

**GENERAL NOTES**

- PROJECT BACKGROUND:  
SUBDIVISION NAME: MAGNOLIA MANOR WEST  
- TAX MAP # 47 GRID 19  
- SECTION/AREA N/A  
- LOT/PARCEL P, 157 & P, 558  
- ZONING R-SC (MIN 6,000 SF LOT)  
- ZB/BA REFERENCE N/A  
- ELECTION DISTRICT 6 TH  
- TOTAL TRACT AREA 1.81 ACRES  
- NUMBER OF PROPOSED LOTS 7 SFD / 1 O.S.  
- NET AREA OF PROJECT 1.81 ACRES  
- AREA OF PROPOSED SFD 1.34 ACRES  
- AREA OF R/W DEDICATION 0.2 ACRES (OLD SCAGGSVILLE RD)  
- AREA OF PROPOSED ROAD R/W 0.0 ACRES (VIC DRIVE PROPOSED)  
- OPEN SPACE REQ. 0.45 ACRES (SEE NOTE 23)  
- OPEN SPACE PROVIDED SEE TABULATION  
- PUBLIC WATER & SEWER SEE NOTE 9  
- DPZ REF.'S F-84-62, ECP-17-004, S-17-003, WP-17-059
- THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- THE SUBJECT PROPERTY IS ZONED R-SC IN ACCORDANCE WITH THE OCT. 06, 2013 ZONING REGULATIONS, AND IS SUBJECT TO THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS EFFECTIVE 10/2/03 PER COUNCIL BILL 75-2003.
- THE PROJECT BOUNDARY IS BASED ON A BOUNDARY SURVEY PREPARED BY ROBERT H. VOGEL ENGINEERING, INC., DATED MARCH 2017.
- THE EXISTING TOPOGRAPHY SHOWN HEREON IS TAKEN FROM A FIELD SURVEY WITH 2 FOOT CONTOUR INTERVALS PREPARED BY ROBERT H. VOGEL ENGINEERING, INC., DATED JUNE 2017 AND SUPPLEMENTED WITH HOWARD COUNTY GIS FOR OFFSITE AREAS.
- SOIL TYPES SHOWN HEREON ARE IN ACCORDANCE WITH THE WEB SOIL SURVEY HOWARD COUNTY, MARYLAND - SAVAGE SW. SEE MAP #24.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 470E AND 470D WERE USED FOR THIS PROJECT.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE WETLANDS, STREAM(S) OR THEIR REQUIRED BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100-YEAR FLOODPLAIN.
- THIS PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT.  
WATER FOR THIS PROJECT IS TO BE A PUBLIC EXTENSION OF CONTRACT NO. 1-W.  
SEWER FOR THIS PROJECT IS TO BE SERVICE CONNECTIONS TO EXISTING CONTRACT NO. 20-1018.
- EXISTING UTILITIES LOCATED FROM TOPOGRAPHIC SURVEY AND AS-BUILT DRAWINGS. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE.
- NO FLOODPLAIN IS LOCATED ONSITE.
- NO STEEP SLOPES OVER 20.00% SF CONTIGUOUS ARE LOCATED ONSITE.
- A WETLAND AND SIMPLIFIED FOREST STAND DELINEATION PLAN WAS PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. C/O MR. JOHN CANOLES, AUGUST 16, 2016, AND APPROVED AS PART OF THE ECP & SKETCH PLAN SUBMISSION.  
-AN INTERMITTENT STREAM IS LOCATED OFFSITE. ITS BUFFER DOES NOT IMPACT THE PROJECT SITE  
-SEVEN (7) SPECIMEN TREES WERE FOUND ONSITE. THE PROPOSAL INCLUDES THE REMOVAL OF 6 TREES. EFFORTS WILL BE MADE TO SAVE TREE #4. REFER TO WP-17-059.
- THIS PROJECT IS SUBJECT TO WP-17-059. ON MARCH 9, 2017, THE PLANNING DIRECTOR APPROVED THE REQUEST FOR AN ALTERNATIVE COMPLIANCE OF SECTION 16.1205(A)(7) FOR REMOVAL OF SEVEN SPECIMEN TREES SUBJECT TO THE FOLLOWING CONDITIONS:  
1. ADD A GENERAL NOTE FOR THE ALTERNATIVE COMPLIANCE WP-17-059, ON S17-003 MAGNOLIA MANOR WEST STATING THE REQUEST, SECTION REFERENCE NUMBER, THE APPROVAL DATE AND CONDITIONS.  
2. SHOW THE SPECIMEN TREES BEING REMOVED AND LABELED PER WP-17-059 ON THE PLAN MYLAR ORIGINAL, FOR S-17-003.  
3. REMOVAL OF THE 7 SPECIMEN TREES IS SUBJECT TO PROVIDING THE REPLACEMENT OF FOURTEEN (14) MINIMUM CALIPER NATIVE SHADE TREES AS STATED IN THE ALTERNATIVE COMPLIANCE JUSTIFICATION TO BE LOCATED AT A MORE APPROPRIATE LOCATION.  
4. FOREST CONSERVATION OBLIGATIONS SHALL BE MET BY PAYMENT OF FEE-IN-LIEU OR PROVIDED VIA PURCHASE EASEMENT IN AN OFFSITE FOREST CONSERVATION BANK.
- OLD SCAGGSVILLE ROAD IS CLASSIFIED AS A LOCAL ROAD.  
-PROPOSED ROAD IS A PRIVATE USE--COMMON DRIVEWAY.
- DRIVEWAY(S) SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:  
A) WIDTH - 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE).  
B) SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING.  
C) GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% CHANGE AND MINIMUM OF 45-FOOT DEPTH TURNING RADIUS.  
D) STRUCTURES (CULVERT/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H2S LOADING).  
E) DRAINAGE ELEMENTS--CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.  
F) STRUCTURE CLEARANCES--MINIMUM 12 FEET.  
G) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
- A TRAFFIC STUDY FOR THIS PROJECT PREPARED BY THE TRAFFIC GROUP, INC., DATED SEPTEMBER 2016, WAS APPROVED UNDER S-17-003.
- A NOISE STUDY IS NOT REQUIRED. NOISE WALL MITIGATION CURRENTLY EXISTS ALONG INTERSTAE 95.
- THE SITE IS NOT LOCATED IN THE HISTORIC DISTRICT, THE TWO EXISTING HOMES BEING REMOVED ARE NOT LISTED ON THE HISTORIC SITES INVENTORY.
- TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO BURIAL GROUNDS OR CEMETERIES LOCATED ON THE SUBJECT PROPERTY OR THE COUNTY'S CEMETERY SITE MAP.
- THE PRE-SUBMISSION COMMUNITY MEETING WAS HELD FOR THIS PROJECT AT THE NORTH LAUREL COMMUNITY CENTER ON JULY 17, 2016.
- THE ENVIRONMENTAL CONCEPT PLAN (ECP-17-004) WAS APPROVED ON JANUARY 24, 2017.
- IN ACCORDANCE WITH SECTION 16.121(A)(2) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, THE OPEN SPACE REQUIREMENTS FOR THIS R-SC PROJECT (6,000 SF MIN LOT SIZE) IS 25% OF GROSS AREA (1.81 AC. GROSS AREA x 25% = 0.45 AC +/-).
- REFUSE COLLECTION, SNOW REMOVAL AND MAINTENANCE FOR LOTS 2-6 SHALL BE PROVIDED AT THE JUNCTION OF THE PRIVATE USE--COMMON ACCESS EASEMENT AND THE PROPOSED ROAD RIGHT-OF-WAY.
- THE PROPOSED UNITS SHALL HAVE AN AUTOMATIC FIRE PROTECTION SPRINKLER SYSTEM.
- STORMWATER MANAGEMENT FOR THE PROJECT IS PROVIDED BY THE USE OF MICRO-SCALE PRACTICES IN ACCORDANCE WITH ENVIRONMENTAL SITE DESIGN CRITERIA. -MICRO-SCALE PRACTICES: MICRO- BIORETENTION (M-8), RAIN GARDENS (M-7) AND DRYWELLS (M-5). THESE FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.  
-FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSSED AS PART OF THE FINAL PLAN DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$10,050.00 FOR THE REQUIRED 19 SHADE TREES 5 SHRUBS (TRASH PAD) AND 14 SPECIMEN REPLACEMENT TREES.
- PUBLIC STREET TREES ARE PROVIDED FOR THIS PROJECT IN ACCORDANCE WITH SECTION 16.124(E)(1) OF THE SUBDIVISION REGULATIONS AND THE LANDSCAPE MANUAL. FINANCIAL SURETY (\$1500) SHALL BE POSTED AS PART OF THE FINAL PLAN DEVELOPER'S AGREEMENT FOR THE REQUIRED 5 STREET TREES.
- A TEST PIT REPORT FOR THIS PROJECT WAS PREPARED BY ROBERT H. VOGEL ENGINEERING, INC., DATED APRIL 2015.
- IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL - VOLUME 3, CHAPTER 2 - SECTION 2.9.B AND THE HOWARD COUNTY ZONING REGULATIONS SECTION 13.0.D.2.a, PARKING IS REQUIRED AT 2.5 SPACES PER UNIT. OFF STREET PARKING TO INCLUDE GARAGE SPACES, DRIVEWAY, PARKING PADS AND COURTS. GARAGES COUNT AS TWO SPACES. SEE TABULATION THIS SHEET.
- STREET LIGHTING IS REQUIRED FOR THIS SITE IN ACCORDANCE WITH SECTION 16.135 OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURES AND POLES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III, SECTION 5.5.A. A MINIMUM OF 20 FEET SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
- IN ACCORDANCE WITH SECTION 112.1.F OF THE 10/06/13 COMPREHENSIVE ZONING REGULATIONS, THIS SUBDIVISION IS SUBJECT TO MODERATE INCOME HOUSING UNITS. A MIHU AGREEMENT AND MIHU COVENANTS WILL BE REQUIRED IN ACCORDANCE WITH SECTION 13.402 OF THE HOWARD COUNTY CODE. THE MIHU REQUIREMENTS FOR THIS SUBDIVISION WILL BE 1 UNITS (10% OF 7 UNITS).
- TRAFFIC CONTROL DEVICES:  
A. THE R1-1(STOP) SIGN AND STREET NAME SIGN (SNS) ASSEMBLY FOR THIS DEVELOPMENT MUST BE INSTALLED BEFORE THE BASE PAVING IS COMPLETE.  
B. A PRIVATE RANGE OF ADDRESS OF ADDRESS SIGN ASSEMBLY SHALL BE FABRICATED BY HOWARD COUNTY BUREAU OF HIGHWAYS AT THE DRIVEWAY ACCESS POINT ONTO OLD SCAGGSVILLE ROAD AT THE DEVELOPERS / OWNERS EXPENSE. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT 410-313-5752 FOR DETAILS AND COST ESTIMATES.  
C. THE TRAFFIC CONTROL DEVICE LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MUST BE FIELD APPROVED BY HOWARD COUNTY TRAFFIC DIVISION (410-313-2430) PRIOR TO THE INSTALLATION OF ANY OF THE TRAFFIC CONTROL DEVICES.  
D. ALL TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MDMUTCD).  
E. ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED ("QUICK PUNCH"), SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) - 3' LONG. THE ANCHOR SHALL NOT EXTEND MORE THAN TWO "QUICK PUNCH" HOLES ABOVE GROUND LEVEL. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.

