

ESD SUMMARY TABLE - LOT 12, UIC Driveway & T-Turnaround

Sizing Criteria	Symbol	Vol. Req. (cf)	Vol. Prov. (cf)
Water Quality Volume	WQv	282	282
Overbank Flood Protection	Qp	0	0
Extreme Flood	Qf	0	0
Recharge Volume	REv	31	*31

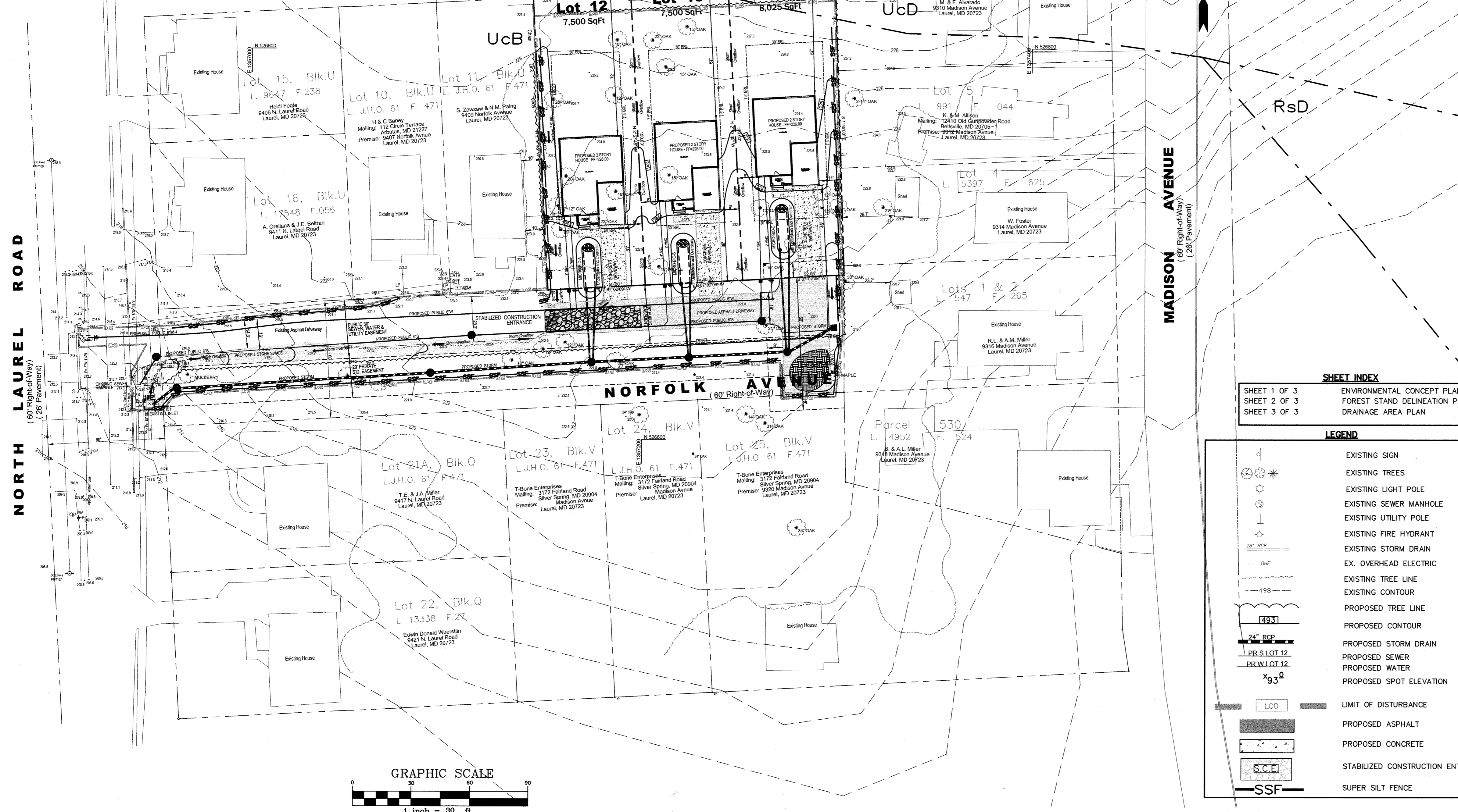
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Overbank Flood Protection	Qp	0	0
Extreme Flood	Qf	0	0
Recharge Volume	REv	32	*32

