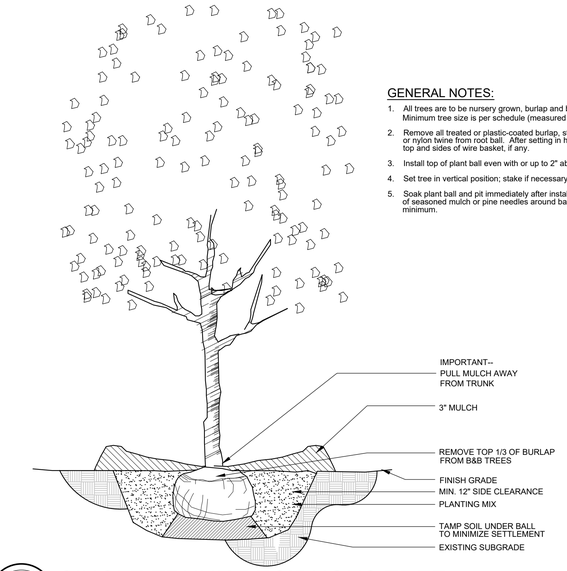
WATERS EDGE
PRELIMINARY PUD DEVELOPMENT PLAN
RIVER ROAD & TAYLOR BEND RD, COLUMBIA TN

DRAKE A. REDDICK REGISTERED LANDSCAPE ARCHITECT TENNESSEE No. 1215

Date: April 20, 2026

Revision Date
△
△
△

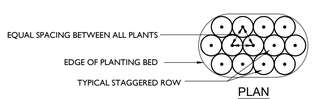
FINAL MASTER DEVELOPMENT PLAN
SHEET
L2.0



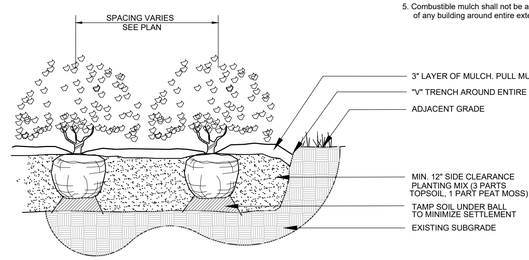
1 / L1.0 SECTION — **SINGLE TRUNK DECIDUOUS TREE** — DETAIL # NTS

GENERAL NOTES:

1. All trees are to be nursery grown, burlap and ball (B&B). Minimum tree size is per schedule (measured 6" above root ball).
2. Remove all treated or plastic-coated burlap, strapping, wire or nylon twine from root ball. After setting in hole, cut away top and sides of wire basket, if any.
3. Install top of plant ball even with or up to 2" above existing grade.
4. Set tree in vertical position; stake if necessary for stabilization.
5. Soak plant ball and pit immediately after installation. Place 3" of seasoned mulch or pine needles around base of tree, 3' diameter minimum.



PLAN



2 / L1.0 SECTION — **SHRUB PLANTING** — DETAIL # NTS

GENERAL NOTES:

1. Install top of plant ball shall be level with finished grade.
2. Tamp planting mix firmly as pit is filled around each plant ball.
3. Soak each plant ball and pit immediately after installation.
4. Cut and remove burlap from top 1/3 of root ball. Non-degradable burlap shall be removed or rolled under ball after replacement of plant.
5. Combustible mulch shall not be applied or maintained within two feet of any building around entire exterior perimeter.

PLANT SCHEDULE - CODE MINIMUM

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	HEIGHT	LEAF	SPACING	REMARKS
CANOPY TREES								
ARA	14	Acer rubrum 'Autumn Flame'	Autumn Flame Red Maple	2.5" Cal. B&B	12`-14`	DECIDUOUS	AS SHOWN	CENTRAL LEADER
ASL	4	Acer saccharum 'Legacy'	Legacy Sugar Maple	2.5" Cal. B&B	12`-14`	DECIDUOUS	AS SHOWN	CENTRAL LEADER
LSR	12	Liquidambar styraciflua 'Rotundiloba'	Fruitless Narrow Sweet Gum	2.5" Cal. B&B	12`-14`	DECIDUOUS	AS SHOWN	CENTRAL LEADER
QF	16	Quercus falcata	Southern Red Oak	2.5" Cal. B&B	12`-14`	DECIDUOUS	AS SHOWN	SINGLE-STRAIGHT CENTRAL LEADER
	46	(SUBTOTAL)						
SHRUBS								
BGM	74	Buxus x 'Green Mountain'	Green Mountain Boxwood	3 gal.	24"	EVERGREEN	36" O.C.	
IGS	83	Ilex glabra 'Shamrock'	Shamrock Inkberry Holly	3 gal.	30"	EVERGREEN	36" O.C.	
RHC	73	Rhododendron x 'Conleb'	Autumn Embers Encore Azalea	3 gal.	30"	EVERGREEN	36" O.C.	
	230	(SUBTOTAL)						

PLANT SCHEDULE - AMENITY BUFFER

CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	HEIGHT	LEAF	SPACING
SHRUBS							
BSD	11	Buxus sempervirens 'Dee Runk'	Dee Runk Common Boxwood		30"	EVERGREEN	36" O.C.
IN	13	Ilex x 'Nellie R. Stevens'	Nellie R. Stevens Holly		4`	EVERGREEN	6` O.C.
RHC	11	Rhododendron x 'Conleb'	Autumn Embers Encore Azalea		24"	EVERGREEN	36" O.C.
VC	11	Viburnum x burkwoodii `Chenaultii`	Chenault Viburnum		36"	EVERGREEN	AS SHOWN

GAMBLE DESIGN COLLABORATIVE
DEVELOPMENT PLANNING AND LANDSCAPE ARCHITECTURE

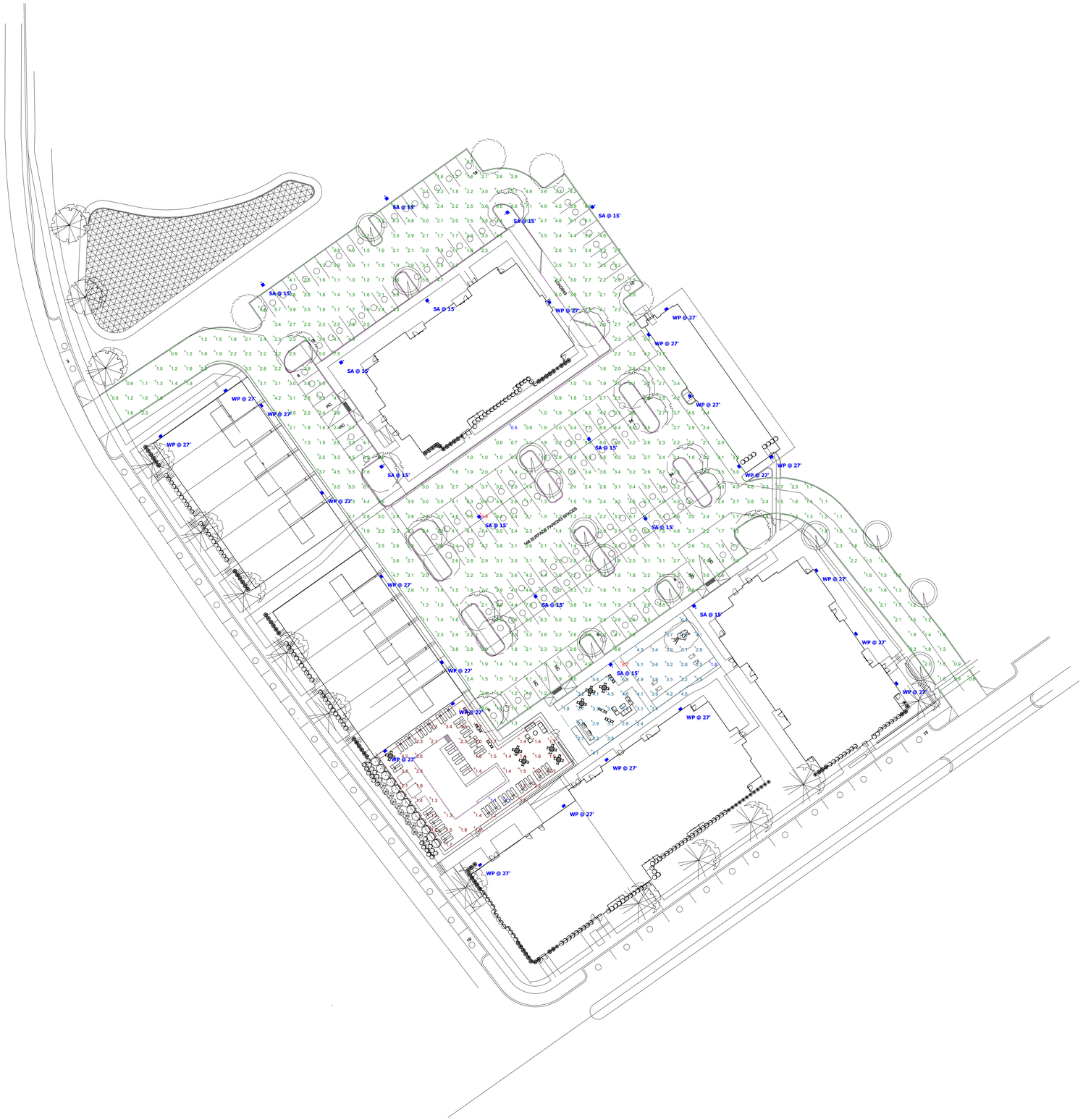
WATERS EDGE
PRELIMINARY PUD DEVELOPMENT PLAN
RIVER ROAD & TAYLOR BEND RD, COLUMBIA TN

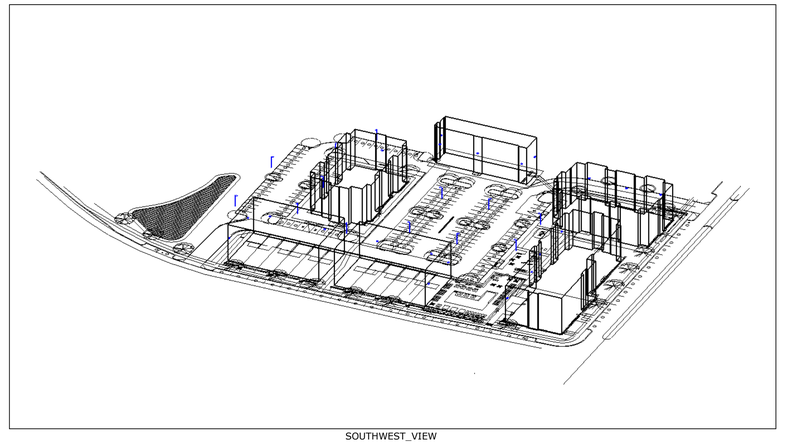
DRAKE A. REEDER
REGISTERED
LANDSCAPE ARCHITECT
TENNESSEE No. 1235

Date: April 20, 2026

Revision Date

FINAL MASTER DEVELOPMENT PLAN
SHEET
L2.1





SOUTHWEST_VIEW

Schedule

Symbol	Label	QTY	Catalog Number	Description	Number Lamps	Lumens per Lamp	LLF	Wattage	Polar Plot
	SA	13	KT-ALED140PS-M2-OSB-PMA-8CSB-VDIM-P (T5) 3000K 480V	(1) head mounted on 15' pole. 15'AFF. Type V, calculated at 3000° K.	1	18820	0.96	147.98	Max: 6269cd
	WP	21	WPT-80UX/CT	Wall Mounted at 27' AFF. Calculated at 3000° K.	1	9733	0.96	80.37	Max: 3868cd

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Civic_Area_0ft_AFF	+	3.8 fc	8.7 fc	1.6 fc	5.4:1	2.4:1
Lot_PVA_0ft_AFF	+	2.9 fc	9.9 fc	0.5 fc	19.8:1	5.8:1
Pool_Deck_0ftAFF	+	1.9 fc	4.9 fc	1.1 fc	4.5:1	1.7:1

Note

1. For budget purposes only.
2. Direct calculation only.
3. Calculations taken at ground (0ft AFG) unless otherwise noted.
4. Levels not guaranteed. Estimation based on info provided.
5. Confirm all voltages, finishes and mounting prior to order.



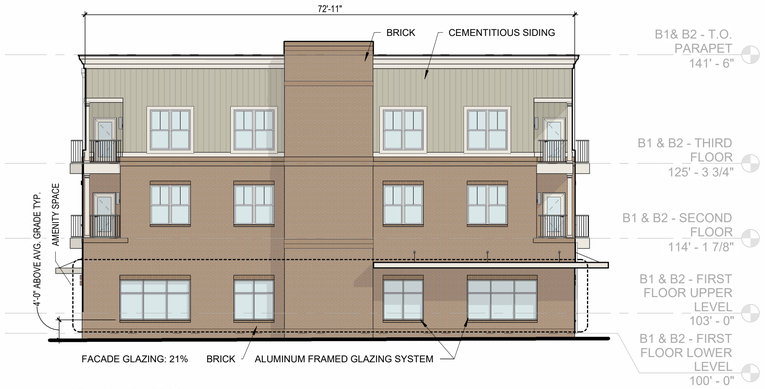


River Road Phase 2 - The James
Proposed Lighting Layout

Designer
AP
Date
04/16/2026
Scale
Not to Scale
Drawing No.
001
Summary
LED PHOTOMETRICS



3 A201 **ELEVATION** BUILDING 2 - (FACING BLDG 3)
3/32" = 1'-0"



2 A201 **ELEVATION** BUILDING 1 - (FACING TAYLOR'S BEND RD.)
3/32" = 1'-0"



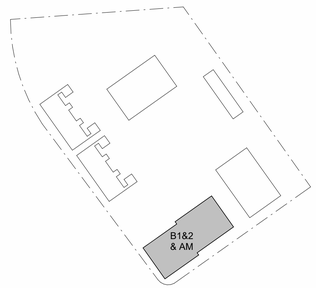
4 A201 **ELEVATION** BUILDING 1&2 - (FACING PARKING LOT)
3/32" = 1'-0"



1 A201 **ELEVATION** BUILDING 1&2 - (FACING RIVER RD.)
3/32" = 1'-0"

* SILL HEIGHT NOTE: PUD-MU ZONING CODE REQUIRES THE RESIDENTIAL SILL TO BE 5' MIN. ABOVE AVERAGE GRADE AT FACADE. APPLICANT IS REQUESTING STAFF LEVEL ALLOWABLE DEVIATION TO REDUCE THE MIN. DIMENSION TO 4' (20%) MIN. ABOVE AVERAGE GRADE AT FACADE FOR ALL BUILDINGS THAT ARE PARALLEL TO STRAIGHT FRONTAGE LINES OR TANGENT OF CURVED FRONTAGE LINE.

KEY PLAN



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NOT FOR CONSTRUCTION

BARLOW BUILDERS & CPS LAND
THE JAMES (PHASE 2)
COLUMBIA, TN

ISSUANCES

NO.	DATE	DESCRIPTION
	2025.05.19	ZONING SUBMISSION
	2025.09.16	CITY COMMENTS REVISION
	2026.04.20	SITE DEVELOPMENT PLAN SUBMISSION

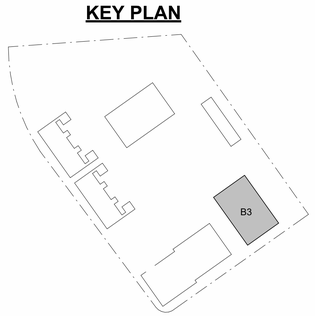
PROJECT NO:
26008

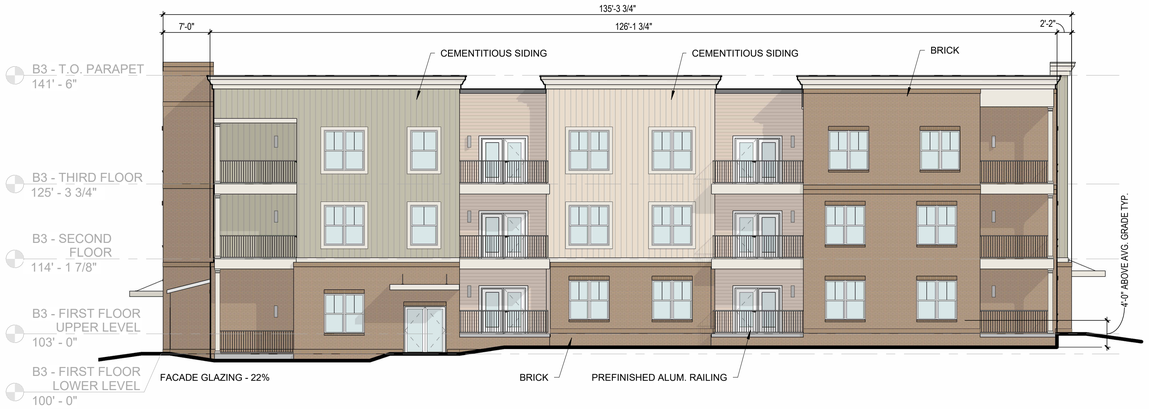
SHEET TITLE:
BUILDING 1/2 ELEVATIONS

SHEET NUMBER:
A201

4/16/2026 10:38:58 AM

KEY PLAN





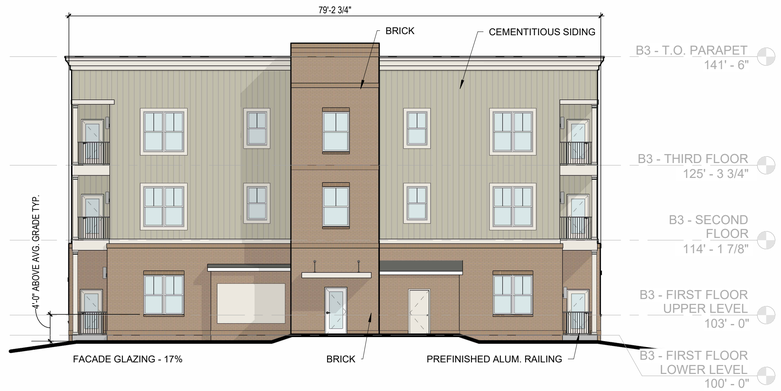
3 A202 **ELEVATION** BUILDING 3 - (FACING BLDG 1&2)
3/32" = 1'-0"



1 A202 **ELEVATION** BUILDING 3 - (FACING RIVER RD.)
3/32" = 1'-0"



4 A202 **ELEVATION** BUILDING 3 - (FACING BACK OF PROPERTY)
3/32" = 1'-0"



2 A202 **ELEVATION** BUILDING 3 - (FACING PARKING LOT)
3/32" = 1'-0"

* SILL HEIGHT NOTE: PUD-MU ZONING CODE REQUIRES THE RESIDENTIAL SILL TO BE 5' MIN. ABOVE AVERAGE GRADE AT FACADE. APPLICANT IS REQUESTING STAFF LEVEL ALLOWABLE DEVIATION TO REDUCE THE MIN. DIMENSION TO 4' (20%) MIN. ABOVE AVERAGE GRADE AT FACADE FOR ALL BUILDINGS THAT ARE PARALLEL TO STRAIGHT FRONTAGE LINES OR TANGENT OF CURVED FRONTAGE LINE.

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ISSUANCES

NO.	DATE	DESCRIPTION
	2025.05.19	ZONING SUBMISSION
	2025.09.16	CITY COMMENTS REVISION
	2026.04.20	SITE DEVELOPMENT PLAN SUBMISSION

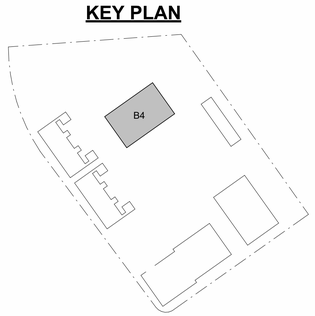
PROJECT NO:
26008

SHEET TITLE:
BUILDING 3 ELEVATIONS

SHEET NUMBER:
A202

4/16/2026 10:39:01 AM

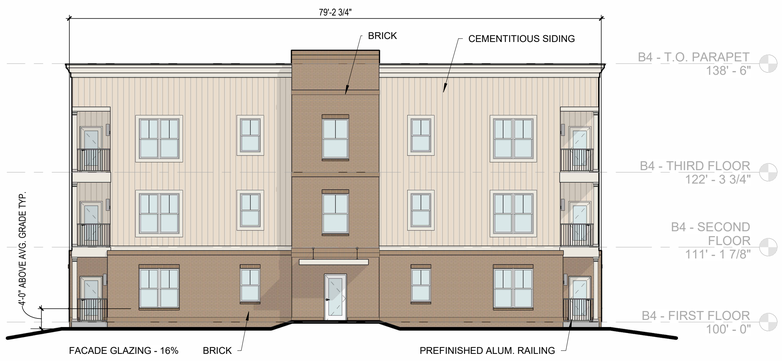
KEY PLAN





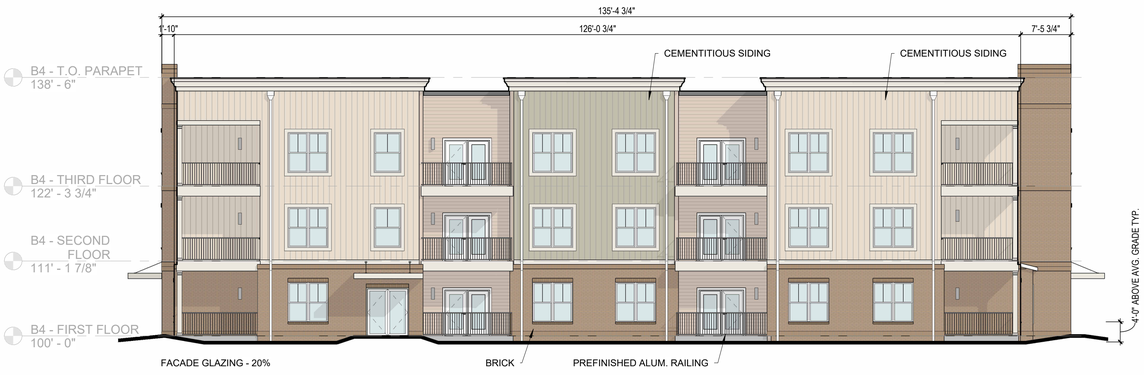
4 A203 ELEVATION BUILDING 4 - (FACING PARKING LOT)

3/32" = 1'-0"



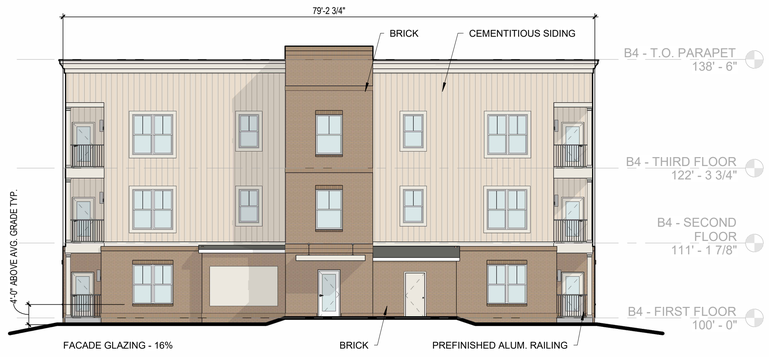
1 A203 ELEVATION BUILDING 4 - (FACING TOWNHOMES)

3/32" = 1'-0"



2 A203 ELEVATION BUILDING 4 - (FACING STORM DETENTION AREA)

3/32" = 1'-0"



3 A203 ELEVATION BUILDING 4 - (FACING BACK OF PROPERTY)

3/32" = 1'-0"

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ISSUANCES

NO.	DATE	DESCRIPTION
	2025.05.19	ZONING SUBMISSION
	2025.09.16	CITY COMMENTS REVISION
	2026.04.20	SITE DEVELOPMENT PLAN SUBMISSION

PROJECT NO:
26008

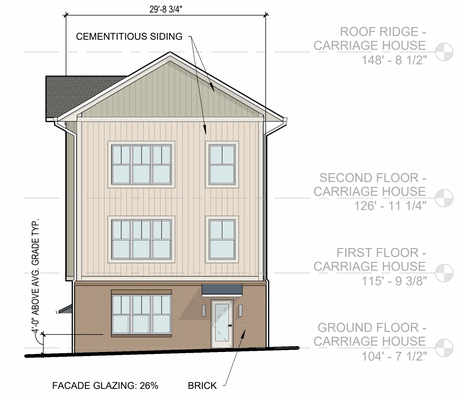
SHEET TITLE:
BUILDING 4 ELEVATIONS

SHEET NUMBER:
A203

4/16/2026 10:39:04 AM



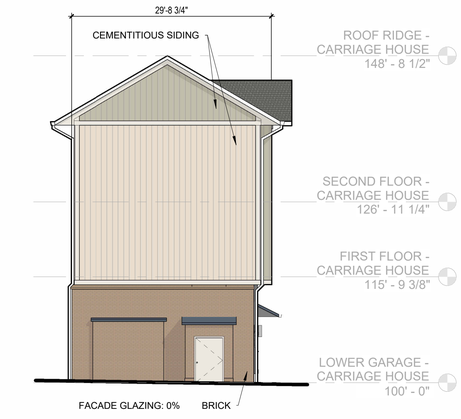
1 A204 **ELEVATION** CARRIAGE HOUSE - (FACING PARKING LOT)
3/32" = 1'-0"



4 A204 **ELEVATION** CARRIAGE HOUSE - (FACING RIVER RD.)
3/32" = 1'-0"

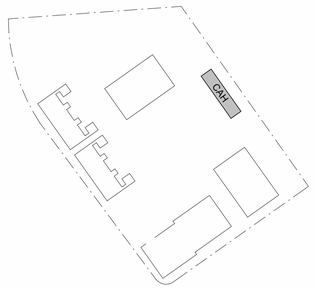


3 A204 **ELEVATION** CARRIAGE HOUSE - (FACING BACK OF PROPERTY)
3/32" = 1'-0"



2 A204 **ELEVATION** CARRIAGE HOUSE - (FACING WATER DETENTION AREA.)
3/32" = 1'-0"

KEY PLAN



* SILL HEIGHT NOTE: PUD-MU ZONING CODE REQUIRES THE RESIDENTIAL SILL TO BE 5' MIN. ABOVE AVERAGE GRADE AT FACADE. APPLICANT IS REQUESTING STAFF LEVEL ALLOWABLE DEVIATION TO REDUCE THE MIN. DIMENSION TO 4' (20%) MIN. ABOVE AVERAGE GRADE AT FACADE FOR ALL BUILDINGS THAT ARE PARALLEL TO STRAIGHT FRONTAGE LINES OR TANGENT OF CURVED FRONTAGE LINE.

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ISSUANCES

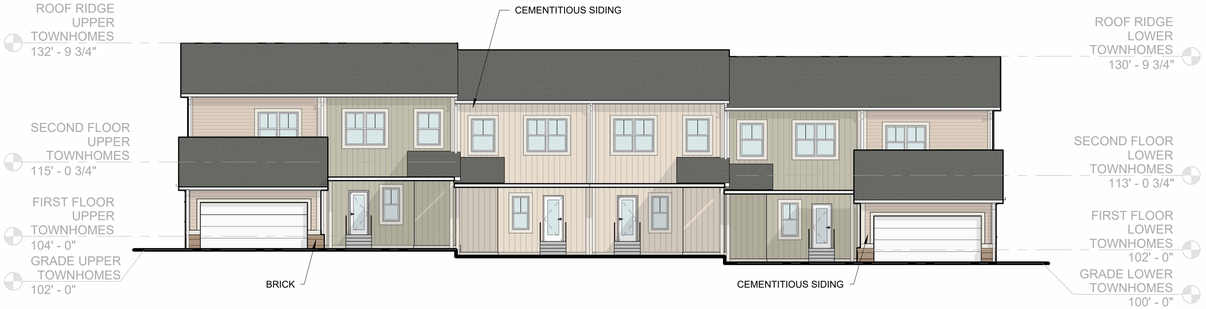
NO.	DATE	DESCRIPTION
	2025.05.19	ZONING SUBMISSION
	2025.09.16	CITY COMMENTS REVISION
	2026.04.20	SITE DEVELOPMENT PLAN SUBMISSION

PROJECT NO:
26008

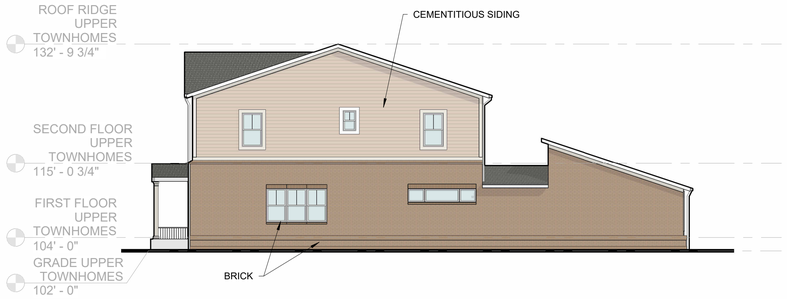
SHEET TITLE:
CARRIAGE HOUSE ELEVATIONS

SHEET NUMBER:
A204

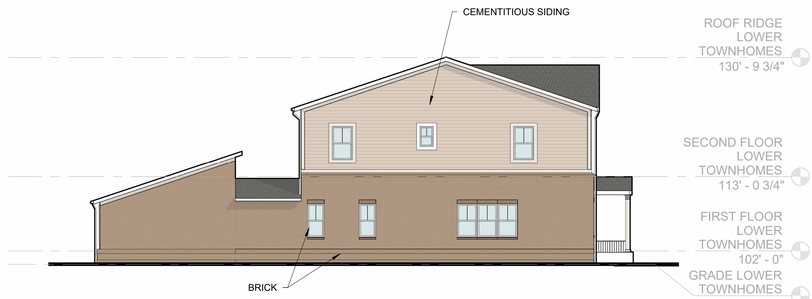
4/16/2026 10:39:07 AM



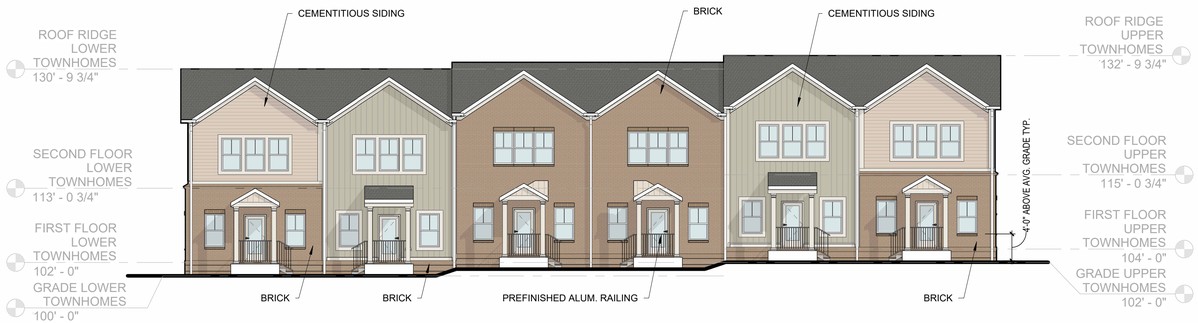
4 A205 **ELEVATION** TOWNHOME - ROW 1 - (FACING PARKING LOT)
3/32" = 1'-0"



2 A205 **ELEVATION** TOWNHOME - ROW 1 - (FACING B1&2)
3/32" = 1'-0"



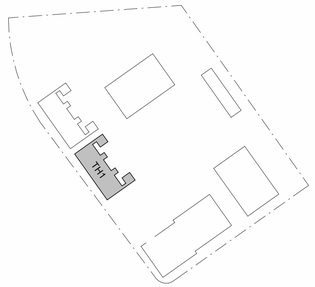
3 A205 **ELEVATION** TOWNHOME - ROW 1 - (FACING ROW 2)
3/32" = 1'-0"



1 A205 **ELEVATION** TOWNHOME - ROW 1 - (FACING TAYLOR'S BEND RD.)
3/32" = 1'-0"

* SILL HEIGHT NOTE: PUD-MU ZONING CODE REQUIRES THE RESIDENTIAL SILL TO BE 5' MIN. ABOVE AVERAGE GRADE AT FACADE. APPLICANT IS REQUESTING STAFF LEVEL ALLOWABLE DEVIATION TO REDUCE THE MIN. DIMENSION TO 4' (20%) MIN. ABOVE AVERAGE GRADE AT FACADE FOR ALL BUILDINGS THAT ARE PARALLEL TO STRAIGHT FRONTAGE LINES OR TANGENT OF CURVED FRONTAGE LINE.

KEY PLAN



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COLUMBIA, TN

ISSUANCES

NO.	DATE	DESCRIPTION
	2025.05.19	ZONING SUBMISSION
	2025.09.16	CITY COMMENTS REVISION
	2026.04.20	SITE DEVELOPMENT PLAN SUBMISSION

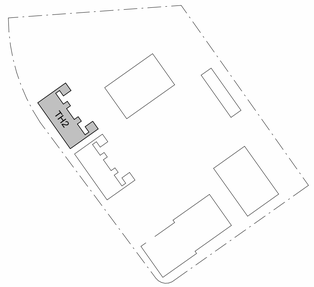
PROJECT NO:
26008

SHEET TITLE:
TOWNHOME ELEVATIONS

SHEET NUMBER:
A205

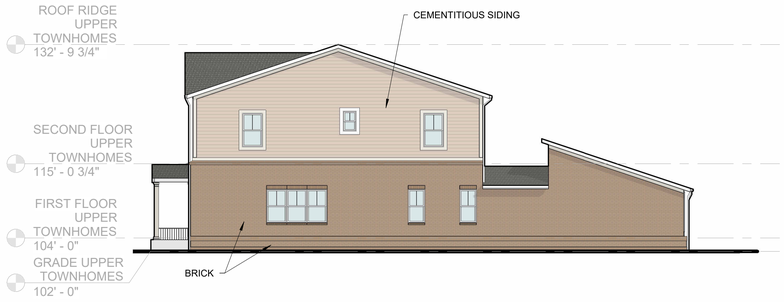
4/16/2026 10:39:10 AM

KEY PLAN

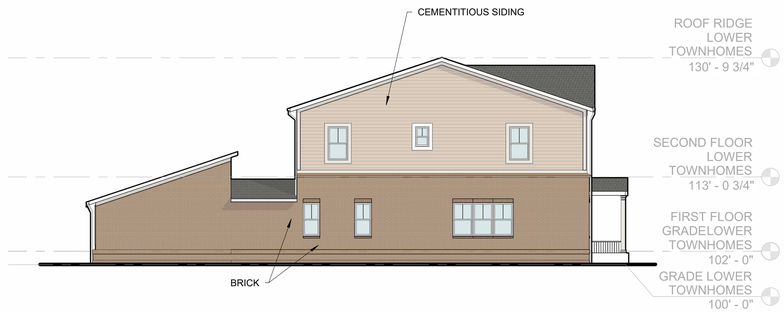




2 A206 **ELEVATION** TOWNHOME - ROW 2 - (FACING PARKING LOT)
3/32" = 1'-0"



3 A206 **ELEVATION** TOWNHOME - ROW 2 - (FACING ROW 1)
3/32" = 1'-0"



4 A206 **ELEVATION** TOWNHOME - ROW 2 - FACING WATER DETENTION AREA)
3/32" = 1'-0"



1 A206 **ELEVATION** TOWNHOME - ROW 2 - (FACING TAYLOR'S BEND RD.)
3/32" = 1'-0"

* SILL HEIGHT NOTE: PUD-MU ZONING CODE REQUIRES THE RESIDENTIAL SILL TO BE 5' MIN. ABOVE AVERAGE GRADE AT FACADE. APPLICANT IS REQUESTING STAFF LEVEL ALLOWABLE DEVIATION TO REDUCE THE MIN. DIMENSION TO 4' (20%) MIN. ABOVE AVERAGE GRADE AT FACADE FOR ALL BUILDINGS THAT ARE PARALLEL TO STRAIGHT FRONTAGE LINES OR TANGENT OF CURVED FRONTAGE LINE.

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BARLOW BUILDERS & CPS LAND
THE JAMES (PHASE 2)
COLUMBIA, TN

ISSUANCES

NO.	DATE	DESCRIPTION
	2025.05.19	ZONING SUBMISSION
	2025.09.16	CITY COMMENTS REVISION
	2026.04.20	SITE DEVELOPMENT PLAN SUBMISSION

PROJECT NO:
26008

SHEET TITLE:
TOWNHOME ELEVATIONS

SHEET NUMBER:
A206

4/16/2026 10:39:13 AM

February 28, 2025
Extension: 6/10/2025

Mr. Keyshawn Gallon
Kimley-Horn
4031 Aspen Grove Drive, Suite 200
Franklin, TN 37067
Sent via email: *keyshaw.gallon@kimley-horn.com*

RE: Water Availability Letter (Extension) Expires: 8/28/2025
Waters Edge Apartments
Northeast Intersection at Taylors Ben and River Road
Tax Map 90, Parcel 7.12
Columbia*, Maury County, TN*

Dear Mr. Gallon:

Columbia Power & Water Systems ("the Utility"/CPWS) is a municipal corporation authorized to provide water services in accordance with State law. CPWS has adopted rules, regulations, and standard operation procedures, prescribing the conditions under which CPWS will furnish water service. In addition, certain State laws delegate authority to the Tennessee Department of Environment and Conservation (TDEC), various Planning Commissions, and other authorities in Cities and Counties. These Cities and Counties have also adopted rules and regulations. Water service will be made available on a first-come, first-served basis, subject to the payment of all charges and fees imposed by CPWS and the approval of any and all required governmental agencies. Water service is subject to availability of all CPWS furnished equipment and materials appropriate for the development and provided the applicant complies with all rules and regulations of CPWS and conditions set out herein.

The proposed development consists of 135 multi-family units in 7 buildings, with an amenity center. CPWS has evaluated the projected water demands for the proposed development in the water system hydraulic model and is able to provide domestic and fire protection service while maintaining state standards for level of service and pressures in this portion of the distribution system. CPWS can provide water for the proposed development according to the following criteria and requirements:

- Water system infrastructure will be connected to the existing 8-inch water mains located on Taylors Bend and/or River Rd
- Multifamily buildings must be served by master meters. Any sub-metering will be the responsibility of the property owner.

- Fire flow availability up to 1,650 gpm is based on Fire Flow Requirements letter dated 8/27/2024 submitted with application.
- Separate fire and irrigation meters with backflow devices will be required to serve the proposed Project.

All of the above requirements up to and including the meter(s) are to be constructed and paid for by the Applicant and dedicated to CPWS once complete. No construction of water infrastructure shall be initiated until final construction plans have been approved by CPWS (including TDEC approval) and all parties have fully executed a water service agreement.

This Water Availability Letter will expire on the date listed unless vested by payment of water service fees and impact fees for the proposed project. If the Applicant elects to pay only a portion of the impact fees due for the proposed development, then the vesting will only apply to the portion for which impact fees were paid. Any request for water availability after the expiration date of this letter will be considered a new application.

Once you have received this Water Availability Letter, next steps in the process to vest water service from CPWS are as follows:

- Remit to CPWS new water service fees for plan review, TDEC coordination, and inspection as follows: $1,500 + $370 per SFU equivalent
- Applicant will prepare design drawings for review and approval by CPWS for construction of the proposed water system improvements.
    - Provide design drawings in AutoCAD and .pdf format for CPWS review of proposed development. Include design drawings for grading, drainage, roadway improvements, buried (wet and dry) utilities, water systems, and surface improvements.
    - CPWS will submit proposed improvements design to TDEC for review and approval.
    - Once comments received from TDEC have been addressed and approved, CPWS will approve the Construction Drawings for the proposed water system improvements.
- Current water service fees due prior to CPWS review of design plans are listed in the table below. *Note that payment of Water Service Fees will extend the expiration of this Water Availability Letter for one year, while the applicant is working with CPWS on design and review of the improvement drawings.*

Water Service Fees	SFUs	Total
$1,500 + 370 per SFU	135	**$51,450**

- Upon Construction Drawing approval by CPWS, applicant may then pay Impact Fees and Meter Fees and schedule the pre-construction meeting. Pre-construction meeting will be canceled and re-scheduled unless all impact fees are paid at least 48 hours prior, or surety is provided in lieu of full payment.

- Water meters will be ordered by CPWS once meter fees are paid by the Applicant.
    - Meter fees are subject to change based on final design and the prevailing Board-approved rates at time of payment.
    - If surety is provided in lieu of payment, meters are not ordered until fees are paid and may result in extended lead-times.
- Applicants will be charged Impact Fees and Meter Fees in effect at time of payment. Please see CPWS website for schedule of impact fees and timing of planned fee escalations. Anticipated meter costs and impact fees for this project are according to the following table:

Impact Fees and Meter Costs	Number	$ / Unit	Total
1" Irrigation Meter Cost	1	$710	$710
6" Domestic Service (master) Meter Cost	1	Current Price	Deferred
6" Fire Meter Cost	1	Current Price	Deferred
(7/1/25) Impact Fee for 1" Irrigation Meter	1	$9,200	$9,200
(7/1/25) Impact Fee for 6" Service Meter	1	$459,000	$459,000
Estimate of Fees Due Prior to Pre-Construction Meeting =			**$468,910**

- After the pre-construction meeting, CPWS will then issue a formal Notice to Proceed. No construction of water improvements may take place prior to the Notice to Proceed.
- Applicant is required to construct all public water infrastructure per CPWS standard specifications and provide CPWS personnel unregulated access to the site to inspect the construction of the water infrastructure. No construction of water improvements may take place without a CPWS inspector present.

Please feel free to contact me at 931-388-4833 x7655 or Matt.Wheeler@cpws.com if you have questions or would like to discuss.

Sincerely,



Matthew J. Wheeler, P.E.
Vice President of Water Resources, CPWS

cc: Bart Anderson, CPWS
Eric King, Inflo Design Group
File 24-062

CITY OF COLUMBIA
TENNESSEE

WASTEWATER DEPARTMENT

30 August 2024

Keyshawn Gallon
4031 Aspen Grove Drive, Suite 200
Franklin, TN 37067

RE: Waters Edge, 090 007.12; Intersection of Taylor Bend Rd and River Road, Columbia, TN 38401

Keyshawn,

This letter serves as confirmation that the City of Columbia Wastewater Department has the available capacity to service the subject development. Any extension to the existing sewer infrastructure will be initiated by the owner/developer, reviewed by our department and approved by the State of Tennessee. The project must be advanced in accordance with local, state and federal rules, regulations and policies. Funding and construction of those improvements will remain the responsibility of the owner/developer. New customers will be required to pay all fees applicable at the time of connection. Any Final Plat approval and Dedication are both subject to installation and function, as determined by our Department. No detailed design plan for an extension of the sewer has been proposed at this time.

Donnie Boshers, Director
City of Columbia, TN
Wastewater Department

December 1, 2025

Mr. Keyshawn Gallon
Kimley-Horn
4031 Aspen Grove Drive, Suite 200
Franklin, TN 37067
Sent via email: *keyshaw.gallon@kimley-horn.com*

RE: **Water Availability Letter**
Waters Edge Apartments
Northeast Intersection at Taylors Ben and River Road
Tax Map 90, Parcel 7.12
Columbia*, Maury County, TN*

NWSF Paid: 2/26/2026
WAL Expires: 2/26/2027

Dear Mr. Gallon:

Columbia Power & Water Systems ("the Utility"/CPWS) is a municipality authorized to provide water services in accordance with State law. CPWS has adopted rules, regulations, and standard operation procedures, prescribing the conditions under which CPWS will furnish water service. In addition, certain State laws delegate authority to the Tennessee Department of Environment and Conservation (TDEC), various Planning Commissions, and other authorities in Cities and Counties. These Cities and Counties have also adopted rules and regulations. Water service will be made available on a first-come, first-served basis, subject to the payment of all charges and fees imposed by CPWS and the approval of any and all required governmental agencies. Water service is subject to availability of all CPWS furnished equipment and materials appropriate for the development and provided the applicant complies with all rules and regulations of CPWS and conditions set out herein.

The proposed development consists of 82 multi-family units and 12 townhome units, with an amenity center. CPWS has evaluated the projected water demands for the proposed development in the water system hydraulic model and is able to provide domestic and fire protection service while maintaining state standards for level of service and pressures in this portion of the distribution system. CPWS can provide water for the proposed development according to the following criteria and requirements:

- This Water Availability Letter (WAL) represents a planning-level indication of current source water availability for the Phase and Unit Count described above in the proposed development project.
- Development projects with multiple phases must be evaluated as a whole and with each phase individually for distribution system infrastructure sizing and sequencing.

- Each Phase of the development will be considered individually (with a separate WAL) to make sure source water capacity is available to support the additional demands of that Phase at the time the application is made.
- Based on State requirements, project phases will be constructed and activated as whole units.
    - CPWS will not accept ownership of or activate portions of the water system that are smaller than the entirety of the infrastructure approved by the State on a single permitted set of construction documents.
    - Phase boundaries should be defined with this in mind, as no water connections in the Phase will be activated until the entire Phase of construction is completed and accepted.
- Water system infrastructure will be connected to the existing 8-inch water mains located on Taylors Bend and/or River Rd
- Multifamily buildings must be served by master meters. Any sub-metering will be the responsibility of the property owner. Current WAL assumes water service to all units will be through master meters (to be verified during Design Review process).
- Fire flow availability up to 1,650 gpm is based on Fire Flow Requirements letter dated 8/27/2024 submitted with application.
- Assumed water meters are listed below based on preliminary description of project. Actual meter count and sizes will be verified during the Design Review process.
    - 12 Service Meters (3/4" size) for townhomes
    - One (1) Landscape Irrigation Meters (1" size)
    - Three (3) Master Service Meters (3" and 4" sizes) for multifamily buildings
    - Two (2) Fire Meters (6" size) for private hydrants and fire sprinklers to buildings
- Separate irrigation meters with backflow devices will be required to serve the proposed Project.
- If fire sprinkler systems are requested or required, separate fire meters with backflow devices will be required to serve the proposed Project.

All of the above requirements up to and including the meter(s) are to be constructed and paid for by the Applicant and deeded over to CPWS once complete.

New Water Service (NWS) Fees have been paid by the applicant which initiated Design Review and Coordination with CPWS. As such, this Water Availability Letter is extended to the date listed on the first page to provide time for completing the design and review process. Any request for water availability after the expiration date of this letter will be considered a new application.

The next steps in the process of obtaining water service from CPWS are as follows:

- Applicant will prepare design drawings for review and approval by CPWS for construction of the proposed water system improvements.

  - Provide design drawings in AutoCAD and .pdf format for CPWS review of proposed development. Include design drawings for grading, drainage, roadway improvements, buried (wet and dry) utilities, water systems, surface improvements, and landscaping.
  - Once CPWS approves the Construction Drawings for the proposed system improvements, Applicant will submit proposed improvements design to TDEC for review and approval.
  - CPWS will prepare hydraulic calculations and a Utility Approval Letter to accompany the plans submittal to TDEC.
- Upon Construction Drawing approval by CPWS, applicant may then schedule the pre-construction meeting.
- After the pre-construction meeting, CPWS will then issue a formal Notice to Proceed.
- Applicant is required to construct all public water infrastructure per CPWS standard specifications and provide CPWS personnel unregulated access to the site to inspect the construction of the water infrastructure.
- Applicant may pay Impact Fees at time of application for Building Permit.
  - Applicants will be charged Impact Fees and Meter Fees in effect at time of payment.
  - Please see CPWS website for schedule of impact fees and timing of planned fee escalations.
  - Water meters will be ordered by CPWS once meter fees are paid by the Applicant.
  - Meter fees are subject to change based on final design and the prevailing Board-approved rates at time of payment.
  - No water meters will be placed prior to payment of Impact Fees.
- An estimate of anticipated meter costs and impact fees for this project is provided below for planning purposes:

Impact Fees and Meter Costs	Number	$ / Unit	Total
¾" Service Meter Cost	12	$540	$6,480
1" Irrigation Meter Cost	1	$710	$710
3" Domestic Service (Master) Meter Cost	2	Current Price	Deferred
4" Domestic Service (Master) Meter Cost	1	Current Price	Deferred
6" Fire Meter Cost	2	Current Price	Deferred
Current Impact Fee for ¾" Service Meter	12	$5,500	$165,000
Current Impact Fee for 1" Service Meter	1	$9,200	$9,200
Current Impact Fee for 3" Service Meter	2	$92,000	$184,000
Current Impact Fee for 4" Service Meter	1	$184,000	$184,000
Estimate of Fees Due Prior to Pre-Construction Meeting =			**$549,390**

- No construction of water improvements may take place prior to the Notice to Proceed or without a CPWS inspector present.

Please feel free to contact me at 931-388-4833 x7655 or Matt.Wheeler@cpws.com if you have questions or would like to discuss.

Sincerely,



Matthew J. Wheeler, P.E.
Vice President of Water Resources, CPWS

cc: Cliff Smith, CPS Land
Sophia Close, Kimley-Horn
Bart Anderson, CPWS
Eric King, Inflo Design Group
File 24-062

PRELIMINARY PLAT FOR

MCCLURE FARMS

2504 NASHVILLE HWY, COLUMBIA, TENNESSEE
PORTION OF MAP 051, PARCEL 006.00 & MAP 042, PARCEL 028.00
116 SINGLE FAMILY LOTS & 315 TOWNHOME UNITS



LOCATION MAP
NOT TO SCALE
COLUMBIA, MAURY COUNTY, TENNESSEE

THIS SITE PLAN HAS BEEN DESIGNED TO MEET THE CRITERIA OF THE CITY OF COLUMBIA, TENNESSEE. THE PLANS ARE NOT RELEASED FOR CONSTRUCTION UNTIL THE RELATIVE PERMIT HAS BEEN ISSUED BY THE MUNICIPALITY. CHANGES SHALL NOT BE MADE TO THE APPROVED SITE PLAN UNLESS APPROVED BY THE RELEVANT DEPARTMENT SUPERINTENDANT OR THE PLANNING COMMISSION.

UTILITY COMPANIES:

UTILITIES SHOWN ARE BASED ON LIMITED DATA. THERE IS NO GUARANTEE AS TO THEIR LOCATION OR SIZE. PLEASE CONTACT RESPECTIVE UTILITY COMPANIES PRIOR TO CONSTRUCTION. POSSIBLE CONTACTS IN THIS AREA INCLUDE:

MUNICIPALITY:	ELECTRIC:	CABLE TELEVISION:
CITY OF COLUMBIA 707 NORTH MAIN ST. COLUMBIA, TN 38401	COLUMBIA POWER & WATER SYSTEMS 201 PICKENS LANE COLUMBIA, TN 38401 (931) 388-4833	COLUMBIA POWER & WATER SYSTEMS 201 PICKENS LANE COLUMBIA, TN 38401 (931) 388-4833
STORM WATER:	**WATER:**	**CABLE TELEVISION:**
CITY OF COLUMBIA ENGINEERING/INSPECTION 707 N. MAIN STREET COLUMBIA, TN 38401 (931) 560-1530 Contact: Glenn Harper, P.E.	COLUMBIA POWER & WATER SYSTEMS 201 PICKENS LANE COLUMBIA, TN 38401 (931) 388-4833	CHARTER COMMUNICATIONS 2008 S. MAIN STREET COLUMBIA, TN 38401 (931) 388-1326
SANITARY:	**TELEPHONE:**	**GAS:**
CITY OF COLUMBIA WASTEWATER SYSTEM 1244 TREATMENT PLANT RD. COLUMBIA, TN 38401 (931) 560-1001 Donnie Boshers, Director	AT&T 904 S. HIGH ST COLUMBIA, TN 38401 JAMIE WHITFIELD (615) 975-0505 jw0972@att.com	ATMOS ENERGY 810 NASHVILLE HWY. COLUMBIA, TN 38401 (888) 824-3434 NASHVILLE (615) 872-5100

Tennessee 811
Know what's **below**
Call before you dig.

STORMWATER DETENTION AGREEMENT:
RECORDED: 10/14/2025
DEED BOOK: R3102 PAGE: 1354-1360

SHEET INDEX

1 - COVER SHEET
2 - EXISTING CONDITIONS
3 - OVERALL LAYOUT
4-8 - PRELIMINARY PLAT
9-16 - EXISTING CONDITIONS
17 - SLOPE ANALYSIS

GENERAL NOTES

1. PROPOSED USE: MIXED USE - RESIDENTIAL, MULTIFAMILY SUBDIVISION
2. A PRE CONSTRUCTION MEETING WITH THE MUNICIPALITY IS REQUIRED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING AND PROPOSED UTILITIES FROM DAMAGE DURING ALL STAGES OF CONSTRUCTION.
4. THE ENGINEER AND APPLICABLE AGENCY MUST APPROVE, PRIOR TO CONSTRUCTION, ANY ALTERATION, OR VARIANCE FROM THESE PLANS.
5. DEVELOPER SHALL COMPLY WITH TDEC EROSION PREVENTION AND SEDIMENTATION CONTROL HANDBOOK, CURRENT EDITION.
6. UNDERGROUND DRY UTILITIES SHALL BE EXTENDED FROM EXISTING LOCATIONS TO SERVICE THIS SITE AS REQUIRED BY UTILITY COMPANIES.
7. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS OR PROGRAMS UTILIZED IN CONNECTION WITH THE WORK, AND WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
8. HANDICAP PARKING SPACES SHALL BE MARKED WITH ABOVE GRADE SIGNS IN ACCORDANCE WITH CURRENT ADA STANDARDS. VAN ACCESSIBLE SPACES SHALL BE MARKED AS SUCH.
9. ALL ON-SITE TRAFFIC SIGNS SHALL MEET THE REQUIREMENTS OF THE CITY ENGINEERING REQUIREMENT, ZONING ORDINANCE, & THE MUTCD.
10. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF COLUMBIA TENNESSEE.
11. UTILITIES AS SHOWN INDICATE THE APPROXIMATE LOCATION OF FACILITIES ONLY AND NO GUARANTEE IS GIVEN TO THE COMPLETENESS OR ACCURACY THEREOF. NO EXCAVATION MAY BE MADE WITHIN 4 FEET OF THESE UTILITIES UNLESS AND UNTIL SUCH UTILITIES HAVE BEEN POSITIVELY LOCATED AS TO HORIZONTAL AND VERTICAL POSITION. CONTRACTOR SHALL CONTACT UTILITY COMPANY AND "TENNESSEE ONE CALL" AT 811 (1-800-351-1111) THREE WORKING DAYS PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXACT LOCATION OF ALL EXISTING UTILITIES.
12. THIS PROPERTY IS NOT LOCATED IN A FLOOD HAZARD AREA AS PER FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD BOUNDARY AND FLOODWAY MAP COMMUNITY PANEL NO. 47119C0180E, (ZONE X), DATED 04-16-2007.
13. THE LIMIT OF CONSTRUCTION IS SHOWN ON THE CONSTRUCTION PLANS. ANY WORK OUTSIDE OF THE LIMIT OF CONSTRUCTION IS TO BE COORDINATED BY THE CONTRACTOR AND PRE-APPROVED BY THE APPROPRIATE PROPERTY OWNER.

SITE DATA

PARCEL NUMBER	TAX MAP 051, PARCEL 006.00 DEED BOOK: R2813, PG 689
PARCEL ADDRESS:	2504 NASHVILLE HWY COLUMBIA, TENNESSEE 38401
EXISTING ZONING:	PUD (RS6-PUD)
MINIMUM REQUIRED BUILDING SETBACK LINES:	30'(RS-6), 35'(RM-1) FRONT (COLLECTOR) 40' FRONT (ARTERIAL) 20' REAR 7' SINGLE SIDE, 15' TOTAL (RS-6 & RM-1; TWO STORIES OR LESS) 12' SINGLE SIDE, 35' TOTAL (RS-6, THREE OR MORE STORIES) 10' SINGLE SIDE, 30' TOTAL (RM-1, THREE OR MORE STORIES)
PARCEL NUMBER	TAX MAP 042, PARCEL 028.00 DEED BOOK: R2813, PG 689
PARCEL ADDRESS:	2524 NASHVILLE HWY COLUMBIA, TENNESSEE 38401
EXISTING ZONING:	(PUD) RM1-PUD
ACREAGE OF SITE:	±62.82 ACRES(TAX MAP 042, PARCEL 028.00) ±32.47 ACRES(TAX MAP 051, PARCEL 006.00) ±95.29 ACRES(TOTAL)
DISTURBED ACREAGE:	± ACRES
PROPERTY OWNER:	GH TENNESSEE, LLC BARTON CREEK PLAZA III 3815 SOUTH CAPITAL OF TEXAS HIGHWAY, SUITE 275 AUSTIN, TX 78704 CHRIS LYNCH CLYNCH@GEHANHOMES.COM 512-483-9810

MCCLURE FARMS
2504 & 2524 NASHVILLE HIGHWAY
COLUMBIA, TENNESSEE

PROPRIETOR

DRB GROUP
4068 RURAL PLAINS CIRCLE, SUITE 200
FRANKLIN, TENNESSEE 37064
CONTACT: ANDREW DAVIDSON

PRIMARY CONTRACTOR INFORMATION:

COMPANY NAME: _____
CONTACT PHONE: _____

TDEC LEVEL I CERTIFIED 24 HOUR POINT OF CONTACT FOR SOIL EROSION CONTROL:
NAME: _____
PHONE: _____

STATE OF TENNESSEE NPDES PERMIT - NOTICE OF COVERAGE
TRACKING NUMBER: TNR182919
DATE: 12/27/2022

WES ENGINEERS & SURVEYORS
CIVIL ENGINEERS & LAND SURVEYORS
2486 NASHVILLE HIGHWAY
COLUMBIA, TN 38401
PHONE: (931) 388-2329
www.wesengineers.com
gerald@wesengineers.com

©2026

RELEASED FOR CONSTRUCTION WHEN APPROVED BY MUNICIPALITY

MCCLURE FARMS
2504 & 2524 NASHVILLE HIGHWAY
COLUMBIA, TENNESSEE 38401

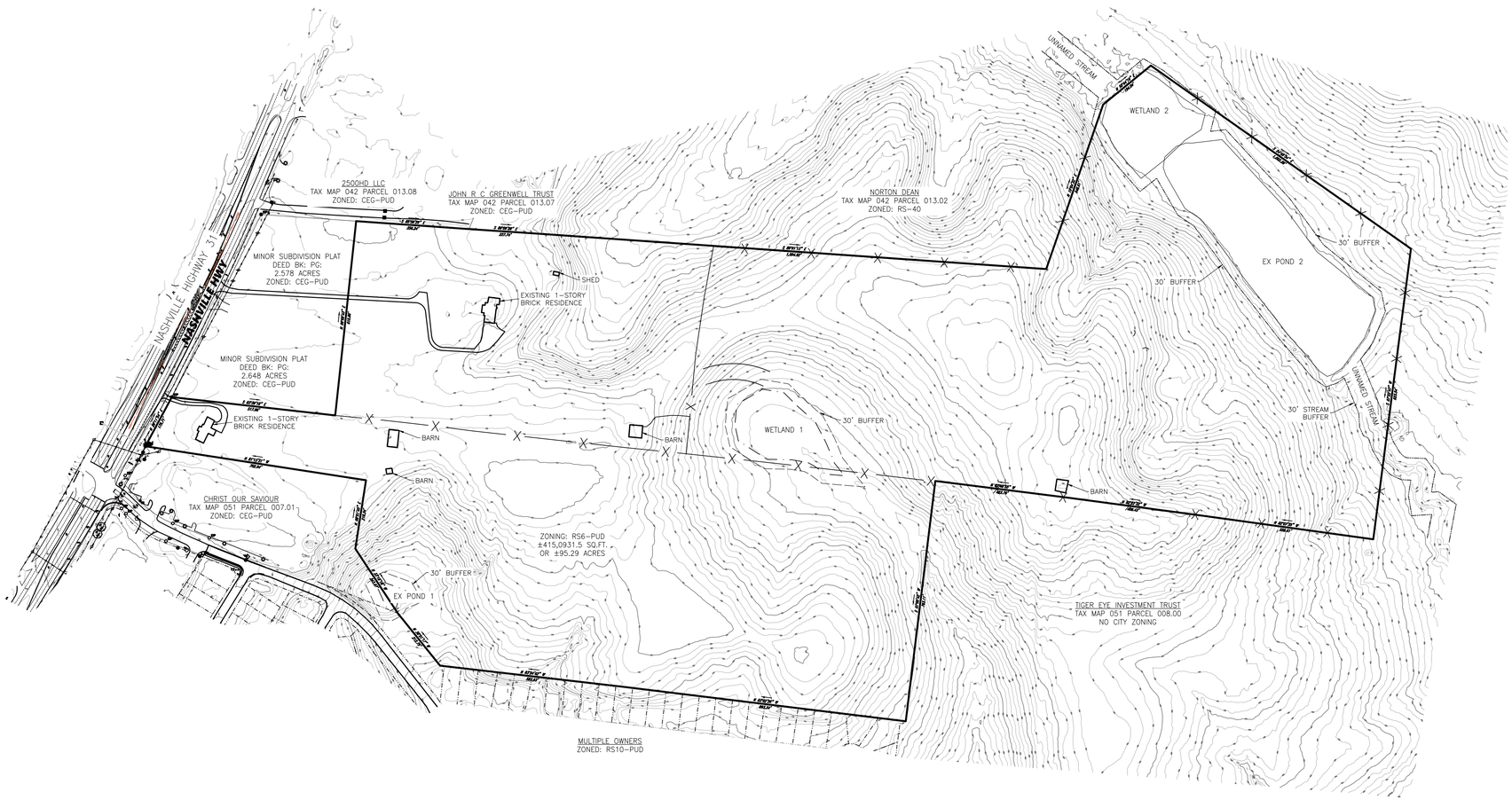
ENGINEER'S SEAL
GERALD W. WARWICK
No. 107415
STATE OF TENNESSEE
4-20-26

REVISIONS	DATE

PROJECT No. 23572-1
COVER
DATE: 04-20-2026

FILE: J:\ WES_Engineers_Surveyors 2023\23572 – McClure Farms – Smith\23572-1 Briteland Homes\Dwg\Survey\08 – PUD Master Plan\23572-1 – McClure – Preliminary Plat.dwg

© 2026



GRAPHIC SCALE

200 0 100 200 400 800

(IN FEET)
1 inch = 200 ft.

WES Engineers & Surveyors
CIVIL ENGINEERS & LAND SURVEYORS
2486 NASHVILLE HIGHWAY
COLUMBIA, TN 38401
PHONE: (931) 388-2329
www.wesengineers.com
ENGINEERS & SURVEYORS

Client
DRB GROUP
4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
PRELMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
EXISTING CONDITIONS

REVISIONS	DATE

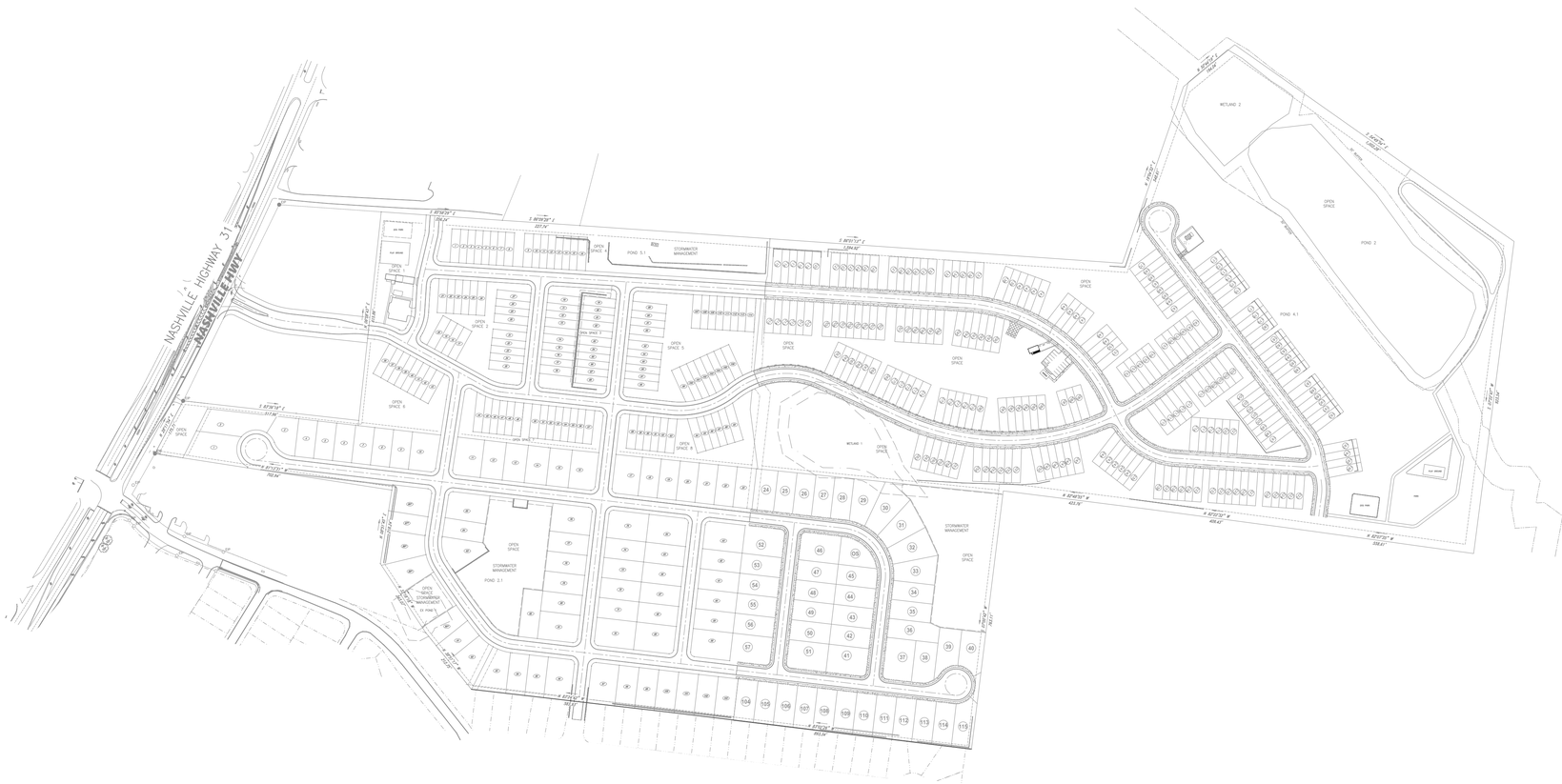
Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

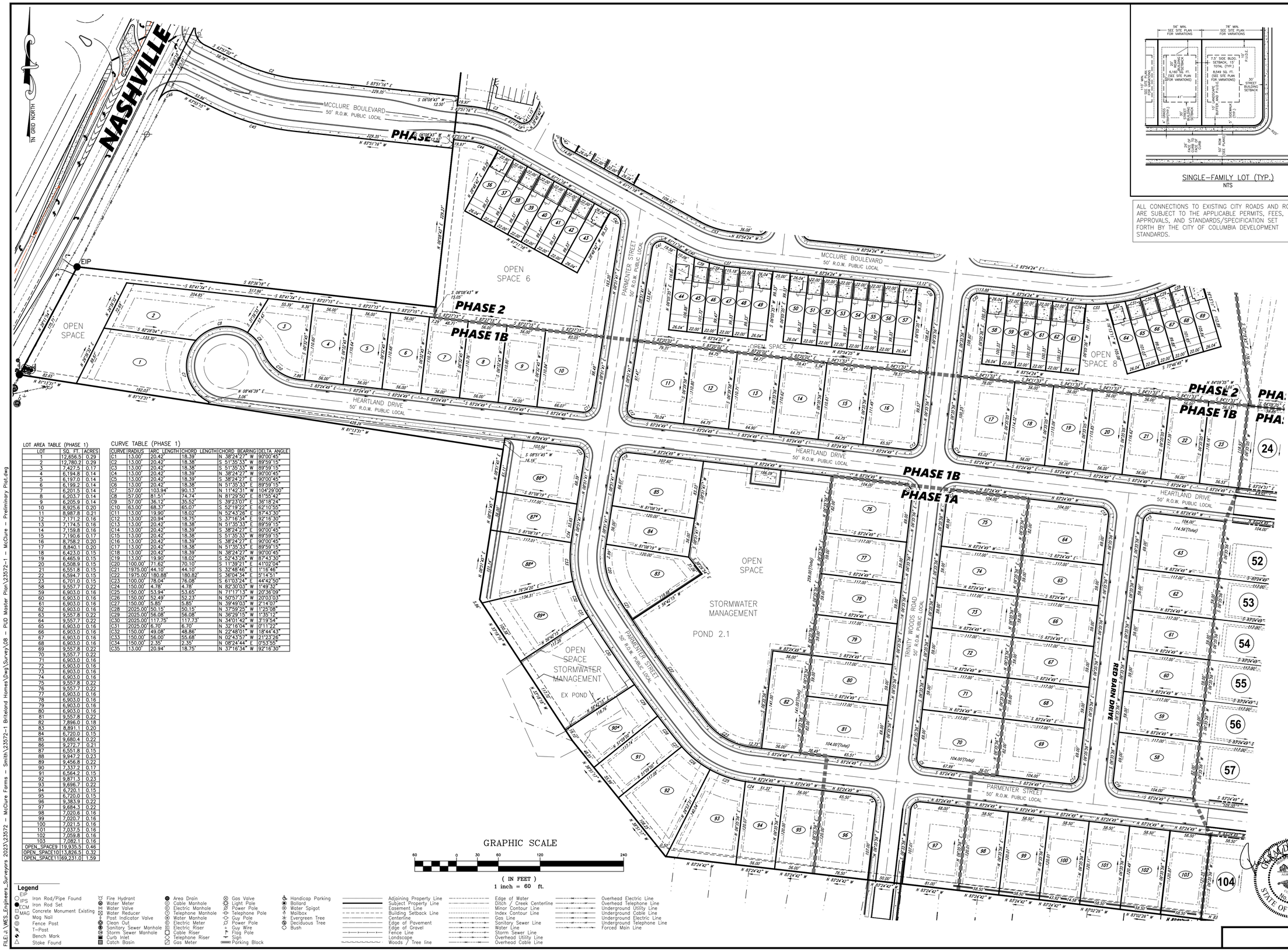
Job. no. 23572-1
Scale:
Vertical: 1" = 200'
Horizontal:

GREGORY A. VICK
LICENSED PROFESSIONAL ENGINEER
AGRICULTURE
No. 107415
STATE OF TENNESSEE
4/20/26

2 of 17

FILE: J:\ WES_Engineers_Surveyors 2023\23572 – McClure Farms – Smith\23572-1 Britelond Homes\Dwg\Survey\08 – PUD Master Plan\23572-1 – McClure – Preliminary Plat.dwg


NASHVILLE HIGHWAY 31
NASHVILLE HWY
OPEN SPACE
STORMWATER MANAGEMENT
POND 5.1
POND 2.1
POND 4.1
POND 2
WETLAND 1
WETLAND 2
S 87°57'01" E 1,284.42'
S 87°57'01" E 1,284.42'
S 87°57'01" E 1,284.42'



ALL CONNECTIONS TO EXISTING CITY ROADS AND ROW ARE SUBJECT TO THE APPLICABLE PERMITS, FEES, APPROVALS, AND STANDARDS/SPECIFICATION SET FORTH BY THE CITY OF COLUMBIA DEVELOPMENT STANDARDS.

© 2026

LOT AREA TABLE (PHASE 1)

LOT	SQ. FT.	ACRES
1	12,656.5	0.29
2	12,780.2	0.29
3	7,427.5	0.17
4	6,194.8	0.14
5	6,197.0	0.14
6	6,199.2	0.14
7	6,201.5	0.14
8	6,203.7	0.14
9	6,205.9	0.14
10	8,925.6	0.20
11	8,987.8	0.21
12	7,171.2	0.16
13	7,174.5	0.16
14	7,159.8	0.16
15	7,190.6	0.17
16	8,758.2	0.20
17	8,840.1	0.20
18	6,423.0	0.15
19	6,465.9	0.15
20	6,508.9	0.15
21	6,551.8	0.15
22	6,594.7	0.15
23	6,701.0	0.15
58	9,557.7	0.22
59	6,903.0	0.16
60	6,903.0	0.16
61	6,903.0	0.16
62	6,903.0	0.16
63	9,557.8	0.22
64	9,557.7	0.22
65	6,903.0	0.16
66	6,903.0	0.16
67	6,903.0	0.16
68	6,903.0	0.16
69	9,557.8	0.22
70	9,557.7	0.22
71	6,903.0	0.16
72	6,903.0	0.16
73	6,903.0	0.16
74	6,903.0	0.16
75	9,557.8	0.22
76	9,557.7	0.22
77	6,903.0	0.16
78	6,903.0	0.16
79	6,903.0	0.16
80	6,903.0	0.16
81	9,557.8	0.22
82	7,896.0	0.18
83	8,891.1	0.20
84	6,720.0	0.15
85	9,680.4	0.22
86	9,272.7	0.21
87	6,551.8	0.15
88	9,947.2	0.23
89	9,456.8	0.22
90	7,337.2	0.17
91	6,564.2	0.15
92	9,871.3	0.23
93	9,696.7	0.22
94	6,720.1	0.15
95	6,720.0	0.15
96	9,383.9	0.22
97	9,684.3	0.22
98	7,020.6	0.16
99	7,020.7	0.16
100	7,021.5	0.16
101	7,037.5	0.16
102	7,059.8	0.16
103	7,082.1	0.16
OPEN_SPACE9	19,935.5	0.46
OPEN_SPACE10	13,826.5	0.32
OPEN_SPACE11	69,231.0	1.59

CURVE TABLE (PHASE 1)

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	13.00'	20.42'	18.39'	N 38°24'27" W	90°00'45"
C2	13.00'	20.42'	18.38'	S 51°35'33" W	89°59'15"
C3	13.00'	20.42'	18.38'	S 51°35'33" W	89°59'15"
C4	13.00'	20.42'	18.39'	N 38°24'27" W	90°00'45"
C5	13.00'	20.42'	18.39'	S 38°24'27" E	90°00'45"
C6	13.00'	20.42'	18.38'	N 51°35'33" E	89°59'15"
C7	57.00'	103.94'	90.13'	N 11°42'31" W	104°29'00"
C8	57.00'	81.51'	74.74'	N 81°29'50" E	81°55'42"
C9	57.00'	36.12'	35.52'	S 39°23'07" E	36°18'24"
C10	63.00'	68.37'	65.07'	S 52°19'22" E	62°10'55"
C11	13.00'	19.90'	18.02'	N 52°43'26" E	87°43'30"
C12	13.00'	20.94'	18.75'	S 37°16'34" E	92°16'30"
C13	13.00'	20.42'	18.38'	N 51°35'33" E	89°59'15"
C14	13.00'	20.42'	18.39'	S 38°24'27" E	90°00'45"
C15	13.00'	20.42'	18.38'	S 51°35'33" W	89°59'15"
C16	13.00'	20.42'	18.39'	S 38°24'27" E	90°00'45"
C17	13.00'	20.42'	18.38'	N 51°35'33" E	89°59'15"
C18	13.00'	20.42'	18.39'	N 38°24'27" W	90°00'45"
C19	13.00'	19.90'	18.02'	S 52°43'26" W	87°43'30"
C20	100.00'	71.62'	70.10'	S 11°39'21" E	41°02'04"
C21	1975.00'	44.10'	44.10'	S 32°48'46" E	1°16'46"
C22	1975.00'	180.88'	180.82'	S 36°04'54" E	5°14'51"
C23	100.00'	78.04'	76.08'	S 61°03'24" E	44°42'50"
C24	150.00'	4.78'	4.78'	N 82°30'03" W	1°49'32"
C25	150.00'	53.94'	53.65'	N 71°17'13" W	20°36'09"
C26	150.00'	52.49'	52.23'	N 50°57'37" W	20°03'03"
C27	150.00'	5.85'	5.85'	N 39°49'03" W	2°14'07"
C28	2025.00'	50.15'	50.15'	N 37°59'25" W	1°25'08"
C29	2025.00'	56.08'	56.08'	N 36°29'15" W	1°35'12"
C30	2025.00'	117.75'	117.73'	N 34°01'42" W	3°19'54"
C31	2025.00'	6.70'	6.70'	N 32°16'04" W	0°11'22"
C32	150.00'	49.08'	48.86'	N 27°48'01" W	18°44'43"
C33	150.00'	56.00'	55.68'	N 02°43'57" W	21°23'26"
C34	150.00'	2.35'	2.35'	N 08°24'44" E	0°53'55"
C35	13.00'	20.94'	18.75'	N 37°16'34" W	92°16'30"

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

Legend

- EIP — Iron Rod/Pipe Found
- IPS — Iron Rod Set
- ECM — Concrete Monument Existing
- MAG — Mag Nail
- Fence Post
- T-Post
- Bench Mark
- Stake Found
- Fire Hydrant
- Water Meter
- Water Valve
- Water Reducer
- Post Indicator Valve
- Clean Out
- Sanitary Sewer Manhole
- Storm Sewer Manhole
- Curb Inlet
- Catch Basin
- Area Drain
- Cable Manhole
- Electric Manhole
- Telephone Manhole
- Water Manhole
- Electric Meter
- Electric Riser
- Cable Riser
- Telephone Riser
- Gas Meter
- Gas Valve
- Light Pole
- Power Pole
- Telephone Pole
- Guy Pole
- Power Pole
- Guy Wire
- Flag Pole
- Sign
- Parking Block
- Handicap Parking
- Bollard
- Water Spigot
- Mailbox
- Evergreen Tree
- Deciduous Tree
- Bush
- Adjoining Property Line
- Subject Property Line
- Easement Line
- Building Setback Line
- Centerline
- Edge of Pavement
- Edge of Gravel
- Fence Line
- Landscape
- Woods / Tree line
- Edge of Water
- Ditch / Creek Centerline
- Minor Contour Line
- Index Contour Line
- Gas Line
- Sanitary Sewer Line
- Water Line
- Storm Sewer Line
- Overhead Utility Line
- Overhead Cable Line
- Overhead Electric Line
- Overhead Telephone Line
- Underground Utility Line
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WES Engineers & Surveyors
CIVIL ENGINEERS & LAND SURVEYORS
2486 NASHVILLE HIGHWAY
COLUMBIA, TN 38401
PHONE: (931) 388-2329
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ENGINEERS & SURVEYORS

Client
DRB GROUP
4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
PRELIMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TENNESSEE
PHASE 1(1A & 1B)

REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical: 1" = 60'
Horizontal:



4 of 17

FILE: J:_WES_Engineers_Surveyors 2023\23572 – McClure Farms – Smith\23572–1 Britelend Homes\Dwg\Survey\08 – PUD Master Plan\23572–1 – McClure – Preliminary Plat.dwg

TN GRID NORTH

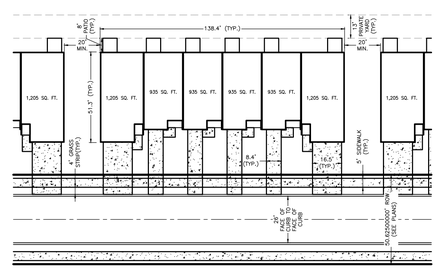
LOT AREA TABLE (PHASE 2)

LOT	SQ. FT.	ACRES
1	2,560.8	0.06
2	2,163.3	0.05
3	2,163.3	0.05
4	2,163.3	0.05
5	2,163.3	0.05
6	2,163.3	0.05
7	2,163.3	0.05
8	2,560.8	0.06
9	2,560.8	0.06
10	2,163.3	0.05
11	2,163.3	0.05
12	2,163.3	0.05
13	2,163.3	0.05
14	2,163.3	0.05
15	2,163.3	0.05
16	2,560.8	0.06
17	2,565.5	0.06
18	2,167.3	0.05
19	2,167.3	0.05
20	2,565.5	0.06
21	2,603.3	0.06
22	2,199.3	0.05
23	2,199.3	0.05
24	2,199.3	0.05
25	2,199.3	0.05
26	2,603.3	0.06
27	2,586.8	0.06
28	2,185.3	0.05
29	2,185.3	0.05
30	2,586.8	0.06
31	2,586.8	0.06
32	2,185.3	0.05
33	2,185.3	0.05
34	2,185.3	0.05
35	2,586.8	0.06
36	2,586.8	0.06
37	2,185.3	0.05
38	2,185.3	0.05
39	2,185.3	0.05
40	2,185.3	0.05
41	2,185.3	0.05
42	2,185.3	0.05
43	2,586.8	0.06
44	2,905.2	0.07
45	2,289.1	0.05
46	2,207.9	0.05
47	2,185.6	0.05
48	2,185.3	0.05
49	2,586.8	0.06
50	2,586.8	0.06
51	2,185.3	0.05
52	2,185.3	0.05
53	2,185.3	0.05
54	2,185.3	0.05
55	2,185.3	0.05
56	2,185.3	0.05
57	2,586.8	0.06
58	2,612.8	0.06
59	2,207.3	0.05
60	2,207.3	0.05
61	2,207.3	0.05
62	2,207.3	0.05
63	2,619.1	0.06
64	2,678.2	0.06
65	2,203.4	0.05
66	2,190.7	0.05
67	2,216.8	0.05
68	2,282.3	0.05
69	2,842.1	0.07
70	2,560.8	0.06
71	2,163.3	0.05
72	2,163.3	0.05
73	2,560.8	0.06
74	2,560.8	0.06
75	2,163.3	0.05
76	2,163.3	0.05
77	2,163.3	0.05
78	2,560.8	0.06
79	2,560.8	0.06
80	2,163.3	0.05
81	2,163.3	0.05
82	2,560.8	0.06
83	2,560.8	0.06
84	2,163.3	0.05
85	2,163.3	0.05
86	2,163.3	0.05
87	2,163.3	0.05
88	2,560.8	0.06
89	2,612.8	0.06
90	2,207.3	0.05
91	2,207.3	0.05
92	2,207.3	0.05
93	2,612.8	0.06
94	2,207.3	0.05
95	2,207.3	0.05
96	2,207.3	0.05
97	2,207.3	0.05
98	2,612.8	0.06
99	2,738.7	0.06
100	2,440.6	0.06
101	2,503.7	0.06
102	2,518.8	0.06
103	2,486.5	0.06
104	2,405.7	0.06
105	2,300.0	0.05
106	2,631.1	0.06
107	2,560.8	0.06
108	2,163.3	0.05
109	2,163.3	0.05
110	2,163.3	0.05
111	2,163.3	0.05
112	2,163.3	0.05
113	2,163.3	0.05
114	2,560.8	0.06

LOT	SQ. FT.	ACRES
OS-1	40,902.9	0.94
OS-2	31,367.4	0.72
OS-3	16,427.1	0.38
OS-4	89,803.4	2.06
OS-5	47,815.3	1.10
OS-6	36,936.8	0.85
OS-7	18,940.5	0.43
OS-8	28,783.2	0.66

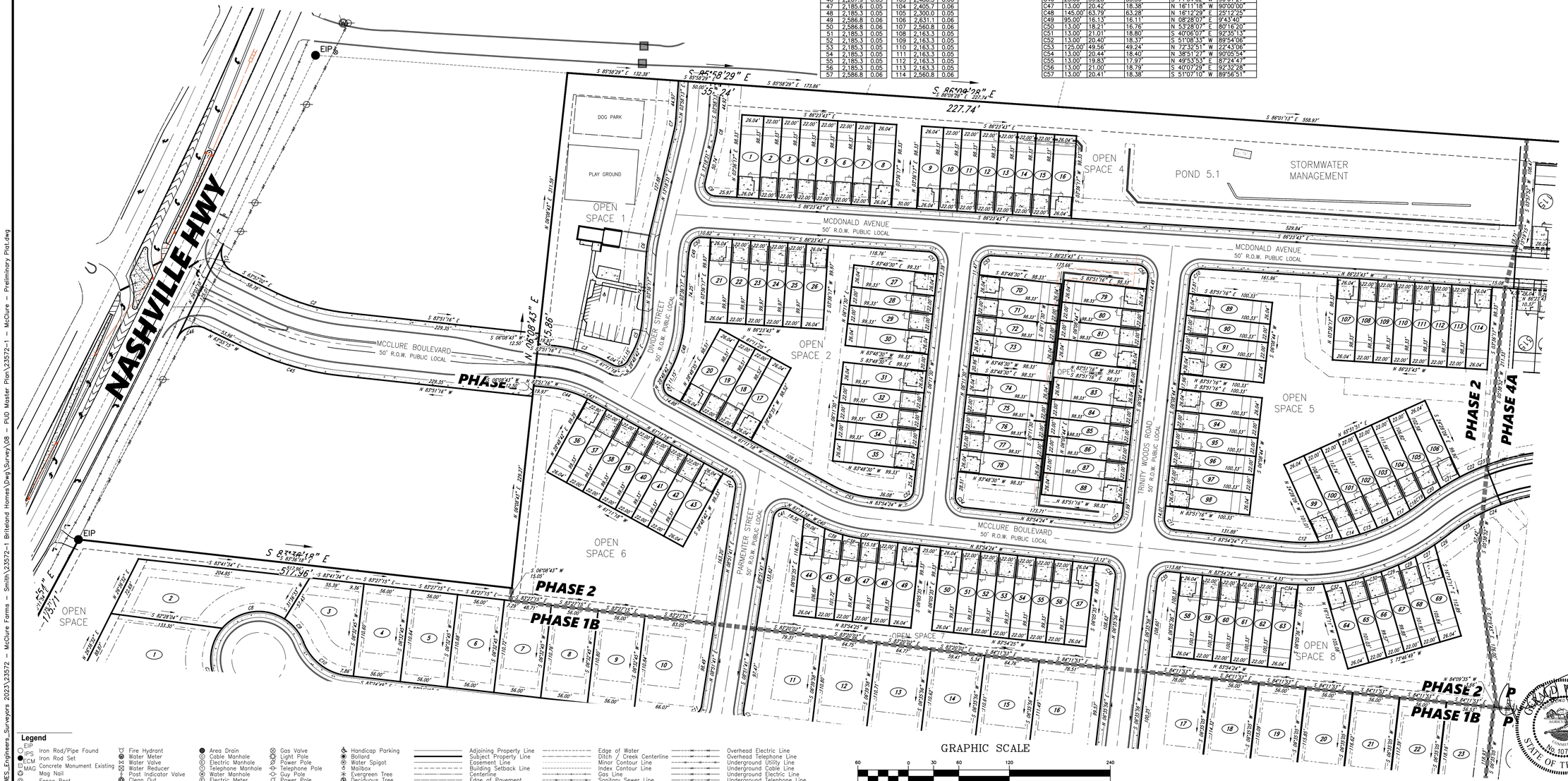
CURVE TABLE (PHASE 2)

CURVE	RADIUS	ARC LENGTH	CHORD	LENGTH	CHORD BEARING	DELTA ANGLE
C1	25.00'	39.27'	35.36'		S 18°58'50" E	90°00'20"
C2	262.50'	86.54'	86.15'		S 74°24'33" E	18°53'24"
C3	175.00'	69.23'	68.78'		S 72°31'17" E	22°39'57"
C4	13.00'	20.42'	18.38'		N 73°48'42" E	90°00'00"
C5	95.00'	41.79'	41.46'		N 16°12'29" E	25°12'25"
C6	145.00'	24.56'	24.53'		N 08°27'24" E	9°42'14"
C7	95.00'	15.48'	15.47'		N 08°38'22" E	9°20'17"
C8	145.00'	23.63'	23.61'		S 08°38'22" W	9°20'17"
C9	13.00'	22.62'	19.87'		S 35°32'36" E	99°42'14"
C10	13.00'	19.84'	17.97'		S 49°52'31" W	87°27'32"
C11	13.00'	20.43'	18.39'		S 38°52'50" W	90°03'09"
C12	225.00'	41.36'	41.30'		S 89°10'22" E	10°31'55"
C13	225.00'	27.19'	27.17'		N 82°06'00" E	6°55'23"
C14	225.00'	22.37'	22.36'		N 75°47'28" E	5°41'44"
C15	225.00'	22.08'	22.07'		N 70°07'53" E	5°37'21"
C16	225.00'	22.01'	22.00'		N 64°31'03" E	5°36'19"
C17	225.00'	22.16'	22.15'		N 58°53'37" E	5°38'52"
C18	225.00'	18.34'	18.33'		N 53°44'15" E	4°40'11"
C19	275.00'	4.17'	4.17'		N 51°50'14" E	0°52'09"
C20	275.00'	22.41'	22.41'		N 54°36'24" E	4°40'10"
C21	275.00'	26.19'	26.18'		N 59°40'11" E	5°27'23"
C22	275.00'	33.92'	33.90'		N 65°55'53" E	7°04'02"
C23	275.00'	2.07'	2.07'		N 69°40'50" E	0°25'51"
C24	225.00'	23.85'	23.84'		S 66°36'35" W	6°04'24"
C25	225.00'	47.79'	47.70'		S 57°29'17" W	12°10'14"
C26	275.00'	21.15'	21.15'		S 53°36'22" W	4°24'24"
C27	275.00'	26.99'	26.98'		S 58°37'16" W	5°37'25"
C28	275.00'	22.35'	22.34'		S 63°45'40" W	4°39'21"
C29	275.00'	22.10'	22.10'		S 68°23'30" W	4°36'19"
C30	275.00'	22.01'	22.00'		S 72°59'13" W	4°35'07"
C31	275.00'	22.05'	22.05'		S 77°34'37" W	4°35'42"
C32	275.00'	26.36'	26.35'		S 82°37'16" W	5°29'35"
C33	275.00'	29.75'	29.74'		S 88°28'00" W	6°11'54"
C34	275.00'	21.73'	21.72'		N 86°10'14" W	4°31'39"
C35	13.00'	20.31'	18.30'		S 51°20'46" W	89°29'40"
C36	13.00'	20.54'	18.47'		N 38°39'14" W	90°30'20"
C37	175.00'	6.83'	6.83'		N 82°47'21" W	2°14'06"
C38	175.00'	22.13'	22.12'		N 78°02'56" W	7°14'44"
C39	175.00'	22.61'	22.60'		N 70°43'29" W	7°24'11"
C40	175.00'	17.82'	17.81'		N 64°06'21" W	5°50'06"
C41	13.00'	24.95'	21.29'		S 63°50'11" W	109°57'01"
C42	13.00'	15.89'	14.92'		N 26°09'49" W	70°02'59"
C43	125.00'	3.14'	3.14'		N 61°54'29" W	1°26'22"
C44	125.00'	46.31'	46.04'		N 73°14'28" W	21°13'35"
C45	337.50'	117.42'	116.83'		N 73°53'15" W	19°56'01"
C46	25.00'	39.28'	35.36'		S 71°04'02" W	90°01'27"
C47	13.00'	20.42'	18.38'		N 16°11'18" W	90°00'00"
C48	145.00'	63.79'	63.28'		N 16°12'29" E	25°12'25"
C49	95.00'	16.13'	16.11'		N 08°28'07" E	9°43'40"
C50	13.00'	18.21'	16.76'		N 53°28'07" E	80°16'20"
C51	13.00'	21.01'	18.80'		S 40°06'07" E	92°35'13"
C52	13.00'	20.40'	18.37'		S 51°08'33" W	89°54'06"
C53	125.00'	49.56'	49.24'		N 72°32'51" W	22°43'06"
C54	13.00'	20.44'	18.40'		N 38°51'27" W	90°05'54"
C55	13.00'	19.83'	17.97'		N 49°53'53" E	87°24'47"
C56	13.00'	21.00'	18.79'		S 40°07'29" E	92°32'28"
C57	13.00'	20.41'	18.38'		S 51°07'10" W	89°56'51"



MULTI-FAMILY LOT (TYP.)
NTS

ALL CONNECTIONS TO EXISTING CITY ROADS AND ROW ARE SUBJECT TO THE APPLICABLE PERMITS, FEES, APPROVALS, AND STANDARDS/SPECIFICATION SET FORTH BY THE CITY OF COLUMBIA DEVELOPMENT STANDARDS.