**NOTES:**

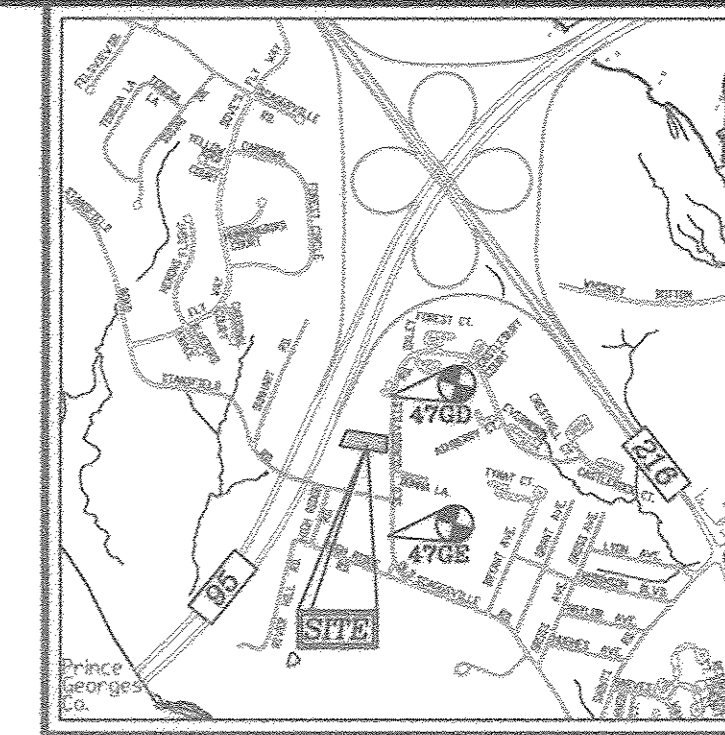
1. ALL WATER CONNECTIONS SHALL BE 1-1/2" WITH 1" OUTSIDE METER SETTINGS, UNLESS OTHERWISE NOTED. REFER TO HOWARD COUNTY DETAILS W-3.28 OUTSIDE METER SETTINGS.

