

VICINITY MAP
SCALE: 1" = 2,000'

CONCEPTUAL DEVELOPMENT PLAN FOR
WARGO SUBDIVISION
PIN 6984-95-2640
REZN-23-021163

PLAN NOTES

- PARCEL IDENTIFICATION: PIN 6984-95-2640-000 (1.6808 ACRES)
- OWNER/APPLICANT: WARGO PROPERTIES LLC
BOB WARGO
6415 ACADEMY HILL ROAD
WARRENTON, VA 20187
- PROPOSED USE/DEVELOPMENT: SIX (6) SINGLE-FAMILY RESIDENTIAL LOTS (MIN 10,000 SF)
- BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A PLAT ENTITLED "PLAT SHOWING TOPOGRAPHIC & BOUNDARY SURVEY ON THE PROPERTY OF WARGO PROPERTIES, LLC DATED 03/23/2023 BY CARDINAL CIVIL RESOURCES.
- CURRENT ZONING: R-1 (RESIDENTIAL DISTRICT, 1 DWELLING UNIT/AC)
PROPOSED ZONING: R-4 (RESIDENTIAL DISTRICT, 4 DWELLING UNITS/AC)

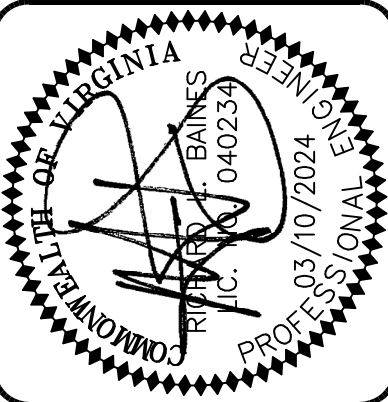
R-4 ZONING DISTRICT USE LIMITATIONS	
MINIMUM LOT WIDTH:	70' (CONVENTIONAL)
MINIMUM FRONT YARD:	50' FROM CENTERLINE (LOCAL ROAD)
MINIMUM SIDE AND REAR YARD:	10'
MAXIMUM BUILDING HEIGHT:	35'
MINIMUM OPEN SPACE:	NOT REQUIRED PER Z.O. SEC. 2-406.1(2)

SHEET INDEX

- COVER SHEET
- TOPOGRAPHIC & BOUNDARY SURVEY
- CONCEPTUAL SUBDIVISION PLAN
- CONCEPTUAL GRADING PLAN
- CONCEPTUAL LANDSCAPING PLAN
- CONCEPTUAL STORMWATER MANAGEMENT PLAN



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125 EAST DAVIS STREET
SUITE 201
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COVER SHEET
WARGO SUBDIVISION
PIN 6984-95-2640-000
CEDAR RUN MAGISTERIAL DISTRICT – FAUQUIER COUNTY, VIRGINIA