Legend

- EIP Iron Rod/Pipe Found
- IPS Iron Rod Set
- ECM Concrete Monument Existing
- MAG Mag Nail
- Fence Post
- T-Post
- Bench Mark
- Stake Found
- Fire Hydrant
- Water Meter
- Water Valve
- Water Reducer
- Post Indicator Valve
- Clean Out
- Sanitary Sewer Manhole
- Storm Sewer Manhole
- Curb Inlet
- Catch Basin
- Area Drain
- Cable Manhole
- Electric Manhole
- Telephone Manhole
- Water Manhole
- Electric Meter
- Electric Riser
- Cable Riser
- Telephone Riser
- Gas Meter
- Gas Valve
- Light Pole
- Power Pole
- Telephone Pole
- Guy Pole
- Power Pole
- Guy Wire
- Flag Pole
- Sign
- Parking Block
- Handicap Parking
- Bollard
- Water Spigot
- Mailbox
- Evergreen Tree
- Deciduous Tree
- Bush
- Adjoining Property Line
- Subject Property Line
- Easement Line
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- Overhead Cable Line
- Overhead Electric Line
- Overhead Telephone Line
- Underground Utility Line
- Underground Cable Line
- Underground Electric Line
- Underground Telephone Line
- Forced Main Line

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

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COLUMBIA, TN 38401
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Client
DRB GROUP
4068 RURAL PLANNS CIRCLE
SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
PRELMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
PHASE 2

REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical: 1" = 60'
Horizontal:

GREGORY A. VERTICK
REGISTERED ENGINEER
No. 107415
STATE OF TENNESSEE

5 of 17

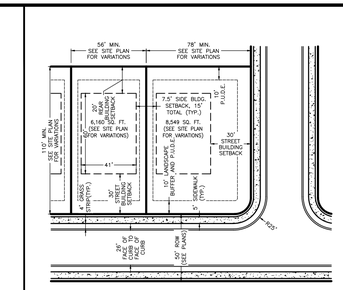
FILE: J:_WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Britelond Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - Preliminary Plat.dwg

TN GRID NORTH

LOT AREA TABLE (PHASE 3)

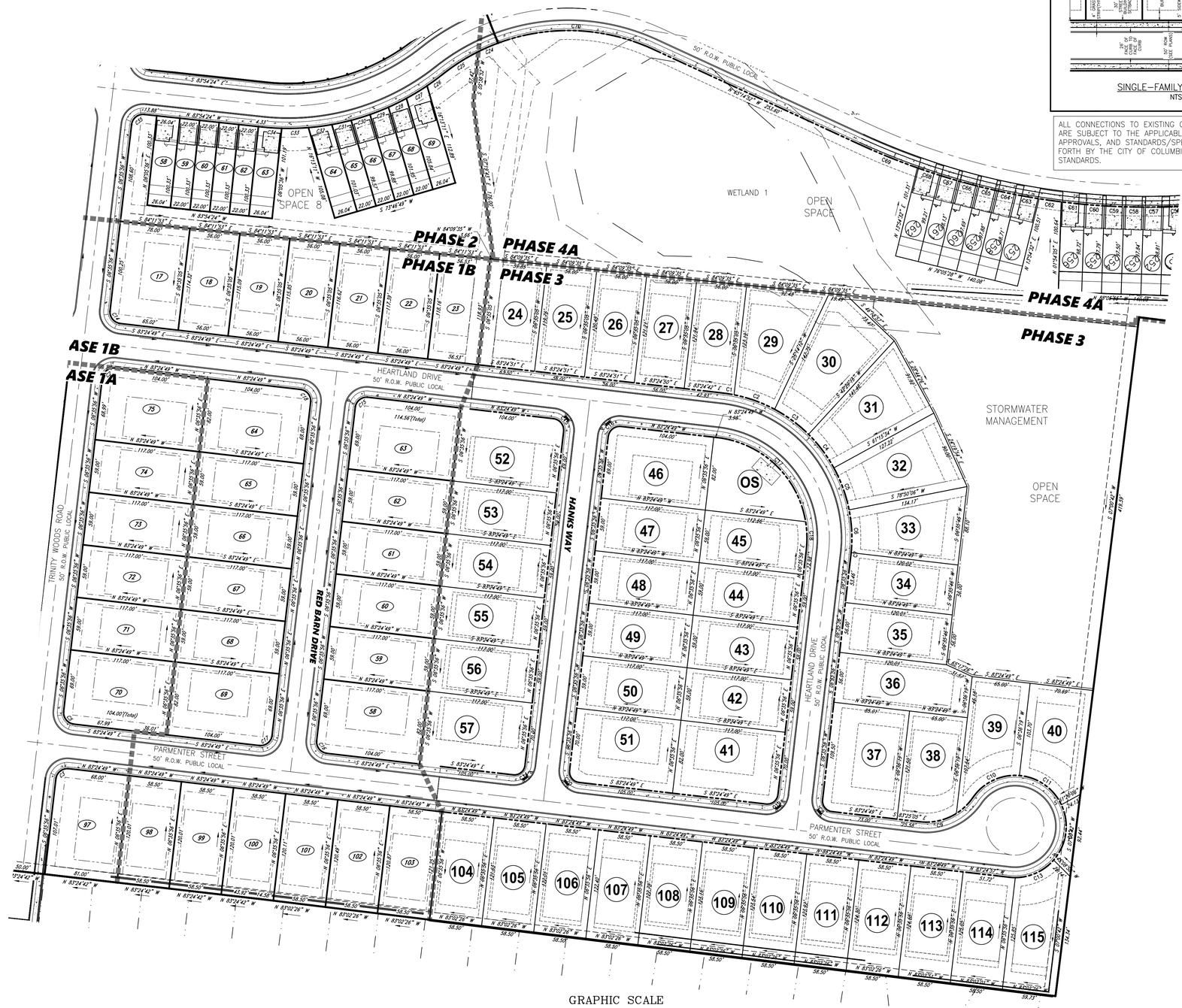
LOT	SQ. FT.	ACRES
24	7,578.2	0.17
25	6,726.7	0.15
26	6,767.5	0.16
27	6,808.3	0.16
28	6,851.4	0.16
29	9,053.4	0.21
30	9,980.3	0.23
31	9,055.0	0.21
32	8,946.0	0.21
33	8,404.7	0.19
34	6,720.3	0.15
35	6,720.3	0.15
36	8,253.5	0.19
37	10,297.2	0.24
38	7,724.1	0.18
39	7,857.1	0.18
40	8,070.3	0.19
41	9,563.1	0.22
42	6,903.0	0.16
43	6,903.0	0.16
44	6,903.0	0.16
45	6,858.4	0.16
46	9,557.8	0.22
47	6,903.0	0.16
48	6,903.0	0.16
49	6,903.0	0.16
50	6,903.0	0.16
51	9,563.1	0.22
52	9,557.7	0.22
53	6,903.0	0.16
54	6,903.0	0.16
55	6,903.0	0.16
56	6,903.0	0.16
57	6,903.0	0.16
104	7,104.4	0.16
105	7,126.7	0.16
106	7,148.9	0.16
107	7,171.0	0.22
108	7,193.3	0.17
109	7,215.5	0.17
110	7,238.1	0.17
111	7,260.4	0.17
112	7,282.7	0.17
113	7,305.0	0.17
114	7,327.3	0.17
115	8,246.6	0.19

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	DELTA ANGLE
C1	170.56'	13.08'	N 81°09'11" W	4°23'36"
C2	160.70'	48.24'	N 70°21'09" W	17°12'09"
C3	164.57'	47.18'	N 53°37'51" W	16°25'34"
C4	167.00'	47.55'	N 37°20'39" W	16°18'31"
C5	163.95'	50.00'	N 19°57'10" W	17°28'09"
C6	162.02'	48.00'	N 02°43'44" W	16°58'33"
C7	184.33'	2.54'	N 06°09'12" E	0°47'18"
C8	12.00'	18.85'	N 38°24'27" W	90°00'45"
C9	63.00'	42.60'	S 77°12'53" W	38°44'55"
C10	57.00'	60.17'	S 64°58'49" W	60°29'05"
C11	57.00'	59.63'	S 53°08'44" E	59°55'55"
C12	57.00'	65.95'	N 07°58'02" E	66°17'41"
C13	57.00'	48.39'	N 65°26'03" E	48°38'22"
C14	12.00'	18.85'	S 51°35'33" W	89°59'15"
C15	13.00'	20.43'	S 38°24'27" E	90°00'45"
C16	13.00'	20.43'	N 51°35'33" E	89°59'15"
C17	113.00'	146.10'	N 48°22'30" W	74°04'39"
C18	113.00'	31.43'	N 01°22'07" W	15°56'06"
C19	12.00'	18.85'	S 51°35'33" W	90°01'01"
C20	112.00'	18.85'	S 38°24'27" E	89°59'04"



SINGLE-FAMILY LOT (TYP.)
NTS

ALL CONNECTIONS TO EXISTING CITY ROADS AND ROW ARE SUBJECT TO THE APPLICABLE PERMITS, FEES, APPROVALS, AND STANDARDS/SPECIFICATION SET FORTH BY THE CITY OF COLUMBIA DEVELOPMENT STANDARDS.



Legend

- EIP — Iron Rod/Pipe Found
- IPS — Iron Rod Set
- CMC — Concrete Monument Existing
- MAG — Mag Nail
- Fence Post
- T-Post
- Bench Mark
- Stake Found
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- Cable Riser
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- Gas Meter
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- Telephone Pole
- Guy Pole
- Power Pole
- Guy Wire
- Flag Pole
- Sign
- Parking Block
- Handicap Parking
- Bollard
- Water Spigot
- Mailbox
- Evergreen Tree
- Deciduous Tree
- Bush
- Adjoining Property Line
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- Underground Electric Line
- Underground Telephone Line
- Forced Main Line

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

GERALD W. WORICK
LICENSED PROFESSIONAL ENGINEER
AGRICULTURE
COMMERCE
No. 107415
STATE OF TENNESSEE

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Client
DRB GROUP
4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
PRELIMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
PHASE 3

REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GW
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical: 1" = 60'
Horizontal:

6 of 17

FILE: J:\WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Briteland Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - Preliminary Plat.dwg

LOT AREA TABLE (PHASE 4)

LOT	SQ. FT.	ACRES
115	12,560.81	0.06
116	12,163.16	0.05
117	12,163.16	0.05
118	12,163.16	0.05
119	12,163.16	0.05
120	12,560.81	0.06
121	12,560.81	0.06
122	12,163.16	0.05
123	12,163.16	0.05
124	12,163.16	0.05
125	12,163.16	0.05
126	12,560.81	0.06
127	12,560.81	0.06
128	12,163.16	0.05
129	12,163.16	0.05
130	12,163.16	0.05
131	12,163.16	0.05
132	12,560.81	0.06
133	12,559.88	0.06
134	12,152.52	0.05
135	12,152.52	0.05
136	12,152.52	0.05
137	12,670.16	0.05
138	12,617.42	0.06
139	12,166.43	0.05
140	12,147.09	0.05
141	12,148.02	0.05
142	12,159.20	0.05
143	12,623.13	0.06
144	12,590.10	0.06
145	12,155.11	0.05
146	12,146.21	0.05
147	12,556.88	0.06
148	12,586.11	0.06
149	12,158.10	0.05
150	12,155.11	0.05
151	12,579.45	0.06
152	12,585.99	0.06
153	12,208.43	0.05
154	12,214.91	0.05
155	12,215.01	0.05

LOT	SQ. FT.	ACRES
156	12,215.01	0.05
157	12,560.81	0.06
158	12,163.16	0.05
159	12,163.16	0.05
160	12,560.81	0.06
161	12,163.16	0.05
162	12,560.81	0.06
163	12,560.81	0.06
164	12,163.16	0.05
165	12,163.16	0.05
166	12,163.16	0.05
167	12,163.16	0.05
168	12,163.16	0.05
169	12,163.16	0.05
170	12,560.81	0.06
171	12,612.89	0.06
172	12,207.30	0.05
173	12,207.30	0.05
174	12,207.30	0.05
175	12,207.30	0.05
176	12,612.89	0.06
177	12,612.89	0.06
178	12,207.30	0.05
179	12,207.30	0.05
180	12,612.89	0.06
181	12,612.89	0.06
182	12,207.30	0.05
183	12,207.30	0.05
184	12,207.30	0.05
185	12,207.30	0.05
186	12,612.89	0.06
187	12,616.80	0.06
188	12,610.50	0.06
189	12,207.30	0.05
190	12,210.50	0.05
191	12,210.50	0.05
192	12,618.60	0.06
193	12,603.80	0.06
194	12,189.00	0.05
195	12,189.01	0.05

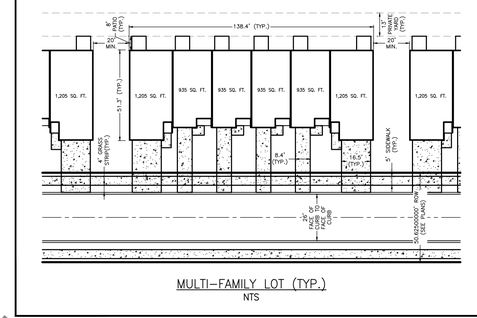
LOT	SQ. FT.	ACRES
196	12,291.92	0.06
197	12,259.93	0.06
198	12,165.51	0.05
199	12,165.51	0.05
200	12,165.51	0.05
201	12,165.51	0.05
202	12,165.51	0.05
203	12,165.51	0.05
204	12,165.51	0.05
205	12,560.81	0.06
206	12,165.51	0.05
207	12,165.51	0.05
208	12,165.51	0.05
209	12,165.51	0.05
210	12,560.81	0.06
211	12,163.16	0.05
212	12,163.16	0.05
213	12,163.16	0.05
214	12,169.71	0.05
215	12,560.81	0.06
216	12,560.81	0.06
217	12,163.88	0.05
218	12,163.88	0.05
219	12,163.88	0.05
220	12,163.88	0.05
221	12,561.36	0.06
222	12,562.29	0.06
223	12,163.88	0.05
224	12,163.88	0.05
225	12,163.88	0.05
226	12,560.88	0.06
227	12,560.88	0.06
228	12,163.88	0.05
229	12,163.88	0.05
230	12,163.88	0.05
231	12,163.88	0.05
232	12,560.88	0.06
233	12,560.88	0.06
234	12,163.88	0.05
235	12,163.88	0.05
236	12,163.31	0.05

LOT	SQ. FT.	ACRES
237	12,182.11	0.05
238	12,687.01	0.06
239	12,702.51	0.06
240	12,188.21	0.05
241	12,149.21	0.05
242	12,149.21	0.05
243	12,218.13	0.05
244	12,769.81	0.06
245	12,586.71	0.06
246	12,157.11	0.05
247	12,146.11	0.05
248	12,149.11	0.05
249	12,166.11	0.05
250	12,605.11	0.06
251	12,597.11	0.06
252	12,592.03	0.06
253	12,147.81	0.05
254	12,142.14	0.05
255	12,160.51	0.05
256	12,592.03	0.06
257	12,592.03	0.06
258	12,161.31	0.05
259	12,156.11	0.05
260	12,152.91	0.05
261	12,169.81	0.05
262	12,609.01	0.06
263	12,594.41	0.06
264	12,159.71	0.05
265	12,191.71	0.05
266	12,191.71	0.05
267	12,191.71	0.05
268	12,594.31	0.06
269	12,594.31	0.06
270	12,191.71	0.05
271	12,191.71	0.05
272	12,191.71	0.05
273	12,190.71	0.05
274	12,577.81	0.06
275	12,593.13	0.06
276	12,224.51	0.05
277	12,239.51	0.05

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	DELTA ANGLE
C1	525.00'	21.04'	S 85°14'55" E	2°17'42"
C2	525.00'	26.10'	S 82°40'29" E	2°50'54"
C3	525.00'	35.34'	S 79°19'19" E	3°51'25"
C4	525.00'	26.19'	S 75°57'51" E	2°51'31"
C5	525.00'	22.04'	S 73°19'56" E	2°24'20"
C6	525.00'	22.01'	S 70°53'43" E	2°24'06"
C7	525.00'	22.01'	S 68°31'37" E	2°24'06"
C8	525.00'	22.05'	S 66°07'29" E	2°24'29"
C9	525.00'	26.21'	S 63°39'23" E	2°51'56"
C10	525.00'	29.80'	S 60°26'40" E	3°13'50"
C11	525.00'	26.14'	S 57°24'11" E	2°51'16"
C12	525.00'	22.02'	S 54°46'50" E	2°24'11"
C13	525.00'	22.00'	S 52°22'39" E	2°24'04"
C14	525.00'	26.07'	S 49°44'59" E	2°50'44"
C15	525.00'	27.80'	S 46°48'36" E	3°02'06"
C16	525.00'	26.11'	S 43°50'03" E	2°51'06"
C17	525.00'	22.01'	S 41°14'29" E	2°24'07"
C18	525.00'	22.00'	S 38°50'22" E	2°24'04"
C19	525.00'	26.09'	S 36°12'55" E	2°50'51"
C20	525.00'	95.60'	S 29°34'30" E	10°25'59"
C21	13.00'	21.47'	S 71°40'11" E	94°37'21"
C22	713.97'	43.14'	S 59°17'17" E	3°27'43"
C23	713.97'	26.09'	S 56°30'31" E	2°05'38"
C24	713.97'	22.01'	N 54°34'49" E	1°45'58"
C25	713.97'	8.81'	N 53°20'36" E	0°42'24"
C26	13.00'	20.42'	N 07°59'24" E	90°00'00"
C27	537.00'	140.03'	N 84°04'54" E	14°56'54"
C28	63.00'	68.37'	S 09°55'09" E	62°10'55"
C29	175.00'	12.73'	S 34°55'33" E	4°10'06"
C30	175.00'	42.89'	S 25°49'11" E	14°02'31"
C31	175.00'	23.75'	S 14°54'44" E	7°46'29"
C32	175.00'	56.86'	S 01°42'58" W	18°37'04"
C33	125.00'	40.62'	N 01°42'58" W	18°37'04"
C34	13.00'	18.34'	N 51°25'52" W	80°48'45"
C35	225.00'	14.22'	N 87°51'09" W	3°37'42"
C36	225.00'	7.50'	N 85°04'47" W	1°55'03"
C37	225.00'	22.08'	N 81°18'53" W	5°37'25"
C38	225.00'	26.54'	N 75°07'07" W	6°45'28"

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	DELTA ANGLE
C39	225.00'	10.78'	N 70°22'05" W	2°44'40"
C40	225.00'	26.79'	N 65°30'09" W	6°49'18"
C41	225.00'	22.18'	N 59°20'58" W	5°38'56"
C42	225.00'	22.02'	N 53°43'18" W	5°36'24"
C43	225.00'	22.08'	N 48°06'33" W	5°37'07"
C44	225.00'	22.33'	N 42°27'29" W	5°41'10"
C45	225.00'	27.11'	N 36°09'44" W	6°54'11"
C46	225.00'	6.39'	N 31°53'48" W	1°37'49"
C47	113.00'	118.64'	N 72°08'59" W	82°08'01"
C48	764.00'	96.55'	S 70°24'13" W	7°14'26"
C49	764.00'	26.10'	S 76°00'10" W	1°57'28"
C50	764.00'	22.02'	S 78°48'28" W	1°39'04"
C51	764.00'	22.02'	S 80°27'32" W	1°39'04"
C52	764.00'	22.01'	S 82°06'28" W	1°39'01"
C53	764.00'	22.03'	S 81°45'28" W	1°39'07"
C54	764.00'	26.13'	S 83°33'53" W	1°57'34"
C55	764.00'	27.16'	S 85°33'46" W	2°02'13"
C56	764.00'	26.12'	S 87°33'36" W	1°57'34"
C57	764.00'	22.02'	S 89°21'57" W	1°39'06"
C58	764.00'	22.02'	N 88°59'00" W	1°39'00"
C59	764.00'	22.00'	N 87°20'00" W	1°39'00"
C60	764.00'	22.02'	N 85°40'57" W	1°39'05"
C61	764.00'	26.11'	N 83°55'35" W	1°57'30"
C62	764.00'	25.00'	N 81°57'40" W	1°52'29"
C63	764.00'	22.00'	N 80°09'24" W	1°39'03"
C64	764.00'	22.02'	N 78°14'25" W	1°39'04"
C65	764.00'	26.09'	N 76°18'08" W	1°57'28"
C66	764.00'	22.01'	N 74°56'25" W	1°39'01"
C67	764.00'	22.03'	N 73°17'19" W	1°39'07"
C68	764.00'	26.13'	N 71°38'58" W	1°57'34"
C69	764.00'	70.08'	N 67°52'29" W	5°15'19"
C70	225.00'	177.13'	N 87°48'03" W	45°06'21"
C71	275.00'	210.83'	S 88°08'27" E	43°55'35"
C72	275.00'	4.46'	S 65°47'46" E	0°55'46"
C73	714.00'	116.07'	S 69°53'43" E	9°18'42"
C74	714.00'	26.08'	S 67°34'58" E	2°05'30"
C75	714.00'	51.28'	S 70°41'11" E	4°06'55"
C76	714.00'	26.13'	S 73°47'32" E	2°05'48"

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	DELTA ANGLE
C77	714.00'	22.02'	S 75°43'59" E	1°46'03"
C78	714.00'	22.00'	S 77°29'27" E	1°45'52"
C79	714.00'	22.00'	S 79°15'23" E	1°45'56"
C80	714.00'	21.86'	S 81°01'14" E	1°45'24"
C81	714.00'	26.19'	S 82°57'09" E	2°06'06"
C82	714.00'	57.04'	S 86°17'31" E	4°34'18"
C83	714.00'	26.12'	S 88°37'43" E	2°05'47"
C84	714.00'	22.02'	N 89°29'29" E	1°46'00"
C85	714.00'	22.00'	N 87°43'29" E	1°45'52"
C86	714.00'	22.00'	N 85°54'28" E	1°45'51"
C87	714.00'	22.00'	N 83°58'27" E	1°45'51"
C88	714.00'	26.13'	N 81°12'51" E	2°05'48"
C89	714.00'	26.07'	N 77°58'41" E	2°05'21"
C90	714.00'	26.05'	N 74°41'14" E	2°05'25"
C91	714.00'	22.00'	N 72°45'33" E	1°45'56"
C92	714.00'	26.07'	N 69°49'45" E	2°05'19"
C93	714.00'	32.16'	N 68°29'37" E	2°34'52"
C94	113.00'	21.26'	N 20°20'48" E	9°58'48"
C95	475.00'	377.50'	N 49°18'39" W	45°32'08"
C96	475.00'	26.09'	N 73°31'03" W	3°08'48"
C97	475.00'	22.05'	N 76°32'19" W	2°39'36"
C98	475.00'	22.01'	N 79°11'45" W	2°39'16"
C99	475.00'	22.01'	N 81°51'01" W	2°39'17"
C100	475.00'	22.06'	N 84°30'30" W	2°39'39"
C101	475.00'	4.61'	N 86°07'05" W	0°33'24"
C102	13.00'	20.42'	S 82°00'36" E	90°00'00"
C103	537.00'	40.09'	S 73°48'08" E	4°16'58"
C104	13.00'	25.03'	S 38°48'36" W	110°18'11"
C105	175.00'	160.59'	N 58°45'01" W	52°34'38"
C106	113.00'	21.47'	N 13°50'30" E	94°36'24"
C107	764.00'	51.54'	N 59°12'44" E	3°51'56"
C108	764.00'	26.09'	N 56°18'05" E	1°57'23"
C109	764.00'	22.01'	N 54°29'53" E	1°39'02"
C110	764.00'	9.10'	N 53°19'53" E	0°40'58"



MULTI-FAMILY LOT (TYP.)
NTS

ALL CONNECTIONS TO EXISTING CITY ROADS AND ROW ARE SUBJECT TO THE APPLICABLE PERMITS, FEES, APPROVALS, AND STANDARDS/SPECIFICATION SET FORTH BY THE CITY OF COLUMBIA DEVELOPMENT STANDARDS.

Legend

- EIP — Iron Rod/Pipe Found
- IPS — Iron Rod Set
- ECM — Concrete Monument Existing
- MAG — Mag Nail
- Fence Post
- T — T-Post
- Bench Mark
- Stake Found
- Fire Hydrant
- Water Meter
- Water Valve
- Water Reducer
- Post Indicator Valve
- Clean Out
- Sanitary Sewer Manhole
- Storm Sewer Manhole
- Curb Inlet
- Catch Basin
- Area Drain
- Cable Manhole
- Electric Manhole
- Telephone Manhole
- Water Manhole
- Electric Meter
- Electric Riser
- Cable Riser
- Telephone Riser
- Gas Meter
- Gas Valve
- Light Pole
- Power Pole
- Telephone Pole
- Guy Pole
- Power Pole
- Guy Wire
- Flag Pole
- Sign
- Parking Block
- Handicap Parking
- Bollard
- Water Spigot
- Mailbox
- Evergreen Tree
- Deciduous Tree
- Bush
- Adjoining Property Line
- Subject Property Line
- Easement Line
- Building Setback Line
- Centerline
- Edge of Pavement
- Edge of Gravel
- Fence Line
- Landscape
- Woods / Tree line
- Edge of Water
- Ditch / Creek Centerline
- Minor Contour Line
- Index Contour Line
- Gas Line
- Sanitary Sewer Line
- Water Line
- Storm Sewer Line
- Overhead Utility Line
- Overhead Cable Line
- Overhead Electric Line
- Overhead Telephone Line
- Underground Utility Line
- Underground Cable Line
- Underground Electric Line
- Underground Telephone Line
- Forced Main Line

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.



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COLUMBIA, TN 38401
PHONE: (931) 388-2329
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DRB GROUP
4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
PRELIMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
PHASE 4

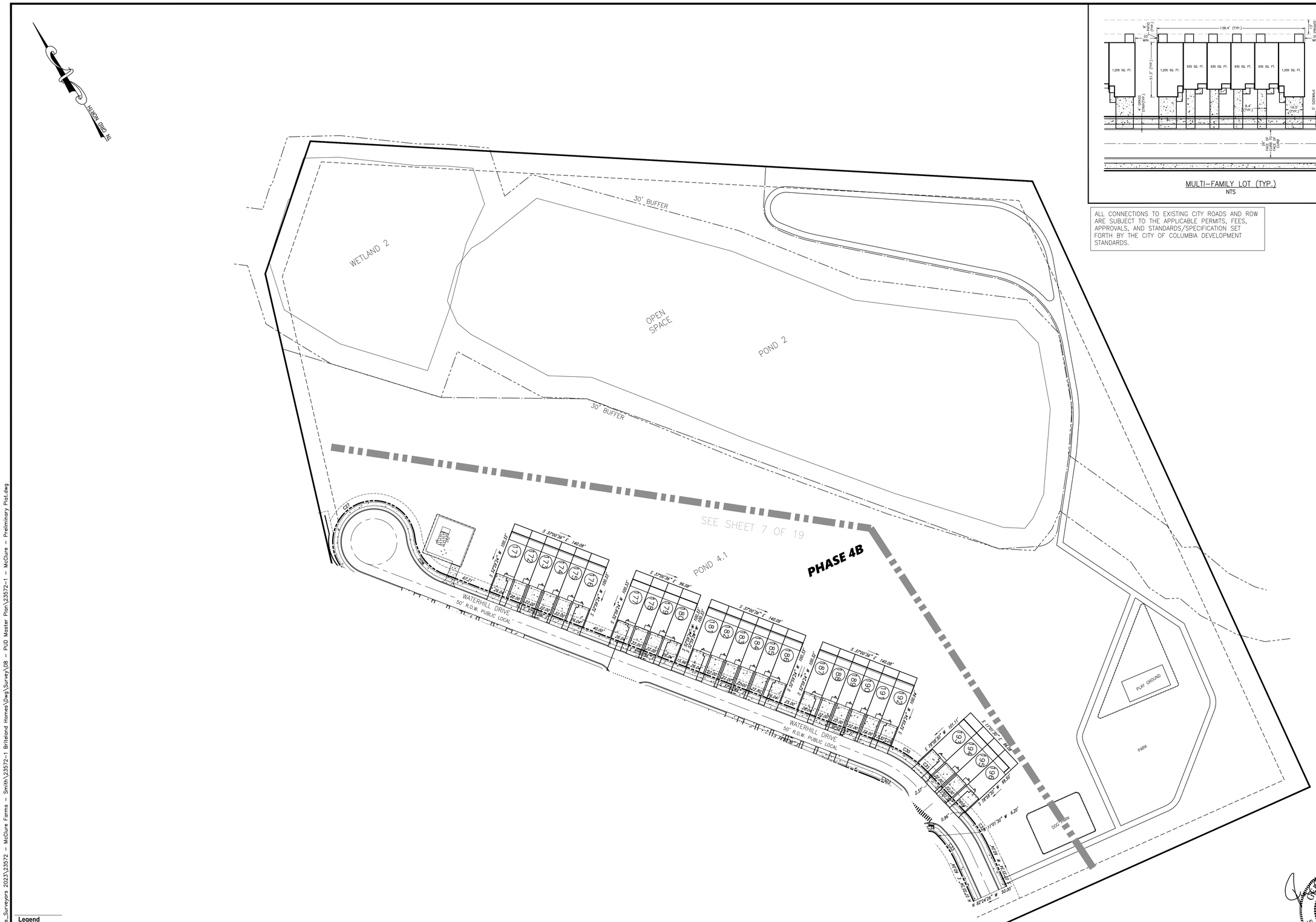
DATE	REVISIONS

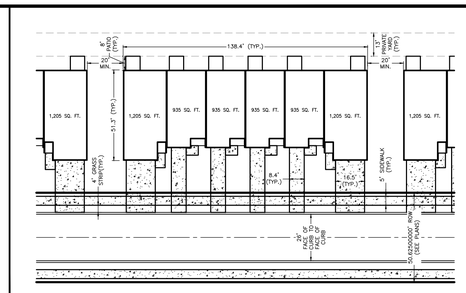
Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale: Vertical: 1" = 60'
Horizontal:

7 of 17

FILE: J:_WES_Engineers_Surveyors 2023\23572 – McClure Farms – Smith\23572–1 Briteland Homes\Dwg\Survey\08 – PUD Master Plan\23572–1 – McClure – Preliminary Plat.dwg





MULTI-FAMILY LOT (TYP.)
NTS

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GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

Legend

- EIP Iron Rod/Pipe Found
- IPS Iron Rod Set
- ECM Concrete Monument Existing
- MAG Mag Nail
- Fence Post
- T-Post
- Bench Mark
- Stake Found
- Fire Hydrant
- Water Meter
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- Cable Manhole
- Electric Manhole
- Telephone Manhole
- Water Manhole
- Electric Meter
- Electric Riser
- Cable Riser
- Telephone Riser
- Gas Meter
- Gas Valve
- Light Pole
- Power Pole
- Telephone Pole
- Guy Pole
- Power Pole
- Guy Wire
- Flag Pole
- Sign
- Parking Block
- Handicap Parking
- Bollard
- Water Spigot
- Mailbox
- Evergreen Tree
- Deciduous Tree
- Bush
- Adjoining Property Line
- Subject Property Line
- Easement Line
- Building Setback Line
- Centerline
- Edge of Pavement
- Edge of Gravel
- Fence Line
- Landscape
- Woods / Tree line
- Edge of Water
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- Minor Contour Line
- Index Contour Line
- Gas Line
- Sanitary Sewer Line
- Water Line
- Storm Sewer Line
- Overhead Utility Line
- Overhead Cable Line
- Overhead Electric Line
- Overhead Telephone Line
- Underground Utility Line
- Underground Cable Line
- Underground Electric Line
- Underground Telephone Line
- Forced Main Line

GERALD W. VICK
STATE OF TENNESSEE
No. 107415
4/20/26

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4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
PRELMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
PHASE 4

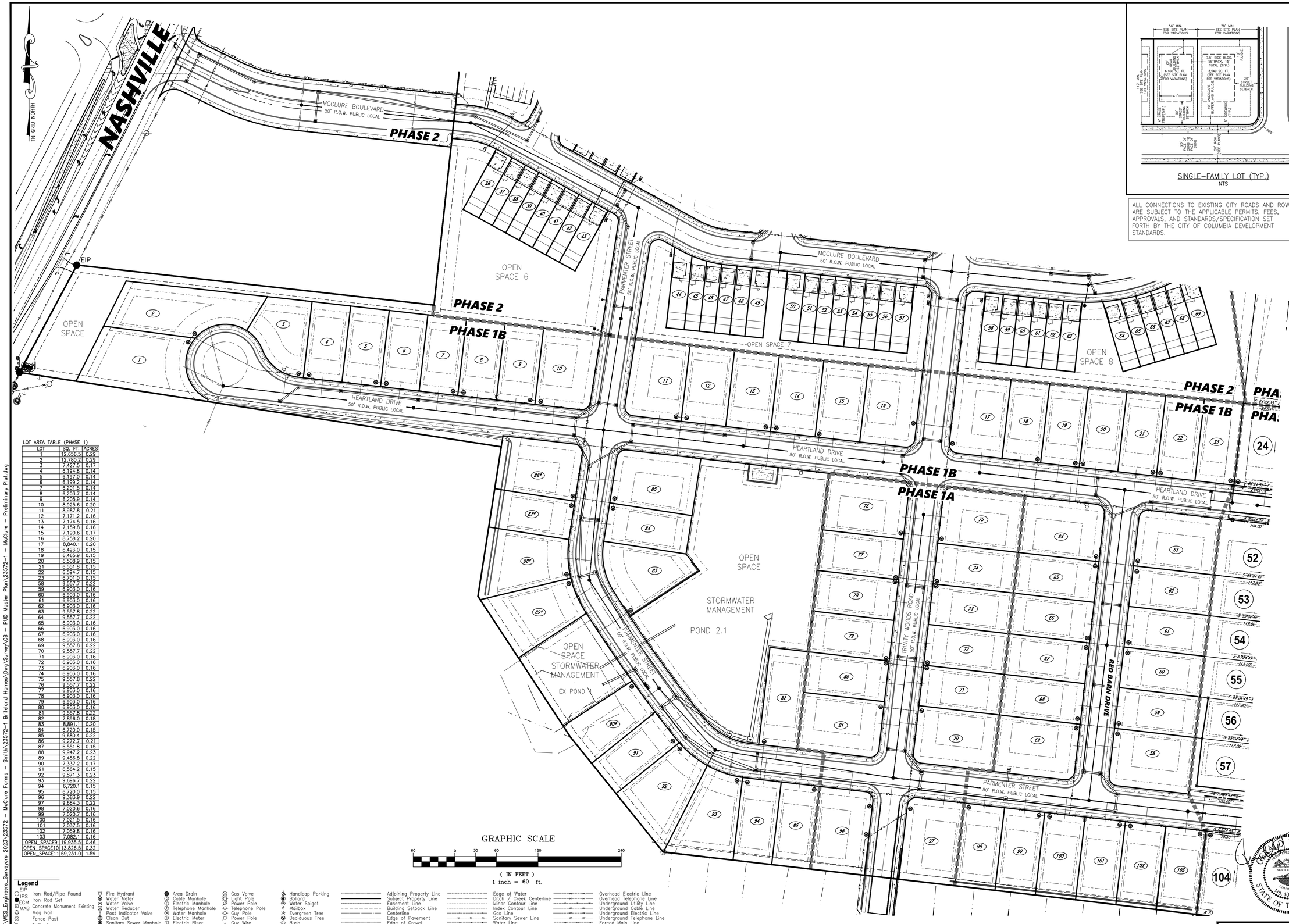
REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical:
Horizontal: 1" = 60'

8 of 17

FILE: J:\WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Briteland Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - Preliminary Plat.dwg



SINGLE-FAMILY LOT (TYP.)
NTS

ALL CONNECTIONS TO EXISTING CITY ROADS AND ROW ARE SUBJECT TO THE APPLICABLE PERMITS, FEES, APPROVALS, AND STANDARDS/SPECIFICATION SET FORTH BY THE CITY OF COLUMBIA DEVELOPMENT STANDARDS.

LOT AREA TABLE (PHASE 1)

LOT	SQ. FT.	ACRES
1	12,656.5	0.29
2	12,780.2	0.29
3	7,427.5	0.17
4	6,194.8	0.14
5	6,197.0	0.14
6	6,199.2	0.14
7	6,201.5	0.14
8	6,203.7	0.14
9	6,205.9	0.14
10	8,925.6	0.20
11	8,987.8	0.21
12	7,171.2	0.16
13	7,174.5	0.16
14	7,159.8	0.16
15	7,190.6	0.17
16	8,758.2	0.20
17	8,840.1	0.20
18	6,423.0	0.15
19	6,465.9	0.15
20	6,508.9	0.15
21	6,551.8	0.15
22	6,594.7	0.15
23	6,701.0	0.15
58	9,557.7	0.22
59	6,903.0	0.16
60	6,903.0	0.16
61	6,903.0	0.16
62	6,903.0	0.16
63	9,557.8	0.22
64	9,557.7	0.22
65	6,903.0	0.16
66	6,903.0	0.16
67	6,903.0	0.16
68	6,903.0	0.16
69	9,557.8	0.22
70	9,557.7	0.22
71	6,903.0	0.16
72	6,903.0	0.16
73	6,903.0	0.16
74	6,903.0	0.16
75	9,557.8	0.22
76	9,557.7	0.22
77	6,903.0	0.16
78	6,903.0	0.16
79	6,903.0	0.16
80	6,903.0	0.16
81	9,557.8	0.22
82	7,896.0	0.18
83	8,891.1	0.20
84	6,720.0	0.15
85	9,680.4	0.22
86	9,272.7	0.21
87	6,551.8	0.15
88	9,947.2	0.23
89	9,456.8	0.22
90	7,337.2	0.17
91	6,564.2	0.15
92	9,871.3	0.23
93	9,696.7	0.22
94	6,720.1	0.15
95	6,720.0	0.15
96	9,383.9	0.22
97	9,684.3	0.22
98	7,020.6	0.16
99	7,020.7	0.16
100	7,021.5	0.16
101	7,037.5	0.16
102	7,059.8	0.16
103	7,062.1	0.16
OPEN_SPACE9	19,935.5	0.46
OPEN_SPACE10	13,826.5	0.32
OPEN_SPACE11	69,231.0	1.59

Legend

EIP Iron Rod/Pipe Found
IPS Iron Rod Set
ECM Concrete Monument Existing
MAG Mag Nail
Fence Post
T-Post
Bench Mark
Stake Found
Fire Hydrant
Water Meter
Water Valve
Water Reducer
Post Indicator Valve
Clean Out
Sanitary Sewer Manhole
Storm Sewer Manhole
Curb Inlet
Catch Basin
Area Drain
Cable Manhole
Electric Manhole
Telephone Manhole
Water Manhole
Electric Meter
Electric Riser
Cable Riser
Telephone Riser
Gas Meter
Gas Valve
Light Pole
Power Pole
Telephone Pole
Guy Pole
Power Pole
Guy Wire
Flag Pole
Sign
Parking Block
Handicap Parking
Bollard
Water Spigot
Mailbox
Evergreen Tree
Deciduous Tree
Bush
Adjoining Property Line
Subject Property Line
Easement Line
Building Setback Line
Centerline
Edge of Pavement
Edge of Gravel
Fence Line
Landscape
Woods / Tree line
Edge of Water
Ditch / Creek Centerline
Minor Contour Line
Index Contour Line
Gas Line
Sanitary Sewer Line
Water Line
Storm Sewer Line
Overhead Utility Line
Overhead Cable Line
Overhead Electric Line
Overhead Telephone Line
Underground Utility Line
Underground Cable Line
Underground Electric Line
Underground Telephone Line
Forced Main Line

GRANT W. BRYCK 2026
LICENSED PROFESSIONAL ENGINEER
AGENCY SEAL
No. 107415
STATE OF TENNESSEE

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Client
DRB GROUP
4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
PRELIMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
UTILITIES - PHASE 1(1A & 1B)

REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale: Vertical: 1" = 60'
Horizontal:

9 of 17

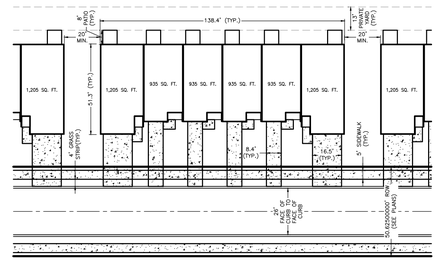
FILE: J:\ WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Briteland Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - Preliminary Plat.dwg

TN GRID NORTH

LOT AREA TABLE (PHASE 2)

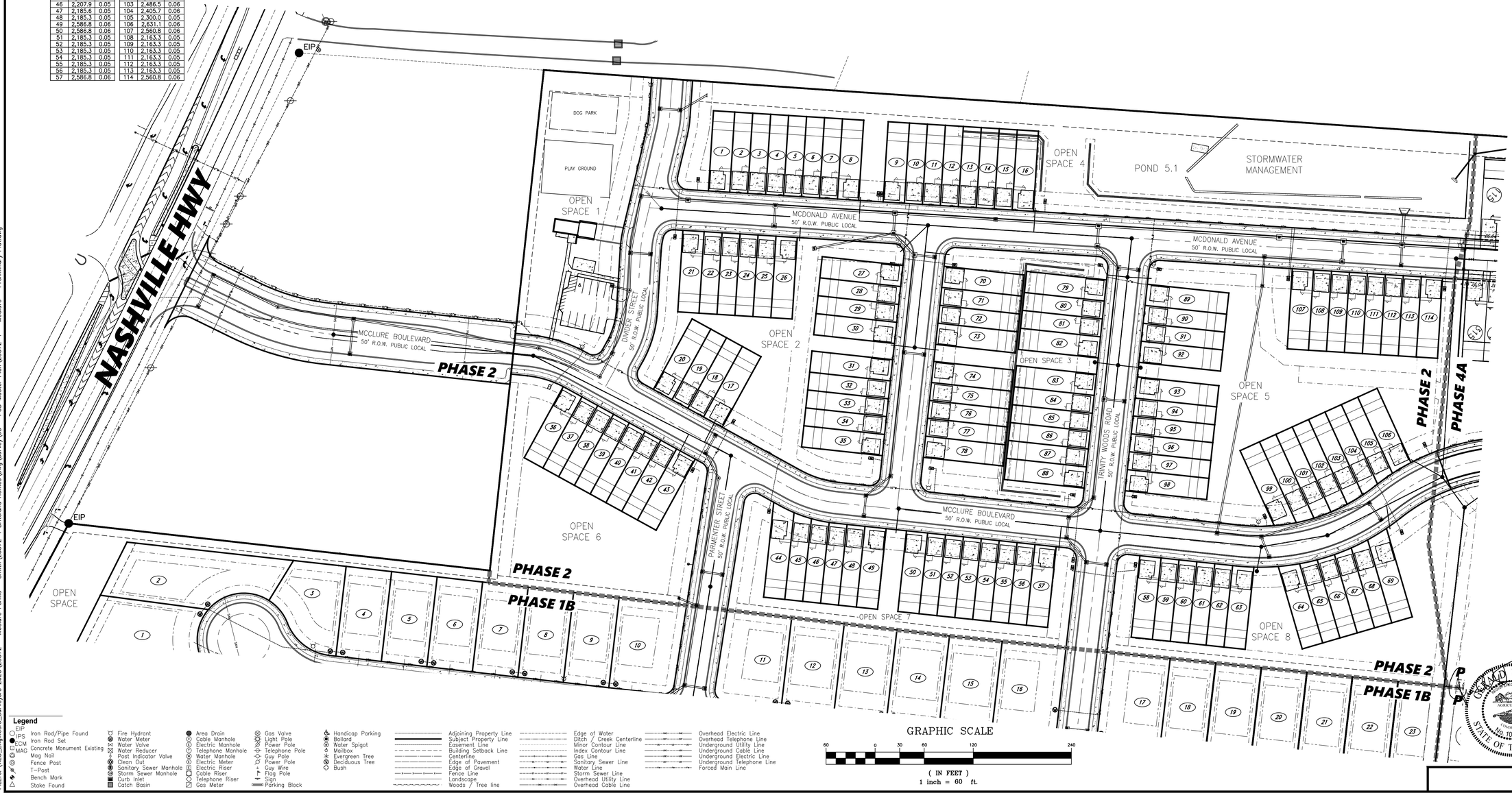
LOT	SQ. FT.	ACRES
1	2,560.8	0.06
2	2,163.3	0.05
3	2,163.3	0.05
4	2,163.3	0.05
5	2,163.3	0.05
6	2,163.3	0.05
7	2,163.3	0.05
8	2,560.8	0.06
9	2,560.8	0.06
10	2,163.3	0.05
11	2,163.3	0.05
12	2,163.3	0.05
13	2,163.3	0.05
14	2,163.3	0.05
15	2,163.3	0.05
16	2,560.8	0.06
17	2,565.5	0.06
18	2,167.3	0.05
19	2,167.3	0.05
20	2,565.5	0.06
21	2,603.3	0.06
22	2,199.3	0.05
23	2,199.3	0.05
24	2,199.3	0.05
25	2,199.3	0.05
26	2,603.3	0.06
27	2,586.8	0.06
28	2,185.3	0.05
29	2,185.3	0.05
30	2,586.8	0.06
31	2,586.8	0.06
32	2,185.3	0.05
33	2,185.3	0.05
34	2,185.3	0.05
35	2,586.8	0.06
36	2,586.8	0.06
37	2,185.3	0.05
38	2,185.3	0.05
39	2,185.3	0.05
40	2,185.3	0.05
41	2,185.3	0.05
42	2,185.3	0.05
43	2,586.8	0.06
44	2,905.2	0.07
45	2,289.1	0.05
46	2,207.9	0.05
47	2,185.6	0.05
48	2,185.3	0.05
49	2,586.8	0.06
50	2,586.8	0.06
51	2,185.3	0.05
52	2,185.3	0.05
53	2,185.3	0.05
54	2,185.3	0.05
55	2,185.3	0.05
56	2,185.3	0.05
57	2,586.8	0.06
58	2,612.8	0.06
59	2,207.3	0.05
60	2,207.3	0.05
61	2,207.3	0.05
62	2,207.3	0.05
63	2,619.1	0.06
64	2,678.2	0.06
65	2,203.4	0.05
66	2,190.7	0.05
67	2,216.8	0.05
68	2,282.3	0.05
69	2,842.1	0.07
70	2,560.8	0.06
71	2,163.3	0.05
72	2,163.3	0.05
73	2,560.8	0.06
74	2,560.8	0.06
75	2,163.3	0.05
76	2,163.3	0.05
77	2,163.3	0.05
78	2,560.8	0.06
79	2,560.8	0.06
80	2,163.3	0.05
81	2,163.3	0.05
82	2,560.8	0.06
83	2,560.8	0.06
84	2,163.3	0.05
85	2,163.3	0.05
86	2,163.3	0.05
87	2,163.3	0.05
88	2,560.8	0.06
89	2,612.8	0.06
90	2,207.3	0.05
91	2,207.3	0.05
92	2,207.3	0.05
93	2,612.8	0.06
94	2,207.3	0.05
95	2,207.3	0.05
96	2,207.3	0.05
97	2,207.3	0.05
98	2,612.8	0.06
99	2,738.7	0.06
100	2,440.6	0.06
101	2,503.7	0.06
102	2,518.8	0.06
103	2,486.5	0.06
104	2,405.7	0.06
105	2,300.0	0.05
106	2,631.1	0.06
107	2,560.8	0.06
108	2,163.3	0.05
109	2,163.3	0.05
110	2,163.3	0.05
111	2,163.3	0.05
112	2,163.3	0.05
113	2,163.3	0.05
114	2,560.8	0.06

LOT	SQ. FT.	ACRES
OS-1	40,902.9	0.94
OS-2	31,367.4	0.72
OS-3	16,427.1	0.38
OS-4	89,803.4	2.06
OS-5	47,815.3	1.10
OS-6	36,936.8	0.85
OS-7	18,940.3	0.43
OS-8	28,783.2	0.66



MULTI-FAMILY LOT (TYP.)
NTS

ALL CONNECTIONS TO EXISTING CITY ROADS AND ROW ARE SUBJECT TO THE APPLICABLE PERMITS, FEES, APPROVALS, AND STANDARDS/SPECIFICATION SET FORTH BY THE CITY OF COLUMBIA DEVELOPMENT STANDARDS.



Legend

- EIP — Iron Rod/Pipe Found
- IPS — Iron Rod Set
- ECM — Concrete Monument Existing
- MAG — Mag Nail
- Fence Post
- T-Post
- Bench Mark
- Stake Found
- Fire Hydrant
- Water Meter
- Water Valve
- Water Reducer
- Post Indicator Valve
- Clean Out
- Sanitary Sewer Manhole
- Storm Sewer Manhole
- Curb Inlet
- Catch Basin
- Area Drain
- Cable Manhole
- Electric Manhole
- Telephone Manhole
- Water Manhole
- Electric Meter
- Electric Riser
- Cable Riser
- Telephone Riser
- Gas Meter
- Gas Valve
- Light Pole
- Power Pole
- Telephone Pole
- Guy Pole
- Power Pole
- Guy Wire
- Flag Pole
- Sign
- Parking Block
- Handicap Parking
- Bollard
- Water Spigot
- Mailbox
- Evergreen Tree
- Deciduous Tree
- Bush
- Adjoining Property Line
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- Overhead Utility Line
- Overhead Cable Line
- Overhead Electric Line
- Overhead Telephone Line
- Underground Utility Line
- Underground Cable Line
- Underground Electric Line
- Underground Telephone Line
- Forced Main Line

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

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FRANKLIN, TN 37064

MCCLURE FARMS
PRELMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
UTILITIES – PHASE 2

REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical: 1" = 60'
Horizontal:

10 of 17

GERALD V. GOYCK, JR. — LICENSED PROFESSIONAL ENGINEER — No. 107415 — STATE OF TENNESSEE

FILE: J:\ WES_Engineers_Surveyors 2023\23572 – McClure Farms – Smith\23572-1 Britelond Homes\Dwg\Survey\08 – PUD Master Plan\23572-1 – McClure – Preliminary Plat.dwg

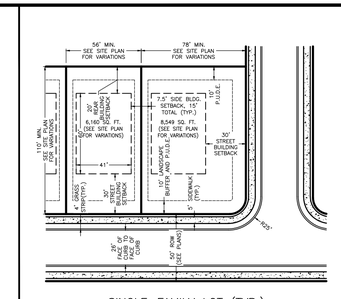
TN GRID NORTH

LOT AREA TABLE (PHASE 3)

LOT	SQ. FT.	ACRES
24	7,578.2	0.17
25	6,726.7	0.15
26	6,767.5	0.16
27	6,808.3	0.16
28	6,851.4	0.16
29	9,053.4	0.21
30	9,980.3	0.23
31	9,055.0	0.21
32	8,946.0	0.21
33	8,404.7	0.19
34	6,720.3	0.15
35	6,720.3	0.15
36	8,253.5	0.19
37	10,297.2	0.24
38	7,724.1	0.18
39	7,857.1	0.18
40	8,070.3	0.19
41	9,563.1	0.22
42	6,903.0	0.16
43	6,903.0	0.16
44	6,903.0	0.16
45	6,858.4	0.16
46	9,557.8	0.22
47	6,903.0	0.16
48	6,903.0	0.16
49	6,903.0	0.16
50	6,903.0	0.16
51	9,563.1	0.22
52	9,557.7	0.22
53	6,903.0	0.16
54	6,903.0	0.16
55	6,903.0	0.16
56	6,903.0	0.16
57	6,903.0	0.16
104	7,104.4	0.16
105	7,126.7	0.16
106	7,148.9	0.16
107	7,171.0	0.22
108	7,193.3	0.17
109	7,215.8	0.17
110	7,238.1	0.17
111	7,260.4	0.17
112	7,282.7	0.17
113	7,305.0	0.17
114	7,328.0	0.17
115	8,246.6	0.19

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	DELTA ANGLE
C1	170.58'	13.08'	N 81°09'11" W	4°23'36"
C2	160.70'	48.24'	N 70°21'09" W	17°12'09"
C3	164.57'	47.18'	N 53°37'51" W	16°25'34"
C4	167.00'	47.55'	N 37°00'39" W	16°18'31"
C5	163.95'	50.00'	N 19°57'10" W	17°28'20"
C6	162.02'	48.00'	N 02°43'44" W	16°58'33"
C7	184.33'	2.54'	N 06°09'12" E	0°47'18"
C8	12.00'	18.85'	N 38°24'27" W	90°00'45"
C9	63.00'	42.60'	S 77°12'53" W	38°44'55"
C10	57.00'	60.17'	S 64°58'49" W	60°29'05"
C11	57.00'	59.63'	S 53°08'44" E	59°55'55"
C12	57.00'	65.95'	N 07°58'02" E	66°17'41"
C13	57.00'	48.39'	N 65°26'03" E	48°38'22"
C14	12.00'	18.85'	S 51°35'33" W	89°59'15"
C15	13.00'	20.43'	S 38°24'27" E	90°00'45"
C16	13.00'	20.43'	N 51°35'33" E	89°59'15"
C17	113.00'	146.10'	N 48°22'50" W	74°04'39"
C18	113.00'	31.43'	N 01°22'07" W	15°56'06"
C19	12.00'	18.85'	S 51°35'33" W	90°01'01"
C20	112.00'	18.85'	S 38°24'27" E	89°59'04"





SINGLE-FAMILY LOT (TYP.)
NTS

ALL CONNECTIONS TO EXISTING CITY ROADS AND ROW ARE SUBJECT TO THE APPLICABLE PERMITS, FEES, APPROVALS, AND STANDARDS/SPECIFICATION SET FORTH BY THE CITY OF COLUMBIA DEVELOPMENT STANDARDS.

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

Legend

- EIP Iron Rod/Pipe Found
- IPS Iron Rod Set
- ECM Concrete Monument Existing
- MAG Mag Nail
- Fence Post
- T-Post
- Bench Mark
- Stake Found
- Fire Hydrant
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- Storm Sewer Manhole
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- Catch Basin
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- Electric Manhole
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- Water Manhole
- Electric Meter
- Electric Riser
- Cable Riser
- Telephone Riser
- Gas Meter
- Gas Valve
- Light Pole
- Power Pole
- Telephone Pole
- Guy Pole
- Power Pole
- Guy Wire
- Flag Pole
- Sign
- Parking Block
- Handicap Parking
- Bollard
- Water Spigot
- Mailbox
- Evergreen Tree
- Deciduous Tree
- Bush
- Adjoining Property Line
- Subject Property Line
- Easement Line
- Building Setback Line
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- Edge of Pavement
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MCCLURE FARMS
PRELIMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
UTILITIES – PHASE 3

REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale: Vertical: 1" = 60'
Horizontal:

11 of 17



FILE: J:\WES_Engineers_Surveyors 2023\23572 – McClure Farms – Smith\23572-1 Briteland Homes\Dwg\Survey\08 – PUD Master Plan\23572-1 – McClure – Preliminary Plat.dwg

LOT AREA TABLE (PHASE 4)

LOT	SQ. FT.	ACRES
115	2,560.8	0.06
116	2,163.3	0.05
117	2,163.3	0.05
118	2,163.3	0.05
119	2,163.3	0.05
120	2,560.8	0.06
121	2,560.8	0.06
122	2,163.3	0.05
123	2,163.3	0.05
124	2,163.3	0.05
125	2,163.3	0.05
126	2,560.8	0.06
127	2,560.8	0.06
128	2,163.3	0.05
129	2,163.3	0.05
130	2,163.3	0.05
131	2,163.3	0.05
132	2,560.8	0.06
133	2,555.8	0.06
134	2,155.7	0.05
135	2,152.5	0.05
136	2,152.3	0.05
137	2,570.1	0.06
138	2,617.4	0.06
139	2,166.4	0.05
140	2,147.0	0.05
141	2,148.0	0.05
142	2,169.2	0.05
143	2,623.3	0.06
144	2,590.3	0.06
145	2,155.1	0.05
146	2,146.2	0.05
147	2,556.8	0.06
148	2,586.1	0.06
149	2,158.1	0.05
150	2,155.3	0.05
151	2,575.4	0.06
152	2,585.9	0.06
153	2,208.4	0.05
154	2,214.9	0.05
155	2,215.0	0.05

LOT	SQ. FT.	ACRES
155	2,215.0	0.05
156	2,622.0	0.06
157	2,560.8	0.06
158	2,163.3	0.05
159	2,163.3	0.05
160	2,163.3	0.05
161	2,163.3	0.05
162	2,560.8	0.06
163	2,560.8	0.06
164	2,163.3	0.05
165	2,163.3	0.05
166	2,163.3	0.05
167	2,163.3	0.05
168	2,163.3	0.05
169	2,163.3	0.05
170	2,560.8	0.06
171	2,612.9	0.06
172	2,207.3	0.05
173	2,207.3	0.05
174	2,207.3	0.05
175	2,207.3	0.05
176	2,612.9	0.06
177	2,612.9	0.06
178	2,207.3	0.05
179	2,207.3	0.05
180	2,612.9	0.06
181	2,612.9	0.06
182	2,207.3	0.05
183	2,207.3	0.05
184	2,207.3	0.05
185	2,207.3	0.05
186	2,612.9	0.06
187	2,616.6	0.06
188	2,210.5	0.05
189	2,210.5	0.05
190	2,210.5	0.05
191	2,210.5	0.05
192	2,618.6	0.06
193	2,603.8	0.06
194	2,189.0	0.05
195	2,189.0	0.05

LOT	SQ. FT.	ACRES
196	2,591.2	0.06
197	2,563.3	0.06
198	2,165.5	0.05
199	2,165.5	0.05
200	2,165.5	0.05
201	2,165.5	0.05
202	2,165.5	0.05
203	2,165.5	0.05
204	2,165.5	0.05
205	2,560.8	0.06
206	2,165.5	0.05
207	2,165.5	0.05
208	2,165.5	0.05
209	2,165.5	0.05
210	2,560.8	0.06
211	2,560.8	0.06
212	2,163.3	0.05
213	2,163.5	0.05
214	2,169.7	0.05
215	2,595.0	0.06
216	2,561.3	0.06
217	2,163.8	0.05
218	2,163.8	0.05
219	2,163.8	0.05
220	2,163.8	0.05
221	2,561.3	0.06
222	2,562.9	0.06
223	2,163.3	0.05
224	2,163.3	0.05
225	2,163.3	0.05
226	2,560.8	0.06
227	2,560.8	0.06
228	2,163.3	0.05
229	2,163.3	0.05
230	2,163.3	0.05
231	2,163.3	0.05
232	2,560.8	0.06
233	2,560.8	0.06
234	2,163.3	0.05
235	2,163.3	0.05
236	2,163.3	0.05

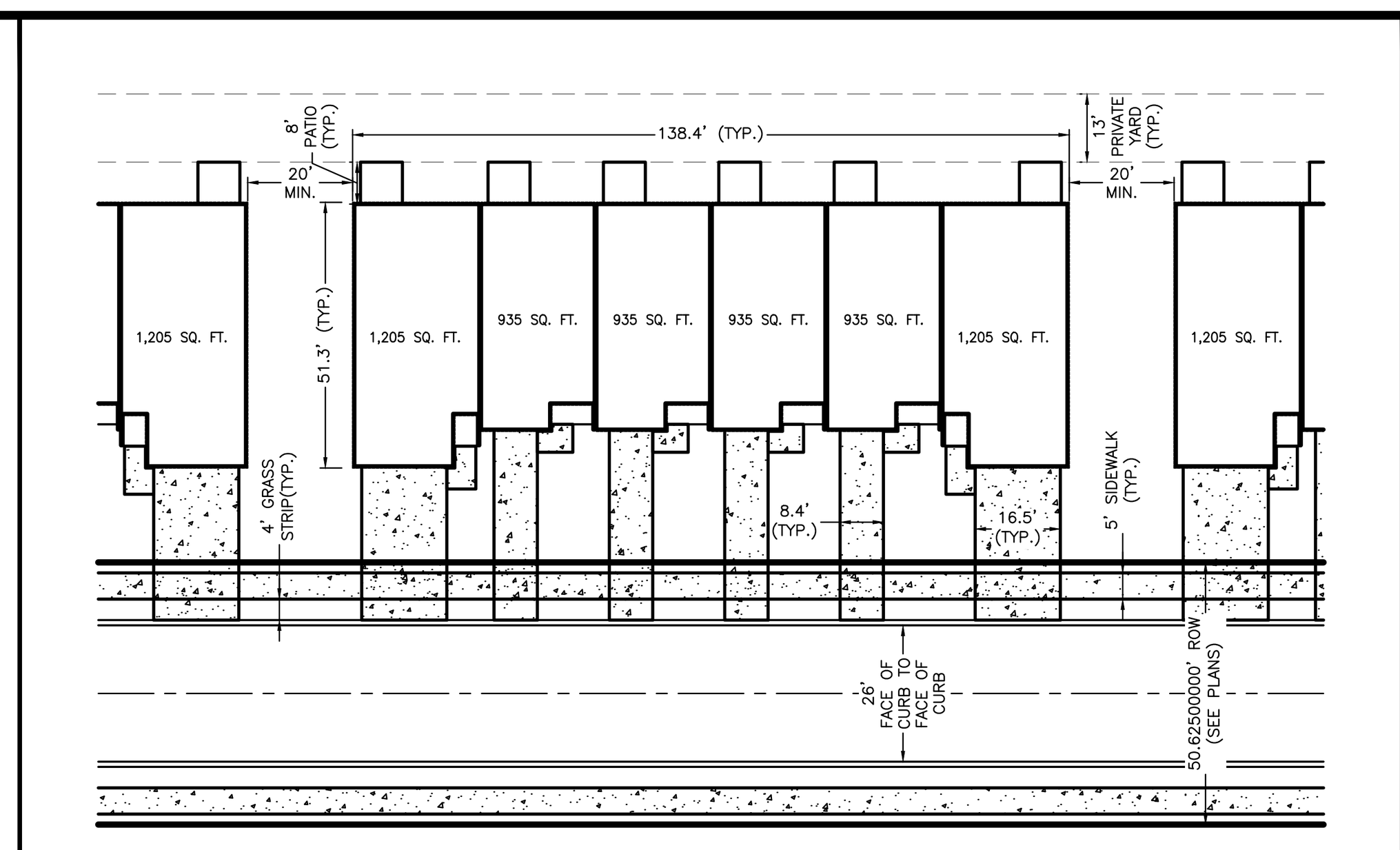
LOT	SQ. FT.	ACRES
237	2,182.1	0.05
238	2,667.0	0.06
239	2,702.5	0.06
240	2,186.2	0.05
241	2,149.2	0.05
242	2,159.8	0.05
243	2,218.3	0.05
244	2,769.6	0.06
245	2,586.7	0.06
246	2,157.1	0.05
247	2,146.1	0.05
248	2,149.1	0.05
249	2,166.1	0.05
250	2,605.1	0.06
251	2,597.1	0.06
252	2,162.0	0.05
253	2,147.6	0.05
254	2,147.1	0.05
255	2,160.5	0.05
256	2,594.0	0.06
257	2,592.0	0.06
258	2,161.3	0.05
259	2,150.1	0.05
260	2,152.9	0.05
261	2,169.6	0.05
262	2,609.0	0.06
263	2,594.4	0.06
264	2,191.7	0.05
265	2,191.7	0.05
266	2,191.7	0.05
267	2,191.7	0.05
268	2,594.3	0.06
269	2,594.3	0.06
270	2,191.7	0.05
271	2,191.7	0.05
272	2,191.7	0.05
273	2,190.7	0.05
274	2,577.8	0.06
275	2,593.3	0.06
276	2,224.5	0.05
277	2,239.5	0.05

LOT	SQ. FT.	ACRES
278	2,239.6	0.05
279	2,221.5	0.05
280	2,596.8	0.06
281	2,598.3	0.06
282	2,228.8	0.05
283	2,242.7	0.05
284	2,242.3	0.05
285	2,227.0	0.05
286	2,595.8	0.06
287	2,622.1	0.06
288	2,216.7	0.05
289	2,604.2	0.06
290	2,664.9	0.06
291	2,300.6	0.05
292	2,321.7	0.05
293	2,320.3	0.05
294	2,296.5	0.05
295	2,660.1	0.06
296	2,612.2	0.06
297	2,206.5	0.05
298	2,206.3	0.05
299	2,206.3	0.05
300	2,206.2	0.05
301	2,611.3	0.06
302	2,559.7	0.06
303	2,161.4	0.05
304	2,161.2	0.05
305	2,161.1	0.05
306	2,160.9	0.05
307	2,160.9	0.05
308	2,160.6	0.05
309	2,557.3	0.06
310	2,556.9	0.06
311	2,159.9	0.05
312	2,159.7	0.05
313	2,159.6	0.05
314	2,159.4	0.05
315	2,555.9	0.06

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	DELTA ANGLE
C1	525.00'	21.04'	S 85°14'50" E	2°17'47"
C2	525.00'	26.10'	S 82°40'29" E	2°50'54"
C3	525.00'	35.34'	S 79°19'19" E	3°51'25"
C4	525.00'	26.19'	S 75°57'51" E	2°51'31"
C5	525.00'	22.04'	S 73°19'56" E	2°24'20"
C6	525.00'	22.01'	S 70°55'43" E	2°24'06"
C7	525.00'	22.01'	S 68°31'37" E	2°24'06"
C8	525.00'	22.05'	S 66°07'22" E	2°24'22"
C9	525.00'	26.21'	S 63°29'23" E	2°51'36"
C10	525.00'	29.60'	S 60°26'40" E	3°13'50"
C11	525.00'	26.14'	S 57°24'11" E	2°51'10"
C12	525.00'	22.02'	S 54°46'30" E	2°24'11"
C13	525.00'	22.00'	S 52°22'23" E	2°24'04"
C14	525.00'	26.07'	S 49°44'59" E	2°50'44"
C15	525.00'	27.80'	S 46°48'34" E	3°02'04"
C16	525.00'	26.11'	S 43°52'03" E	2°51'00"
C17	525.00'	22.01'	S 41°14'29" E	2°24'07"
C18	525.00'	22.00'	S 38°50'23" E	2°24'05"
C19	525.00'	26.09'	S 36°12'55" E	2°50'51"
C20	525.00'	95.60'	S 29°34'30" E	10°25'59"
C21	13.00'	21.47'	S 71°40'11" E	94°37'21"
C22	713.97'	43.14'	N 59°17'17" E	3°27'43"
C23	713.97'	26.09'	N 56°30'37" E	2°05'38"
C24	713.97'	22.01'	N 54°34'49" E	1°45'58"
C25	713.97'	8.81'	N 53°20'36" E	0°42'26"
C26	13.00'	20.42'	N 07°59'24" E	90°00'00"
C27	57.00'	240.93'	N 84°04'52" E	242°10'54"
C28	63.00'	68.37'	S 05°55'09" E	62°10'55"
C29	175.00'	12.73'	S 34°55'33" E	4°10'06"
C30	175.00'	42.89'	S 25°49'14" E	14°02'31"
C31	175.00'	23.75'	S 14°54'44" E	7°46'29"
C32	175.00'	56.86'	S 01°42'58" E	18°37'04"
C33	125.00'	40.62'	N 01°42'58" W	18°37'04"
C34	13.00'	18.34'	N 51°25'52" W	80°48'45"
C35	225.00'	14.25'	N 87°51'09" W	3°37'42"
C36	225.00'	7.53'	N 85°04'47" W	1°55'03"
C37	225.00'	22.08'	N 81°18'33" W	5°37'25"
C38	225.00'	26.54'	N 75°07'07" W	6°45'28"

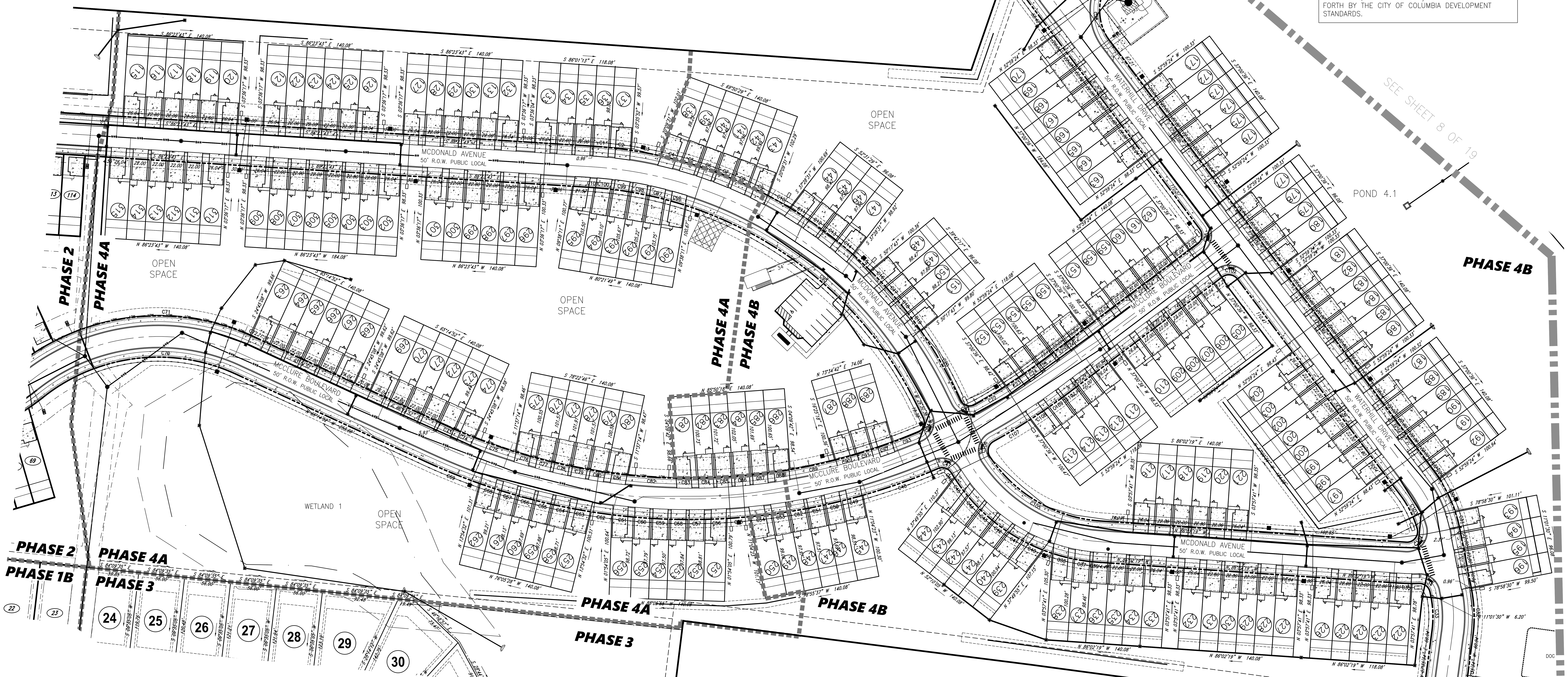
CURVE	RADIUS	ARC LENGTH	CHORD BEARING	DELTA ANGLE
C39	225.00'	10.78'	N 70°22'03" W	2°44'40"
C40	225.00'	26.79'	N 65°35'05" W	6°49'18"
C41	225.00'	22.18'	N 59°20'58" W	5°38'56"
C42	225.00'	22.02'	N 53°43'18" W	5°36'24"
C43	225.00'	22.06'	N 48°06'33" W	5°37'07"
C44	225.00'	22.33'	N 42°27'25" W	5°41'10"
C45	225.00'	27.11'	N 36°09'44" W	6°54'11"
C46	225.00'	6.39'	N 31°53'48" W	1°37'40"
C47	13.00'	18.64'	N 72°08'59" W	82°08'01"
C48	764.00'	96.55'	S 70°24'13" W	7°14'26"
C49	764.00'	26.10'	S 75°00'10" W	1°57'28"
C50	764.00'	22.02'	S 76°48'26" W	1°39'04"
C51	764.00'	22.00'	S 78°27'28" W	1°39'00"
C52	764.00'	22.01'	S 80°06'28" W	1°39'01"
C53	764.00'	22.03'	S 81°45'32" W	1°39'07"
C54	764.00'	26.13'	S 83°33'53" W	1°57'34"
C55	764.00'	27.16'	S 85°33'46" W	2°02'13"
C56	764.00'	26.12'	S 87°33'38" W	1°57'31"
C57	764.00'	22.02'	S 89°21'57" W	1°39'06"
C58	764.00'	22.00'	N 88°59'00" W	1°39'00"
C59	764.00'	22.00'	N 87°20'00" W	1°39'00"
C60	764.00'	22.02'	N 85°40'57" W	1°39'05"
C61	764.00'	26.11'	N 83°52'39" W	1°57'30"
C62	764.00'	25.00'	N 81°57'40" W	1°52'29"
C63	764.00'	26.11'	N 80°02'41" W	1°57'28"
C64	764.00'	22.02'	N 78°14'25" W	1°39'04"
C65	764.00'	22.00'	N 76°35'23" W	1°39'00"
C66	764.00'	22.01'	N 74°56'23" W	1°39'01"
C67	764.00'	22.03'	N 73°17'19" W	1°39'07"
C68	764.00'	26.13'	N 71°28'58" W	1°57'34"
C69	764.00'	70.08'	N 67°52'32" W	5°15'19"
C70	225.00'	177.13'	N 87°48'02" W	45°06'21"
C71	275.00'	210.83'	S 88°08'27" E	43°55'35"
C72	275.00'	4.46'	S 65°42'46" E	0°55'48"
C73	714.00'	16.07'	S 65°53'33" E	1°17'22"
C74	714.00'	26.06'	S 67°34'58" E	2°05'30"
C75	714.00'	51.28'	S 70°41'11" E	4°06'55"
C76	714.00'	26.13'	S 73°47'32" E	2°05'48"

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	DELTA ANGLE
C77	714.00'	22.02'	S 75°43'27" E	1°46'03"
C78	714.00'	22.00'	S 77°29'27" E	1°45'57"
C79	714.00'	22.00'	S 79°15'23" E	1°45'56"
C80	714.00'	21.96'	S 81°01'14" E	1°45'44"
C81	714.00'	26.19'	S 82°57'09" E	2°06'06"
C82	714.00'	57.04'	S 86°17'31" E	4°34'38"
C83	714.00'	26.12'	S 89°37'43" E	2°05'47"
C84	714.00'	22.02'	N 88°26'22" E	1°46'02"
C85	714.00'	22.00'	N 86°40'23" E	1°45'56"
C86	714.00'	22.00'	N 84°54'26" E	1°45'57"
C87	714.00'	22.03'	N 83°08'27" E	1°46'03"
C88	714.00'	26.13'	N 81°12'31" E	2°05'48"
C89	714.00'	55.18'	N 77°56'47" E	4°25'41"
C90	714.00'	26.05'	N 74°41'14" E	2°05'25"
C91	714.00'	22.00'	N 72°45'33" E	1°45'56"
C92	714.00'	26.07'	N 70°49'49" E	2°05'32"
C93	714.00'	32.16'	N 68°29'37" E	2°34'52"
C94	13.00'	21.26'	N 20°20'48" E	93°42'46"
C95	475.00'	377.50'	N 49°16'39" W	45°32'08"
C96	475.00'	26.23'	N 73°37'37" W	3°09'48"
C97	475.00'	22.05'	N 76°32'19" W	2°39'36"
C98	475.00'	22.01'	N 79°11'45" W	2°39'16"
C99	475.00'	22.01'	N 81°51'02" W	2°39'17"
C100	475.00'	22.06'	N 84°30'30" W	2°39'39"
C101	475.00'	4.61'	N 86°07'01" W	0°33'24"
C102	13.00'	20.42'	S 82°00'36" E	90°00'00"
C103	125.00'	45.09'	S 26°40'33" E	20°40'06"
C104	13.00'	25.03'	S 38°48'36" W	110°18'11"
C105	175.00'	160.59'	N 59°45'01" W	52°34'36"
C106	13.00'	21.47'	N 13°50'30" E	94°36'24"
C107	764.00'	51.54'	N 59°12'44" E	3°51'55"
C108	764.00'	26.09'	N 56°18'05" E	1°57'23"
C109	764.00'	22.01'	N 54°29'53" E	1°39'02"
C110	764.00'	9.10'	N 53°19'53" E	0°40'58"



MULTI-FAMILY LOT (TYP.)
NTS

ALL CONNECTIONS TO EXISTING CITY ROADS AND ROW ARE SUBJECT TO THE APPLICABLE PERMITS, FEES, APPROVALS, AND STANDARDS/SPECIFICATION SET FORTH BY THE CITY OF COLUMBIA DEVELOPMENT STANDARDS.