ESD SUMMARY TABLE - LOT 14, UIC Driveway & T-Turnaround

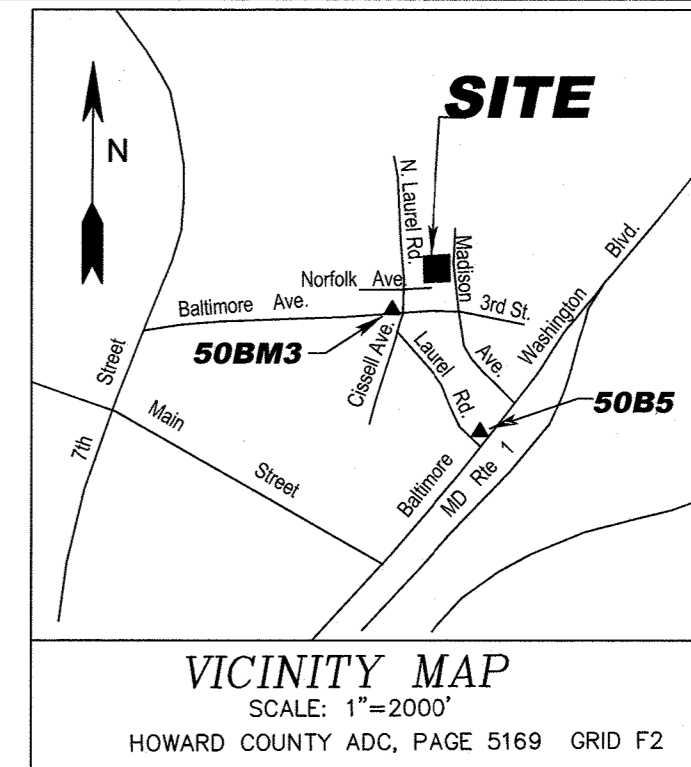
Sizing Criteria	Symbol	Vol. Req. (cf)	Vol. Prov. (cf)
Water Quality Volume	WQv	279	279
Overbank Flood Protection	Qp	0	0
Extreme Flood	Qf	0	0
Recharge Volume	REv	32	*32

* 6" below underdrain well exceeds 25% REV, thus we show we will meet the required REV.



FOREST STAND DELINEATION NARRATIVE

Stand F-1 is a mix of trees and sizes typical of middle succession growth whose dominant species consists of White Oaks and Willow Oaks. The understory consists of Red Oak, Pin Oak, Red Maple, and Beech species. There are a moderate amount of saplings and early developed species, showing successful reproduction potential. The canopy closure is about 75%, giving the opportunity for a moderate amount of ground/herbaceous cover. The groundcover throughout the stand consists of Multiflora Rose and Ivy species. This, along with a moderate amount of downed woody material, makes the stand well suited for small animal habitat. This stand does not reside within an environmentally sensitive areas.



GENERAL NOTES / SITE ANALYSIS

ZONE: R-SC (RESIDENTIAL: SINGLE CLUSTER)
 EXISTING USE: OPEN LAND
 PROPOSED USE: SINGLE FAMILY RESIDENTIAL
 COUNCIL DISTRICT: 3
 PARCEL 426
 TAX MAP 50 GRID 03
 TOTAL PROJECT SIZE: 23,025 sf (0.528 AC)
 TOTAL DISTURBED AREA: 35,117 sf (0.81 AC)
 TOTAL IMPERVIOUS AREA WITHIN PROJECT AREA: 0.18 AC
 TOTAL EXISTING FOREST AREA WITHIN LOTS: 0.50 AC
 TOTAL ERODIBLE SOILS ON SITE: 0.0 AC
 TOTAL OPEN/GREEN AREA FOR LOTS 12, 13 & 14: 0.398 AC
 THERE ARE NO FLOODPLAINS WITHIN THE PROJECT AREA
 THERE ARE NO WETLANDS WITHIN THE PROJECT AREA
 THERE ARE NO STEEP SLOPES WITHIN THE PROJECT AREA
 PROJECTED BY HOWARD COUNTY GEODETIC CONTROL
 STATION 50B3 N 527565.8697 E 1359782.8206
 STATION 50B5 N 524999.3750 E 1357925.7480
 THIS PROJECT IS EXEMPT FROM FOREST CONSERVATION BECAUSE IT IS A PARCEL THAT DOES NOT CREATE ANY ADDITIONAL LOTS PER SECTION 16.1202(b)(1).