# PRELIMINARY PLAN MAGNOLIA MANOR WEST LOTS 1 - 7 AND OPEN SPACE LOT 8 OLD SCAGGSVILLE ROAD HOWARD COUNTY, MD

COORDINATE TABLE		
NO.	NORTH	EAST
202	530058.4985	1350390.5274
203	530085.5109	1350841.3121
204	529908.4781	1350841.0238
301	529990.9559	1350841.6307
312	530146.9628	1350430.8871
400	529979.2066	1350354.3523

**BENCHMARKS**

HOWARD COUNTY BENCHMARK - 47GE  
N 529044.94 E 1350855.03 ELEV.: 337.61  
HOWARD COUNTY BENCHMARK - 47GD  
N 530494.49 E 1350872.35 ELEV.: 312.28



VICINITY MAP  
SCALE: 1"=2,000'  
ADC MAP COORDINATE: 40- A6

**LEGEND**

- EXISTING CURB AND GUTTER
- CURB AND GUTTER
- EXISTING LIGHT POLE
- EXISTING MAILBOX
- EXISTING SIGN
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- EXISTING WETLAND
- EXISTING WETLAND BUFFER
- EXISTING TREE LINE
- TREE LINE

SHEET INDEX		
DESCRIPTION	SHEET NO.	
COVER SHEET	1	OF 7
SITE LAYOUT	2	OF 7
GRADING, SOIL EROSION AND SEDIMENT CONTROL PLAN AND SOILS MAP	3	OF 7
STORM DRAIN DRAINAGE AREA MAP	4	OF 7
PRELIMINARY LANDSCAPE PLAN, NOTES & DETAILS	5	OF 7
FOREST CONSERVATION PLAN, NOTES & DETAILS	6	OF 7
STORM WATER MANAGEMENT DRAINAGE AREA MAP, NOTES AND DETAILS	7	OF 7

**PARKING TABULATION:**

TOTAL NUMBER OF DWELLING UNITS PROPOSED : 7  
OFF-STREET PARKING SPACES REQUIRED: 2 SPACES PER UNIT = 14 SPACES  
PARKING SPACES PROVIDED:  
SFD = 1 GARAGE/1 DRIVEWAY  
2 SPACE IN GARAGE = 14 SPACES (FOR 7 UNITS)  
2 SPACES ON DRIVEWAY = 14 SPACES (FOR 7 UNITS)  
TOTAL PARKING SPACES PROVIDED: = 28 SPACES OFF-STREET  
OVERFLOW / GUEST PARKING SPACES REQUIRED:  
0.5 SPACES PER SFD UNIT x 7 = 4 SPACES  
REQUIRED TOTAL OVERFLOW PARKING SPACES PROVIDED:  
= 7 SPACES (DRIVEWAY)  
REFER TO OFF-STREET EXCESS.

**SITE ANALYSIS DATA CHART**

A. TOTAL PROJECT AREA:	1.81 AC +/-
B. AREA OF PLAN SUBMISSION:	1.81 AC
C. AREA OF WETLANDS AND BUFFERS:	0.14 AC +/-
D. AREA OF FLOODPLAIN:	0.00 AC +/-
E. AREA OF FOREST:	0.0 AC
F. AREA OF STEEP SLOPES (25% & GREATER):	0.0 AC +/-
G. ERODIBLE SOILS:	0.01 AC +/- WITHIN LOD
H. LIMIT OF DISTURBED AREA:	1.81 AC +/-
I. PROPOSED USES FOR SITE AND STRUCTURES:	RESIDENTIAL SINGLE FAMILY DETACHED HOMES
J. GREEN OPEN AREA:	1.28 AC +/-
K. PROPOSED IMPERVIOUS AREA:	0.53 AC +/-
L. PRESENT ZONING DESIGNATION:	R-SC (MIN 6,000 SF LOT)
M. OPEN SPACE REQUIRED:	SEE NOTE 23 & TABULATION
N. TOTAL NUMBER OF UNITS ALLOWED:	16 (8.47 X 2)
O. TOTAL NUMBER OF UNITS PROPOSED:	7
P. DPZ FILE REFERENCES:	SEE NOTE 1

**OWNER**

MAGNOLIA MANOR LLC  
C/O TRINITY QUALITY HOMES  
3675 PARK AVE., SUITE 301  
ELLCOTT CITY, MD 21043  
(410) 480-0023

**DEVELOPER**

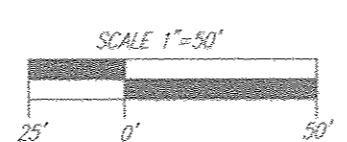
TRINITY HOMES MARY LAND, LLC  
3675 PARK AVE., SUITE 301  
ELLCOTT CITY, MD 21043  
(410) 480-0023