Legend

EIP / IPS — Iron Rod/Pipe Found
ECM — Iron Rod Set
MAG — Concrete Monument Existing
Mag Nail
Fence Post
T-Post
Bench Mark
Stake Found
Fire Hydrant
Water Meter
Water Valve
Water Reducer
Post Indicator Valve
Clean Out
Sanitary Sewer Manhole
Storm Sewer Manhole
Curb Inlet
Catch Basin
Area Drain
Cable Manhole
Electric Manhole
Telephone Manhole
Water Manhole
Electric Meter
Electric Riser
Cable Riser
Telephone Riser
Gas Meter
Gas Valve
Light Pole
Power Pole
Telephone Pole
Guy Pole
Power Pole
Guy Wire
Flag Pole
Sign
Parking Block
Handicap Parking
Bollard
Water Spigot
Mailbox
Evergreen Tree
Deciduous Tree
Bush
Adjoining Property Line
Subject Property Line
Easement Line
Building Setback Line
Centerline
Edge of Pavement
Edge of Gravel
Fence Line
Landscape
Woods / Tree line
Edge of Water
Ditch / Creek Centerline
Minor Contour Line
Index Contour Line
Gas Line
Sanitary Sewer Line
Water Line
Storm Sewer Line
Overhead Utility Line
Overhead Cable Line
Overhead Electric Line
Overhead Telephone Line
Underground Utility Line
Underground Cable Line
Underground Electric Line
Underground Telephone Line
Forced Main Line

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

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2486 NASHVILLE HIGHWAY
COLUMBIA, TN 38401
PHONE: (931) 388-2329
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ENGINEERS & SURVEYORS

Client
DRB GROUP
4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
PRELMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
UTILITIES – PHASE 4

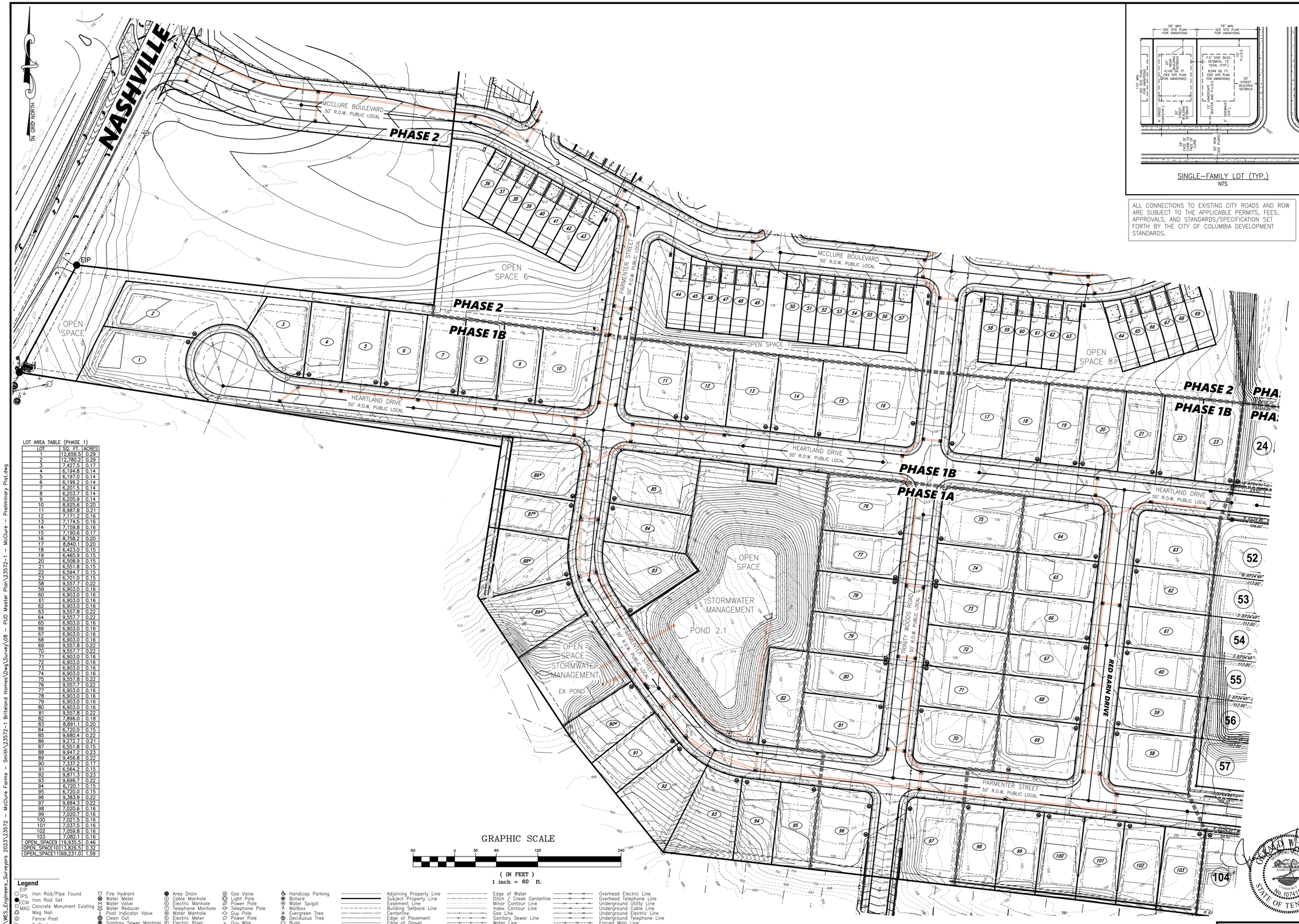
REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical:
Horizontal: 1" = 60'

GERALD W. VICK
REGISTERED ENGINEER
AGRICULTURE COMMERCE
No. 107415
STATE OF TENNESSEE
4/20/26

FILE: J:\WES_Engineers_Surveyors 2023\23572 – McClure Farms – Smith\23572-1 Briteland Homes\Dwg\Survey\08 – PUD Master Plan\23572-1 – McClure – Preliminary Plat.dwg



SINGLE-FAMILY LOT (TYP.)
NTS

ALL CONNECTIONS TO EXISTING CITY ROADS AND ROW ARE SUBJECT TO THE APPLICABLE PERMITS, FEES, APPROVALS, AND STANDARDS/SPECIFICATION SET FORTH BY THE CITY OF COLUMBIA DEVELOPMENT STANDARDS.

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LOT AREA TABLE (PHASE 1)

LOT	SQ. FT.	ACRES
1	12,656.5	0.29
2	12,780.2	0.29
3	7,427.5	0.17
4	6,194.8	0.14
5	6,197.0	0.14
6	6,199.2	0.14
7	6,201.5	0.14
8	6,203.7	0.14
9	6,205.9	0.14
10	8,925.6	0.20
11	8,987.8	0.21
12	7,171.2	0.16
13	7,174.5	0.16
14	7,159.8	0.16
15	7,190.6	0.17
16	8,758.2	0.20
17	8,840.1	0.20
18	6,423.0	0.15
19	6,465.9	0.15
20	6,508.9	0.15
21	6,551.8	0.15
22	6,594.7	0.15
23	6,701.0	0.15
58	9,557.7	0.22
59	6,903.0	0.16
60	6,903.0	0.16
61	6,903.0	0.16
62	6,903.0	0.16
63	9,557.8	0.22
64	9,557.7	0.22
65	6,903.0	0.16
66	6,903.0	0.16
67	6,903.0	0.16
68	6,903.0	0.16
69	9,557.8	0.22
70	9,557.7	0.22
71	6,903.0	0.16
72	6,903.0	0.16
73	6,903.0	0.16
74	6,903.0	0.16
75	9,557.8	0.22
76	9,557.7	0.22
77	6,903.0	0.16
78	6,903.0	0.16
79	6,903.0	0.16
80	6,903.0	0.16
81	9,557.8	0.22
82	7,896.0	0.18
83	8,891.1	0.20
84	6,720.0	0.15
85	9,680.4	0.22
86	9,272.7	0.21
87	6,551.8	0.15
88	9,947.2	0.23
89	9,456.8	0.22
90	7,337.2	0.17
91	6,564.2	0.15
92	9,871.3	0.23
93	9,696.7	0.22
94	6,720.1	0.15
95	6,720.0	0.15
96	9,383.9	0.22
97	9,684.3	0.22
98	7,020.6	0.16
99	7,020.7	0.16
100	7,021.5	0.16
101	7,037.5	0.16
102	7,059.8	0.16
103	7,062.1	0.16
OPEN_SPACE9	19,935.5	0.46
OPEN_SPACE10	13,826.5	0.32
OPEN_SPACE11	69,231.0	1.59

Legend

- EIP — Iron Rod/Pipe Found
- IPS — Iron Rod Set
- ECM — Concrete Monument Existing
- MAG — Mag Nail
- Fence Post
- T-Post
- Bench Mark
- Stake Found
- Fire Hydrant
- Water Meter
- Water Valve
- Water Reducer
- Post Indicator Valve
- Clean Out
- Sanitary Sewer Manhole
- Storm Sewer Manhole
- Curb Inlet
- Catch Basin
- Area Drain
- Cable Manhole
- Electric Manhole
- Telephone Manhole
- Water Manhole
- Electric Meter
- Electric Riser
- Cable Riser
- Telephone Riser
- Gas Meter
- Gas Valve
- Light Pole
- Power Pole
- Telephone Pole
- Guy Pole
- Power Pole
- Guy Wire
- Flag Pole
- Sign
- Parking Block
- Handicap Parking
- Bollard
- Water Spigot
- Mailbox
- Evergreen Tree
- Deciduous Tree
- Bush
- Adjoining Property Line
- Subject Property Line
- Easement Line
- Building Setback Line
- Centerline
- Edge of Pavement
- Edge of Gravel
- Fence Line
- Landscape
- Woods / Tree line
- Edge of Water
- Ditch / Creek Centerline
- Minor Contour Line
- Index Contour Line
- Gas Line
- Sanitary Sewer Line
- Water Line
- Storm Sewer Line
- Overhead Utility Line
- Overhead Cable Line
- Overhead Electric Line
- Overhead Telephone Line
- Underground Utility Line
- Underground Cable Line
- Underground Electric Line
- Underground Telephone Line
- Forced Main Line

GRAND W. WYCK 2/26
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COLUMBIA, TN 38401
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www.wesengineers.com
ENGINEERS & SURVEYORS

Client
DRB GROUP
4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale: Vertical: 1" = 60'
Horizontal:

MCCLURE FARMS
PRELIMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
GRADING - PHASE 1(1A & 1B)

13 of 17

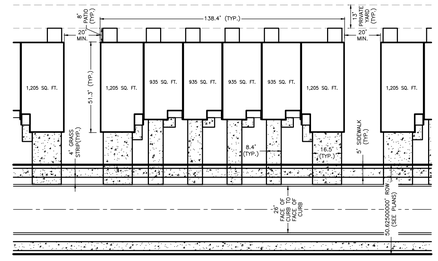
FILE: J:\ WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Briteland Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - Preliminary Plat.dwg

TN GRID NORTH

LOT AREA TABLE (PHASE 2)

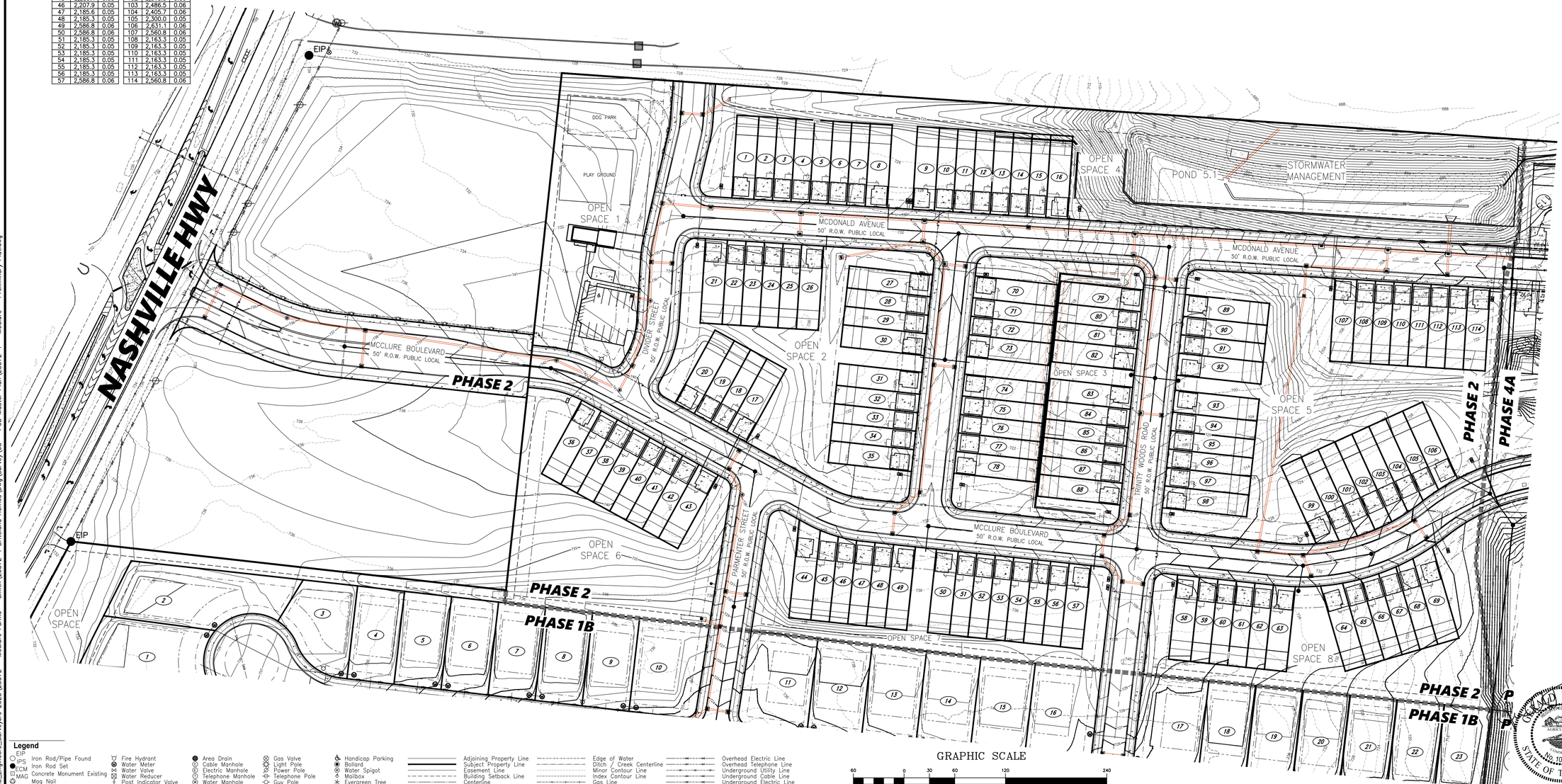
LOT	SQ. FT.	ACRES
1	2,560.8	0.06
2	2,163.3	0.05
3	2,163.3	0.05
4	2,163.3	0.05
5	2,163.3	0.05
6	2,163.3	0.05
7	2,163.3	0.05
8	2,560.8	0.06
9	2,560.8	0.06
10	2,163.3	0.05
11	2,163.3	0.05
12	2,163.3	0.05
13	2,163.3	0.05
14	2,163.3	0.05
15	2,163.3	0.05
16	2,560.8	0.06
17	2,565.5	0.06
18	2,167.3	0.05
19	2,167.3	0.05
20	2,565.5	0.06
21	2,603.3	0.06
22	2,199.3	0.05
23	2,199.3	0.05
24	2,199.3	0.05
25	2,199.3	0.05
26	2,603.3	0.06
27	2,586.8	0.06
28	2,185.3	0.05
29	2,185.3	0.05
30	2,586.8	0.06
31	2,586.8	0.06
32	2,185.3	0.05
33	2,185.3	0.05
34	2,185.3	0.05
35	2,586.8	0.06
36	2,586.8	0.06
37	2,185.3	0.05
38	2,185.3	0.05
39	2,185.3	0.05
40	2,185.3	0.05
41	2,185.3	0.05
42	2,185.3	0.05
43	2,586.8	0.06
44	2,905.2	0.07
45	2,289.1	0.05
46	2,207.9	0.05
47	2,185.6	0.05
48	2,185.3	0.05
49	2,586.8	0.06
50	2,586.8	0.06
51	2,185.3	0.05
52	2,185.3	0.05
53	2,185.3	0.05
54	2,185.3	0.05
55	2,185.3	0.05
56	2,185.3	0.05
57	2,586.8	0.06
58	2,612.8	0.06
59	2,207.3	0.05
60	2,207.3	0.05
61	2,207.3	0.05
62	2,207.3	0.05
63	2,619.1	0.06
64	2,678.2	0.06
65	2,203.4	0.05
66	2,190.7	0.05
67	2,216.8	0.05
68	2,282.3	0.05
69	2,842.1	0.07
70	2,560.8	0.06
71	2,163.3	0.05
72	2,163.3	0.05
73	2,560.8	0.06
74	2,560.8	0.06
75	2,163.3	0.05
76	2,163.3	0.05
77	2,163.3	0.05
78	2,560.8	0.06
79	2,560.8	0.06
80	2,163.3	0.05
81	2,163.3	0.05
82	2,560.8	0.06
83	2,560.8	0.06
84	2,163.3	0.05
85	2,163.3	0.05
86	2,163.3	0.05
87	2,163.3	0.05
88	2,560.8	0.06
89	2,612.8	0.06
90	2,207.3	0.05
91	2,207.3	0.05
92	2,207.3	0.05
93	2,612.8	0.06
94	2,207.3	0.05
95	2,207.3	0.05
96	2,207.3	0.05
97	2,207.3	0.05
98	2,612.8	0.06
99	2,738.7	0.06
100	2,440.6	0.06
101	2,503.7	0.06
102	2,518.8	0.06
103	2,486.5	0.06
104	2,405.7	0.06
105	2,300.0	0.05
106	2,631.1	0.06
107	2,560.8	0.06
108	2,163.3	0.05
109	2,163.3	0.05
110	2,163.3	0.05
111	2,163.3	0.05
112	2,163.3	0.05
113	2,163.3	0.05
114	2,560.8	0.06

LOT	SQ. FT.	ACRES
OS-1	40,902.9	0.94
OS-2	31,367.4	0.72
OS-3	16,427.1	0.38
OS-4	89,803.4	2.06
OS-5	47,815.3	1.10
OS-6	36,936.8	0.85
OS-7	18,940.3	0.43
OS-8	28,783.2	0.66



MULTI-FAMILY LOT (TYP.)
NTS

ALL CONNECTIONS TO EXISTING CITY ROADS AND ROW ARE SUBJECT TO THE APPLICABLE PERMITS, FEES, APPROVALS, AND STANDARDS/SPECIFICATION SET FORTH BY THE CITY OF COLUMBIA DEVELOPMENT STANDARDS.



Legend

- EIP Iron Rod/Pipe Found
- IPS Iron Rod Set
- CM Concrete Monument Existing
- MAG Mag Nail
- Fence Post
- T-Post
- Bench Mark
- Stake Found
- Fire Hydrant
- Water Meter
- Water Valve
- Water Reducer
- Post Indicator Valve
- Clean Out
- Sanitary Sewer Manhole
- Storm Sewer Manhole
- Curb Inlet
- Catch Basin
- Area Drain
- Cable Manhole
- Electric Manhole
- Telephone Manhole
- Water Manhole
- Electric Meter
- Electric Riser
- Cable Riser
- Telephone Riser
- Gas Meter
- Gas Valve
- Light Pole
- Power Pole
- Telephone Pole
- Guy Pole
- Power Pole
- Guy Wire
- Flag Pole
- Sign
- Parking Block
- Handicap Parking
- Bollard
- Water Spigot
- Mailbox
- Evergreen Tree
- Deciduous Tree
- Bush
- Adjoining Property Line
- Subject Property Line
- Easement Line
- Building Setback Line
- Centerline
- Edge of Pavement
- Edge of Gravel
- Fence Line
- Landscape
- Woods / Tree line
- Edge of Water
- Ditch / Creek Centerline
- Minor Contour Line
- Index Contour Line
- Gas Line
- Sanitary Sewer Line
- Water Line
- Storm Sewer Line
- Overhead Utility Line
- Overhead Cable Line
- Overhead Electric Line
- Overhead Telephone Line
- Underground Utility Line
- Underground Cable Line
- Underground Electric Line
- Underground Telephone Line
- Forced Main Line

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

GRADY M. MCCLOY JR.
REGISTERED ENGINEER
AGRICULTURE
No. 107415
STATE OF TENNESSEE

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WES ENGINEERS & SURVEYORS
CIVIL ENGINEERS & LAND SURVEYORS
2486 NASHVILLE HIGHWAY
COLUMBIA, TN 38401
PHONE: (931) 388-2329
www.wesengineers.com
ENGINEERS & SURVEYORS

Client
DRB GROUP
4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
PRELIMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
GRADING – PHASE 2

REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GM
Date: 04-20-2026

Job. no. 23572-1
Scale: Vertical: 1" = 60'
Horizontal:

14 of 17

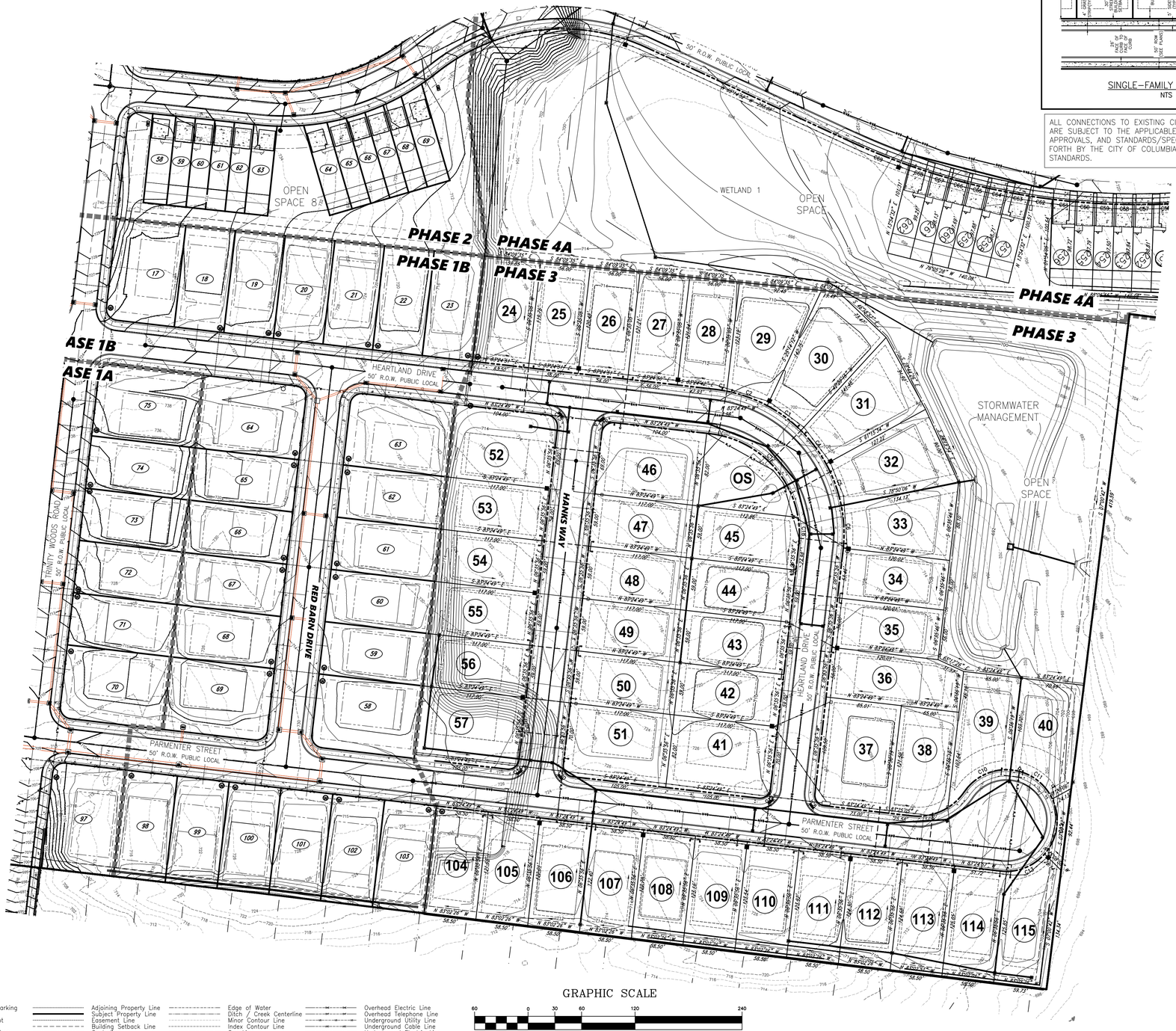
FILE: J:\WES_Engineers_Surveyors 2023\23572 – McClure Farms – Smith\23572-1 Britelond Homes\Dwg\Survey\08 – PUD Master Plan\23572-1 – McClure – Preliminary Plat.dwg

TN GRID NORTH

LOT AREA TABLE (PHASE 3)

LOT	SQ. FT.	ACRES
24	7,578.2	0.17
25	6,726.7	0.15
26	6,767.5	0.16
27	6,808.3	0.16
28	6,851.4	0.16
29	9,053.4	0.21
30	9,980.3	0.23
31	9,055.0	0.21
32	8,946.0	0.21
33	8,404.7	0.19
34	6,720.3	0.15
35	6,760.5	0.15
36	8,253.5	0.19
37	10,297.2	0.24
38	7,724.1	0.18
39	7,857.1	0.18
40	8,070.3	0.19
41	9,563.1	0.22
42	6,903.0	0.16
43	6,903.0	0.16
44	6,903.0	0.16
45	6,858.4	0.16
46	9,557.8	0.22
47	6,903.0	0.16
48	6,903.0	0.16
49	6,903.0	0.16
50	6,903.0	0.16
51	9,563.1	0.22
52	9,557.7	0.22
53	6,903.0	0.16
54	6,903.0	0.16
55	6,903.0	0.16
56	6,903.0	0.16
57	6,903.0	0.16
104	7,104.4	0.16
105	7,126.7	0.16
106	7,148.9	0.16
107	11,171.0	0.22
108	7,193.3	0.17
109	7,215.8	0.17
110	7,238.1	0.17
111	7,260.4	0.17
112	7,282.7	0.17
113	7,305.0	0.17
114	7,328.0	0.17
115	8,246.6	0.19

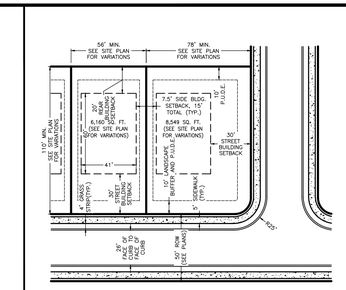
CURVE	RADIUS	ARC LENGTH	CHORD BEARING	DELTA ANGLE
C1	170.58'	13.08'	N 81°09'11" W	4°23'36"
C2	160.70'	48.24'	N 70°21'09" W	17°12'09"
C3	164.57'	47.18'	N 53°37'51" W	16°25'34"
C4	167.00'	47.05'	N 37°00'39" W	16°08'31"
C5	163.95'	50.00'	N 19°57'10" W	17°28'20"
C6	162.02'	48.00'	N 02°43'44" W	16°58'33"
C7	184.33'	2.54'	N 06°09'12" E	0°47'18"
C8	12.00'	18.85'	N 38°24'27" W	90°00'45"
C9	63.00'	42.60'	S 77°12'53" W	38°44'50"
C10	57.00'	60.17'	S 64°58'49" W	60°29'05"
C11	57.00'	59.62'	S 03°08'44" E	59°55'55"
C12	57.00'	65.95'	N 07°58'02" E	66°17'41"
C13	57.00'	48.39'	N 65°26'03" E	48°38'22"
C14	12.00'	18.85'	S 51°35'33" W	89°59'15"
C15	13.00'	20.43'	S 38°24'27" E	90°00'45"
C16	13.00'	20.43'	N 51°35'33" E	89°59'15"
C17	113.00'	146.10'	N 48°22'50" W	74°04'39"
C18	113.00'	31.43'	N 01°22'07" W	15°56'06"
C19	12.00'	18.85'	S 51°35'33" W	90°01'01"
C20	112.00'	18.85'	S 38°24'27" E	89°59'04"



GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.



SINGLE-FAMILY LOT (TYP.)
NTS

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Legend

- EIP — Iron Rod/Pipe Found
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- Electric Meter
- Electric Riser
- Cable Riser
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- Gas Meter
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- Light Pole
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- Guy Pole
- Power Pole
- Guy Wire
- Flag Pole
- Sign
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- Handicap Parking
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- Underground Cable Line
- Underground Electric Line
- Underground Telephone Line
- Forced Main Line

GERALD W. MOORCK
LICENSED PROFESSIONAL ENGINEER
AGRICULTURE
COMMERCE
No. 107415
STATE OF TENNESSEE

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MCCLURE FARMS
PRELIMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
GRADING – PHASE 3

REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical: 1" = 60'
Horizontal:

15 of 17

FILE: J:\ WES_Engineers_Surveyors 2023\23572 – McClure Farms – Smith\23572-1 Briteland Homes\Dwg\Survey\08 – PUD Master Plan\23572-1 – McClure – Preliminary Plat.dwg

LOT AREA TABLE (PHASE 4)

LOT	SQ. FT.	ACRES
115	12,560.8	0.06
116	12,163.3	0.05
117	12,163.3	0.05
118	12,163.3	0.05
119	12,163.3	0.05
120	12,560.8	0.06
121	12,560.8	0.06
122	12,163.3	0.05
123	12,163.3	0.05
124	12,163.3	0.05
125	12,163.3	0.05
126	12,560.8	0.06
127	12,560.8	0.06
128	12,153.3	0.05
129	12,163.3	0.05
130	12,163.3	0.05
131	12,163.3	0.05
132	12,560.8	0.06
133	12,559.8	0.06
134	12,152.5	0.05
135	12,152.5	0.05
136	12,152.3	0.05
137	12,676.1	0.05
138	12,617.4	0.06
139	12,166.4	0.05
140	12,147.0	0.05
141	12,148.0	0.05
142	12,159.2	0.05
143	12,623.3	0.06
144	12,590.1	0.06
145	12,155.1	0.05
146	12,147.2	0.05
147	12,556.8	0.06
148	12,586.1	0.06
149	12,158.1	0.05
150	12,155.1	0.05
151	12,575.4	0.06
152	12,585.9	0.06
153	12,608.6	0.06
154	12,214.9	0.05
155	12,215.0	0.05

LOT	SQ. FT.	ACRES
156	12,215.0	0.05
157	12,560.8	0.06
158	12,163.3	0.05
159	12,163.3	0.05
160	12,163.3	0.05
161	12,163.3	0.05
162	12,560.8	0.06
163	12,560.8	0.06
164	12,163.3	0.05
165	12,163.3	0.05
166	12,163.3	0.05
167	12,163.3	0.05
168	12,163.3	0.05
169	12,163.3	0.05
170	12,560.8	0.06
171	12,612.9	0.06
172	12,207.3	0.05
173	12,207.3	0.05
174	12,207.3	0.05
175	12,207.3	0.05
176	12,207.3	0.05
177	12,207.3	0.05
178	12,612.9	0.06
179	12,612.9	0.06
180	12,612.9	0.06
181	12,612.9	0.06
182	12,207.3	0.05
183	12,207.3	0.05
184	12,207.3	0.05
185	12,207.3	0.05
186	12,612.9	0.06
187	12,616.6	0.06
188	12,610.5	0.06
189	12,610.5	0.06
190	12,210.5	0.05
191	12,210.5	0.05
192	12,618.6	0.06
193	12,603.8	0.06
194	12,189.0	0.05
195	12,189.0	0.05

LOT	SQ. FT.	ACRES
196	12,591.9	0.06
197	12,560.8	0.06
198	12,165.5	0.05
199	12,165.5	0.05
200	12,165.5	0.05
201	12,165.5	0.05
204	12,165.5	0.05
205	12,560.8	0.06
206	12,165.5	0.05
207	12,165.5	0.05
208	12,165.5	0.05
209	12,165.5	0.05
210	12,560.8	0.06
211	12,560.8	0.06
212	12,163.3	0.05
213	12,163.3	0.05
214	12,169.7	0.05
215	12,595.5	0.06
216	12,592.0	0.06
217	12,163.8	0.05
218	12,163.8	0.05
219	12,163.8	0.05
220	12,163.8	0.05
221	12,561.3	0.06
222	12,560.8	0.06
223	12,163.3	0.05
224	12,163.3	0.05
225	12,163.3	0.05
226	12,560.8	0.06
227	12,560.8	0.06
228	12,163.3	0.05
229	12,163.3	0.05
230	12,163.3	0.05
231	12,163.3	0.05
232	12,560.8	0.06
233	12,560.8	0.06
234	12,163.3	0.05
235	12,163.3	0.05
236	12,163.3	0.05

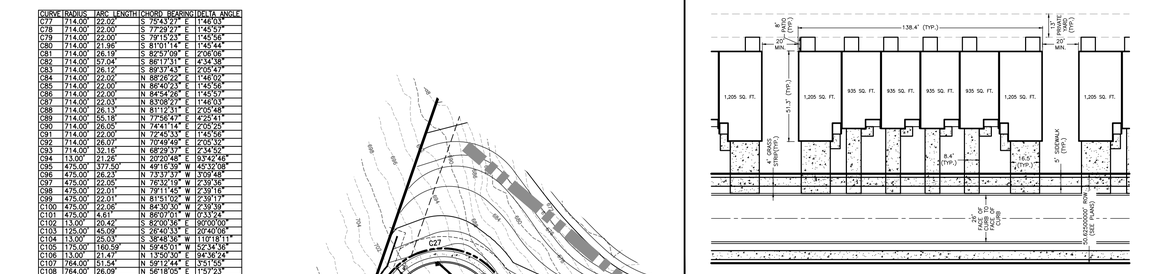
LOT	SQ. FT.	ACRES
237	12,821.1	0.06
238	12,687.0	0.06
239	12,702.5	0.06
240	12,188.2	0.06
241	12,149.2	0.06
242	12,218.3	0.06
243	12,218.3	0.06
244	12,769.6	0.06
245	12,586.7	0.06
246	12,157.1	0.05
247	12,146.1	0.05
248	12,149.1	0.05
249	12,166.1	0.05
250	12,605.1	0.06
251	12,597.1	0.06
252	12,605.1	0.06
253	12,147.6	0.05
254	12,144.2	0.05
255	12,160.5	0.05
256	12,595.5	0.06
257	12,592.0	0.06
258	12,161.3	0.05
259	12,166.1	0.05
260	12,152.9	0.05
261	12,169.8	0.05
262	12,609.0	0.06
263	12,594.4	0.06
264	12,159.7	0.05
265	12,191.7	0.05
266	12,191.7	0.05
267	12,191.7	0.05
268	12,594.3	0.06
269	12,594.3	0.06
270	12,191.7	0.05
271	12,191.7	0.05
272	12,191.7	0.05
273	12,190.7	0.05
274	12,577.8	0.06
275	12,593.1	0.06
276	12,224.5	0.05
277	12,239.5	0.05

LOT	SQ. FT.	ACRES
278	12,639.6	0.06
279	12,621.5	0.06
280	12,596.8	0.06
281	12,598.1	0.06
282	12,228.8	0.06
283	12,228.8	0.06
284	12,242.3	0.06
285	12,227.0	0.06
286	12,595.8	0.06
287	12,622.1	0.06
288	12,617.0	0.06
289	12,604.2	0.06
290	12,604.2	0.06
291	12,300.6	0.06
292	12,321.7	0.06
293	12,651.0	0.06
294	12,298.5	0.06
295	12,666.1	0.06
296	12,612.2	0.06
297	12,612.2	0.06
298	12,208.3	0.05
299	12,206.3	0.05
300	12,206.3	0.05
301	12,611.5	0.06
302	12,169.8	0.05
303	12,161.4	0.05
304	12,161.2	0.05
305	12,161.1	0.05
306	12,160.9	0.05
307	12,160.9	0.05
308	12,160.6	0.05
309	12,592.5	0.06
310	12,556.9	0.06
311	12,159.9	0.05
312	12,159.7	0.05
313	12,159.6	0.05
314	12,159.4	0.05
315	12,555.9	0.06

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	DELTA ANGLE
C1	525.00'	21.04'	S 85°14'55" E	2°17'42"
C2	525.00'	26.10'	S 82°40'29" E	2°50'54"
C3	525.00'	35.34'	S 79°19'19" E	3°51'25"
C4	525.00'	26.19'	S 75°57'51" E	2°51'31"
C5	525.00'	22.04'	S 73°19'56" E	2°24'20"
C6	525.00'	22.01'	S 70°55'43" E	2°24'06"
C7	525.00'	22.01'	S 68°31'37" E	2°24'08"
C8	525.00'	22.05'	S 66°07'29" E	2°24'22"
C9	525.00'	26.21'	S 63°29'45" E	2°51'58"
C10	525.00'	29.80'	S 60°26'40" E	3°13'50"
C11	525.00'	26.14'	S 57°24'11" E	2°51'10"
C12	525.00'	22.02'	S 54°46'50" E	2°24'11"
C13	525.00'	22.00'	S 52°22'39" E	2°24'01"
C14	525.00'	28.07'	S 49°44'59" E	3°03'44"
C15	525.00'	27.80'	S 46°48'36" E	3°02'06"
C16	525.00'	26.11'	S 43°52'03" E	2°51'00"
C17	525.00'	22.01'	S 41°14'29" E	2°24'07"
C18	525.00'	22.00'	S 38°50'22" E	2°24'00"
C19	525.00'	26.09'	S 36°12'55" E	2°50'51"
C20	525.00'	95.60'	S 29°34'10" E	10°25'49"
C21	13.00'	21.47'	S 71°40'11" E	94°37'21"
C22	713.97'	43.14'	S 59°17'17" E	3°27'43"
C23	713.97'	26.09'	S 56°30'37" E	2°05'35"
C24	713.97'	22.01'	N 54°34'49" W	1°45'58"
C25	713.97'	8.81'	N 53°20'56" W	0°42'24"
C26	13.00'	20.42'	N 07°59'24" E	90°00'00"
C27	437.00'	140.03'	N 44°04'54" W	18°21'40"
C28	63.00'	68.37'	S 09°55'09" E	62°10'55"
C29	175.00'	12.73'	S 34°55'33" E	4°10'06"
C30	175.00'	42.89'	S 25°49'14" E	14°02'31"
C31	175.00'	23.75'	S 14°54'44" E	7°46'29"
C32	175.00'	56.86'	S 01°42'58" E	18°37'04"
C33	125.00'	40.62'	N 01°42'58" W	18°37'04"
C34	13.00'	18.34'	N 51°25'56" W	80°48'45"
C35	225.00'	114.22'	N 01°47'39" W	29°05'30"
C36	225.00'	7.50'	N 85°04'47" W	1°55'03"
C37	225.00'	22.08'	N 81°18'33" W	5°37'29"
C38	225.00'	26.54'	N 75°07'07" W	6°45'28"

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	DELTA ANGLE
C39	225.00'	10.78'	N 70°22'05" W	2°44'40"
C40	225.00'	26.79'	N 65°30'09" W	6°49'18"
C41	225.00'	22.18'	N 59°20'58" W	5°38'56"
C42	225.00'	22.02'	N 53°43'19" W	5°36'24"
C43	225.00'	22.08'	N 48°06'33" W	5°37'07"
C44	225.00'	22.33'	N 42°27'29" W	5°41'10"
C45	225.00'	27.11'	N 36°09'44" W	6°54'11"
C46	225.00'	6.39'	N 31°53'48" W	1°37'49"
C47	13.00'	18.64'	N 72°08'59" W	82°08'01"
C48	764.00'	96.55'	S 70°24'13" W	7°14'26"
C49	764.00'	26.10'	S 76°00'10" W	1°57'26"
C50	764.00'	22.02'	S 78°48'28" W	1°39'04"
C51	764.00'	22.02'	S 80°27'32" W	1°39'04"
C52	764.00'	22.01'	S 82°06'28" W	1°39'01"
C53	764.00'	22.03'	S 81°45'25" W	1°39'07"
C54	764.00'	26.13'	S 83°33'53" W	1°57'34"
C55	764.00'	27.16'	S 85°33'46" W	2°02'13"
C56	764.00'	26.12'	S 87°33'38" W	1°57'31"
C57	764.00'	22.02'	S 89°21'57" W	1°39'06"
C58	764.00'	22.02'	N 89°59'00" W	1°39'06"
C59	764.00'	22.00'	N 87°20'00" W	1°39'00"
C60	764.00'	22.01'	N 85°40'57" W	1°39'05"
C61	764.00'	26.11'	N 83°52'35" W	1°57'27"
C62	764.00'	25.00'	N 81°57'40" W	1°52'29"
C63	764.00'	22.01'	N 80°02'41" W	1°39'04"
C64	764.00'	22.02'	N 78°14'25" W	1°39'04"
C65	764.00'	22.00'	N 76°35'05" W	1°39'00"
C66	764.00'	22.01'	N 74°56'23" W	1°39'01"
C67	764.00'	22.03'	N 73°17'19" W	1°39'07"
C68	764.00'	26.13'	N 71°28'58" W	1°57'34"
C69	764.00'	70.08'	N 67°52'29" W	5°15'19"
C70	225.00'	177.13'	N 87°48'03" W	45°06'21"
C71	275.00'	210.83'	S 88°08'27" E	43°55'35"
C72	275.00'	4.46'	S 65°47'49" E	0°55'46"
C73	714.00'	116.07'	S 69°53'35" E	9°18'42"
C74	714.00'	26.08'	S 67°34'58" E	2°05'30"
C75	714.00'	51.28'	S 70°41'11" E	4°06'56"
C76	714.00'	26.13'	S 73°47'32" E	2°05'48"

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	DELTA ANGLE
C77	714.00'	22.02'	S 75°43'59" E	1°46'03"
C78	714.00'	22.00'	S 77°29'27" E	1°45'52"
C79	714.00'	22.00'	S 79°15'23" E	1°45'56"
C80	714.00'	21.86'	S 81°01'14" E	1°45'24"
C81	714.00'	26.19'	S 82°57'09" E	2°06'06"
C82	714.00'	57.04'	S 86°17'31" E	4°34'58"
C83	714.00'	26.12'	S 89°37'43" E	2°05'47"
C84	714.00'	22.02'	N 88°29'23" E	1°46'00"
C85	714.00'	22.00'	N 86°43'55" E	1°45'53"
C86	714.00'	22.00'	N 84°54'28" E	1°45'57"
C87	714.00'	21.86'	N 83°08'27" E	1°45'24"
C88	714.00'	26.13'	N 81°12'31" E	2°05'48"
C89	714.00'	22.02'	N 79°08'41" E	1°46'00"
C90	714.00'	26.05'	N 74°41'14" E	2°05'25"
C91	714.00'	22.00'	N 72°45'33" E	1°45'56"
C92	714.00'	70.49'	N 67°39'49" E	5°39'24"
C93	714.00'	32.16'	N 68°29'37" E	2°34'52"
C94	113.00'	21.26'	N 20°20'46" E	9°34'42"
C95	475.00'	377.50'	N 49°18'39" W	45°32'08"
C96	475.00'	23.77'	N 71°37'19" W	2°52'04"
C97	475.00'	22.05'	N 76°32'19" W	2°39'36"
C98	475.00'	22.01'	N 79°11'45" W	2°39'16"
C99	475.00'	22.01'	N 81°51'01" W	2°39'17"
C100	475.00'	22.06'	N 84°30'30" W	2°39'39"
C101	475.00'	4.61'	N 86°00'01" W	0°33'22"
C102	13.00'	20.42'	S 82°00'36" W	90°00'00"
C103	437.00'	40.09'	S 42°26'08" E	5°15'26"
C104	113.00'	25.03'	S 38°48'38" W	11°21'51"
C105	175.00'	160.59'	N 58°45'01" W	52°34'38"
C106	113.00'	21.47'	N 13°50'50" E	94°36'24"
C107	764.00'	51.54'	N 59°12'44" E	3°51'56"
C108	764.00'	26.09'	N 56°18'05" E	1°57'23"
C109	764.00'	22.01'	N 54°29'53" E	1°39'02"
C110	764.00'	9.10'	N 53°19'53" E	0°40'58"



MULTI-FAMILY LOT (TYP.)
NTS

ALL CONNECTIONS TO EXISTING CITY ROADS AND ROW ARE SUBJECT TO THE APPLICABLE PERMITS, FEES, APPROVALS, AND STANDARDS/SPECIFICATION SET FORTH BY THE CITY OF COLUMBIA DEVELOPMENT STANDARDS.

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WES Engineers & Surveyors
CIVIL ENGINEERS & LAND SURVEYORS
2486 NASHVILLE HIGHWAY
COLUMBIA, TN 38401
PHONE: (931) 388-2329
www.wesengineers.com
ENGINEERS & SURVEYORS

Client
DRB GROUP
4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
PRELIMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
GRADING – PHASE 4

DATE	REVISIONS

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical: 1" = 60'
Horizontal:

16 of 17

SEE SHEET 8 OF 19

PHASE 1B | PHASE 2 | PHASE 3 | PHASE 4A | PHASE 4B

MCDONALD AVENUE 50' R.O.W. PUBLIC LOCAL
MCCLURE BOULEVARD 50' R.O.W. PUBLIC LOCAL
WATERHILL DRIVE 50' R.O.W. PUBLIC LOCAL
OPEN SPACE
WETLAND 1
POND 4.1

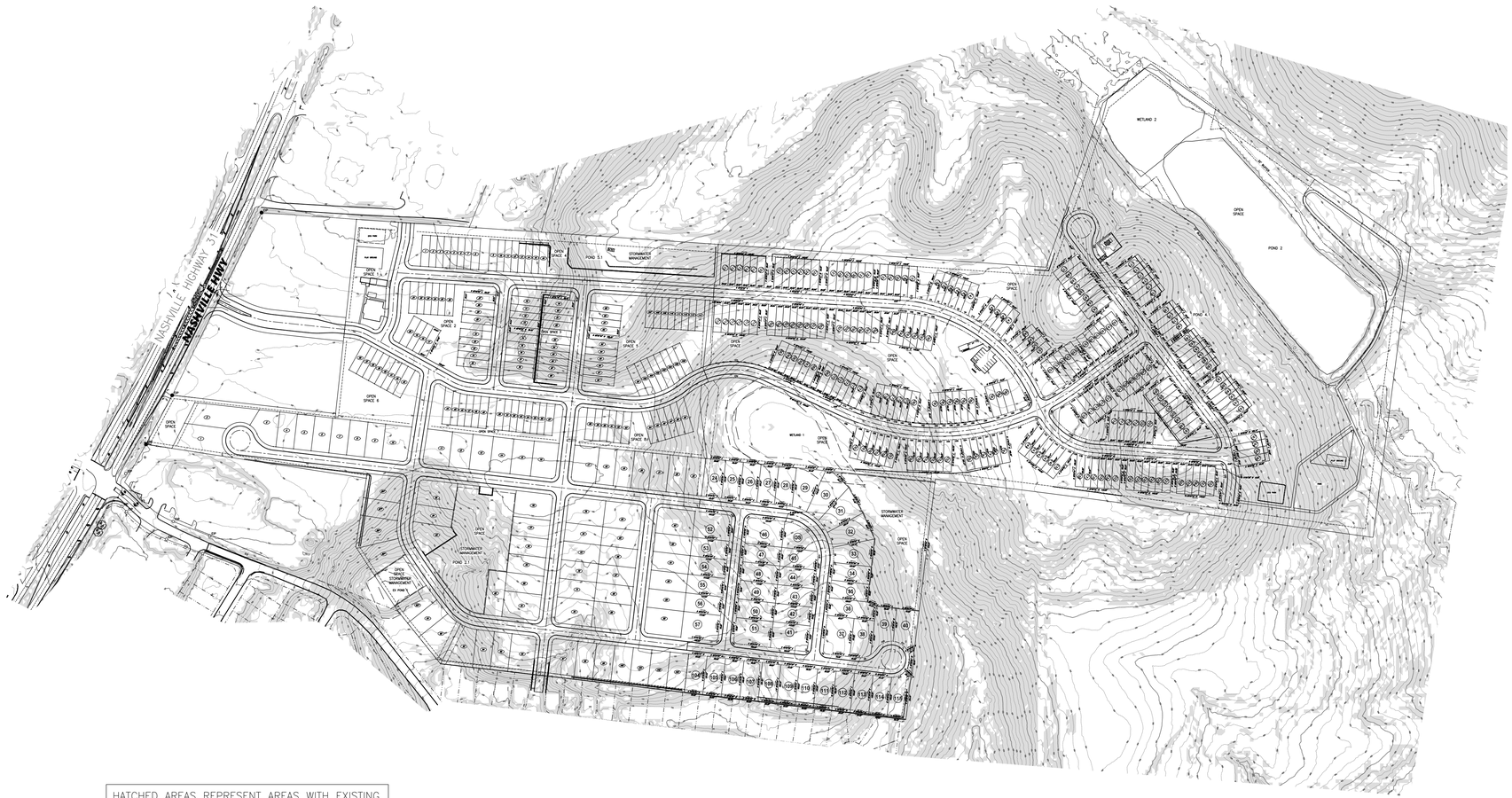
GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

Legend

- EIP Iron Rod/Pipe Found
- IPS Iron Rod Set
- CCM Concrete Monument Existing
- MAG Mag Nail
- Fence Post
- T-Post
- Bench Mark
- Stake Found
- Fire Hydrant
- Water Meter
- Water Valve
- Water Reducer
- Post Indicator Valve
- Clean Out
- Sanitary Sewer Manhole
- Storm Sewer Manhole
- Curb Inlet
- Catch Basin
- Area Drain
- Cable Manhole
- Electric Manhole
- Telephone Manhole
- Water Manhole
- Electric Meter
- Electric Riser
- Cable Riser
- Telephone Riser
- Gas Meter
- Gas Valve
- Light Pole
- Power Pole
- Telephone Pole
- Guy Pole
- Power Pole
- Guy Wire
- Flag Pole
- Sign
- Parking Block
- Handicap Parking
- Bollard
- Water Spigot
- Mailbox
- Evergreen Tree
- Deciduous Tree
- Bush
- Adjoining Property Line
- Subject Property Line
- Easement Line
- Building Setback Line
- Centerline
- Edge of Pavement
- Edge of Gravel
- Fence Line
- Landscape
- Woods / Tree line
- Edge of Water
- Ditch / Creek Centerline
- Minor Contour Line
- Index Contour Line
- Gas Line
- Sanitary Sewer Line
- Water Line
- Storm Sewer Line
- Overhead Utility Line
- Overhead Cable Line
- Overhead Electric Line
- Overhead Telephone Line
- Underground Utility Line
- Underground Cable Line
- Underground Electric Line
- Underground Telephone Line
- Forced Main Line

GRAND W. LOVCK
LICENSED PROFESSIONAL ENGINEER
No. 107415
STATE OF TENNESSEE

FILE: J:\ WES_Engineers_Surveyors 2023\23572 – McClure Farms – Smith\23572-1 Britelond Homes\Dwg\Survey\08 – PUD Master Plan\23572-1 – McClure – Preliminary Plat.dwg


TN GRID NORTH
NASHVILLE HWY
MASHVILLE HIGHWAY 31
POND 1
POND 2
POND 3
POND 4
POND 5
WETLAND 1
WETLAND 2
STORMWATER MANAGEMENT
OPEN SPACE
OPEN SPACE 1
OPEN SPACE 2
OPEN SPACE 3
OPEN SPACE 4
OPEN SPACE 5
OPEN SPACE 6
OPEN SPACE 7
OPEN SPACE 8
OPEN SPACE 9
OPEN SPACE 10
OPEN SPACE 11
OPEN SPACE 12
OPEN SPACE 13
OPEN SPACE

FINAL PUD MASTER DEVELOPMENT PLAN FOR

MCCLURE FARMS

2504 NASHVILLE HWY, COLUMBIA, TENNESSEE
PORTION OF MAP 051, PARCEL 006.00 & MAP 042, PARCEL 028.00
116 SINGLE FAMILY LOTS & 315 TOWNHOME UNITS



LOCATION MAP
NOT TO SCALE
COLUMBIA, MAURY COUNTY, TENNESSEE

THIS SITE PLAN HAS BEEN DESIGNED TO MEET THE CRITERIA OF THE CITY OF COLUMBIA, TENNESSEE (3638). THE PLANS ARE NOT RELEASED FOR CONSTRUCTION UNTIL THE RELATIVE PERMIT HAS BEEN ISSUED BY THE MUNICIPALITY. CHANGES SHALL NOT BE MADE TO THE APPROVED SITE PLAN UNLESS APPROVED BY THE RELEVANT DEPARTMENT SUPERINTENDANT OR THE PLANNING COMMISSION.

UTILITY COMPANIES:

UTILITIES SHOWN ARE BASED ON LIMITED DATA. THERE IS NO GUARANTEE AS TO THEIR LOCATION OR SIZE. PLEASE CONTACT RESPECTIVE UTILITY COMPANIES PRIOR TO CONSTRUCTION. POSSIBLE CONTACTS IN THIS AREA INCLUDE:

MUNICIPALITY:	ELECTRIC:	CABLE TELEVISION:
CITY OF COLUMBIA 707 NORTH MAIN ST. COLUMBIA, TN 38401	COLUMBIA POWER & WATER SYSTEMS 201 PICKENS LANE COLUMBIA, TN 38401 (931) 388-4833	COLUMBIA POWER & WATER SYSTEMS 201 PICKENS LANE COLUMBIA, TN 38401 (931) 388-4833
STORM WATER:	**WATER:**	**CABLE TELEVISION:**
CITY OF COLUMBIA ENGINEERING/INSPECTION 707 N. MAIN STREET COLUMBIA, TN 38401 (931) 560-1530 Contact: Glenn Harper, P.E.	COLUMBIA POWER & WATER SYSTEMS 201 PICKENS LANE COLUMBIA, TN 38401 (931) 388-4833	CHARTER COMMUNICATIONS 2008 S. MAIN STREET COLUMBIA, TN 38401 (931) 388-1326
SANITARY:	**TELEPHONE:**	**GAS:**
CITY OF COLUMBIA WASTEWATER SYSTEM 1244 TREATMENT PLANT RD. COLUMBIA, TN 38401 (931) 560-1001 Donnie Boshers, Director	AT&T 904 S. HIGH ST COLUMBIA, TN 38401 JAMIE WHITFIELD (615) 975-0505 jw0972@att.com	ATMOS ENERGY 810 NASHVILLE HWY. COLUMBIA, TN 38401 (888) 824-3434 NASHVILLE (615) 872-5100

Tennessee 811
Know what's **below**
Call before you dig.

STORMWATER DETENTION AGREEMENT:
RECORDED: 10/14/2025
DEED BOOK: R3102 PAGE: 1354-1360

SHEET INDEX

C002 - PROJECT NOTES
C100 - OVERALL EXISTING CONDITIONS
C101 - EXISTING CONDITIONS
C102 - EXISTING CONDITIONS
C103 - EXISTING CONDITIONS
C111 - DEMOLITION PLAN
C200 - OVERALL SITE PLAN
C201 - SITE PLAN
C202 - SITE PLAN
C203 - SITE PLAN
C204 - SITE PLAN
C205 - SITE PLAN
C206 - SITE PLAN
C300 - OVERALL GRADING PLAN
C301 - GRADING PLAN
C302 - GRADING PLAN
C303 - GRADING PLAN
C304 - GRADING PLAN
C305 - GRADING PLAN
C306 - GRADING PLAN
C500 - OVERALL UTILITY PLAN
C501 - UTILITY PLAN
C502 - UTILITY PLAN
C503 - UTILITY PLAN
C504 - UTILITY PLAN
C505 - UTILITY PLAN
C506 - UTILITY PLAN

GENERAL NOTES

1. PROPOSED USE: MIXED USE - RESIDENTIAL, MULTIFAMILY SUBDIVISION
2. A PRE CONSTRUCTION MEETING WITH THE MUNICIPALITY IS REQUIRED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING AND PROPOSED UTILITIES FROM DAMAGE DURING ALL STAGES OF CONSTRUCTION.
4. THE ENGINEER AND APPLICABLE AGENCY MUST APPROVE, PRIOR TO CONSTRUCTION, ANY ALTERATION, OR VARIANCE FROM THESE PLANS.
5. DEVELOPER SHALL COMPLY WITH TDEC EROSION PREVENTION AND SEDIMENTATION CONTROL HANDBOOK, CURRENT EDITION.
6. UNDERGROUND DRY UTILITIES SHALL BE EXTENDED FROM EXISTING LOCATIONS TO SERVICE THIS SITE AS REQUIRED BY UTILITY COMPANIES.
7. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS OR PROGRAMS UTILIZED IN CONNECTION WITH THE WORK, AND WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
8. HANDICAP PARKING SPACES SHALL BE MARKED WITH ABOVE GRADE SIGNS IN ACCORDANCE WITH CURRENT ADA STANDARDS. VAN ACCESSIBLE SPACES SHALL BE MARKED AS SUCH.
9. ALL ON-SITE TRAFFIC SIGNS SHALL MEET THE REQUIREMENTS OF THE CITY ENGINEERING REQUIREMENT, ZONING ORDINANCE, & THE MUTCD.
10. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF SPRING HILL TENNESSEE.
11. UTILITIES AS SHOWN INDICATE THE APPROXIMATE LOCATION OF FACILITIES ONLY AND NO GUARANTEE IS GIVEN TO THE COMPLETENESS OR ACCURACY THEREOF. NO EXCAVATION MAY BE MADE WITHIN 4 FEET OF THESE UTILITIES UNLESS AND UNTIL SUCH UTILITIES HAVE BEEN POSITIVELY LOCATED AS TO HORIZONTAL AND VERTICAL POSITION. CONTRACTOR SHALL CONTACT UTILITY COMPANY AND "TENNESSEE ONE CALL" AT 811 (1-800-351-1111) THREE WORKING DAYS PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXACT LOCATION OF ALL EXISTING UTILITIES.
12. THIS PROPERTY IS NOT LOCATED IN A FLOOD HAZARD AREA AS PER FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD BOUNDARY AND FLOODWAY MAP COMMUNITY PANEL NO. 47119C0180E, (ZONE X), DATED 04-16-2007.
13. THE LIMIT OF CONSTRUCTION IS SHOWN ON THE CONSTRUCTION PLANS. ANY WORK OUTSIDE OF THE LIMIT OF CONSTRUCTION IS TO BE COORDINATED BY THE CONTRACTOR AND PRE-APPROVED BY THE APPROPRIATE PROPERTY OWNER.

SITE DATA

PARCEL NUMBER	TAX MAP 051, PARCEL 006.00 DEED BOOK: R2813, PG 689
PARCEL ADDRESS:	2504 NASHVILLE HWY COLUMBIA, TENNESSEE 38401
EXISTING ZONING:	PUD (RS6-PUD)
MINIMUM REQUIRED BUILDING SETBACK LINES:	30'(RS-6), 35'(RM-1) FRONT (COLLECTOR) 40' FRONT (ARTERIAL) 20' REAR 7' SINGLE SIDE, 15' TOTAL (RS-6 & RM-1; TWO STORIES OR LESS) 12' SINGLE SIDE, 35' TOTAL (RS-6, THREE OR MORE STORIES) 10' SINGLE SIDE, 30' TOTAL (RM-1, THREE OR MORE STORIES)
PARCEL NUMBER	TAX MAP 042, PARCEL 028.00 DEED BOOK: R2813, PG 689
PARCEL ADDRESS:	2524 NASHVILLE HWY COLUMBIA, TENNESSEE 38401
EXISTING ZONING:	(PUD) RM1-PUD
ACREAGE OF SITE:	±62.82 ACRES(TAX MAP 042, PARCEL 028.00) ±32.47 ACRES(TAX MAP 051, PARCEL 006.00) ±95.29 ACRES(TOTAL)
DISTURBED ACREAGE:	± ACRES
PROPERTY OWNER:	GH TENNESSEE, LLC BARTON CREEK PLAZA III 3815 SOUTH CAPITAL OF TEXAS HIGHWAY, SUITE 275 AUSTIN, TX 78704 CHRIS LYNCH CLYNCH@GEHANHOMES.COM 512-483-9810

MCCLURE FARMS
2504 & 2524 NASHVILLE HIGHWAY
COLUMBIA, TENNESSEE

PROPRIETOR

DRB GROUP
4068 RURAL PLAINS CIRCLE, SUITE 200
FRANKLIN, TENNESSEE 37064
CONTACT: ANDREW DAVIDSON

PRIMARY CONTRACTOR INFORMATION:

COMPANY NAME: _____
CONTACT PHONE: _____

TDEC LEVEL I CERTIFIED 24 HOUR POINT OF CONTACT FOR SOIL EROSION CONTROL:
NAME: _____
PHONE: _____

STATE OF TENNESSEE NPDES PERMIT - NOTICE OF COVERAGE
TRACKING NUMBER: TNR182919
DATE: 12/27/2022

WES ENGINEERS & SURVEYORS
CIVIL ENGINEERS & LAND SURVEYORS
2486 NASHVILLE HIGHWAY
COLUMBIA, TN 38401
PHONE: (931) 388-2329
www.wesengineers.com
gerald@wesengineers.com

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RELEASED FROM CONSTRUCTION WHEN APPROVED BY MUNICIPALITY

MCCLURE FARMS
2504 & 2524 NASHVILLE HIGHWAY
COLUMBIA, TENNESSEE 38401

ENGINEER'S SEAL
GERALD W. KERR
No. 107415
STATE OF TENNESSEE
REGISTERED ENGINEER
AGRICULTURE
COMMERCE

REVISIONS	DATE

PROJECT No. 23572-1
COVER
DATE: 04-20-2026

FILE: J:\ WES_Engineers_Surveyors 2023\23572 – McClure Farms – Smith\23572-1 Briteland Homes\Dwg\Survey\08 – PUD Master Plan\23572-1 – McClure – PUD Master Plan.dwg

GENERAL NOTES

1. THE FOLLOWING NOTES ARE APPLICABLE TO ALL CIVIL DOCUMENTS.
2. THE CONTRACTOR SHALL USE MATERIALS AND EMPLOY CONSTRUCTION METHODS IN ORDER TO COMPLY WITH THE DRAWINGS AND SPECIFICATIONS. WHERE A CONFLICT OCCURS, THE STRICTEST DESIGN SHALL GOVERN. ENGINEER'S REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC. DOES NOT RELIEVE THE CONTRACTOR FROM COMPLYING WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL INFORM THE OWNER AND ENGINEER IN WRITING OF ANY SPECIFIC DEVIATIONS AND OBTAIN OWNER'S AND ENGINEER'S WRITTEN APPROVAL OF THE SPECIFIC DEVIATION.
3. THE CONTRACTOR SHALL CONFORM TO ALL LOCAL CODES AND OBTAIN ALL PERMITS AND BOND, IF REQUIRED, PRIOR TO BEGINNING WORK.
4. ALL RADII SHALL BE 3' MIN. UNLESS OTHERWISE NOTED. DIMENSIONS ARE TO THE FACE OF CURBS, EDGE OF CONCRETE, OR TO FACE OF BUILDING, UNLESS OTHERWISE NOTED.
5. CURBS SHALL BE PARALLEL TO THE CENTERLINE OF DRIVES. THE CURB SHALL BE PLACED ONLY AFTER HAVING ALL BREAK POINTS (PC & PT OF CURVES) LOCATED AT THE FACE OF CURB OR AT A CONSISTENT OFFSET BY A LAND SURVEYOR.
6. THE SITE LAYOUT IS BASED ON THE CONTROL POINTS OR SITE DIMENSIONS AS NOTED.
7. REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULES, SLOPE PAVING, SIDEWALKS, EXIT PORCHES, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS, AS APPLICABLE.
8. DO NOT SCALE DRAWING AS THEY ARE REPRODUCTION AND SUBJECT TO DISTORTION.
9. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE STARTING ANY WORK. DAMAGES TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE REPAIRED ACCORDING TO LOCAL STANDARDS AND SPECIFICATIONS AT THE CONTRACTOR'S EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY.
10. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFICATIONS AND LIAISON WITH UTILITY COMPANIES IN THE PROCESS OF LOCATING, RELOCATION, AND TIE-IN TO PUBLIC UTILITIES. ALSO, CONTRACTOR IS RESPONSIBLE FOR NOTIFYING ALL INSPECTORS A MINIMUM 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITIES, VERIFY WITH GOVERNING AGENCY.
11. PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING PAVEMENT AND NEW PAVEMENT. FIELD ADJUSTMENT OF FINAL GRADES MAY BE NECESSARY. INSTALL ALL UTILITIES PRIOR TO INSTALLATION OF PAVEMENT.
12. CONCRETE WALKS AND PADS SHALL HAVE A LIGHT BROOM FINISH. ALL CONCRETE SHALL BE CLASS "A" (3,000 P.S.I.), UNLESS OTHERWISE NOTED. PREFORMED RECYCLED RUBBER EXPANSION JOINTS (1/2") ARE TO BE USED AT ALL LOCATIONS, WITH A MAXIMUM SPACING OF 30'O.C. TRANSVERSE JOINT MARKINGS SHALL BE MADE TO FORM BLOCKS AS NEARLY SQUARE AS POSSIBLE.
13. ALL DAMAGE TO EXISTING ASPHALT PAVEMENT TO REMAIN, WHICH RESULTS FROM NEW CONSTRUCTION, SHALL BE REPLACED WITH LIKE MATERIALS AT CONTRACTOR'S EXPENSE.
14. CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN THE USE OF EQUIPMENT IN AND AROUND OVERHEAD ELECTRICAL WIRES AND SERVICES. IF AT ANY TIME IN THE PURSUIT OF THIS WORK, THE CONTRACTOR MUST WORK IN CLOSE PROXIMITY OF THE ABOVE NOTED WIRES, THE ELECTRICAL COMPANY SHALL BE CONTACTED PRIOR TO SUCH WORK AND THE PROPER SAFETY MEASURES TAKEN.
15. FOR ANY WORK PERFORMED IN EASEMENTS OR RIGHTS-OF-WAYS, THE CONTRACTOR SHALL PROTECT AND RESTORE SAID PROPERTY TO A CONDITION SIMILAR OR EQUAL TO THAT EXISTING AT THE COMMENCEMENT OF CONSTRUCTION EXCEPT AS NOTED.
16. THESE PLANS, PREPARED BY W&A ENGINEERING, DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF W&A ENGINEERING REGISTERED PROFESSIONAL HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND /OR LOCAL REGULATIONS.
17. ALL ACCESSIBLE RAMPS SHALL CONFORM TO ADA STANDARDS OR LOCAL BUILDING CODE STANDARDS, WHICHEVER IS MORE RESTRICTIVE.
18. ON-SITE PAVING SHALL BE CONSTRUCTED IN ACCORDANCE WITH PLANS AND THE GEOTECHNICAL ENGINEERING REPORT. ALL PAVING WORK WITHIN PUBLIC RIGHT-OF-WAY MUST MEET THE MATERIALS, EQUIPMENT, AND CONSTRUCTION, AND TESTING REQUIREMENTS OF THE GOVERNING MUNICIPALITY'S STANDARDS & SPECIFICATIONS.
19. THIS SITE DOES NOT CONTAIN ANY WETLANDS AS SHOWN ON THE U.S. DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE, NATIONAL WETLANDS INVENTORY.
20. THE CONTRACTOR SHALL PROTECT ALL MONUMENTS, IRON PINS, AND PROPERTY CORNERS DURING CONSTRUCTION.
21. UNLESS NOTED, SUBMIT SHOP DRAWINGS OF ALL FABRICATED MATERIALS FOR REVIEW. DESIGN DRAWINGS SHALL NOT BE REPRODUCED FOR USE AS SHOP DRAWINGS.
22. ALL REQUIRED TESTING REPORTS SHALL BE MADE AVAILABLE AT THE JOB SITE.
23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING AND MAINTAINING AS-BUILT INFORMATION WHICH SHALL BE RECORDED AS CONSTRUCTION PROGRESSES OR AT THE COMPLETION OF APPROPRIATE CONSTRUCTION INTERVALS AND SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS TO THE OWNER FOR THE PURPOSE OF CERTIFICATION TO JURISDICTIONAL AGENCIES AS REQUIRED. ALL AS-BUILT DATA SHALL BE COLLECTED BY A STATE OF TENNESSEE PROFESSIONAL LAND SURVEYOR WHOSE SERVICES ARE ENGAGED AND PAID FOR BY THE CONTRACTOR.
24. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES A COPY OF THE CURRENT CONSTRUCTION DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, SPECIAL CONDITIONS AND COPIES OF ANY REQUIRED PERMITS.
25. ALL PAVING, CONSTRUCTION, MATERIALS, AND WORKMANSHIP WITHIN THE RIGHT-OF-WAY (ROW) SHALL BE IN ACCORDANCE WITH THE LOCAL GOVERNING AGENCY SPECIFICATIONS AND STANDARDS (LATEST EDITION).
26. ANY WELLS DISCOVERED ON SITE THAT HAVE NO USE MUST BE PLUGGED BY A LICENSED WELL DRILLING CONTRACTOR IN A MANNER APPROVED BY ALL JURISDICTIONAL AGENCIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY WELL ABANDONMENT PERMITS REQUIRED AND REPORTING TO THE APPROPRIATE JURISDICTIONAL AGENCIES WITHIN 24 HOURS AFTER DISCOVERY IS MADE.

GRADING NOTES:

1. *THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO EXISTING VEGETATION DURING CONSTRUCTION. THE COST TO REPLACE OR RESTORE VEGETATION SHALL BE THE CONTRACTOR'S RESPONSIBILITY. NO TREES ARE TO BE REMOVED AND/OR VEGETATION DISTURBED EXCEPT AS NECESSARY FOR GRADING PURPOSES AND ONLY AS APPROVED BY THE OWNER'S REPRESENTATIVE AND/OR CITY ENGINEER. SEE LANDSCAPE PLANS FOR TREES VEGETATION TO REMAIN.*
2. *CONTRACTOR TO VERIFY THAT NO TOP SOILS REMAINS ON SITE AND TO NOTIFY OWNER IF TOPSOIL IS FOUND.*
3. *AFTER MASS GRADING IS COMPLETE, PROOF-ROLL THE EXPOSED SUBGRADE TO DETECT ANY LOOSE OR SOFT AREAS. ANY YIELDING MATERIAL SHOULD BE UNDER CUT AND COMPACTED AS NOTED BELOW.*
4. *FILL MATERIAL SHALL MEET THE FOLLOWING REQUIREMENTS:*
   MINIMUM DRY DENSITY = 95 PCF
   LIQUID LIMIT LESS THAN 30
   PLASTICITY LIMIT LESS THAN 15
   UPPER 12" OF FILL: PARTICLE SIZE 6"ø MAXIMUM
   FILL BELOW UPPER 12": PARTICLE SIZE 2"ø MAXIMUM
   PROVIDE THE OWNER WITH TEST RESULTS OF OFF-SITE BORROW MATERIAL FOR APPROVAL PRIOR TO BRINGING SUCH MATERIAL ON-SITE.
5. *COHESIVE FILL SHALL BE PLACED IN LOOSE LIFTS OF 6" TO 8" AND COMPACTED WITH VIBRATORY SHEEP'S FOOT ROLLER. CLAY FILL SHALL BE COMPACTED TO 95% OF THE MAXIMUM STANDARD PROCTOR DRY DENSITY, ASTM D698. GRANULAR FILL SHALL BE PLACED IN LOOSE LIFTS OF 8" TO 10" AND COMPACTED/CONSOLIDATED TO 98% MAXIMUM STANDARD PROCTOR DRY DENSITY, ASTM D1557.*
6. *COMPACT ALL FILL TO A MINIMUM OF 95% OF THE MAXIMUM STANDARD PROCTOR (ASTM D-698)DRY DENSITY. COMPACT THE UPPER 12" OF FILL IN NON-LANDSCAPED AREAS TO A MINIMUM OF 100% OF THE MAXIMUM STANDARD PROCTOR DRY DENSITY. THE MOISTURE CONTENT OF COHESIVE SOIL SHALL BE WITHIN ±2% OF THE OPTIMUM MOISTURE. THE MOISTURE CONTENT OF GRANULAR SOIL SHALL BE BETWEEN ±3% OF THE OPTIMUM MOISTURE.*
7. *PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS. SUBGRADE SOFTENED BY PERCHED WATER IN FOUNDATIONS AND PAVEMENT AREAS MUST BE UNDERCUT AND COMPACTED WITH SUITABLE FILL MATERIAL AS DIRECTED BY THE OWNER'S REPRESENTATIVE.*
8. *TOPOGRAPHIC INFORMATION PROVIDED BY W&A ENGINEERING. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, HE/SHE SHALL HAVE MADE AT HIS/HER EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER AND ENGINEER FOR REVIEW.*
9. *FILL ALL PLANTERS/ISLANDS TO TOP OF CONCRETE CURB WITH TOPSOIL. TOPSOIL TO BE CLEAN AND FREE OF DEBRIS GREATER THAN 1" IN DIAMETER, ETC.*
10. *IN NO CASE SHALL SLOPE HEIGHT, SLOPE INCLINATION, OR EXCAVATION DEPTH, INCLUDING TRENCH CONSTRUCTION, EXCEED THOSE SPECIFIED IN LOCAL, STATE AND FEDERAL REGULATIONS, SPECIFICALLY THE CURRENT OSHA HEALTH AND SAFETY STANDARDS FOR EXCAVATIONS (29 CRF PART 1926) SHALL BE FOLLOWED*
11. *A GEOTECHNICAL REPORT WAS PROVIDED TO THE ENGINEER AT THE TIME OF DESIGN. IN THE EVENT OF CONFLICT BETWEEN THE DRAWINGS AND ANY GEOTECHNICAL REPORT, MAKE NO ASSUMPTIONS. THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR CLARIFICATION.*
12. *ALL PIPES UNDER EXISTING PAVED AREAS SHALL BE BACKFILLED TO THE TOP OF SUBGRADE WITH #57 CRUSHED STONE OR AS REQUIRED BY THE LOCAL GOVERNING AGENCY.*
13. *MINIMUM SLOPE ON ASPHALT OR CONCRETE PAVING SHALL BE 1.0% AND A MINIMUM 0.5% SLOPE ON CURBS. THE MAXIMUM SLOPE IN ACCESSIBLE PARKING OR OTHER ADA DESIGNATED AREAS SHALL BE 2.0%.*
14. *ALL GRADED AREAS, INCLUDING SLOPES, ARE TO BE MULCHED AND SEEDED AS SOON AS POSSIBLE AFTER GRADING IS COMPLETED.*
15. *ALL NEW STRUCTURES AND EXISTING STRUCTURES SHALL HAVE SEDIMENT REMOVED PRIOR TO ACCEPTANCE.*
16. *ALL LAWN/LANDSCAPE AREAS DISTURBED BY GRADING OPERATIONS SHALL RECEIVE 8 INCHES OF TOPSOIL. CONTRACTOR TO MAINTAIN DISTURBED AREAS UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED.*
17. *ALL SLOPES 3:1 OR STEEPER SHALL BE STABILIZED WITH EROSION CONTROL MATTING INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR TO MAINTAIN DISTURBED AREAS UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED.*
18. *THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE GENERAL N.P.D.E.S. PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES. SEE EROSION PROTECTION AND SEDIMENT CONTROL (EPSC) PLANS FOR ADDITIONAL INFORMATION.*
19. *EXISTING AND PROPOSED GRADE CONTOUR INTERVALS SHOWN AT (1' FOOT).*
20. *THIS GRADING AND DRAINAGE PLAN IS NOT A DETERMINATION OR GUARANTEE OF THE SUITABILITY OF SURFACE CONDITIONS FOR THE WORK INDICATED. DETERMINATION OF THE SUBSURFACE CONDITIONS FOR THE WORK INDICATED IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.*

UTILITY NOTES:

1. PROPER FITTINGS SHALL BE USED THROUGHOUT PROJECT. TAPPING IS NOT PERMITTED EXCEPT ON EXISTING MAIN AND ONLY APPROVED WITH PROPER TAPPING SLEEVE AND VALVE AS APPROVED BY THE NOLENSVILLE COLLEGE GROVE UTILITY DISTRICT SPECIFICATIONS.
2. FRAMES AND COVERS SHALL BE CAST IRON, AS APPROVED BY THE NOLENSVILLE COLLEGE GROVE UTILITY DISTRICT.
3. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY LICENSES, PERMITS, ETC., AND PAY ANY FEES OR COSTS ASSOCIATED THEREWITH INCLUDING COSTS OF INSPECTIONS FROM GOVERNMENTAL AND UTILITY AGENCIES WITH SUCH REQUIREMENTS PRIOR TO START OF CONSTRUCTION.
4. NOTIFICATION SHALL BE GIVEN TO PROPER AUTHORITIES PRIOR TO CONSTRUCTION OF WATER OR SEWER LINES AND APPURTENANCES.
5. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN THE REQUIRED CONSTRUCTION IDENTIFICATION SIGNS FOR PRIVATE DEVELOPMENT AS APPROVED BY THE NOLENSVILLE COLLEGE GROVE UTILITY DISTRICT.
6. MATERIALS AND WORKMANSHIP SHALL BE IN STRICT COMPLIANCE WITH THE CURRENT SPECIFICATIONS OF THE LOCAL UTILITY, OR OTHER GOVERNING AGENCY OR DEPARTMENT, AND ANY CONFLICT APPEARING IN THESE PLANS OR ITEMS NOT MENTIONED WILL BE GOVERNED BY SAID SPECIFICATIONS.
7. ANY PIPE LENGTHS SHOWN ARE APPROXIMATE AND SHALL NOT BE USED UNTIL VERIFIED IN THE FIELD FROM OFF-SET MEASUREMENTS.
8. LAY SANITARY SEWER AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. IF THIS IS NOT PRACTICAL, THE SANITARY SEWER MAY BE LAID CLOSER THAN 10 FEET TO A WATER MAIN PROVIDED IT IS LAID IN A SEPARATE TRENCH AND THE ELEVATION OF THE TOP OF THE WASTEWATER IS AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN.
9. WHERE A SANITARY SEWER LINE CROSSES UNDER WATER MAINS, THE TOP OF THE SANITARY SEWER SHALL BE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN. IF THE ELEVATION OF THE WASTEWATER CANNOT BE VARIED TO MEET THE ABOVE REQUIREMENTS, RELOCATE THE WATER MAIN TO PROVIDE THIS SEPARATION, OR ELSE RECONSTRUCT WITH MECHANICAL JOINT DUCTILE IRON PIPE FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE WASTEWATER WITH A FULL JOINT OF THE WATER MAIN CENTERED OVER THE WASTEWATER, AND ENCASED IN CONCRETE.
10. IF IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS STIPULATED ABOVE, CONSTRUCT BOTH THE WATER MAIN AND THE SANITARY SEWER OF MECHANICAL JOINT DUCTILE IRON PIPE, AND PRESSURE TEST EACH.
11. PROVIDE CONCRETE CAP OR DUCTILE IRON PIPE FOR SECTIONS OF SANITARY SEWER LINE WITH LESS THAN 2.5 FEET OF COVER IN NON-TRAFFIC AREAS AND 4 FEET OF COVER IN TRAFFIC AREAS WHEN COMPLETED.
12. LINES CROSSING A CREEK, STREAM, OR DRAIN SHALL BE INSTALLED IN ACCORDANCE WITH LATEST REQUIREMENTS OF THE LOCAL UTILITY.
13. ALL APPURTENANCES SHALL BE FLUSH WITH FINISH GRADE.
14. A MINIMUM VERTICAL SEPARATION OF 24" IS REQUIRED AT ANY LOCATION WHERE A WATER LINE CROSSES A STORM SEWER LINE.
15. WATER/SEWER LINE TRENCHES IN EXISTING DRIVEWAYS OR STREETS SHALL BE BACKFILLED WITH CRUSHED STONE TO THE TOP OF THE TRENCH.
16. SEWER LINE TRENCHES OUTSIDE EXISTING DRIVEWAYS OR STREETS SHALL BE BACKFILLED WITH CRUSHED STONE TO 12" ABOVE THE PIPE AND BACKFILLED WITH A MIXTURE OF CLEAN EARTH, FREE OF ROCK NO LARGER THAN 1 INCH SQ. AND DEBRIS, FROM THAT POINT TO THE TOP OF THE TRENCH. WHERE THE UTILITIES ARE LOCATED BENEATH OR NEAR PAVEMENT, BACKFILL THE TRENCHES WITH CRUSHED STONE TO SUBGRADE.
17. SANITARY SEWER LINES SHALL BE SDR 35 PVC WITH GASKET JOINTS, PER ASTM D3034, OR DUCTILE IRON SEWER PIPE CONFORMING TO ANSI 21.51/AWWA C151 FOR CENTRIFUGALLY CAST IN METAL OR SAND-LINED MOLDS. THICKNESS CLASS 51 FOR GRAVITY SEWERS.
18. SANITARY SEWER LINES THAT ARE 12 FEET DEEP OR GREATER ON AVERAGE SHALL BE DUCTILE IRON PIPE, OTHERWISE USE PVC.
19. PVC CONDUIT, SCHEDULE 40, ELECTRICAL GRADE SHALL BE INSTALLED AT LOCATIONS SHOWN ON THE PLANS AT 24"-30" DEPTH BELOW SUBGRADE FOR FUTURE UTILITIES INSTALLATION. CONDUITS SHALL BE TRENCH BACKFILLED. LENGTH OF THE CONDUIT SHALL EXTEND TO 2 FEET BEYOND THE CURB AND GUTTER OR SIDEWALK UNLESS OTHERWISE INDICATED ON THE PLANS AND ENDS TAPED W/ DUCT TAPE. A PULL STRING OR WIRE SHALL BE INSTALLED IN THE CONDUIT. THE CONTRACTOR SHALL MARK LOCATIONS OF BURIED CONDUIT BY A SCORE LINE IN THE TOP OF THE CURB DURING PAVING OPERATIONS.
20. ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
21. WATER LINES 3" OR LARGER TO BE CLASS 52 DUCTILE CAST IRON PIPE MADE OF GOOD QUALITY DUCTILE IRON THAT MEETS THE REQUIREMENTS FOR MODULAR IRON CASTINGS OF ASTM E8. IT SHALL BE PLAIN END DUCTILE IRON PIPE WITH PUSH-ON, SINGLE GASKET JOINTS. THE DESIGN THICKNESS SHALL BE THAT SPECIFIED BY ANSI A21.50/AWWA C150. DEPTH TO TOP OF PIPE WILL BE NO LESS THAN 36". UNLESS OTHERWISE SPECIFIED ON THE PLAN.
22. WATER LINES 2" OR SMALLER TO BE SDR 26 PVC PIPE, DEPTH OF PIPE IS TO BE NO LESS THAN 36" AND NO MORE THAN 42" UNDERGROUND.
23. TELEPHONE UTILITY CONSTRUCTION SHALL COMPLY WITH LOCAL UTILITY SPECIFICATIONS.
24. ELECTRIC UTILITY CONSTRUCTION SHALL COMPLY WITH LOCAL UTILITY SPECIFICATIONS.
25. THRUST BLOCKS W/ RESTRAINT DEVICES SHALL BE PROVIDED AT ALL BENDS, TEES, AND FIRE HYDRANTS, ETC.
26. DIMENSIONS SHOWN ARE TO CENTERLINE OF PIPE OR FITTING.

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CIVIL ENGINEERS & LAND SURVEYORS
2486 NASHVILLE HIGHWAY
COLUMBIA, TN 38401
PHONE: (931) 388-2329
www.wesengineers.com
ENGINEERS & SURVEYORS

Client
DRB GROUP
4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
FINAL PUD MASTER PLAN
COLUMBIA, MAURY COUNTY, TN 38401
PROJECT NOTES

REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical:
Horizontal: N/A

GERALD W. ...VICK REGISTERED ENGINEER AGRICULTURE COMMERCE No. 107415 STATE OF TENNESSEE 4/20/26

C002

FILE: J:\WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Briteland Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - PUD Master Plan.dwg

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TN GRID NORTH



GRAPHIC SCALE

200 0 100 200 400 800

(IN FEET)
1 inch = 200 ft.