LOT 12
 ADDRESS: 9411 NORFOLK AVENUE
 ZONING: R-SC
 TAX MAP: 50 - GRID 03
 LOT SIZE: 7,500 SF

	REQUIRED	PROPOSED
BUILDING HEIGHT	35 feet (Max)	20 FEET
LOT COVERAGE	4,500sf (60% Max)	1,807sf(24.1%)
LOT SIZE	6,000sf (Min)	7,500 SF
MIN. LOT WIDTH AT BRL:	60 feet	50 FEET
FRONT BRL:	30 feet	31 FEET
SIDE BRL:	7.5 feet	8 FEET
REAR BRL:	30 feet	72 FEET

LOT 13
 ADDRESS: 9413 NORFOLK AVENUE
 ZONING: R-SC
 TAX MAP: 50 - GRID 03
 LOT SIZE: 7,500 SF

	REQUIRED	PROPOSED
BUILDING HEIGHT	35 feet (Max)	20 FEET
LOT COVERAGE	4,500sf (60% Max)	1,874sf(24.1%)
LOT SIZE	6,000sf (Min)	7,500 SF
MIN. LOT WIDTH AT BRL:	60 feet	50 FEET
FRONT BRL:	30 feet	36 FEET
SIDE BRL:	7.5 feet	8 FEET
REAR BRL:	30 feet	67 FEET

LOT 14
 ADDRESS: 9415 NORFOLK AVENUE
 ZONING: R-SC
 TAX MAP: 50 - GRID 03
 LOT SIZE: 8,025 SF

	REQUIRED	PROPOSED
BUILDING HEIGHT	35 feet (Max)	20 FEET
LOT COVERAGE	4,815sf (60% Max)	1,807sf(22.5%)
LOT SIZE	6,000sf (Min)	8,025 SF
MIN. LOT WIDTH AT BRL:	60 feet	52 FEET
FRONT BRL:	30 feet	31 FEET
SIDE BRL:	7.5 feet	10 FEET
REAR BRL:	30 feet	72 FEET

SOILS:
 UCB (99.9%) - Urban land - Chillum-Beltsville complex, 0 to 5 percent slopes
 Ucd (00.1%) - Urban land - Chillum-Beltsville complex, 5 to 15 percent slopes

PROJECT NARRATIVE

THE THREE LOTS 12, 13 & 14 ARE LOCATED IN A WOODED AREA. AS THE LOTS ARE DEVELOPED, ALL TREES WORTH SAVING SAFELY WILL REMAIN IN PLACE AND PROTECTED. THE LAND SLOPES MODERATELY SO VERY LITTLE GRADING WILL TAKE PLACE TO CHANGE THE LAY OF THE LAND. DUE TO VIRGIN LAND BECOMING DEVELOPED REDUCTION OF IMPERVIOUS AREA IS NOT POSSIBLE AND WITH THE LACK OF SOIL INFILTRATION AND OVERALL EXCESS GREEN AREA DOWNSTREAM, ALTERNATIVE SURFACES AND NON-STRUCTURAL PRACTICES ARE NOT PRACTICAL TO ADDRESS STORMWATER. THREE INDIVIDUAL MICRO-BIOTENTION FACILITIES WITH UNDERDRAINS HAVE BEEN DESIGNED ON EACH LOT TO BE DEVELOPED AS A PART OF ONSITE MITIGATION. WITH THE LIMITED DOWNSTREAM AREA AND SIMPLICITY OF DEVELOPMENT SILT FENCE IS PROPOSED TO CONTROL THE RUNOFF OF DISTURBANCE DURING CONSTRUCTION.

PRELIMINARY STORMWATER MANAGEMENT

ONE STORMWATER MICRO-BIOTENTION FACILITY IS PROPOSED FOR EACH LOT TO MEET STORMWATER REQUIREMENTS FOR LOTS 12, 13 & 14 ALONG WITH THE ASSOCIATED ADDITIONAL DRIVEWAY. SAFE CONVEYANCE OF OFFSITE FLOW DOWN THE DRIVEWAY BY WAY OF A STONE CHANNEL.