**OPEN SPACE TABULATION:**

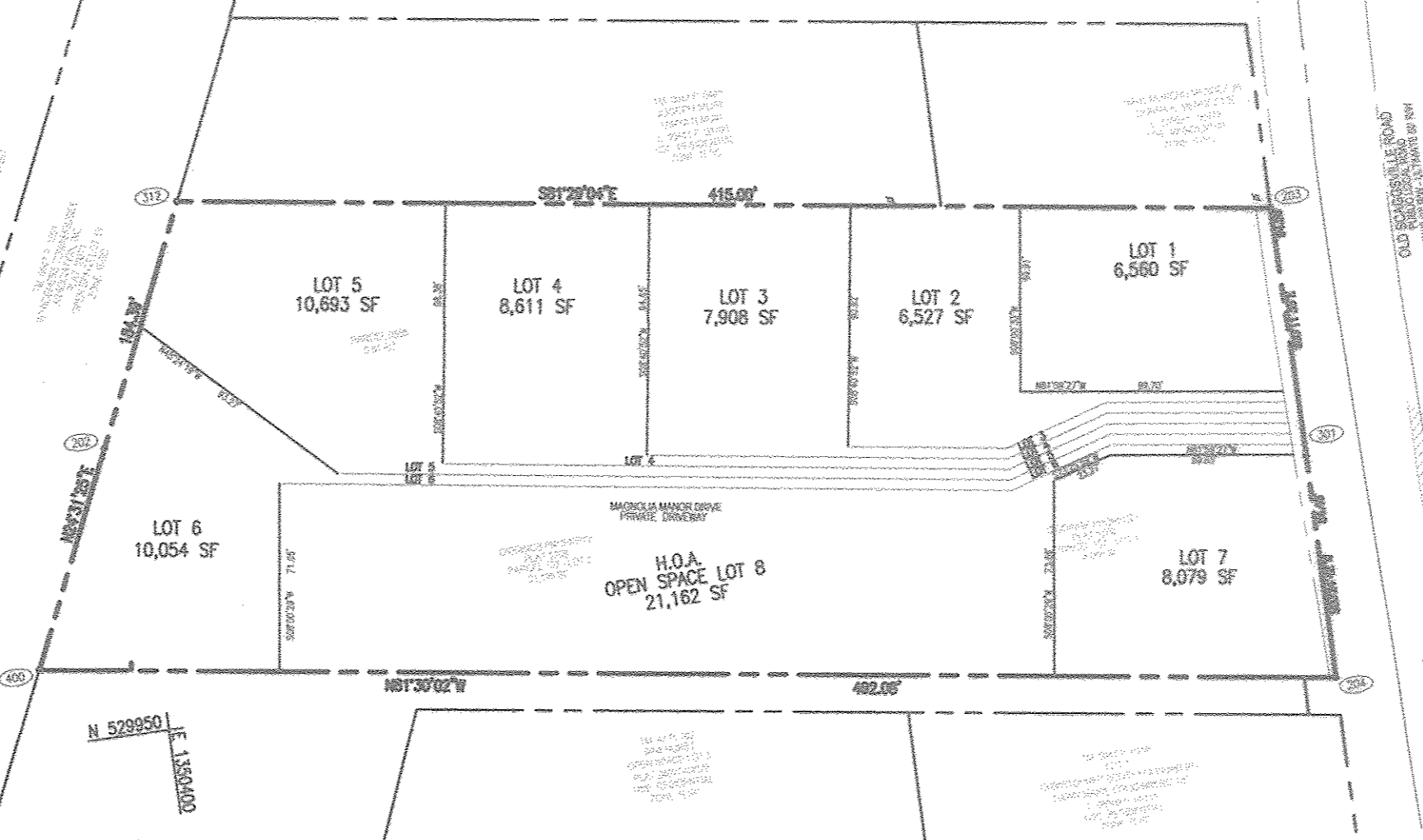
IN ACCORDANCE WITH SECTION 16.121(A)(2) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS THE OPEN SPACE REQUIREMENTS FOR THIS R-SC PROJECT IS 25% OF GROSS AREA  
(1.81 AC. GROSS AREA x 25% = 0.45 AC.)  
OPEN SPACE PROVIDED IS 0.47 ACRES±  
CREDITED 0.45 ACRES±  
NON-CREDITED 0.02 ACRES±

IN ACCORDANCE WITH SECTION 16.121(A)(4) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS RECREATION OPEN SPACE IS NOT REQUIRED FOR THIS PROJECT; LESS THAN 10 DWELLING UNITS.