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PHONE: (931) 388-2329
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DRB GROUP
4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
FINAL PUD MASTER PLAN
COLUMBIA, MAURY COUNTY, TN 38401
OVERALL EXISTING CONDITIONS

REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale: Vertical: 1" = 200'
Horizontal:

C100

GREGORY W. VICK
REGISTERED LANDSCAPE ARCHITECT
No. 107415
STATE OF TENNESSEE

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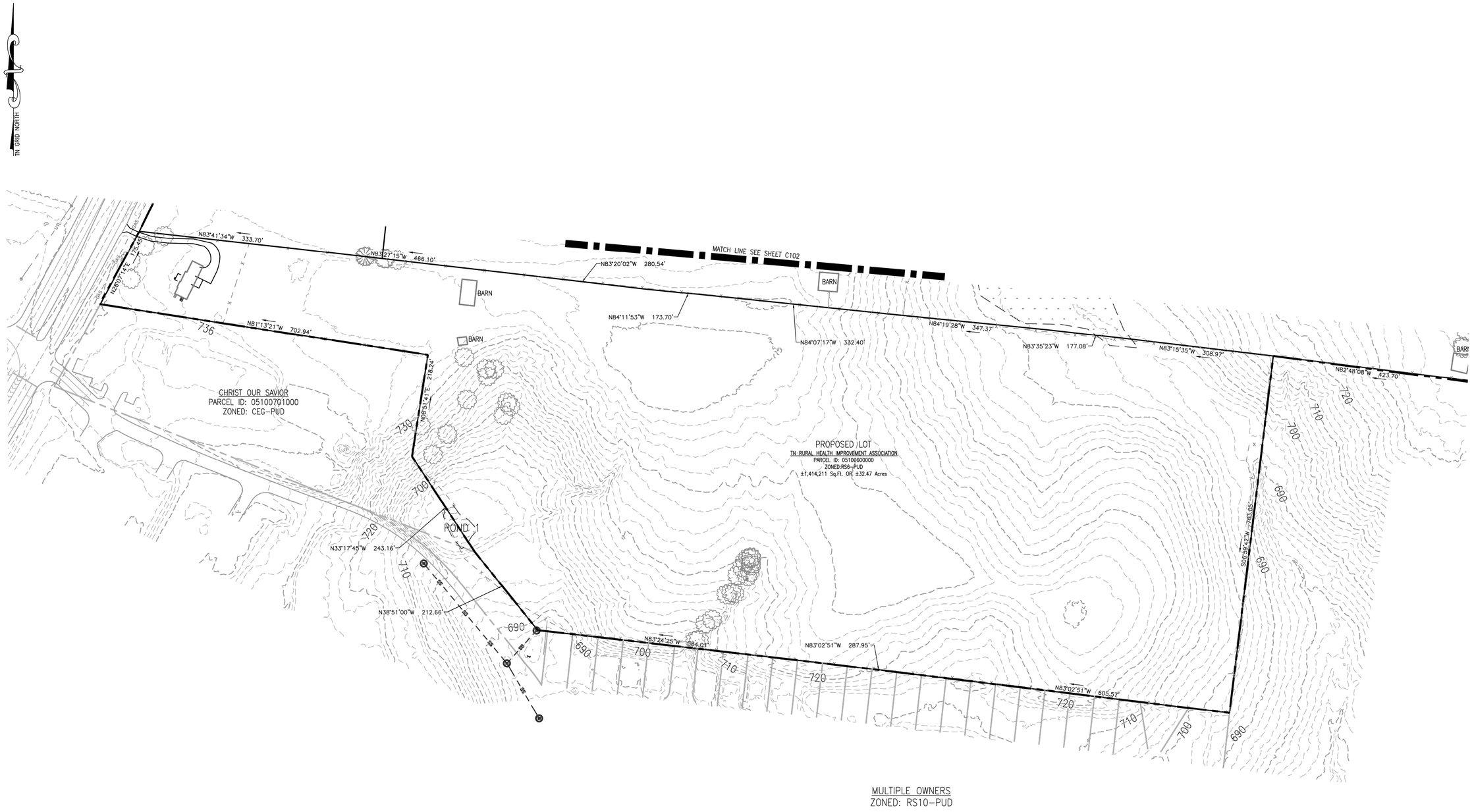

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www.wesengineers.com

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DRB GROUP
4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

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FINAL PUD MASTER PLAN
COLUMBIA, MAURY COUNTY, TN 38401
EXISTING CONDITIONS

REVISIONS	DATE

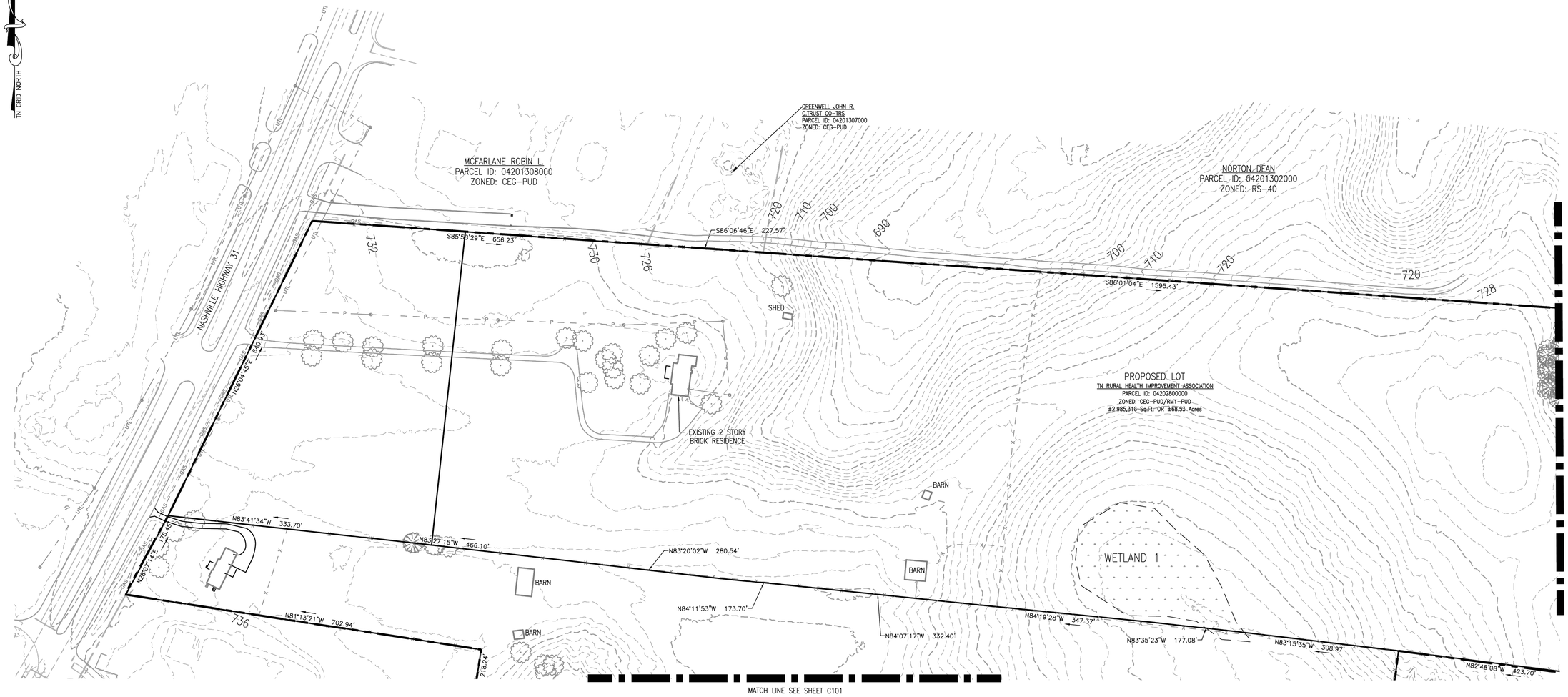
Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical:
Horizontal: 1" = 100'

GERALD W. VICK
STATE OF TENNESSEE
No. 107415
4-20-2026

C101

FILE: J:\WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Briteland Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - PUD Master Plan.dwg



GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

GERALD W. DYCK
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 107415
STATE OF TENNESSEE
4-20-26

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MCCLURE FARMS
FINAL PUD MASTER PLAN
COLUMBIA, MAURY COUNTY, TN 38401
EXISTING CONDITIONS

REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical:
Horizontal: 1" = 100'

C102

FILE:J:\WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Briteland Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - PUD Master Plan.dwg

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TN GRID NORTH



GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

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FINAL PUD MASTER PLAN
COLUMBIA, MAURY COUNTY, TN 38401
EXISTING CONDITIONS

REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale: Vertical: 1" = 100'
Horizontal:

GREGORY W. VICK
LICENSED PROFESSIONAL ENGINEER
No. 107415
STATE OF TENNESSEE
4/20/26

C103

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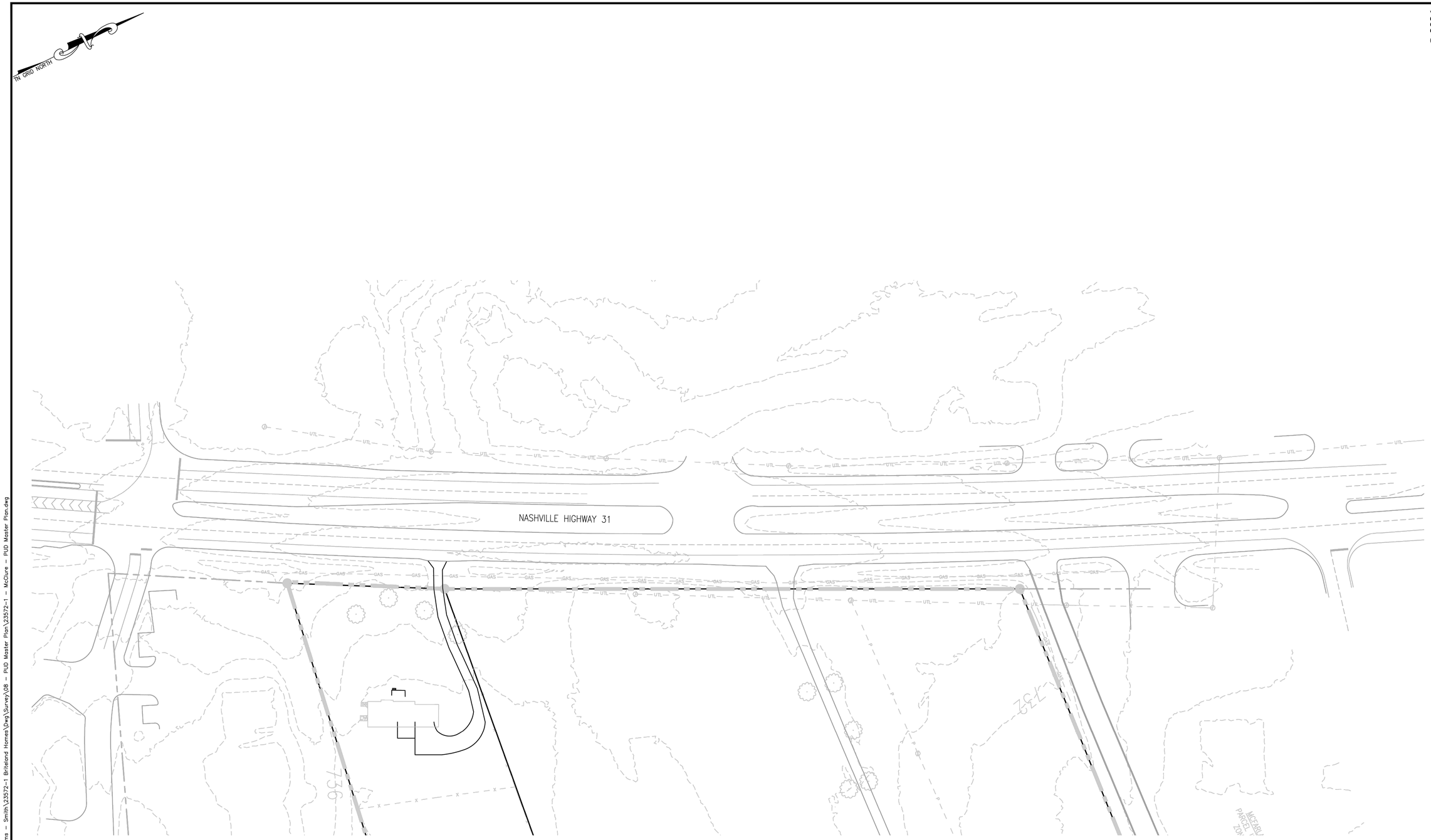

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

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MCCLURE FARMS
FINAL PUD MASTER PLAN
COLUMBIA, MAURY COUNTY, TN 38401
DEMOLITION PLAN

REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical:
Horizontal: 1" = 50'

GERALD W. VOVICK
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 107415
STATE OF TENNESSEE
4/20/26

C111

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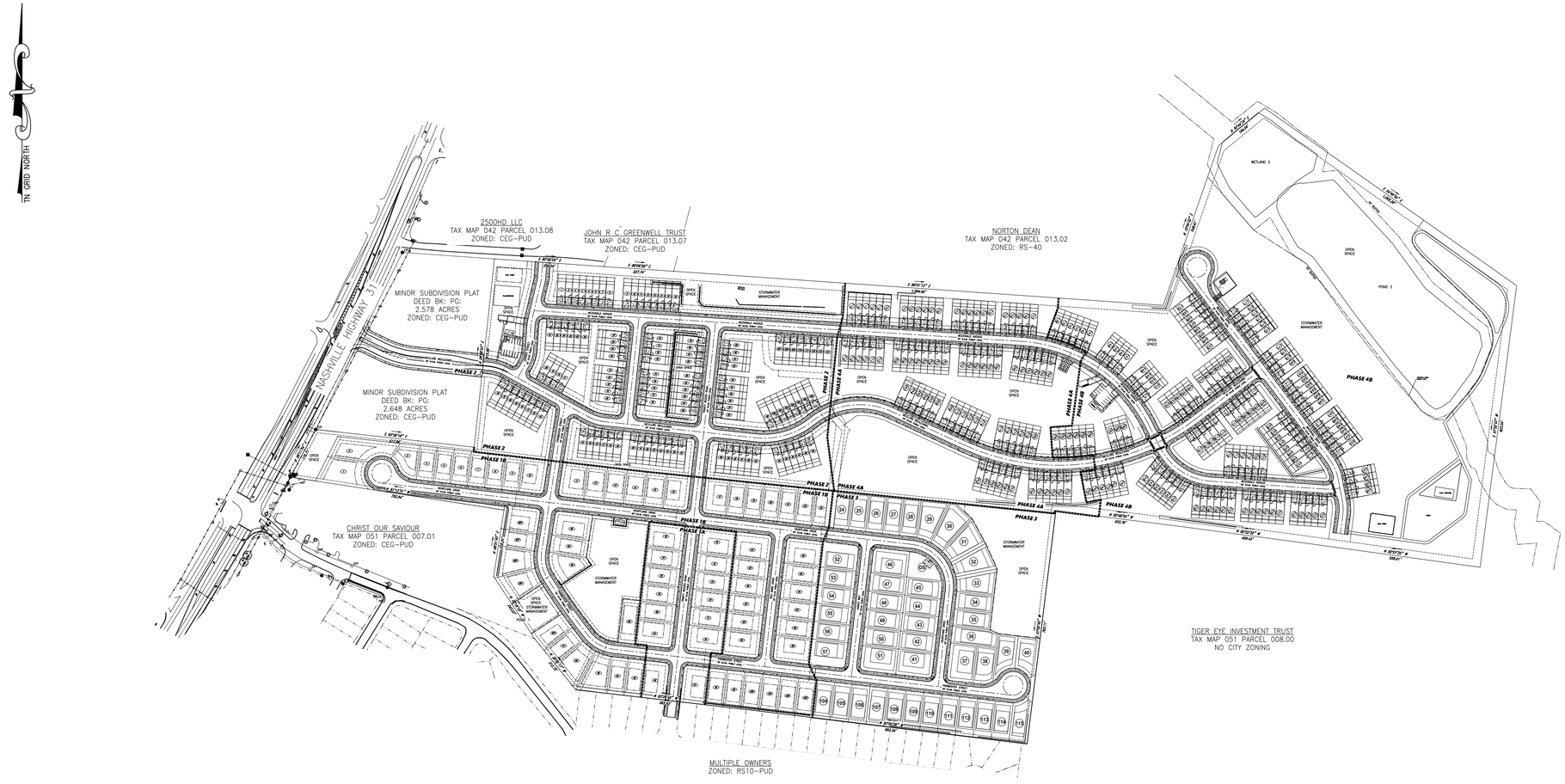


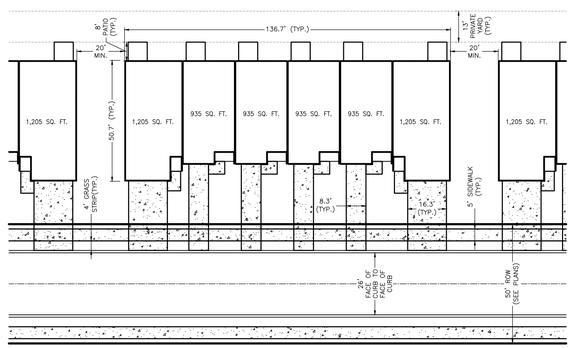
GRAPHIC SCALE

200 0 100 200 400 800

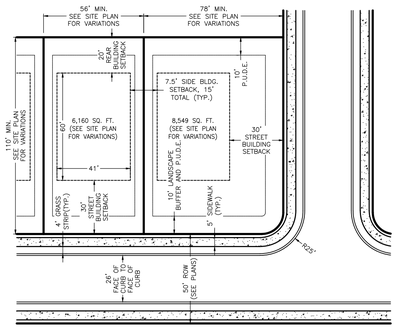
(IN FEET)
1 inch = 200 ft.

TOWNHOME UNITS – 315
SINGLE FAMILY LOTS – 115

NOTE: STREET TREES SHALL BE PLANTED A A RATE OF 1 TREE PER 50' OF LINEAR STREET FRONTAGE AS A TOTAL REQUIREMENT. STREET TREES SHALL BE ALLOWED TO VARY IN SPACING AND MAY BE PLACED IN GROUPS WHERE UNIFORM PLANTING IS UNVIABLE DUE TO CONFLICTS WITH BUILDINGS OR UTILITIES. TREES SHALL BE PLACED NO CLOSER THAN 5' FROM THE BACK OF THE SIDEWALK AND NO FURTHER THAN 15'.



MULTI-FAMILY LOT (TYP.)
SCALE: 1"=30'



SINGLE-FAMILY LOT (TYP.)
SCALE: 1"=40'

PROJECT DATA

PROPERTY OWNER: GH TENNESSEE, LLC
BARTON CREEK PLAZA III
3815 SOUTH CAPITAL OF TEXAS HIGHWAY, SUITE 275
AUSTIN, TX 78704
ATTN: CHRIS LYNCH
CLYNCH@GEHANHOMES.COM
512-483-9810

DEVELOPER: GH TENNESSEE, LLC
BARTON CREEK PLAZA III
3815 SOUTH CAPITAL OF TEXAS HIGHWAY, SUITE 275
AUSTIN, TX 78704
ATTN: CHRIS LYNCH
CLYNCH@GEHANHOMES.COM
512-483-9810

AUTHORIZED AGENT: WES ENGINEERS & SURVEYORS
2486 NASHVILLE HWY
COLUMBIA, TN 38401
ATTN: GERALD WICK
GERALD@WESENGINEERS.COM
931-388-2329

PYSICAL ADDRESS: 2504 NASHVILLE HWY
COLUMBIA, TN 38401

TAX PARCEL: PORTION OF MAP 051, PARCEL 006.00 & MAP 042, PARCEL 028.00

TOTAL PROJECT ACREAGE: 32.47 ACRES & 62.62 ACRES FOR A TOTAL OF 95.29 ACRES

CONTOUR INTERVAL: 1 FOOT

BOUNDARY SURVEY: A SURVEY BY W&A ENGINEERING, DATED 02-01-2021 WAS USED IN DEVELOPING THIS SET OF PLANS.

A GEOTECHNICAL REPORT FOR THIS SITE COMPLETED BY GEOSERVICES, LLC DATED 01-14-2021 WAS USED IN DEVELOPING THIS SET OF PLANS.

EXISTING ZONING: RS6-PUD (2504 NASHVILLE HIGHWAY) & CEG-PUD, RM1-PUD (2524 NASHVILLE HIGHWAY)

BUILDING SETBACK MINIMUM UNLESS LANDSCAPE BUFFER IS MORE RESTRICTIVE (FOR ALL BUILDING LOCATED WITHIN THE INTERNAL PORTION OF THE SITE, SETBACKS ARE TO BE ESTABLISHED THROUGH REVIEW OF THE DEVELOPMENT PROPOSAL):

- NASHVILLE HIGHWAY = 400' MAX
  - 100' IF 100% OF PARKING IS BEHIND/BELOW BUILDINGS AND 100% OF PARKING SCREENED FROM VIEW; BUILDINGS LIMITED TO ONE STORY
  - 200' IF PARKING IS BEHIND, BELOW, ABOVE, OR TO THE SIDE OF BUILDINGS AND 75% OF PARKING SCREENED FROM VIEW; BUILDINGS LIMITED TO TWO STORIES
  - 300' IF MAX 50% OF PARKING IS IN FRONT OF BUILDING AND 50% OF PARKING SCREENED FROM VIEW; BUILDINGS LIMITED TO THREE STORIES
- FRONT/STREET YARD (COLLECTOR STREET) = 30' (RS-6), 35' (RM-1)
- FRONT/STREET YARD (ARTERIAL STREET) = 40' (RS-6 & RM-1)
- SIDE YARD =
  - 7' SINGLE SIDE, 15' TOTAL (RS-6 & RM-1, TWO STORIES OR LESS)
  - 12' SINGLE SIDE, 35' TOTAL (RS-6, THREE OR MORE STORIES); 10' SINGLE SIDE, 30' TOTAL (RM-1, THREE OR MORE STORIES)
- REAR YARD = 20' (RS-6 & RM-1)
- CEG-PUD SETBACKS ARE SET DURING PLAN REVIEW AND APPROVAL

LANDSCAPE BUFFERS: (BASED UPON CANOPY, MIXED TREE, OR POWERLINE COVERAGE. WALL ALTERNATIVE AVAILABLE AS NEEDED)

ZONING	FRONT/STREET	CEG-PUD	RS40(DEVELOPED)	RS40(UNDERDEVELOPED)	RS6-PUD	RM1-PUD	RS10-PUD
RS6-PUD	10'	10'(30' TOT.)	15'(25' TOT.)	15'	0'	10'(25' TOT.)	10'(15' TOT.)
RM1-PUD	10'	10'(30' TOT.)	20'(30' TOT.)	25'	15'(25' TOT.)	10'(15' TOT.)	N/A
CEG-PUD	10'	10'(15' TOT.)	20'(30' TOT.)	N/A	20'(30' TOT.)	20'(30' TOT.)	N/A

EXISTING USE: SINGLE FAMILY RESIDENTIAL

EXISTING BUILDING SF: 1,498 S.F. (2504 NASHVILLE HIGHWAY) & 3,366 S.F. (2524 NASHVILLE HIGHWAY)

EXISTING PARKING: N/A

PROPOSED USE: MIXED USE – RESIDENTIAL, MULTIFAMILY.

MINIMUM REQUIRED SITE:
COMMERCIAL ENTERPRISE-GENERAL (CEG-PUD) – 40,000 S.F.
MINIMUM LOT AREA:

RS6 – 6,000 S.F.
RM1 – 6,000 S.F.

PROPOSED BUILDING SF: 750,924 S.F. (FAR = 0.26, MAX LOT COVERAGE = 0.35 (RS-6) OR 0.50 (RM-1), LOT COVERAGE = 0.13)

BUILDING HEIGHT: 28'-9" AT TOP OF ROOF, MAX BUILDING HEIGHT OF 35' IN R-PUD UNLESS APPROVED BY CITY FIRE DEPARTMENT

PARKING REQUIREMENT: MINIMUM 630
ALL SINGLE-FAMILY RESIDENTIAL HOUSEHOLD LIVING – 1.5 SPACES PER UNIT
MULTIFAMILY/APARTMENT – 2 SPACES PER 3 BEDROOM UNITS; MIN. 630 REQUIRED BASED ON 315 UNITS
ALL RETAIL SALES AND SERVICE – 1 SPACE PER 400 SF FLOOR AREA; MIN. TBD BASED ON TBD SQ. FT. OF AREA

ACCESSIBLE PARKING:
REQUIRED – TBD (0 VAN SPACES) PER ADA.
REQUIRED – TBD (0 VAN SPACES)

PROPOSED PARKING: 630 MULTIFAMILY TOTAL SPACES, INCLUDING 0 ADA SPACES.

OPEN SPACE USE REQUIREMENT: 33% MINIMUM OF TOTAL OPEN SPACE MUST BE USEABLE (REQUIRED YARD SPACES AND INDIVIDUAL YARDS CANNOT BE COUNTED TOWARDS FULFILLING THIS REQUIREMENT EXCEPT IN THE R/RS-40 DISTRICT). ALL RESIDENTIAL PROJECTS LESS THAN 25 ACRES IN SIZE AND/OR 100 DWELLING UNITS (WHICHEVER IS LESS) SHALL BE EXEMPT FROM OPEN SPACE REQUIREMENTS SHOWN BELOW:
RS-6 – 9% OF GROSS AREA
RM-1 – 12% OF GROSS AREA

FLOOD PLAIN: NO PORTION OF THIS PROPERTY LIES WITHIN THE FLOOD PLAIN ACCORDING TO FIRM COMMUNITY PANEL NUMBER 47119C0180E DATE 04/16/2007.

THERE ARE STATE WATERS ON-SITE.

THERE ARE TWO AREAS CLASSIFIED AS PSS1C FRESHWATER FORESTED/SHRUB WETLAND HABITATS & ONE AREA CLASSIFIED AS A PF01A FRESHWATER FORESTED/SHRUB WETLAND HABITAT TO BE DELINEATED ON-SITE. THERE IS A PUBHx FRESHWATER POND ON-SITE. THERE IS ALSO A PUBHh FRESHWATER POND ON-SITE. TWO AREAS CLASSIFIED AS R2UBH & R5UBH RIVERINES ARE UPSTREAM OF THE FRESHWATER PUBHh POND & A SINGLE R2UBH RIVERINE DOWNSTREAM OF THE PUBHh POND.

WATER SUPPLY: COLUMBIA POWER & WATER SYSTEMS

SEWAGE DISPOSAL: COLUMBIA WASTEWATER SYSTEM

NATURAL GAS: ATMOS ENERGY CORPORATION

SOLID WASTE: CITY OF COLUMBIA SANITATION DIVISION

OTHER UTILITIES: TELEPHONE, CABLE TV

SITE DRAINAGE: THE EXISTING LOT DRAINS TO THE SOUTHEAST TO AN EXISTING STREAMS LEADING TO RUTHERFORD CREEK. THE SITE IS MOSTLY UNDEVELOPED WITH NO WATER QUALITY OR QUANTITY CURRENTLY PROVIDED. A FRESHWATER POND TO THE NORTHEAST COLLECTS DRAINAGE FROM THE NORTH.

CITY OF COLUMBIA NOTES:
1. THE OWNER/DEVELOPER OF THIS PROPERTY IS RESPONSIBLE FOR ALL FINANCIAL MATTERS.
2. ALL CONSTRUCTION AND USE OF THE PROPOSED FACILITY TO MEET THE APPLICABLE PERFORMANCE STANDARDS AS SET FORTH IN THE CITY OF COLUMBIA ZONING ORDINANCE, ARTICLE 12, SECTION 8.
3. CONSTRUCTION ANTICIPATED TO BE COMPLETED BY 2027.



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WES ENGINEERS & SURVEYORS
CIVIL ENGINEERS & LAND SURVEYORS
2486 NASHVILLE HIGHWAY
COLUMBIA, TN 38401
PHONE: (931) 388-2329
www.wesengineers.com
ENGINEERS & SURVEYORS

Client
DRB GROUP
4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
FINAL PUD MASTER PLAN
COLUMBIA, MAURY COUNTY, TN 38401
OVERALL SITE PLAN

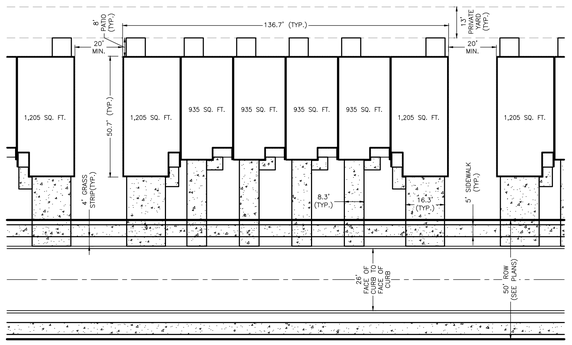
REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GW
Date: 04-20-2026

Job. no. 23572-1
Scale: Vertical: 1" = 200' Horizontal:

C200

FILE: J:\WES_Engineers_Surveyors 2023\23572 – McClure Farms – Smith\23572-1 Britland Homes\Dwg\Survey\08 – PUD Master Plan\23572-1 – McClure – PUD Master Plan.dwg



MULTI-FAMILY LOT (TYP.)
SCALE: 1"=30'

TN GRID NORTH

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

LOT AREA TABLE (PHASE 2)

LOT	SQ. FT.	ACRES
1	2,560.8	0.06
2	2,163.3	0.05
3	2,163.3	0.05
4	2,163.3	0.05
5	2,163.3	0.05
6	2,163.3	0.05
7	2,163.3	0.05
8	2,560.8	0.06
9	2,560.8	0.06
10	2,163.3	0.05
11	2,163.3	0.05
12	2,163.3	0.05
13	2,163.3	0.05
14	2,163.3	0.05
15	2,163.3	0.05
16	2,560.8	0.06
17	2,560.8	0.06
18	2,167.3	0.05
19	2,167.3	0.05
20	2,565.5	0.06
21	2,603.3	0.06
22	2,199.3	0.05
23	2,199.3	0.05
24	2,199.3	0.05
25	2,199.3	0.05
26	2,603.3	0.06
27	2,586.8	0.06
28	2,185.3	0.05
29	2,185.3	0.05
30	2,586.8	0.06
31	2,586.8	0.06
32	2,185.3	0.05
33	2,185.3	0.05
34	2,185.3	0.05
35	2,586.8	0.06
36	2,586.8	0.06
37	2,185.3	0.05
38	2,185.3	0.05
39	2,185.3	0.05
40	2,185.3	0.05
41	2,185.3	0.05
42	2,185.3	0.05
43	2,586.8	0.06
44	2,905.2	0.07
45	2,289.1	0.05
46	2,207.3	0.05
47	2,185.6	0.05
48	2,185.1	0.05
49	2,586.8	0.06
50	2,586.8	0.06
51	2,185.1	0.05
52	2,185.1	0.05
53	2,185.1	0.05
54	2,185.1	0.05
55	2,185.1	0.05
56	2,185.1	0.05
57	2,586.8	0.06
58	2,612.8	0.06
59	2,207.3	0.05
60	2,207.3	0.05
61	2,207.3	0.05
62	2,207.3	0.05
63	2,619.1	0.06
64	2,678.2	0.06
65	2,203.4	0.05
66	2,180.7	0.05
67	2,216.8	0.05
68	2,282.3	0.05
69	2,842.1	0.07
70	2,560.8	0.06
71	2,163.3	0.05
72	2,163.3	0.05
73	2,560.8	0.06
74	2,560.8	0.06
75	2,163.3	0.05
76	2,163.3	0.05
77	2,163.3	0.05
78	2,612.8	0.06
79	2,560.8	0.06
80	2,560.8	0.06
81	2,163.3	0.05
82	2,560.8	0.06
83	2,560.8	0.06
84	2,163.3	0.05
85	2,163.3	0.05
86	2,163.3	0.05
87	2,560.8	0.06
88	2,560.8	0.06
89	2,612.8	0.06
90	2,207.3	0.05
91	2,207.3	0.05
92	2,207.3	0.05
93	2,612.8	0.06
94	2,207.3	0.05
95	2,207.3	0.05
96	2,207.3	0.05
97	2,207.3	0.05
98	2,612.8	0.06
99	2,587.1	0.06
100	2,440.6	0.06
101	2,503.7	0.06
102	2,518.8	0.06
103	2,486.5	0.06
104	2,405.7	0.06
105	2,300.0	0.05
106	2,631.1	0.06
107	2,560.8	0.06
108	2,163.3	0.05
109	2,163.3	0.05
110	2,163.3	0.05
111	2,163.3	0.05
112	2,163.3	0.05
113	2,163.3	0.05
114	2,560.8	0.06

LOT	SQ. FT.	ACRES
OS-1	40,902.9	0.94
OS-2	31,359.4	0.72
OS-3	16,427.1	0.38
OS-4	89,803.4	2.06
OS-5	47,815.3	1.10
OS-6	36,936.8	0.85
OS-7	18,940.3	0.43
OS-8	28,783.2	0.66

CURVE TABLE (PHASE 2)

CURVE	RADIUS	LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	75.00'	39.27'	38.83'	S 18°56'55" E	30°00'25"
C2	150.00'	98.54'	96.78'	S 72°41'13" E	37°38'24"
C3	150.00'	99.23'	97.38'	S 72°41'13" E	37°53'51"
C4	13.00'	20.42'	18.38'	N 73°48'42" E	90°00'00"
C5	95.00'	41.79'	41.46'	N 16°12'29" E	25°12'26"
C6	145.00'	24.58'	24.53'	N 08°27'29" E	9°43'19"
C7	95.00'	15.48'	15.47'	N 08°38'59" E	9°20'17"
C8	145.00'	23.63'	23.61'	S 08°38'19" W	9°20'17"
C9	13.00'	22.62'	19.93'	S 36°32'36" E	99°42'14"
C10	13.00'	19.84'	17.97'	S 49°52'31" W	87°27'39"
C11	13.00'	20.43'	18.39'	S 38°52'50" E	90°03'09"
C12	225.00'	41.36'	41.30'	S 89°10'22" E	10°31'55"
C13	225.00'	27.19'	27.17'	N 80°06'05" E	6°55'23"
C14	225.00'	22.17'	22.16'	N 75°47'26" E	5°41'44"
C15	225.00'	22.08'	22.07'	N 70°07'53" E	5°37'31"
C16	225.00'	22.01'	22.00'	N 64°31'03" E	5°36'19"
C17	225.00'	22.16'	22.15'	N 58°53'31" E	5°38'32"
C18	225.00'	18.34'	18.33'	N 53°44'15" E	4°40'11"
C19	225.00'	4.13'	4.13'	N 51°50'14" E	1°03'09"
C20	275.00'	22.41'	22.41'	N 54°36'24" E	4°40'15"
C21	275.00'	26.18'	26.18'	N 59°40'11" E	5°27'03"
C22	275.00'	33.92'	33.90'	N 65°55'53" E	7°04'05"
C23	275.00'	22.91'	22.91'	N 69°40'50" E	4°46'31"
C24	225.00'	23.85'	23.84'	S 66°36'35" W	6°04'24"
C25	225.00'	42.70'	42.65'	S 73°29'13" W	10°52'14"
C26	225.00'	21.15'	21.15'	S 53°56'22" W	4°49'24"
C27	225.00'	26.98'	26.98'	S 58°31'16" W	6°52'25"
C28	225.00'	22.33'	22.34'	S 63°45'46" W	5°41'21"
C29	225.00'	22.00'	22.00'	S 69°23'10" W	5°36'19"
C30	225.00'	22.01'	22.00'	S 74°59'29" W	5°36'31"
C31	225.00'	22.05'	22.05'	S 80°34'17" W	5°36'42"
C32	225.00'	26.10'	26.10'	S 86°21'16" W	6°38'45"
C33	225.00'	29.75'	29.74'	S 88°28'00" W	6°47'14"
C34	225.00'	41.07'	41.02'	N 86°10'14" W	10°27'39"
C35	13.00'	20.31'	18.30'	S 51°20'46" W	89°29'40"
C36	13.00'	20.54'	18.47'	N 38°39'14" W	90°30'20"
C37	175.00'	6.83'	6.83'	N 82°47'21" W	2°14'06"
C38	175.00'	125.13'	122.51'	N 78°05'56" W	7°14'44"
C39	175.00'	22.61'	22.60'	N 70°43'29" W	7°24'11"
C40	175.00'	17.82'	17.81'	N 64°06'21" W	5°50'08"
C41	13.00'	24.95'	21.29'	S 63°50'11" W	109°57'01"
C42	13.00'	15.89'	14.92'	N 26°09'49" W	70°02'59"
C43	125.00'	3.14'	3.14'	N 61°54'29" W	1°26'26"
C44	125.00'	46.31'	46.04'	N 73°14'26" W	21°13'30"
C45	337.50'	117.49'	116.83'	N 73°53'13" W	19°56'01"
C46	25.00'	39.28'	35.36'	S 71°04'10" W	90°01'21"
C47	13.00'	20.42'	18.38'	N 16°11'18" W	90°00'00"
C48	145.00'	63.79'	63.28'	N 16°12'29" E	25°12'26"
C49	95.00'	16.13'	16.11'	N 08°28'07" E	9°43'45"
C50	13.00'	18.21'	16.76'	N 53°18'07" E	80°16'20"
C51	13.00'	21.01'	18.80'	S 40°06'07" E	92°35'13"
C52	13.00'	20.40'	18.37'	S 51°08'33" W	89°54'06"
C53	125.09'	49.56'	49.24'	N 72°10'51" W	22°43'06"
C54	13.00'	20.44'	18.40'	N 38°51'31" W	90°05'54"
C55	13.00'	19.83'	17.97'	N 49°53'53" E	87°24'47"
C56	13.00'	21.00'	18.79'	S 40°07'29" E	92°32'39"
C57	13.00'	20.41'	18.38'	S 51°07'10" W	89°56'51"

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WES ENGINEERS & SURVEYORS
CIVIL ENGINEERS & LAND SURVEYORS
2486 NASHVILLE HIGHWAY
COLUMBIA, TN 38401
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MCCLURE FARMS
FINAL PUD MASTER PLAN
COLUMBIA, MAURY COUNTY, TN 38401
SITE PLAN

REVISIONS	DATE

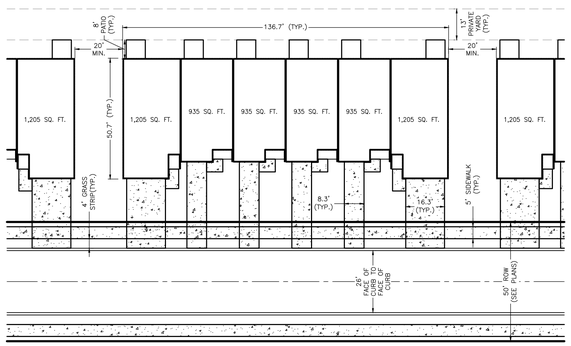
Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical: 1" = 50'
Horizontal:

C201

GREGORY VICK
REGISTERED LANDSCAPE ARCHITECT
No. 1074115
STATE OF TENNESSEE

FILE: I:\WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Briteland Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - PUD Master Plan.dwg



MULTI-FAMILY LOT (TYP.)
SCALE: 1"=30'

TN GRID NORTH

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

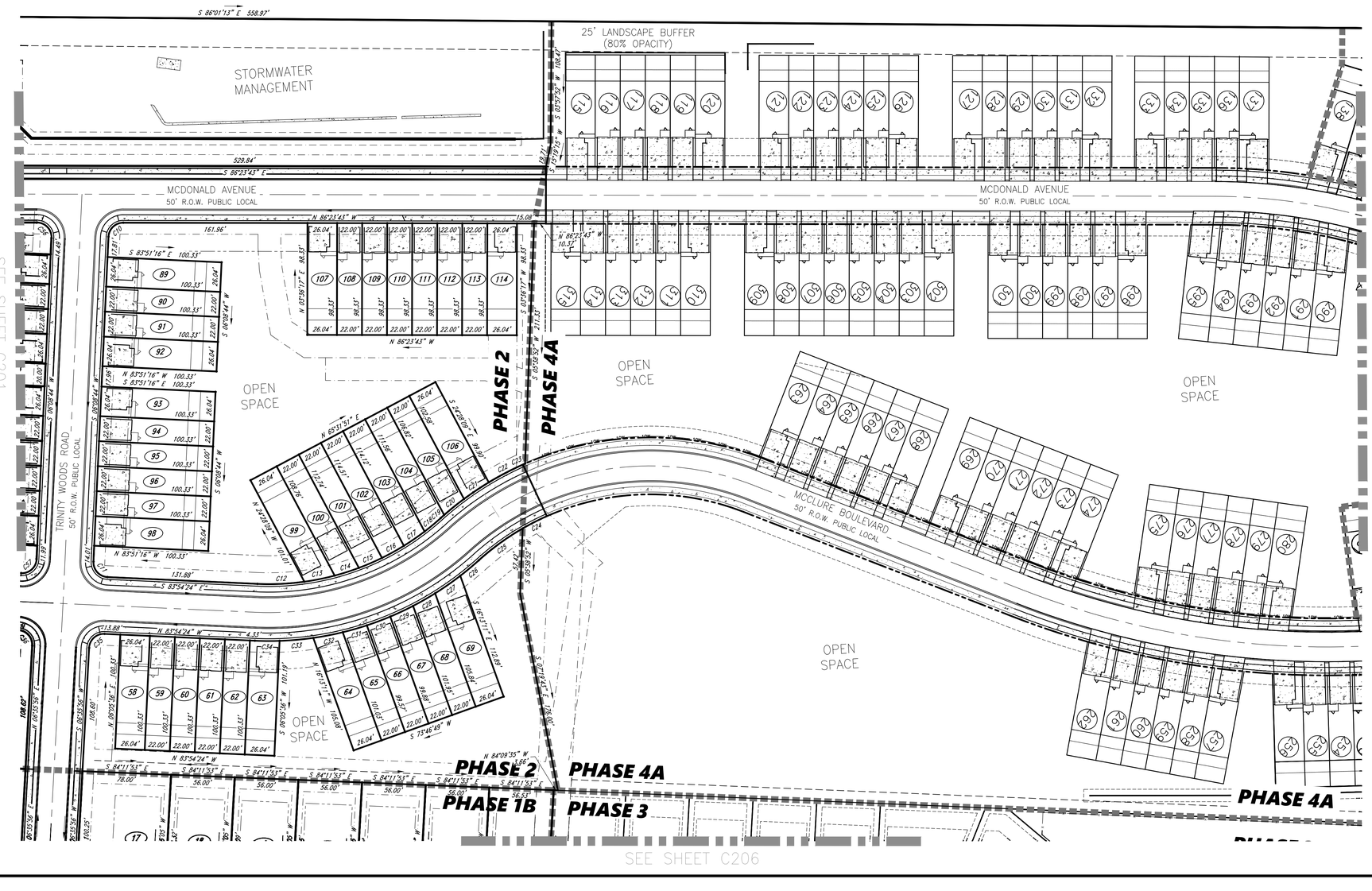
LOT AREA TABLE (PHASE 2)

LOT	SQ. FT.	ACRES
1	2,560.8	0.06
2	2,163.3	0.05
3	2,163.3	0.05
4	2,163.3	0.05
5	2,163.3	0.05
6	2,163.3	0.05
7	2,163.3	0.05
8	2,560.8	0.06
9	2,560.8	0.06
10	2,163.3	0.05
11	2,163.3	0.05
12	2,163.3	0.05
13	2,163.3	0.05
14	2,163.3	0.05
15	2,163.3	0.05
16	2,560.8	0.06
17	2,560.5	0.06
18	2,167.3	0.05
19	2,163.3	0.05
20	2,561.5	0.06
21	2,603.3	0.06
22	2,199.3	0.05
23	2,199.3	0.05
24	2,199.3	0.05
25	2,199.3	0.05
26	2,603.3	0.06
27	2,586.8	0.06
28	2,185.3	0.05
29	2,185.3	0.05
30	2,586.8	0.06
31	2,586.8	0.06
32	2,185.3	0.05
33	2,185.3	0.05
34	2,185.3	0.05
35	2,586.8	0.06
36	2,586.8	0.06
37	2,185.3	0.05
38	2,185.3	0.05
39	2,185.3	0.05
40	2,185.3	0.05
41	2,185.3	0.05
42	2,185.3	0.05
43	2,586.8	0.06
44	2,586.2	0.07
45	2,259.1	0.05
46	2,185.3	0.05
47	2,185.6	0.05
48	2,185.3	0.05
49	2,586.8	0.06
50	2,586.8	0.06
51	2,185.3	0.05
52	2,185.3	0.05
53	2,185.3	0.05
54	2,185.3	0.05
55	2,185.3	0.05
56	2,185.3	0.05
57	2,586.8	0.06
58	2,612.8	0.06
59	2,207.3	0.05
60	2,207.3	0.05
61	2,207.3	0.05
62	2,207.3	0.05
63	2,619.1	0.06
64	2,678.2	0.06
65	2,203.4	0.05
66	2,190.7	0.05
67	2,116.8	0.05
68	2,282.3	0.05
69	2,842.1	0.07
70	2,560.8	0.06
71	2,163.3	0.05
72	2,163.3	0.05
73	2,560.8	0.06
74	2,560.8	0.06
75	2,163.3	0.05
76	2,163.3	0.05
77	2,163.3	0.05
78	2,560.8	0.06
79	2,560.8	0.06
80	2,163.3	0.05
81	2,163.3	0.05
82	2,560.8	0.06
83	2,560.8	0.06
84	2,163.3	0.05
85	2,163.3	0.05
86	2,163.3	0.05
87	2,163.3	0.05
88	2,560.8	0.06
89	2,612.8	0.06
90	2,207.3	0.05
91	2,207.3	0.05
92	2,207.3	0.05
93	2,612.8	0.06
94	2,207.3	0.05
95	2,207.3	0.05
96	2,207.3	0.05
97	2,207.3	0.05
98	2,612.8	0.06
99	2,738.7	0.06
100	2,440.6	0.06
101	2,503.5	0.06
102	2,312.8	0.06
103	2,486.5	0.06
104	2,456.7	0.06
105	2,551.1	0.06
106	2,631.1	0.06
107	2,560.8	0.06
108	2,163.3	0.05
109	2,163.3	0.05
110	2,163.3	0.05
111	2,163.3	0.05
112	2,163.3	0.05
113	2,163.3	0.05
114	2,560.8	0.06

LOT	SQ. FT.	ACRES
OS-1	40,900.91	0.94
OS-2	31,367.41	0.72
OS-3	16,427.11	0.38
OS-4	89,803.41	2.06
OS-5	47,815.31	1.10
OS-6	36,936.81	0.85
OS-7	19,940.51	0.43
OS-8	28,783.21	0.66

CURVE TABLE (PHASE 2)

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	25.00'	39.27'	35.36'	S 18°36'52" E	90°00'00"
C2	250.50'	86.54'	86.15'	S 74°24'53" E	18°53'24"
C3	175.00'	69.23'	68.78'	S 72°31'17" E	22°39'37"
C4	13.00'	20.42'	18.38'	N 73°48'42" E	90°00'00"
C5	95.00'	41.79'	41.46'	N 16°12'29" E	25°12'25"
C6	145.00'	24.56'	24.53'	N 08°37'24" E	9°42'14"
C7	95.00'	15.48'	15.47'	N 08°38'22" E	9°20'11"
C8	145.00'	23.63'	23.61'	N 08°38'22" W	9°20'17"
C9	13.00'	22.62'	19.85'	S 36°12'56" E	99°42'14"
C10	13.00'	19.84'	17.97'	S 49°53'31" W	87°29'35"
C11	13.00'	20.43'	18.39'	S 38°52'50" E	90°03'09"
C12	225.00'	41.36'	41.30'	S 89°10'22" E	10°31'55"
C13	225.00'	27.17'	27.17'	N 80°06'00" E	6°55'23"
C14	225.00'	23.37'	23.36'	N 76°47'28" E	5°57'44"
C15	225.00'	22.08'	22.07'	N 70°57'53" E	5°37'21"
C16	225.00'	22.01'	22.00'	N 64°51'01" E	5°36'19"
C17	225.00'	22.16'	22.15'	N 58°53'13" E	5°38'35"
C18	225.00'	18.34'	18.33'	N 53°44'15" E	4°40'11"
C19	13.00'	4.17'	4.15'	N 51°50'14" E	18°23'08"
C20	275.00'	22.41'	22.41'	N 54°36'24" E	4°40'10"
C21	275.00'	22.59'	22.58'	N 59°43'11" E	4°42'31"
C22	275.00'	14.93'	14.93'	N 63°03'53" E	3°06'49"
C23	275.00'	2.07'	2.07'	N 69°40'50" E	0°25'51"
C24	225.00'	23.85'	23.84'	S 69°39'35" W	6°04'24"
C25	225.00'	47.79'	47.70'	S 77°29'31" W	12°10'14"
C26	225.00'	21.10'	21.10'	S 83°39'29" W	5°22'24"
C27	275.00'	28.99'	28.98'	S 58°17'16" W	5°37'25"
C28	275.00'	22.54'	22.54'	S 63°40'40" W	4°41'31"
C29	275.00'	22.10'	22.10'	S 68°23'30" W	4°36'19"
C30	275.00'	22.01'	22.00'	S 72°59'13" W	4°35'07"
C31	275.00'	22.05'	22.05'	S 77°34'37" W	4°35'42"
C32	275.00'	26.96'	26.95'	S 82°37'18" W	5°37'35"
C33	275.00'	29.75'	29.74'	S 88°28'00" W	6°11'54"
C34	275.00'	21.73'	21.72'	N 86°10'14" W	4°31'39"
C35	13.00'	20.31'	18.30'	S 51°30'46" W	89°29'40"
C36	13.00'	20.54'	18.47'	N 38°39'14" W	90°30'20"
C37	175.00'	6.83'	6.83'	N 82°47'21" W	2°14'06"
C38	175.00'	22.13'	22.13'	N 78°02'58" W	7°14'44"
C39	175.00'	22.61'	22.60'	N 70°43'29" W	7°24'11"
C40	175.00'	17.82'	17.81'	N 64°09'21" W	5°50'06"
C41	13.00'	24.95'	21.59'	S 63°50'11" W	109°57'01"
C42	13.00'	15.89'	14.90'	N 28°09'49" W	70°02'59"
C43	125.00'	3.14'	3.14'	N 61°54'29" W	1°26'29"
C44	125.00'	46.04'	45.78'	N 73°14'28" W	21°06'55"
C45	537.50'	117.42'	116.83'	N 79°53'15" W	12°30'31"
C46	95.00'	139.28'	126.78'	S 17°04'10" W	84°00'23"
C47	13.00'	20.42'	18.38'	N 16°11'16" W	90°00'00"
C48	145.00'	63.72'	63.21'	N 12°13'39" E	25°10'48"
C49	95.00'	16.13'	16.11'	N 08°23'09" E	9°43'49"
C50	13.00'	18.21'	16.76'	N 40°58'07" E	80°16'20"
C51	13.00'	21.01'	18.80'	S 40°08'01" E	92°36'15"
C52	13.00'	20.40'	18.37'	S 51°08'31" W	89°54'06"
C53	125.00'	49.56'	49.24'	N 76°29'01" W	22°43'05"
C54	13.00'	20.44'	18.40'	N 38°51'21" W	90°05'54"
C55	13.00'	19.83'	17.97'	N 49°53'53" E	87°24'47"
C56	13.00'	21.00'	18.79'	S 40°07'29" E	92°32'28"
C57	13.00'	20.61'	18.38'	S 51°01'10" W	89°56'51"



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Client
DRB GROUP
4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
FINAL PUD MASTER PLAN
COLUMBIA, MAURY COUNTY, TN 38401
SITE PLAN

REVISIONS	DATE

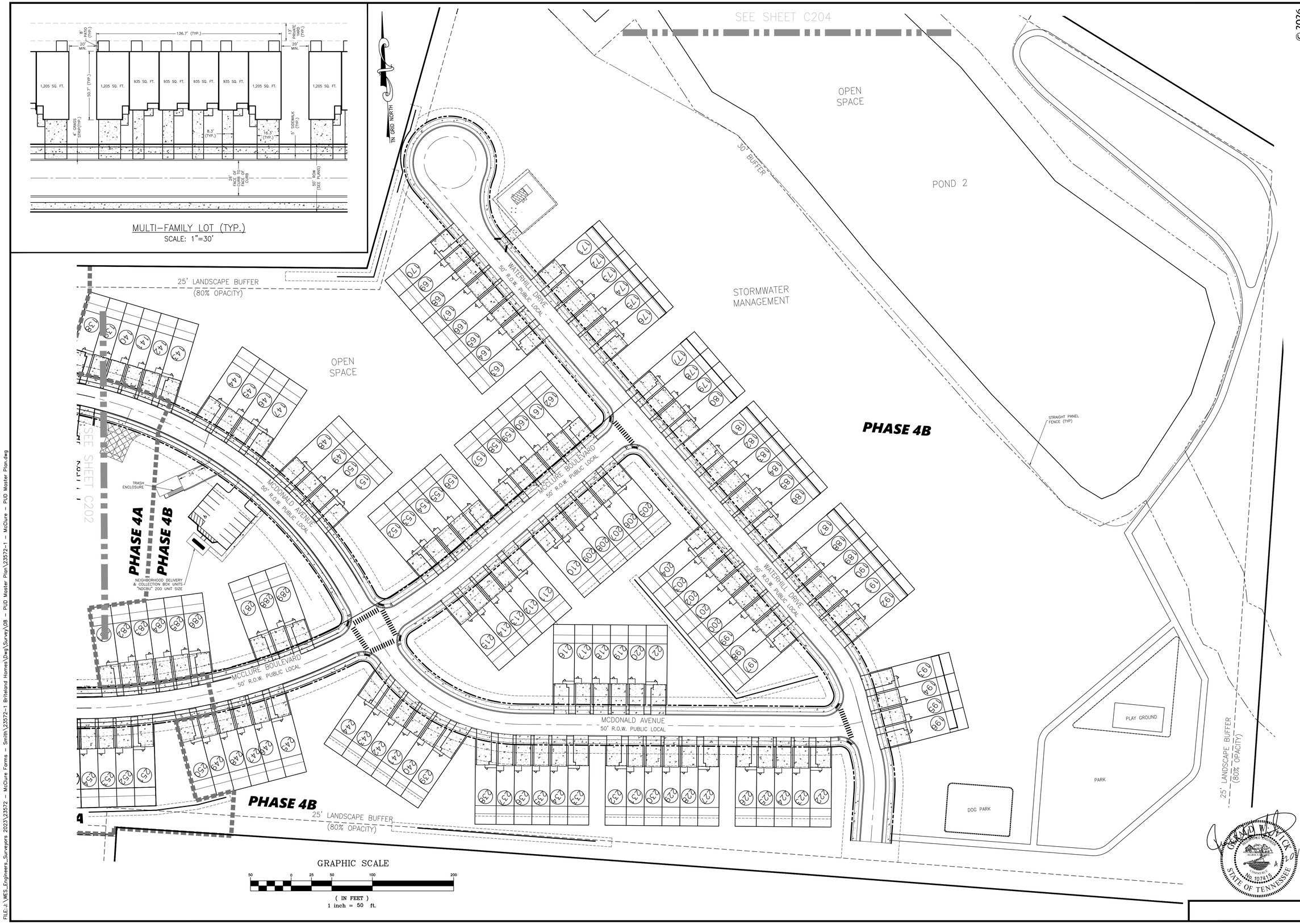
Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical: 1" = 50'
Horizontal:

GERALD W. VAYCK 4/24
LICENSED PROFESSIONAL ENGINEER
AGRICULTURE & BIOSYSTEMS ENGINEERING
COMMERCE
No. 107415
STATE OF TENNESSEE

C202

FILE: J:\WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Britelond Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - PUD Master Plan.dwg



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SUITE 200
FRANKLIN, TN 37064

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FINAL PUD MASTER PLAN
COLUMBIA, MAURY COUNTY, TN 38401
SITE PLAN

REVISIONS	DATE

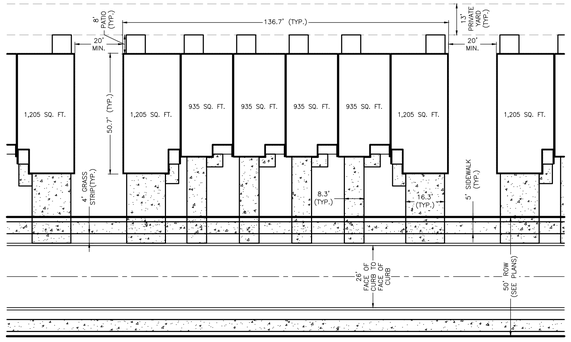
Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical:
Horizontal: 1" = 50'

GERALD W. VICK
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 107415
STATE OF TENNESSEE
4/20/26

C203

FILE:J:\WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Briteland Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - PUD Master Plan.dwg



MULTI-FAMILY LOT (TYP.)
SCALE: 1"=30'

TN GRID NORTH

WETLAND 2

25' LANDSCAPE BUFFER (80% OPACITY)

30' BUFFER

25' LANDSCAPE BUFFER (80% OPACITY)

OPEN SPACE

50' BUFFER

POND 2

STORMWATER MANAGEMENT

OPEN SPACE

WATERHILL DRIVE
50' R.O.W. PUBLIC LOCAL

MCCLURE BOULEVARD
60' R.O.W. PUBLIC LOCAL

PHASE 4B

SEE SHEET C203

STRAIGHT PANEL FENCE (TYP)

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

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DRB GROUP
4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

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FINAL PUD MASTER PLAN
COLUMBIA, MAURY COUNTY, TN 38401
SITE PLAN

REVISIONS	DATE

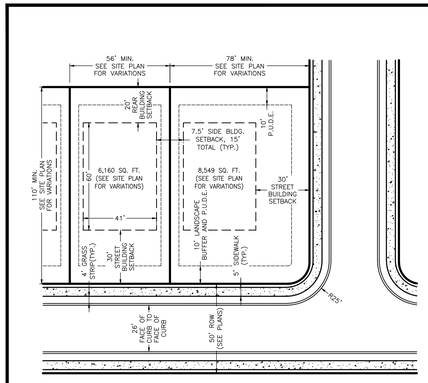
Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical: 1" = 50'
Horizontal:

GREGORY VANCE MCCLARY
LICENSED PROFESSIONAL ENGINEER
AGRICULTURE & BIOSYSTEMS
COMMERCIAL
No. 107415
STATE OF TENNESSEE
04/20/26

C204

FILE: J:\WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Britelend Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - PUD Master Plan.dwg



SINGLE-FAMILY LOT (TYP.)
SCALE: 1"=40'

TN GRID NORTH

LOT AREA TABLE (PHASE 1)

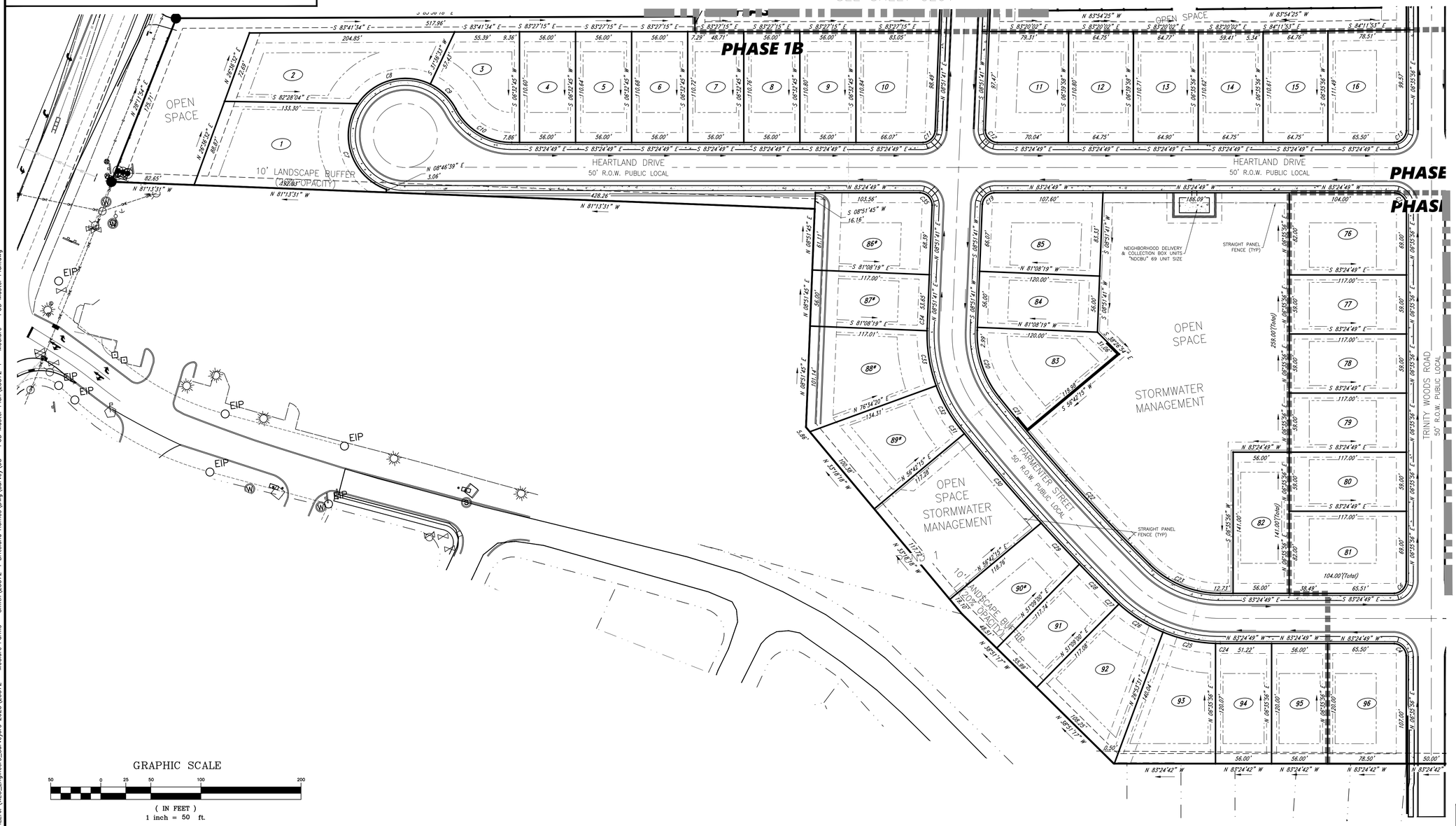
LOT	SQ. FT.	ACRES
1	12,656.5	0.29
2	12,780.2	0.29
3	7,427.5	0.17
4	6,194.8	0.14
5	6,197.0	0.14
6	6,199.2	0.14
7	6,201.5	0.14
8	6,203.7	0.14
9	6,205.9	0.14
10	8,925.6	0.20
11	8,987.8	0.21
12	7,171.2	0.16
13	7,174.5	0.16
14	7,159.8	0.16
15	7,190.6	0.17
16	8,758.2	0.20
17	8,840.1	0.20
18	6,423.0	0.15
19	6,465.9	0.15
20	6,508.9	0.15
21	6,551.8	0.15
22	6,594.7	0.15
23	6,701.0	0.15
58	9,503.7	0.22
59	6,903.0	0.16
60	6,903.0	0.16
61	6,903.0	0.16
62	6,903.0	0.16
63	9,557.8	0.22
64	9,557.7	0.22
65	6,903.0	0.16
66	6,903.0	0.16
67	6,903.0	0.16
68	6,903.0	0.16
69	9,557.8	0.22
70	9,557.7	0.22

LOT	SQ. FT.	ACRES
71	6,903.0	0.16
72	6,903.0	0.16
73	6,903.0	0.16
74	6,903.0	0.16
75	9,557.8	0.22
76	9,557.7	0.22
77	6,903.0	0.16
78	6,903.0	0.16
79	6,903.0	0.16
80	6,903.0	0.16
81	9,557.8	0.22
82	7,896.0	0.18
83	8,891.1	0.20
84	6,720.0	0.15
85	9,680.4	0.22
86	9,272.7	0.21
87	6,551.8	0.15
88	9,947.2	0.23
89	9,456.8	0.22
90	7,137.2	0.17
91	6,564.2	0.15
92	9,871.3	0.23
93	9,696.7	0.22
94	6,720.0	0.15
95	6,720.0	0.15
96	9,583.9	0.22
97	9,684.3	0.22
98	7,020.6	0.16
99	7,020.0	0.16
100	7,021.5	0.16
101	7,023.5	0.16
102	7,059.8	0.16
103	7,082.1	0.16
OPEN_SPACE9	19,935.5	0.46
OPEN_SPACE10	13,826.5	0.32
OPEN_SPACE11	69,231.0	1.59

CURVE TABLE (PHASE 1)

CURVE	RADIUS	ARC_LENGTH	CHORD_LENGTH	CHORD_BEARING	DELTA_ANGLE
C1	13.00'	20.42'	18.39'	N 38°24'27" W	90°00'45"
C2	13.00'	20.42'	18.39'	S 51°35'33" W	89°59'15"
C3	13.00'	20.42'	18.38'	S 51°35'33" W	89°59'15"
C4	13.00'	20.42'	18.39'	N 38°24'27" W	90°00'45"
C5	13.00'	20.42'	18.39'	S 38°24'27" E	90°00'45"
C6	13.00'	20.42'	18.38'	N 51°35'33" E	89°59'15"
C7	57.00'	103.94'	90.13'	N 11°42'31" W	104°29'00"
C8	57.00'	81.51'	74.74'	N 81°29'50" E	81°56'42"
C9	57.00'	36.12'	35.52'	S 39°23'07" E	36°18'24"
C10	63.00'	68.30'	65.07'	S 52°19'22" E	62°10'50"
C11	13.00'	19.90'	18.02'	N 57°43'26" E	87°43'30"
C12	13.00'	20.94'	18.75'	S 37°16'54" E	92°16'30"
C13	13.00'	20.42'	18.38'	N 51°35'33" E	89°59'15"
C14	13.00'	20.42'	18.39'	S 38°24'27" E	90°00'45"
C15	13.00'	20.42'	18.38'	S 51°35'33" W	89°59'15"
C16	13.00'	20.42'	18.39'	S 38°24'27" E	90°00'45"
C17	13.00'	20.42'	18.38'	N 51°35'33" E	89°59'15"
C18	13.00'	20.42'	18.39'	S 38°24'27" W	90°00'45"
C19	13.00'	19.90'	18.02'	S 57°43'26" W	87°43'30"
C20	100.00'	71.62'	70.10'	S 11°39'21" E	41°02'04"
C21	1975.00'	44.10'	44.10'	S 37°48'46" E	1°16'48"
C22	1975.00'	180.88'	180.82'	S 32°04'14" E	5°14'51"
C23	100.00'	78.04'	76.08'	S 61°03'24" E	44°42'50"
C24	150.00'	4.18'	4.18'	N 82°53'03" W	1°49'12"
C25	150.00'	53.94'	53.65'	N 71°17'13" W	20°36'09"
C26	150.00'	52.49'	52.23'	N 50°57'31" W	20°03'03"
C27	100.00'	5.85'	5.85'	N 39°49'03" W	3°21'07"
C28	2025.00'	50.15'	50.15'	N 37°59'25" W	1°25'08"
C29	2025.00'	56.08'	56.08'	N 35°29'15" W	1°35'12"
C30	2025.00'	117.75'	117.73'	N 34°01'42" W	3°19'54"
C31	2025.00'	6.70'	6.70'	N 32°16'04" W	0°11'22"
C32	150.00'	49.08'	48.86'	N 27°48'01" W	18°44'43"
C33	150.00'	56.00'	55.68'	N 07°43'57" W	21°23'58"
C34	150.00'	2.35'	2.35'	N 08°24'44" E	0°53'51"
C35	13.00'	20.94'	18.75'	N 37°16'54" W	92°16'30"

SEE SHEET C201



SEE SHEET C206

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

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MCCLURE FARMS
FINAL PUD MASTER PLAN
COLUMBIA, MAURY COUNTY, TN
SITE PLAN

REVISIONS	DATE

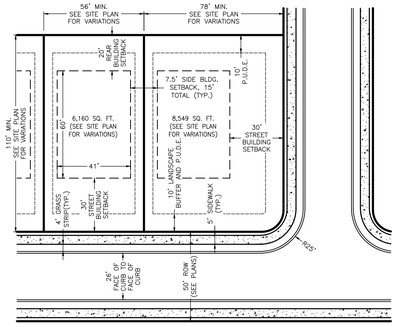
Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical: 1" = 50'
Horizontal:

C205

GERALD W. VICK
REGISTERED LANDSCAPE ARCHITECT
No. 107415
STATE OF TENNESSEE

FILE: z:\WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Britelond Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - PUD Master Plan.dwg



SINGLE-FAMILY LOT (TYP.)
SCALE: 1"=40'

LOT AREA TABLE (PHASE 1)

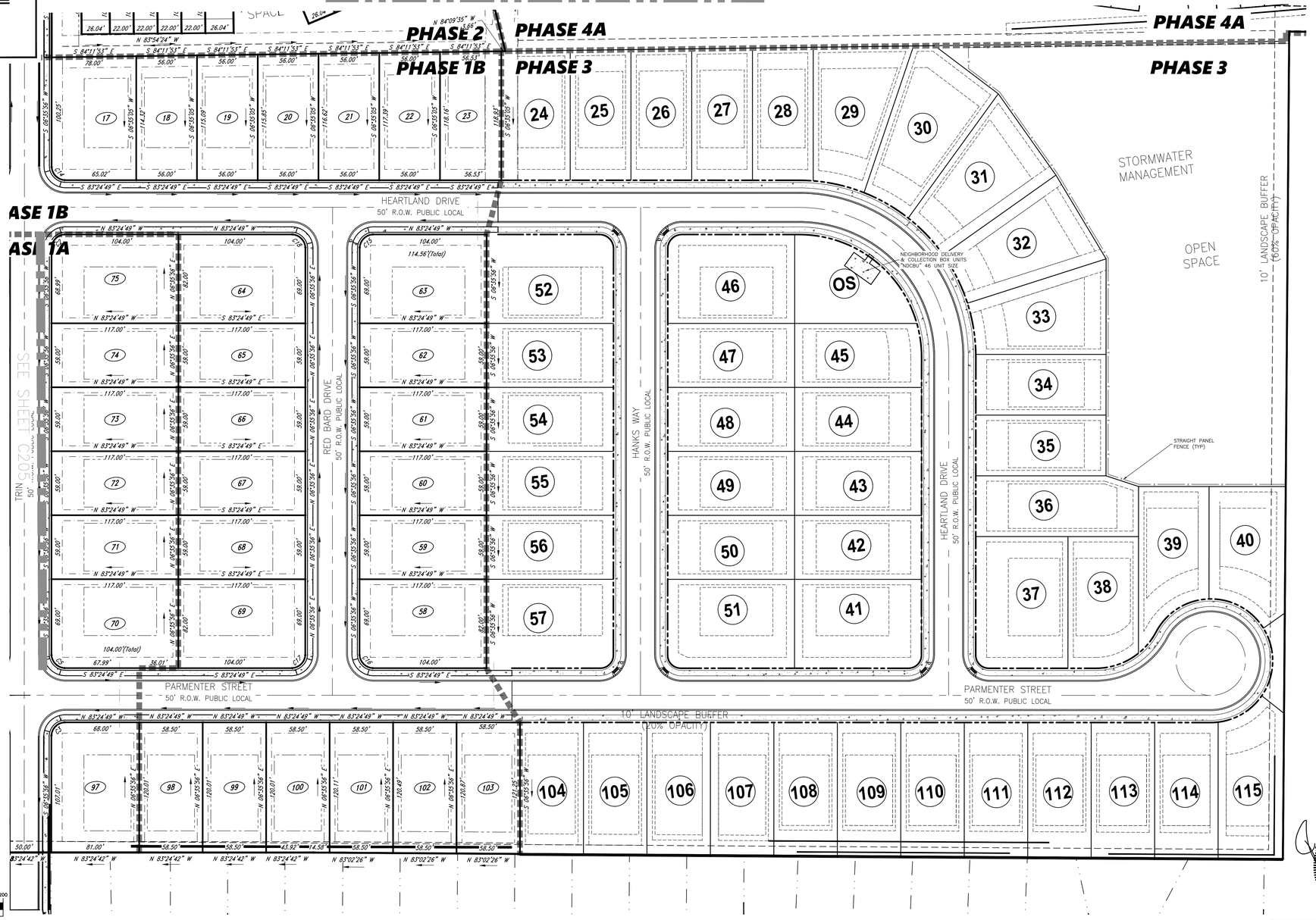
LOT	SQ. FT.	ACRES
1	12,626.5	0.29
2	12,780.2	0.29
3	7,427.5	0.17
4	6,194.8	0.14
5	6,197.0	0.14
6	6,199.2	0.14
7	6,201.5	0.14
8	6,203.7	0.14
9	6,205.9	0.14
10	8,925.6	0.20
11	8,987.8	0.21
12	7,171.2	0.16
13	7,174.5	0.16
14	7,159.8	0.16
15	7,190.6	0.17
16	8,758.1	0.20
17	8,840.1	0.20
18	6,423.0	0.15
19	6,465.9	0.15
20	6,508.9	0.15
21	6,551.8	0.15
22	6,594.7	0.15
23	6,701.0	0.15
24	9,557.7	0.22
25	6,903.0	0.16
26	6,903.0	0.16
27	6,903.0	0.16
28	6,903.0	0.16
29	9,557.8	0.22
30	9,557.7	0.22
31	6,903.0	0.16
32	6,903.0	0.16
33	6,903.0	0.16
34	6,903.0	0.16
35	6,903.0	0.16
36	6,903.0	0.16
37	9,557.8	0.22
38	9,557.7	0.22

LOT	SQ. FT.	ACRES
71	6,903.0	0.16
72	6,903.0	0.16
73	6,903.0	0.16
74	6,903.0	0.16
75	9,557.8	0.22
76	9,557.7	0.22
77	6,903.0	0.16
78	6,903.0	0.16
79	6,903.0	0.16
80	6,903.0	0.16
81	9,557.8	0.22
82	7,896.0	0.18
83	8,891.1	0.20
84	9,720.0	0.22
85	9,680.4	0.22
86	9,272.7	0.21
87	6,551.8	0.15
88	9,947.2	0.23
89	9,456.8	0.22
90	7,137.2	0.17
91	6,564.2	0.15
92	9,871.1	0.23
93	9,696.7	0.22
94	6,720.1	0.15
95	6,763.0	0.16
96	9,583.3	0.22
97	9,684.3	0.22
98	7,020.6	0.16
99	7,020.7	0.16
100	7,021.5	0.16
101	7,037.5	0.16
102	7,059.8	0.16
103	7,082.1	0.16
OPEN_SPACE9	19,935.5	0.46
OPEN_SPACE10	13,826.5	0.32
OPEN_SPACE11	169,231.0	1.59

CURVE TABLE (PHASE 1)

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	13.00'	20.42'	18.39'	N 38°24'27" W	90°00'45"
C2	13.00'	20.42'	18.38'	S 51°35'33" W	89°59'15"
C3	13.00'	20.42'	18.38'	S 51°35'33" W	89°59'15"
C4	13.00'	20.42'	18.39'	S 38°24'27" E	90°00'45"
C5	13.00'	20.42'	18.39'	S 38°24'27" E	90°00'45"
C6	13.00'	20.42'	18.38'	N 51°35'33" E	89°59'15"
C7	57.00'	103.94'	90.13'	N 11°42'31" W	104°29'00"
C8	57.00'	81.51'	74.74'	N 81°29'50" E	81°55'42"
C9	57.00'	36.12'	35.50'	S 39°23'07" E	36°18'24"
C10	63.00'	68.35'	65.07'	S 57°19'22" E	62°10'00"
C11	113.00'	19.90'	18.02'	N 52°43'26" E	87°43'30"
C12	113.00'	20.94'	18.73'	S 37°16'34" E	10°37'30"
C13	13.00'	20.42'	18.38'	S 51°35'33" E	89°59'15"
C14	13.00'	20.42'	18.39'	S 38°24'27" E	90°00'45"
C15	13.00'	20.42'	18.38'	S 51°35'33" E	89°59'15"
C16	13.00'	20.42'	18.39'	S 38°24'27" E	90°00'45"
C17	13.00'	20.42'	18.38'	N 51°35'33" E	89°59'15"
C18	13.00'	20.42'	18.39'	N 38°24'27" W	90°00'45"
C19	113.00'	19.90'	18.02'	S 52°43'26" W	87°43'30"
C20	1000.00'	171.82'	70.10'	S 17°39'21" E	14°10'04"
C21	1975.00'	44.10'	44.10'	S 12°48'46" E	1°16'46"
C22	1975.00'	180.88'	180.80'	S 16°04'14" E	5°14'51"
C23	100.00'	78.04'	76.08'	S 61°03'24" E	44°42'50"
C24	150.00'	14.78'	14.78'	N 82°50'03" W	5°38'53"
C25	150.00'	53.84'	53.55'	N 71°17'13" W	20°36'09"
C26	150.00'	37.49'	37.39'	N 55°57'13" W	14°19'33"
C27	150.00'	5.87'	5.87'	N 49°49'03" W	2°14'50"
C28	2025.00'	50.15'	50.15'	N 37°59'25" W	1°25'08"
C29	2025.00'	68.08'	68.08'	N 36°29'13" W	1°55'12"
C30	2025.00'	117.75'	117.73'	N 34°01'42" W	3°19'54"
C31	2025.00'	6.70'	6.70'	N 32°16'04" W	0°11'22"
C32	150.00'	49.08'	48.86'	N 22°48'01" W	18°44'43"
C33	150.00'	56.00'	55.68'	N 02°43'27" W	21°23'27"
C34	150.00'	2.35'	2.35'	N 08°24'44" E	0°53'50"
C35	113.00'	20.94'	18.73'	N 37°16'34" W	10°37'30"

SEE SHEET C206



GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

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MCCLURE FARMS
FINAL PUD MASTER PLAN
COLUMBIA, MAURY COUNTY, TN 38401
SITE PLAN

REVISIONS	DATE

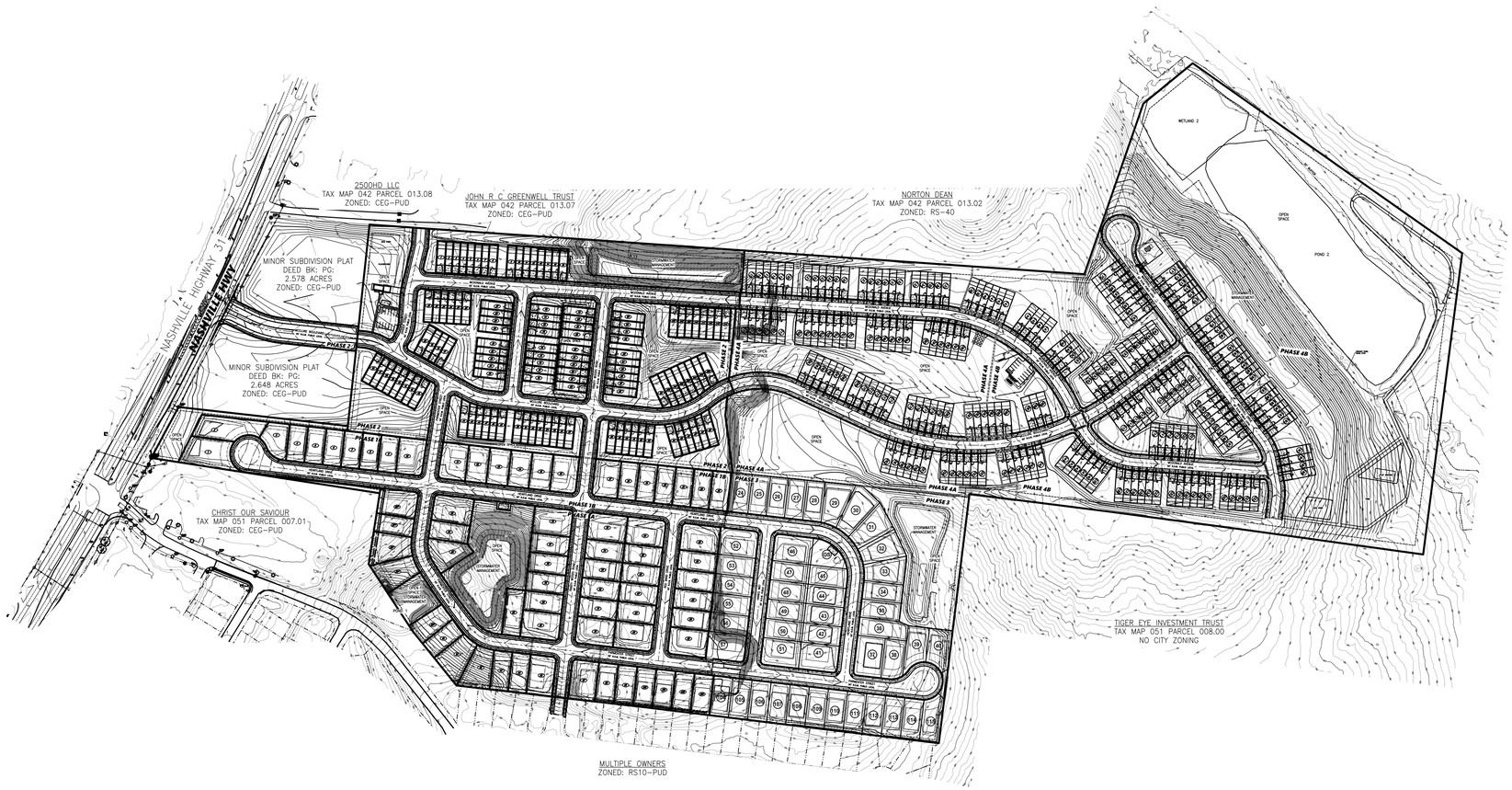
Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

job. no. 23572-1
Scale:
Vertical: 1" = 50'
Horizontal:

C205

GREGORY V. CLACK
REGISTERED LANDSCAPE ARCHITECT
No. 107415
STATE OF TENNESSEE

FILE: J:\ WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Britelend Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - PUD Master Plan.dwg



GRAPHIC SCALE

200 0 100 200 400 800

(IN FEET)

1 inch = 200 ft.