Professional Certification

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

OWNER/DEVELOPER
 MR. MARK HADEED
 3172 FAIRLAND ROAD
 SILVER SPRING, MD. 20904
 PHONE: (240) 328-2591

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief, Development Engineering Division
 Chief, Division of Land Development

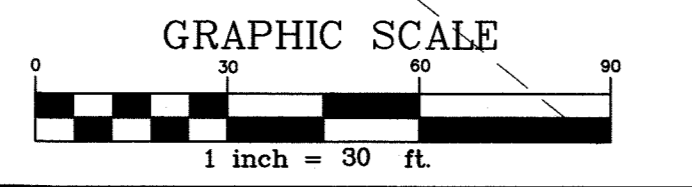
DATE: 08/06/2020

SHEET INDEX

SHEET 1 OF 3	ENVIRONMENTAL CONCEPT PLAN
SHEET 2 OF 3	FOREST STAND DELINEATION PLAN
SHEET 3 OF 3	DRAINAGE AREA PLAN

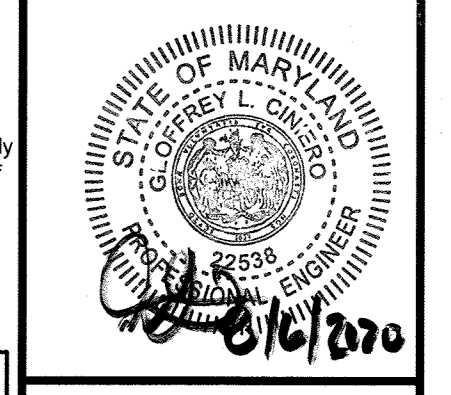
LEGEND

(Symbol)	EXISTING SIGN
(Symbol)	EXISTING TREES
(Symbol)	EXISTING LIGHT POLE
(Symbol)	EXISTING SEWER MANHOLE
(Symbol)	EXISTING UTILITY POLE
(Symbol)	EXISTING FIRE HYDRANT
(Symbol)	EXISTING STORM DRAIN
(Symbol)	EX. OVERHEAD ELECTRIC
(Symbol)	EXISTING TREE LINE
(Symbol)	EXISTING CONTOUR
(Symbol)	PROPOSED TREE LINE
(Symbol)	PROPOSED CONTOUR
(Symbol)	PROPOSED STORM DRAIN
(Symbol)	PROPOSED SEWER
(Symbol)	PROPOSED WATER
(Symbol)	PROPOSED SPOT ELEVATION
(Symbol)	LIMIT OF DISTURBANCE
(Symbol)	PROPOSED ASPHALT
(Symbol)	PROPOSED CONCRETE
(Symbol)	STABILIZED CONSTRUCTION ENT.
(Symbol)	SUPER SILT FENCE



CIVIL ENGINEER
CMS
 CMS ASSOCIATES LLC
 4925 Ellis Lane
 Ellicott City, Maryland 21043
 Tel. (410) 988-2436
 Contact: Geoffrey L. Cimiero, PE
 www.cms-engineering.net

NORTH LAUREL PARK ENVIRONMENTAL CONCEPT PLAN
 PARCEL 426 BLOCK U LOTS 12, 13, 14
 PLAT J.H.O. 61 as PLAT 470
 TAX MAP 50 GRID 03
 6th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND



PLAN NO.:
 SCALE: AS NOTED
 DATE: 08/06/2020
 SHEET 1 OF 3
 FILE NO: 19-021
 ECP - 20 - 029

SITE NARRATIVE AND FOREST SUMMARY

INTRODUCTION

Norton Land Design completed a Forest Stand Delineation for the project known as North Laurel Park located in Laurel, Howard County, MD in November, 2019. The delineation was conducted using the guidelines set forth in the MDNR State Forest Conservation Technical Manual and Howard County Forest Conservation Manual.

GENERAL INFORMATION

This is a 0.52 acre site consisting of three lots, Lot 12 being owned by Mark Hadeed and Lots 13 and 14 being owned by T-Bone Enterprises LLC. The site currently is undeveloped. The site is bordered by residential properties on all sides. There is a vehicle and pedestrian access from Norfolk Avenue.

ENVIRONMENTAL FEATURES

100 YEAR FLOOD PLAIN

The FEMA flood map Community-Panel # 24027 C0230D indicates there is no floodplain on the property.