MINIMUM LOT SIZE CHART				
LOT	GROSS AREA	PIPESTEM AREA	NET AREA	MIN. LOT SIZE
2	6,527 SF	274 SF	6,253 SF	6,000 SF
3	7,908 SF	673 SF	7,235 SF	6,000 SF
4	8,611 SF	981 SF	7,631 SF	6,000 SF
5	10,693 SF	1,293 SF	9,399 SF	6,000 SF
6	10,054 SF	1,455 SF	8,599 SF	6,000 SF



LOCATION MAP  
SCALE: 1"= 50'



LOT LAYOUT DETAIL  
SCALE: 1"= 60'



TENTATIVELY APPROVED  
DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY  
*Robert H. Vogel*  
PLANNING DIRECTOR  
12-7-17  
DATE

NO.	REVISION	DATE

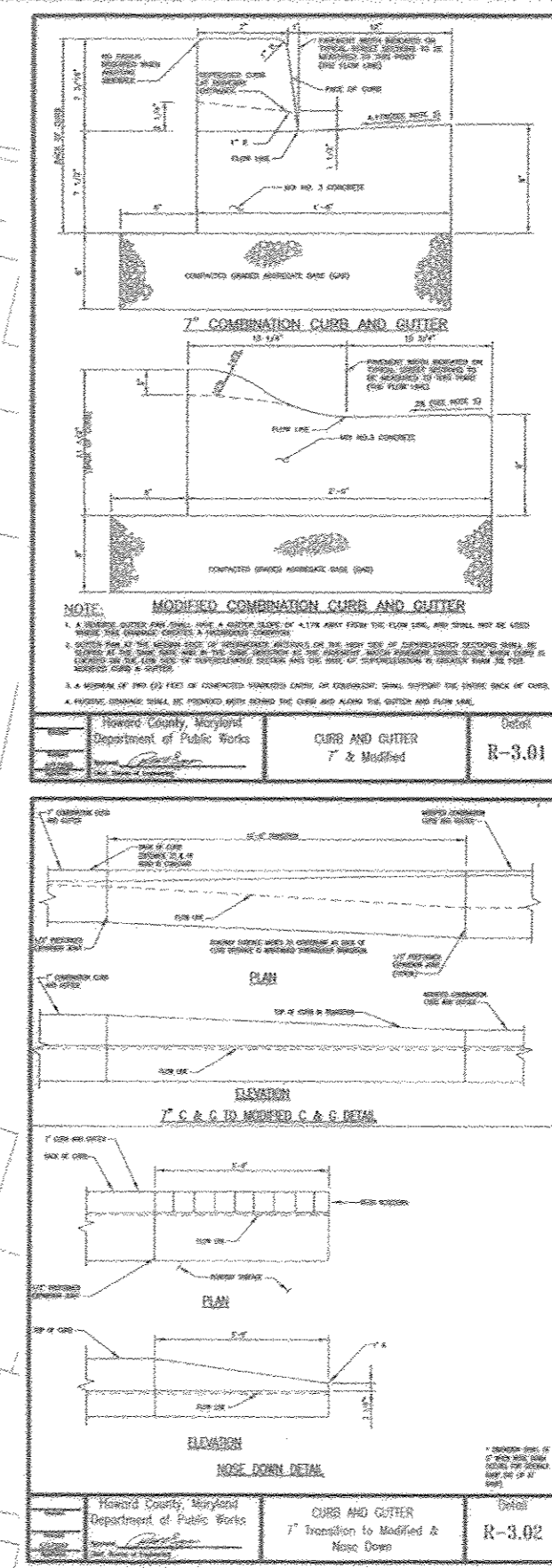
PRELIMINARY PLAN  
COVER SHEET  
**MAGNOLIA MANOR WEST**  
LOTS 1 - 7 AND OPEN SPACE LOT 8  
A SUBDIVISION OF TAX MAP 47 - PARCEL 558  
AND A RESUBDIVISION OF TAX MAP 47 - PARCEL 157  
("GIDDINGS PROPERTY - LOTS 1 AND 2" (PLAT 5708))  
TAX MAP: 47 PARCELS: 157 & 558  
BLOCK: 19 ZONING: R-SC  
6TH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

**ROBERT H. VOGEL ENGINEERING, INC.**  
ENGINEERS • SURVEYORS • PLANNERS  
8407 MAIN STREET  
ELLCOTT CITY, MD 21043  
TEL: 410.461.7666  
FAX: 410.461.8961