ALL RETAINING WALLS TO BE MAINTAINED BY HOA AND ACCESSED BY A 10' WIDE EASEMENT

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FINAL PUD MASTER PLAN
COLUMBIA, MAURY COUNTY, TN 38401
OVERALL GRADING & DRAINAGE PLAN

REVISIONS	DATE

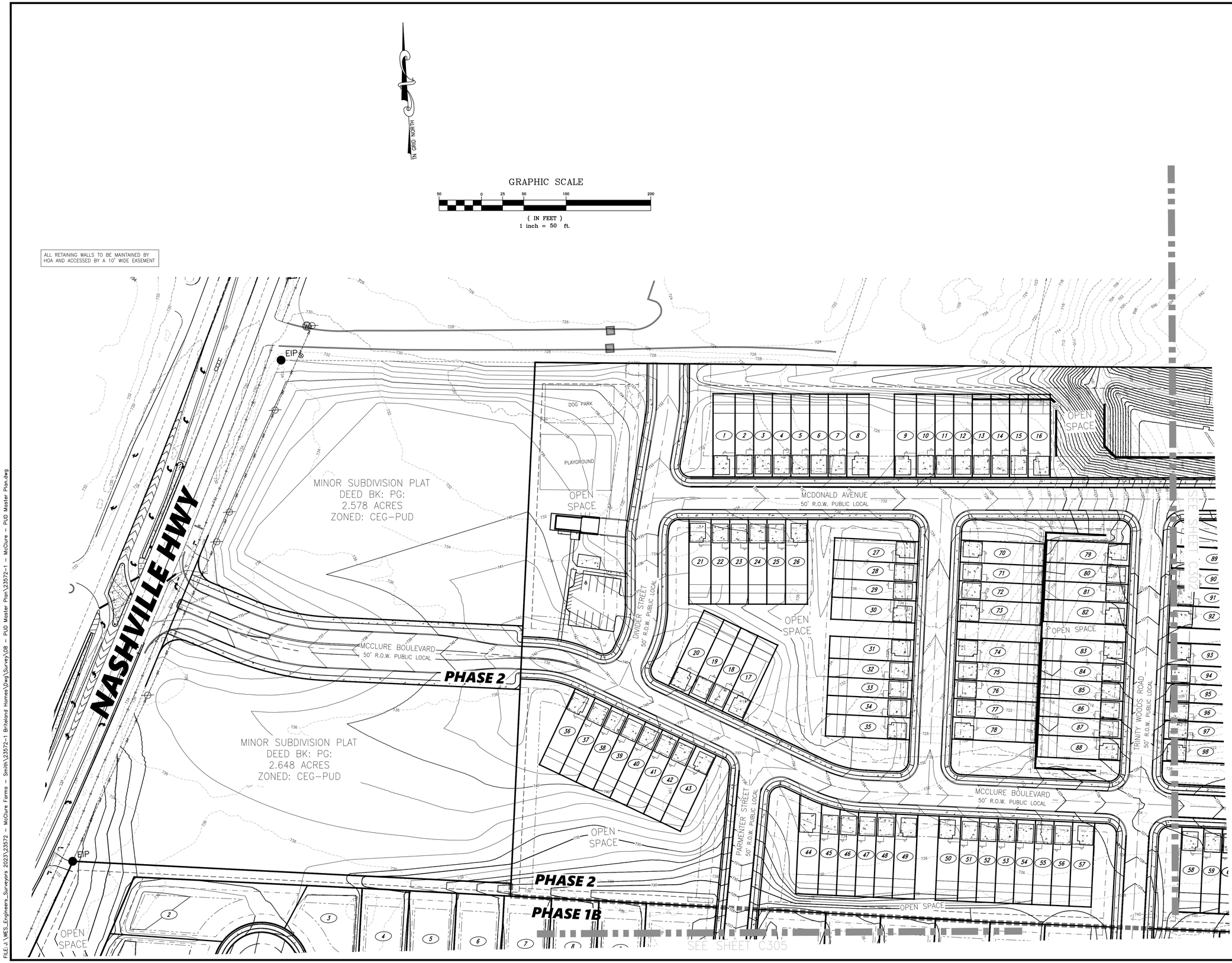
Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale: Vertical: 1" = 200'
Horizontal:

C300

JASON G. WICKS
TENNESSEE
REGISTERED
LICENSED
SURVEYOR
No. 107415
STATE OF TENNESSEE
4/24/26

FILE: I:\WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Briteland Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - PUD Master Plan.dwg



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GRADING & DRAINAGE PLAN

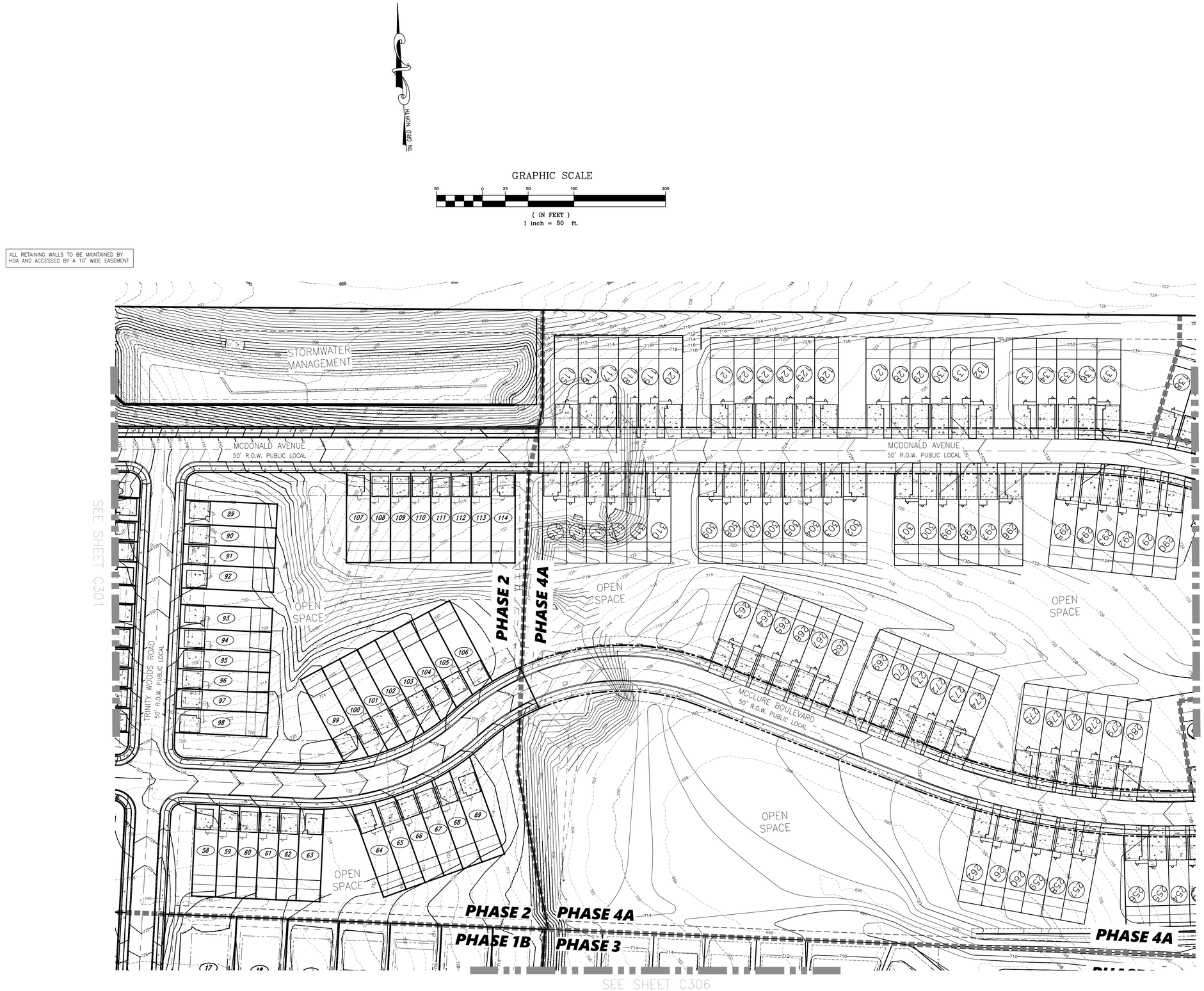
REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical:
Horizontal: 1" = 50'

GERALD W. VICK
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 107415
STATE OF TENNESSEE
4/20/26

C301



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GRADING & DRAINAGE PLAN

REVISIONS	DATE

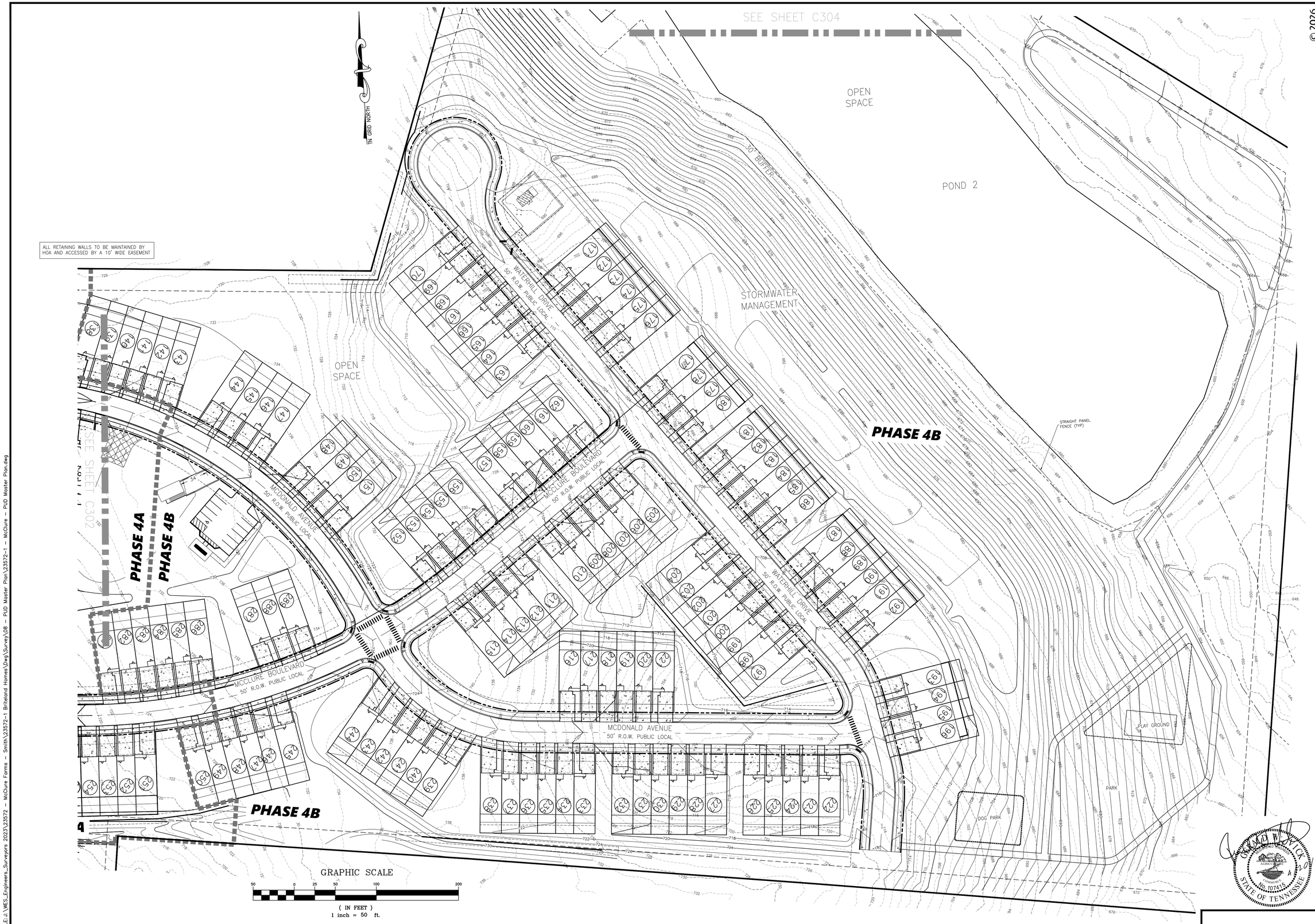
Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical:
Horizontal: 1" = 50'

GERALD W. VOLICK
STATE OF TENNESSEE
No. 107415
4/20/26

C302

FILE:J:\WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Briteland Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - PUD Master Plan.dwg



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GRADING & DRAINAGE PLAN

REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical:
Horizontal: 1" = 50'

GERALD W. VOYICK
REGISTERED ENGINEER
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COMMERCE
No. 107415
STATE OF TENNESSEE
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C303

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ALL RETAINING WALLS TO BE MAINTAINED BY HOA AND ACCESSED BY A 10' WIDE EASEMENT

TN GRID NORTH

WETLAND 2

30' BUFFER

OPEN SPACE

50' BUFFER

POND 2

MATERHILL DRIVE
50' R.O.W. PUBLIC LOCAL

STORMWATER MANAGEMENT

OPEN SPACE

PHASE 4B

STRAIGHT PANEL FENCE (TYP)

MCCLURE BOULEVARD
50' R.O.W. PUBLIC LOCAL

SEE SHEET C303

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

GREGORY W. NICKS
LICENSED PROFESSIONAL ENGINEER
No. 107415
STATE OF TENNESSEE

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FINAL PUD MASTER PLAN
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GRADING & DRAINAGE PLAN

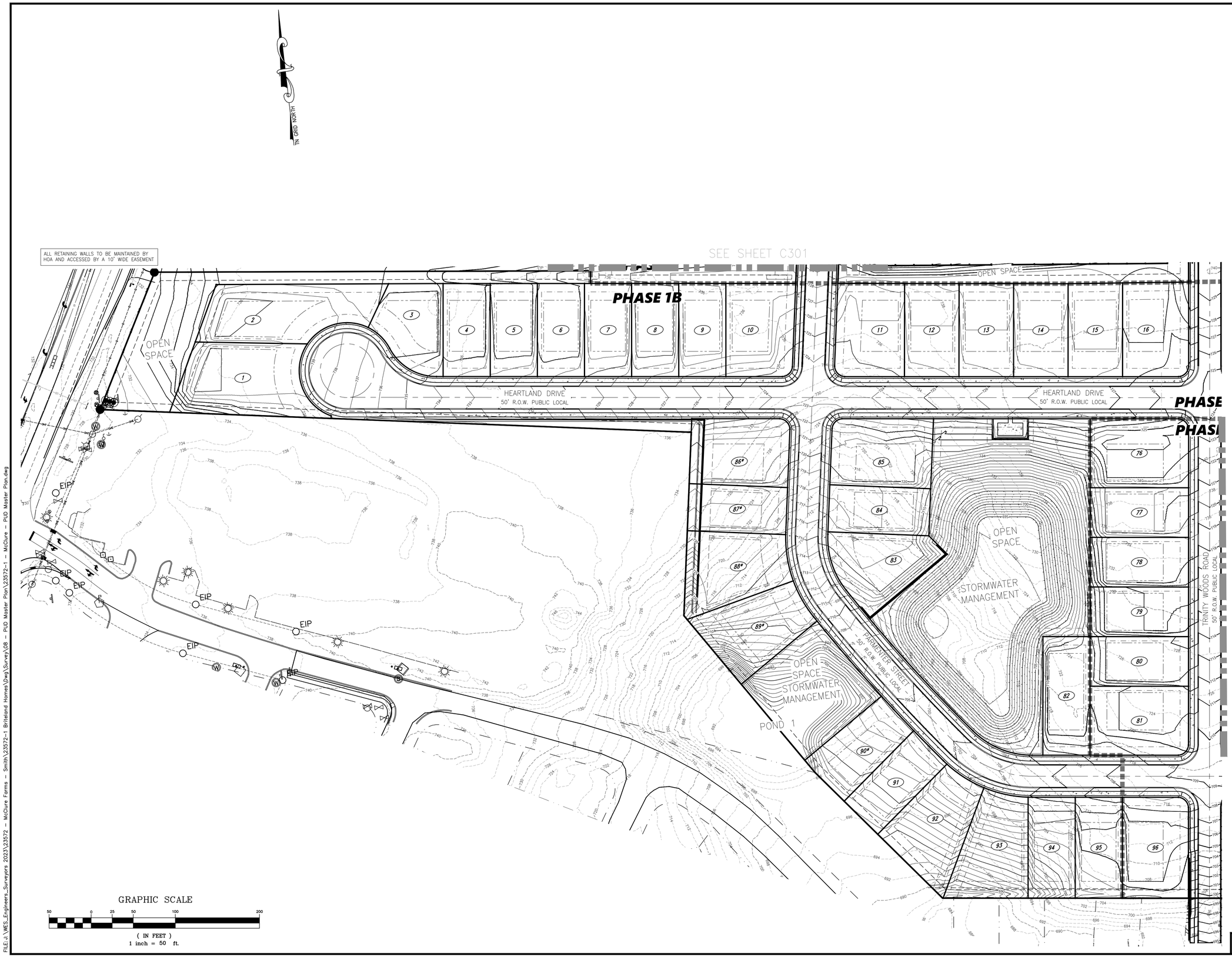
REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GW
Date: 04-20-2026

Job. no. 23572-1
Scale: Vertical: 1" = 50'
Horizontal:

C304

FILE: J:\WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Briteland Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - PUD Master Plan.dwg



FILE:J:\WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Briteland Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - PUD Master Plan.dwg

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FINAL PUD MASTER PLAN
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GRADING & DRAINAGE PLAN

REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical:
Horizontal: 1" = 50'

GERALD W. VOVICK
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 107415
STATE OF TENNESSEE
4/20/26

C305

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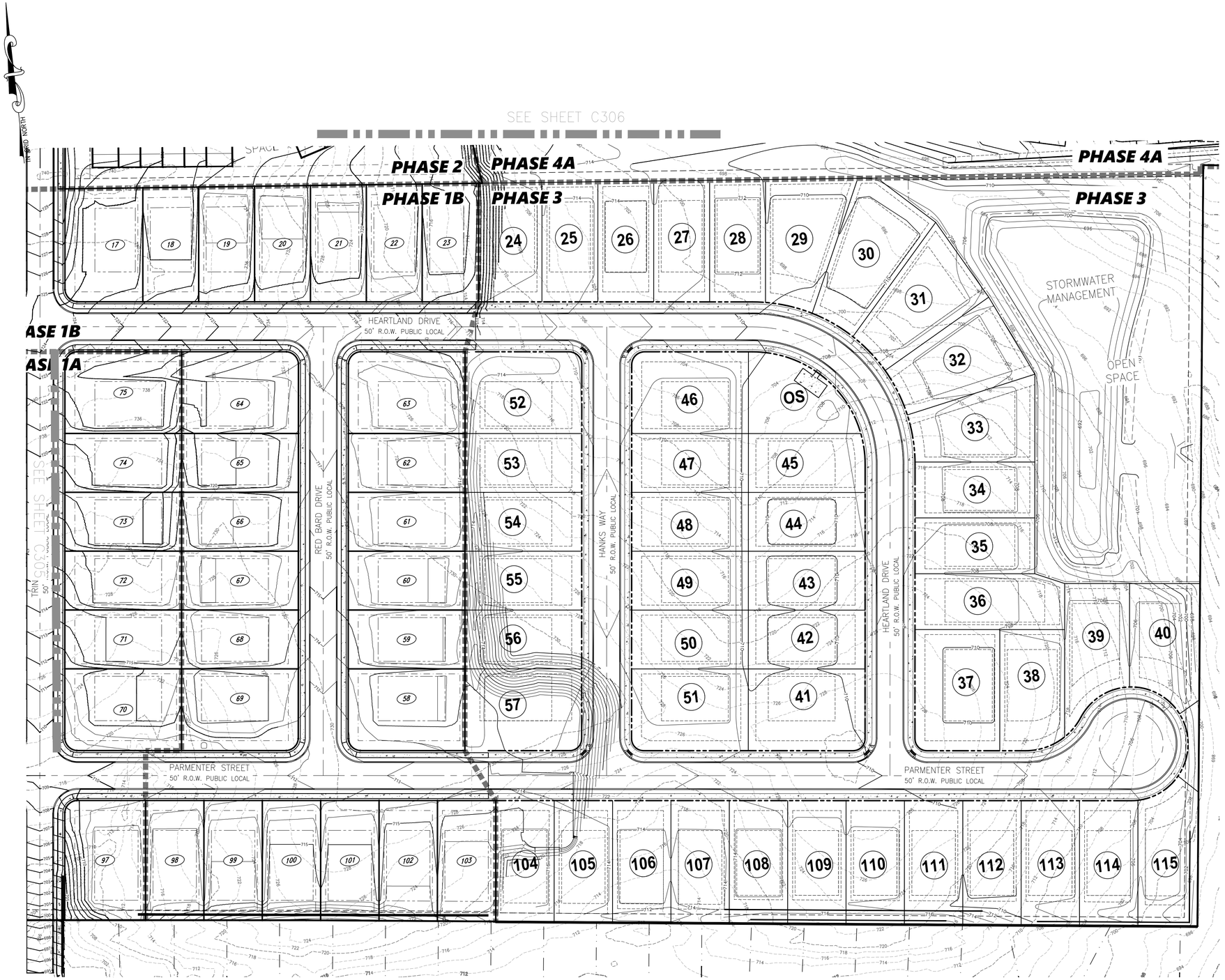
ALL RETAINING WALLS TO BE MAINTAINED BY HOA AND ACCESSED BY A 10' WIDE EASEMENT

SEE SHEET C306



GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

GEORGE W. MCCRICK
04/20/2026
AGRICULTURE
COMMERCE
No. 107415
STATE OF TENNESSEE

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GRADING & DRAINAGE PLAN

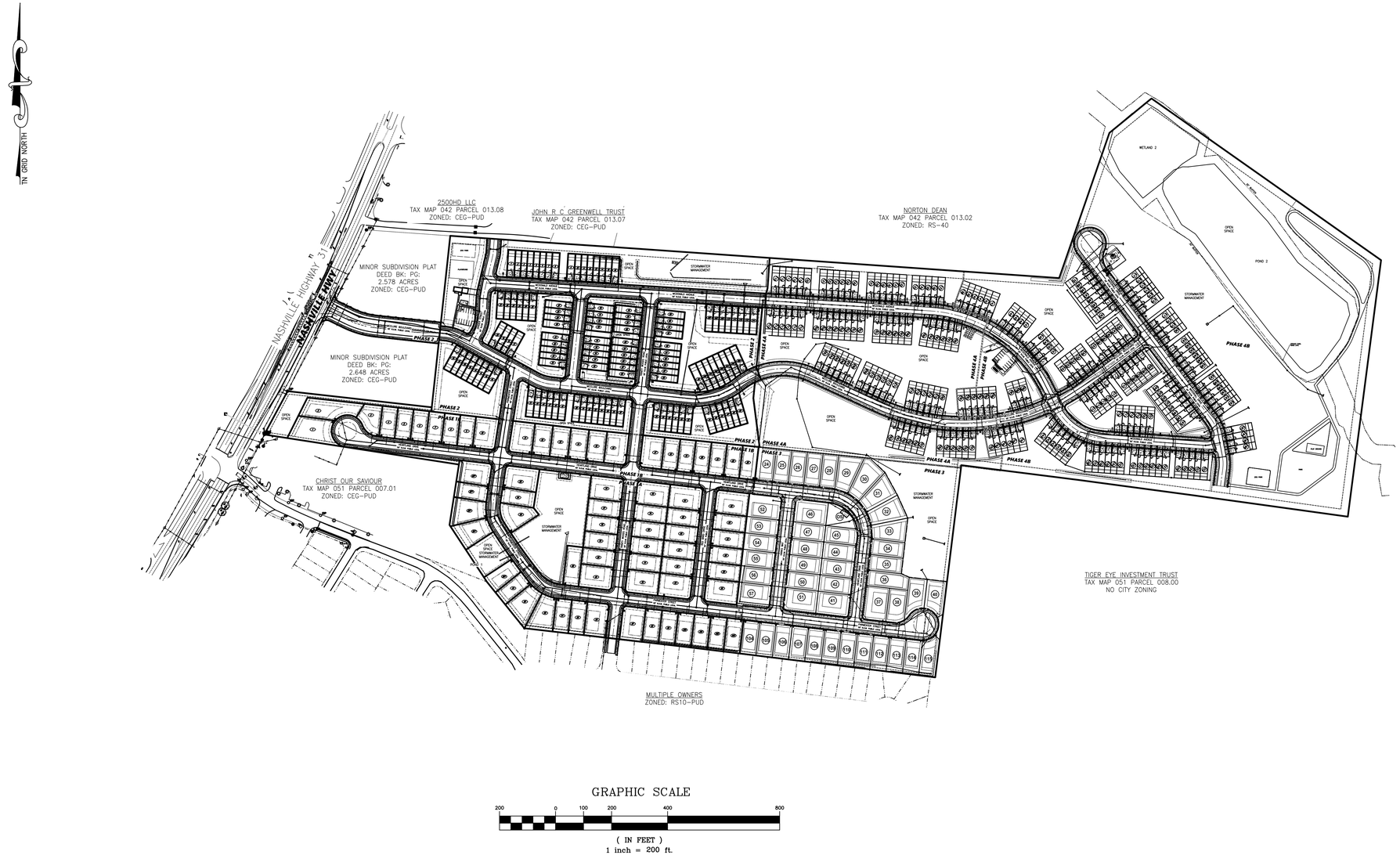
REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GW
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical: 1" = 50'
Horizontal:

C306

FILE: J:\WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Britelond Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - PUD Master Plan.dwg



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MCCLURE FARMS
FINAL PUD MASTER PLAN
COLUMBIA, MAURY COUNTY, TN 38401
OVERALL UTILITY PLAN

REVISIONS	DATE

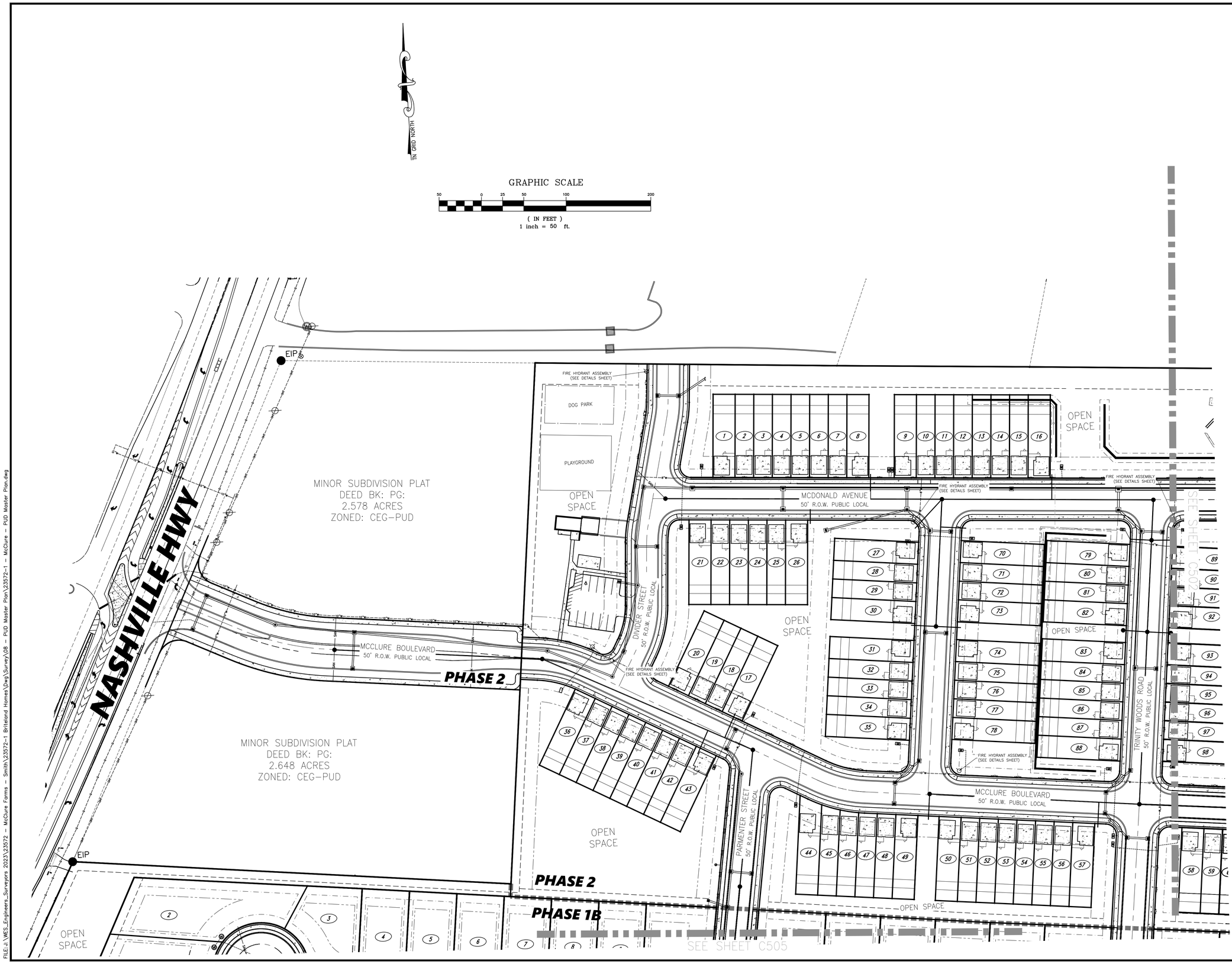
Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical:
Horizontal: 1" = 200'

GERALD W. VICK
NO. 107415
STATE OF TENNESSEE
4-20-26

C500

FILE: J:\WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Briteland Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - PUD Master Plan.dwg



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FINAL PUD MASTER PLAN
COLUMBIA, MAURY COUNTY, TN 38401
UTILITY PLAN

REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical:
Horizontal: 1" = 50'

C501

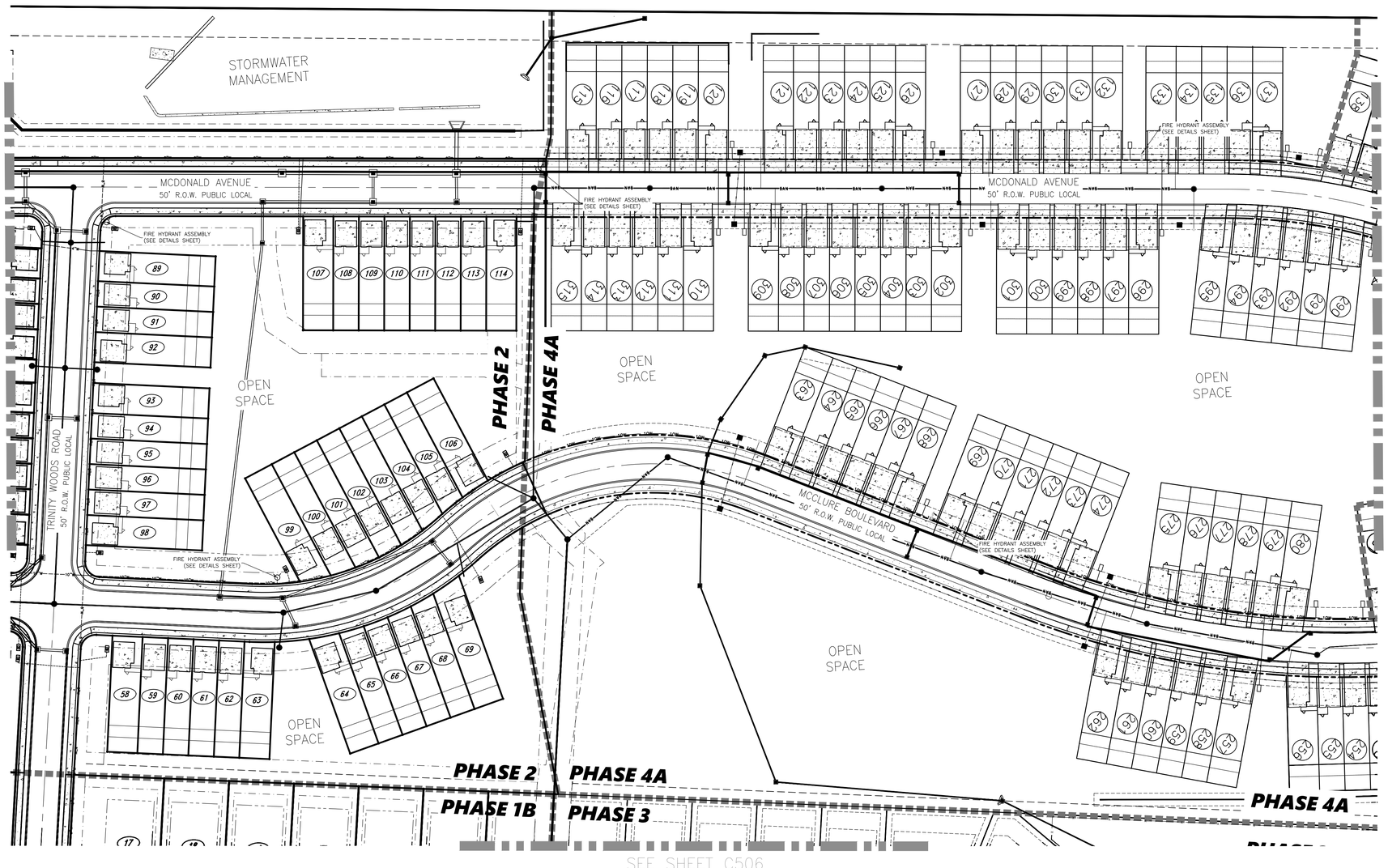
FILE:J:\WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Briteland Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - PUD Master Plan.dwg

TN GRID NORTH

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.



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FINAL PUD MASTER PLAN
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UTILITY PLAN

REVISIONS	DATE

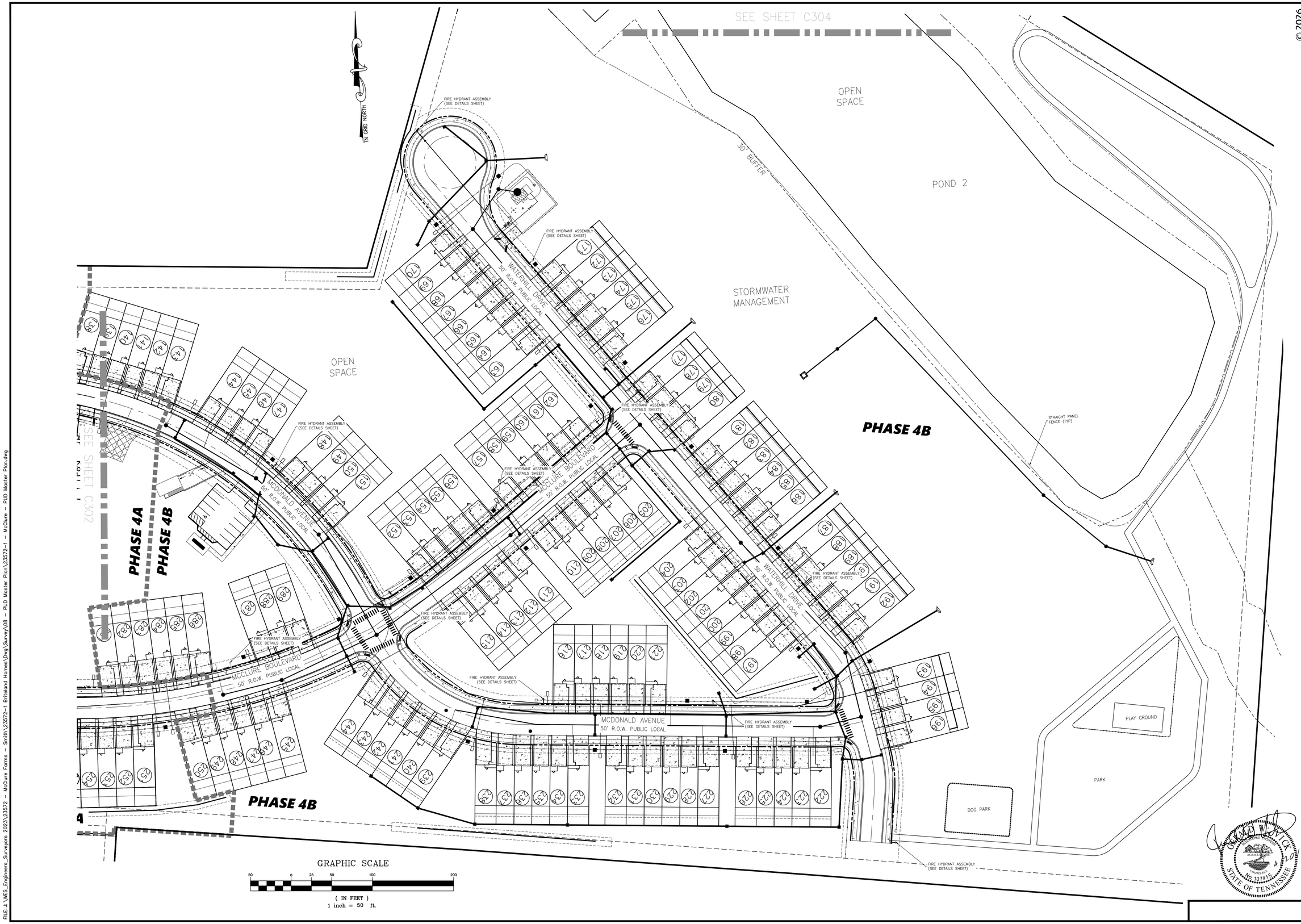
Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale: Vertical: 1" = 50'
Horizontal:

GREGORY W. VICK
LICENSED PROFESSIONAL ENGINEER
No. 107415
STATE OF TENNESSEE
4/24/26

C502

FILE: J:\WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Briteland Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - PUD Master Plan.dwg



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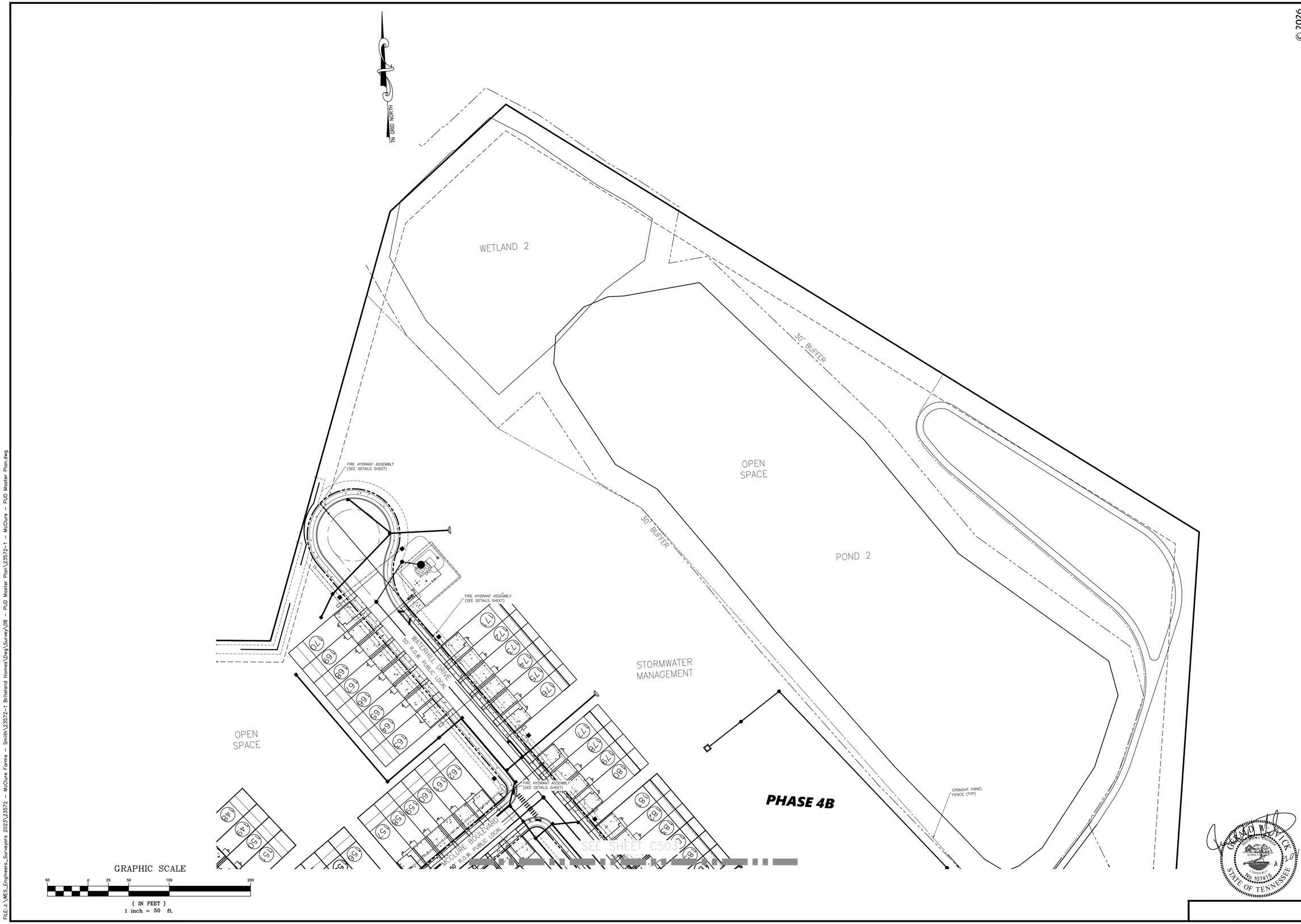
Scale:
Vertical:
Horizontal: 1" = 50'

GERALD W. VICK
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 107415
STATE OF TENNESSEE
4/20/26

C503



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UTILITY PLAN

REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical:
Horizontal: 1" = 50'

GERALD W. LOVICK
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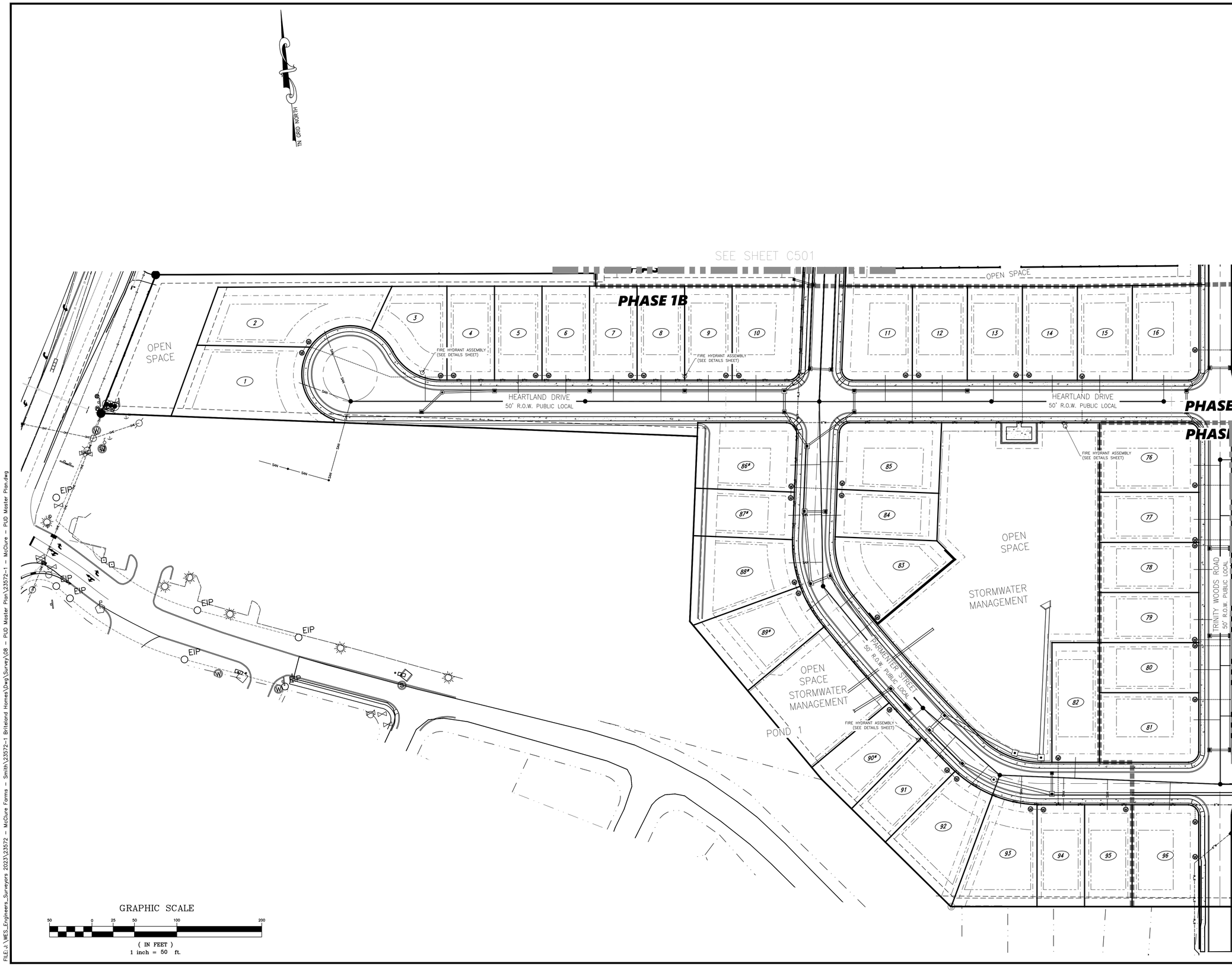
No. 107415
STATE OF TENNESSEE
4/20/26

C504

FILE:J:\WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Briteland Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - PUD Master Plan.dwg



FILE:J:\WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Briteland Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - PUD Master Plan.dwg

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UTILITY PLAN

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Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical:
Horizontal: 1" = 50'

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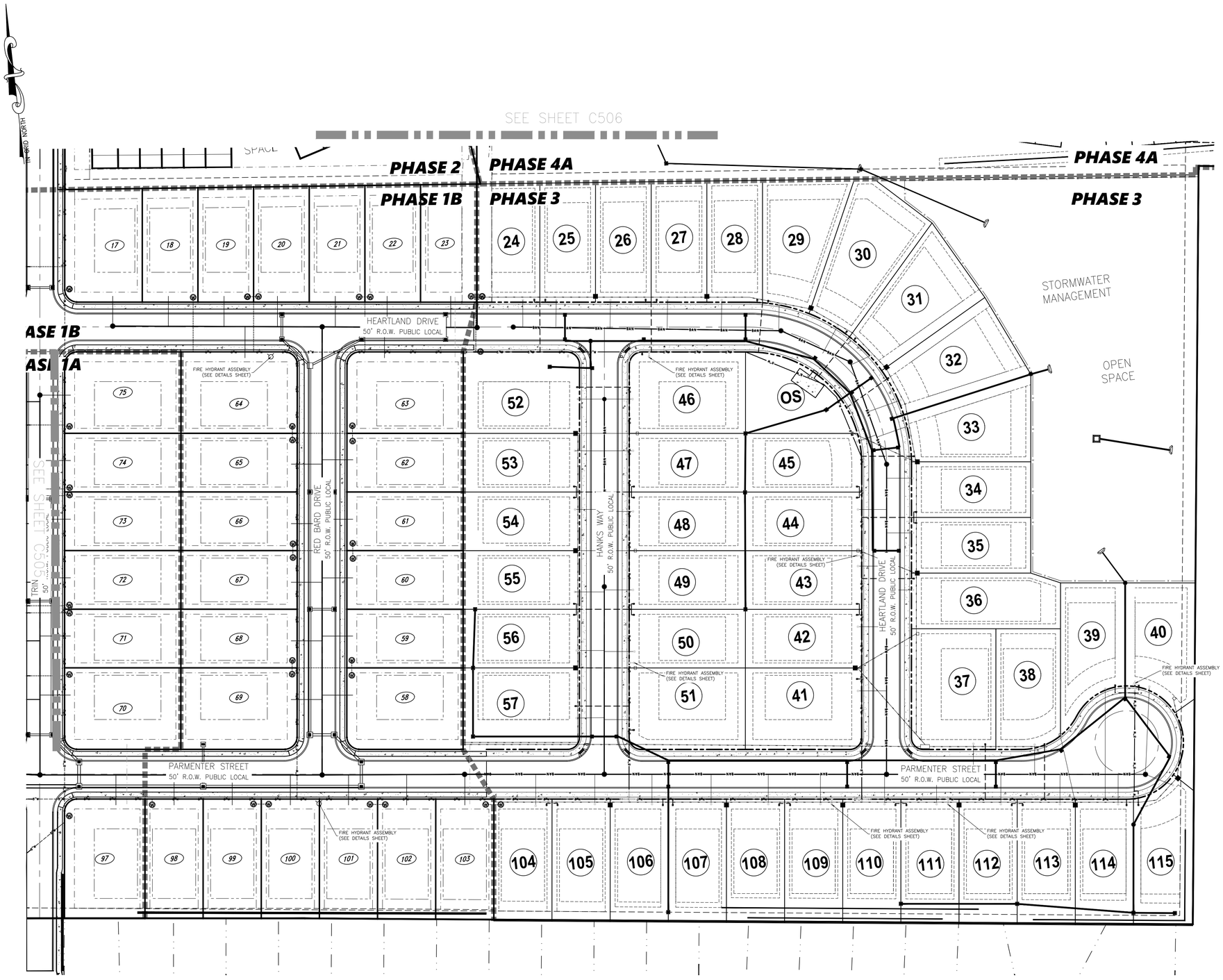
AGRICULTURE
COMMERCE
No. 107415
STATE OF TENNESSEE
4/20/26

C505



GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

FILE:J:\WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Briteland Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - PUD Master Plan.dwg

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UTILITY PLAN

REVISIONS	DATE

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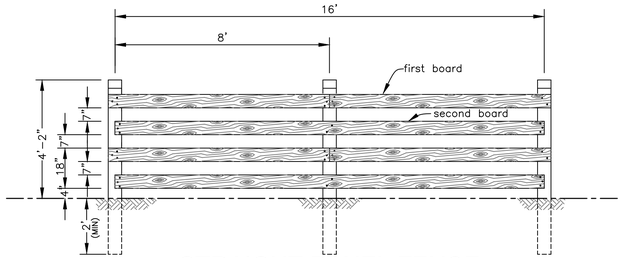
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical:
Horizontal: 1" = 50'

GRAND W. WYCK
STATE OF TENNESSEE
No. 107415
4-20-26

C506

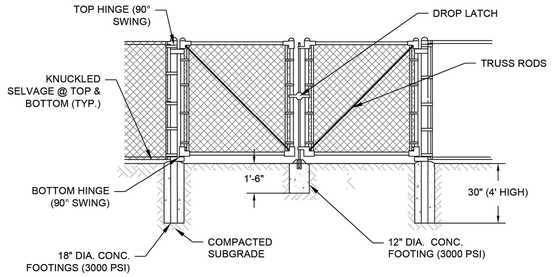


STRAIGHT PANEL FENCE

PROPOSED 4-RAIL PLANK FENCE
DETENTION AREAS

4 PLANK RANCH FENCE:

1. SPACE 7' FENCE POST AT 8' O.C.
2. PLACE 16' BOARD (6" ‡ BOARD) ± 2" BELOW TOP OF POST.
3. PLACE SECOND BOARD 7" BELOW FIRST BOARD AND OFFSET BY 8'.
4. ATTACH REMAINING BOARDS IN SAME MANNER ALONG FENCE.
5. ADD 4' HORIZONTAL BOARD AT POSTS IF DESIRED TO REINFORCE SPLICES.

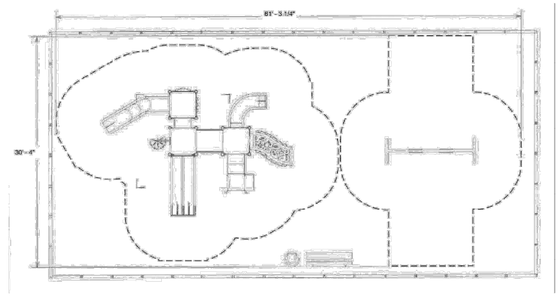


NOTES:

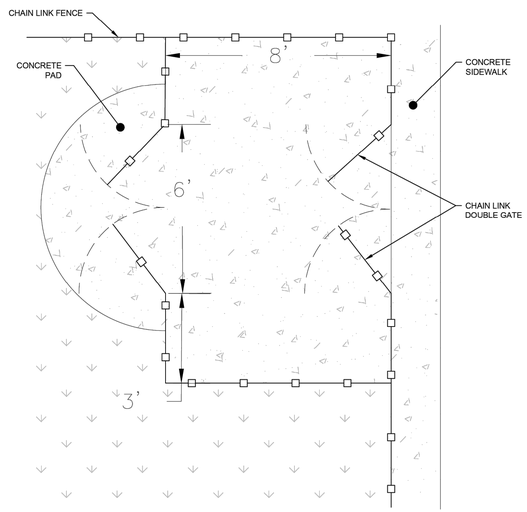
1. ALL CONCRETE FOOTINGS AROUND POSTS AT GROUND LINE SHALL BE MOUNDED & SLOPED FOR POSITIVE DRAINAGE.
2. FRAMING MEMBERS (INCLUDING POST, RAILS, BRACES, GATE FRAMES) SHALL BE TYPE 1 PIPE, SCHEDULE 40. POSTS AND RAILS SHALL HAVE CAPS TO EXCLUDE MOISTURE. RAILS SHALL BE ATTACHED TO POSTS W/ MALLEABLE RAIL END CAPS W/ 7/8" BEVELED STEEL BRACE BAND.
3. ALL MATERIALS (POSTS, RAILS, CAPS, TENSION BARS, BANDS, FABRIC, ETC.) SHALL HAVE AN OUTER PVC COATING IN ACCORDANCE WITH ASTM F 1043, 7. COLOR TO BE BLACK.

3 CHAIN LINK DOUBLE GATE

N.T.S.

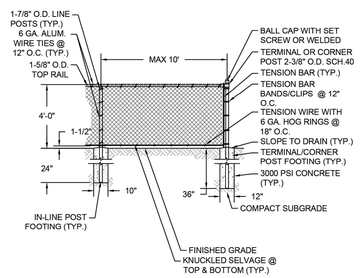


PLAYGROUND DETAIL
NTS



1 DOUBLE GATE ENTRANCE PLAN

N.T.S.

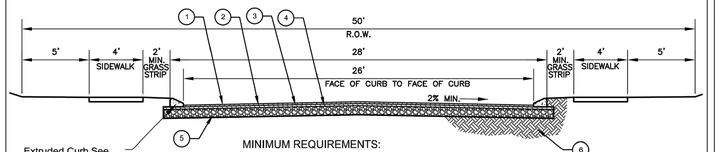


NOTES:

1. ALL CONCRETE FOOTINGS AROUND POSTS AT GROUND LINE SHALL BE MOUNDED & SLOPED FOR POSITIVE DRAINAGE.
2. FRAMING MEMBERS (INCLUDING POST, RAILS, BRACES, GATE FRAMES) SHALL BE TYPE 1 PIPE, SCHEDULE 40. POSTS AND RAILS SHALL HAVE CAPS TO EXCLUDE MOISTURE. RAILS SHALL BE ATTACHED TO POSTS W/ MALLEABLE RAIL END CAPS W/ 7/8" BEVELED STEEL BRACE BAND.
3. ALL MATERIALS (POSTS, RAILS, CAPS, TENSION BARS, BANDS, FABRIC, ETC.) SHALL HAVE AN OUTER PVC COATING IN ACCORDANCE WITH ASTM F 1043, 7. COLOR TO BE BLACK.

2 CHAIN LINK FENCE

N.T.S.



Extruded Curb See Detail SD-09 (Curb & Gutter may be used in place of Extruded Curb See Detail SD-10)

MINIMUM REQUIREMENTS:

1. 1 1/2" ASPHALTIC CONCRETE SURFACE (GRADING E) ITEM NO. 411-01.11
2. TACK COAT (RS-2) ITEM NO. 403-01
3. 2" ASPHALTIC CONCRETE BASE (GRADING B) ITEM NO. 307-01.06
4. PRIME COAT (AE-P) ITEM NO. 402-01
5. 8" STONE (GRADING D PUG MILL MIX) ITEM NO. 303-01
6. APPROVED COMPACTED SUBGRADE

ITEM NUMBERS ARE TO MEET TDOT SPECIFICATIONS

Notes:

Additional right-of-way may be required near intersections.

Elements of this typical section may be revised if approved by the City Engineer.

CITY OF COLUMBIA TENNESSEE

RESIDENTIAL LOCAL STREET

(NTS)

DATE 9-10-2014
DWG. NO. SD-04

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WES ENGINEERS & SURVEYORS
CIVIL ENGINEERS & LAND SURVEYORS
2486 NASHVILLE HIGHWAY
COLUMBIA, TN 38401
PHONE: (931) 388-2329
www.wesengineers.com
ENGINEERS & SURVEYORS

Client
DRB GROUP
4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
FINAL PUD MASTER PLAN
COLUMBIA, MAURY COUNTY, TN 38401
DETAILS

REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical: N/A
Horizontal:

GREGORY V. WOLCK
REGISTERED LANDSCAPE ARCHITECT
AGRICULTURE
COMMERCE
No. 1074
STATE OF TENNESSEE
4-20-26

C901

FILE: J:\ WES_Engineers_Surveyors 2023\23572 – McClure Farms – Smith\23572–1 Britelond Homes\Dwg\Survey\08 – PUD Master Plan\23572–1 – McClure – PUD Master Plan.dwg

McClure Farms Townhome Additions

DRB Homes – Pattern Book

Submitted: 4/20/2026

Plans:

Seeking Approval:

- **Braden –** Elevation #2.1, 4, 4.1

Renderings:





Garage handing and pad elevation changes between units may alter the massing, resulting in roofline shifts such as a single- or double-gable condition.

Braden – Elevation 2.1

Seeking Approval:



Braden – Elevation 4

Seeking Approval:



Braden – Elevation 4.1

Seeking Approval:



PRELIMINARY PLAT FOR

MCCLURE FARMS

2504 NASHVILLE HWY, COLUMBIA, TENNESSEE
PORTION OF MAP 051, PARCEL 006.00 & MAP 042, PARCEL 028.00
116 SINGLE FAMILY LOTS & 315 TOWNHOME UNITS



LOCATION MAP
NOT TO SCALE
COLUMBIA, MAURY COUNTY, TENNESSEE

THIS SITE PLAN HAS BEEN DESIGNED TO MEET THE CRITERIA OF THE CITY OF COLUMBIA, TENNESSEE. THE PLANS ARE NOT RELEASED FOR CONSTRUCTION UNTIL THE RELATIVE PERMIT HAS BEEN ISSUED BY THE MUNICIPALITY. CHANGES SHALL NOT BE MADE TO THE APPROVED SITE PLAN UNLESS APPROVED BY THE RELEVANT DEPARTMENT SUPERINTENDANT OR THE PLANNING COMMISSION.

UTILITY COMPANIES:

UTILITIES SHOWN ARE BASED ON LIMITED DATA. THERE IS NO GUARANTEE AS TO THEIR LOCATION OR SIZE. PLEASE CONTACT RESPECTIVE UTILITY COMPANIES PRIOR TO CONSTRUCTION. POSSIBLE CONTACTS IN THIS AREA INCLUDE:

MUNICIPALITY:	ELECTRIC:	CABLE TELEVISION:
CITY OF COLUMBIA 707 NORTH MAIN ST. COLUMBIA, TN 38401	COLUMBIA POWER & WATER SYSTEMS 201 PICKENS LANE COLUMBIA, TN 38401 (931) 388-4833	COLUMBIA POWER & WATER SYSTEMS 201 PICKENS LANE COLUMBIA, TN 38401 (931) 388-4833
STORM WATER:	**WATER:**	**CABLE TELEVISION:**
CITY OF COLUMBIA ENGINEERING/INSPECTION 707 N. MAIN STREET COLUMBIA, TN 38401 (931) 560-1530 Contact: Glenn Harper, P.E.	COLUMBIA POWER & WATER SYSTEMS 201 PICKENS LANE COLUMBIA, TN 38401 (931) 388-4833	CHARTER COMMUNICATIONS 2008 S. MAIN STREET COLUMBIA, TN 38401 (931) 388-1326
SANITARY:	**TELEPHONE:**	**GAS:**
CITY OF COLUMBIA WASTEWATER SYSTEM 1244 TREATMENT PLANT RD. COLUMBIA, TN 38401 (931) 560-1001 Donnie Boshers, Director	AT&T 904 S. HIGH ST COLUMBIA, TN 38401 JAMIE WHITFIELD (615) 975-0505 jw0972@att.com	ATMOS ENERGY 810 NASHVILLE HWY. COLUMBIA, TN 38401 (888) 824-3434 NASHVILLE (615) 872-5100

Tennessee 811
Know what's **below**
Call before you dig.

STORMWATER DETENTION AGREEMENT:
RECORDED: 10/14/2025
DEED BOOK: R3102 PAGE: 1354-1360

PRIMARY CONTRACTOR INFORMATION:

COMPANY NAME: _____
CONTACT PHONE: _____

TDEC LEVEL I CERTIFIED 24 HOUR POINT OF CONTACT FOR SOIL EROSION CONTROL:
NAME: _____
PHONE: _____

STATE OF TENNESSEE NPDES PERMIT - NOTICE OF COVERAGE
TRACKING NUMBER: TNR182919
DATE: 12/27/2022

©2026

gerald@wesengineers.com

RELEASED FOR CONSTRUCTION WHEN APPROVED BY MUNICIPALITY

SHEET INDEX

1 - COVER SHEET
2 - EXISTING CONDITIONS
3 - OVERALL LAYOUT
4-8 - PRELIMINARY PLAT
9-16 - EXISTING CONDITIONS
17 - SLOPE ANALYSIS

GENERAL NOTES

1. PROPOSED USE: MIXED USE - RESIDENTIAL, MULTIFAMILY SUBDIVISION
2. A PRE CONSTRUCTION MEETING WITH THE MUNICIPALITY IS REQUIRED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING AND PROPOSED UTILITIES FROM DAMAGE DURING ALL STAGES OF CONSTRUCTION.
4. THE ENGINEER AND APPLICABLE AGENCY MUST APPROVE, PRIOR TO CONSTRUCTION, ANY ALTERATION, OR VARIANCE FROM THESE PLANS.
5. DEVELOPER SHALL COMPLY WITH TDEC EROSION PREVENTION AND SEDIMENTATION CONTROL HANDBOOK, CURRENT EDITION.
6. UNDERGROUND DRY UTILITIES SHALL BE EXTENDED FROM EXISTING LOCATIONS TO SERVICE THIS SITE AS REQUIRED BY UTILITY COMPANIES.
7. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS OR PROGRAMS UTILIZED IN CONNECTION WITH THE WORK, AND WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
8. HANDICAP PARKING SPACES SHALL BE MARKED WITH ABOVE GRADE SIGNS IN ACCORDANCE WITH CURRENT ADA STANDARDS. VAN ACCESSIBLE SPACES SHALL BE MARKED AS SUCH.
9. ALL ON-SITE TRAFFIC SIGNS SHALL MEET THE REQUIREMENTS OF THE CITY ENGINEERING REQUIREMENT, ZONING ORDINANCE, & THE MUTCD.
10. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF COLUMBIA TENNESSEE.
11. UTILITIES AS SHOWN INDICATE THE APPROXIMATE LOCATION OF FACILITIES ONLY AND NO GUARANTEE IS GIVEN TO THE COMPLETENESS OR ACCURACY THEREOF. NO EXCAVATION MAY BE MADE WITHIN 4 FEET OF THESE UTILITIES UNLESS AND UNTIL SUCH UTILITIES HAVE BEEN POSITIVELY LOCATED AS TO HORIZONTAL AND VERTICAL POSITION. CONTRACTOR SHALL CONTACT UTILITY COMPANY AND "TENNESSEE ONE CALL" AT 811 (1-800-351-1111) THREE WORKING DAYS PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXACT LOCATION OF ALL EXISTING UTILITIES.
12. THIS PROPERTY IS NOT LOCATED IN A FLOOD HAZARD AREA AS PER FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD BOUNDARY AND FLOODWAY MAP COMMUNITY PANEL NO. 47119C0180E, (ZONE X), DATED 04-16-2007.
13. THE LIMIT OF CONSTRUCTION IS SHOWN ON THE CONSTRUCTION PLANS. ANY WORK OUTSIDE OF THE LIMIT OF CONSTRUCTION IS TO BE COORDINATED BY THE CONTRACTOR AND PRE-APPROVED BY THE APPROPRIATE PROPERTY OWNER.

SITE DATA

PARCEL NUMBER	TAX MAP 051, PARCEL 006.00 DEED BOOK: R2813, PG 689
PARCEL ADDRESS:	2504 NASHVILLE HWY COLUMBIA, TENNESSEE 38401
EXISTING ZONING:	PUD (RS6-PUD)
MINIMUM REQUIRED BUILDING SETBACK LINES:	30'(RS-6), 35'(RM-1) FRONT (COLLECTOR) 40' FRONT (ARTERIAL) 20' REAR 7' SINGLE SIDE, 15' TOTAL (RS-6 & RM-1; TWO STORIES OR LESS) 12' SINGLE SIDE, 35' TOTAL (RS-6, THREE OR MORE STORIES) 10' SINGLE SIDE, 30' TOTAL (RM-1, THREE OR MORE STORIES)
PARCEL NUMBER	TAX MAP 042, PARCEL 028.00 DEED BOOK: R2813, PG 689
PARCEL ADDRESS:	2524 NASHVILLE HWY COLUMBIA, TENNESSEE 38401
EXISTING ZONING:	(PUD) RM1-PUD
ACREAGE OF SITE:	±62.82 ACRES(TAX MAP 042, PARCEL 028.00) ±32.47 ACRES(TAX MAP 051, PARCEL 006.00) ±95.29 ACRES(TOTAL)
DISTURBED ACREAGE:	± ACRES
PROPERTY OWNER:	GH TENNESSEE, LLC BARTON CREEK PLAZA III 3815 SOUTH CAPITAL OF TEXAS HIGHWAY, SUITE 275 AUSTIN, TX 78704 CHRIS LYNCH CLYNCH@GEHANHOMES.COM 512-483-9810

MCCLURE FARMS
2504 & 2524 NASHVILLE HIGHWAY
COLUMBIA, TENNESSEE

PROPRIETOR

DRB GROUP
4068 RURAL PLAINS CIRCLE, SUITE 200
FRANKLIN, TENNESSEE 37064
CONTACT: ANDREW DAVIDSON

WES ENGINEERS & SURVEYORS
CIVIL ENGINEERS & LAND SURVEYORS
2486 NASHVILLE HIGHWAY
COLUMBIA, TN 38401
PHONE: (931) 388-2329
www.wesengineers.com

MCCLURE FARMS
2504 & 2524 NASHVILLE HIGHWAY
COLUMBIA, TENNESSEE 38401

ENGINEER'S SEAL

GERALD W. MARTICK
REGISTERED PROFESSIONAL ENGINEER
AGRICULTURAL
CIVIL
COMMERCIAL
No. 107415
STATE OF TENNESSEE

REVISIONS	DATE

PROJECT No. 23572-1
COVER
DATE: 04-20-2026

FILE: J:\ WES_Engineers_Surveyors 2023\23572 – McClure Farms – Smith\23572-1 Briteland Homes\Dwg\Survey\08 – PUD Master Plan\23572-1 – McClure – Preliminary Plat.dwg

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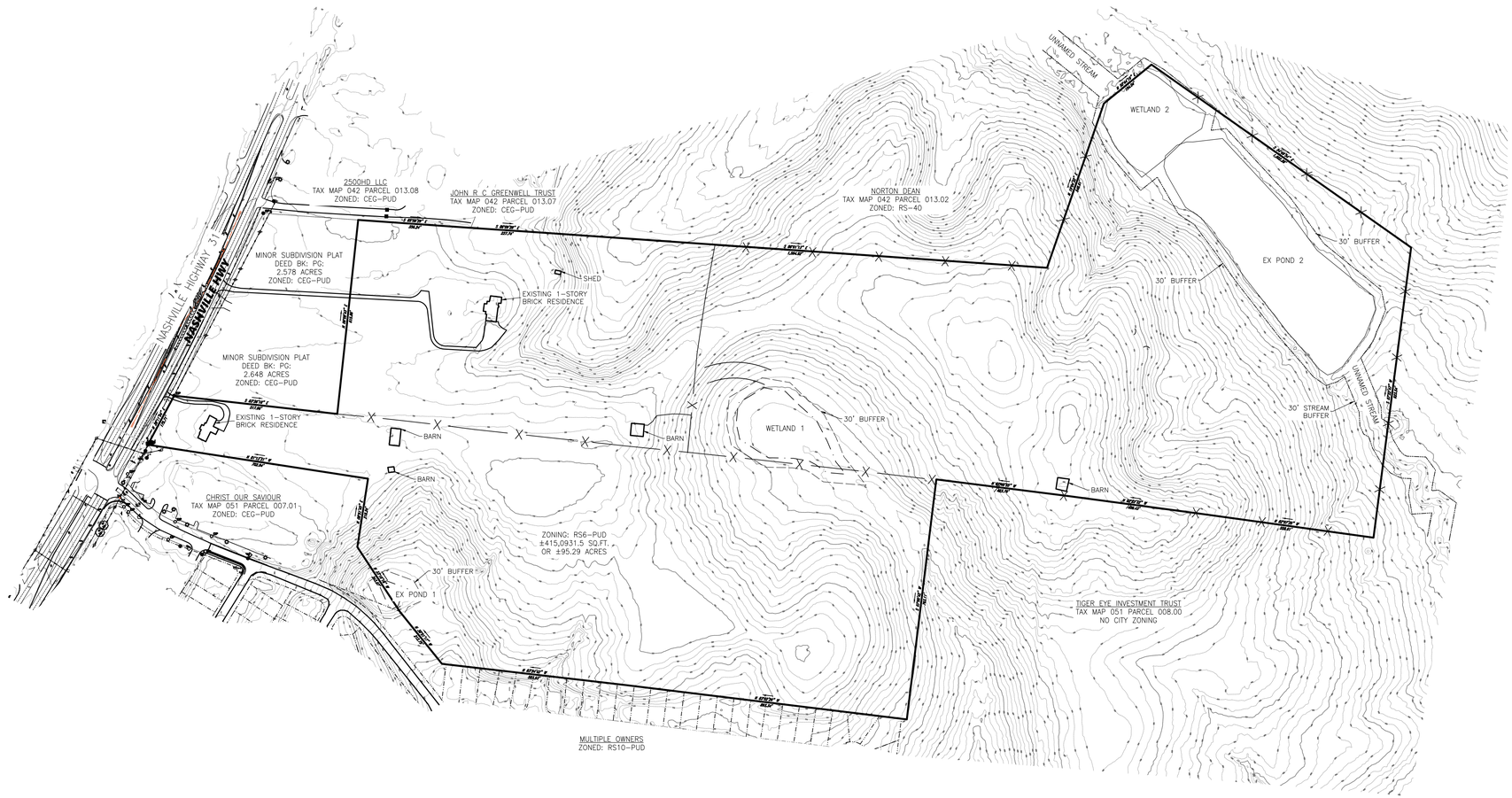

GRAPHIC SCALE

200 0 100 200 400 800

(IN FEET)
1 inch = 200 ft.

WES Engineers & Surveyors
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Client
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4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
PRELMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
EXISTING CONDITIONS

REVISIONS	DATE

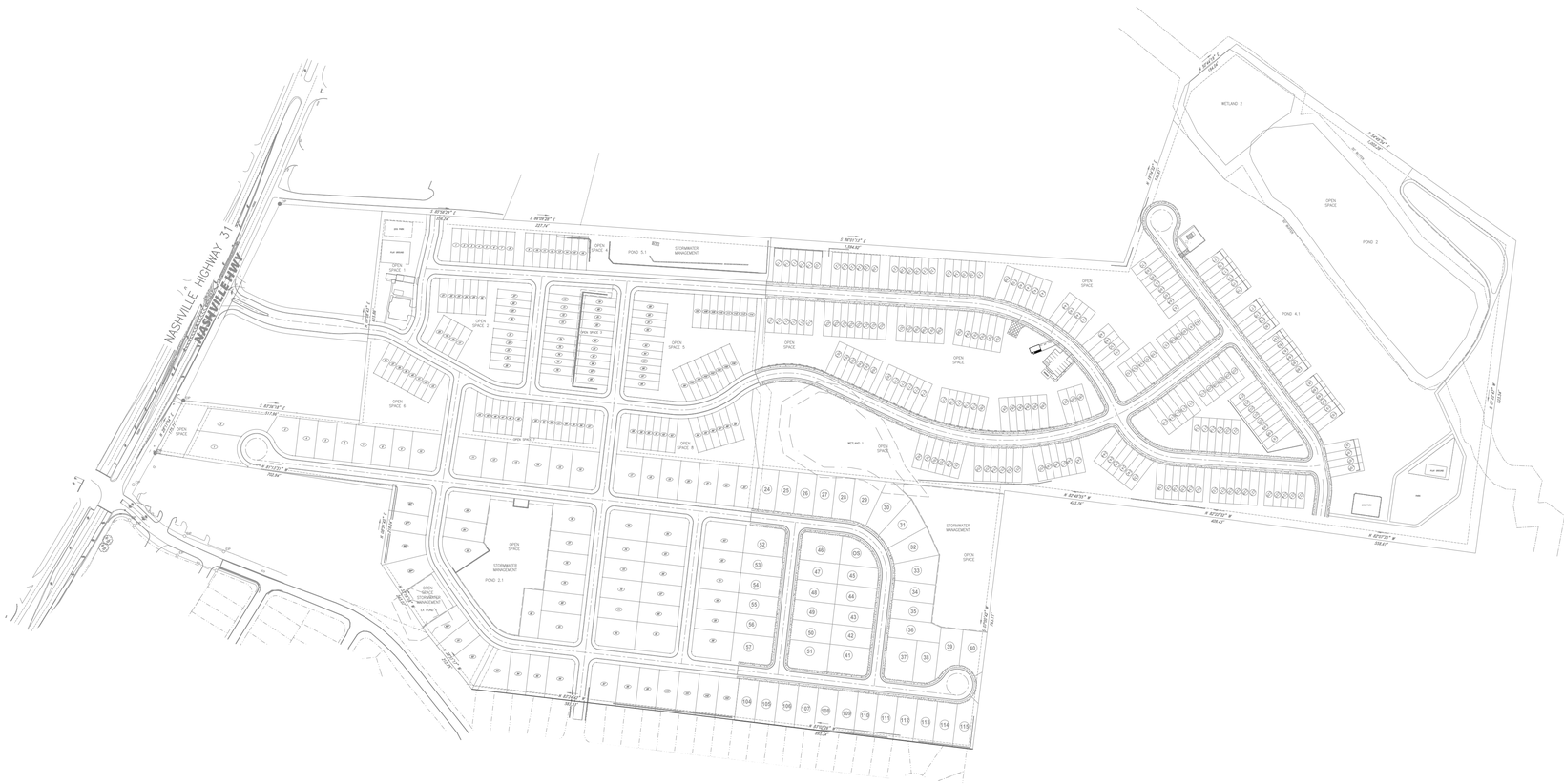
Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

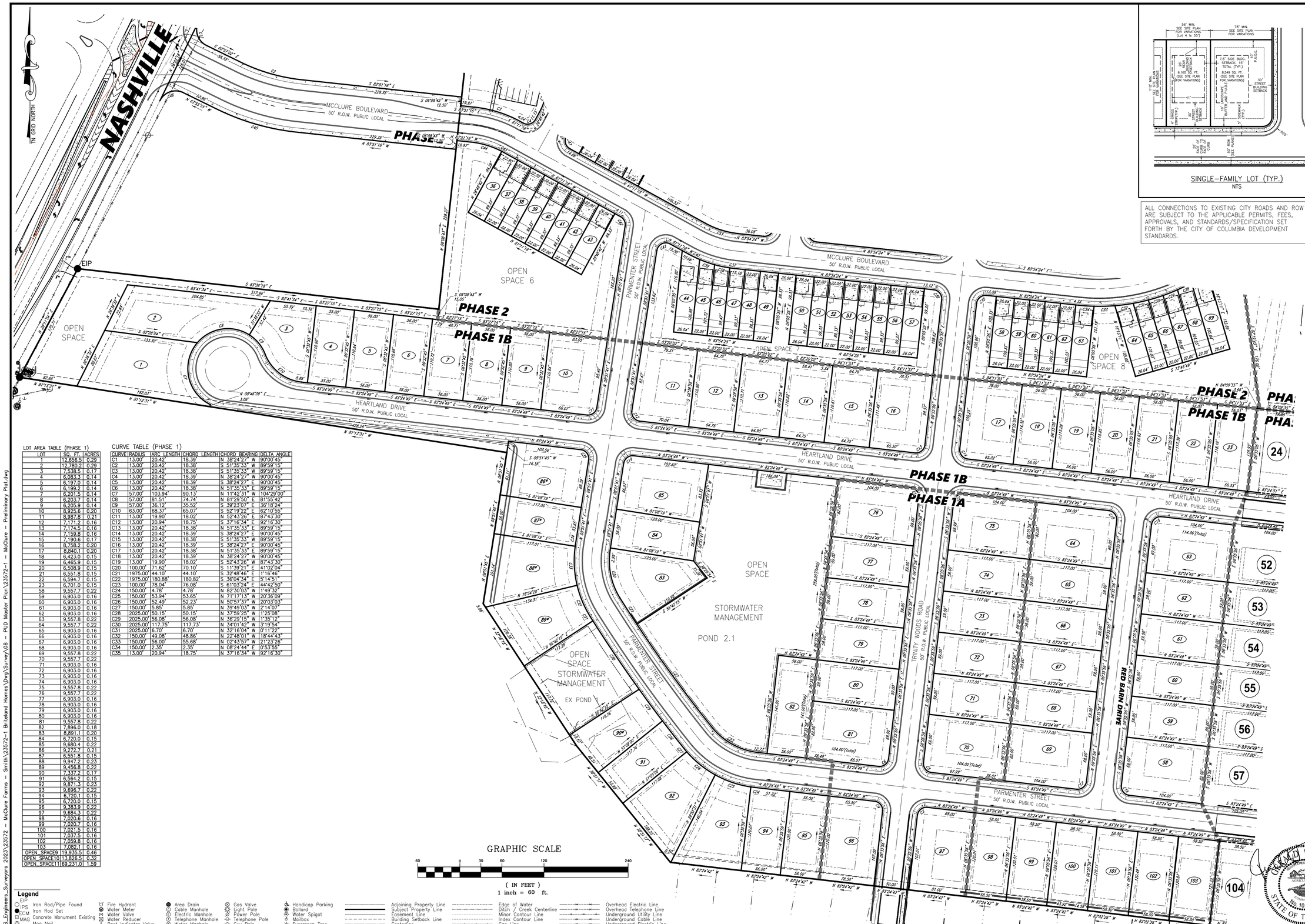
Job. no. 23572-1
Scale:
Vertical: 1" = 200'
Horizontal:

GREGORY W. VICK
REGISTERED LAND SURVEYOR
No. 107415
STATE OF TENNESSEE

2 of 17

FILE: J:\WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Britelond Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - Preliminary Plat.dwg


NASHVILLE HIGHWAY 31
NASHVILLE HWY
OPEN SPACE
STORMWATER MANAGEMENT
POND 5.1
POND 2.1
POND 4.1
POND 2
WETLAND 1
WETLAND 2
S 87°57'01" E 1,284.42'
S 87°57'01" E 1,284.42'
S 87°57'01" E 403.91'
S 87°57'01" E 398.61'
S 87°57'01" E 403.91'
S 87°57'01" E 398.61'
N 87°57'01" W 403.91'
N 87°57'01" W 398.61'
N 87°57'01" W 403.91'
N 87°57'01" W 398.61'
S 87°57'01" E 403.91'
S 87°57'01" E



SINGLE-FAMILY LOT (TYP.)
NTS

ALL CONNECTIONS TO EXISTING CITY ROADS AND ROW ARE SUBJECT TO THE APPLICABLE PERMITS, FEES, APPROVALS, AND STANDARDS/SPECIFICATION SET FORTH BY THE CITY OF COLUMBIA DEVELOPMENT STANDARDS.

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LOT AREA TABLE (PHASE 1)

LOT	SQ. FT.	ACRES
1	12,656.5	0.29
2	12,780.2	0.29
3	7,538.5	0.17
4	6,083.3	0.14
5	6,197.0	0.14
6	6,199.2	0.14
7	6,201.5	0.14
8	6,203.7	0.14
9	6,205.9	0.14
10	8,925.6	0.20
11	8,987.8	0.21
12	7,171.2	0.16
13	7,174.5	0.16
14	7,159.8	0.16
15	7,190.6	0.17
16	8,758.2	0.20
17	8,840.1	0.20
18	6,423.0	0.15
19	6,465.9	0.15
20	6,508.9	0.15
21	6,551.8	0.15
22	6,594.7	0.15
23	6,701.0	0.15
58	9,557.7	0.22
59	6,903.0	0.16
60	6,903.0	0.16
61	6,903.0	0.16
62	6,903.0	0.16
63	9,557.8	0.22
64	9,557.7	0.22
65	6,903.0	0.16
66	6,903.0	0.16
67	6,903.0	0.16
68	6,903.0	0.16
69	9,557.8	0.22
70	9,557.7	0.22
71	6,903.0	0.16
72	6,903.0	0.16
73	6,903.0	0.16
74	6,903.0	0.16
75	9,557.8	0.22
76	9,557.7	0.22
77	6,903.0	0.16
78	6,903.0	0.16
79	6,903.0	0.16
80	6,903.0	0.16
81	9,557.8	0.22
82	7,896.0	0.18
83	8,891.1	0.20
84	6,720.0	0.15
85	9,680.4	0.22
86	9,272.7	0.21
87	6,551.8	0.15
88	9,947.2	0.23
89	9,456.8	0.22
90	7,337.2	0.17
91	6,564.2	0.15
92	9,871.3	0.23
93	9,696.7	0.22
94	6,720.1	0.15
95	6,720.0	0.15
96	9,383.9	0.22
97	9,684.3	0.22
98	7,020.6	0.16
99	7,020.7	0.16
100	7,021.5	0.16
101	7,037.5	0.16
102	7,059.8	0.16
103	7,082.1	0.16
OPEN_SPACE9	19,935.5	0.46
OPEN_SPACE10	13,826.5	0.32
OPEN_SPACE11	69,231.0	1.59

CURVE TABLE (PHASE 1)

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	13.00'	20.42'	18.39'	N 38°24'27" W	90°00'45"
C2	13.00'	20.42'	18.38'	S 51°35'33" W	89°59'15"
C3	13.00'	20.42'	18.38'	S 51°35'33" W	89°59'15"
C4	13.00'	20.42'	18.39'	N 38°24'27" W	90°00'45"
C5	13.00'	20.42'	18.39'	S 38°24'27" E	90°00'45"
C6	13.00'	20.42'	18.38'	N 51°35'33" E	89°59'15"
C7	57.00'	103.94'	90.13'	N 11°42'31" W	104°29'00"
C8	57.00'	81.51'	74.74'	N 81°29'50" E	81°55'42"
C9	57.00'	36.12'	35.52'	S 39°23'07" E	36°18'24"
C10	63.00'	68.37'	65.07'	S 52°19'22" E	62°10'55"
C11	13.00'	19.90'	18.02'	N 52°43'26" E	87°43'30"
C12	13.00'	20.94'	18.75'	S 37°16'34" E	92°16'30"
C13	13.00'	20.42'	18.38'	N 51°35'33" E	89°59'15"
C14	13.00'	20.42'	18.39'	S 38°24'27" E	90°00'45"
C15	13.00'	20.42'	18.38'	S 51°35'33" W	89°59'15"
C16	13.00'	20.42'	18.39'	S 38°24'27" E	90°00'45"
C17	13.00'	20.42'	18.38'	N 51°35'33" E	89°59'15"
C18	13.00'	20.42'	18.39'	N 38°24'27" W	90°00'45"
C19	13.00'	19.90'	18.02'	S 52°43'26" W	87°43'30"
C20	100.00'	71.62'	70.10'	S 11°39'21" E	41°02'04"
C21	1975.00'	44.10'	44.10'	S 32°48'46" E	1°16'46"
C22	1975.00'	180.88'	180.82'	S 36°04'54" E	5°14'51"
C23	100.00'	78.04'	76.08'	S 61°03'24" E	44°42'50"
C24	150.00'	4.78'	4.78'	N 82°30'03" W	1°49'32"
C25	150.00'	53.94'	53.65'	N 71°17'13" W	20°36'09"
C26	150.00'	52.49'	52.23'	N 50°57'37" W	20°03'03"
C27	150.00'	5.85'	5.85'	N 39°49'03" W	2°14'07"
C28	2025.00'	50.15'	50.15'	N 37°59'25" W	1°25'08"
C29	2025.00'	56.08'	56.08'	N 36°29'15" W	1°35'12"
C30	2025.00'	117.75'	117.73'	N 34°01'42" W	3°19'54"
C31	2025.00'	6.70'	6.70'	N 32°16'04" W	0°11'22"
C32	150.00'	49.08'	48.86'	N 27°48'01" W	18°44'43"
C33	150.00'	56.00'	55.68'	N 02°43'57" W	21°23'26"
C34	150.00'	2.35'	2.35'	N 08°24'44" E	0°53'55"
C35	13.00'	20.94'	18.75'	N 37°16'34" W	92°16'30"

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

Legend

- EIP — Iron Rod/Pipe Found
- IPS — Iron Rod Set
- ECM — Concrete Monument Existing
- MAG — Mag Nail
- Fence Post
- T-Post
- Bench Mark
- Stake Found
- Fire Hydrant
- Water Meter
- Water Valve
- Water Reducer
- Post Indicator Valve
- Clean Out
- Sanitary Sewer Manhole
- Storm Sewer Manhole
- Curb Inlet
- Catch Basin
- Area Drain
- Cable Manhole
- Electric Manhole
- Telephone Manhole
- Water Manhole
- Electric Meter
- Electric Riser
- Cable Riser
- Telephone Riser
- Gas Meter
- Gas Valve
- Light Pole
- Power Pole
- Telephone Pole
- Guy Pole
- Power Pole
- Guy Wire
- Flag Pole
- Sign
- Parking Block
- Handicap Parking
- Bollard
- Water Spigot
- Mailbox
- Evergreen Tree
- Deciduous Tree
- Bush
- Adjoining Property Line
- Subject Property Line
- Easement Line
- Building Setback Line
- Centerline
- Edge of Pavement
- Edge of Gravel
- Fence Line
- Landscape
- Woods / Tree line
- Edge of Water
- Ditch / Creek Centerline
- Minor Contour Line
- Index Contour Line
- Gas Line
- Sanitary Sewer Line
- Water Line
- Storm Sewer Line
- Overhead Utility Line
- Overhead Cable Line
- Overhead Electric Line
- Overhead Telephone Line
- Underground Utility Line
- Underground Cable Line
- Underground Electric Line
- Underground Telephone Line
- Forced Main Line

WES Engineers & Surveyors
CIVIL ENGINEERS & LAND SURVEYORS
2486 NASHVILLE HIGHWAY
COLUMBIA, TN 38401
PHONE: (931) 388-2329
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ENGINEERS & SURVEYORS

Client
DRB GROUP
4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
PRELIMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
PHASE 1(1A & 1B)

REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical: 1" = 60'
Horizontal:

GREGORY M. VENCK
REGISTERED LAND SURVEYOR
No. 107415
STATE OF TENNESSEE

4 of 17

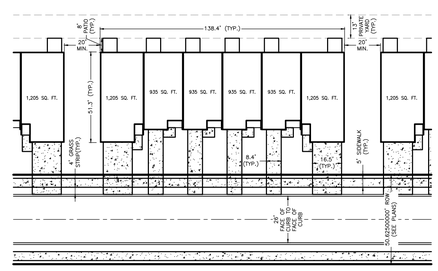
FILE: J:_WES_Engineers_Surveyors 2023\23572 – McClure Farms – Smith\23572–1 Britelend Homes\Dwg\Survey\08 – PUD Master Plan\23572–1 – McClure – Preliminary Plat.dwg

TN GRID NORTH

LOT	SQ. FT.	ACRES
1	2,560.8	0.06
2	2,163.3	0.05
3	2,163.3	0.05
4	2,163.3	0.05
5	2,163.3	0.05
6	2,163.3	0.05
7	2,163.3	0.05
8	2,560.8	0.06
9	2,560.8	0.06
10	2,163.3	0.05
11	2,163.3	0.05
12	2,163.3	0.05
13	2,163.3	0.05
14	2,163.3	0.05
15	2,163.3	0.05
16	2,560.8	0.06
17	2,565.5	0.06
18	2,167.3	0.05
19	2,167.3	0.05
20	2,565.5	0.06
21	2,603.3	0.06
22	2,199.3	0.05
23	2,199.3	0.05
24	2,199.3	0.05
25	2,199.3	0.05
26	2,603.3	0.06
27	2,586.8	0.06
28	2,185.3	0.05
29	2,185.3	0.05
30	2,586.8	0.06
31	2,586.8	0.06
32	2,185.3	0.05
33	2,185.3	0.05
34	2,185.3	0.05
35	2,586.8	0.06
36	2,586.8	0.06
37	2,185.3	0.05
38	2,185.3	0.05
39	2,185.3	0.05
40	2,185.3	0.05
41	2,185.3	0.05
42	2,185.3	0.05
43	2,586.8	0.06
44	2,905.2	0.07
45	2,289.1	0.05
46	2,207.9	0.05
47	2,185.6	0.05
48	2,185.3	0.05
49	2,586.8	0.06
50	2,586.8	0.06
51	2,185.3	0.05
52	2,185.3	0.05
53	2,185.3	0.05
54	2,185.3	0.05
55	2,185.3	0.05
56	2,185.3	0.05
57	2,586.8	0.06
58	2,612.8	0.06
59	2,207.3	0.05
60	2,207.3	0.05
61	2,207.3	0.05
62	2,207.3	0.05
63	2,619.1	0.06
64	2,678.2	0.06
65	2,203.4	0.05
66	2,190.7	0.05
67	2,216.8	0.05
68	2,282.3	0.05
69	2,842.1	0.07
70	2,560.8	0.06
71	2,163.3	0.05
72	2,163.3	0.05
73	2,560.8	0.06
74	2,560.8	0.06
75	2,163.3	0.05
76	2,163.3	0.05
77	2,163.3	0.05
78	2,560.8	0.06
79	2,560.8	0.06
80	2,163.3	0.05
81	2,163.3	0.05
82	2,560.8	0.06
83	2,560.8	0.06
84	2,163.3	0.05
85	2,163.3	0.05
86	2,163.3	0.05
87	2,163.3	0.05
88	2,560.8	0.06
89	2,612.8	0.06
90	2,207.3	0.05
91	2,207.3	0.05
92	2,207.3	0.05
93	2,612.8	0.06
94	2,207.3	0.05
95	2,207.3	0.05
96	2,207.3	0.05
97	2,207.3	0.05
98	2,612.8	0.06
99	2,738.7	0.06
100	2,440.6	0.06
101	2,503.7	0.06
102	2,518.8	0.06
103	2,486.5	0.06
104	2,405.7	0.06
105	2,300.0	0.05
106	2,631.1	0.06
107	2,560.8	0.06
108	2,163.3	0.05
109	2,163.3	0.05
110	2,163.3	0.05
111	2,163.3	0.05
112	2,163.3	0.05
113	2,163.3	0.05
114	2,560.8	0.06

LOT	SQ. FT.	ACRES
OS-1	40,902.9	0.94
OS-2	31,367.4	0.72
OS-3	16,427.1	0.38
OS-4	89,803.4	2.06
OS-5	47,815.3	1.10
OS-6	36,936.8	0.85
OS-7	18,940.5	0.43
OS-8	28,783.2	0.66

CURVE	RADIUS	ARC LENGTH	CHORD	LENGTH	CHORD BEARING	DELTA ANGLE
C1	25.00'	39.27'	35.36		S 18°58'50" E	90°00'20"
C2	262.50'	86.54'	86.15'		S 74°24'33" E	18°53'24"
C3	175.00'	69.23'	68.78'		S 72°31'17" E	22°39'57"
C4	13.00'	20.42'	18.38'		N 73°48'42" E	90°00'00"
C5	95.00'	41.79'	41.46'		N 16°12'29" E	25°12'25"
C6	145.00'	24.56'	24.53'		N 08°27'24" E	9°42'14"
C7	95.00'	15.48'	15.47'		N 08°38'22" E	9°20'17"
C8	145.00'	23.63'	23.61'		S 08°38'22" W	9°20'17"
C9	13.00'	22.62'	19.87'		S 35°32'36" E	99°42'14"
C10	13.00'	19.84'	17.97'		S 49°52'31" W	87°27'32"
C11	13.00'	20.43'	18.39'		S 38°52'50" W	90°03'09"
C12	225.00'	41.36'	41.30'		S 89°10'22" E	10°31'55"
C13	225.00'	27.19'	27.17'		N 82°06'00" E	6°55'23"
C14	225.00'	22.37'	22.36'		N 75°47'28" E	5°41'44"
C15	225.00'	22.08'	22.07'		N 70°07'53" E	5°37'21"
C16	225.00'	22.01'	22.00'		N 64°31'03" E	5°36'19"
C17	225.00'	22.16'	22.15'		N 58°53'37" E	5°38'52"
C18	225.00'	18.34'	18.33'		N 53°44'15" E	4°40'11"
C19	275.00'	4.17'	4.17'		N 51°50'14" E	0°52'09"
C20	275.00'	22.41'	22.41'		N 54°36'24" E	4°40'10"
C21	275.00'	26.19'	26.18'		N 59°40'11" E	5°27'23"
C22	275.00'	33.92'	33.90'		N 65°55'53" E	7°04'02"
C23	275.00'	2.07'	2.07'		N 69°40'50" E	0°25'51"
C24	225.00'	23.85'	23.84'		S 66°36'35" W	6°04'24"
C25	225.00'	47.79'	47.70'		S 57°29'17" W	12°10'14"
C26	275.00'	21.15'	21.15'		S 53°36'22" W	4°24'24"
C27	275.00'	26.99'	26.98'		S 58°37'16" W	5°37'25"
C28	275.00'	22.35'	22.34'		S 63°45'40" W	4°39'21"
C29	275.00'	22.10'	22.10'		S 68°23'30" W	4°36'19"
C30	275.00'	22.01'	22.00'		S 72°59'13" W	4°35'07"
C31	275.00'	22.05'	22.05'		S 77°34'37" W	4°35'42"
C32	275.00'	26.36'	26.35'		S 82°37'16" W	5°29'35"
C33	275.00'	29.75'	29.74'		S 88°28'00" W	6°11'54"
C34	275.00'	21.73'	21.72'		N 86°10'14" W	4°31'39"
C35	13.00'	20.31'	18.30'		S 51°20'46" W	89°29'40"
C36	13.00'	20.54'	18.47'		N 38°39'14" W	90°30'20"
C37	175.00'	6.83'	6.83'		N 82°47'21" W	2°14'06"
C38	175.00'	22.13'	22.12'		N 78°02'56" W	7°14'44"
C39	175.00'	22.61'	22.60'		N 70°43'29" W	7°24'11"
C40	175.00'	17.82'	17.81'		N 64°06'21" W	5°50'06"
C41	13.00'	24.95'	21.29'		S 63°50'11" W	109°57'01"
C42	13.00'	15.89'	14.92'		N 26°09'49" W	70°02'59"
C43	125.00'	3.14'	3.14'		N 61°54'29" W	1°26'22"
C44	125.00'	46.31'	46.04'		N 73°14'28" W	21°13'35"
C45	337.50'	117.42'	116.83'		N 73°53'15" W	19°56'01"
C46	25.00'	39.28'	35.36'		S 71°04'02" W	90°01'27"
C47	13.00'	20.42'	18.38'		N 16°11'18" W	90°00'00"
C48	145.00'	63.79'	63.28'		N 16°12'29" E	25°12'25"
C49	95.00'	16.13'	16.11'		N 08°28'07" E	9°43'40"
C50	13.00'	18.21'	16.76'		N 53°28'07" E	80°16'20"
C51	13.00'	21.01'	18.80'		S 40°06'07" E	92°35'13"
C52	13.00'	20.40'	18.37'		S 51°08'33" W	89°54'06"
C53	125.00'	49.56'	49.24'		N 72°32'51" W	22°43'06"
C54	13.00'	20.44'	18.40'		N 38°51'27" W	90°05'54"
C55	13.00'	19.83'	17.97'		N 49°53'53" E	87°24'47"
C56	13.00'	21.00'	18.79'		S 40°07'29" E	92°32'28"
C57	13.00'	20.41'	18.38'		S 51°07'10" W	89°56'51"



MULTI-FAMILY LOT (TYP.)
NTS

ALL CONNECTIONS TO EXISTING CITY ROADS AND ROW ARE SUBJECT TO THE APPLICABLE PERMITS, FEES, APPROVALS, AND STANDARDS/SPECIFICATION SET FORTH BY THE CITY OF COLUMBIA DEVELOPMENT STANDARDS.