SCALE:	1"=20'
DATE:	11/17/2023
REVISIONS:	3/10/24 COUNTY COMMENTS

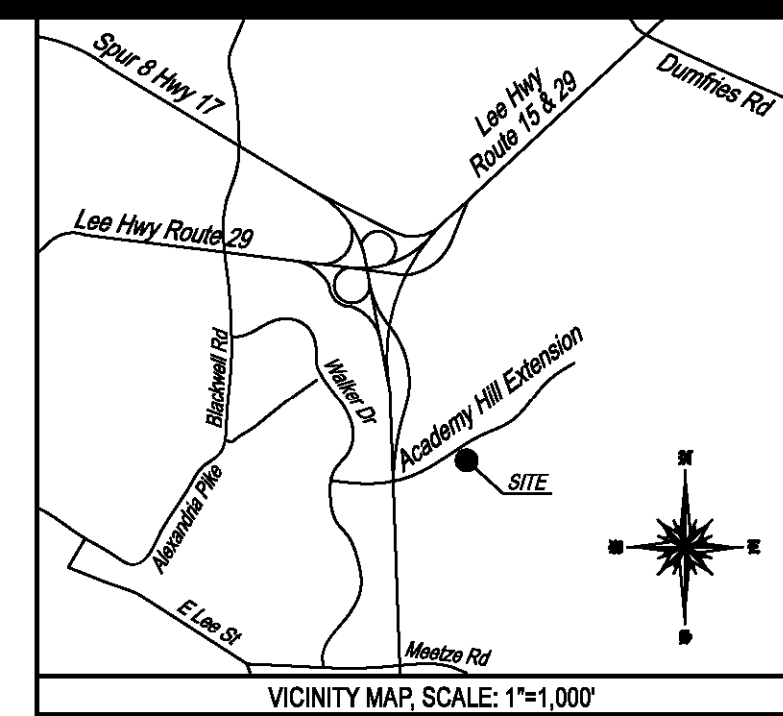
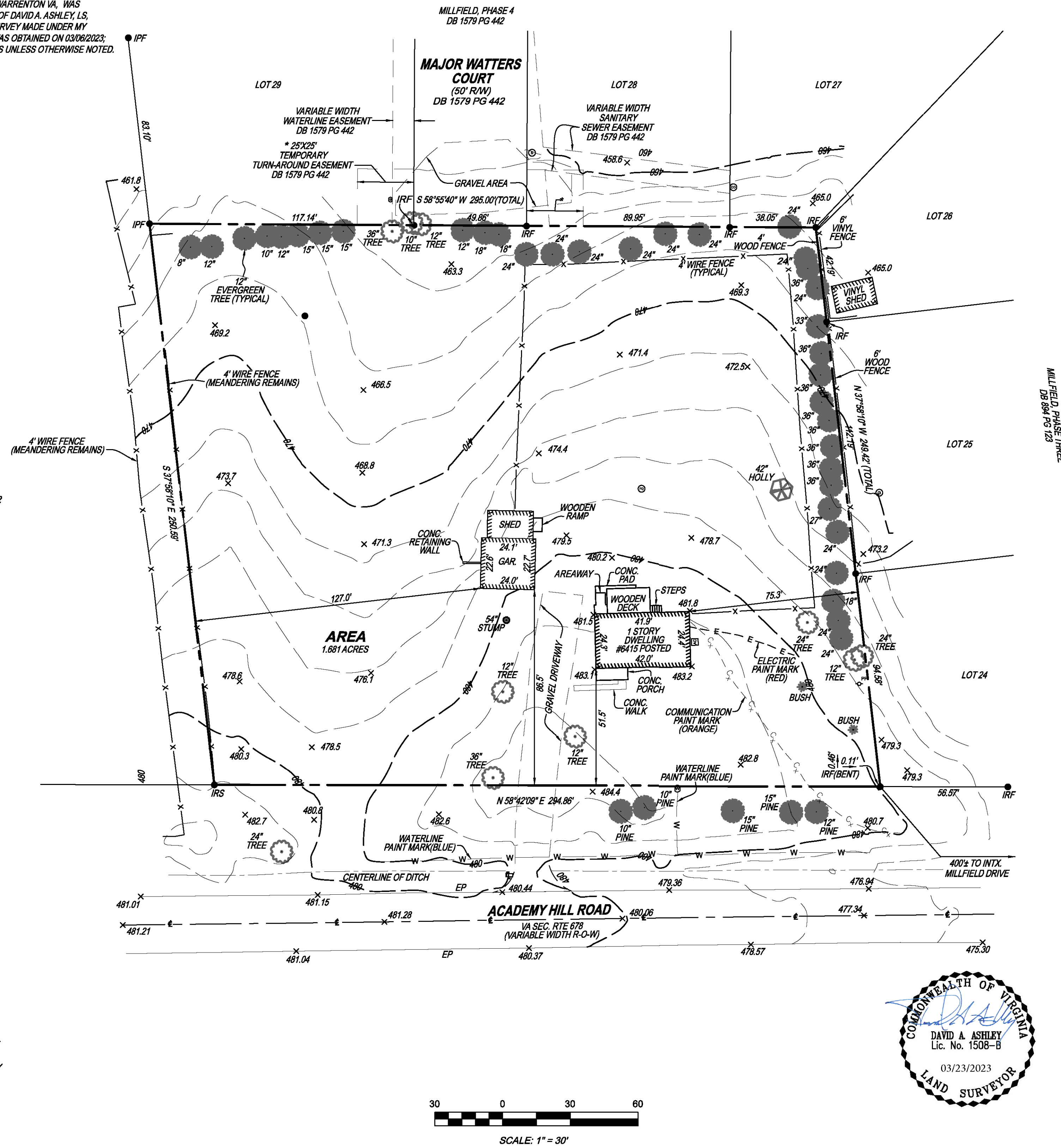
SHEET
1 OF 6
FILE NO. 1659

CONCEPTUAL SUBDIVISION LAYOUT
SCALE: 1" = 20'

TOPOGRAPHY STATEMENT
THIS TOPOGRAPHIC SURVEY ON 6415 ACADEMY HILL ROAD, WARRENTON VA, WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF DAVID A. ASHLEY, L.S., FROM AN ACTUAL / GROUND OR / REMOTE SENSING SURVEY MADE UNDER MY SUPERVISION; THAT THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED ON 03/02/2023; AND THAT THIS PLAT MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.

N/F R/F WC, LC
DB 1353, PG 54
PIN 6984-94-9303-000
WARRENTON CHASE, PHASE 2
OPEN SPACE
PARCEL Y-1

- NOTES:
1. NO TITLE REPORT FURNISHED.
 2. OTHER EASEMENTS MAY EXIST THAT ARE NOT SHOWN ON THE PROPERTY.
 3. BOUNDARY SURVEY SHOWN IS BASED ON A CURRENT FIELD SURVEY.
 4. THIS SURVEY WAS PERFORMED FOR;
ROBERT WARGO
 5. ELEVATIONS SHOWN ARE BASED ON NAVD83, AT 2' INTERVAL.
GPS DISK HB4B USED AS BENCHMARK
 6. THIS PROPERTY IS IN ZONE "X" AREAS OF MINIMAL FLOOD HAZARD, AS SHOWN ON FEMA, RATE MAP FAUQUIER COUNTY, VIRGINIA, FLOODMAP BOUNDARY #51061C0309C EFFECTIVE DATE: FEBRUARY 06, 2008.
 7. LOCATION OF FENCES ARE APPROXIMATE AND DO NOT CERTIFY TO OWNERSHIP.
 8. THE PROPERTIES SHOWN ON THIS PLAT IS LOCATED BY PARCEL ID # 6984-95-2640-000
 9. ADDRESS: 6415 ACADEMY HILL ROAD, WARRENTON VA 20187
 10. OWNER: WARGO PROPERTIES, LLC, DB 1566 PG 2484
 11. ZONING: RES, 1DWELLAC