DESIGN BY: RHV/EDS  
DRAWN BY: KG/EDS  
CHECKED BY: RHV  
DATE: NOVEMBER 2017  
SCALE: AS SHOWN  
W.O. NO.: 16-15

PROFESSIONAL CERTIFICATE  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE NO. 17883 EXPIRATION DATE 08-27-2018

1 SHEET OF 7



FOR REFERENCE: TYPICAL DETAIL

Access Plans, Access Drives, Floor Collector, Easement Section

NOTE: MODIFIED COMBINATION CURB AND GUTTER

7' COMBINATION CURB AND GUTTER

7' CURB AND GUTTER

7' CURB AND GUTTER

FOR REFERENCE: TYPICAL DETAIL

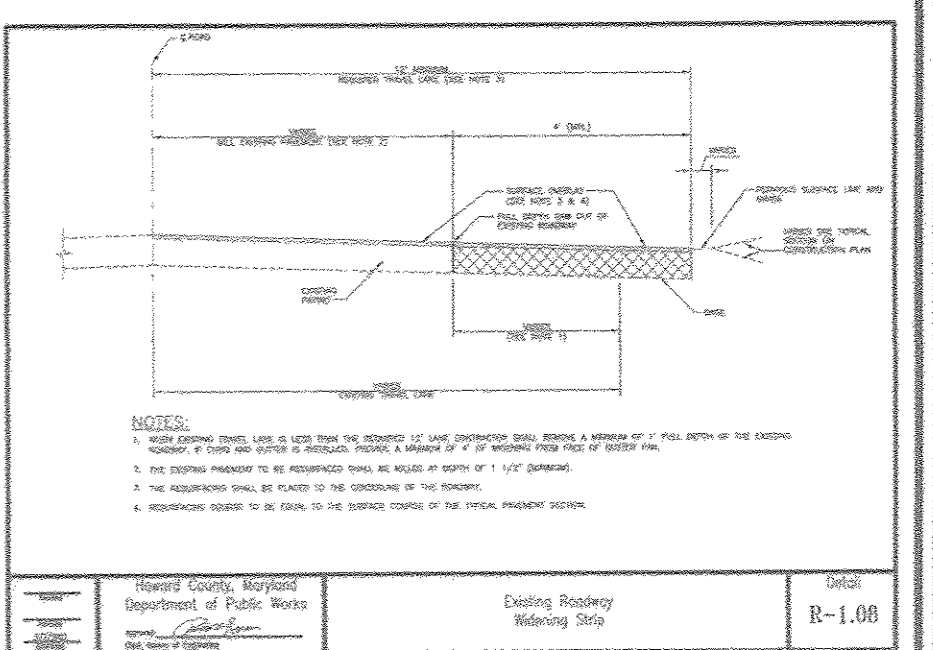
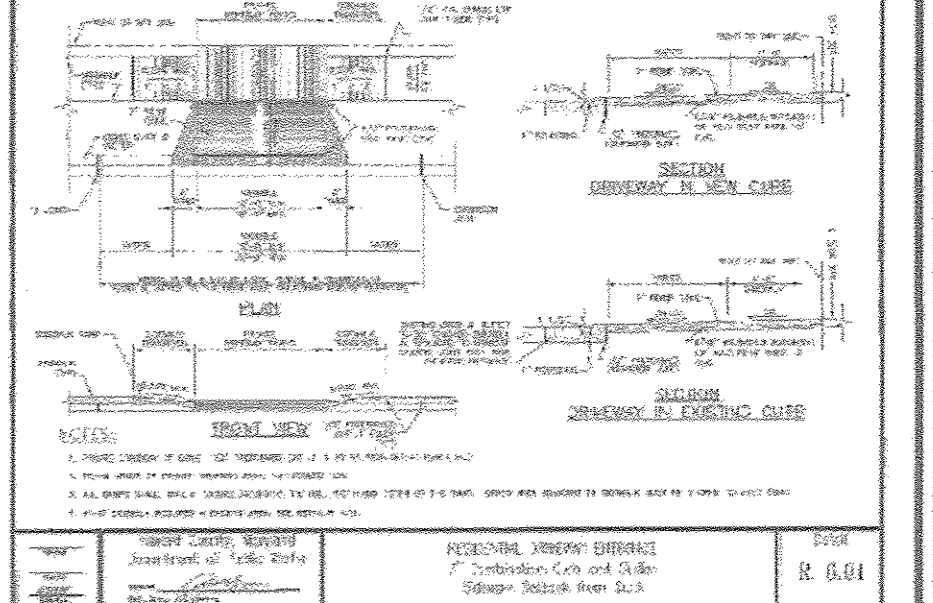
Access Plans, Access Drives, Floor Collector, Easement Section