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SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
PRELMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
PHASE 2

REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical: 1" = 60'
Horizontal:

5 of 17

GREGORY W. VICK
REGISTERED ENGINEER
No. 107415
STATE OF TENNESSEE

Legend

- EIP — Iron Rod/Pipe Found
- EIPS — Iron Rod Set
- ECM — Concrete Monument Existing
- MAG — Mag Nail
- Fence Post
- T-Post
- Bench Mark
- Stake Found
- Fire Hydrant
- Water Meter
- Water Valve
- Water Reducer
- Post Indicator Valve
- Clean Out
- Sanitary Sewer Manhole
- Storm Sewer Manhole
- Curb Inlet
- Catch Basin
- Area Drain
- Cable Manhole
- Electric Manhole
- Telephone Manhole
- Water Manhole
- Electric Meter
- Electric Riser
- Cable Riser
- Telephone Riser
- Gas Meter
- Gas Valve
- Light Pole
- Power Pole
- Telephone Pole
- Guy Pole
- Power Pole
- Guy Wire
- Flag Pole
- Sign
- Parking Block
- Handicap Parking
- Bollard
- Water Spigot
- Mailbox
- Evergreen Tree
- Deciduous Tree
- Bush
- Adjoining Property Line
- Subject Property Line
- Easement Line
- Building Setback Line
- Centerline
- Edge of Pavement
- Edge of Gravel
- Fence Line
- Landscape
- Woods / Tree line
- Edge of Water
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- Overhead Utility Line
- Overhead Cable Line
- Overhead Electric Line
- Overhead Telephone Line
- Underground Utility Line
- Underground Cable Line
- Underground Electric Line
- Underground Telephone Line
- Forced Main Line

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

FILE: J:_WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Britelond Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - Preliminary Plat.dwg

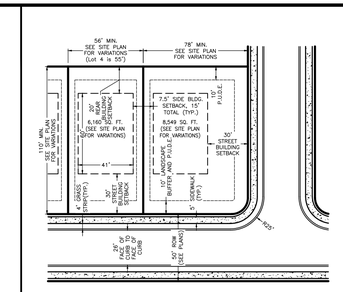
TN GRID NORTH

LOT AREA TABLE (PHASE 3)

LOT	SQ. FT.	ACRES
24	7,578.2	0.17
25	6,726.7	0.15
26	6,767.5	0.16
27	6,808.3	0.16
28	6,851.4	0.16
29	9,053.4	0.21
30	9,980.3	0.23
31	9,055.0	0.21
32	8,946.0	0.21
33	8,404.7	0.19
34	6,720.3	0.15
35	6,720.3	0.15
36	8,253.5	0.19
37	10,297.2	0.24
38	7,724.1	0.18
39	7,857.1	0.18
40	8,070.3	0.19
41	9,563.1	0.22
42	6,903.0	0.16
43	6,903.0	0.16
44	6,903.0	0.16
45	6,858.4	0.16
46	9,557.8	0.22
47	6,903.0	0.16
48	6,903.0	0.16
49	6,903.0	0.16
50	6,903.0	0.16
51	9,563.1	0.22
52	9,557.7	0.22
53	6,903.0	0.16
54	6,903.0	0.16
55	6,903.0	0.16
56	6,903.0	0.16
57	6,903.0	0.16
104	7,104.4	0.16
105	7,126.7	0.16
106	7,148.9	0.16
107	7,171.0	0.22
108	7,193.3	0.17
109	7,215.6	0.17
110	7,238.1	0.17
111	7,260.4	0.17
112	7,282.7	0.17
113	7,305.0	0.17
114	7,327.3	0.17
115	8,246.6	0.19

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	DELTA ANGLE
C1	170.56'	13.08'	N 81°09'11" W	4°23'36"
C2	160.70'	148.24'	N 70°21'09" W	11°49'06"
C3	164.57'	47.18'	N 53°37'51" W	16°25'34"
C4	167.00'	47.55'	N 37°20'39" W	16°18'27"
C5	163.95'	50.00'	N 19°57'10" W	17°28'20"
C6	162.02'	48.00'	N 02°43'44" W	16°58'33"
C7	184.33'	2.54'	N 08°09'12" E	0°47'18"
C8	12.00'	18.85'	N 38°24'27" W	90°00'45"
C9	63.00'	42.60'	S 77°12'53" W	38°44'55"
C10	57.00'	60.17'	S 64°58'49" W	60°29'05"
C11	57.00'	59.63'	S 53°08'44" E	59°55'55"
C12	57.00'	65.85'	N 07°58'02" E	66°11'41"
C13	57.00'	48.39'	N 65°26'03" E	48°38'22"
C14	12.00'	18.85'	S 51°35'33" W	89°59'15"
C15	13.00'	20.42'	S 38°24'27" E	90°00'45"
C16	13.00'	20.42'	N 51°35'33" E	89°59'15"
C17	113.00'	146.10'	N 48°22'30" W	74°04'39"
C18	113.00'	31.43'	N 01°22'07" W	15°56'06"
C19	12.00'	18.85'	S 51°35'33" W	90°01'01"
C20	112.00'	18.85'	S 38°24'27" E	89°59'04"





ALL CONNECTIONS TO EXISTING CITY ROADS AND ROW ARE SUBJECT TO THE APPLICABLE PERMITS, FEES, APPROVALS, AND STANDARDS/SPECIFICATION SET FORTH BY THE CITY OF COLUMBIA DEVELOPMENT STANDARDS.

Legend

- EIP — Iron Rod/Pipe Found
- IPS — Iron Rod Set
- CM — Concrete Monument Existing
- MAG — Mag Nail
- Fence Post
- T-Post
- Bench Mark
- Stake Found
- Fire Hydrant
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- Water Reducer
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- Power Pole
- Telephone Pole
- Guy Pole
- Power Pole
- Guy Wire
- Flag Pole
- Sign
- Parking Block
- Handicap Parking
- Bollard
- Water Spigot
- Mailbox
- Evergreen Tree
- Deciduous Tree
- Bush
- Adjoining Property Line
- Subject Property Line
- Easement Line
- Building Setback Line
- Centerline
- Edge of Pavement
- Edge of Gravel
- Fence Line
- Landscape
- Woods / Tree line
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- Overhead Cable Line
- Overhead Electric Line
- Overhead Telephone Line
- Underground Utility Line
- Underground Cable Line
- Underground Electric Line
- Underground Telephone Line
- Forced Main Line

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)

1 inch = 60 ft.



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Client
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SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
PRELIMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
PHASE 3

REVISIONS	DATE

Drawn: EB
Checked: JS
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical: 1" = 60'
Horizontal:

6 of 17

FILE: J:\ WES_Engineers_Surveyors 2023\23572 – McClure Farms – Smith\23572-1 Briteland Homes\Dwg\Survey\08 – PUD Master Plan\23572-1 – McClure – Preliminary Plat.dwg

LOT AREA TABLE (PHASE 4)

LOT	SQ. FT.	ACRES
115	2,560.8	0.06
116	2,163.3	0.05
117	2,163.3	0.05
118	2,163.3	0.05
119	2,163.3	0.05
120	2,560.8	0.06
121	2,560.8	0.06
122	2,163.3	0.05
123	2,163.3	0.05
124	2,163.3	0.05
125	2,163.3	0.05
126	2,560.8	0.06
127	2,560.8	0.06
128	2,163.3	0.05
129	2,163.3	0.05
130	2,163.3	0.05
131	2,163.3	0.05
132	2,560.8	0.06
133	2,555.8	0.06
134	2,155.7	0.05
135	2,152.5	0.05
136	2,152.3	0.05
137	2,570.1	0.06
138	2,617.4	0.06
139	2,166.4	0.05
140	2,147.0	0.05
141	2,148.0	0.05
142	2,169.2	0.05
143	2,623.3	0.06
144	2,590.3	0.06
145	2,155.1	0.05
146	2,146.2	0.05
147	2,556.8	0.06
148	2,586.1	0.06
149	2,158.1	0.05
150	2,155.3	0.05
151	2,575.4	0.06
152	2,585.9	0.06
153	2,208.4	0.05
154	2,214.9	0.05
155	2,215.0	0.05

LOT	SQ. FT.	ACRES
155	2,215.0	0.05
156	2,622.0	0.06
157	2,560.8	0.06
158	2,163.3	0.05
159	2,163.3	0.05
160	2,163.3	0.05
161	2,163.3	0.05
162	2,560.8	0.06
163	2,560.8	0.06
164	2,163.3	0.05
165	2,163.3	0.05
166	2,163.3	0.05
167	2,163.3	0.05
168	2,163.3	0.05
169	2,163.3	0.05
170	2,560.8	0.06
171	2,612.9	0.06
172	2,207.3	0.05
173	2,207.3	0.05
174	2,207.3	0.05
175	2,207.3	0.05
176	2,612.9	0.06
177	2,612.9	0.06
178	2,207.3	0.05
179	2,207.3	0.05
180	2,612.9	0.06
181	2,612.9	0.06
182	2,207.3	0.05
183	2,207.3	0.05
184	2,207.3	0.05
185	2,207.3	0.05
186	2,612.9	0.06
187	2,616.6	0.06
188	2,210.5	0.05
189	2,210.5	0.05
190	2,210.5	0.05
191	2,210.5	0.05
192	2,618.6	0.06
193	2,603.8	0.06
194	2,189.0	0.05
195	2,189.0	0.05

LOT	SQ. FT.	ACRES
196	2,591.2	0.06
197	2,563.3	0.06
198	2,165.5	0.05
199	2,165.5	0.05
200	2,165.5	0.05
201	2,165.5	0.05
202	2,165.5	0.05
203	2,165.5	0.05
204	2,165.5	0.05
205	2,560.8	0.06
206	2,165.5	0.05
207	2,165.5	0.05
208	2,165.5	0.05
209	2,165.5	0.05
210	2,560.8	0.06
211	2,560.8	0.06
212	2,163.3	0.05
213	2,163.5	0.05
214	2,169.7	0.05
215	2,595.0	0.06
216	2,561.3	0.06
217	2,163.8	0.05
218	2,163.8	0.05
219	2,163.8	0.05
220	2,163.8	0.05
221	2,561.3	0.06
222	2,562.9	0.06
223	2,163.3	0.05
224	2,163.3	0.05
225	2,163.3	0.05
226	2,560.8	0.06
227	2,560.8	0.06
228	2,163.3	0.05
229	2,163.3	0.05
230	2,163.3	0.05
231	2,163.3	0.05
232	2,560.8	0.06
233	2,560.8	0.06
234	2,163.3	0.05
235	2,163.3	0.05
236	2,163.3	0.05

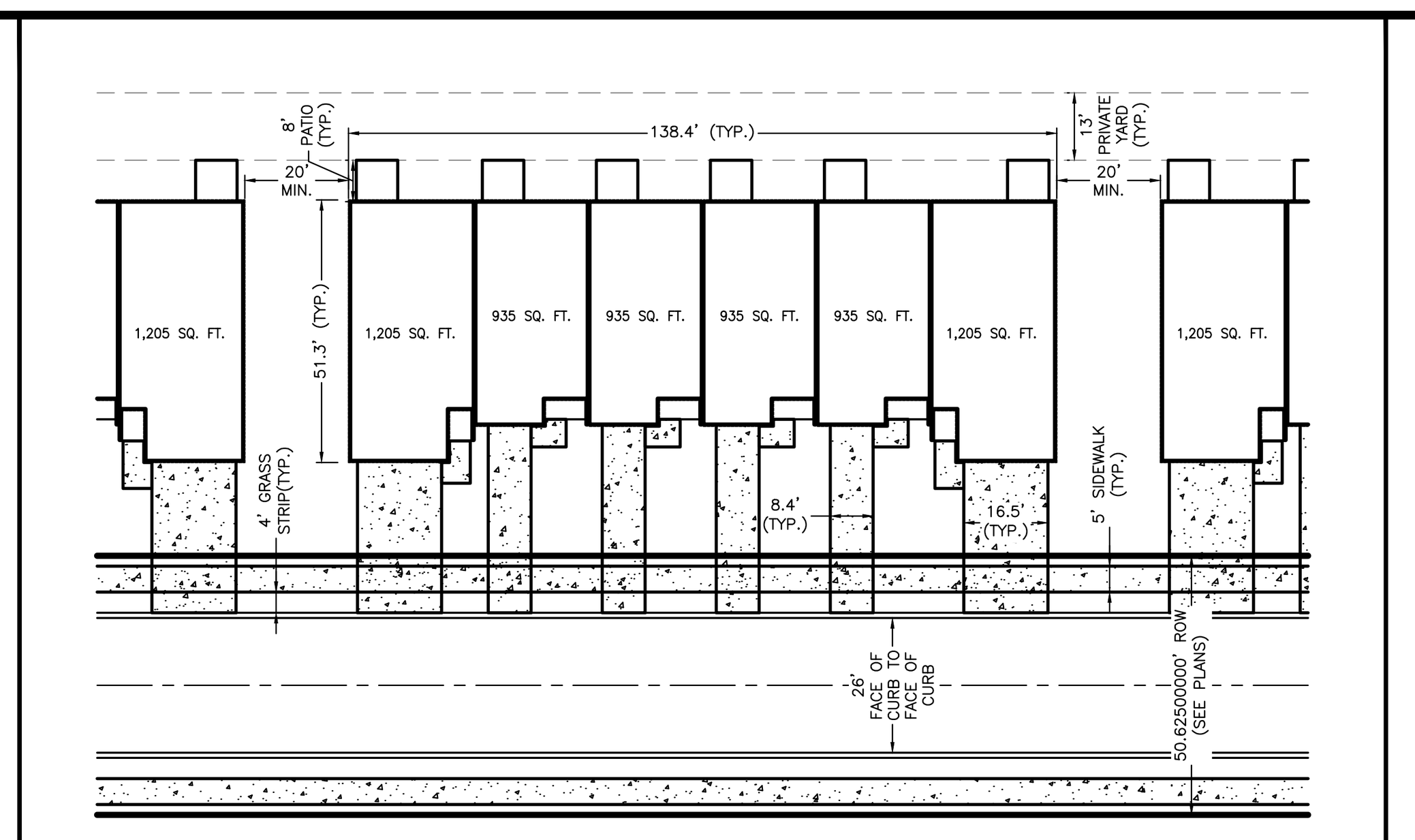
LOT	SQ. FT.	ACRES
237	2,182.1	0.05
238	2,667.0	0.06
239	2,702.5	0.06
240	2,186.2	0.05
241	2,149.2	0.05
242	2,159.8	0.05
243	2,218.3	0.05
244	2,769.6	0.06
245	2,586.7	0.06
246	2,157.1	0.05
247	2,146.1	0.05
248	2,149.1	0.05
249	2,166.1	0.05
250	2,605.1	0.06
251	2,597.1	0.06
252	2,162.0	0.05
253	2,147.6	0.05
254	2,147.1	0.05
255	2,160.5	0.05
256	2,594.0	0.06
257	2,592.0	0.06
258	2,161.3	0.05
259	2,150.1	0.05
260	2,152.9	0.05
261	2,169.6	0.05
262	2,609.0	0.06
263	2,594.4	0.06
264	2,191.7	0.05
265	2,191.7	0.05
266	2,191.7	0.05
267	2,191.7	0.05
268	2,594.3	0.06
269	2,594.3	0.06
270	2,191.7	0.05
271	2,191.7	0.05
272	2,191.7	0.05
273	2,190.7	0.05
274	2,577.8	0.06
275	2,593.3	0.06
276	2,224.5	0.05
277	2,239.5	0.05

LOT	SQ. FT.	ACRES
278	2,239.6	0.05
279	2,221.5	0.05
280	2,596.8	0.06
281	2,598.3	0.06
282	2,228.8	0.05
283	2,242.7	0.05
284	2,242.3	0.05
285	2,227.0	0.05
286	2,595.8	0.06
287	2,622.1	0.06
288	2,216.7	0.05
289	2,604.2	0.06
290	2,664.9	0.06
291	2,300.6	0.05
292	2,321.7	0.05
293	2,320.3	0.05
294	2,296.5	0.05
295	2,660.1	0.06
296	2,612.2	0.06
297	2,206.5	0.05
298	2,206.3	0.05
299	2,206.3	0.05
300	2,206.2	0.05
301	2,611.3	0.06
302	2,559.7	0.06
303	2,161.4	0.05
304	2,161.2	0.05
305	2,161.1	0.05
306	2,160.9	0.05
307	2,160.9	0.05
308	2,160.6	0.05
309	2,557.3	0.06
310	2,556.9	0.06
311	2,159.9	0.05
312	2,159.7	0.05
313	2,159.6	0.05
314	2,159.4	0.05
315	2,555.9	0.06

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	DELTA ANGLE
C1	525.00'	21.04'	S 85°14'50" E	2°17'47"
C2	525.00'	26.10'	S 82°40'29" E	2°50'54"
C3	525.00'	35.34'	S 79°19'19" E	3°51'25"
C4	525.00'	26.19'	S 75°57'51" E	2°51'31"
C5	525.00'	22.04'	S 73°19'56" E	2°24'20"
C6	525.00'	22.01'	S 70°55'43" E	2°24'06"
C7	525.00'	22.01'	S 68°31'37" E	2°24'06"
C8	525.00'	22.05'	S 66°07'22" E	2°24'22"
C9	525.00'	26.21'	S 63°29'23" E	2°51'36"
C10	525.00'	29.60'	S 60°26'40" E	3°13'50"
C11	525.00'	26.14'	S 57°24'11" E	2°51'10"
C12	525.00'	22.02'	S 54°46'30" E	2°24'11"
C13	525.00'	22.00'	S 52°22'23" E	2°24'04"
C14	525.00'	26.07'	S 49°44'59" E	2°50'44"
C15	525.00'	27.80'	S 46°48'34" E	3°02'04"
C16	525.00'	26.11'	S 43°52'03" E	2°51'00"
C17	525.00'	22.01'	S 41°14'29" E	2°24'07"
C18	525.00'	22.00'	S 38°50'23" E	2°24'05"
C19	525.00'	26.09'	S 36°12'55" E	2°50'51"
C20	525.00'	95.60'	S 29°34'30" E	10°25'59"
C21	13.00'	21.47'	S 71°40'11" E	94°37'21"
C22	713.97'	43.14'	N 59°17'17" E	3°27'43"
C23	713.97'	26.09'	N 56°30'37" E	2°05'38"
C24	713.97'	22.01'	N 54°34'49" E	1°45'58"
C25	713.97'	8.81'	N 53°20'36" E	0°42'26"
C26	13.00'	20.42'	N 07°59'24" E	90°00'00"
C27	57.00'	240.93'	N 84°04'52" E	242°10'54"
C28	63.00'	68.37'	S 05°55'09" E	62°10'55"
C29	175.00'	12.73'	S 34°55'33" E	4°10'06"
C30	175.00'	42.89'	S 25°49'14" E	14°02'31"
C31	175.00'	23.75'	S 14°54'44" E	7°46'29"
C32	175.00'	56.86'	S 01°42'58" E	18°37'04"
C33	125.00'	40.62'	N 01°42'58" W	18°37'04"
C34	13.00'	18.34'	N 51°25'52" W	80°48'45"
C35	225.00'	14.25'	N 87°51'09" W	3°37'42"
C36	225.00'	7.53'	N 85°04'47" W	1°55'03"
C37	225.00'	22.08'	N 81°18'33" W	5°37'25"
C38	225.00'	26.54'	N 75°07'07" W	6°45'28"

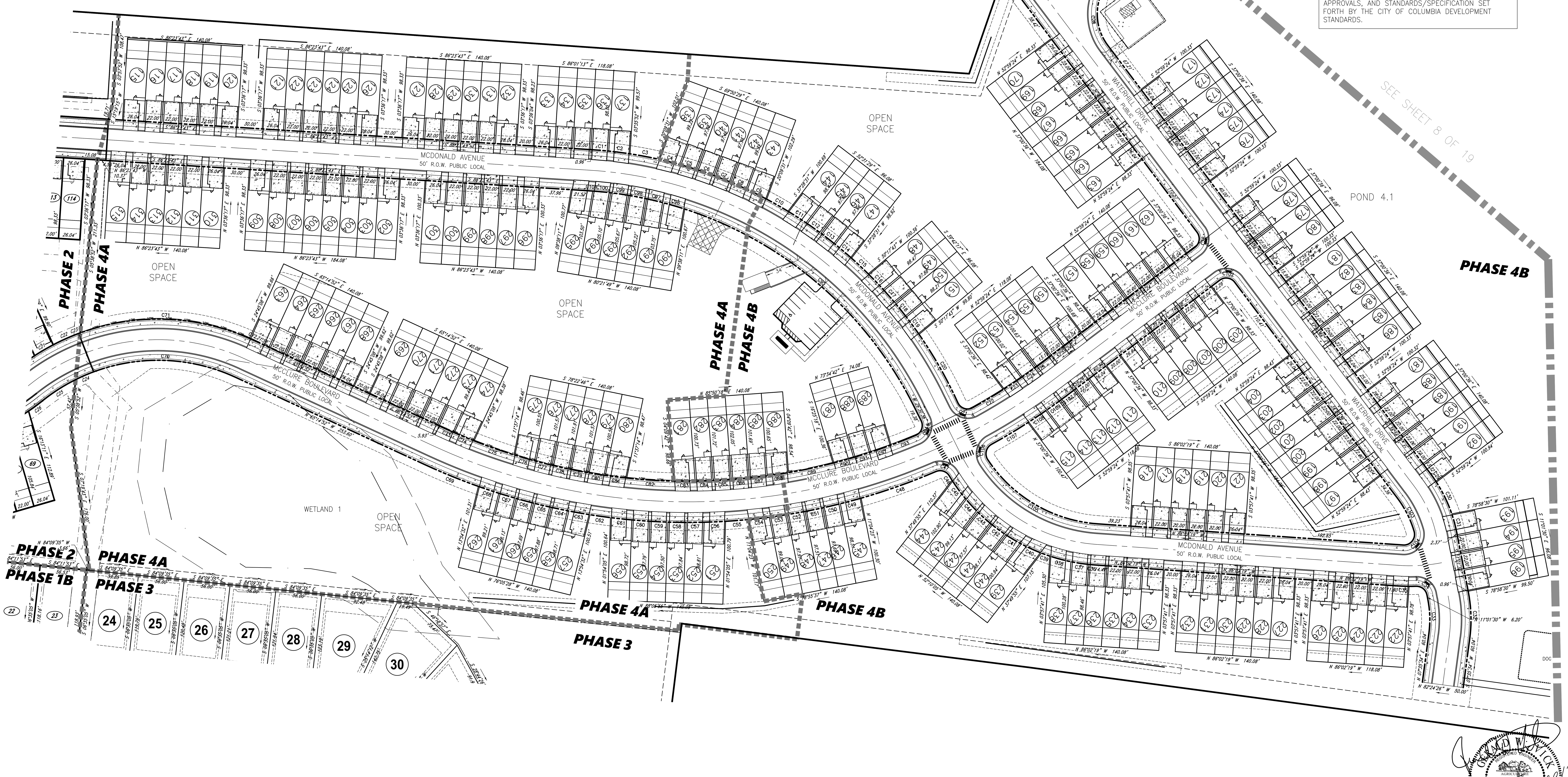
CURVE	RADIUS	ARC LENGTH	CHORD BEARING	DELTA ANGLE
C39	225.00'	10.78'	N 70°22'03" W	2°44'40"
C40	225.00'	26.79'	N 65°35'05" W	6°49'18"
C41	225.00'	22.18'	N 59°20'58" W	5°38'56"
C42	225.00'	22.02'	N 53°43'18" W	5°36'24"
C43	225.00'	22.06'	N 48°06'33" W	5°37'07"
C44	225.00'	22.33'	N 42°27'25" W	5°41'10"
C45	225.00'	27.11'	N 36°09'44" W	6°54'11"
C46	225.00'	6.39'	N 31°53'48" W	1°37'40"
C47	13.00'	18.64'	N 72°08'59" W	82°08'01"
C48	764.00'	96.55'	S 70°24'13" W	7°14'26"
C49	764.00'	26.10'	S 75°00'10" W	1°57'28"
C50	764.00'	22.02'	S 76°48'26" W	1°39'04"
C51	764.00'	22.00'	S 78°27'28" W	1°39'00"
C52	764.00'	22.01'	S 80°06'28" W	1°39'01"
C53	764.00'	22.03'	S 81°45'32" W	1°39'07"
C54	764.00'	26.13'	S 83°33'53" W	1°57'34"
C55	764.00'	27.16'	S 85°33'46" W	2°02'13"
C56	764.00'	26.12'	S 87°33'38" W	1°57'31"
C57	764.00'	22.02'	S 89°21'57" W	1°39'06"
C58	764.00'	22.00'	N 88°59'00" W	1°39'00"
C59	764.00'	22.00'	N 87°20'00" W	1°39'00"
C60	764.00'	22.02'	N 85°40'57" W	1°39'05"
C61	764.00'	26.11'	N 83°52'39" W	1°57'30"
C62	764.00'	25.00'	N 81°57'40" W	1°52'29"
C63	764.00'	26.11'	N 80°02'41" W	1°57'28"
C64	764.00'	22.02'	N 78°14'25" W	1°39'04"
C65	764.00'	22.00'	N 76°35'23" W	1°39'00"
C66	764.00'	22.01'	N 74°56'23" W	1°39'01"
C67	764.00'	22.03'	N 73°17'19" W	1°39'07"
C68	764.00'	26.13'	N 71°28'58" W	1°57'34"
C69	764.00'	70.08'	N 67°52'32" W	5°15'19"
C70	225.00'	177.13'	N 87°48'02" W	45°06'21"
C71	275.00'	210.83'	S 88°08'27" E	43°55'35"
C72	275.00'	4.46'	S 65°42'46" E	0°55'48"
C73	714.00'	16.07'	S 65°53'33" E	1°17'22"
C74	714.00'	26.06'	S 67°34'58" E	2°05'30"
C75	714.00'	51.28'	S 70°41'11" E	4°06'55"
C76	714.00'	26.13'	S 73°47'32" E	2°05'48"

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	DELTA ANGLE
C77	714.00'	22.02'	S 75°43'27" E	1°46'03"
C78	714.00'	22.00'	S 77°29'27" E	1°45'57"
C79	714.00'	22.00'	S 79°15'23" E	1°45'56"
C80	714.00'	21.96'	S 81°01'14" E	1°45'44"
C81	714.00'	26.19'	S 82°57'09" E	2°06'06"
C82	714.00'	57.04'	S 86°17'31" E	4°34'38"
C83	714.00'	26.12'	S 89°37'43" E	2°05'47"
C84	714.00'	22.02'	N 88°26'22" E	1°46'02"
C85	714.00'	22.00'	N 86°40'23" E	1°45'56"
C86	714.00'	22.00'	N 84°54'26" E	1°45'57"
C87	714.00'	22.03'	N 83°08'27" E	1°46'03"
C88	714.00'	26.13'	N 81°12'31" E	2°05'48"
C89	714.00'	55.18'	N 77°56'47" E	4°25'41"
C90	714.00'	26.05'	N 74°41'14" E	2°05'25"
C91	714.00'	22.00'	N 72°45'33" E	1°45'56"
C92	714.00'	26.07'	N 70°49'49" E	2°05'32"
C93	714.00'	32.16'	N 68°29'37" E	2°34'52"
C94	13.00'	21.26'	N 20°20'48" E	93°42'46"
C95	475.00'	377.50'	N 49°16'39" W	45°32'08"
C96	475.00'	26.23'	N 73°37'37" W	3°09'48"
C97	475.00'	22.05'	N 76°32'19" W	2°39'36"
C98	475.00'	22.01'	N 79°11'45" W	2°39'16"
C99	475.00'	22.01'	N 81°51'02" W	2°39'17"
C100	475.00'	22.06'	N 84°30'30" W	2°39'39"
C101	475.00'	4.61'	N 86°07'01" W	0°33'24"
C102	13.00'	20.42'	S 82°00'36" E	90°00'00"
C103	125.00'	45.09'	S 26°40'33" E	20°40'06"
C104	13.00'	25.03'	S 38°48'36" W	110°18'11"
C105	175.00'	160.59'	N 59°45'01" W	52°34'36"
C106	13.00'	21.47'	N 13°50'30" E	94°36'24"
C107	764.00'	51.54'	N 59°12'44" E	3°51'55"
C108	764.00'	26.09'	N 56°18'05" E	1°57'23"
C109	764.00'	22.01'	N 54°29'53" E	1°39'02"
C110	764.00'	9.10'	N 53°19'53" E	0°40'58"



MULTI-FAMILY LOT (TYP.)
NTS

ALL CONNECTIONS TO EXISTING CITY ROADS AND ROW ARE SUBJECT TO THE APPLICABLE PERMITS, FEES, APPROVALS, AND STANDARDS/SPECIFICATION SET FORTH BY THE CITY OF COLUMBIA DEVELOPMENT STANDARDS.



Legend

- EIP / IPS — Iron Rod/Pipe Found
- ECM — Iron Rod Set
- MAG — Concrete Monument Existing
- Mag Nail
- Fence Post
- T–Post
- Bench Mark
- Stake Found
- Fire Hydrant
- Water Meter
- Water Valve
- Water Reducer
- Post Indicator Valve
- Clean Out
- Sanitary Sewer Manhole
- Storm Sewer Manhole
- Curb Inlet
- Catch Basin
- Area Drain
- Cable Manhole
- Electric Manhole
- Telephone Manhole
- Water Manhole
- Electric Meter
- Electric Riser
- Cable Riser
- Telephone Riser
- Gas Meter
- Gas Valve
- Light Pole
- Power Pole
- Telephone Pole
- Guy Pole
- Power Pole
- Guy Wire
- Flag Pole
- Sign
- Parking Block
- Handicap Parking
- Bollard
- Water Spigot
- Mailbox
- Evergreen Tree
- Deciduous Tree
- Bush
- Adjoining Property Line
- Subject Property Line
- Easement Line
- Building Setback Line
- Centerline
- Edge of Pavement
- Edge of Gravel
- Fence Line
- Landscape
- Woods / Tree line
- Edge of Water
- Ditch / Creek Centerline
- Minor Contour Line
- Index Contour Line
- Gas Line
- Sanitary Sewer Line
- Water Line
- Storm Sewer Line
- Overhead Utility Line
- Overhead Cable Line
- Overhead Electric Line
- Overhead Telephone Line
- Underground Utility Line
- Underground Cable Line
- Underground Electric Line
- Underground Telephone Line
- Forced Main Line

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

FILE: J:\WES_Engineers_Surveyors 2023\23572 – McClure Farms – Smith\23572-1 Briteland Homes\Dwg\Survey\08 – PUD Master Plan\23572-1 – McClure – Preliminary Plat.dwg

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DRB GROUP
4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
PRELMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
PHASE 4

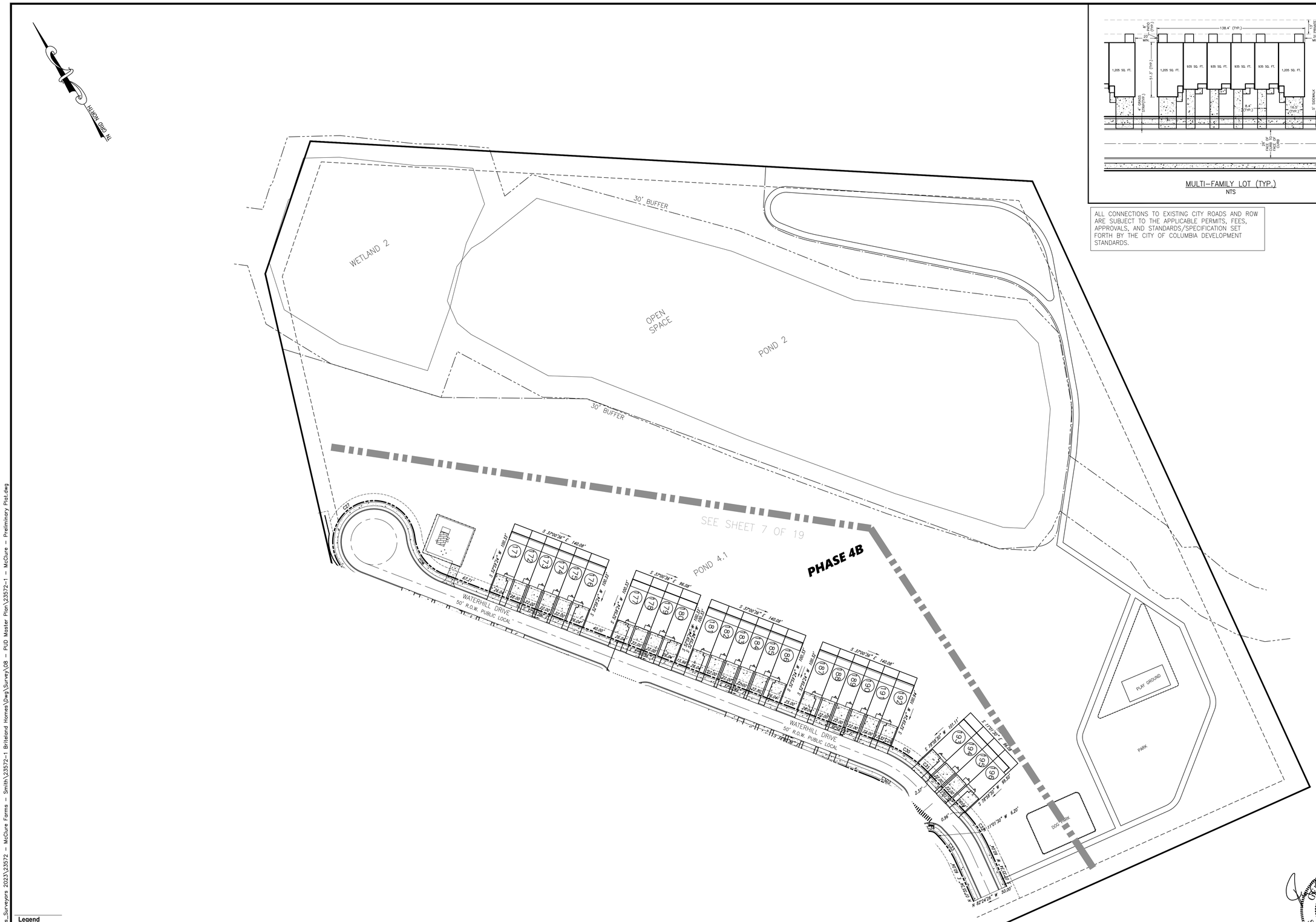
REVISIONS | DATE

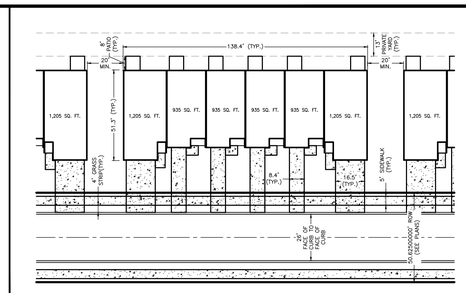
Drawn: EB
Checked: JG
Approved: GV
Date: 04–20–2026

Job. no. 23572-1
Scale:
Vertical:
Horizontal: 1" = 60'

GERALD W. VICK
REGISTERED ENGINEER
AGRICULTURE
COMMERCE
No. 107415
STATE OF TENNESSEE
4/20/26

7 of 17





MULTI-FAMILY LOT (TYP.)
NTS

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GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

Legend

- EIP Iron Rod/Pipe Found
- IPS Iron Rod Set
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- Gas Meter
- Gas Valve
- Light Pole
- Power Pole
- Telephone Pole
- Guy Pole
- Power Pole
- Guy Wire
- Flag Pole
- Sign
- Parking Block
- Handicap Parking
- Bollard
- Water Spigot
- Mailbox
- Evergreen Tree
- Deciduous Tree
- Bush
- Adjoining Property Line
- Subject Property Line
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- Overhead Utility Line
- Overhead Cable Line
- Overhead Electric Line
- Overhead Telephone Line
- Underground Utility Line
- Underground Cable Line
- Underground Electric Line
- Underground Telephone Line
- Forced Main Line

GERALD W. DYCK
STATE OF TENNESSEE
No. 107415
4/20/26

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MCCLURE FARMS
PRELMINARY PLAT - PHASE 1-4
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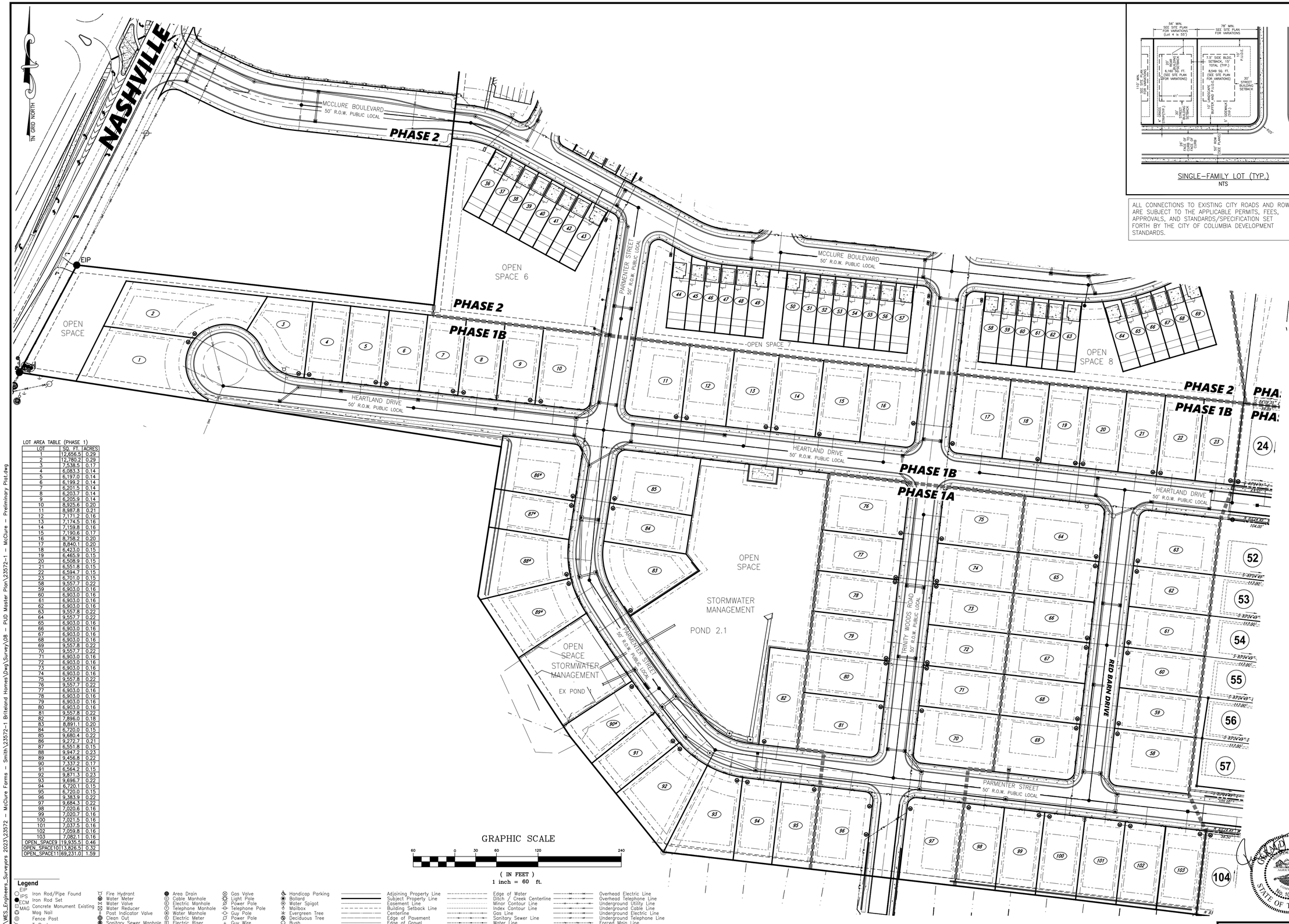
PHASE 4

REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical:
Horizontal: 1" = 60'

FILE: J:\WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Briteland Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - Preliminary Plat.dwg



SINGLE-FAMILY LOT (TYP.)
NTS

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LOT AREA TABLE (PHASE 1)

LOT	SQ. FT.	ACRES
1	12,656.5	0.29
2	12,780.2	0.29
3	7,538.5	0.17
4	6,083.3	0.14
5	6,197.0	0.14
6	6,199.2	0.14
7	6,201.5	0.14
8	6,203.7	0.14
9	6,205.9	0.14
10	8,925.6	0.20
11	8,987.8	0.21
12	7,171.2	0.16
13	7,174.5	0.16
14	7,159.8	0.16
15	7,190.6	0.17
16	8,758.2	0.20
17	8,840.1	0.20
18	6,423.0	0.15
19	6,465.9	0.15
20	6,508.9	0.15
21	6,551.8	0.15
22	6,594.7	0.15
23	6,701.0	0.15
58	9,557.7	0.22
59	6,903.0	0.16
60	6,903.0	0.16
61	6,903.0	0.16
62	6,903.0	0.16
63	9,557.8	0.22
64	9,557.7	0.22
65	6,903.0	0.16
66	6,903.0	0.16
67	6,903.0	0.16
68	6,903.0	0.16
69	9,557.8	0.22
70	9,557.7	0.22
71	6,903.0	0.16
72	6,903.0	0.16
73	6,903.0	0.16
74	6,903.0	0.16
75	9,557.8	0.22
76	9,557.7	0.22
77	6,903.0	0.16
78	6,903.0	0.16
79	6,903.0	0.16
80	6,903.0	0.16
81	9,557.8	0.22
82	7,896.0	0.18
83	8,891.1	0.20
84	6,720.0	0.15
85	9,680.4	0.22
86	9,272.7	0.21
87	6,551.8	0.15
88	9,947.2	0.23
89	9,456.8	0.22
90	7,337.2	0.17
91	6,564.2	0.15
92	9,871.3	0.23
93	9,696.7	0.22
94	6,720.1	0.15
95	6,720.0	0.15
96	9,383.9	0.22
97	9,684.3	0.22
98	7,020.6	0.16
99	7,020.7	0.16
100	7,021.5	0.16
101	7,037.5	0.16
102	7,059.8	0.16
103	7,062.1	0.16
OPEN_SPACE9	19,935.5	0.46
OPEN_SPACE10	13,826.5	0.32
OPEN_SPACE11	69,231.0	1.59

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

Legend

- EIP — Iron Rod/Pipe Found
- IPS — Iron Rod Set
- ECM — Concrete Monument Existing
- MAG — Mag Nail
- Fence Post
- T-Post
- Bench Mark
- Stake Found
- Fire Hydrant
- Water Meter
- Water Valve
- Water Reducer
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- Electric Manhole
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- Water Manhole
- Electric Meter
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- Cable Riser
- Telephone Riser
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- Light Pole
- Power Pole
- Telephone Pole
- Guy Pole
- Power Pole
- Guy Wire
- Flag Pole
- Sign
- Parking Block
- Handicap Parking
- Bollard
- Water Spigot
- Mailbox
- Evergreen Tree
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- Bush
- Adjoining Property Line
- Subject Property Line
- Easement Line
- Building Setback Line
- Centerline
- Edge of Pavement
- Edge of Gravel
- Fence Line
- Landscape
- Woods / Tree line
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- Overhead Cable Line
- Overhead Electric Line
- Overhead Telephone Line
- Underground Utility Line
- Underground Cable Line
- Underground Electric Line
- Underground Telephone Line
- Forced Main Line

GARRETT M. BLACK 10/2024
AGRICULTURE
LICENSED LANDSCAPE ARCHITECT
No. 107415
STATE OF TENNESSEE

WES Engineers & Surveyors
CIVIL ENGINEERS & LAND SURVEYORS
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PHONE: (931) 388-2329
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ENGINEERS & SURVEYORS

Client
DRB GROUP
4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
PRELIMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
UTILITIES - PHASE 1(1A & 1B)

REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale: Vertical: 1" = 60'
Horizontal:

9 of 17

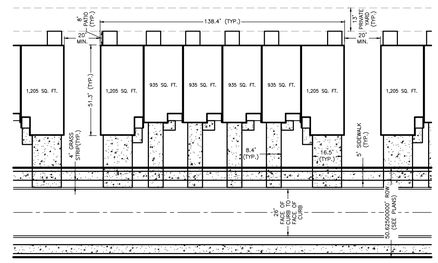
FILE: J:\ WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Briteland Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - Preliminary Plat.dwg

TN GRID NORTH

LOT AREA TABLE (PHASE 2)

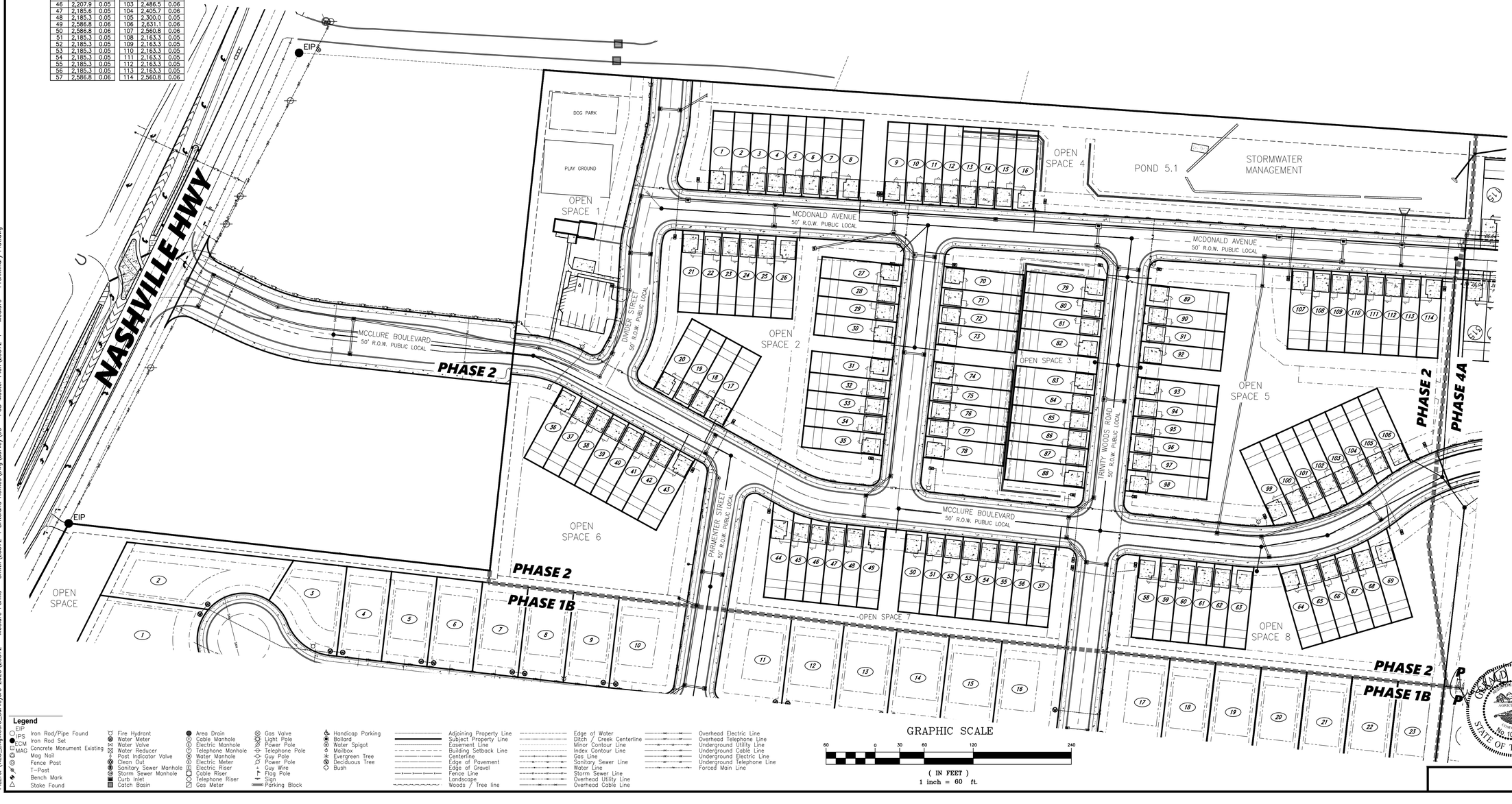
LOT	SQ. FT.	ACRES
1	2,560.8	0.06
2	2,163.3	0.05
3	2,163.3	0.05
4	2,163.3	0.05
5	2,163.3	0.05
6	2,163.3	0.05
7	2,163.3	0.05
8	2,560.8	0.06
9	2,560.8	0.06
10	2,163.3	0.05
11	2,163.3	0.05
12	2,163.3	0.05
13	2,163.3	0.05
14	2,163.3	0.05
15	2,163.3	0.05
16	2,560.8	0.06
17	2,565.5	0.06
18	2,167.3	0.05
19	2,167.3	0.05
20	2,565.5	0.06
21	2,603.3	0.06
22	2,199.3	0.05
23	2,199.3	0.05
24	2,199.3	0.05
25	2,199.3	0.05
26	2,603.3	0.06
27	2,586.8	0.06
28	2,185.3	0.05
29	2,185.3	0.05
30	2,586.8	0.06
31	2,586.8	0.06
32	2,185.3	0.05
33	2,185.3	0.05
34	2,185.3	0.05
35	2,586.8	0.06
36	2,586.8	0.06
37	2,185.3	0.05
38	2,185.3	0.05
39	2,185.3	0.05
40	2,185.3	0.05
41	2,185.3	0.05
42	2,185.3	0.05
43	2,586.8	0.06
44	2,905.2	0.07
45	2,289.1	0.05
46	2,207.9	0.05
47	2,185.6	0.05
48	2,185.3	0.05
49	2,586.8	0.06
50	2,586.8	0.06
51	2,185.3	0.05
52	2,185.3	0.05
53	2,185.3	0.05
54	2,185.3	0.05
55	2,185.3	0.05
56	2,185.3	0.05
57	2,586.8	0.06
58	2,612.8	0.06
59	2,207.3	0.05
60	2,207.3	0.05
61	2,207.3	0.05
62	2,207.3	0.05
63	2,619.1	0.06
64	2,678.2	0.06
65	2,203.4	0.05
66	2,190.7	0.05
67	2,216.8	0.05
68	2,282.3	0.05
69	2,842.1	0.07
70	2,560.8	0.06
71	2,163.3	0.05
72	2,163.3	0.05
73	2,560.8	0.06
74	2,560.8	0.06
75	2,163.3	0.05
76	2,163.3	0.05
77	2,163.3	0.05
78	2,560.8	0.06
79	2,560.8	0.06
80	2,163.3	0.05
81	2,163.3	0.05
82	2,560.8	0.06
83	2,560.8	0.06
84	2,163.3	0.05
85	2,163.3	0.05
86	2,163.3	0.05
87	2,163.3	0.05
88	2,560.8	0.06
89	2,612.8	0.06
90	2,207.3	0.05
91	2,207.3	0.05
92	2,207.3	0.05
93	2,612.8	0.06
94	2,207.3	0.05
95	2,207.3	0.05
96	2,207.3	0.05
97	2,207.3	0.05
98	2,612.8	0.06
99	2,738.7	0.06
100	2,440.6	0.06
101	2,503.7	0.06
102	2,518.8	0.06
103	2,486.5	0.06
104	2,405.7	0.06
105	2,300.0	0.05
106	2,631.1	0.06
107	2,560.8	0.06
108	2,163.3	0.05
109	2,163.3	0.05
110	2,163.3	0.05
111	2,163.3	0.05
112	2,163.3	0.05
113	2,163.3	0.05
114	2,560.8	0.06

LOT	SQ. FT.	ACRES
OS-1	40,902.9	0.94
OS-2	31,367.4	0.72
OS-3	16,427.1	0.38
OS-4	89,803.4	2.06
OS-5	47,815.3	1.10
OS-6	36,936.8	0.85
OS-7	18,940.3	0.43
OS-8	28,783.2	0.66



MULTI-FAMILY LOT (TYP.)
NTS

ALL CONNECTIONS TO EXISTING CITY ROADS AND ROW ARE SUBJECT TO THE APPLICABLE PERMITS, FEES, APPROVALS, AND STANDARDS/SPECIFICATION SET FORTH BY THE CITY OF COLUMBIA DEVELOPMENT STANDARDS.



Legend

- EIP — Iron Rod/Pipe Found
- IPS — Iron Rod Set
- ECM — Concrete Monument Existing
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GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

GEORGE M. MCCLURE
TENNESSEE
LICENSED PROFESSIONAL ENGINEER
AGENT
No. 107415
STATE OF TENNESSEE

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SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
PRELMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
UTILITIES – PHASE 2

DATE	REVISIONS

Drawn: EB
Checked: JG
Approved: GM
Date: 04-20-2026

Job. no. 23572-1
Scale: Vertical: 1" = 60'
Horizontal:

10 of 17

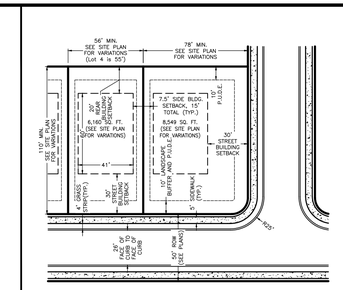
FILE: J:\ WES_Engineers_Surveyors 2023\23572 – McClure Farms – Smith\23572-1 Britelond Homes\Dwg\Survey\08 – PUD Master Plan\23572-1 – McClure – Preliminary Plat.dwg

TN GRID NORTH

LOT AREA TABLE (PHASE 3)

LOT	SQ. FT.	ACRES
24	7,578.2	0.17
25	6,726.7	0.15
26	6,767.5	0.16
27	6,808.3	0.16
28	6,851.4	0.16
29	9,053.4	0.21
30	9,980.3	0.23
31	9,055.0	0.21
32	8,946.0	0.21
33	8,404.7	0.19
34	6,720.3	0.15
35	6,720.3	0.15
36	8,253.5	0.19
37	10,297.2	0.24
38	7,724.1	0.18
39	7,857.1	0.18
40	8,070.3	0.19
41	9,563.1	0.22
42	6,903.0	0.16
43	6,903.0	0.16
44	6,903.0	0.16
45	6,858.4	0.16
46	9,557.8	0.22
47	6,903.0	0.16
48	6,903.0	0.16
49	6,903.0	0.16
50	6,903.0	0.16
51	9,563.1	0.22
52	9,557.7	0.22
53	6,903.0	0.16
54	6,903.0	0.16
55	6,903.0	0.16
56	6,903.0	0.16
57	6,903.0	0.16
104	7,104.4	0.16
105	7,126.7	0.16
106	7,148.9	0.16
107	11,171.0	0.22
108	7,193.3	0.17
109	7,215.6	0.17
110	7,238.1	0.17
111	12,680.4	0.17
112	7,282.7	0.17
113	7,305.2	0.17
114	7,328.0	0.17
115	8,246.6	0.19

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	DELTA ANGLE
C1	170.56'	13.08'	N 81°09'11" W	4°23'36"
C2	160.70'	48.24'	N 70°21'09" W	17°12'09"
C3	164.57'	47.18'	N 53°37'51" W	16°25'34"
C4	167.00'	47.55'	N 37°00'39" W	16°18'31"
C5	163.95'	50.00'	N 19°57'10" W	17°28'00"
C6	162.02'	48.00'	N 02°43'44" W	16°58'33"
C7	184.33'	2.54'	N 06°09'12" E	0°47'18"
C8	12.00'	18.85'	N 38°24'27" W	90°00'45"
C9	63.00'	42.60'	S 77°12'53" W	38°44'50"
C10	57.00'	60.17'	S 64°58'49" W	60°29'05"
C11	57.00'	59.63'	S 53°08'44" E	59°55'55"
C12	57.00'	65.95'	N 07°58'02" E	66°17'41"
C13	57.00'	48.39'	N 65°26'03" E	48°38'22"
C14	12.00'	18.85'	S 51°35'33" W	89°59'15"
C15	13.00'	20.43'	S 38°24'27" E	90°00'45"
C16	13.00'	20.43'	N 51°35'33" E	89°59'15"
C17	113.08'	146.10'	N 48°22'50" W	74°04'39"
C18	113.08'	31.43'	N 01°22'07" W	15°55'56"
C19	12.00'	18.85'	S 51°35'33" W	90°01'01"
C20	112.00'	18.85'	S 38°24'27" E	89°59'04"



SINGLE-FAMILY LOT (TYP.)
NTS

ALL CONNECTIONS TO EXISTING CITY ROADS AND ROW ARE SUBJECT TO THE APPLICABLE PERMITS, FEES, APPROVALS, AND STANDARDS/SPECIFICATION SET FORTH BY THE CITY OF COLUMBIA DEVELOPMENT STANDARDS.



Legend

- Iron Rod/Pipe Found
- Iron Rod Set
- Concrete Monument Existing
- Mag Nail
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- Guy Pole
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- Flag Pole
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- Parking Block
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GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

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FRANKLIN, TN 37064

MCCLURE FARMS
PRELIMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
UTILITIES – PHASE 3

REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical: 1" = 60'
Horizontal:

11 of 17

GRANT W. VACK
LICENSED PROFESSIONAL ENGINEER
AGRICULTURAL
No. 107415
STATE OF TENNESSEE

FILE: J:\WES_Engineers_Surveyors 2023\23572 – McClure Farms – Smith\23572-1 Britelond Homes\Dwg\Survey\08 – PUD Master Plan\23572-1 – McClure – Preliminary Plat.dwg

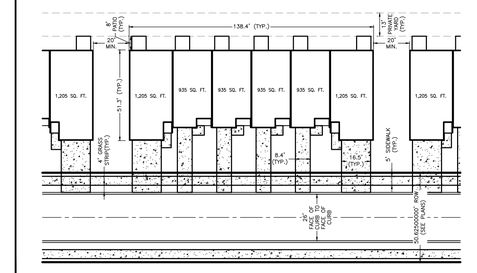
LOT AREA TABLE (PHASE 4)

LOT	SQ. FT.	ACRES
115	12,560.8	0.06
116	12,163.3	0.05
117	12,163.3	0.05
118	12,163.3	0.05
119	12,163.3	0.05
120	12,560.8	0.06
121	12,560.8	0.06
122	12,163.3	0.05
123	12,163.3	0.05
124	12,163.3	0.05
125	12,163.3	0.05
126	12,560.8	0.06
127	12,560.8	0.06
128	12,153.3	0.05
129	12,163.3	0.05
130	12,163.3	0.05
131	12,163.3	0.05
132	12,560.8	0.06
133	12,559.8	0.06
134	12,152.5	0.05
135	12,152.5	0.05
136	12,152.3	0.05
137	12,670.1	0.06
138	12,617.4	0.06
139	12,166.4	0.06
140	12,147.0	0.05
141	12,148.0	0.05
142	12,159.2	0.05
143	12,623.3	0.06
144	12,590.1	0.06
145	12,155.1	0.05
146	12,146.2	0.05
147	12,556.8	0.06
148	12,586.1	0.06
149	12,158.1	0.05
150	12,155.1	0.05
151	12,575.4	0.06
152	12,585.9	0.06
153	12,608.4	0.06
154	12,214.9	0.06
155	12,215.0	0.05
156	12,215.0	0.05
157	12,560.8	0.06
158	12,163.3	0.05
159	12,163.3	0.05
160	12,560.8	0.06
161	12,163.3	0.05
162	12,560.8	0.06
163	12,560.8	0.06
164	12,163.3	0.05
165	12,163.3	0.05
166	12,163.3	0.05
167	12,163.3	0.05
168	12,163.3	0.05
169	12,163.3	0.05
170	12,560.8	0.06
171	12,612.9	0.06
172	12,207.3	0.05
173	12,207.3	0.05
174	12,207.3	0.05
175	12,207.3	0.05
176	12,207.3	0.05
177	12,612.9	0.06
178	12,207.3	0.05
179	12,207.3	0.05
180	12,612.9	0.06
181	12,612.9	0.06
182	12,207.3	0.05
183	12,207.3	0.05
184	12,207.3	0.05
185	12,207.3	0.05
186	12,612.9	0.06
187	12,616.6	0.06
188	12,610.5	0.06
189	12,610.5	0.06
190	12,210.5	0.05
191	12,210.5	0.05
192	12,618.6	0.06
193	12,603.8	0.06
194	12,189.0	0.05
195	12,189.0	0.05
196	12,597.9	0.06
197	12,560.8	0.06
198	12,165.5	0.05
199	12,165.5	0.05
200	12,165.5	0.05
201	12,165.5	0.05
202	12,165.5	0.05
203	12,165.5	0.05
204	12,165.5	0.05
205	12,560.8	0.06
206	12,165.5	0.05
207	12,165.5	0.05
208	12,165.5	0.05
209	12,165.5	0.05
210	12,560.8	0.06
211	12,165.5	0.05
212	12,165.5	0.05
213	12,165.5	0.05
214	12,165.5	0.05
215	12,163.8	0.05
216	12,560.8	0.06
217	12,163.8	0.05
218	12,163.8	0.05
219	12,163.8	0.05
220	12,163.8	0.05
221	12,561.3	0.06
222	12,562.9	0.06
223	12,163.3	0.05
224	12,163.3	0.05
225	12,163.3	0.05
226	12,560.8	0.06
227	12,560.8	0.06
228	12,163.3	0.05
229	12,163.3	0.05
230	12,163.3	0.05
231	12,163.3	0.05
232	12,560.8	0.06
233	12,560.8	0.06
234	12,163.3	0.05
235	12,163.3	0.05
236	12,163.3	0.05
237	12,182.1	0.05
238	12,687.0	0.06
239	12,702.5	0.06
240	12,188.2	0.05
241	12,149.2	0.05
242	12,218.3	0.05
243	12,218.3	0.05
244	12,769.6	0.06
245	12,586.7	0.06
246	12,157.1	0.05
247	12,146.1	0.05
248	12,149.1	0.05
249	12,166.1	0.05
250	12,605.1	0.06
251	12,597.1	0.06
252	12,162.0	0.05
253	12,147.8	0.05
254	12,144.7	0.05
255	12,160.5	0.05
256	12,595.6	0.06
257	12,592.0	0.06
258	12,161.3	0.05
259	12,146.1	0.05
260	12,152.9	0.05
261	12,169.8	0.05
262	12,609.0	0.06
263	12,594.4	0.06
264	12,173.7	0.05
265	12,191.7	0.05
266	12,191.7	0.05
267	12,191.7	0.05
268	12,594.1	0.06
269	12,594.3	0.06
270	12,191.7	0.05
271	12,191.7	0.05
272	12,191.7	0.05
273	12,190.7	0.05
274	12,577.8	0.06
275	12,593.1	0.06
276	12,224.5	0.05
277	12,239.5	0.05

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	DELTA ANGLE
C1	525.00'	21.04'	S 85°14'55" E	2°17'42"
C2	525.00'	26.10'	S 82°40'29" E	2°50'54"
C3	525.00'	35.34'	S 79°19'19" E	3°51'25"
C4	525.00'	26.19'	S 75°57'51" E	2°51'31"
C5	525.00'	22.04'	S 73°19'56" E	2°24'20"
C6	525.00'	22.01'	S 70°55'43" E	2°24'06"
C7	525.00'	22.01'	S 68°31'37" E	2°24'06"
C8	525.00'	22.05'	S 66°07'29" E	2°24'20"
C9	525.00'	26.21'	S 63°39'25" E	2°51'56"
C10	525.00'	29.80'	S 60°26'40" E	3°15'20"
C11	525.00'	26.14'	S 57°24'11" E	2°51'06"
C12	525.00'	22.02'	S 54°46'50" E	2°24'11"
C13	525.00'	22.00'	S 52°22'39" E	2°24'00"
C14	525.00'	28.07'	S 49°44'59" E	3°03'44"
C15	525.00'	27.80'	S 46°48'36" E	3°02'06"
C16	525.00'	26.11'	S 43°52'03" E	2°51'06"
C17	525.00'	22.01'	S 41°14'29" E	2°24'07"
C18	525.00'	22.00'	S 38°50'22" E	2°24'00"
C19	525.00'	26.09'	S 36°12'55" E	2°50'51"
C20	525.00'	95.60'	S 29°34'10" E	10°25'39"
C21	13.00'	21.47'	S 71°40'11" E	94°37'21"
C22	713.97'	43.14'	S 59°17'17" E	3°27'43"
C23	713.97'	26.09'	S 56°30'17" E	2°05'38"
C24	713.97'	22.01'	N 54°34'49" E	1°45'58"
C25	713.97'	8.81'	N 53°20'36" E	0°42'25"
C26	13.00'	20.42'	N 07°39'24" E	90°00'00"
C27	257.00'	140.03'	N 84°04'54" E	31°13'04"
C28	63.00'	68.37'	S 59°55'09" E	62°10'55"
C29	175.00'	12.73'	S 34°55'33" E	4°10'06"
C30	175.00'	42.89'	S 25°49'14" E	14°02'31"
C31	175.00'	23.75'	S 14°54'44" E	7°46'29"
C32	175.00'	56.86'	S 01°42'58" W	18°37'04"
C33	125.00'	40.62'	N 01°42'58" W	18°37'04"
C34	13.00'	18.34'	N 51°25'52" W	80°48'45"
C35	225.00'	14.22'	N 87°51'09" W	3°37'42"
C36	225.00'	7.50'	N 85°04'47" W	1°55'03"
C37	225.00'	22.08'	N 81°18'33" W	5°37'25"
C38	225.00'	26.54'	N 75°07'07" W	6°45'28"

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	DELTA ANGLE
C39	225.00'	10.78'	N 70°22'05" W	2°44'40"
C40	225.00'	26.79'	N 65°30'09" W	6°49'18"
C41	225.00'	22.18'	N 59°20'58" W	5°38'56"
C42	225.00'	22.02'	N 53°43'18" W	5°36'24"
C43	225.00'	22.68'	N 48°06'33" W	5°37'07"
C44	225.00'	22.33'	N 42°27'29" W	5°41'10"
C45	225.00'	27.11'	N 36°09'44" W	6°54'11"
C46	225.00'	6.39'	N 31°53'48" W	1°37'49"
C47	13.00'	18.64'	N 72°08'59" W	82°08'01"
C48	764.00'	96.55'	S 70°24'13" W	7°14'26"
C49	764.00'	26.10'	S 76°00'10" W	1°57'26"
C50	764.00'	22.02'	S 76°48'26" W	1°39'04"
C51	764.00'	22.02'	S 78°27'29" W	1°39'04"
C52	764.00'	22.01'	S 80°06'28" W	1°39'01"
C53	764.00'	22.03'	S 81°45'29" W	1°39'07"
C54	764.00'	26.13'	S 83°33'53" W	1°57'34"
C55	764.00'	27.16'	S 85°33'46" W	2°02'13"
C56	764.00'	26.12'	N 87°33'38" W	1°57'34"
C57	764.00'	22.02'	S 89°21'57" W	1°39'06"
C58	764.00'	22.00'	N 88°59'00" W	1°39'00"
C59	764.00'	22.00'	N 87°20'00" W	1°39'00"
C60	764.00'	22.01'	N 85°40'57" W	1°39'05"
C61	764.00'	26.11'	N 83°52'35" W	1°57'28"
C62	764.00'	25.00'	N 81°57'40" W	1°52'29"
C63	764.00'	22.00'	N 80°09'21" W	1°39'04"
C64	764.00'	22.02'	N 78°14'25" W	1°39'04"
C65	764.00'	26.09'	N 76°18'58" W	1°57'28"
C66	764.00'	22.01'	N 74°56'25" W	1°39'01"
C67	764.00'	22.03'	N 73°17'19" W	1°39'07"
C68	764.00'	26.13'	N 71°28'58" W	1°57'34"
C69	764.00'	70.08'	N 67°52'29" W	5°15'19"
C70	225.00'	177.13'	N 87°48'03" W	45°06'21"
C71	275.00'	210.83'	S 88°08'27" E	43°55'35"
C72	275.00'	4.46'	S 65°47'46" E	0°55'46"
C73	714.00'	116.07'	S 69°53'43" E	9°18'42"
C74	714.00'	26.08'	S 67°34'58" E	2°05'30"
C75	714.00'	51.28'	S 70°41'11" E	4°06'55"
C76	714.00'	26.13'	S 73°47'32" E	2°05'48"

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	DELTA ANGLE
C77	714.00'	22.02'	S 75°43'59" E	1°46'03"
C78	714.00'	22.00'	S 77°29'27" E	1°45'52"
C79	714.00'	22.00'	S 79°15'23" E	1°45'56"
C80	714.00'	21.86'	S 81°01'14" E	1°45'24"
C81	714.00'	26.19'	S 82°37'09" E	2°06'06"
C82	714.00'	57.04'	S 86°17'31" E	4°34'18"
C83	714.00'	26.12'	S 89°37'43" E	2°05'47"
C84	714.00'	22.02'	N 88°29'29" E	1°46'00"
C85	714.00'	22.00'	N 86°43'29" E	1°45'52"
C86	714.00'	22.00'	N 84°54'28" E	1°45'51"
C87	714.00'	22.00'	N 83°08'27" E	1°45'51"
C88	714.00'	26.13'	N 81°12'51" E	2°05'48"
C89	714.00'	22.00'	N 79°06'43" E	1°45'41"
C90	714.00'	26.05'	N 74°41'14" E	2°05'25"
C91	714.00'	22.00'	N 72°45'33" E	1°45'56"
C92	714.00'	26.07'	N 70°49'48" E	2°05'15"
C93	714.00'	32.16'	N 68°29'37" E	2°34'52"
C94	13.00'	21.26'	N 20°20'48" E	93°42'48"
C95	475.00'	377.50'	N 49°18'39" W	45°32'08"
C96	475.00'	26.13'	N 73°37'19" W	3°09'04"
C97	475.00'	22.05'	N 76°32'19" W	2°39'36"
C98	475.00'	22.01'	N 79°11'48" W	2°39'16"
C99	475.00'	22.01'	N 81°51'05" W	2°39'17"
C100	475.00'	22.08'	N 84°30'30" W	2°39'39"
C101	475.00'	4.61'	N 86°07'01" W	0°33'24"
C102	13.00'	20.42'	S 82°00'56" E	90°00'00"
C103	475.00'	45.09'	S 79°40'18" E	5°26'08"
C104	13.00'	25.03'	S 38°48'36" W	110°18'11"
C105	175.00'	160.59'	N 58°45'01" W	52°34'38"
C106	13.00'	21.47'	N 13°50'35" W	94°36'24"
C107	764.00'	51.54'	N 59°12'44" E	3°51'56"
C108	764.00'	26.09'	N 56°18'05" E	1°57'23"
C109	764.00'	22.01'	N 54°29'53" E	1°39'02"
C110	764.00'	9.10'	N 53°19'53" E	0°40'58"



MULTI-FAMILY LOT (TYP.)
NTS

ALL CONNECTIONS TO EXISTING CITY ROADS AND ROW ARE SUBJECT TO THE APPLICABLE PERMITS, FEES, APPROVALS, AND STANDARDS/SPECIFICATION SET FORTH BY THE CITY OF COLUMBIA DEVELOPMENT STANDARDS.

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WES Engineers & Surveyors
CIVIL ENGINEERS & LAND SURVEYORS
2486 NASHVILLE HIGHWAY
COLUMBIA, TN 38401
PHONE: (931) 388-2329
www.wesengineers.com
ENGINEERS & SURVEYORS

Client
DRB GROUP
4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
PRELIMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
UTILITIES – PHASE 4

DATE	REVISIONS

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale: Vertical: 1" = 60' Horizontal:

12 of 17

SEE SHEET 8 OF 19

POND 4.1

OPEN SPACE

WETLAND 1

MCDONALD AVENUE
50' R.O.W. PUBLIC LOCAL

MCCLURE BOULEVARD
50' R.O.W. PUBLIC LOCAL

WATERHILL DRIVE
50' R.O.W. PUBLIC LOCAL

PHASE 1B
PHASE 2
PHASE 3
PHASE 4A
PHASE 4B

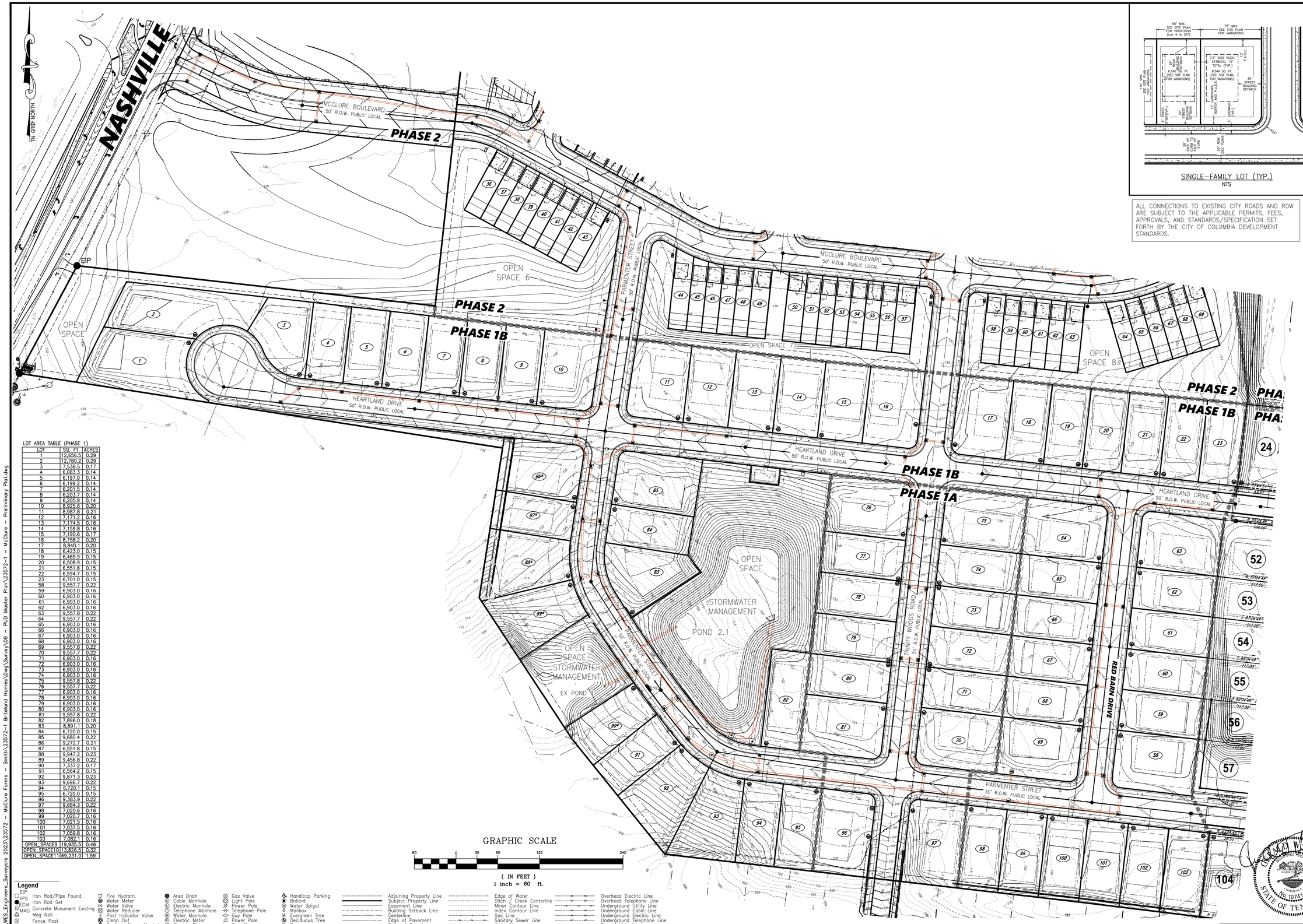
Legend

- EIP — Iron Rod/Pipe Found
- IPS — Iron Rod Set
- ECM — Concrete Monument Existing
- MAG — Mag Nail
- Fence Post
- T — T-Post
- Bench Mark
- Stake Found
- Fire Hydrant
- Water Meter
- Water Valve
- Water Reducer
- Post Indicator Valve
- Clean Out
- Sanitary Sewer Manhole
- Storm Sewer Manhole
- Curb Inlet
- Catch Basin
- Area Drain
- Cable Manhole
- Electric Manhole
- Telephone Manhole
- Water Manhole
- Electric Meter
- Electric Riser
- Cable Riser
- Telephone Riser
- Gas Meter
- Gas Valve
- Light Pole
- Power Pole
- Telephone Pole
- Guy Pole
- Power Pole
- Guy Wire
- Flag Pole
- Sign
- Parking Block
- Handicap Parking
- Bollard
- Water Spigot
- Mailbox
- Evergreen Tree
- Deciduous Tree
- Bush
- Adjoining Property Line
- Subject Property Line
- Easement Line
- Building Setback Line
- Centerline
- Edge of Pavement
- Edge of Gravel
- Fence Line
- Landscape
- Woods / Tree line
- Edge of Water
- Ditch / Creek Centerline
- Minor Contour Line
- Index Contour Line
- Gas Line
- Sanitary Sewer Line
- Water Line
- Storm Sewer Line
- Overhead Utility Line
- Overhead Cable Line
- Overhead Electric Line
- Overhead Telephone Line
- Underground Utility Line
- Underground Cable Line
- Underground Electric Line
- Underground Telephone Line
- Forced Main Line

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

GREGORY VICK
LICENSED PROFESSIONAL ENGINEER
No. 107415
STATE OF TENNESSEE

FILE: J:_WES_Engineers_Surveyors 2023\23572 – McClure Farms – Smith\23572-1 Briteland Homes\Dwg\Survey\08 – PUD Master Plan\23572-1 – McClure – Preliminary Plat.dwg



ALL CONNECTIONS TO EXISTING CITY ROADS AND ROW ARE SUBJECT TO THE APPLICABLE PERMITS, FEES, APPROVALS, AND STANDARDS/SPECIFICATION SET FORTH BY THE CITY OF COLUMBIA DEVELOPMENT STANDARDS.

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LOT AREA TABLE (PHASE 1)

LOT	SQ. FT.	ACRES
1	12,656.5	0.29
2	12,780.2	0.29
3	7,538.5	0.17
4	6,083.3	0.14
5	6,197.0	0.14
6	6,199.2	0.14
7	6,201.5	0.14
8	6,203.7	0.14
9	6,205.9	0.14
10	8,925.6	0.20
11	8,987.8	0.21
12	7,171.2	0.16
13	7,174.5	0.16
14	7,159.8	0.16
15	7,190.6	0.17
16	8,758.2	0.20
17	8,840.1	0.20
18	6,423.0	0.15
19	6,465.9	0.15
20	6,508.9	0.15
21	6,551.8	0.15
22	6,594.7	0.15
23	6,701.0	0.15
58	9,557.7	0.22
59	6,903.0	0.16
60	6,903.0	0.16
61	6,903.0	0.16
62	6,903.0	0.16
63	9,557.8	0.22
64	9,557.7	0.22
65	6,903.0	0.16
66	6,903.0	0.16
67	6,903.0	0.16
68	6,903.0	0.16
69	9,557.8	0.22
70	9,557.7	0.22
71	6,903.0	0.16
72	6,903.0	0.16
73	6,903.0	0.16
74	6,903.0	0.16
75	9,557.8	0.22
76	9,557.7	0.22
77	6,903.0	0.16
78	6,903.0	0.16
79	6,903.0	0.16
80	6,903.0	0.16
81	9,557.8	0.22
82	7,896.0	0.18
83	8,891.1	0.20
84	6,720.0	0.15
85	9,680.4	0.22
86	9,272.7	0.21
87	6,551.8	0.15
88	9,947.2	0.23
89	9,456.8	0.22
90	7,337.2	0.17
91	6,564.2	0.15
92	9,871.3	0.23
93	9,696.7	0.22
94	6,720.1	0.15
95	6,720.0	0.15
96	9,383.9	0.22
97	9,684.3	0.22
98	7,020.6	0.16
99	7,020.7	0.16
100	7,021.5	0.16
101	7,037.5	0.16
102	7,059.8	0.16
103	7,082.1	0.16
OPEN_SPACE9	19,935.5	0.46
OPEN_SPACE10	13,826.5	0.32
OPEN_SPACE11	69,231.0	1.59

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)

1 inch = 60 ft.