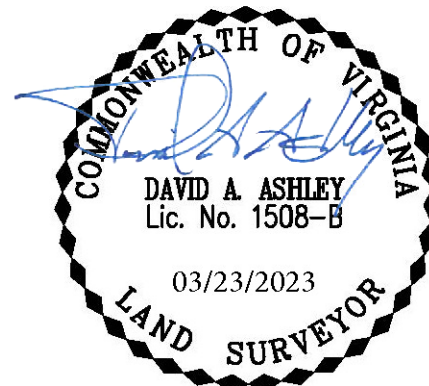
- LEGEND:
- I.R.F. IRON ROD FOUND
 - I.R.S. IRON ROD SET
 - X- FENCE LINE
 - DISTRIBUTION BOX
 - SAN. SEW. MANHOLE
 - ⊕ POWER POLE
 - ⊙ CENTERLINE
 - ⊙ WATER METER
 - ⊙ MAIL BOX
 - ⊙ EDGE OF PAVEMENT
 - ⊙ AC UNIT
 - ⊙ 2" PROPANE TANK LID
 - ⊙ GAS LINE MARKERS POST
 - ⊙ SAN. SEW. CLEAN-OUT

PLAT SHOWING
TOPOGRAPHIC & BOUNDARY SURVEY
ON THE PROPERTY OF
WARGO PROPERTIES, LLC
DEED BOOK 1566, PAGE 2484

CEDAR RUN MAGISTERIAL DISTRICT
FAUQUIER COUNTY, VIRGINIA
DATE OF SURVEY: 03/02/2023
PROJ.# 23-073 DRAWN BY: J.N.R.



9255 CORPORATE CIRCLE
MANASSAS, VIRGINIA 20110
703-368-5866 - 703-368-6892 (FAX)



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TOPOGRAPHIC & BOUNDARY SURVEY
WARGO SUBDIVISION
PIN 6984-95-2640-000
CEDAR RUN MAGISTERIAL DISTRICT - FAUQUIER COUNTY, VIRGINIA

SCALE: AS NOTED

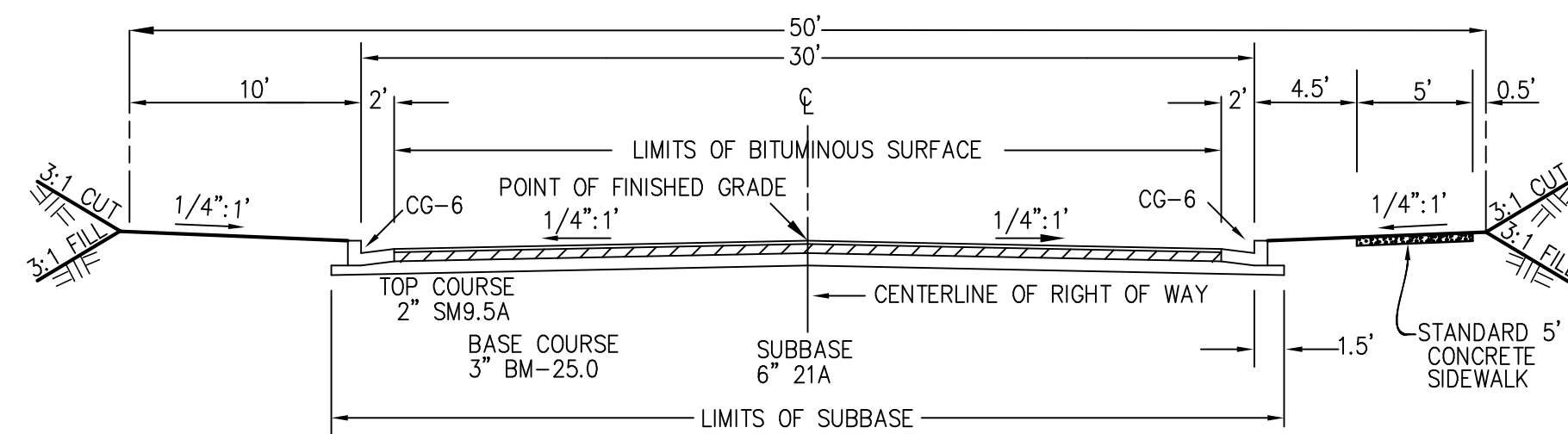
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REVISIONS:

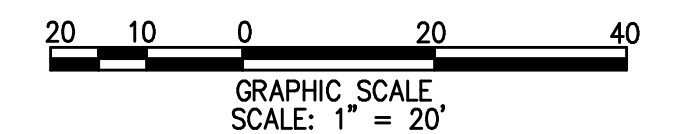
3/10/24 COUNTY COMMENTS

SHEET 2 OF 6

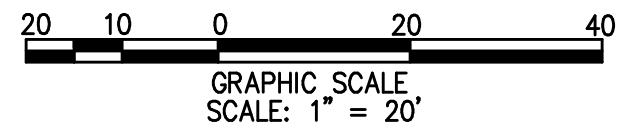
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ST'D UD-3 AND 4" MINIMUM AGGREGATE BENEATH ST'D SIDEWALK.