SOILS

The soil types that are present on the property are as follows.

Soil type UCB – Urban Land-Chillum-Beltsville Complex, 0 to 5 percent slopes. Very deep, and well drained soil type. Low runoff potential. Very deep water table with a moderate amount of available water storage. There is very little potential for flooding or ponding. This soil occurs on minimally sloped areas.

NONTIDAL WETLANDS

There were no wetlands observed onsite or within 100' of the property during the field investigation. No wetland buffers exist near the property.

STREAMS AND DRAINAGEWAYS

There was no stream observed onsite, or within 100' of site. The site is within the Patuxent River Watershed, Use I,P

TOPOGRAPHY AND STEEP SLOPES

The site overall site is relatively flat and slightly sloped south. Severe or moderate slopes do not exist on the site.

CRITICAL HABITATS

The MDNR have been notified of the project area and description. There appears to be no critical wildlife habitats from the field inspection. Copy of correspondence will be provided when it is available.

CULTURAL FEATURES

The site does not appear to have any individual historic sites found in the Howard County Interactive Map. It appears the development of the subject site will not impact any historic sites.


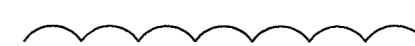


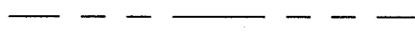
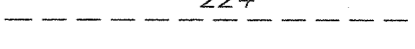

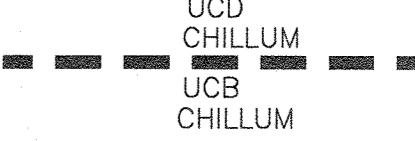

BRIEF FOREST STAND INFORMATION

The site contains a forest stand with a total of 0.45 acres of forest onsite. There no significant/specimen trees located within the forest stand. The forest area is summarized below, and a full narrative will be attached to this plan.

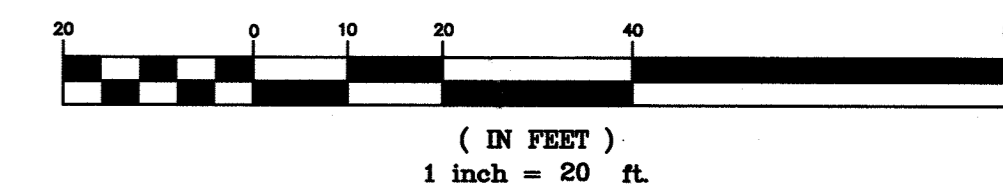
FOREST STAND F-1

Forest Stand F-1 (19,760 sq.ft. / 0.45 ac). Stand F-1 is a mix of trees and sizes typical of middle succession growth whose dominant species consists of White Oaks and Willow Oaks. The understory consists of Red Oak, Pin Oak, Red Maple, and Beech species. There are a moderate amount of saplings and early developed species, showing successful reproduction potential. The canopy closure is about 75%, giving the opportunity for a moderate amount of ground/herbaceous cover. The groundcover throughout the stand consists of Multiflora Rose and Ivy species. This, along with a moderate amount of downed woody material, makes the stand well suited for small animal habitat. This stand does not reside within and environmentally sensitive areas.

LEGEND

-  EXISTING TREE
-  SCRUB/SHRUB AREA
-  FOREST BOUNDARY
-  EXISTING PROPERTY BOUNDARY
-  ADJACENT PROPERTY BOUNDARY
-  EX. CONTOUR
-  SLOPES 15-25%
-  SOILS BOUNDARY
-  STUDY AREA