Legend

- EIP — Iron Rod/Pipe Found
- IPS — Iron Rod Set
- ECM — Concrete Monument Existing
- MAG — Mag Nail
- Fence Post
- T-Post
- Bench Mark
- Stake Found
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- Cable Riser
- Telephone Riser
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- Power Pole
- Telephone Pole
- Guy Pole
- Power Pole
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- Sign
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GREGORY W. BLACK 2-20-26
AGRICULTURE & ENVIRONMENT
LICENSED PROFESSIONAL ENGINEER
No. 107415
STATE OF TENNESSEE

WES Engineers & Surveyors
CIVIL ENGINEERS & LAND SURVEYORS
2486 NASHVILLE HIGHWAY
COLUMBIA, TN 38401
PHONE: (931) 388-2329
www.wesengineers.com
ENGINEERS & SURVEYORS

Client
DRB GROUP
4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

REVISIONS | DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale: Vertical: — Horizontal: 1" = 60'

MCCLURE FARMS
PRELIMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
GRADING – PHASE 1(1A & 1B)

13 of 17

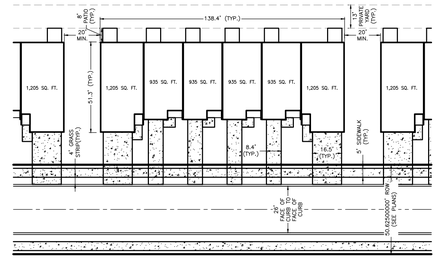
FILE:J:\ WES_Engineers_Surveyors 2023\23572 – McClure Farms – Smith\23572-1 Briteland Homes\Dwg\Survey\08 – PUD Master Plan\23572-1 – McClure – Preliminary Plat.dwg

TN GRID NORTH

LOT AREA TABLE (PHASE 2)

LOT	SQ. FT.	ACRES
1	2,560.8	0.06
2	2,163.3	0.05
3	2,163.3	0.05
4	2,163.3	0.05
5	2,163.3	0.05
6	2,163.3	0.05
7	2,163.3	0.05
8	2,560.8	0.06
9	2,560.8	0.06
10	2,163.3	0.05
11	2,163.3	0.05
12	2,163.3	0.05
13	2,163.3	0.05
14	2,163.3	0.05
15	2,163.3	0.05
16	2,560.8	0.06
17	2,565.5	0.06
18	2,167.3	0.05
19	2,167.3	0.05
20	2,565.5	0.06
21	2,603.3	0.06
22	2,199.3	0.05
23	2,199.3	0.05
24	2,199.3	0.05
25	2,199.3	0.05
26	2,603.3	0.06
27	2,586.8	0.06
28	2,185.3	0.05
29	2,185.3	0.05
30	2,586.8	0.06
31	2,586.8	0.06
32	2,185.3	0.05
33	2,185.3	0.05
34	2,185.3	0.05
35	2,586.8	0.06
36	2,586.8	0.06
37	2,185.3	0.05
38	2,185.3	0.05
39	2,185.3	0.05
40	2,185.3	0.05
41	2,185.3	0.05
42	2,185.3	0.05
43	2,586.8	0.06
44	2,905.2	0.07
45	2,289.1	0.05
46	2,207.9	0.05
47	2,185.6	0.05
48	2,185.3	0.05
49	2,586.8	0.06
50	2,586.8	0.06
51	2,185.3	0.05
52	2,185.3	0.05
53	2,185.3	0.05
54	2,185.3	0.05
55	2,185.3	0.05
56	2,185.3	0.05
57	2,586.8	0.06
58	2,612.8	0.06
59	2,207.3	0.05
60	2,207.3	0.05
61	2,207.3	0.05
62	2,207.3	0.05
63	2,619.1	0.06
64	2,678.2	0.06
65	2,203.4	0.05
66	2,190.7	0.05
67	2,216.8	0.05
68	2,282.3	0.05
69	2,842.1	0.07
70	2,560.8	0.06
71	2,163.3	0.05
72	2,163.3	0.05
73	2,560.8	0.06
74	2,560.8	0.06
75	2,163.3	0.05
76	2,163.3	0.05
77	2,163.3	0.05
78	2,560.8	0.06
79	2,560.8	0.06
80	2,163.3	0.05
81	2,163.3	0.05
82	2,560.8	0.06
83	2,560.8	0.06
84	2,163.3	0.05
85	2,163.3	0.05
86	2,163.3	0.05
87	2,163.3	0.05
88	2,560.8	0.06
89	2,612.8	0.06
90	2,207.3	0.05
91	2,207.3	0.05
92	2,207.3	0.05
93	2,612.8	0.06
94	2,207.3	0.05
95	2,207.3	0.05
96	2,207.3	0.05
97	2,207.3	0.05
98	2,612.8	0.06
99	2,738.7	0.06
100	2,440.6	0.06
101	2,503.7	0.06
102	2,518.8	0.06
103	2,486.5	0.06
104	2,405.7	0.06
105	2,300.0	0.05
106	2,631.1	0.06
107	2,560.8	0.06
108	2,163.3	0.05
109	2,163.3	0.05
110	2,163.3	0.05
111	2,163.3	0.05
112	2,163.3	0.05
113	2,163.3	0.05
114	2,560.8	0.06

LOT	SQ. FT.	ACRES
OS-1	40,902.9	0.94
OS-2	31,367.4	0.72
OS-3	16,427.1	0.38
OS-4	89,803.4	2.06
OS-5	47,815.3	1.10
OS-6	36,936.8	0.85
OS-7	18,940.3	0.43
OS-8	28,783.2	0.66



MULTI-FAMILY LOT (TYP.)
NTS

ALL CONNECTIONS TO EXISTING CITY ROADS AND ROW ARE SUBJECT TO THE APPLICABLE PERMITS, FEES, APPROVALS, AND STANDARDS/SPECIFICATION SET FORTH BY THE CITY OF COLUMBIA DEVELOPMENT STANDARDS.

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NASHVILLE HWY
MCCLURE BOULEVARD
50' R.O.W. PUBLIC LOCAL
MCDONALD AVENUE
50' R.O.W. PUBLIC LOCAL
DIVIDER STREET
50' R.O.W. PUBLIC LOCAL
PARKMENTER STREET
50' R.O.W. PUBLIC LOCAL
TRINITY WOODS ROAD
50' R.O.W. PUBLIC LOCAL
DOG PARK
PLAY GROUND
OPEN SPACE 1
OPEN SPACE 2
OPEN SPACE 3
OPEN SPACE 4
OPEN SPACE 5
OPEN SPACE 6
OPEN SPACE 7
OPEN SPACE 8
POND 5.1
STORMWATER MANAGEMENT
PHASE 2
PHASE 1B
PHASE 4A
EIP

Legend

- EIP Iron Rod/Pipe Found
- IPS Iron Rod Set
- CCM Concrete Monument Existing
- MAG Mag Nail
- Fence Post
- T-Post
- Bench Mark
- Stake Found
- Fire Hydrant
- Water Meter
- Water Valve
- Water Reducer
- Post Indicator Valve
- Clean Out
- Sanitary Sewer Manhole
- Storm Sewer Manhole
- Curb Inlet
- Catch Basin
- Area Drain
- Cable Manhole
- Electric Manhole
- Telephone Manhole
- Water Manhole
- Electric Meter
- Electric Riser
- Cable Riser
- Telephone Riser
- Gas Meter
- Gas Valve
- Light Pole
- Power Pole
- Telephone Pole
- Guy Pole
- Power Pole
- Guy Wire
- Flag Pole
- Sign
- Parking Block
- Handicap Parking
- Bollard
- Water Spigot
- Mailbox
- Evergreen Tree
- Deciduous Tree
- Bush
- Adjoining Property Line
- Subject Property Line
- Easement Line
- Building Setback Line
- Centerline
- Edge of Pavement
- Edge of Gravel
- Fence Line
- Landscape
- Woods / Tree line
- Edge of Water
- Ditch / Creek Centerline
- Minor Contour Line
- Index Contour Line
- Gas Line
- Sanitary Sewer Line
- Water Line
- Storm Sewer Line
- Overhead Utility Line
- Overhead Cable Line
- Overhead Electric Line
- Overhead Telephone Line
- Underground Utility Line
- Underground Cable Line
- Underground Electric Line
- Underground Telephone Line
- Forced Main Line

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

GEORGE W. LYONS
REGISTERED ENGINEER
AGRICULTURE
No. 107415
STATE OF TENNESSEE

WES ENGINEERS & SURVEYORS
CIVIL ENGINEERS & LAND SURVEYORS
2486 NASHVILLE HIGHWAY
COLUMBIA, TN 38401
PHONE: (931) 388-2329
www.wesengineers.com
ENGINEERS & SURVEYORS

Client
DRB GROUP
4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
PRELIMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
GRADING – PHASE 2

DATE	REVISIONS

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical: 1" = 60'
Horizontal:

14 of 17

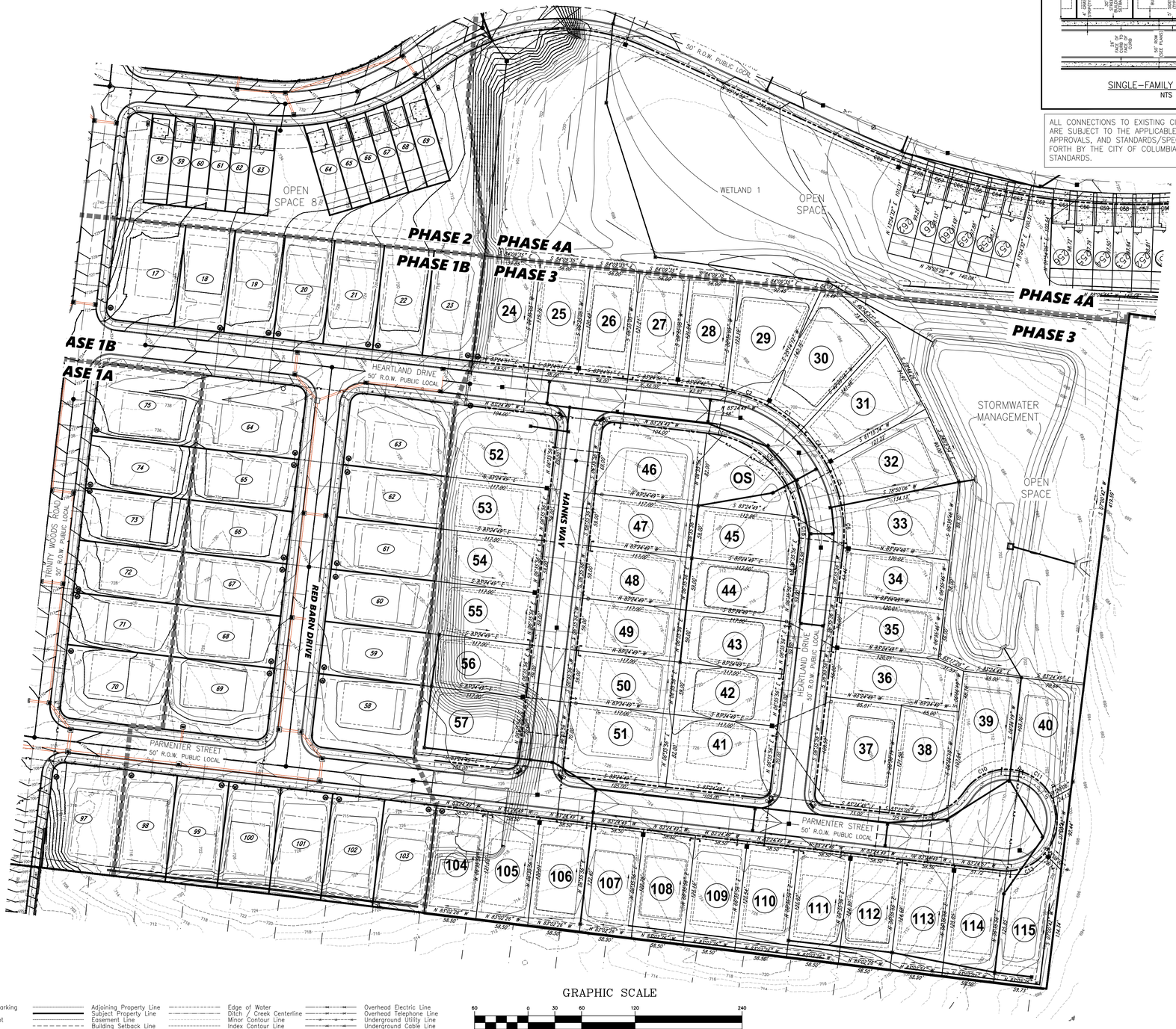
FILE: J:\WES_Engineers_Surveyors 2023\23572 – McClure Farms – Smith\23572-1 Britelond Homes\Dwg\Survey\08 – PUD Master Plan\23572-1 – McClure – Preliminary Plat.dwg

TN GRID NORTH

LOT AREA TABLE (PHASE 3)

LOT	SQ. FT.	ACRES
24	7,578.2	0.17
25	6,726.7	0.15
26	6,767.5	0.16
27	6,808.3	0.16
28	6,851.4	0.16
29	9,053.4	0.21
30	9,980.3	0.23
31	9,055.0	0.21
32	8,946.0	0.21
33	8,404.7	0.19
34	6,720.3	0.15
35	6,720.3	0.15
36	8,253.5	0.19
37	10,297.2	0.24
38	7,724.1	0.18
39	7,857.1	0.18
40	8,070.3	0.19
41	9,563.1	0.22
42	6,903.0	0.16
43	6,903.0	0.16
44	6,903.0	0.16
45	6,858.4	0.16
46	9,557.8	0.22
47	6,903.0	0.16
48	6,903.0	0.16
49	6,903.0	0.16
50	6,903.0	0.16
51	9,563.1	0.22
52	9,557.7	0.22
53	6,903.0	0.16
54	6,903.0	0.16
55	6,903.0	0.16
56	6,903.0	0.16
57	6,903.0	0.16
104	7,104.4	0.16
105	7,126.7	0.16
106	7,148.9	0.16
107	11,171.0	0.22
108	7,193.3	0.17
109	7,215.6	0.17
110	7,238.1	0.17
111	12,260.4	0.17
112	7,282.7	0.17
113	7,305.0	0.17
114	7,328.2	0.17
115	8,246.6	0.19

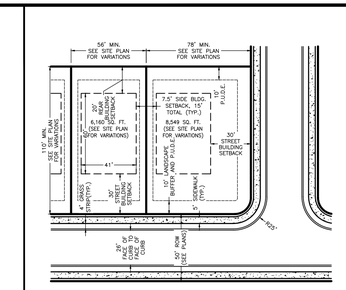
CURVE	RADIUS	ARC LENGTH	CHORD BEARING	DELTA ANGLE
C1	170.58'	13.08'	N 81°09'11" W	4°23'36"
C2	160.70'	48.24'	N 70°21'09" W	17°12'09"
C3	164.57'	47.18'	N 53°37'51" W	16°25'34"
C4	167.00'	47.05'	N 37°00'39" W	16°08'31"
C5	163.95'	50.00'	N 19°57'10" W	17°28'20"
C6	162.02'	48.00'	N 02°43'44" W	16°58'33"
C7	184.33'	2.54'	N 08°09'12" E	0°47'18"
C8	12.00'	18.85'	N 38°24'27" W	90°00'45"
C9	63.00'	42.60'	S 77°12'53" W	38°44'50"
C10	57.00'	60.17'	S 64°58'49" W	60°29'05"
C11	57.00'	59.62'	S 03°08'44" E	59°55'55"
C12	57.00'	65.95'	N 07°58'02" E	66°17'41"
C13	57.00'	48.39'	N 65°26'03" E	48°38'22"
C14	12.00'	18.85'	S 51°35'33" W	89°59'15"
C15	13.00'	20.43'	S 38°24'27" E	90°00'45"
C16	13.00'	20.43'	N 51°35'33" E	89°59'15"
C17	113.00'	146.10'	N 48°22'50" W	74°04'39"
C18	113.00'	31.43'	N 01°22'07" W	15°56'06"
C19	12.00'	18.85'	S 51°35'33" W	90°01'01"
C20	112.00'	18.85'	S 38°24'27" E	89°59'04"



GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.



ALL CONNECTIONS TO EXISTING CITY ROADS AND ROW ARE SUBJECT TO THE APPLICABLE PERMITS, FEES, APPROVALS, AND STANDARDS/SPECIFICATION SET FORTH BY THE CITY OF COLUMBIA DEVELOPMENT STANDARDS.

Legend

EIP	Iron Rod/Pipe Found	Fire Hydrant	Area Drain	Gas Valve	Handicap Parking	Adjoining Property Line	Edge of Water	Overhead Electric Line
IPS	Iron Rod Set	Water Meter	Cable Manhole	Light Pole	Bollard	Subject Property Line	Ditch / Creek Centerline	Overhead Telephone Line
ECM	Concrete Monument Existing	Water Valve	Electric Manhole	Power Pole	Water Spigot	Easement Line	Minor Contour Line	Underground Utility Line
MAG	Mag Nail	Water Reducer	Telephone Manhole	Telephone Pole	Mailbox	Building Setback Line	Index Contour Line	Underground Cable Line
	Fence Post	Post Indicator Valve	Water Manhole	Guy Pole	Evergreen Tree	Centerline	Gas Line	Underground Electric Line
	T-Post	Clean Out	Electric Meter	Power Pole	Deciduous Tree	Edge of Pavement	Sanitary Sewer Line	Underground Telephone Line
	Bench Mark	Sanitary Sewer Manhole	Electric Riser	Guy Wire	Bush	Edge of Gravel	Water Line	Forced Main Line
	Stake Found	Storm Sewer Manhole	Cable Riser	Flag Pole		Fence Line	Storm Sewer Line	
		Curb Inlet	Telephone Riser	Sign		Landscape	Overhead Utility Line	
		Catch Basin	Gas Meter	Parking Block		Woods / Tree line	Overhead Cable Line	

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CIVIL ENGINEERS & LAND SURVEYORS
2486 NASHVILLE HIGHWAY
COLUMBIA, TN 38401
PHONE: (931) 388-2329
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Client
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4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
PRELIMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
GRADING – PHASE 3

REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical: 1" = 60'
Horizontal:

GEORGE M. VERICKER
AGRICULTURE
ENGINEER
REGISTERED
No. 107415
STATE OF TENNESSEE

15 of 17

FILE: J:\ WES_Engineers_Surveyors 2023\23572 – McClure Farms – Smith\23572-1 Briteland Homes\Dwg\Survey\08 – PUD Master Plan\23572-1 – McClure – Preliminary Plat.dwg

LOT AREA TABLE (PHASE 4)

LOT	SQ. FT.	ACRES
115	12,560.8	0.06
116	12,163.3	0.05
117	12,163.3	0.05
118	12,163.3	0.05
119	12,163.3	0.05
120	12,560.8	0.06
121	12,560.8	0.06
122	12,163.3	0.05
123	12,163.3	0.05
124	12,163.3	0.05
125	12,163.3	0.05
126	12,560.8	0.06
127	12,560.8	0.06
128	12,153.3	0.05
129	12,163.3	0.05
130	12,163.3	0.05
131	12,163.3	0.05
132	12,560.8	0.06
133	12,559.8	0.06
134	12,152.5	0.05
135	12,152.5	0.05
136	12,152.3	0.05
137	12,676.1	0.06
138	12,617.4	0.06
139	12,166.4	0.06
140	12,147.0	0.05
141	12,148.0	0.05
142	12,159.2	0.05
143	12,623.3	0.06
144	12,590.1	0.06
145	12,155.1	0.05
146	12,146.7	0.05
147	12,556.8	0.06
148	12,586.1	0.06
149	12,158.1	0.05
150	12,155.1	0.05
151	12,575.4	0.06
152	12,585.9	0.06
153	12,208.4	0.05
154	12,214.9	0.05
155	12,215.0	0.05

LOT	SQ. FT.	ACRES
156	12,215.0	0.05
156	12,469.0	0.06
157	12,560.8	0.06
158	12,163.3	0.05
159	12,163.3	0.05
160	12,560.8	0.06
161	12,163.3	0.05
162	12,560.8	0.06
163	12,560.8	0.06
164	12,163.3	0.05
165	12,163.3	0.05
166	12,163.3	0.05
167	12,163.3	0.05
168	12,163.3	0.05
169	12,163.3	0.05
170	12,560.8	0.06
171	12,612.9	0.06
172	12,207.3	0.05
173	12,207.3	0.05
174	12,207.3	0.05
175	12,207.3	0.05
176	12,612.9	0.06
177	12,612.9	0.06
178	12,207.3	0.05
179	12,207.3	0.05
180	12,612.9	0.06
181	12,612.9	0.06
182	12,207.3	0.05
183	12,207.3	0.05
184	12,207.3	0.05
185	12,207.3	0.05
186	12,612.9	0.06
187	12,616.6	0.06
188	12,610.5	0.06
189	12,210.5	0.05
190	12,210.5	0.05
191	12,210.5	0.05
192	12,618.6	0.06
193	12,603.8	0.06
194	12,189.0	0.05
195	12,189.0	0.05

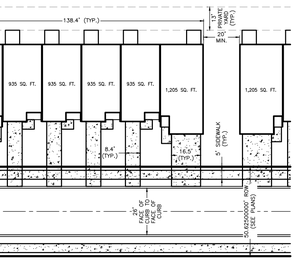
LOT	SQ. FT.	ACRES
196	12,291.9	0.06
197	12,165.5	0.05
198	12,165.5	0.05
199	12,165.5	0.05
200	12,165.5	0.05
201	12,165.5	0.05
202	12,165.5	0.05
203	12,165.5	0.05
204	12,165.5	0.05
205	12,560.8	0.06
206	12,163.3	0.05
207	12,165.5	0.05
208	12,165.5	0.05
209	12,165.5	0.05
210	12,560.8	0.06
211	12,163.3	0.05
212	12,163.3	0.05
213	12,163.3	0.05
214	12,169.7	0.05
215	12,595.5	0.06
216	12,592.0	0.06
217	12,163.8	0.05
218	12,163.8	0.05
219	12,163.8	0.05
220	12,163.8	0.05
221	12,561.3	0.06
222	12,560.8	0.06
223	12,163.3	0.05
224	12,163.3	0.05
225	12,163.3	0.05
226	12,560.8	0.06
227	12,508.6	0.06
228	12,163.3	0.05
229	12,163.3	0.05
230	12,163.3	0.05
231	12,163.3	0.05
232	12,560.8	0.06
233	12,560.8	0.06
234	12,593.1	0.06
235	12,163.3	0.05
236	12,163.3	0.05

LOT	SQ. FT.	ACRES
237	12,182.1	0.05
238	12,687.0	0.06
239	12,702.5	0.06
240	12,188.2	0.05
241	12,149.2	0.05
242	12,218.3	0.05
243	12,218.3	0.05
244	12,769.6	0.06
245	12,586.7	0.06
246	12,157.1	0.05
247	12,146.1	0.05
248	12,149.1	0.05
249	12,166.1	0.05
250	12,605.1	0.06
251	12,597.1	0.06
252	12,162.0	0.05
253	12,147.8	0.05
254	12,144.1	0.05
255	12,160.5	0.05
256	12,595.5	0.06
257	12,592.0	0.06
258	12,161.3	0.05
259	12,166.1	0.05
260	12,152.9	0.05
261	12,169.8	0.05
262	12,609.0	0.06
263	12,594.4	0.06
264	12,161.3	0.05
265	12,191.7	0.05
266	12,191.7	0.05
267	12,191.7	0.05
268	12,594.1	0.06
269	12,594.3	0.06
270	12,191.7	0.05
271	12,191.7	0.05
272	12,191.7	0.05
273	12,190.7	0.05
274	12,577.8	0.06
275	12,593.1	0.06
276	12,224.5	0.05
277	12,239.5	0.05

CURVE	RADIUS	ARC	LENGTH	CHORD	BEARING	DELTA	ANGLE
C1	525.00'	21.04'		S 85°14'55" E		2°17'43"	
C2	525.00'	26.10'		S 82°40'29" E		2°50'54"	
C3	525.00'	35.34'		S 79°19'19" E		3°51'25"	
C4	525.00'	26.19'		S 75°57'51" E		2°51'31"	
C5	525.00'	22.04'		S 73°19'56" E		2°24'20"	
C6	525.00'	22.01'		S 70°55'43" E		2°24'06"	
C7	525.00'	22.01'		S 68°31'37" E		2°24'08"	
C8	525.00'	22.05'		S 66°07'29" E		2°24'22"	
C9	525.00'	26.21'		S 63°29'55" E		2°51'58"	
C10	525.00'	29.60'		S 60°26'40" E		3°13'50"	
C11	525.00'	26.14'		S 57°24'11" E		2°51'10"	
C12	525.00'	22.02'		S 54°46'50" E		2°24'11"	
C13	525.00'	22.00'		S 52°22'39" E		2°24'01"	
C14	525.00'	28.07'		S 49°44'59" E		3°03'44"	
C15	525.00'	27.80'		S 46°48'36" E		3°02'06"	
C16	525.00'	26.11'		S 43°52'03" E		2°51'00"	
C17	525.00'	22.01'		S 41°14'29" E		2°24'07"	
C18	525.00'	22.01'		S 38°50'22" E		2°24'06"	
C19	525.00'	26.09'		S 36°12'55" E		2°50'51"	
C20	525.00'	95.60'		S 29°34'10" E		10°25'49"	
C21	13.00'	21.47'		S 71°40'11" E		94°37'21"	
C22	713.97'	43.14'		S 59°17'17" E		3°27'43"	
C23	713.97'	26.09'		S 56°30'37" E		2°05'38"	
C24	713.97'	22.01'		N 54°34'49" E		1°45'58"	
C25	713.97'	8.81'		N 53°20'36" E		0°42'23"	
C26	13.00'	20.42'		N 07°09'24" E		90°00'00"	
C27	437.00'	140.03'		N 44°04'54" E		18°21'36"	
C28	63.00'	68.37'		S 09°55'09" E		62°10'55"	
C29	175.00'	12.73'		S 34°50'33" E		4°10'06"	
C30	175.00'	42.89'		S 25°49'11" E		14°02'31"	
C31	175.00'	23.75'		S 14°54'44" E		7°46'29"	
C32	175.00'	56.86'		S 01°42'58" E		18°37'04"	
C33	125.00'	40.62'		N 01°42'58" W		18°37'04"	
C34	13.00'	18.34'		N 51°25'56" W		80°48'45"	
C35	225.00'	114.22'		N 75°31'09" W		29°05'13"	
C36	225.00'	7.50'		N 85°04'47" W		1°55'03"	
C37	225.00'	22.08'		N 81°18'33" W		5°37'29"	
C38	225.00'	26.54'		N 75°07'07" W		6°45'28"	

CURVE	RADIUS	ARC	LENGTH	CHORD	BEARING	DELTA	ANGLE
C39	225.00'	10.78'		N 70°22'05" W		2°44'40"	
C40	225.00'	26.79'		N 65°30'09" W		6°49'18"	
C41	225.00'	22.18'		N 59°20'58" W		5°38'56"	
C42	225.00'	22.02'		N 53°43'18" W		5°36'24"	
C43	225.00'	22.08'		N 48°06'33" W		5°37'07"	
C44	225.00'	22.33'		N 42°27'23" W		5°41'10"	
C45	225.00'	27.11'		N 36°09'44" W		6°54'11"	
C46	225.00'	6.39'		N 31°53'48" W		1°37'42"	
C47	13.00'	18.64'		N 72°08'59" W		82°08'01"	
C48	764.00'	96.55'		S 70°24'13" W		7°14'26"	
C49	764.00'	26.10'		S 76°00'10" W		1°57'28"	
C50	764.00'	22.02'		S 78°48'28" W		1°39'04"	
C51	764.00'	22.02'		S 80°27'32" W		1°39'04"	
C52	764.00'	22.01'		S 82°06'28" W		1°39'01"	
C53	764.00'	22.03'		S 81°45'25" W		1°39'04"	
C54	764.00'	26.13'		S 83°33'53" W		1°57'34"	
C55	764.00'	27.16'		S 85°33'46" W		2°02'13"	
C56	764.00'	26.12'		S 87°33'38" W		1°57'31"	
C57	764.00'	22.02'		S 89°21'57" W		1°39'06"	
C58	764.00'	22.00'		N 89°59'00" W		1°39'00"	
C59	764.00'	22.00'		N 87°20'00" W		1°39'00"	
C60	764.00'	22.02'		N 85°40'57" W		1°39'05"	
C61	764.00'	26.11'		N 83°55'35" W		1°57'29"	
C62	764.00'	25.00'		N 81°57'40" W		1°52'28"	
C63	764.00'	22.00'		N 80°05'12" W		1°39'01"	
C64	764.00'	22.02'		N 78°14'25" W		1°39'04"	
C65	437.00'	40.09'		N 76°49'59" W		5°15'26"	
C66	764.00'	22.01'		N 74°56'23" W		1°39'01"	
C67	764.00'	22.03'		N 73°17'19" W		1°39'04"	
C68	764.00'	26.13'		N 71°28'58" W		1°57'34"	
C69	764.00'	70.08'		N 67°52'29" W		5°15'19"	
C70	225.00'	177.13'		N 87°48'03" W		45°06'21"	
C71	275.00'	210.83'		S 88°08'27" E		43°55'35"	
C72	275.00'	4.46'		S 65°47'46" E		0°55'46"	
C73	714.00'	116.07'		S 69°53'35" E		9°18'72"	
C74	714.00'	26.08'		S 73°34'58" E		2°05'30"	
C75	714.00'	51.28'		S 75°41'11" E		4°06'55"	
C76	714.00'	26.13'		S 73°47'32" E		2°05'48"	

CURVE	RADIUS	ARC	LENGTH	CHORD	BEARING	DELTA	ANGLE
C77	714.00'	22.02'		S 70°43'59" E		1°46'03"	
C78	714.00'	22.00'		S 72°29'27" E		1°45'53"	
C79	714.00'	22.00'		S 74°15'23" E		1°45'56"	
C80	714.00'	21.86'		S 81°01'14" E		1°45'24"	
C81	714.00'	26.19'		S 82°57'09" E		2°06'06"	
C82	714.00'	57.04'		S 86°17'31" E		4°34'18"	
C83	714.00'	26.12'		S 89°37'43" E		2°05'47"	
C84	714.00'	22.02'		N 88°28'28" E		1°46'00"	
C85	714.00'	22.00'		N 86°42'33" E		1°45'54"	
C86	714.00'	22.00'		N 84°54'28" E		1°45'51"	
C87	714.00'	22.01'		N 83°08'27" E		1°45'58"	
C88	714.00'	26.13'		N 81°12'51" E		2°05'48"	
C89	714.00'	22.02'		N 77°58'41" E		1°46'01"	
C90	714.00'	26.05'		N 74°41'14" E		2°05'25"	
C91	714.00'	22.00'		N 72°45'33" E		1°45'56"	
C92	714.00'	70.49'		N 67°39'49" E		5°39'27"	
C93	714.00'	32.16'		N 68°29'37" E		2°34'52"	
C94	113.00'	21.26'		N 20°20'48" E		9°24'24"	
C95	475.00'	377.50'		N 49°18'39" W		45°32'08"	
C96	475.00'	73.01'		N 73°37'19" W		8°48'24"	
C97	475.00'	22.05'		N 76°32'19" W		2°39'36"	
C98	475.00'	22.01'		N 79°11'45" W		2°39'16"	
C99	475.00'	22.01'		N 81°51'01" W		2°39'17"	
C100	475.00'	22.08'		N 84°30'30" W		2°39'39"	
C101	475.00'	4.61'		N 86°00'01" W		0°33'22"	
C102	13.00'	20.42'		S 82°00'36" W		90°00'00"	
C103	437.00'	40.09'		S 76°49'59" E		5°15'26"	
C104	113.00'	25.03'		S 38°48'36" W		11°21'51"	
C105	175.00'	160.59'		N 58°45'01" W		52°34'38"	
C106	113.00'	21.47'		N 13°50'30" E		94°36'24"	
C107	764.00'	51.54'		N 59°12'44" E		3°51'56"	
C108	764.00'	26.09'		N 56°18'05" E		1°57'23"	
C109	764.00'	22.01'		N 54°29'53" E		1°39'02"	
C110	764.00'	9.10'		N 53°19'53" E		0°40'58"	



MULTI-FAMILY LOT (TYP.)
NTS

ALL CONNECTIONS TO EXISTING CITY ROADS AND ROW ARE SUBJECT TO THE APPLICABLE PERMITS, FEES, APPROVALS, AND STANDARDS/SPECIFICATION SET FORTH BY THE CITY OF COLUMBIA DEVELOPMENT STANDARDS.

© 2026

Legend

- EIP — Iron Rod/Pipe Found
- IPS — Iron Rod Set
- CM — Concrete Monument Existing
- MAG — Mag Nail
- Fence Post
- T-Post
- Bench Mark
- Stake Found
- Fire Hydrant
- Water Meter
- Water Valve
- Water Reducer
- Post Indicator Valve
- Clean Out
- Sanitary Sewer Manhole
- Storm Sewer Manhole
- Curb Inlet
- Catch Basin
- Area Drain
- Cable Manhole
- Electric Manhole
- Telephone Manhole
- Water Manhole
- Electric Meter
- Electric Riser
- Cable Riser
- Telephone Riser
- Gas Meter
- Gas Valve
- Light Pole
- Power Pole
- Telephone Pole
- Guy Pole
- Power Pole
- Guy Wire
- Flag Pole
- Sign
- Parking Block
- Handicap Parking
- Bollard
- Water Spigot
- Mailbox
- Evergreen Tree
- Deciduous Tree
- Bush
- Adjoining Property Line
- Subject Property Line
- Easement Line
- Building Setback Line
- Centerline
- Edge of Pavement
- Edge of Gravel
- Fence Line
- Landscape
- Woods / Tree line
- Edge of Water
- Ditch / Creek Centerline
- Minor Contour Line
- Index Contour Line
- Gas Line
- Sanitary Sewer Line
- Water Line
- Storm Sewer Line
- Overhead Utility Line
- Overhead Cable Line
- Overhead Electric Line
- Overhead Telephone Line
- Underground Utility Line
- Underground Cable Line
- Underground Electric Line
- Underground Telephone Line
- Forced Main Line

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

WES ENGINEERS & SURVEYORS
CIVIL ENGINEERS & LAND SURVEYORS
2486 NASHVILLE HIGHWAY
COLUMBIA, TN 38401
PHONE: (931) 388-2329
www.wesengineers.com
ENGINEERS & SURVEYORS

Client
DRB GROUP
4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
PRELIMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
GRADING – PHASE 4

DATE	REVISIONS

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

Job. no. 23572-1
Scale:
Vertical: 1" = 60'
Horizontal:

16 of 17

GRAND WORKS
REGISTERED ENGINEER
AGENT
No. 107415
STATE OF TENNESSEE

FILE: J:\WES_Engineers_Surveyors 2023\23572 – McClure Farms – Smith\23572-1 Britelond Homes\Dwg\Survey\08 – PUD Master Plan\23572-1 – McClure – Preliminary Plat.dwg



HATCHED AREAS REPRESENT AREAS WITH EXISTING SLOPES GREATER THAN TEN PERCENT (>10%)

GRAPHIC SCALE

200 0 100 200 400 800

(IN FEET)
1 inch = 200 ft.

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COLUMBIA, TN 38401
PHONE: (931) 388-2329
www.wesengineers.com

Client
DRB GROUP
4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

MCCLURE FARMS
PRELMINARY PLAT - PHASE 1-4
COLUMBIA, MAURY COUNTY, TN 38401
EXISTING SLOPE ANALYSIS

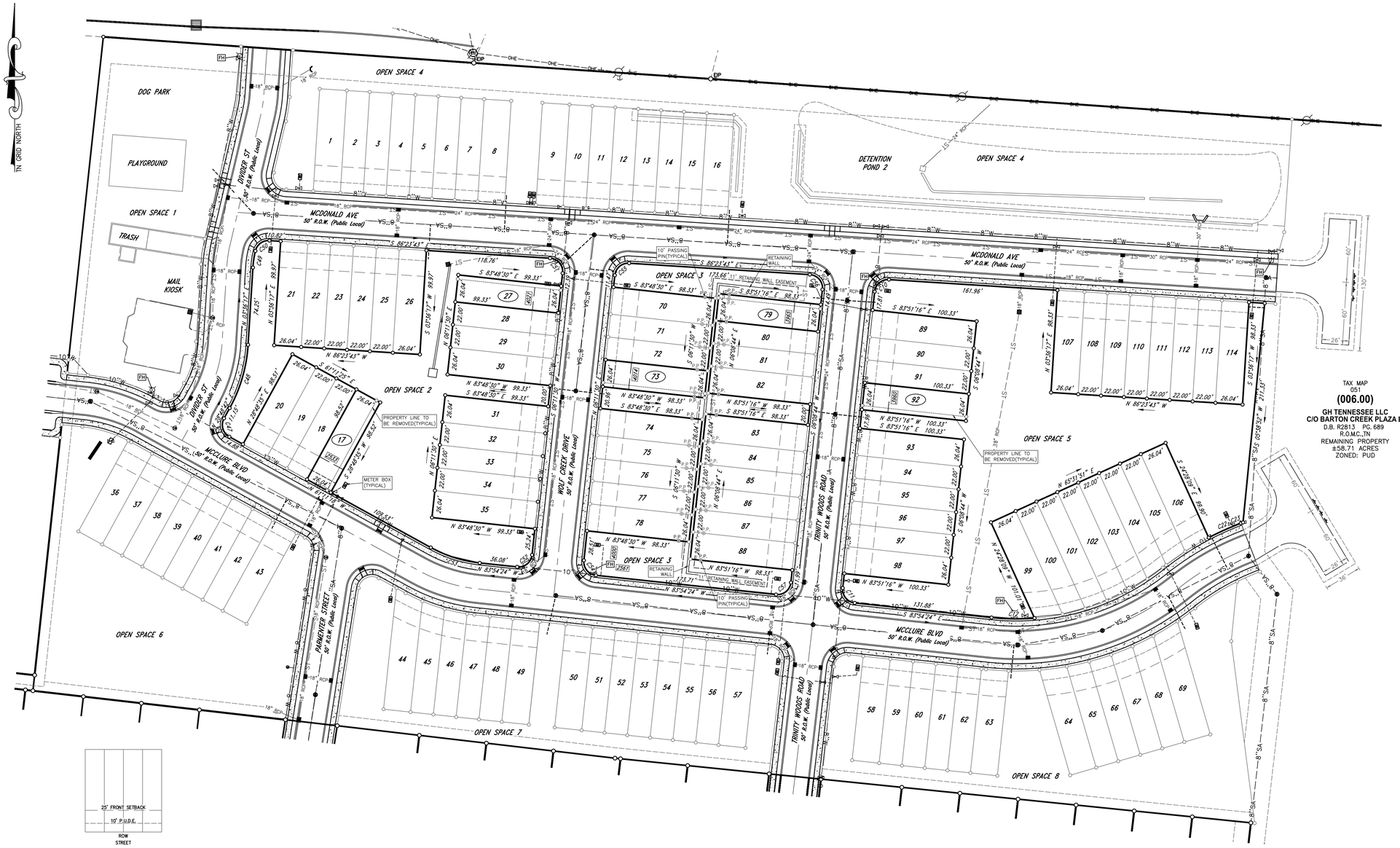
REVISIONS	DATE

Drawn: EB
Checked: JG
Approved: GV
Date: 04-20-2026

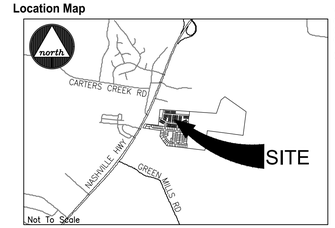
Job. no. 23572-1
Scale:
Vertical:
Horizontal: 1" = 200'

GERALD W. VICK
AGRICULTURE
COMMERCE
No. 107415
STATE OF TENNESSEE
4-20-26

FILE:J:\WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Briteland Homes\Dwg\Survey\08 - PUD Master Plan\23572-1 - McClure - Preliminary Plat.dwg



Location Map



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WES Engineers & Surveyors
CIVIL ENGINEERS & LAND SURVEYORS
2486 NASHVILLE HIGHWAY
COLUMBIA, TN 38401
PHONE: (931) 388-2329
www.wesengineers.com
ENGINEERS & SURVEYORS

PURPOSE NOTE:
The purpose of this plat is to revise property lines on lots 17, 27, 73, 79, 92, OS-2, OS-3, & OS-5.

DRIVEWAY NOTE:
All driveways shall be constructed to contain gutter flow within the street and right-of-way, particularly lots that do not have a sidewalk.

STORMWATER MANAGEMENT AGREEMENT:
RECORDED: 10-14-2025
DEED BOOK: R3102 PAGE: 1354-1360

SITE DATA:

PARCEL NUMBER:
Tax Map 042O, Group "A", Parcels 049.00, 083.00, 097.00, 101.00, 111.00, 116.00, 117.00, 119.00

DEED BOOK:
R2813, PAGE 689

PARCEL ADDRESS:
3901 MCCLURE BLVD
4014, 4021 WOLF CREEK DR
3960, 3965 TRINITY WOODS RD

PROPERTY OWNER:
GH TENNESSEE LLC
C/O BARTON CREEK PLAZA III
1616 SOUTH CAPITAL OF TEXAS HWY STE 275
AUSTIN, TX 78704

ACREAGE OF PARCEL:
±56.29 ACRES TOTAL
±13.41 ACRES - 156,493.1 S.F. - PHASE 1A
±15.95 ACRES - 127,535.2 S.F. - PHASE 1B
±12.72 ACRES - 749,959.0 S.F. - PHASE 2
±58.71 ACRES REMAINING
±2.43 ACRES - 105,883.7 S.F. - PHASE 2 REVISED LOTS

EXISTING ZONING:
PUD(MIXED USE - RESIDENTIAL, MULTIFAMILY, COMMERCIAL)
HSB-PUD PER PRELIMINARY PLAT

BUILDING SETBACKS:
FRONT - 25'
SIDE - N/A
REAR - N/A

TAX MAP
051
(006.00)
GH TENNESSEE LLC
C/O BARTON CREEK PLAZA III
D.B. R2813 PG. 689
R.O.M.C.,TN
REMAINING PROPERTY
±58.71 ACRES
ZONED: PUD

Surveyor's Notes

1. All distances were measured with E.D.M. equipment and have been adjusted for temperature and pressure.
2. The property (Boundary) Line Survey exceeds the minimum requirements of an Urban Land Survey Category 1 as per Standards of Practice adopted by the State Board of Examiners for Land Surveyors for the State of Tennessee, and the precision of the unadjusted survey is greater than 1 foot in 10,000 feet.
3. Information concerning site utility services and appurtenances shown hereon is based on visible evidence noted during the survey, information provided by utility representatives or information shown on original construction plans by other. Information and location of service lines on site should be considered approximate and there may be underground utility lines that are not shown on the survey. Owner(s) and contractor(s) should assume responsibility of locating all underground utility service lines prior to any construction, excavation or any disturbance of the existing ground elevation to avoid hazard of unnecessary expense.
4. Information concerning major utilities or appurtenances shown hereon are based on visible evidence noted during the survey or information provided by utility representatives. Verification of existence, size, location, depth and availability of service should be confirmed by local utility agencies.
5. The property shown hereon is located within the City of Columbia, Maury County, TN. All matters pertaining to construction, use location of improvements, signage, parking, noise, vibration, emissions, fire hazards, radiation, illumination, setback provisions, etc., are subject to the City of Columbia's Zoning Regulation as interpreted and regulated by the Department of Planning and Codes.
6. The area of the parcels as shown hereon.
7. This property currently identified as Tax Map No. 042C, Group 'A', Parcel No. 049.00, 083.00, 097.00, 101.00, 111.00, 116.00, 117.00, 119.00, Maury County. For designation shown thus ( ) indicates Parcel Numbers for said map.
8. Plat reference: P24, Page 155
9. Deed reference: Book R2813, Page 689
10. Bearings based on: Tennessee State Plane, NAD 83.
11. This drawing was prepared in accordance with our field survey notes. It shows improvements as they exist to the best of our knowledge, but is not guaranteed to be correct in each and every detail.
12. This survey was prepared from current deeds of record and does not represent a title search or a guarantee of title, and is subject to any state of facts a current and accurate search may reveal.
13. This survey was prepared for the exclusive use of the person, persons, or entity, if any, named on the certification hereon. Said certificate does not extend to any unnamed person without an express re-certification by the surveyor naming said person.
14. The certification as provided on this survey, is purely a statement of professional opinion based on knowledge, information and belief, based on existing field evidence and documentary evidence provided by others.
15. The certification is not an expressed or implied warranty or guarantee.
16. This property is not located in a Special Flood Hazard Area as shown on F.E.M.A. Flood Insurance Rate Map, Community Panel No. 47119C0180E, dated April 16, 2007, and shown hereon graphically.
17. All public utility and drainage easements located on proposed lots are to be maintained by the individual property owner for said lot.
18. All property corners are ½" rebar with cap reading "WES 1987" unless otherwise noted.

SUBDIVISION
TYPICAL LOT LAYOUT
N.T.S.

CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C10	13.00'	19.84'	17.97'	S 49°52'51" W	87°27'32"
C11	13.00'	20.43'	18.39'	S 38°52'50" E	90°03'09"
C12	225.00'	41.36'	41.30'	S 89°10'22" E	10°31'55"
C22	275.00'	33.92'	33.90'	N 65°50'53" E	7°04'02"
C23	275.00'	2.07'	2.07'	N 69°40'50" E	0°25'51"
C47	13.00'	20.42'	18.38'	N 16°11'18" W	90°00'00"
C48	145.00'	63.79'	63.28'	N 18°12'29" E	25°12'25"
C49	95.00'	16.13'	16.11'	N 08°28'07" E	9°43'40"
C50	13.00'	18.21'	16.76'	N 53°28'07" E	80°16'20"
C51	13.00'	21.01'	18.80'	S 40°06'07" E	92°35'13"
C52	13.00'	20.40'	18.37'	S 51°08'33" W	89°54'06"
C53	125.00'	49.56'	49.24'	N 72°32'51" W	22°43'06"
C54	13.00'	20.44'	18.40'	N 38°51'27" W	90°05'54"
C55	13.00'	19.83'	17.97'	N 49°53'53" E	87°24'43"
C56	13.00'	21.00'	18.79'	S 40°07'29" E	92°32'28"
C57	13.00'	20.41'	18.38'	S 51°07'10" W	89°56'51"

LOT AREA TABLE

LOT	SQ. FT.	ACRES
17	2,565.5	0.06
27	2,586.8	0.06
73	2,560.8	0.06
79	2,560.8	0.06
OS-2	31,367.4	0.72
OS-3	16,427.1	0.38
OS-5	47,815.3	1.10

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

Legend

- EIP — Iron Rod/Pipe Found
- IPS — Iron Rod Set
- ECM — Concrete Monument Existing
- MAG — Mag Nail
- Fence Post
- T-Post
- Bench Mark
- Stake Found
- Fire Hydrant
- Water Meter
- Water Valve
- Water Reducer
- Post Indicator Valve
- Clean Out
- Sanitary Sewer Manhole
- Storm Sewer Manhole
- Curb Inlet
- Catch Basin
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- Cable Manhole
- Electric Manhole
- Telephone Manhole
- Water Manhole
- Electric Meter
- Electric Riser
- Cable Riser
- Telephone Riser
- Gas Meter
- Gas Valve
- Light Pole
- Power Pole
- Telephone Pole
- Guy Pole
- Power Pole
- Guy Wire
- Flag Pole
- Sign
- Parking Block
- Handicap Parking
- Bollard
- Water Spigot
- Mailbox
- Evergreen Tree
- Deciduous Tree
- Bush

Adjoining Property Line
Subject Property Line
Easement Line
Building Setback Line
Centerline
Edge of Pavement
Edge of Gravel
Fence Line
Landscape
Woods / Tree line
Edge of Water
Ditch / Creek Centerline
Minor Contour Line
Index Contour Line
Gas Line
Sanitary Sewer Line
Water Line
Storm Sewer Line
Overhead Utility Line
Overhead Cable Line
Overhead Electric Line
Overhead Telephone Line
Underground Utility Line
Underground Cable Line
Underground Electric Line
Underground Telephone Line
Forced Main Line
Lot Address Label

OPEN SPACE, BUFFERS, & RETAINING WALL NOTE:
ALL OPEN SPACE AREA, BUFFERS, & RETAINING WALLS WITHIN RETAINING WALL EASEMENTS IS TO BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION, CREATED FOR THE PURPOSE OF MAINTAINING ALL COMMON OPEN SPACE AND GROUNDS INCLUDING THE DETENTION AREAS SHOWN ON THIS PLAT. ALL OPEN SPACE AREA IS CONSIDERED A PUBLIC UTILITY, AND DRAINAGE EASEMENT.

CERTIFICATE OF OWNERSHIP AND DEDICATION

I, (we) hereby certify that I am (we are) the owner(s) of the property shown and described hereon as evidenced in Book Number *see below, Page *see below, Maury County Registers Office, and that I (we) hereby adopt this plan of subdivision with my (our) free consent, establish the minimum building restriction lines, and that offers of irrevocable dedication for all public ways, utilities, and other facilities have been filed.

Deed Book R2813, Page 689

Date — GH Tennessee, LLC

CERTIFICATE OF APPROVAL FOR SUBDIVISION NAME AND STREET NAMES

Subdivision name and street names approved by the City Engineering Department and by E-911 Maury County.

Date — Maury County E-911
Columbia, Tennessee

CERTIFICATE OF COMPLIANCE

I hereby certify that the subdivision plat shown hereon has been found to comply with the City of Columbia Subdivision Regulations and other adopted ordinances and policies.

Date — City Engineer
Columbia, Tennessee

CERTIFICATE OF APPROVAL FOR RECORDING

I hereby certify that the subdivision plat shown hereon has been found to comply with the City of Columbia Subdivision Regulations, with the exception of such variances, if any, as are noted in the minutes of the Planning Commission, and that it has been approved for recording in the Office of the County Register:

Date — Secretary, Planning Commission
Columbia, Tennessee

SURVEYOR'S CERTIFICATION (TENNESSEE)

I hereby certify that to the best of my knowledge and belief this is a true and accurate survey of the property shown hereon; that this is a category "I" Land Survey as defined in Title 62, Chapter 18, Tennessee Code Annotated, and that the ratio of precision is greater than or equal to 1:10,000.

3/16/26 — Date
Allen B. O'Leary — Allen B. O'Leary
TN RLS #1987 — Number

Register of Deed Recording Stamp

ALLEN B. O'LEARY
REGISTERED LAND SURVEYOR
AGRICULTURE OF
TENNESSEE
TENNESSEE NO. 1987

Client
DRB GROUP
4068 RURAL PLAINS CIRCLE
SUITE 200
FRANKLIN, TN 37064

FINAL PLAT
MCCLURE FARMS, PHASE 2, REVISION TO LOTS
NASHVILLE HWY, COLUMBIA, TN

REVISIONS	DATE

Drawn: EB
Checked: AO
Approved: AO
Date: 03-16-2026

Job. no. 23572-1
Scale: Vertical: 1" = 50'
Horizontal:

1 of 1

FILE: J:\WES_Engineers_Surveyors 2023\23572 - McClure Farms - Smith\23572-1 Briteland Homes\Dwg\Survey\02 - Final Plat\23572-1 - McClure Farms - P2 - Final Plat Revised Lot Width.dwg

Completed with original McClure Phase 2 submittal and recording.

March 16, 2026

City of Columbia
Development Services
700 North Garden Street
Columbia, TN 38401

RE: **Project Name: McClure Farms Phase 2, Revision to Lots Final Plat**
City of Columbia Staff Review Submittal

On behalf of GH Tennessee, LLC, the owner of these 5 single family townhome lots and 3 open spaces, **WES Engineers & Surveyors** would like to submit this Final Plat to the City of Columbia for Planning Commission approval.

If you have any questions or comments with this submittal, please do not hesitate to contact me directly.

Sincerely,
WES Engineers & Surveyors



Allen B. O'Leary, RLS
Principal

RESERVE AT HICKORY RIDGE, PHASE 2

1690 BEAR CREEK PIKE, 4TH CIVIL DISTRICT MAP 072, PARCEL 066.00, & MAP 093, PARCEL 003.00 & 003.02, R.O.M.C., TN.
COLUMBIA, MAURY COUNTY, TENNESSEE
NOVEMBER 8, 2024

DEVELOPER/OWNER:	D.R. HORTON
Parcel Address:	1690 BEAR CREEK PIKE COLUMBIA, TN 37064
Parcel Acreage:	+/- 155.5 Acres
Zoning:	CD-3 (NEIGHBORHOOD CHARACTER DISTRICT)
Recorded Deed:	Deed Book R2974, Page 443 R.O.M.C. Deed Book R2974, Page 432 R.O.M.C.

SURVEYOR & ENGINEER
THOUVENOT, WADE & MOERCHEN, INC.
390 MALLORY STATION ROAD, SUITE 100
FRANKLIN, TENNESSEE 37067

CONTACT: TKC ENGINEERING
615-617-7477
cole@tkc-ae.com

CONTACT: ROGER HARRAH
615-814-7414
rharrah@twm-inc.com

OWNER / SUBDIVIDER
D.R. HORTON
1210 PREMIER DRIVE, SUITE 100
CHATTANOOGA, TENNESSEE 37421
(423) 497-1380
drhorton.com

OWNER / PARCEL 409
LARRY ANDERSON
1740 BEAR CREEK PIKE
COLUMBIA, TN 38401

Phase 2 Parcel Area Table		
PARCEL	SQ. FT.	ACRES
104	6821	0.157
105	5564	0.128
106	5501	0.126
107	5912	0.136
108	5429	0.125
109	5350	0.123
110	5350	0.123
111	5350	0.123
112	5350	0.123
113	7541	0.173
160	11925	0.274
161	10050	0.231
162	10050	0.231
163	9983	0.229
164	9838	0.226
165	10050	0.231
166	10050	0.231
167	10046	0.231
168	9663	0.222
180	7706	0.177
181	5521	0.127
182	5370	0.123
183	5350	0.123
184	5350	0.123
185	5350	0.123
186	5500	0.126
187	5500	0.126
188	5500	0.126
189	6028	0.138
190	5511	0.127

Phase 2 Parcel Area Table		
PARCEL	SQ. FT.	ACRES
191	7412	0.170
344	16655	0.382
345	14122	0.324
346	10520	0.241
347	5610	0.129
348	6970	0.160
349	8180	0.188
366	7116	0.163
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368	5779	0.133
369	5349	0.123
370	5350	0.123
371	5329	0.122
372	5000	0.115
373	5000	0.115
374	5000	0.115
377	6401	0.147
378	6621	0.152
379	7589	0.174
380	6109	0.140
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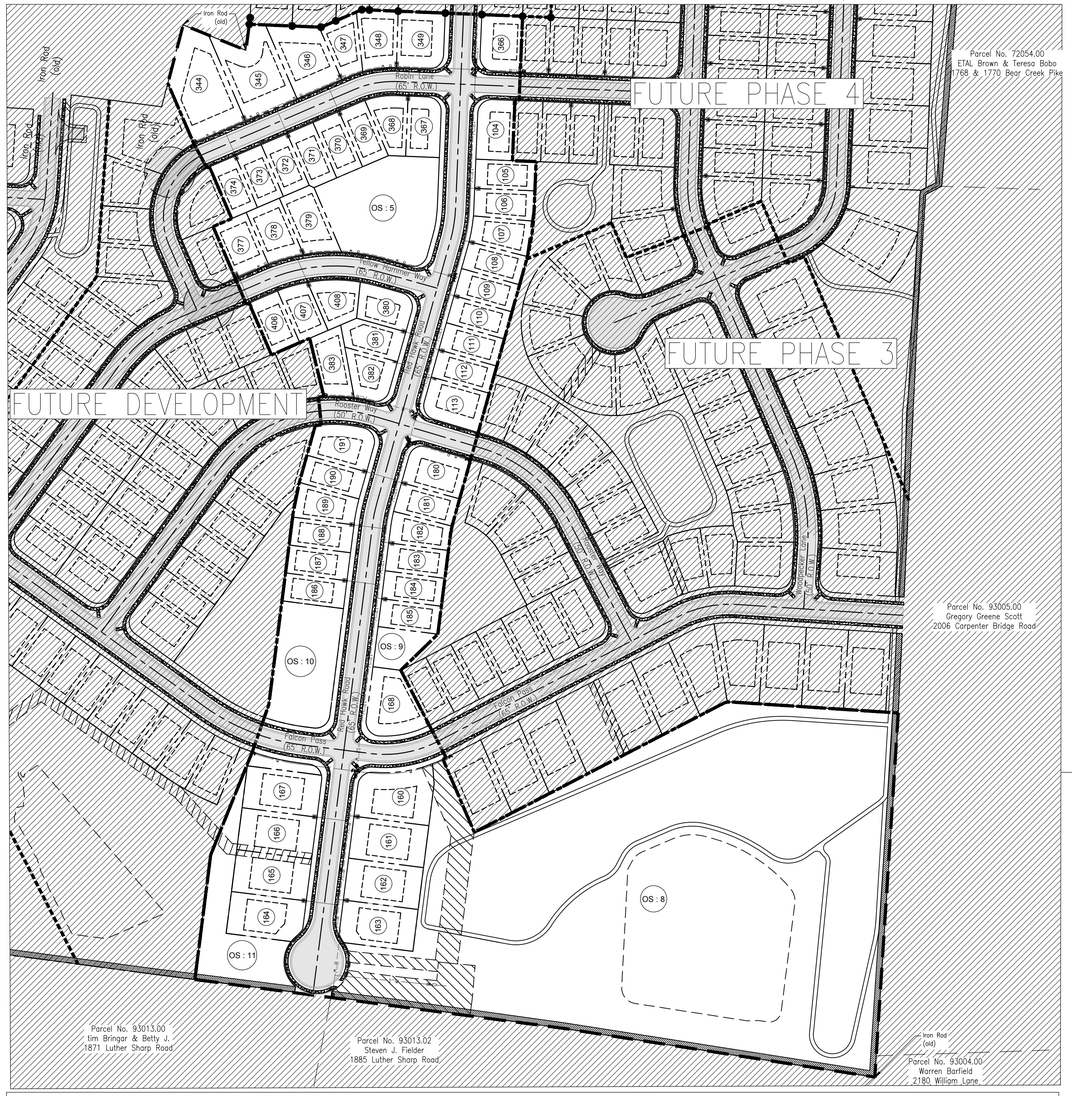
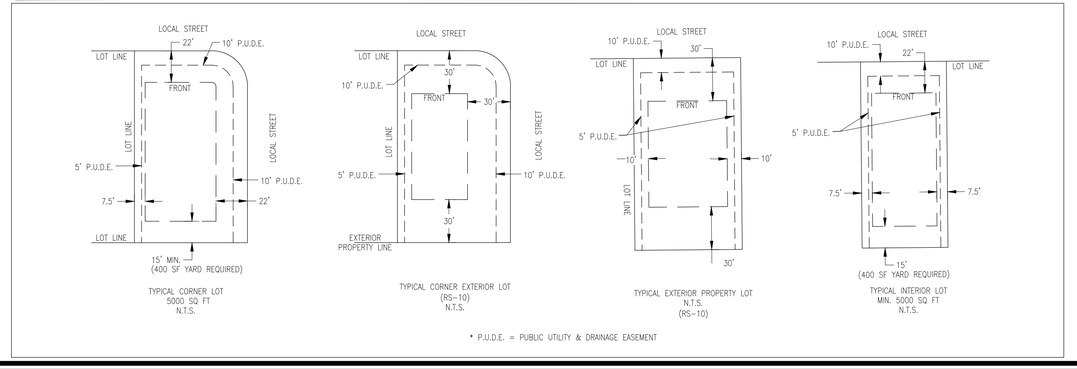




LOT DEVELOPMENT

MINIMUM LOT SIZE = 5000 SQ FT. CLUSTER / 10000 SQ FT RS-10

1. SITE AREA 2= 1,116,872 SF / 25.639 ACRES
2. Base property Zoning is RS-10 Residential/Cluster Design

MINIMUM LOT SIZE	5000 SF (CLUSTER)	10000 SF (RS-10):
SETBACKS:	RS-10	UNDER 10000 SF:
FRONT:	30 FEET	22'
SIDE SETBACKS:	10 FEET	7.5'
REAR SETBACKS :	30 FEET	15'MIN. (400 SQ FT YARD)

Open Space Area Table

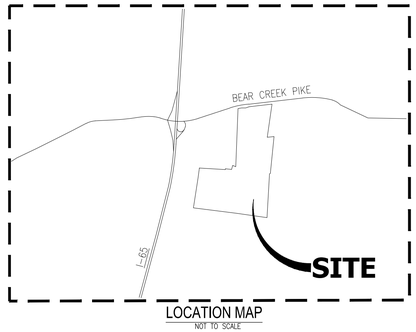
PARCEL	SQ. FT.	ACRES
OS:5	22,825	0.524
PART OF OS:8	441,709	10.140
PART OF OS:9	3,296	0.076
PART OF OS:10	14,128	0.324
PART OF OS:11	22,878	0.525

AREA SUMMARY	
AREA IN LOTS:	6.108 ACRES
AREA IN R.O.W.:	7.942 ACRES
OPEN SPACE AREA:	11.589 ACRES
TOTAL AREA:	25.639 ACRES

GENERAL NOTES

The purpose of this plat it to create 56 single family lots and 5 open space lots, establish easements, and dedicate right-of-way, as shown for Phase 2 of "RESERVE AT HICKORY RIDGE".

1. *Bearings as shown hereon are reference to the Tennessee Coordinate System of 1983.*
2. *By scaled map location and graphic plotting only, this property lies within Flood Zone "X", as designated on current Federal Emergency Management Agency Map No. 47119C0195E with an effective date of April 16, 2007, which makes up a part of the National Flood Insurance Administration Report; Community No. 470123, Panel No. 0195 Suffix E, which is the current Flood Insurance Rate Map for the community in which said premises is situated. Said map defines Zone "X" under "Other Areas" as areas determined to be outside the 500-Year Flood Plain.*
3. *Base property Zoning is RS-10 Residential/Cluster Design*
4. *This map or plat and the survey on which it is based were made in accordance with the requirements of a General Property Survey and conforms to the accuracy of a Category I Survey as currently defined and adopted by the Tennessee State Board of Examiners for Land Surveyors and the ratio of precision of the unadjusted survey is less than 1:10,000.*
5. *Critical Lots are denoted with (*) . Engineered site plans will need to be provided for theses lots, due to the presence of 15-25% slopes.*
6. *All streets designated public and as such are public utility, access and drainage easements.*
7. *All public streets and drainage structures within the rights-of-way will be maintained by the City of Columbia, once accepted for maintenance by City Council.*
8. *Open space areas and all landscaping within roadway medians shall be maintained by the homeowner's association.*
9. *Open space tracts are also public utility, drainage and access easements.*
10. *All public utility and drainage easements located on proposed lots are to be maintained by the individual property owner for said lot.*
11. *During construction phase each unit shall have pedestrian and vehicular access to all amenities at Planning Final inspection before C.O, is released. Construction will conform to this standard.*
12. *The HOA will be responsible for the monument signs and the mail kiosk area.*
13. *Private Stormwater Management Facilities shown on this Final Plat shall be maintained as directed in the Long Term Maintenance Plan as recorded in Record Book _____ , Pages____-_____ in the Register's of Deed's Office of Maury County, Tennessee.*
14. *Current zoning is CD-3. The development is vested under a previous zoning ordinance (ZO3638) and was zoned RS-10.*
15. *The subdivision was previously referred to as Dabbs Subdivision.*



LOCATION MAP
NOT TO SCALE

CERTIFICATE OF APPROVAL OF WATER SYSTEM

I hereby certify that the water system (s) outlined or indicated on this final subdivision plat has/have been installed in accordance with current local and state government requirements, or a sufficient bond or other surety has been filed to guarantee said installation.

Name _____ Date _____

Title _____ Authorizing Agency _____

CERTIFICATE OF APPROVAL OF STREETS, DRAINAGE, AND UTILITIES

I hereby certify that the streets, drainage, and utilities outlined or indicated on this final subdivision plat have been installed in accordance with City specifications, or a performance surety in the amount of $____ for streets and drainage has been posted with the City of Columbia, Tennessee, to assure completion of such improvements.

City Engineer _____ Date _____
Columbia, Tennessee

CERTIFICATE OF OWNERSHIP AND DEDICATION

I (we) hereby certify that I am (we are) the owner (s) of the property shown and described hereon as evidenced in Book R2974, Page 443 (Tract 1) , and Book R2974, Page 432 (Tract 2) , Maury County Registers Office, and adopt this final subdivision plat of the property as shown hereon and dedicate all public ways and easements as noted with my (our) free consent.

Owner (s) _____ Date _____

Title (if action for corporation or partnership) _____

CERTIFICATE OF ACCURACY

I (we) hereby certify that to the best of my (our) knowledge and belief this is a true and accurate survey of the property shown hereon; that this is a class "____" Land Survey as defined in Title 62, Chapter 18, Tennessee Code Annotated, and that the ratio of precision is greater than or equal to 1: __.

Date _____ Registered Surveyor, R.L.S. 2039 _____

CERTIFICATE OF APPROVAL FOR RECORDING

I hereby certify that the final subdivision plat shown hereon has been found to comply with the City of Columbia Subdivision Regulations, with the exception of such variances, if any, as noted in the minutes of the Columbia Municipal Planning Commission, and that it has been approved for recording in the Office of the Maury County Register of Deeds.

Planning Director _____ Date _____
Columbia, Tennessee

CERTIFICATE OF ADDRESSES

Subdivision name and street names approved by the City Engineering Department and by E-911 Maury County.

Maury County E-911 _____ Date _____

CERTIFICATE OF SANITARY SEWER SYSTEM

I hereby certify that the sanitary sewer system outlined or indicated on this final subdivision plat has been installed in accordance with the current local and state government requirements, or a sufficient bond or other surety has been filed to guarantee said installation.

Director of Wastewater Department _____ Date _____
Columbia, Tennessee

CERTIFICATE OF COMPLIANCE

I hereby certify that the final subdivision plat shown hereon has been found to comply with the City of Columbia Subdivision Regulations and other adopted ordinances and policies.

City Engineer _____ Date _____
Columbia, Tennessee

TWM
CONSULTING ENGINEERING
GEOSPATIAL SERVICES
ILLINOIS: SWANSEA, COLUMBIA, GLEN CARBON, PEORIA, DECATUR
MISSOURI: ST. CHARLES, ST. LOUIS, COLUMBIA
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PROF. LICENSE NUMBER	
IL. PROF. DESIGN FIRM	184-001220
IL. PROF. ENGR. CORP.	62-035370
IL. PROF. STR. ENGR. CORP.	81-005202
IL. PROF. LAND SURV. CORP.	048-000029
KS. PROF. ENGR. FACILITY	E-3256
MO. PROF. ENGR. CORP.	001528
MO. LAND SURVEYING CORP.	000346
TN. PROF. ENGR. FIRM	8974

SEAL

ROGER HARRAH — REGISTERED LAND SURVEYOR — TENNESSEE NO. 2039

SIGNATURE:
DATE SIGNED:

ISSUED FOR
DATE OF ISSUANCE

REV.	DATE	DESCRIPTION
△		
△		
△		
△		
△		

DRAWN BY:	MDS
DESIGNED BY:	TKC
CHECKED BY:	RH
APPROVED BY:	RH
PROJECT NO:	211205A

PROJECT:

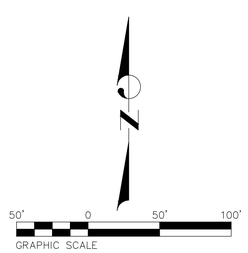
FINAL PLAT
RESERVE AT HICKORY RIDGE
CITY OF COLUMBIA
MAURY COUNTY, TENNESSEE

TITLE:

COVER SHEET

1 OF 4

L:\2021\211205A\4 CADD - DWG\4.6 Surv\PHASE 2\Drafts\211205A-Revised Phase 2 Plat.dwg Plotted By: dsmith



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106	5501	0.126
107	5912	0.136
108	5429	0.125
109	5350	0.123
110	5350	0.123
111	5350	0.123
112	5350	0.123
113	7541	0.173
160	11925	0.274
161	10050	0.231
162	10050	0.231
163	9983	0.229
164	9838	0.226
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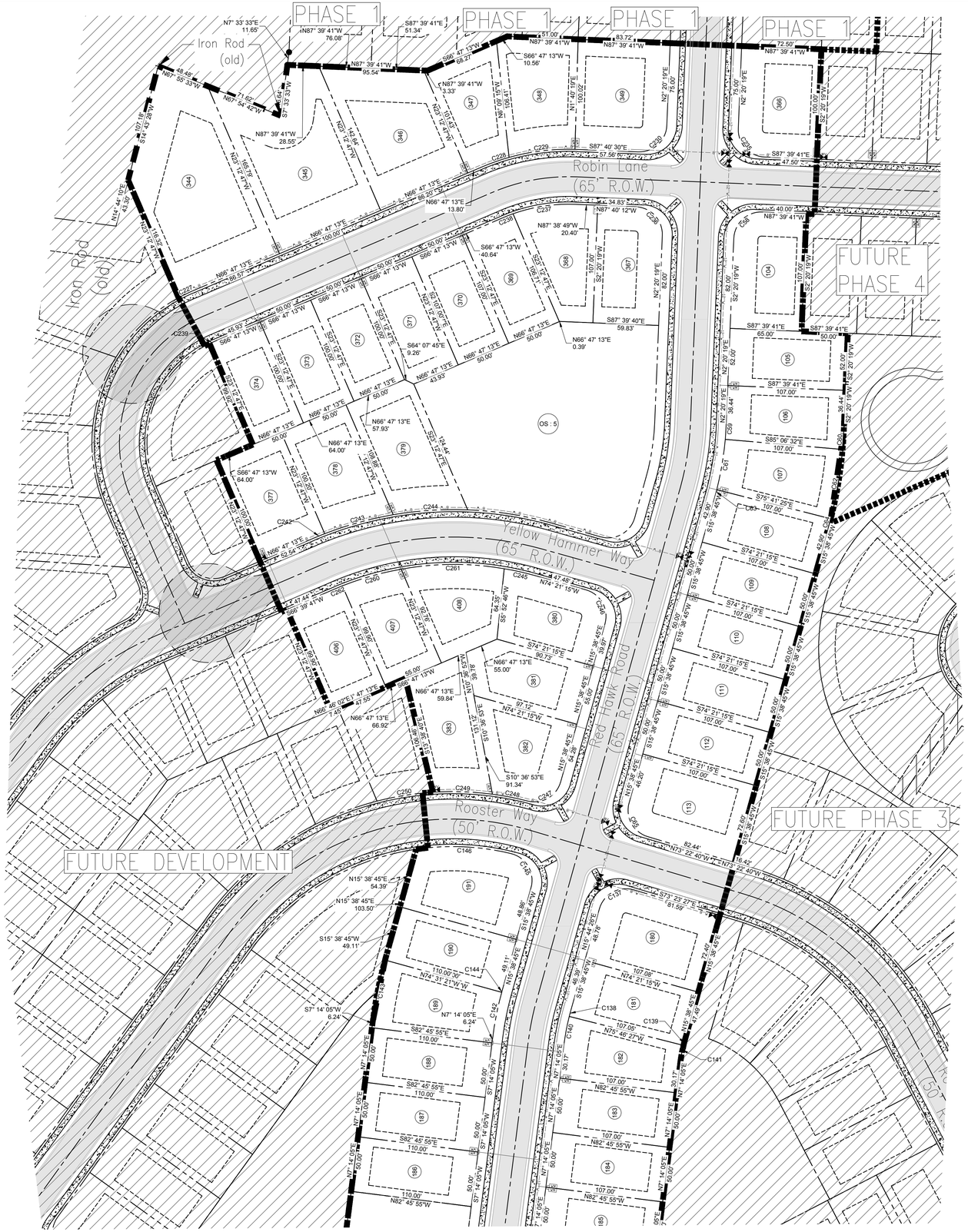
PHASE 1
PHASE 1
PHASE 1
PHASE 1
Iron Rod (old)
Iron Rod (old)
Robin Lane (65' R.O.W.)
Yellow Hammer Way (65' R.O.W.)
Red Hawk Road (65' R.O.W.)
Rooster Way (50' R.O.W.)
FUTURE PHASE 4
FUTURE PHASE 3
FUTURE DEVELOPMENT
OS : 5
N7° 33' 33"E 11.65'
N87° 39' 41"W 76.08'
S87° 39' 41"E 51.34'
N87° 39' 41"W 95.54'
N87° 39' 41"W 83.72'
N87° 39' 41"W 72.50'
S66° 47' 13"W 68.27'
S66° 47' 13"W 10.56'
N87° 39' 41"W 3.33'
N87° 39' 41"W 28.55'
N87° 48' 48"W 71.62'
N87° 58' 33"W
N87° 54' 42"W
S87° 40' 30"E 57.56'
S87° 39' 41" 47.50'
N66° 47' 13"E 13.80'
N87° 40' 12"W 34.83'
N87° 38' 49"W 20.40'
S66° 47' 13"W 40.64'
N66° 47' 13"E 86.57'
N66° 47' 13"E 100.00'
S87° 39' 40"E 59.83'
S64° 07' 45"E 9.26'
N66° 47' 13"E 0.39'
N66° 47' 13"E 43.93'
N66° 47' 13"E 57.93'
N66° 47' 13"E 64.00'
S66° 47' 13"W 64.00'
N66° 47' 13"E 52.54'
N74° 21' 15"W 47.48'
S74° 21' 15"E 90.73'
N66° 47' 13"E 55.00'
N66° 47' 13"E 59.84'
N66° 47' 13"E 66.92'
N66° 47' 13"E 1.45'
S10° 36' 53"E 91.34'
S74° 21' 15"E 97.12'
N74° 21' 15"W
S74° 21' 15"E 107.00'
S87° 39' 41"E 65.00'
S87° 39' 41"E 50.00'
S87° 39' 41"E 107.00'
S85° 06' 32"E 107.00'
S76° 21' 25"E 107.00'
S74° 21' 15"E 107.00'
N73° 25' 40"W 82.44'
N73° 25' 40"W 16.42'
S73° 23' 27"E 61.69'
N74° 21' 15"W 107.06'
S75° 46' 27"W 107.06'
N82° 45' 55"W 107.00'
S82° 45' 55"E 110.00'
N74° 31' 21"W 110.00'
N15° 38' 45"E 54.39'
N15° 38' 45"E 103.50'
S15° 38' 45"W 49.11'
N7° 14' 05"E 6.24'
S7° 14' 05"W 6.24'
N82° 45' 55"W
S82° 45' 55"E
N7° 14' 05"E 50.00'
S7° 14' 05"W 50.00'
N15° 38' 45"E 46.39'
S15° 38' 45"W 48.86'
N15° 38' 45"E 49.11'
N15° 38' 45"E 47.46'
N15° 38' 45"E 46.20'
S15° 38' 45"W 72.40'
S15° 38' 45"W 50.00'
N16° 44' 40"E 48.78'
S16° 44' 40"W 48.78'
N74° 21' 15"W 30.17'
S74° 21' 15"E 30.17'
S15° 38' 45"W 42.49'
S15° 38' 45"W 50.00'
N15° 38' 45"E 50.00'
N15° 38' 45"E 55.00'
S15° 38' 45"W 50.00'
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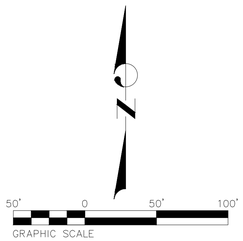

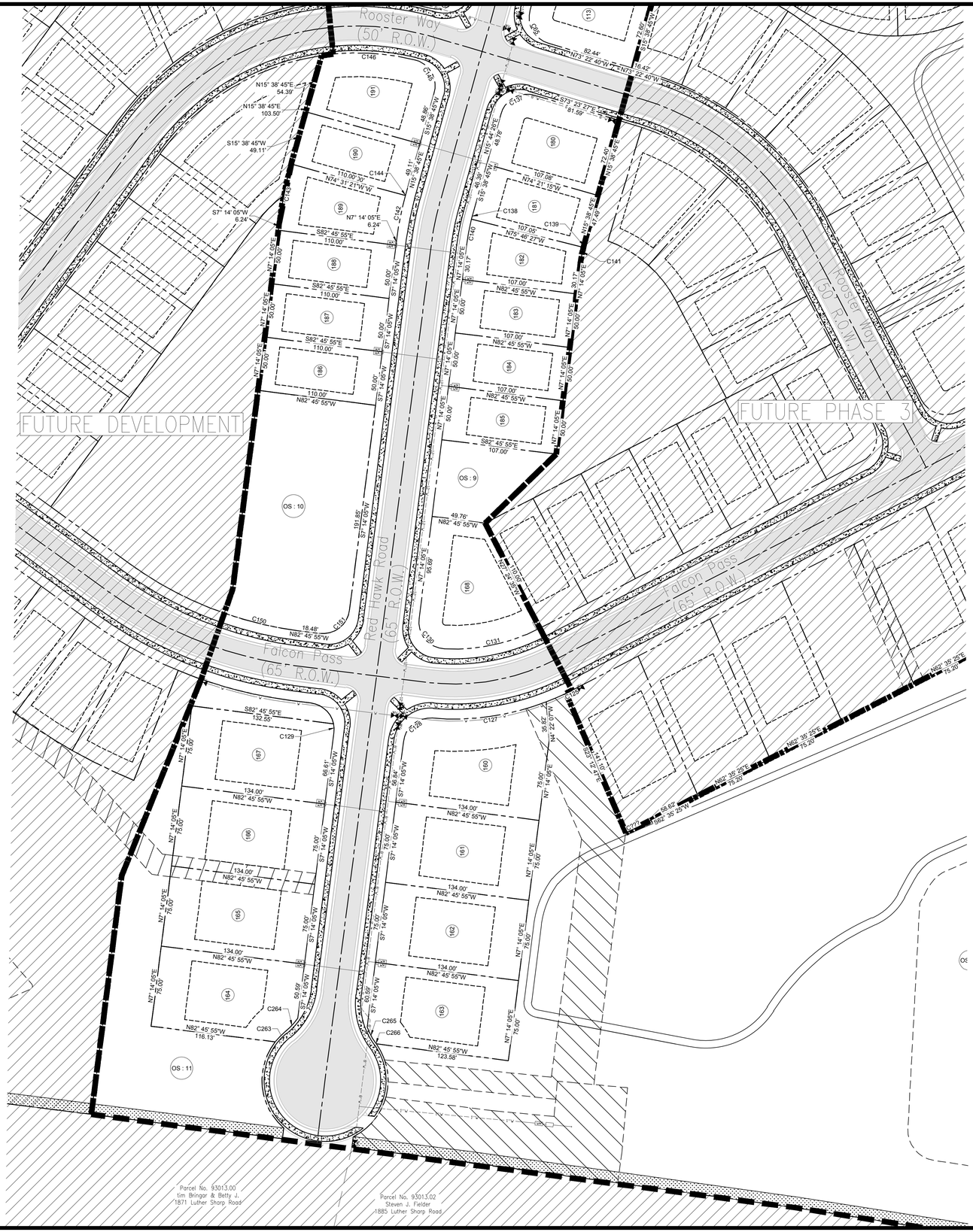

LEGEND

- STORM CATCH BASIN
- SET IRON PIN
- SET CONCRETE MONUMENT
- PROPOSED FIRE HYDRANT
- PROPOSED WATER METER
- PROPOSED WATER VALVE
- PROPOSED STORM INLET
- PROPOSED SANITARY MANHOLE
- EXISTING RIGHT-OF-WAY LINE
- EXISTING LOT LINE
- EXISTING EASEMENT LINE
- RIGHT-OF-WAY LINE
- EASEMENT LINE
- CENTERLINE
- MINIMUM SETBACK LINE
- PROPERTY LINE
- SUBJECT PROPERTY BOUNDARY
- PROPOSED STORM SEWER SYSTEM
- PROPOSED WATERMAIN SYSTEM
- PROPOSED SANITARY SEWER SYSTEM
- PROPOSED 5' SIDEWALK

Phase 2
Parcel Area Table

PARCEL	SQ. FT.	ACRES
104	6821	0.157
105	5564	0.128
106	5501	0.126
107	5912	0.136
108	5429	0.125
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382	6048	0.139
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406	5497	0.126
407	5350	0.123
408	5809	0.133

Curve Table

Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C57	39.27	25.00	90.00	S42° 39' 41"E	35.36
C58	39.27	25.00	90.00	S47° 20' 19"W	35.36
C59	12.58	282.50	2.55	N3° 36' 53"E	12.58
C60	17.35	389.50	2.55	S3° 36' 53"W	17.35
C61	46.43	299.88	8.87	N9° 36' 01"E	46.39
C62	64.03	389.50	9.42	S9° 36' 01"W	63.96
C63	6.59	282.50	1.34	S14° 58' 40"W	6.59
C64	9.08	389.50	1.34	N14° 58' 40"E	9.08
C121	39.61	172.50	13.15	N87° 11' 01"E	39.52
C123	40.47	172.50	13.44	N73° 53' 09"E	40.37
C124	4.82	31.06	8.90	S77° 37' 39"W	4.82
C125	6.27	237.50	1.51	N63° 20' 50"E	6.27
C127	107.57	235.67	26.15	S81° 51' 30"W	106.64
C128	38.24	25.00	87.65	S51° 03' 33"W	34.62
C129	8.56	25.00	19.61	S2° 34' 14"E	8.51
C130	41.10	25.00	94.19	N39° 51' 31"W	36.62
C131	91.70	172.50	30.46	S77° 49' 09"W	90.62
C137	39.70	25.00	90.98	N61° 08' 03"E	35.66
C138	6.49	225.00	1.65	S14° 49' 11"W	6.49
C139	2.74	110.50	1.42	N14° 56' 09"E	2.74
C140	26.54	225.00	6.76	N10° 36' 51"E	26.53
C141	13.48	110.50	6.99	S10° 43' 49"W	13.48
C142	40.64	282.50	8.24	N11° 21' 22"E	40.61
C143	56.47	392.50	8.24	N11° 21' 22"E	56.42
C144	0.83	282.50	0.17	S15° 33' 42"W	0.83
C145	40.12	25.00	91.95	S30° 19' 50"E	35.95
C146	86.91	225.00	22.13	S87° 22' 20"E	86.37
C151	39.27	25.00	90.00	S52° 14' 05"W	35.36
C227	13.45	150.00	5.14	N64° 13' 09"E	13.44
C228	26.33	200.00	7.54	N70° 33' 28"E	26.31
C229	60.54	200.00	17.34	N83° 00' 02"E	60.31
C230	39.27	25.00	90.00	N47° 20' 19"E	35.36
C235	39.27	25.00	90.00	S42° 39' 41"E	35.36
C236	39.27	25.00	90.00	N42° 39' 41"W	35.36
C237	57.53	150.00	21.97	S81° 21' 06"W	57.18
C238	9.37	150.00	3.58	S68° 34' 33"W	9.36
C239	4.07	100.00	2.33	S65° 37' 18"W	4.07
C242	11.46	325.00	2.02	N67° 47' 50"E	11.46
C243	64.69	325.00	11.40	S74° 30' 35"W	64.59
C244	67.98	325.00	11.99	S86° 12' 18"W	67.86
C245	29.22	275.00	6.09	N77° 23' 54"W	29.21
C246	39.27	25.00	90.00	N29° 21' 15"W	35.36
C247	38.70	25.00	88.70	N59° 59' 42"E	34.95
C248	32.40	275.00	6.75	S79° 01' 50"E	32.38
C249	54.15	275.00	11.28	N88° 02' 48"W	54.07
C260	55.56	271.98	11.70	N74° 10' 55"E	55.46
C261	94.19	265.80	20.30	S89° 43' 46"W	93.70
C262	7.56	275.00	1.58	S67° 34' 29"W	7.56
C263	13.23	58.50	12.95	S44° 16' 59"W	13.20
C264	17.11	61.50	15.94	S42° 47' 24"W	17.05
C265	17.10	61.51	15.93	S28° 19' 57"E	17.04
C266	0.74	58.50	0.73	S35° 55' 56"E	0.74

TWM
CONSULTING ENGINEERING
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KS. PROF. ENGR. FACILITY	E-3256
MO. PROF. ENGR. CORP.	001528
MO. LAND SURVEYING CORP.	000346
TN. PROF. ENGR. FIRM	8974

SEAL
ROGER HARRAH
REGISTERED LAND SURVEYOR
TENNESSEE NO. 2039

SIGNATURE:
DATE SIGNED:

ISSUED FOR
DATE OF ISSUANCE

REV.	DATE	DESCRIPTION
△		
△		
△		
△		
△		

DRAWN BY: MDS
DESIGNED BY: TKC
CHECKED BY:
APPROVED BY: RH
PROJECT NO: 211205A

PROJECT:

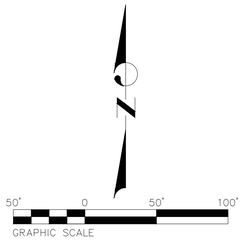
FINAL PLAT
RESERVE AT HICKORY RIDGE
CITY OF COLUMBIA
MAURY COUNTY, TENNESSEE

TITLE:

PHASE 2-2

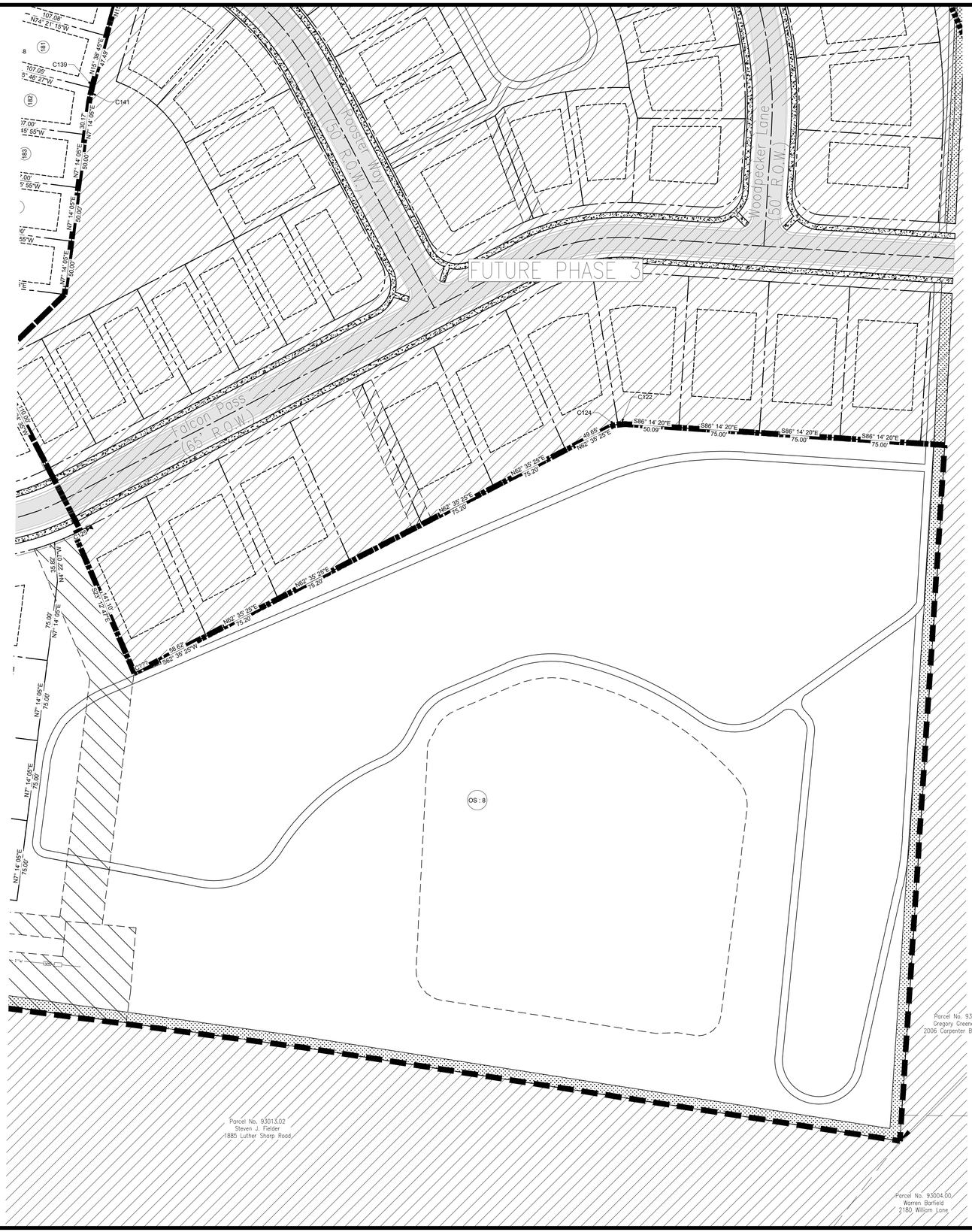
3 OF 4

I:\2021\211205A\4. CADD - DWG\4.6. Surv\PHASE 2\Drafts\211205A-Revised Phase 2 Plat.dwg Plotted By: dsmith



Phase 2 Parcel Area Table		
PARCEL	SQ. FT.	ACRES
104	6821	0.157
105	5564	0.128
106	5501	0.126
107	5912	0.136
108	5429	0.125
109	5350	0.123
110	5350	0.123
111	5350	0.123
112	5350	0.123
113	7541	0.173
160	11925	0.274
161	10050	0.231
162	10050	0.231
163	9983	0.229
164	9838	0.226
165	10050	0.231
166	10050	0.231
167	10046	0.231
168	9663	0.222
180	7706	0.177
181	5521	0.127
182	5370	0.123
183	5350	0.123
184	5350	0.123
185	5350	0.123
186	5500	0.126
187	5500	0.126
188	5500	0.126
189	6028	0.138
190	5511	0.127

Phase 2 Parcel Area Table		
PARCEL	SQ. FT.	ACRES
191	7412	0.170
344	16655	0.382
345	14122	0.324
346	10520	0.241
347	5610	0.129
348	6970	0.160
349	8180	0.188
366	7116	0.163
367	6268	0.144
368	5779	0.133
369	5349	0.123
370	5350	0.123
371	5329	0.122
372	5000	0.115
373	5000	0.115
374	5000	0.115
377	6401	0.147
378	6621	0.152
379	7589	0.174
380	6109	0.140
381	5764	0.132
382	6048	0.139
383	6552	0.150
406	5497	0.126
407	5350	0.123
408	5809	0.133



LEGEND

- STORM CATCH BASIN
- SET IRON PIN
- SET CONCRETE MONUMENT
- PROPOSED FIRE HYDRANT
- PROPOSED WATER METER
- PROPOSED WATER VALVE
- PROPOSED STORM INLET
- PROPOSED SANITARY MANHOLE
- EXISTING RIGHT-OF-WAY LINE
- EXISTING LOT LINE
- EXISTING EASEMENT LINE
- RIGHT-OF-WAY LINE
- EASEMENT LINE
- CENTERLINE
- MINIMUM SETBACK LINE
- PROPERTY LINE
- SUBJECT PROPERTY BOUNDARY
- PROPOSED STORM SEWER SYSTEM
- PROPOSED WATERMAIN SYSTEM
- PROPOSED SANITARY SEWER SYSTEM
- PROPOSED 5' SIDEWALK

Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C57	39.27	25.00	90.00	S42° 39' 41"E	35.36
C58	39.27	25.00	90.00	S47° 20' 19"W	35.36
C59	12.58	282.50	2.55	N3° 36' 53"E	12.58
C60	17.35	389.50	2.55	S3° 36' 53"W	17.35
C61	46.43	299.88	8.87	N9° 36' 01"E	46.39
C62	64.03	389.50	9.42	S9° 36' 01"W	63.96
C63	6.59	282.50	1.34	S14° 58' 40"W	6.59
C64	9.08	389.50	1.34	N14° 58' 40"E	9.08
C121	39.61	172.50	13.15	N87° 11' 01"E	39.52
C123	40.47	172.50	13.44	N73° 53' 09"E	40.37
C124	4.82	31.06	8.90	S77° 37' 39"W	4.82
C125	6.27	237.50	1.51	N63° 20' 50"E	6.27
C127	107.57	235.67	26.15	S81° 51' 30"W	106.64
C128	38.24	25.00	87.65	S51° 03' 33"W	34.62
C129	8.56	25.00	19.61	S2° 34' 14"E	8.51
C130	41.10	25.00	94.19	N39° 51' 31"W	36.62
C131	91.70	172.50	30.46	S77° 49' 09"W	90.62
C137	39.70	25.00	90.98	N61° 08' 03"E	35.66
C138	6.49	225.00	1.65	S14° 49' 11"W	6.49
C139	2.74	110.50	1.42	N14° 56' 09"E	2.74
C140	26.54	225.00	6.76	N10° 36' 51"E	26.53
C141	13.48	110.50	6.99	S10° 43' 49"W	13.48
C142	40.64	282.50	8.24	N11° 21' 22"E	40.61
C143	56.47	392.50	8.24	N11° 21' 22"E	56.42
C144	0.83	282.50	0.17	S15° 33' 42"W	0.83
C145	40.12	25.00	91.95	S30° 19' 50"E	35.95
C146	86.91	225.00	22.13	S87° 22' 20"E	86.37
C151	39.27	25.00	90.00	S52° 14' 05"W	35.36
C227	13.45	150.00	5.14	N64° 13' 09"E	13.44
C228	26.33	200.00	7.54	N70° 33' 28"E	26.31
C229	60.54	200.00	17.34	N83° 00' 02"E	60.31
C230	39.27	25.00	90.00	N47° 20' 19"E	35.36
C235	39.27	25.00	90.00	S42° 39' 41"E	35.36
C236	39.27	25.00	90.00	N42° 39' 41"W	35.36
C237	57.53	150.00	21.97	S81° 21' 06"W	57.18
C238	9.37	150.00	3.58	S68° 34' 33"W	9.36
C239	4.07	100.00	2.33	S65° 37' 18"W	4.07
C242	11.46	325.00	2.02	N67° 47' 50"E	11.46
C243	64.69	325.00	11.40	S74° 30' 35"W	64.59
C244	67.98	325.00	11.99	S86° 12' 18"W	67.86
C245	29.22	275.00	6.09	N77° 23' 54"W	29.21
C246	39.27	25.00	90.00	N29° 21' 15"W	35.36
C247	38.70	25.00	88.70	N59° 59' 42"E	34.95
C248	32.40	275.00	6.75	S79° 01' 50"E	32.38
C249	54.15	275.00	11.28	N88° 02' 48"W	54.07
C260	55.56	271.98	11.70	N74° 10' 55"E	55.46
C261	94.19	265.80	20.30	S89° 43' 46"W	93.70
C262	7.56	275.00	1.58	S67° 34' 29"W	7.56
C263	13.23	58.50	12.95	S44° 16' 59"W	13.20
C264	17.11	61.50	15.94	S42° 47' 24"W	17.05
C265	17.10	61.51	15.93	S28° 19' 57"E	17.04
C266	0.74	58.50	0.73	S35° 55' 56"E	0.74

TWM
CONSULTING ENGINEERING
GEOSPATIAL SERVICES

ILLINOIS	SWANSEA COLUMBIA GLEN CARBON PEORIA DECATUR
MISSOURI	ST. CHARLES ST. LOUIS COLUMBIA
TENNESSEE	NASHVILLE CHATTANOOGA ATHENS

THOUVENOT, WADE & MOERCHEN, INC.