SHEET
3 OF 6
FILE NO. 1659

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PLANT LIST								
KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	CALIPER	HEIGHT	CANOPY/SPREAD	REMARKS	TOTAL
TREES:								
AR	6	ACER RUBRUM	RED MAPLE	2-1/4" MIN.	6' MIN.	310 SF	B&B	1,860 SF
AP	6	ACER PLATANOIDES 'CRIMSON KING'	NORWAY MAPLE	2-1/4" MIN.	6' MIN.	310 SF	B&B	1,860 SF
KP	2	KOELREUTERIA PANICULATA	GOLDENRAIN TREE	2-1/4" MIN.	6' MIN.	175 SF	B&B	350 SF
QC	6	QUERCUS COCCINEA	SCARLET OAK	2-1/4" MIN.	6' MIN.	250 SF	B&B	1,500 SF
TOTAL CANOPY AREA OF TREES TO BE PLANTED:								5,570 SF

PLANT LEGEND

KP

AR

AP

QC

MEDIUM DECIDUOUS:
KOELREUTERIA PANICULATA/GOLDENRAIN TREE

LARGE DECIDUOUS:
ACER RUBRUM/RED MAPLE

LARGE DECIDUOUS:
ACER PLATANOIDES 'CRIMSON KING'/NORWAY MAPLE

LARGE DECIDUOUS:
QUERCUS COCCINEA/SCARLET OAK

STREET TREE PLANTING

REQUIRED: 1 CANOPY TREE PER 50 LINEAR FEET
ACADEMY HILL ROAD = 294.86' - 50' R.O.W. = 244.86'/50 = 4.90
5 TREES REQUIRED
MAJOR WATERS COURT = 252.50' - 15' STORM SEWER EASEMENT = 237.5'/50 = 4.75
5 TREES REQUIRED (BOTH SIDES)

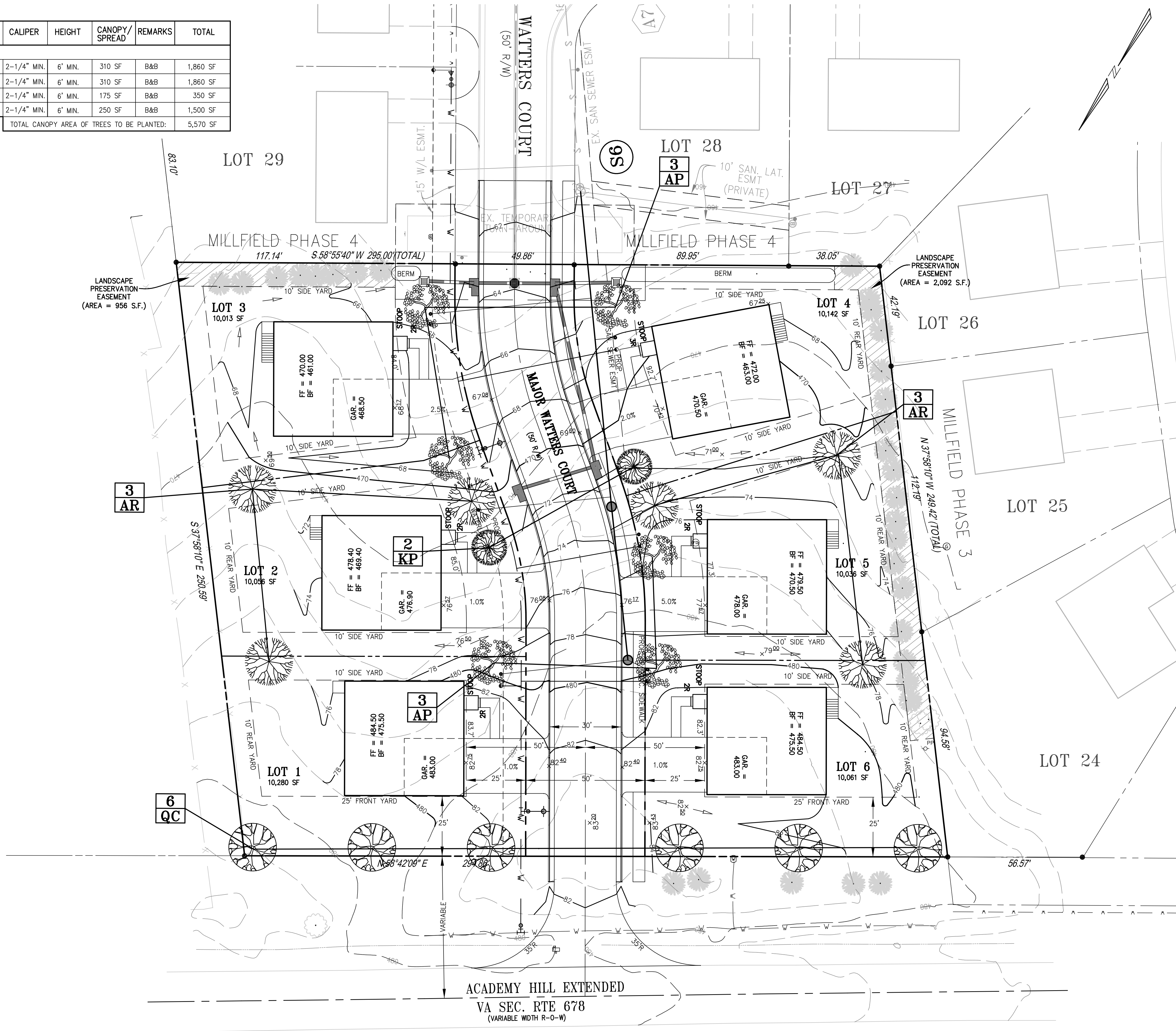
PROVIDED: ACADEMY ROAD = 6 TREES
MAJOR WATERS COURT = 5 TREES (BOTH SIDES)