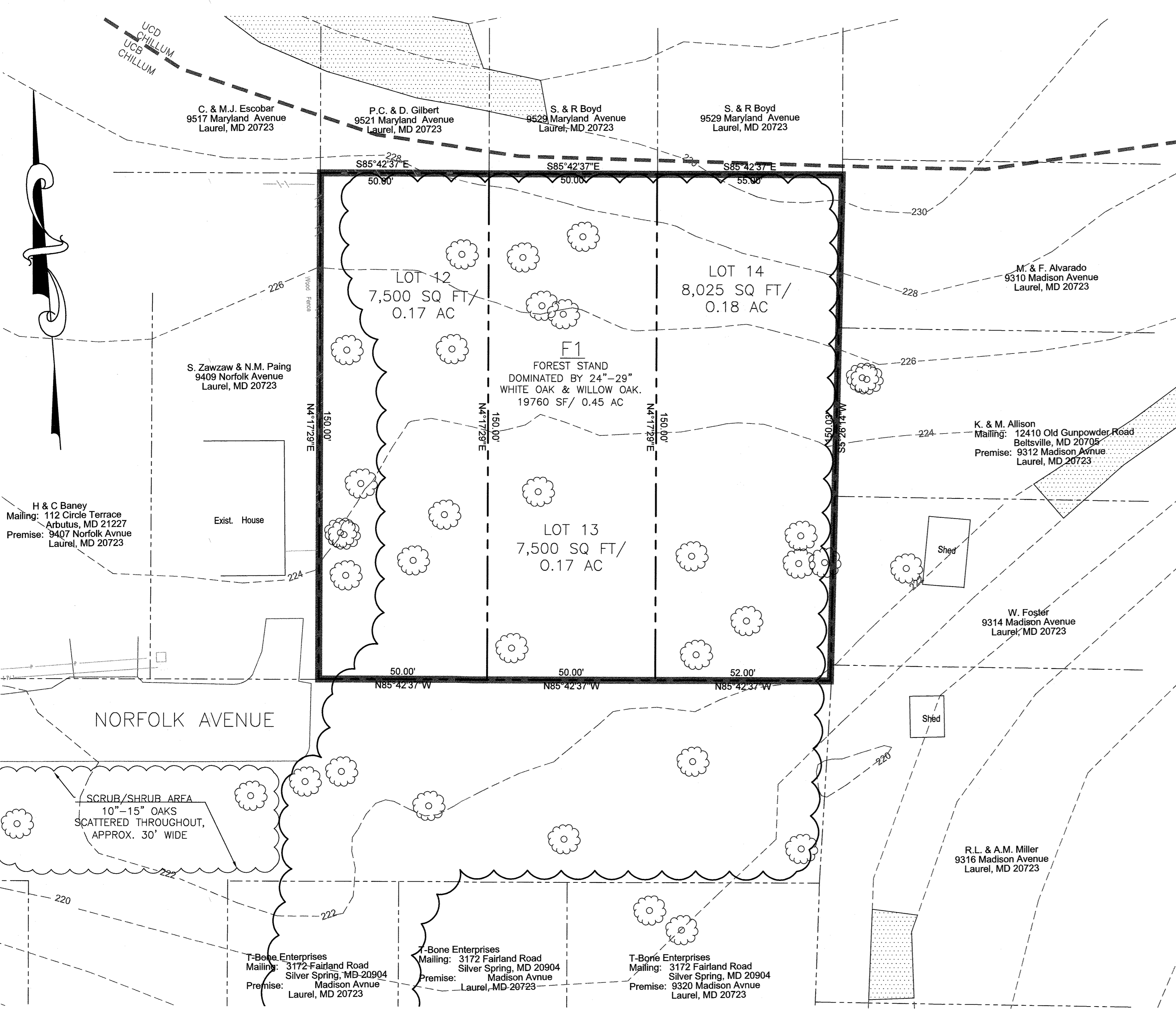
GRAPHIC SCALE



CERTIFICATION OF QUALIFIED PROFESSIONAL

I HEREBY CERTIFY THAT THE PLAN SHOWN HEREON HAS BEEN PREPARED IN ACCORDANCE WITH MARYLAND STATE, AND HOWARD COUNTY FOREST CONSERVATION LAWS.