NASHVILLE OFFICE
390 MALLORY STATION RD.
SUITE 100, FRANKLIN, TENNESSEE
37067-8279
(615)-814-7414
WWW.TWM-INC.COM

PROF. LICENSE	NUMBER
IL. PROF. DESIGN FIRM	184-001220
IL. PROF. ENGR. CORP.	62-035370
IL. PROF. STR. ENGR. CORP.	81-005202
IL. PROF. LAND SURV. CORP.	048-000029
KS. PROF. ENGR. FACILITY	E-3256
MO. PROF. ENGR. CORP.	001528
MO. LAND SURVEYING CORP.	000346
TN. PROF. ENGR. FIRM	8974

SEAL



SIGNATURE:
DATE SIGNED:

ISSUED FOR
DATE OF ISSUANCE

REV.	DATE	DESCRIPTION
1		
2		
3		
4		
5		

DRAWN BY:	MDS
DESIGNED BY:	TKC
CHECKED BY:	RH
APPROVED BY:	RH
PROJECT NO:	211205A

PROJECT:

FINAL PLAT
RESERVE AT HICKORY RIDGE
CITY OF COLUMBIA
MAURY COUNTY, TENNESSEE

TITLE:

PHASE 2-3

4 OF 4

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Appendix B: Subdivision Development Agreement

This DEVELOPMENT AGREEMENT is made and entered into on this

_____ day of _____, 20_____ ,
between THE CITY OF COLUMBIA, TENNESSEE, (hereinafter the "CITY"), and

D.R. Horton
_____, the DEVELOPER (hereinafter the "DEVELOPER") named on the Addendum to this Agreement attached hereto and by this reference made a part hereof (hereinafter the "ADDENDUM").

WITNESSETH:

WHEREAS, the DEVELOPER desires to develop the property described on the ADDENDUM (hereinafter the "PROJECT"); and,

WHEREAS, the Development Plan of the PROJECT has been approved by the Columbia Municipal Planning Commission (hereinafter the “CMPC”) on the

_____ day of _____, 20_____ ,
pursuant to Tennessee Code Annotated Title 13, Chapter 4, and the Subdivision Regulations of Columbia, Tennessee (hereinafter the "SUBDIVISION REGULATIONS”); and,

WHEREAS, the DEVELOPER is the owner of the PROJECT and has authority to engage in such development; and,

WHEREAS, the DEVELOPER desires to develop and improve said PROJECT; and,

WHEREAS, in order to provide for the health, safety, and welfare of future residents of the PROJECT, it will be necessary for certain improvements to the CITY'S utility systems, public infrastructure, and common areas to be constructed within and to serve the PROJECT including but not be limited to roads, bridges, sidewalks, pedestrian facilities, stormwater facilities, street signs, markings, signals, street lighting, recreation and park facilities, landscaping, and the like (hereinafter the “IMPROVEMENTS”); and,

WHEREAS, in order for the IMPROVEMENTS to be fully integrated with the utility systems and public infrastructure of the CITY and to function in a satisfactory manner, the DEVELOPER has agreed to construct, in accordance with the Subdivision Regulations and other rules, regulations, and ordinances of the CITY, the IMPROVEMENTS in said PROJECT and extend utilities to the PROJECT at their own cost; and,

WHEREAS, the CITY is willing to accept the dedication of the streets, utilities, and other improvements as determined in the Development Plan of the PROJECT, subject to the City of Columbia City Council approval by resolution, and subject to the applicant's compliance with all requirements in this agreement and applicable existing laws of the CITY of Columbia and the State of Tennessee,

NOW, THEREFORE, it is agreed and understood as follows:

B1 General Conditions

B1.1 Construction Costs

The DEVELOPER shall pay for all material and labor necessary to install and complete the roads, sidewalks, sewers, utilities, and other facilities in accordance with this agreement.

B1.2 City Ordinances, Rules and Regulations

All currently existing CITY ordinances, rules and regulations, and the Subdivision Regulations adopted by the CMPC are made a part of this agreement. In the event of a conflict between the terms of this agreement and a CITY ordinance, the ordinance shall prevail. In the event of a conflict between the terms of this agreement and the Subdivision Regulations, the Subdivision Regulations shall prevail. All work done under this agreement is to be performed in accordance with plans and specifications approved by the City and made a part, hereof.

B1.3 Fees

Review fees, inspection fees, and other amounts established by the CITY shall be paid prior to any review of the plans. If the DEVELOPER fails to install the facilities in accordance with the terms of this Agreement, no portion of the review fees, inspection fees, or other amounts paid to the CITY shall be refundable to the DEVELOPER.

B1.4 Inspection

The CITY shall have a continuous right to inspect the work and facilities to assure that the work and facilities are in accordance with the Subdivision Regulations, approved Construction Plans, and other rules, regulations, and ordinances of the CITY.

B1.5 Right of Entry

The CITY shall have the right, in case of breach of the Performance Agreement, to enter upon any property of the DEVELOPER and take all necessary actions to complete the work and obligations not completed.

B1.6 Easements

The DEVELOPER shall obtain and dedicate to the CITY or cause to be dedicated to the CITY, either by dedication on the plat or by easement deed, in either case in a form acceptable to the CITY, permanent easements of such widths as required by the CITY and noted on the Plans. The DEVELOPER further agrees to grant the necessary easements and rights-of-way across the DEVELOPER's properties without expense to the CITY and waive any claim for damages.

B1.7 Stormwater Maintenance Agreement

If the PROJECT includes any detention or retention ponds, common drainage ditches, water quality facilities, or stormwater facilities outside of the CITY rights-of-way, the DEVELOPER will submit a Stormwater Maintenance Agreement, to be filed with and recorded with the Final Plat.

B1.8 Attorney Fees and Other Expenses

The DEVELOPER shall pay all reasonable costs and expenses incurred by the CITY in enforcing or completing this agreement. The DEVELOPER shall pay all costs and expenses, including the CITY'S attorney fees, of any legal proceedings brought by the CITY against the DEVELOPER seeking remedies for the DEVELOPER'S failure to perform any of its obligations hereunder, whether or not any proceedings are prosecuted to judgment.

B1.9 Agreement Not Assignable

No third party shall obtain any benefits or rights under this agreement nor shall the rights or duties be assigned by either party.

B1.10 Revocation and Interpretation

This agreement shall bind the DEVELOPER when executed by the DEVELOPER and may not be revoked by the DEVELOPER without permission of the CITY, even if the agreement has not been executed by the CITY, or does not bind CITY, for other reasons. This agreement shall be interpreted in accordance with Tennessee law and may only be enforced in the Chancery Court or Circuit Court or Court of competent jurisdiction of Maury County, Tennessee, and Tennessee Appellate Courts.

B1.11 No Oral Agreement

This agreement may not be orally amended and supersedes all prior negotiations, commitments, or understandings.

B1.12 Separability

If any portion of this agreement is held to be unenforceable, the CITY shall have the right to determine whether the remainder of the agreement shall remain in effect, or whether the agreement shall be void and all rights of the DEVELOPER pursuant to this agreement terminated.

B 1.13 Transferability

The DEVELOPER agrees to not transfer the property on which this PROJECT is to be located without first providing the CITY with written notice. The transferee shall provide the CITY an Assumption Agreement of this Agreement, whereby the transferee agrees to perform the IMPROVEMENTS required under this agreement and to provide a performance surety. The DEVELOPER understands that if the DEVELOPER transfers said property without providing the notice of transfer and Assumption Agreement as required herein, they will be in breach of this agreement and in violation of the Subdivision Regulations.

B1.14 Indemnity

The DEVELOPER shall indemnify and hold the CITY harmless from all loss, costs, expenses, liability, money damages, penalties, or claims arising out of any work covered by this agreement, including any attorney fees incurred by the CITY in connection therewith. Inspection of the IMPROVEMENTS by an authorized representative of the CITY shall not constitute a waiver by the CITY of any defect or of any of the DEVELOPER'S obligations hereunder.

B1.15 Binding Effect

This agreement shall be binding upon the DEVELOPER and the DEVELEPOR's heirs, administrators, executors, assigns, and any other successors in interest.

B1.16 Entire Agreement

This document contains the entire agreement between the parties, and there are no collateral understandings or agreements between them. No variations or alterations of the terms of this agreement shall be binding upon either of the parties, unless the same be reduced to writing and made an amendment to this agreement.

B1.17 Headings

Paragraph titles and headings contained herein are inserted for convenience only and shall not be deemed a part of the agreement and in no way shall define, limit, extend, or describe the scope or intent of any provision, hereof.

B2 Performance Surety

At the time of execution of this agreement, the DEVELOPER shall provide the CITY a performance surety, in an amount determined by the City Engineer for the IMPROVEMENTS and other items specified by the Construction Plans, plats, and plans approved by the CMPC. This performance surety shall secure performance of all obligations of the DEVELOPER under this agreement. The performance surety shall meet all requirements established in Chapter 4: Performance Agreement of the Subdivision Regulations and secure full compliance with all terms and conditions of this agreement. The performance surety may be called for failure to comply with the provisions of this agreement in whole or in part according to the terms of the performance surety. The performance surety will not be released, except and until there has been full compliance with this agreement.

B3 Construction

B3.1 Construction Plans

The DEVELOPER shall submit to the CITY, Construction Plans describing in reasonable detail all utility systems, all storm water management systems, all street systems, pedestrian facilities, and all IMPROVEMENTS. The Construction Plans shall be designed according to the Engineering Standards and Specifications, all other codes and ordinances enforced by the City, and sound engineering judgment. The design of all utility systems shall follow the State of Tennessee and utility provider design criteria and specifications. In the event of a disagreement as to compliance with or interpretation of the Construction Plans and the CITY'S specifications, the decision of the CITY shall be final and binding on the DEVELOPER. The Construction Plans shall be prepared by a design professional licensed by the State of Tennessee to design all systems and shall bear the seal, signature, date, and license number of the professional preparing the Construction Plans.

B3.2 Commencement of Construction

Construction of IMPROVEMENTS may not begin until the following events have occurred:

A. The Preliminary Plat has been approved by the CMPC;
B. The Construction Plans are approved by the CITY;
C. The Tennessee Department of Environment and Conservation has approved the applicable portions of the Plans and has confirmed its approval to the CITY and/or DEVELOPER in writing;
D. The CITY shall have received an appropriately executed Development Agreement; and
E. The DEVELOPER shall give the CITY notice of commencement of construction, in writing at least one (1) working day prior to commencement.

B3.3 Site Grading

The DEVELOPER, hereby, agrees to construct all site grading to comply with the approved Construction Plans, including the approved Erosion Control Plan for the PROJECT and to comply with the Engineering Standards and Specifications, Stormwater Ordinance, and all other codes and ordinances enforced by the CITY.

B3.4 Storm Water Management Systems

The DEVELOPER shall be responsible for all storm water management work made necessary by the development of this PROJECT. It is understood and agreed that the CITY in its proprietary function is not and could not be expected to oversee, supervise, or direct the construction of all drainage improvements, and the excavation incident thereto. Neither is the CITY vested with the original design responsibility nor the means to formally survey elevations or the locations of improvements at every stage of the construction process. The CITY is vested with the right of periodic inspections, stop work order, and final approval as a measure of secondary or subsequent enforcement. The DEVELOPER has and shall retain the responsibility to properly anticipate, survey, design and construct the subdivision storm water improvements and give full assurance that same shall not adversely affect the flow or quality of surface water from or upon any property. In providing technical assistance, plan and design review, the CITY does not and shall not relieve or accept any liability from the DEVELOPER.

B3.5 Street Construction

The DEVELOPER, hereby, agrees to construct and improve the streets shown on the Construction Plans to comply with the CITY's specifications and to the satisfaction and approval of the City Engineer by grading, draining, subgrade preparation, base preparation, curbing, signage, striping, signalization, sidewalk installation, and paving with the required preparation, amounts, and types of material. The DEVELOPER further agrees to pay the cost of all engineering, inspection and laboratory cost incidental to the construction of subdivision streets including but not limited to material and density testing. The DEVELOPER further agrees to make all necessary adjustments to manholes and valve boxes to meet finished surface grade and to repair subsurface or base material, as required, in areas directed by the CITY Engineer, prior to application of final surface.

B3.6 Time Period for Construction

The DEVELOPER agrees to be bound to complete, within three (3) years of commencement of construction, all IMPROVEMENTS shown on the plat and plans and all things required by this agreement.

The DEVELOPER further agrees that if due to unforeseen circumstances, he is unable to complete all work included in this agreement within the time specified above, but desires to complete said agreement to the satisfaction of the CITY, the DEVELOPER shall submit a written request for extension of the agreement period to the CITY at least sixty (60) days prior to the expiration of the existing agreement period, specifying the reason for the DEVELOPER's failure to complete the work as agreed and a prospective date for such completion. The DEVELOPER further agrees that if the performance surety executed to secure the value of the work to be performed under this agreement, due to inflation or rising costs, is determined to be inadequate by the City Engineer to secure the cost of said IMPROVEMENTS at the time an extension is sought, the DEVELOPER will provide the additional security to bring the performance surety amount in line with current cost projections as made by the CITY. The DEVELOPER understands that the DEVELOPER's failure to follow the extension procedure constitutes a breach of this agreement and places the DEVELOPER in violation of the Subdivision Regulations. The DEVELOPER further understands, that should the DEVELOPER fail to complete any part of the work outlined in this agreement in a good and workmanlike manner as approved, the CITY shall reserve the right to withhold and withdraw all building permits within the PROJECT until all items of this Agreement have been fulfilled by the DEVELOPER.

B3.7 Off-Site Improvements

The DEVELOPER shall construct any and all off-site facilities that may be required to serve the PROJECT. Unless specifically noted in the Construction Plans and made a part of separate agreement with the CITY, the CITY shall not be required to reimburse the DEVELOPER for construction of off-site improvements.

B3.9 Inspection and Compliance

After construction begins, the CITY shall provide on-site construction inspection as the CITY deems necessary to ensure that all work is performed and completed in accordance with the Construction Plans, CITY specifications, and the contents of this agreement. In the event of a disagreement as to compliance with or interpretation of the Construction Plans and the CITY'S specifications, the decision of the CITY shall be final and binding on the DEVELOPER. If the DEVELOPER fails to construct in accordance with the approved Construction Plans or to comply with the CITY'S specifications, the CITY may issue a stop-work order and DEVELOPER, hereby, agrees to be bound by such order.

B3.10 Testing

The DEVELOPER agrees to pay the cost of all engineering, inspection, and laboratory cost incidental to construction of the streets, sidewalks, utilities, sewers, compacted fill material, and other facilities included within this agreement. Such testing includes, but is not limited to, material and density testing.

B3.11 Scrap Removal

The DEVELOPER agrees to comply with all local, state, and federal rules and regulations regarding waste material and debris disposal.

B3.12 Traffic Control

The DEVELOPER, hereby, agrees to prepare a traffic control/detour plan where required and shall submit said plan to the CITY for review and approval. All traffic control and safety devices, including

signs, lane markings, and barriers necessitated by construction activity undertaken pursuant to this agreement shall be installed and maintained by the DEVELOPER. All traffic control devices shall meet the standards and be installed in accordance with the latest edition of the Manual on Uniform Traffic Control Devices for Streets and Highways, published by the United States Department of Transportation.

B3.13 Temporary Facilities

The DEVELOPER shall provide all temporary facilities including but not limited to utilities and roadways, that are determined by the CITY to be required in connection with or as a result of interruption of service or access that occurs as a consequence of construction activity associated with the work covered by this agreement. Such temporary services shall in all regards and at all points in time be adequate to assure emergency access and adequate fire flows.

B4 Acceptance of Improvements

B4.1 Completion of Improvements

At such time as the improvements have been constructed and installed, in accordance with the Constructions Plans and specifications, required testing and inspections completed and found satisfactory, and all clean-up and cover-up has been done to the satisfaction the City Engineer, a letter requesting preliminary acceptance of the PROJECT will be provided by the DEVELOPER. Formal acceptance shall follow the procedure established in the Subdivision Regulations.

The DEVELOPER agrees the DEVELOPER shall have no claim, direct or implied, in the title or ownership of the IMPROVEMENTS specified in this agreement when the IMPROVEMENTS are complete and thereafter accepted by the CITY. The DEVELOPER will be responsible for construction failures and defects in PROJECT prior to final acceptance. During this period, it shall remain the responsibility of the DEVELOPER to correct and cure these defects and failures.

B4.2 As-Built Drawings and Post-Completion Items

The DEVELOPER agrees to furnish to the CITY as-built plans, on a reproducible, stable media, of the sanitary sewer, storm water management, water mains and service system, and streets within the subdivision before the CITY shall accept the subdivision.

B4.3 Acceptance of Facilities

Upon final acceptance of all or part of the IMPROVEMENTS in the PROJECT, then those IMPROVEMENTS shall become the property of the CITY free from all claims from any person or entity without the necessity of any further writing, agreement, or deed. The DEVELOPER further agrees that any facilities placed within a public or platted right-of-way or dedicated public easement are irrevocably dedicated to the public use without any right of reimbursement or compensation of any kind.

B4.4 Failure to Install

In the event the DEVELOPER fails to install the facilities in accordance with the terms of this agreement, the CITY may, in its sole discretion, elect to accept all or a portion of the IMPROVEMENTS in the PROJECT. Should the CITY choose to accept all or a portion of these IMPROVEMENTS, the CITY shall become the sole owner of these facilities. The CITY may give notice of acceptance by writing delivered to the DEVELOPER or recorded in the Register’s Office of Maury County, Tennessee. No further writing or deed shall be required.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed in multiple originals by persons properly authorized so, to do on or as of the day and year first given.

PROJECT	
Completed by the Developer	*Completed by the City*
D.R. Horton, Inc. DEVELOPER NAME	
Mathew McKendree AUTHORIZED AGENT NAME	CITY ENGINEER
SIGNATURE	SIGNATURE
04/20/26 DATE	DATE
819 Seven Oaks, Blvd. STREET	
Smyrna, TN 37167 CITY, STATE, ZIP	
615-906-7942 PHONE	
mwmckendree@drhorton.com EMAIL	
Attest	*Attest*
Sammie Brewer ATTEST NAME	ATTEST NAME
ATTEST SIGNATURE	ATTEST SIGNATURE
4-19-2026 DATE	DATE

DOCUMENT PREPARED BY:
Name: Cole O Newton
Company TKC Architecture and Engineering

Address: 818 S Main Street
Columbia, TN 38401

After recording return copy to City of Columbia, Development Services

INSPECTION AND MAINTENANCE AGREEMENT OF PRIVATE STORMWATER MANAGEMENT FACILITIES

Map & Parcel Number: Map 072 Parcel 0.66.00 & Map 093 Parcel 003.00
Project Name: Reserve at Hickory Ridge Phase 2

Recorded by deed in the Register of Deeds Office of Maury County in Deed Book _____, Page(s) _____.

THIS AGREEMENT, made this _____ day of _____, 20____ , by and between _____ hereinafter referred to as the "OWNER(S)" of the following property and City of Columbia, Tennessee, hereinafter referred to as the "CITY",

WE, the OWNER(S), with full authority to execute deeds, mortgages, other covenants, all rights, titles, and interests in the property described above, do hereby covenant with the CITY and agree as follows:

1. The OWNER(S) covenant and agree with the CITY that the OWNER(S) shall provide for adequate long term maintenance and continuation of stormwater control measures described in the Long Term Maintenance Plan and shown on the location map, deed of easement drawing or plat attached hereto to ensure that the facilities, are and remain in proper working condition in accordance with approved design standards, rules and regulations, and applicable laws. The OWNER(S) shall perform preventative maintenance activities at intervals described in the schedule attached hereto along with necessary landscaping (grass cutting, etc.) and trash removal as part of regular maintenance.

2. The OWNER(S) shall perform routine inspections to ensure that all long term stormwater management facilities are properly functioning. These inspections shall be conducted on an annual basis, at a minimum. These inspections shall be conducted by a person familiar with control measures implemented at the site. The OWNER(S) or operators shall maintain documents of these inspections.

3. The OWNER(S) shall perform comprehensive inspections of all stormwater management facilities and practices. These inspections shall be conducted once every five years, at a minimum. Such inspections must be conducted by either a professional engineer or landscape architect.

4. The OWNER(S) shall grant to the CITY or its agent or contractor the right of entry at reasonable times and in a reasonable manner for the purpose of inspecting, operating, installing, constructing, reconstructing, maintaining or repairing the facility within the CITY.

5. The OWNER(S) shall record and grant to the CITY the necessary easements and rights-of-way and maintain perpetual access from public rights-of-way to the facility for the CITY or its agent and contractor.

6. If, upon inspection, the CITY finds that the OWNER(S) has failed to properly maintain the facilities, the CITY may order the work performed within ten (10) days. In the event the work is not performed within the specified time, the ONWER(S) agrees to allow the CITY to enter the property and take whatever steps it deems necessary to maintain the stormwater control facilities. This provision shall not be construed to allow the CITY to erect any structure of a permanent nature on the PROPERTY without first obtaining written approval of the OWNER(S)

7. The CITY is under no obligation to maintain or repair said facilities, and in no event shall this Agreement be construed to impose any obligation on the CITY. The OWNER(S) shall reimburse the CITY upon demand the costs incurred in the maintenance of the facilities.

8. If the OWNER(S) fails to pay the CITY for the above expensive after forty-five (45) days written notice, the OWNER(S) authorizes the CITY to collect said expenses from the OWNER(S) through appropriate legal action and the OWNER(S) shall be liable for the reasonable expenses of collection, court costs, and attorney fees.

9. The OWNER(S) and the OWNER(S) heirs, administrators, executors, assigns, and any other successor in interest shall indemnify and hold harmless the CITY and its officers, agents and employees for any and all damages, accidents, casualties, occurrences, claims or attorney's fees which might arise or be asserted, in whole or in part,

against the CITY from the construction, presence, existence, or maintenance of the stormwater control facilities subject to this AGREEMENT. In the event a claim is asserted against the CITY, its officers, agents or employees, the CITY shall notify OWNER(S) and the OWNER(S) shall defend at OWNER(S) expense any suit based on such claim. If any judgment or claims against the CITY, its officers, agents or employees, shall be allowed, the OWNER(S) shall pay all costs and expenses in connection therewith. The CITY will not indemnify, defend or hold harmless in any fashion the OWNER(S) from any claims arising from any failure, regardless of any language in any attachment or other document that the OWNER(S) may provide

10. The OWNER(S) shall not be able to transfer, assign or modify its responsibilities with respect to this agreement without the CITY's written prior consent. Nothing herein shall be construed to prohibit a transfer by OWNER(S) to subsequent owners and assigns.

11. No waiver of any provision of this AGREEMENT shall affect the right of any party thereafter to enforce such provision or to exercise any right or remedy available to it in the event of any default.

12. The OWNER(S) shall record a plat showing and accurately defining the easements for stormwater control facilities. The plat must reference the Instrument Number where this AGREEMENT and its attachments are recorded and contain a note that the OWNER(S) is responsible for maintaining the stormwater management facilities.

13. The OWNER(S) shall record this AGREEMENT in the office of the Register of Deeds for the county of Maury, Tennessee, and the AGREEMENT shall constitute a covenant running with the land, and shall be binding upon the OWNER(S) and the OWNER(S) heirs, administrators, executors, assigns, and any other successors in interest

ATTEST BY OWNER(S):

Print Name: Mathew McKendree

Title: Assistant Secretary

Signature: Mathew McKendree

Owner: D.R. Horton, Inc

Address: 819 Seven Oaks Blvd.

City, State ZIP: Smyrna, TN 37167

STATE OF Tennessee
COUNTY OF Rutherford

Before me, Mathew McKendree of the state and county mentioned, personally appeared Mathew McKendree, with whom I am personally acquainted and who acknowledged that he/she executed the foregoing instrument of the purposes therein contained.

Witness my hand this the 20 day of April, 2026.

Magdalena Koehler
Notary Public

MAGDALENA KOEHLER STATE OF TENNESSEE NOTARY PUBLIC DAVIDSON COUNTY MY COMMISSION EXPIRES 3-6-2029

My Commission Expires: 3-6-2029

CITY OF COLUMBIA, TENNESSEE
ENGINEERING DEPARTMENT

APPROVED BY :_____

STATE OF TENNESSEE
COUNTY OF MAURY

Before me, _____ of the state and county mentioned, personally appeared _____, with whom I am personally acquainted, and who acknowledged themselves to be the City Engineer of the City of Columbia or his designee and as such, being authorized so to do, executed the foregoing instrument of the purposes therein contained.

Witness my hand this the _____ day of _____, 20_____.

_____
Notary Public
My Commission Expires:_____

ARCHITECTURE
INTERIORS
CIVIL SITE

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COLUMBIA, TN 38401
TKC-AE.COM
615.617.7477

POST CONSTRUCTION LONG TERM MAINTENANCE PLAN

Reserve at Hickory Ridge Phase 2
1690 Bear Creek Pike
COLUMBIA, TN 38401

Prepared by:

ARCHITECTURE
INTERIORS
CIVIL SITE

TKC ARCHITECTURE AND ENGINEERING LLC

April 16, 2026

818 South Main Street
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615.617.7477

C**ONTENTS**

SECTION 1 : INTRODUCTION **3**

SECTION 2 : SYSTEM DESCRIPTION **3**

SECTION 3 : MAINTENANCE PROCEDURES **3**

3.1 Stormwater Retention Basin 3
3.2 Stormwater Pipe and Storm Inlets 4

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SECTION 1: INTRODUCTION

The project is to construct 56 housing lots for the Reserve at Hickory Ridge Phase 2 development in Columbia, Maury County, Tennessee. This post construction long term maintenance plan addresses the development which consists of 25.64 acres in which utility infrastructures (water, sewer, and storm) will be installed. The proposed construction consists primarily of site grading related to the installation of roadway pavements, curbs, sidewalks, residential lots, utility infrastructure, and storm water conveyance system located within the permitted project area.

SECTION 2: SYSTEM DESCRIPTION

The site consists of a stormwater detention basin, stormwater conveyance inlets and pipes.

1. There is a stormwater detention basin sized to detain the 2-yr through 100-yr peak events, with the detention outfall structure designed to contain the first flush, 1 inch, for 48 hours.
2. 2906 LF OF 18” pipe, 325 LF of 24” pipe, 164 LF of 30” pipe, 186 LF of 54” pipe, 54 storm inlets, and 2 headwalls.

Upon completion of the site construction, ‘Record Drawings’ in a version not less than AutoCAD 2006 LT (NAD83, NAVD88) of the stormwater controls will be provided to the City of Columbia for verification.

SECTION 3: MAINTENANCE PROCEDURES

3.1 Stormwater Detention Basin:

1. The outlet structure shall be checked regularly for clogging and shall be cleaned and repaired as necessary. The outlet structure shall be checked on a monthly basis until the detention basin side slopes and grass lines ditches have stabilized and no heavy sediment laden runoff enters the detention basin. Then it shall be checked on a quarterly basis and after a large rain event.
2. Check detention basin side slopes and bottom for erosion and correct necessary at least on a quarterly basis.
3. At least quarterly and after each large rain event, the facility should be cleaned of accumulated debris. Remove nuisance wetland species and take appropriate measures to control mosquitos.
4. At least quarterly and after each large rain event, the retention basin outfall structure shall be cleaned of sediment, floatables, and debris.
5. Remove sediment within retention basin outfall structure and headwalls when sediment accumulation reaches 6” or if resuspension is observed or probable. This sediment may contain contaminants and should be disposed of using the Tennessee Department of

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Environment and Conservation (TDEC) special disposal procedure. If there is any uncertainty about what the sediment contains or it is known to contain contaminants, then TDEC should be consulted, and their disposal recommendations followed. The TDEC Division of Water Pollution Control should be contacted at (931)-380-3371.

6. Some sediment collected may be innocuous (free from pollutants) and can be used as fill material, cover or land spreading. It is important that the material not be placed in a way that may promote or allow re-suspension in storm runoff.

3.2 Storm Drains and storm inlets:

These structures to be inspected annually and cleaned monthly of accumulated debris and sediment. All sediment to be disposed of per TDEC disposal procedures. All debris (paper products, floatables) to be disposed of per Maury County Waste Management requirements.

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Stormwater Pond Inspection and Maintenance Checklist

Site Name: _____Owner Change since last inspection? Y N

Location: _____

Owner Name: _____

Address: _____ Phone Number _____

Site Status: _____

Date: _____ Time: _____ Site conditions:

Stormwater Pond Type: Wet Pond fl Wet ED Pond fl Micropool Pond fl Multiple Pond System fl
Dry Pond fl

Inspection Frequency Key: A=annual(required); M=monthly(recommended); S=after major storms(recommended)

Inspection Items	Inspection Frequence	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
Embankment and Emergency Spillway				
Vegetation Healthy?	A/S			
Erosion on embankment?	A/S			
Animal burrows in embankment?	A/S			
Cracking, sliding, bulging of dam?	A/S			
Drains blocked or not functioning?	A/S			
Leaks or seeps on embankment?	A/S			
Slope protection failure functional?	A/S			
Emergency spillway obstructed?	A/S			
Erosion in/around emergency spillway?	A/S			
Other (describe)	A/S			
Riser and Principal Spillway		(described type: concrete pipe, slotted weir, channel etc.)		
Low-flow orifice functional?	A/S			
Trash rack (Debris removal needed? Corrosion noted?)	A/S			

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Sediment buildup in riser?	A			
Concrete/masonry condition (Cracks or displacement? Spalling?)	A			
Metal pipe in good condition?	A			
Control valve operation?	A			
Pond drain valve operation?	A			
Outfall channels function, not eroding?	A			
Other (describe)	A			
Sediment Forebays				
Sedimentation description				
Sediment cleanout needed (over 50 percent full?	A/S			
Permanent Pool Areas (if applicable)				
Undesirable vegetation growth?	A/M			
Visible pollution?	A/M			
Shoreline erosion?	A/M			
Erosion at outfalls into pond?	A/M			
Headwalls and endwalls in good condition?	A/M			
Encroachment into pond or easement area by other activities?	A/M			
Evidence of sediment accumulation?	A			
Dry Pond Area (if applicable)				
Vegetation adequate?	A/M			
Undesirable vegetation or woody plant growth?	A/M			
Excessive sedimentation?	A			
Hazards				
Have there ben complaints from residents?	A/M			
Public hazards noted?	A/M			

Inspector Comments: _____

_____

_____

_____

Overall Condition of Facility: ☐Acceptable ☐Unacceptable

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If any of the above Inspection Items are checked "Yes" for "Maintenance Need," list Maintenance actions and their completion dates below:

Maintenance Action Needed	Due Date

The next routine inspection is scheduled for approximately: _____

(date)

Inspected by: (signature) _____

Inspected by: (printed) _____

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615.617.7477

Grass Channel Inspections and Maintenance Checklist

Site Name: _____Owner Change since last inspection? Y N

Location: _____

Owner Name: _____

Address: _____ Phone Number _____

Site Status: _____

Date: _____ Time: _____ Site conditions:

Inspection Frequency Key: A=annual(required); M=monthly(recommended); S=after major storms(recommended)

Inspection Items	Inspection Frequence	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
Debris Removal				
Facility and adjacent area free of debris?	A/M			
Inlets and outlets free of debris?	A/M			
Any dumping of yard wastes into facility?	A/M			
Litter (branches) removed?	A/M			
Vegetation				
Surrounding area fully stabilized? (no evidence of eroding material into swale, channel or filter strip)	A/M			
Grass mowed?	A/M			
Grass height not less than 3 to 4 inches?	A/M			
Fertilized per specifications?	A/M			
Grasses planted according to approved plan?	A/M			
Unauthorized or inappropriate plantings?	A			

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Grasses healthy? (no diseased or dying vegetation)	A/M			
Evidence of grasses stressed from inadequate watering?	A/M			
Filtration Capacity				
Clogging from oil or grease?	A/M			
Facility dewaters between storms?	A/M			
Check dams and energy dissipater/sumps				
Any evidence of sedimentation buildup?	A/S			
Are sumps greater than 50% full of sediment?	A/S			
Any evidence of erosion and downstream toe of drop structures?	A/S			
Any trash or blockages at weep holes?	A/S			
Sediment Deposition				
Swale clean of sediments?	A			
Sediment not > 25% of swale design?	A			
Outlet/Overflow Spillway				
In good condition?	A			
Any evidence of erosion?	A			
Any evidence of blockages?	A			
Has facility been filled or blocked inappropriately?	A			
Hazards				
Have there been complaints from residents?	A/M			
Public hazards noted?	A/M			
Maintenance accesses free of hazards and fully operational?	A/M			

Inspector Comments: _____

_____

_____

_____

Overall Condition of Facility: ☐Acceptable ☐Unacceptable

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If any of the above Inspection Items are checked “Yes” for “Maintenance Need,” list Maintenance actions and their completion dates below:

Maintenance Action Needed	Due Date

The next routine inspection is scheduled for approximately: _____

(date)

Inspected by: (signature) _____

Inspected by: (printed) _____

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Storm Sewer Inspections and Maintenance Checklist

Site Name: _____Owner Change since last inspection? Y N

Location: _____

Owner Name: _____

Address: _____ Phone Number _____

Site Status: _____

Date: _____ Time: _____ Site conditions:

Stormwater Pond Type: Catch Basins fl Storm Pipe fl Headwalls fl Outfalls fl Catch Basin Inlets fl

Inspection Frequency Key: A=annual; M=monthly; S=after major storms

Inspection Items	Inspection Frequence	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
Catch Basins				
Ensure all are structurally sound and in good condition. Note any deficiencies and repair to proper working condition to ensure all are set properly in place over inlets	A/S			
Check for sediment, leaf, or debris clogging grates and remove	A/S			
Catch Basin Inlets				
Ensure all are structurally sound and in good condition. Note any deficiencies and repair to proper working condition	A/S			
Inspect for blockage or sediment accumulation and remove when capacity is diminished by 20% or greater	A/S			
Pipes				
Ensure all are structurally sound and in good condition. Note any	A/S			

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deficiencies and repair to proper working condition				
Inspect for blockage or sediment accumulation and remove when capacity is diminished by 20% or greater	A/S			
Concrete/masonry condition of pipes and joints? (Cracks or displacement? Spalling?)	A/S			
Headwalls and Endwalls				
Ensure all are structurally sound and in good condition. Note any deficiencies and repair to proper working condition	A/S			
Inspect for blockage or sediment	A/S			
Check for erosion or scouring around headwalls inlets and repair	A/S			
Evidence of staining?	A/S			
If flowing water is present does it appear to contain anything other than stormwater? I.e. Discoloration, odors, sheens, etc? Note location and describe.	A/S			
Hazards				
Have there been complaints from residents?	A/S			

Inspector Comments: _____

_____

_____

_____

Overall Condition of Facility: ☐Acceptable ☐Unacceptable

If any of the above Inspection Items are checked "Yes" for "Maintenance Need," list Maintenance actions and their completion dates below:

Maintenance Action Needed	Due Date

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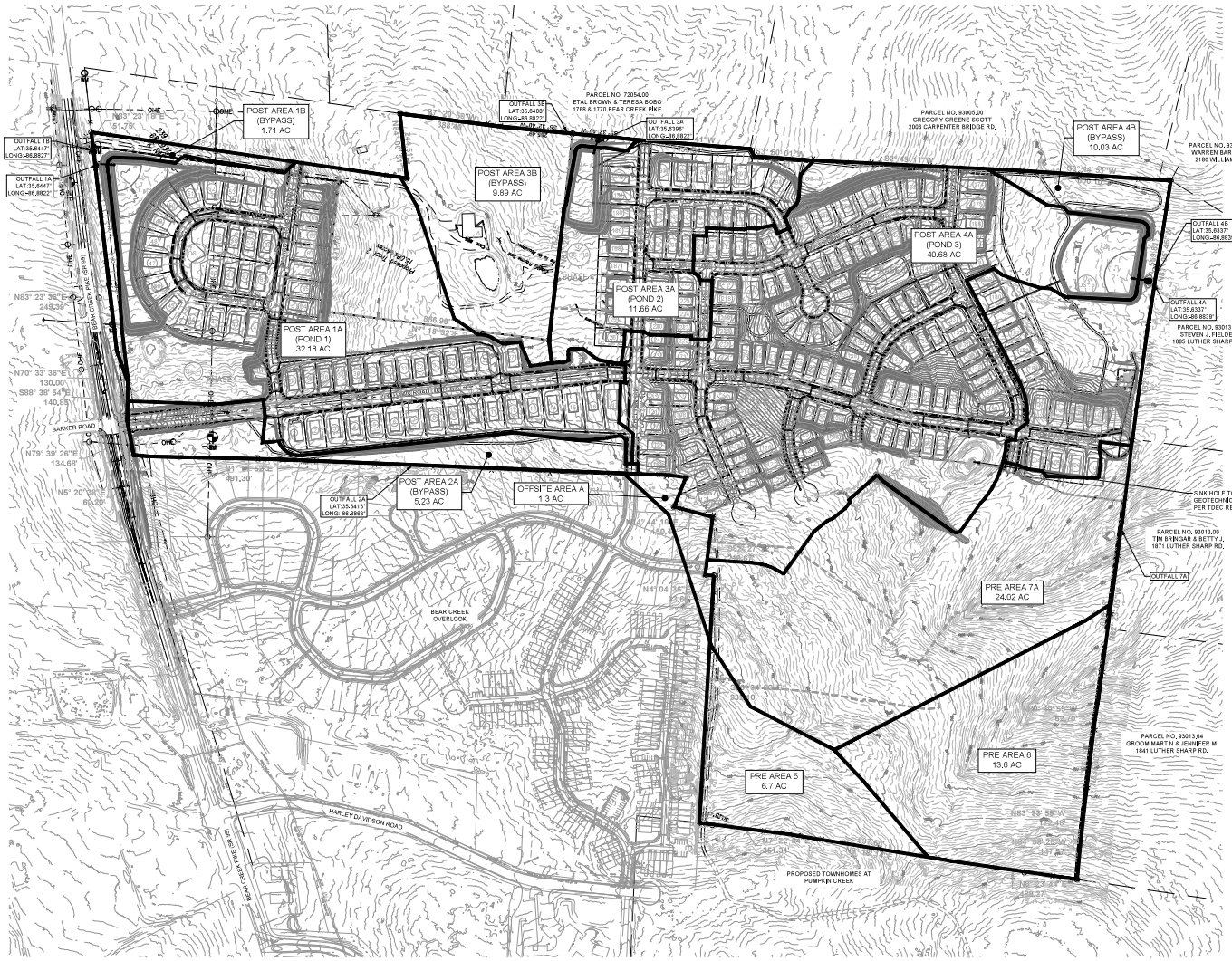
The next routine inspection is scheduled for approximately: _____

(date)

Inspected by: (signature) _____

Inspected by: (printed) _____


POST AREA 1B (BYPASS) 1.71 AC
POST AREA 3B (BYPASS) 9.89 AC
POST AREA 1A (POND 1) 32.18 AC
POST AREA 3A (POND 2) 11.66 AC
POST AREA 4A (POND 3) 40.88 AC
POST AREA 4B (BYPASS) 10.03 AC
POST AREA 2A (BYPASS) 5.23 AC
OFFSITE AREA A 1.3 AC
PRE AREA 7A 24.02 AC
PRE AREA 6 13.6 AC
PRE AREA 5 6.7 AC
OUTFALL 1A LAT:35.6447' LONG=-86.8822'
OUTFALL 1B LAT:35.6447' LONG=-86.8827'
OUTFALL 1B LAT:35.6400' LONG=-86.8822'
OUTFALL 2A LAT:35.6413' LONG=-86.8863'
OUTFALL 3A LAT:35.6386' LONG=-86.8822'
OUTFALL 4A LAT:35.6337' LONG=-86.8839'
OUTFALL 4B LAT:35.6337' LONG=-86.8826'
OUTFALL 7A
PARCEL NO. 72054.00 ETAL BROWN & TERESA BOBO 1768 & 1770 BEAR CREEK PIKE
PARCEL NO. 93005.00 GREGORY GREENE SCOTT 2006 CARPENTER BRIDGE RD.
PARCEL NO. 93004.00 WARREN BARFIELD 2180 WILLIAM LN.
PARCEL NO. 93013.02 STEVEN J. FIELDER 1865 LUTHER SHARP RD.
PARCEL NO. 93013.00 TIM BRINGAR & BETTY J. 1871 LUTHER SHARP RD.
PARCEL NO. 93013.04 GROOM MARTIN & JENNIFER M. 1841 LUTHER SHARP RD.
SINK HOLE TO BE VERIFIED BY GEOTECHNICAL ENGINEER & REMEDIATED PER TDEC REQUIREMENTS
BARKER ROAD
HARLEY DAVIDSON ROAD
BEAR CREEK PIKE (SR 96)
BEAR CREEK OVERLOOK
PROPOSED TOWNHOMES AT PUMPKIN CREEK
N83° 23' 36"E 249.29'
N70° 33' 36"E 130.00'
S88° 38' 54"E 140.65'
N79° 39' 26"E 134.68'
N5° 20' 38"E 60.20'
N83° 23' 36"E 61.78'
N83° 23' 36"E 491.30'
N7° 19' 31"W 506.98'
N41° 04' 55"E 1,150.27'
N83° 33' 58"W 1,150.27'
N83° 33' 58"W 1,150.27'
N83° 33' 58"W

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INTERIORS
CIVIL SITE

818 South Main Street
COLUMBIA, TN 38401
TKC-AE.COM
615.617.7477

April 20, 2026

Planning Staff
City of Columbia
700 N. Garden Street
Columbia TN 38401

Subject: Owner Consent Form –

Address: Map 072, Parcel 0.66.00, & Map 093, Parcel 003.00 & 003.02

As the property owner of the property located at 1690 Bear Creek Pike in Columbia, TN (Map 072, Parcel 0.66.00, & Map 093, Parcel 003.00 & 003.02), I hereby give consent for TKC Architecture and Engineering LLC to submit a Final Plat application for approval on our property and represent that Final Plat to the City at Boards and Commissions.

Sincerely,

Owners Signature

Mathew McKendree, D.R. Horton, Inc. Assistant Secretary

Owners Printed Name

ARCHITECTURE
INTERIORS
CIVIL SITE

818 S MAIN STREET
COLUMBIA, TN 38401
TKC-AE.COM
615.617.7477

April 20th, 2026

Planning Staff
City of Columbia
700 N Garden Street
Columbia, TN 38401

Project: Reserve at Hickory Ridge Phase 1A

Subject: Final Plat at 1690 Bear Creek Pike.

Staff,

We are submitting a Final Plat for the Reserve at Hickory Ridge Phase 2 at 1690 Bear Creek Pike in Columbia, TN 38401 (Map 072, Parcel 0.66.00, & Map 093, Parcel 003.00). This submittal follows the City's zoning ordinance and subdivision regulations. The Final Plat proposes 56 single-family residential lots. The total site is +/- 25.639 acres.

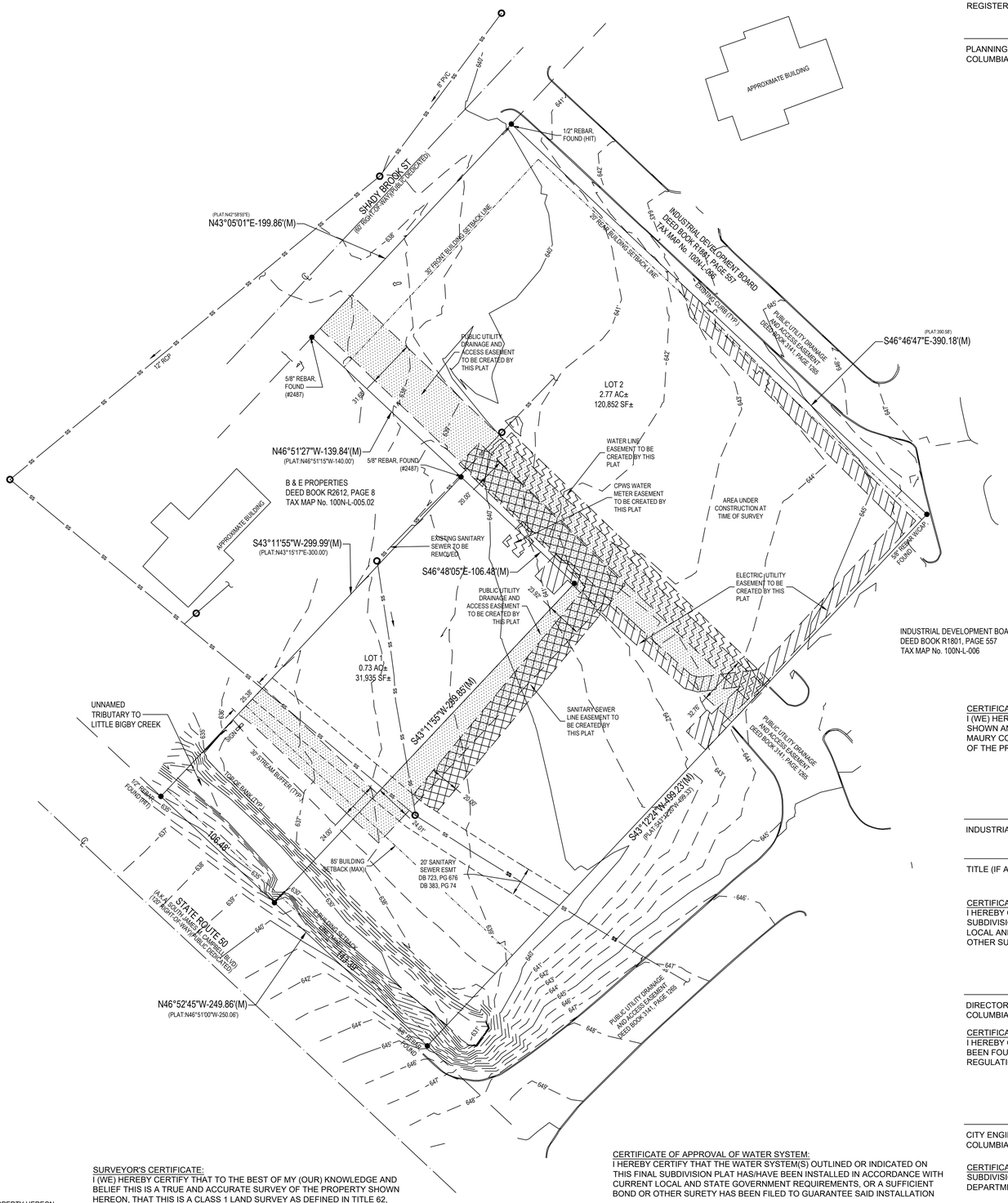
With this submittal please find: project letter, final plat, application, long-term maintenance plan, developers agreement, surety calculations and an owners consent form.

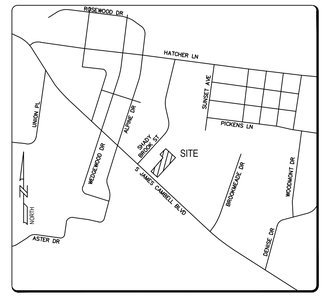
If you have any comments or questions, please contact TKC Architecture and Engineering.

Thank you,

Cole Newton, PE, LEED AP
TKC Architecture and Engineering LLC
615.617.7477 (o)
931.797.3323 (c)
cole@tkc-ae.com

NORTH
TN STATE PLANE NAD 83 (2011)





LOCATION MAP
N.T.S.

LEGEND OF SYMBOLS

CL/CLR	CENTERLINE ROAD	TB	TOP BANK
TC	TOP CURB	TS	TOE SLOPE
BC	BOTTOM CURB	BD	BOTTOM DITCH
A	ASPHALT	BLD	BUILDING
G	GROUNDSHOT	FFE	FINISH FLOOR ELEVATION
EG	EDGE GRAVEL	EW	EDGE WATER
EP/EOP	EDGE PAVEMENT	NS	NAIL SET
CC	CORNER (TOP)	OHW	OVERHEAD WIRE
TYP	TYPICAL	W	WATER LINE
CO	CLEANOUT	ST	STORM SEWER LINE
	SCB MANHOLE	SS	SANITARY SEWER LINE
	SANITARY/STORM MANHOLE	G	GAS LINE
	WATER METER	UGE	UNDERGROUND ELECTRIC
	POWER POLE	COM	COMMUNICATION
	LIGHT POLE		BUILDING LINE
	CLEANOUT	HDPE	HIGH DENSITY POLYETHYLENE
	CATCH BASIN	CONC	CONCRETE
	GAS VALVE		GUY WIRE
	GAS METER		POST INDICATOR VALVE
	FIRE HYDRANT		ELECTRIC BOX
	WATER VALVE		GREASE TRAP
	PHONE PEDESTAL		TRAFFIC BOX
	TRAFFIC POLE		TREES (SIZE VARIES-SEE PLAN)
	FIRE DEPARTMENT CONNECTION		POWER METER
	IRRIGATION CONTROL VALVE	SS/ST	UNABLE TO DETERMINE TERMINUS
	SPIGOT		PROPERTY CORNER (AS DESCRIBED)
	STOP BAR		
	AIR CONDITIONING UNIT		

* NOTE: ALL SYMBOLS WILL NOT APPLY TO YOUR SURVEY.

NOTES:
1.) PRESENT ZONING CLASSIFICATION "CD-4C" GENERAL URBAN CORRIDOR CHARACTER DISTRICT
SETBACKS:
FRONT - 6 FT MIN / 85 FT MAX
SIDE - 0 FT
REAR - 3' MIN
2.) AREA SUBDIVIDED BY THIS PLAT IS 3.50 ACRES±.
3.) THE PURPOSE OF THIS PLAT IS TO CREATE 2 LOTS, ACCESS EASEMENT, WATER LINE EASEMENTS, ELECTRIC EASEMENT, AND SANITARY SEWER EASEMENT.
4.) ALL CORNERS ARE 1/2" REBAR W/CAP UNLESS NOTED OTHERWISE.
5.) DONE WITHOUT THE BENEFIT OF TITLE COMMITMENT.
6.) BASED ON GRAPHIC DETERMINATION THIS PROPERTY IS LOCATED IN ZONE "X" AND IS NOT IN A FEMA/FIRM SPECIAL FLOOD HAZARD AREA PER COMMUNITY PANEL NO. 47119C0285E, DATED 4/16/2007.
7.) ALL UTILITIES SHOWN HEREON ARE FROM ABOVE GROUND STRUCTURES ONLY. THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY, AND RELIABLY DEPICTED WITHOUT EXCAVATION. NO EXCAVATION WAS DONE. CONTACT LOCAL UTILITY COMPANIES FOR MORE ACCURATE DATA. THE SURVEYOR MAKES NO CERTIFICATION CONCERNING THE COMPLETENESS OF UNDERGROUND UTILITIES
8.) TOPOGRAPHICAL INFORMATION IS SHOWN FROM HOPKINS SURVEYING GROUP DRAWING NUMBER 2024-291-3, DATED 12/23/2024.

CERTIFICATE OF APPROVAL FOR RECORDING:
I HEREBY CERTIFY THAT THE FINAL SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE CITY OF COLUMBIA SUBDIVISION REGULATIONS, WITH THE EXCEPTION OF SUCH VARIANCES, IF ANY, AS NOTED IN THE MINUTES OF THE COLUMBIA MUNICIPAL PLANNING COMMISSION, AND THAT IT HAS BEEN APPROVED FOR RECORDING IN THE OFFICE OF THE MAURY COUNTY REGISTER OF DEEDS.

PLANNING DIRECTOR — DATE
COLUMBIA, TENNESSEE

INDUSTRIAL DEVELOPMENT BOARD
DEED BOOK R1801, PAGE 557
TAX MAP No. 100N-L-006

CERTIFICATE OF OWNERSHIP AND DEDICATION:
I (WE) HEREBY CERTIFY THAT I AM (WE ARE) THE OWNER(S) OF THE PROPERTY SHOWN AND DESCRIBED HEREON AS EVIDENCED IN BOOK RN801, PAGE 1479, MAURY COUNTY REGISTERS OFFICE AND ADOPT THIS FINAL SUBDIVISION PLAT OF THE PROPERTY AS SHOWN HEREON

INDUSTRIAL DEVELOPMENT BOARD OF THE CITY OF COLUMBIA — DATE

TITLE (IF ACTING FOR CORPORATION OR PARTNERSHIP)

CERTIFICATE OF SANITARY SEWER SYSTEM:
I HEREBY CERTIFY THAT THE SANITARY SEWER SYSTEM OUTLINED ON THIS FINAL SUBDIVISION PLAT HAS BEEN INSTALLED IN ACCORDANCE WITH THE CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS, OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION.

DIRECTOR OF WASTEWATER DEPARTMENT — DATE
COLUMBIA, TENNESSEE

CERTIFICATE OF COMPLIANCE:
I HEREBY CERTIFY THAT THE FINAL SUBDIVISION PLAT SHOWN HEREON HAS BEEN FOUND TO COMPLY WITH THE CITY OF COLUMBIA SUBDIVISION REGULATIONS AND OTHER ADOPTED ORDINANCES AND POLICIES.

CITY ENGINEER — DATE
COLUMBIA, TENNESSEE

CERTIFICATE OF SUBDIVISION NAME AND STREET NAMES:
SUBDIVISION NAME AND STREET NAMES APPROVED BY THE CITY ENGINEERING DEPARTMENT AND BY E-911 MAURY COUNTY

MAURY COUNTY E-911 — DATE

OWNER:
BOSTELMAN REALTY, LLC
610 N. GARDEN ST, SUITE 300
COLUMBIA, TN 38401
(931) 380-2262
d.weir@bostelmaninc.com

GRAPHIC SCALE

40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

DONE WITHOUT THE BENEFIT OF A TITLE COMMITMENT

NOTE: THIS SURVEY IS NOT TRANSFERABLE TO ANY OTHER OWNER OR LENDER, ATTORNEY, ENGINEER, ARCHITECT AND MAY NOT BE COPIED OR USED IN ANY WAY WITHOUT THE WRITTEN CONSENT TO THE SURVEYOR.

GPS NOTE:
1. CONTROL AND THE LOCATION OF PROPERTY CORNERS & OTHER FEATURES WAS ESTABLISHED USING GPS/GNSS METHODOLOGIES (OPUS)
2. MAKE: TRIMBLE
3. MODEL: R10
4. FREQUENCY: DUAL
5. TYPE OF GPS SURVEY PERFORMED: (STATIC)
6. PRECISION OF GPS WORK DONE: ΔH:<=0.12'; ΔV:<=0.15'
7. DATE OF FIELD WORK: 11-2024

DAVID L. HOPKINS, JR. REGISTERED LAND SURVEYOR TENNESSEE NO. 2026

SURVEYOR STATEMENT
I CERTIFY THAT I HAVE SURVEYED THE PROPERTY HEREON, THAT THE SURVEY IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE SURVEY WAS DONE IN COMPLIANCE WITH CURRENT TENNESSEE MINIMUM STANDARDS OF PRACTICE AND THAT THE RATIO OF PRECISION OF UNADJUSTED SURVEY IS >1:10,000 (CATEGORY I)

SURVEYOR'S CERTIFICATE:
I (WE) HEREBY CERTIFY THAT TO THE BEST OF MY (OUR) KNOWLEDGE AND BELIEF THIS IS A TRUE AND ACCURATE SURVEY OF THE PROPERTY SHOWN HEREON, THAT THIS IS A CLASS 1 LAND SURVEY AS DEFINED IN TITLE 62, CHAPTER 18, TENNESSEE CODE ANNOTATED, AND THAT THE RATIO OF PRECISION IS GREATER THAN OR EQUAL TO 1:10,000.

DAVID. L. HOPKINS, JR TN RLS #120 — DATE

CERTIFICATE OF APPROVAL OF WATER SYSTEM:
I HEREBY CERTIFY THAT THE WATER SYSTEM(S) OUTLINED OR INDICATED ON THIS FINAL SUBDIVISION PLAT HAS/HAVE BEEN INSTALLED IN ACCORDANCE WITH CURRENT LOCAL AND STATE GOVERNMENT REQUIREMENTS, OR A SUFFICIENT BOND OR OTHER SURETY HAS BEEN FILED TO GUARANTEE SAID INSTALLATION

NAME — DATE

TITLE — COLUMBIA POWER & WATER SYSTEMS

DWG. NO.: 2026-89-3

SHADY BROOK CINEMA

PRELIMINARY PLAT

LOT 1, SHADY BROOK CINEMA, PLAT BOOK 17, PAGE 398, AND AS DESCRIBED IN DEED BOOK R2713, PAGE 1366, R.O.M.C., CITY OF COLUMBIA, MAURY COUNTY, TENNESSEE

HOPKINS SURVEYING GROUP
175 Hamm Road - P.O. Box 4366
Chattanooga, Tennessee 37405
(423) 267-3751 Office (thl@hopkinssurveying.com)

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DRAWN BY: ZA	SHEET NO.: 1 OF 1	DWG. No: 2026-89-3
SCALE: 1"=40'	DATE: 4/7/2026	REF. DWG.: 2025-366-3; 2024-291-3
PROPERTY ADDRESS: 1907 SHADY BROOK ST, COLUMBIA TN 38401		TAX MAP No.: 100N-L-005.00 & 005.02

January 30, 2026

Mr. Nick Madonia
Kimley-Horn and Associates
10 Lea
Nashville, TN 37208
Sent via email: *nick.madonia@kimley-horn.com*

RE: **Water Availability Letter** Expires: 8/01/2026
Chase Bank
1907 Shady Brook Street
Tax Map & Parcel 100N L 00500 000
Columbia, TN

Dear Mr. Madonia:

Columbia Power & Water Systems ("the Utility"/CPWS) is a municipal corporation authorized to provide water services in accordance with State law. CPWS has adopted rules, regulations, and standard operation procedures, prescribing the conditions under which CPWS will furnish water service. In addition, certain State laws delegate authority to the Tennessee Department of Environment and Conservation (TDEC), various Planning Commissions, and other authorities in Cities and Counties. These Cities and Counties have also adopted rules and regulations. Water service will be made available on a first-come, first-served basis, subject to the payment of all charges and fees imposed by CPWS and the approval of any and all required governmental agencies. Water service is subject to availability of all CPWS furnished equipment and materials appropriate for the development and provided the applicant complies with all rules and regulations of CPWS and conditions set out herein.

The proposed development is a 3,432 square foot commercial (bank) building. CPWS has evaluated the projected water demands for the proposed development in the water system hydraulic model and is able to provide domestic and fire protection service while maintaining state standards for level of service and pressures in this portion of the distribution system. CPWS can provide water for the proposed development according to the following criteria and requirements:

- Source water capacity for individual phases of the development is vested when CPWS has provided approval to proceed to construction and appropriate Impact Fees are paid.
- Available fire flow capacity at the proposed location is 1,500 gpm after necessary water main improvements are completed.

- Approval is based on daily volumes and peak flows as provided by the applicant:
    - Commercial Demand of up to 700 gallons per day
    - Irrigation Peak of 32 gpm
- Assumed water meters are listed below based on preliminary description of project. Actual meter count and sizes will be verified during the Design Review process.
    - One (1) ¾" Service Meters
    - One (1) ¾" Landscape Irrigation Meter
    - No fire sprinkler service or meter is anticipated at this time
- The above request translates to a 4 Single Family Unit (SFU) flow demand equivalent.
- Proposed water main extension will be from the existing 8-inch main at Shady Brook through the Project access drive to an existing 8-inch main at the main mall entrance, to make a looped connection for fire flow capacity.
- Public water system improvements must be in road right-of-way or in a dedicated utility easement.
- Separate irrigation meters with backflow devices will be required to serve the proposed Project.
- If fire sprinkler systems are requested or required, separate fire meters with backflow devices will be required to serve the proposed Project.

All of the above requirements up to and including the meter(s) are to be constructed and paid for by the Applicant and dedicated to CPWS once complete. No construction of water infrastructure shall be initiated until final construction plans have been approved by CPWS (including TDEC approval).

This Water Availability Letter will expire in one-hundred twenty (120) days unless vested by payment of water service fees and impact fees for the proposed project. If the Applicant elects to pay only a portion of the impact fees due for the proposed development, then the vesting will only apply to the portion for which impact fees were paid. Any request for water availability after the expiration date of this letter will be considered a new application.

Once you have received this Water Availability Letter, next steps in the process to vest water service from CPWS are as follows:

- Remit to CPWS new water service fees for plan review, TDEC coordination, and inspection as follows: $1,500 + $370 per SFU equivalent
- Applicant will prepare design drawings for review and approval by CPWS for construction of the proposed water system improvements.
    - Provide design drawings in AutoCAD and .pdf format for CPWS review of proposed development. Include design drawings for grading, drainage, roadway improvements, buried (wet and dry) utilities, water systems, and surface improvements.

  - Once CPWS approves the Construction Drawings for the proposed system improvements, Applicant will submit proposed improvements design to TDEC for review and approval.
  - CPWS will prepare hydraulic calculations and a Utility Approval Letter to accompany the plans submittal to TDEC.
- Current water service fees due prior to CPWS review of design plans are listed in the table below. *Note that payment of Water Service Fees will extend the expiration of this Water Availability Letter for one year, while the applicant is working with CPWS on design and review of the improvement drawings.*

New Water Service Fees	SFUs	Total
$1,500 + 370 per SFU	4	**$2,980**

- Upon Construction Drawing approval by CPWS, applicant may then schedule the pre-construction meeting.
- After the pre-construction meeting, CPWS will then issue a formal Notice to Proceed.
- Applicant is required to construct all public water infrastructure per CPWS standard specifications and provide CPWS personnel unregulated access to the site to inspect the construction of the water infrastructure.
- Applicant may pay Impact Fees upon Construction Drawing approval by CPWS.
  - Applicants will be charged Impact Fees and Meter Fees in effect at time of payment.
  - Please see CPWS website for schedule of impact fees and timing of planned fee escalations.
  - Water meters will be ordered by CPWS once meter fees are paid by the Applicant.
  - Meter fees are subject to change based on final design and the prevailing Board-approved rates at time of payment.
- An estimate of anticipated meter costs and impact fees for this project is provided below for planning purposes:

Impact Fees and Meter Costs	Number	$ / Unit	Total
¾" Service Meter Cost	1	$540	$540
¾" Irrigation Meter Cost	1	$540	$540
Current Impact Fee for ¾" Service Meter	2	$5,500	$11,000
Estimate of Impact and Meter Fees =			**$12,080**

- No construction of water improvements may take place prior to the Notice to Proceed or without a CPWS inspector present.

Please feel free to contact me at 931-388-4833 x7655 or Matt.Wheeler@cpws.com if you have questions or would like to discuss.

Sincerely,



Matthew J. Wheeler, P.E.
Vice President of Water Resources, CPWS

cc: Drueann Weir, Bostelman Enterprises
Bart Anderson, CPWS
File 25-040

Columbia Fire & Rescue

Fire Flow Requirements

Water Purveyor: Columbia Power & Water System

Date: 1/15/2026
Name: Julian Yee
Phone: 615-669-4982
Email: julian.yee@kimley-horn.com
Address/Parcel ID: 100N L 005.00
Property Type: ○ Residential ◉ Commercial ○ Industrial
Construction Type: V-B, Unsprinkled
Enclosed Area (ft²): 3,000

FILLED OUT BY COLUMBIA FIRE AND RESCUE

NFPA Sprinkler Type: NFPA 13

Water System Demand without Sprinkler Credit

Fire flow Requirements (International Fire Code Appendix B)

Fire Flow: 1,500 gpm Duration: 2 hours

Fire Hydrant Location and Distribution (International Fire Code Appendix C)

Minimum number of hydrants: 1

Average spacing between hydrants: 500 ft.

Maximum distance from frontage to hydrant: 250 ft.

Water System Demand with Sprinkler Credit

Fire flow requirements (International Fire Code Appendix B)

Fire Flow: 1,000 gpm Duration: 2 hours

Fire Hydrant Location and Distribution (International Fire Code Appendix C)

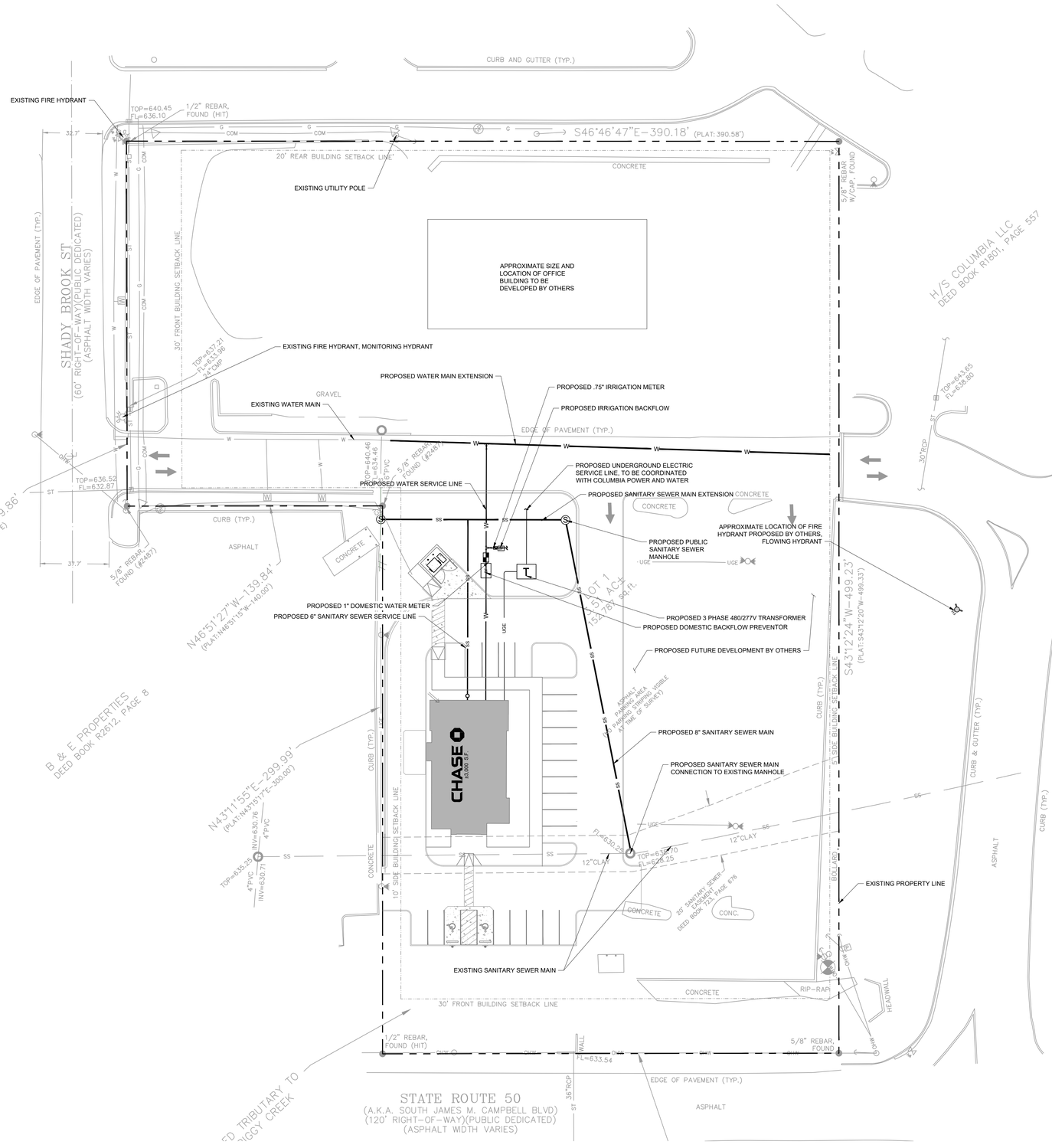
Minimum number of hydrants: 1

Average spacing between hydrants: 500 ft.

Maximum distance from frontage to hydrant: 250 ft.

Fire Plan Reviewer: Brad Massey Date: 1/20/2026

Columbia Fire & Rescue can add up to 600gpm, with our tanker truck operation, to the gpm that CPWS can supply. If CPWS cannot supply the required fire flow, please contact our office to see how much can be added by Columbia Fire at the site in question.



UTILITY LEGEND

W	WATERLINE
SS	SANITARY SEWER LINE
UGE	UNDERGROUND ELECTRIC LINE
UT	UNDERGROUND TELECOM. LINE

UTILITY NOTES

1. CONTRACTOR RESPONSIBLE FOR VERIFYING EXISTING ELEVATIONS COMPARED TO THOSE SHOWN ON PLAN PRIOR TO GRADING. NOTIFY OWNER'S REPRESENTATIVE IF DISCREPANCIES ARE FOUND.
2. AREAS FOR CONSTRUCTION THAT REQUIRE DE-WATERING FOR EXCAVATION WILL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
3. MAINTAIN MINIMUM 10 FEET HORIZONTAL SEPARATION BETWEEN WATER & SANITARY SEWER OR 18" VERTICAL SEPARATION AT CROSSING LOCATIONS.

EXISTING UTILITIES NOTE

CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES AND NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES AND/OR CONFLICTS WITH EXISTING OR PROPOSED UTILITIES PRIOR TO PROCEEDING.

UTILITY CROSSING NOTE

CONTRACTOR TO MAINTAIN 18" MINIMUM CLEARANCE FOR UTILITY CROSSINGS.

Kimley»Horn
10 Lea Avenue, Suite 400 Nashville, TN 37210
Main: 615.564.2701 | www.kimley-horn.com

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CHASE
COLUMBIA SHADY BROOK
1907 SHADY BROOK ST
COLUMBIA, TENNESSEE

DRAFT
PRELIMINARY PLANS
FOR REVIEW ONLY

No.	REVISIONS	DATE	BY
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

DESIGNED BY: —
DRAWN BY: —
CHECKED BY: —
DATE: 1/9/2026
KIMLEY-HORN PROJECT NO. 015071093

UTILITY PLAN - OVERALL

SHEET NUMBER
C6-00

COORDINATES ARE NAD83.
ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

811 Know what's below. Call before you dig.

GRAPHIC SCALE IN FEET
0 15 30 60

NORTH

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

CPWS
Columbia Power & Water Systems

201 Pickens Lane
P.O. Box 379
Columbia, TN 38402

P 931.388.4833
F 931.388.5287
www.cpws.com

January 15, 2026

Julian Yee, E.I.
Kimley-Horn
10 Lea Ave.
Nashville, TN 37210

Julian.yee@kimley-horn.com

Re: South James Campbell Blvd. Being Tax Map: 100N Parcel: 005.00

Dear Sir:

Columbia Power System has an existing power line near your proposed development.

We are willing to serve this new development subject to all Columbia Power System policies and procedures in effect at actual time service is rendered provided an approved final plat and complete electrical load information is furnished as soon as possible prior to start of actual construction.

• **Unfortunately, due to current supply chain challenges, no timeframe can be guaranteed regarding the availability of meters or transformers appropriate for your development.**

Yours truly,

COLUMBIA POWER & WATER SYSTEMS

Trevor Gilmer
Manager of Power Operations

so

CITY OF COLUMBIA
TENNESSEE

WASTEWATER DEPARTMENT

20 January 2026

Julian Yee
Kimley-Horn
10 Lea Avenue
Nashville, TN 37208

RE: 1907 Shady Brook St, Columbia, TN 38401; Chase Bank

Julian,

This letter serves as confirmation that the City of Columbia Wastewater Department has the available capacity to service the subject development. Any extension to the existing sewer infrastructure will be initiated by the owner, reviewed by our department and approved by the State of Tennessee. The project must be advanced in accordance with local, state and federal rules, regulations and policies. Funding and construction of those improvements will remain the responsibility of the owner. New customers will be required to pay all fees applicable at the time of connection. Any Final Plat approval and dedication are both subject to installation and function, as determined by our Department. No detailed design plan for an extension of the sewer has been approved at this time.

Donnie Boshers, Director
City of Columbia, TN
Wastewater Department

CITY OF COLUMBIA TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
FAX: (931) 560-1541

Preliminary Plat, Site Development Plan, and PUD Checklist

Development: Proposed Bank at 1907 Shady Brook Street

This checklist shall be completed, and included with the submittal documents. If the submittal does not contain a completed checklist, it shall be deemed incomplete. All below listed items shall be included in the submittal documents and plans, as well as any further information required by the City of Columbia to evaluate compliance and to perform a full and complete review. See Zoning Ordinance Article 8 and Subdivision Regulations.

General

- ☒ Name of development
- ☒ Contact info for the owner and licensed design professional(s) preparing plan: name, address, email, phone
- ☒ Plan sealed by a design professional licensed in the State of Tennessee.
- ☒ North Arrow, legend, and site vicinity map
- ☒ Graphic Scale: between 1 in. = 10 ft. and 1 in. =100 ft.
- ☒ Survey stamped by a State of Tennessee Licensed Professional Land Surveyor, with all project boundaries including bearings and angles to the nearest hundredth, utilities, and existing streets and rights-of-way.
- ☒ Note referencing Tennessee State Plane Coordinate System, NAD 83 Datum
- ☒ All property boundaries, existing easements, and encumbrances
- ☒ Parcel identification, owner, and deed and plat references of adjoining properties
- ☒ Proposed phasing and timetable for all phases of development
- N/A ☐ Traffic Impact Study, as required.
- ☒ The substance of all existing and proposed covenants, easements, or other restrictions.

Lots and Land-Use

- ☒ The size of total property to be developed in square feet and acres
- ☒ Lot numbers of all proposed lots, with dimensions, locations, and square footage
- N/A: singular use site ☐ A tabulation of the land area to be devoted to various uses and activities and overall densities.
- ☒ Typical lot layout depicting proposed setbacks, yards, and easements, where applicable

Structures

- ☒ Location and approximate dimensions of all existing and proposed structures.
- N/A ☐ Location of all earth retaining structures, with approximate top and bottom of wall elevations.
- ☒ Existing and intended use of all buildings and structures on site, including the number of dwelling units and density, where applicable
- ☒ Location, type, and size of proposed signs
- ☒ Approximate height, bulk, and the utilization of structures including activities and the number of living units.

CITY OF COLUMBIA TENNESSEE

DEVELOPMENT SERVICES
700 NORTH GARDEN STREET
COLUMBIA, TN 38401
PHONE: (931) 560-1560
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Grading, Drainage, and Storm

- ☒ Existing conditions and contours at vertical intervals of not more than two (2) feet
- ☒ General proposed contours at vertical intervals of not more than two (2) feet
- ☒ FEMA Special Flood Hazard Area (SFHA), 100-year Floodplain (F-P), and Floodway (F-W) boundaries with elevations and the exact location of the nearest benchmark. Indicate the Flood Insurance Rate Map (FIRM) panel number, its effective date, and flood insurance zones
- ☒ Location and dimension of aquatic buffer zones
- ☒ General layout of the proposed storm drainage system including surface and subsurface drainage systems, areas for detention, and water quality devices.
- N/A ☒ Identification of all critical lots

Streets, Parking, and Pedestrian Elements

- ☒ Proposed street and alley rights-of-way, typical sections, widths, classification, names, and proposed ownership and maintenance responsibility
- ☒ Proposed connections to existing and proposed streets (including classification) located outside the development
- N/A ☐ Proposed improvements as identified in the Traffic Impact Study, as required
- ☒ Existing and proposed sidewalks, trails, and other pedestrian elements
- ☒ Existing and proposed on-street and off-street parking and loading areas
- ☒ Summary of all provided and required parking

Landscaping, Open Space, and Amenities

- ☒ Natural features on site including, but not limited to, wetlands, streams, ponds, springs, sinkholes, wells, rock outcroppings, excessive slopes, and forested areas
- ☒ Landscaped areas and buffers with details on proposed plantings, existing vegetation, and other features.
- N/A ☐ The location and size of all common open space, parkland dedications, and dedications and reservations of land for public uses.
- ☒ Any amenity features and structures for private or public benefit.
- ☒ Location, dimension, and materials of fences and walls
- N/A ☐ Tree Canopy retention

Utilities

- ☒ General layout and location of existing and proposed utilities and utility features including, but not limited to potable water, fire hydrants, sanitary sewer, storm sewer, and power and communication facilities.
- ☒ Acknowledgement from water, sewer, and power utility providers that the proposed development may be adequately served with existing infrastructure, or if improvements are required to adequately serve the development, a general statement of the improvements.

CITY OF
COLUMBIA
TENNESSEE

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N/A **PUD Specific Items**

- ❑ List of all deviations from PUD Standards requested
- ❑ The nature of the landholder's interest in the land proposed to be developed and a written statement of concurrence from all parties having a beneficial interest in the affected property.
- ❑ Location and approximate dimensions of all existing and proposed structures including approximate height, bulk, and the utilization of structures including activities and the number of living units. Include architectural renderings of all proposed structures with materials listed.
- ❑ The substance of covenants, grants of easements or other restrictions to be imposed upon the use of the land, buildings and structures including proposed easements for public utilities on the property or documentation of off-site easements.
- ❑ Exterior lighting plan.

If the application is deemed incomplete by the Zoning Administrator, a written request shall be made within ten days after the original submittal, for further information. In such case the application shall be held in abeyance until deemed complete for final review. No plan shall be formally presented for Planning Commission action until such plan is found complete, compliant with City standards, and ready for review.

Checklist Completed By:

Nick Madonia	Nick Madonia	04/20/2026
Print Name	Signature	Date