TREE CANOPY COVER CALCULATIONS

GROSS SITE AREA: (1.6808 AC.) = 73,216 SF.
EXCLUSIONS:
R.O.W. = 12,628 S.F.
UTILITY EASEMENTS = 4,590 S.F.
TOTAL = 17,218 S.F.
NET AREA: 73,216 - 17,218 = 55,998 S.F.
MULTIPLIED BY PERCENTAGE OF TREE COVER REQ'D = (R1&R4=15%):
55,998 (0.15) = 8,399.7 SF
CANOPY AREA REQUIRED = 8,400 SF.

AREA OF EXISTING WOODLANDS TO BE PRESERVED WITHIN EASEMENTS: 3,048 S.F.
CANOPY AREA OF TREES TO BE PLANTED: 5,570 S.F.
TOTAL CANOPY AREA PROVIDED = 8,618 SF.

CANOPY AREA PROVIDED EXCEEDS REQUIRED

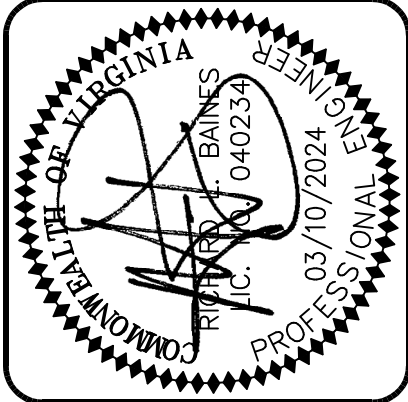


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CONCEPTUAL LANDSCAPE PLAN

WARGO SUBDIVISION

PIN 6984-95-2640-000

CEDAR RUN MAGISTERIAL DISTRICT - FAUQUIER COUNTY, VIRGINIA

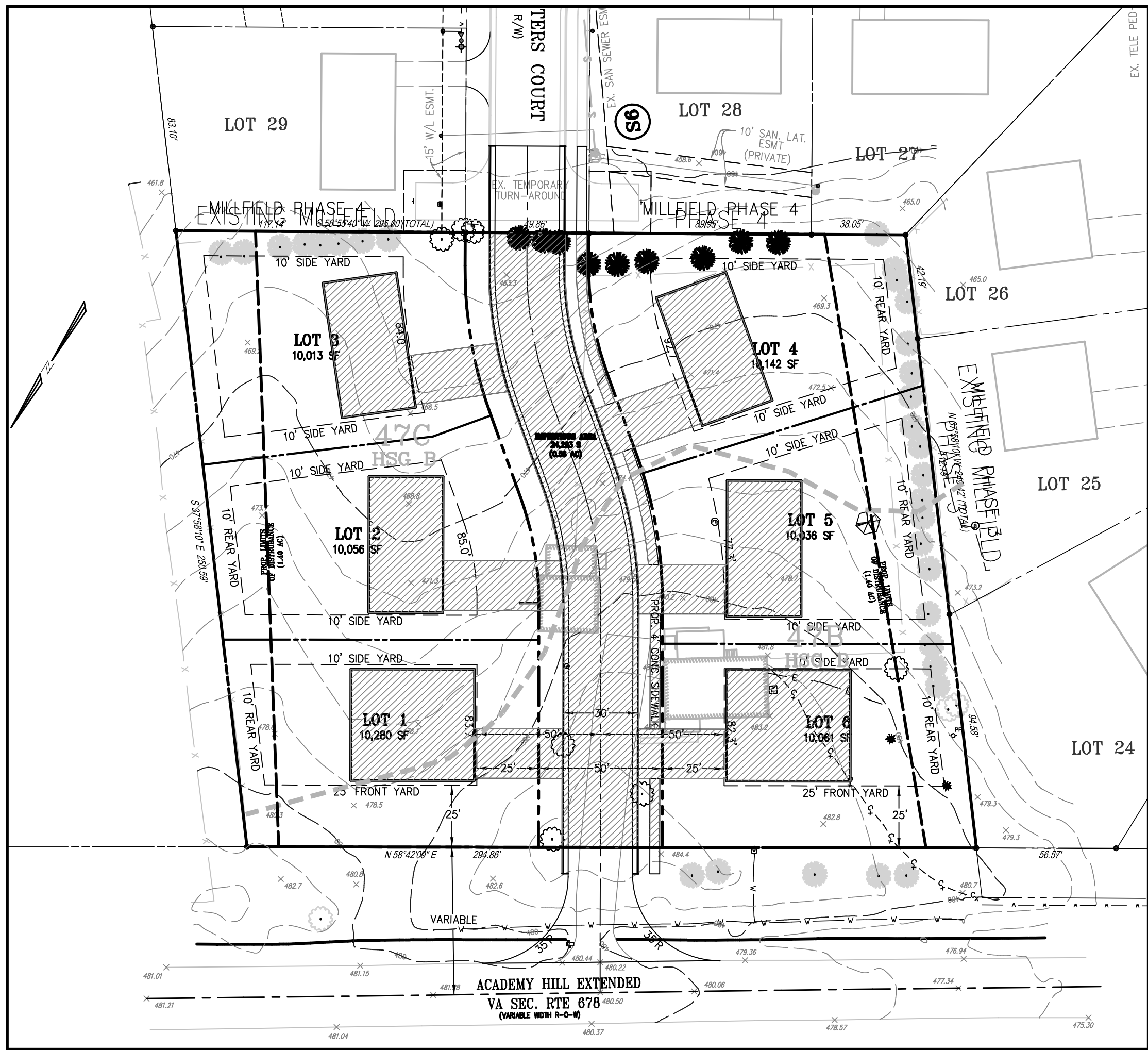
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SHEET

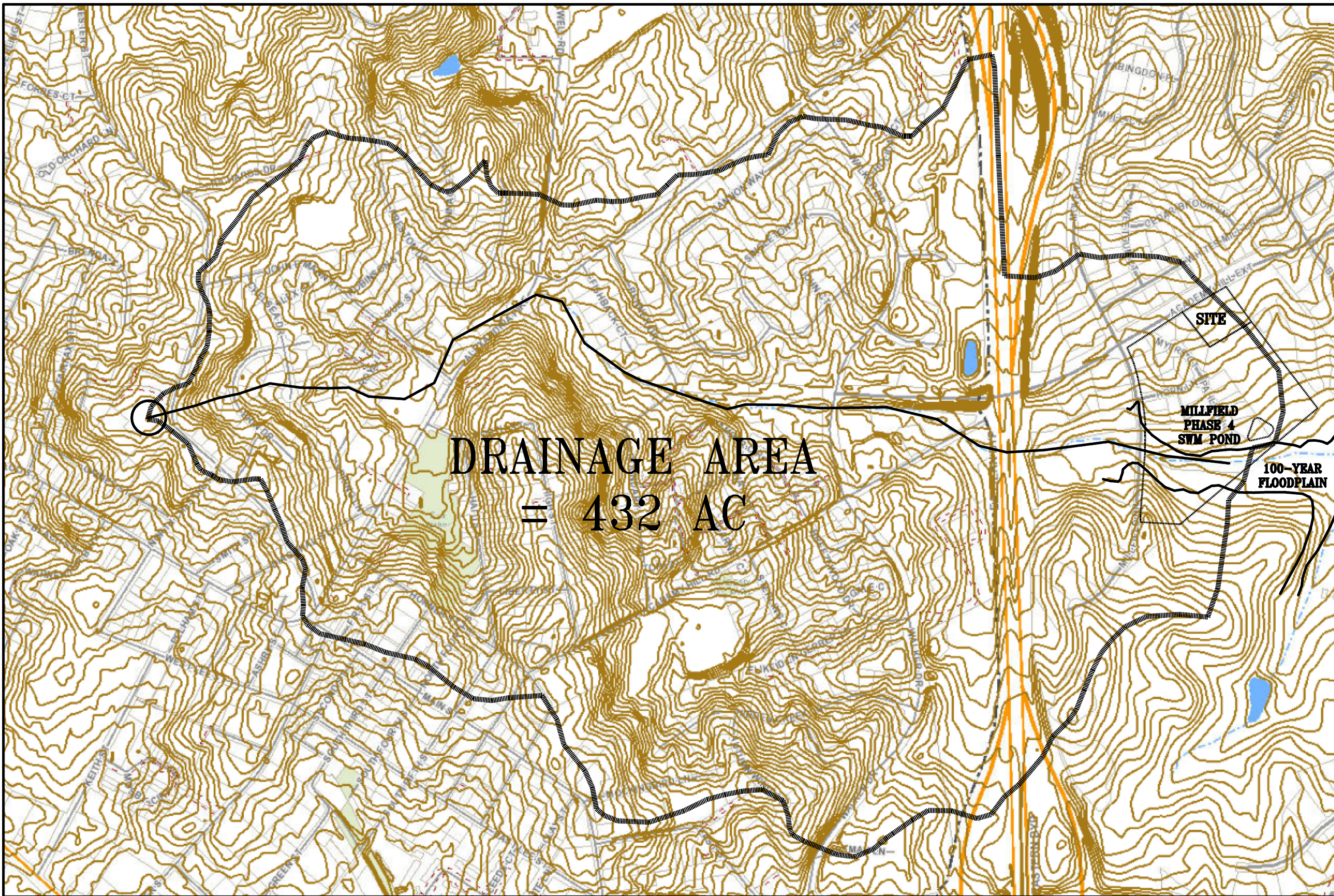
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FILE NO.