8.11.2020 DATE
 MICHAEL A. NORTON
 MDNR / COMAR 06.19.06.01
 QUALIFIED PROFESSIONAL



GENERAL FSD NOTES

1. THIS PROPERTY IS ZONED R-SC.
2. THE TOTAL TRACT AREA IS 0.52 ACRES.
3. SITE FIELD WORK WAS PERFORMED ON NOVEMBER, 2019 BY MICHAEL NORTON, NORTON LAND DESIGN LLC.
4. BOUNDARY AND FIELD SURVEY WAS PROVIDED BY WITMER ASSOCIATES IN JULY 2019.
5. THERE IS A NO PRIME AGRICULTURAL SOIL ON THE PROPERTY. SEE SOIL TABLE.
6. NO TREES WERE FOUND TO BE 30' AND GREATER ONSITE OR WITHIN 100 FEET OFFSITE. THIS WAS VERIFIED BY THE USE OF A FOREST DIAMETER TAPE, (FOR TREES ON THE PROPERTY), AND OCULAR ESTIMATE, (FOR TREES OFFSITE).
7. ALL MANMADE STRUCTURES OFFSITE ARE LOCATED BY AVAILABLE AERIAL PHOTOGRAPHS AND/OR OCULAR ESTIMATE.
8. NO RARE, THREATENED OR ENDANGERED SPECIES WERE OBSERVED ON OR OFFSITE AT THE TIME OF THE FIELD INVESTIGATION.
9. NO TREES OCCUR WITHIN THE STUDY AREA WHICH ARE RECOGNIZED AS CURRENT STATE CHAMPION TREES.
10. THE SUBJECT PROPERTY IS NOT LISTED AS HAVING INDIVIDUAL HISTORIC SITES AS FOUND IN THE HOWARD COUNTY INTERACTIVE MAP.

FSD TABULATION TABLE

ACREAGE OF TRACT(S):	0.52
ACREAGE OF EX. FOREST:	0.45
ACREAGE OF EXISTING WETLANDS	0.00
ACREAGE OF FORESTED WETLANDS	0.00
ACREAGE OF WETLAND BUFFERS	0.00
ACREAGE OF STREAM BUFFERS	0.00
ACREAGE OF FORESTED STREAM BUFFER	0.00
ACREAGE OF 100 YEAR FLOODPLAIN	0.00
LINEAR EXTENT OF STREAMS	0
AVERAGE WIDTH OF STREAM BUFFER	0

SOIL TABLE

SOILS	ERODIBLE	HYDRIC	CONTAINS 15-25% SLOPES	CONTAINS > 25% SLOPES	CAPABILITY SUBCLASS SYMBOL	PRIME AGRICULTURAL SOIL
UCB URBAN LAND-CHILLUM-BELTSVILLE COMPLEX 0-5% SLOPES	NO	NO	N/A	NO	N/A	NO

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature]
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature]
 CHIEF, DIVISION OF LAND DEVELOPMENT

9.30.20 DATE
 8/19/2020 DATE

WATER CLASS I,P	WATERSHED PATUXENT RIVER	FEMA FLOODPLAIN MAP PANEL # 24027C0230D
TRIBUTARY N/A		
TAX MAP 0050	200 SHEET N/A	ADC MAP PAGE 19 GRID K-12
SCALE AS SHOWN	DATE AUGUST 2020	PROJ. NO. 19-055 SHEET NO. 2 OF 3