1659



POST-DEVELOPMENT QUALITY MAP
SCALE: 1" = 40'



OFFSITE DRAINAGE MAP
SCALE: 1" = 500'

Project Name: **Wargo PIN 6984-95-2640-000**
Date: **11/17/2023**
Linear Development Project? **No**

Site Information

Post-Development Project (Treatment Volume and Loads)

Enter Total Disturbed Area (acres) **1.40**

Maximum reduction required **20%**
The site's net increase in impervious cover (acres) **0.47**
Post-Development TP Load Reduction for Site (lb/yr) **0.94**

Pre-Redevelopment Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) - undisturbed	0.00	0.00	0.00	0.00	0.00
Managed Turf (acres) - disturbed, graded	1.31	0.00	0.00	0.00	1.31
Impervious Cover (acres)	0.09	0.00	0.00	0.00	0.09
Totals	1.31	0.00	0.00	0.00	1.40

Post-Development Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) - undisturbed	0.00	0.00	0.00	0.00	0.00
Managed Turf (acres) - disturbed, graded	0.84	0.00	0.00	0.00	0.84
Impervious Cover (acres)	0.36	0.00	0.00	0.00	0.36
Totals	0.84	0.00	0.00	0.00	0.84

Area Check **OK**

Runoff Coefficients (Rc)

	A Soils	B Soils	C Soils	D Soils
Forest/Open Space	0.00	0.00	0.00	0.00
Managed Turf	0.00	0.00	0.00	0.00
Impervious Cover	0.95	0.95	0.95	0.95

LAND COVER SUMMARY - PRE-REDEVELOPMENT

Pre-Redevelopment	Post-Redevelopment
Forest/Open Space (acres)	0.00
Managed Turf (acres)	0.00
Impervious Cover (acres)	0.00
Managed Turf Cover (acres)	0.84
Weighted Runoff (Rc)	0.20
% Managed Turf	96%
Impervious Cover (acres)	0.09
% Impervious	10%
Total Site Area (acres)	1.40
Site Rc	0.20

LAND COVER SUMMARY - POST DEVELOPMENT

Post-Development	Post-Development New Impervious
Forest/Open Space (acres)	0.00
Managed Turf (acres)	0.00
Impervious Cover (acres)	0.00
Managed Turf Cover (acres)	0.84
Weighted Runoff (Rc)	0.20
% Managed Turf	96%
Impervious Cover (acres)	0.09
% Impervious	10%
Total Site Area (acres)	1.40
Site Rc	0.20

Treatment Volume and Nutrient Load

Pre-Redevelopment	Post-Development
Treatment Volume (ac-ft)	0.0200
TP Load (lb/yr)	0.79
TP Load Reduction (lb/yr)	0.94

Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr)
0.94

Nitrogen Loads (Informational Purposes Only)

Pre-Redevelopment TN Load (lb/yr)	Post-Development TN Load (lb/yr)
5.57	11.42

CONCEPTUAL STORMWATER MANAGEMENT NARRATIVE

The proposed development is located along the southern side of Academy Hill Road to the north of the terminus of Major Watters Court. The existing site is approximately 1.68 acres and consists of one existing residential dwelling, and existing driveway, and open lawn areas. The project consists of the development of six single family detached lots along with associated improvements. Stormwater runoff generally discharges to the southern boundary line. Stormwater runoff will be collected in a closed conduit storm sewer system that will outfall into the existing, manmade storm sewer system located along Major Watters Court.

WATER QUANTITY

Channel Protection:
Stormwater runoff from this development will discharge into an existing, manmade storm sewer system along Major Watters Court. Flow from the 2-year storm is non-erosive within the existing storm sewer system. In accordance with 9VAC25-870-66.B.4, the existing storm sewer system shall be analyzed from the point of discharge to the limits of analysis. The existing storm sewer system discharges into an existing SWM pond within Millfield Phase 4. The overall drainage area at the existing pond outfall is approximately 432 acres. The proposed site's contributing drainage area is less than 1% of the total drainage area at the existing pond outfall. Therefore, 9VAC25-870-66.B.1.A has been met since post-developed flow from the 2-year storm does not cause erosion to the existing manmade stormwater conveyance system from the point of discharge to the limits of analysis. Based on preliminary analysis of the existing SWM pond, the increase in runoff from this proposed development will not exceed the allowable release rate of the 2-year storm at the pond outfall as originally designed with the Millfield Phase 4 construction plan.