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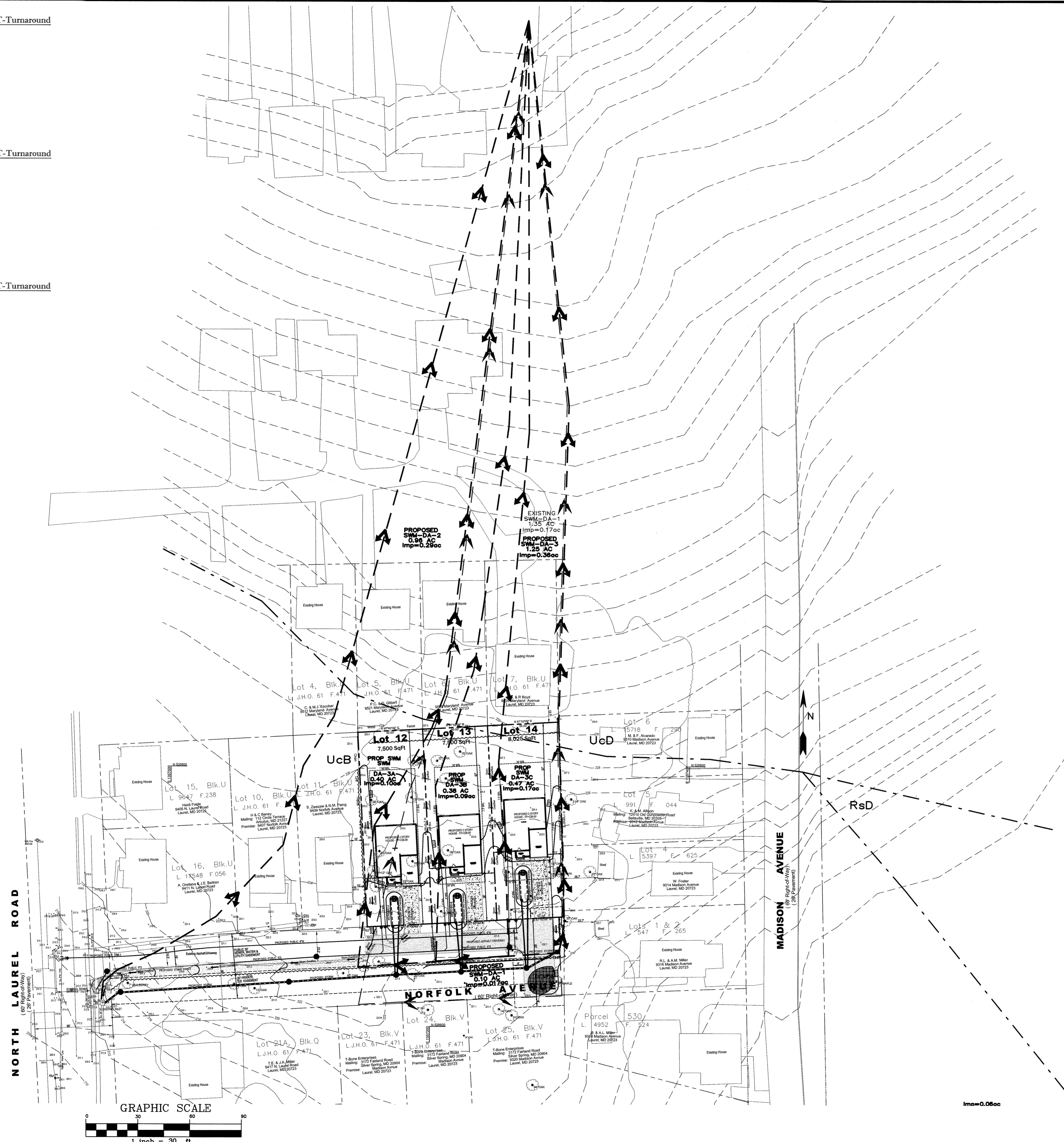
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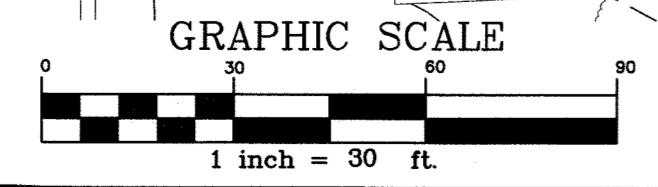
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* 6" below underdrain well exceeds 25% REV, thus we show we will meet the required REV.



- Existing Drainage Divide
- Proposed Drainage Divide
- Proposed Individual Drainage Divide for Stormwater Management

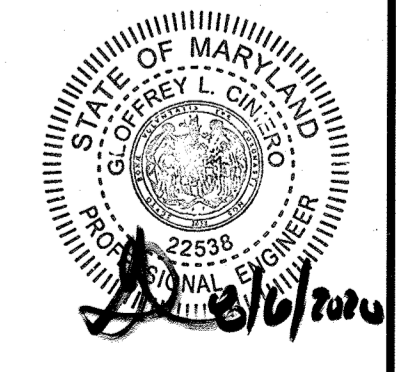


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**NORTH LAUREL PARK
 DRAINAGE AREA PLAN**
 PARCEL 426 BLOCK U LOTS 12, 13, 14
 PLAT J.H.O. 61 as PLAT 470
 TAX MAP 50 GRID 03
 6th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

OWNER/DEVELOPER
 MR. MARK HADEED
 3172 FAIRLAND ROAD
 SILVER SPRING, MD, 20904
 PHONE: (240) 328-2591

Professional Certification
 I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No.: 22538
 Expiration Date: 11-24-21



APPROVED: DEPARTMENT OF PLANNING AND ZONING

 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 9/30/20

 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 01/19/20

PLAN NO.:
 SCALE: AS NOTED
 DATE: 08/06/2020
 SHEET 3 OF 3
 FILE NO: 19-021

ECP-20-025