Flood Protection:

The existing storm sewer system along Major Watters Court does not currently experience localized flooding. Per 9VAC25-870-66.C.3, the existing storm sewer system shall be analyzed from the point of discharge to the limits of analysis. The existing storm sewer system discharges into an existing SWM pond within Millfield Phase 4. The overall drainage area at the existing pond outfall is approximately 432 acres. The proposed site's contributing drainage area is less than 1% of the total drainage area at the existing pond outfall. Therefore, 9VAC25-870-66.C.1 has been met since post-developed flow from the 10-year storm is contained within the existing stormwater conveyance system from the point of discharge to the limits of analysis. Based on preliminary analysis of the existing SWM pond, the increase in runoff from this proposed development will not exceed the allowable release rate of the 10-year storm at the pond outfall as originally designed with the Millfield Phase 4 construction plan.

WATER QUALITY

Water Quality compliance has been analyzed using the Redevelopment Spreadsheet. The Site Area for this project is estimated to be 1.40 acres and is entirely B soils type (HSG). Pre-development Site Area consists of approximately 1.31 acres of managed turf and 0.09 acres of impervious. Post-development Site Area is estimated to consist of approximately 0.84 acres of managed turf and 0.56 of impervious surface. Total Phosphorous Load Reduction required is estimated to be 0.94 lbs/yr. Stormwater quality compliance for this development will be provided by purchasing the required nutrient credits.

NATURAL RESOURCES INVENTORY

Natural resources inventory is based on publicly available information and mapping. No field investigations or studies have been performed.

SOIL CONDITIONS

According to the USDA Web Soil Survey, soils onsite consist of:
47B Elioak-Fauquier Complex (2-7% slopes) HSG: B
47C Elioak-Fauquier Complex (7-15% slopes) HSG: B
Soils boundaries and types have been shown on the plan.
Fauquier County GIS identifies all soils onsite to have moderate shrink-swell potential.

WETLANDS POTENTIAL

According to the National Wetlands inventory, there are no potential wetland areas onsite or adjacent to the site.

FOREST COVER AND VEGETATION

The subject parcel is mostly open with managed turf yard. Trees line the property perimeter.

TOPOGRAPHY

The subject parcel generally drains from north to south. Existing topography is consistent and ranges from 4 - 15%.

ENVIRONMENTALLY SENSITIVE AREAS

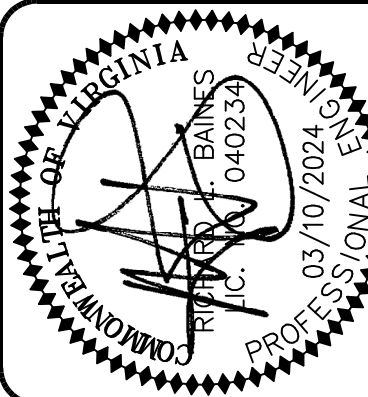
Open space for Woods of Warrenton lies adjacent to the east of the subject property.

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	20.83	1	15	25,033	-----	-----	-----	PRE
2	Rational	21.09	1	12	20,275	-----	-----	-----	POST to pond
3	Rational	10.83	1	15	9,747	-----	-----	-----	BYPASS
4	Reservoir	11.07	1	22	11,803	2	430.03	25,314	ROUTE THRU 48
5	Combine	17.26	1	19	20,529	3, 4	-----	-----	<no description>
PER PLAN SWM with WARGO.gpw					Return Period: 2 Year		Friday, 03 / 8 / 2024		

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	27.80	1	15	33,403	-----	-----	-----	PRE
2	Rational	27.93	1	12	26,851	-----	-----	-----	POST to pond
3	Rational	14.45	1	15	13,006	-----	-----	-----	BYPASS
4	Reservoir	16.68	1	20	18,371	2	430.17	27,161	ROUTE THRU 48
5	Combine	26.44	1	17	30,025	3, 4	-----	-----	<no description>
PER PLAN SWM with WARGO.gpw					Return Period: 10 Year		Friday, 03 / 8 / 2024		

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	37.61	1	15	45,190	-----	-----	-----	PRE
2	Rational	37.60	1	12	36,137	-----	-----	-----	POST to pond
3	Rational	19.55	1	15	17,595	-----	-----	-----	BYPASS
4	Reservoir	22.99	1	20	27,645	2	430.38	30,112	ROUTE THRU 48
5	Combine	38.36	1	15	43,421	3, 4	-----	-----	<no description>
PER PLAN SWM with WARGO.gpw					Return Period: 100 Year		Friday, 03 / 8 / 2024		

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WARGO SUBDIVISION
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FAUQUIER COUNTY, VIRGINIA

SCALE: AS NOTED
DATE: 11/17/2023
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SHEET 6 OF 6
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