NOTE: MODIFIED COMBINATION CURB AND GUTTER

7' COMBINATION CURB AND GUTTER

7' CURB AND GUTTER

7' CURB AND GUTTER



**LEGEND:**

EXISTING CURB AND GUTTER	MICRO-BORSTERTATION (M-6)
EXISTING UTILITY POLE	EXISTING WETLAND
EXISTING MAILBOX	EXISTING WETLAND BUFFER
EXISTING SIGN	EXISTING WETLAND AND UTILITY EASEMENT
EXISTING SANITARY MANHOLE	PUBLIC DRAINAGE AND UTILITY EASEMENT
EXISTING SANITARY LINE	24" PRIVATE ACCESS EASEMENT
EXISTING CLEANOUT	WATER, SEWER AND UTILITY EASEMENT
EXISTING FIRE HYDRANT	EXISTING SEWER AND UTILITY EASEMENT
EXISTING WATER LINE	EXISTING SEWER AND UTILITY EASEMENT
EXISTING STORM DRAIN	EXISTING SEWER AND UTILITY EASEMENT
EXISTING OVER HEAD LINE	EXISTING SEWER AND UTILITY EASEMENT
STORM DRAIN	EXISTING SEWER AND UTILITY EASEMENT
EXISTING TREES (FIELD LOCATED)	EXISTING SEWER AND UTILITY EASEMENT
EXISTING SPECIMEN TREES	EXISTING SEWER AND UTILITY EASEMENT
EXISTING TREELINE	EXISTING SEWER AND UTILITY EASEMENT
EXISTING FENCE	EXISTING SEWER AND UTILITY EASEMENT
PROPERTY LINE	EXISTING SEWER AND UTILITY EASEMENT
RIGHT-OF-WAY LINE	EXISTING SEWER AND UTILITY EASEMENT

**LAYOUT SHEET**  
SCALE: 1"=30'

**UIC DRIVEWAY CURVE TABLE**

CURVE	LENGTH	RADIUS	DELTA ANGLE	TANGENT	CHORD DIRECTION	CHORD LENGTH
0+15.83 - 0+31.94	16.11'	100.00'	09°13'41"	8.07'	N 86°36'17" W	16.09'
0+79.82 - 1+08.56	28.74'	67.00'	24°34'35"	14.59'	S 85°43'16" W	28.52'
1+20.39 - 1+57.02	36.63'	83.00'	25°16'58"	18.82'	N 86°04'28" E	36.33'

**OLD SCAGGSVILLE ROAD CURVE TABLE (COMPUTED CL)**

CURVE	LENGTH	RADIUS	DELTA ANGLE	TANGENT	CHORD DIRECTION	CHORD LENGTH
10+11.85 - 12+96.27	254.42'	1956.00'	07°27'09"	127.39'	S 02°27'09" W	254.24'

**STREET LIGHT LOCATIONS**

ROAD NAME	STATION	OFFSET	FIXTURE/POLE TYPE
MAGNOLIA MANOR DRIVE	0+17.95	13.9' LEFT	130 WATT LED PREMIER POST-TOP FIXTURE MOUNTED ON A 14' BLACK FIBERGLASS POLE

**TRAFFIC CONTROL SIGN LOCATION CHART**

ROAD NAME	STATION	OFFSET	TYPE
MAGNOLIA MANOR DRIVE	0+26.33	9.7' L	R1-1 STOP SIGN & STREET NAME SIGN

- NOTES:**
- FOR STREET TREE LOCATIONS, REFER TO SHEET 5.
  - ALL STREET TREES AND/OR SIGN SHALL BE LOCATED 5' MIN. FROM PROPOSED DRAINAGE, UTILITY STRUCTURE.
  - THERE SHOULD BE A MINIMUM OF 20' BETWEEN STREET LIGHTS AND STREET TREES.
  - IN THE DIRECTION FACING A TRAFFIC CONTROL SIGN:
    - THERE SHALL BE A MINIMUM OF 40' BETWEEN THE SIGN FACE AND CLOSEST TREE FOR ALL STOP SIGNS.
    - THERE SHALL BE A MINIMUM OF 35' BETWEEN THE SIGN FACE AND CLOSEST TREE FOR ALL SIGNS OTHER THAN A STOP SIGN.

- NOTES:**
- ALL WATER CONNECTIONS SHALL BE 1-1/2" WITH 1" OUTSIDE METER SETTINGS, UNLESS OTHERWISE NOTED. REFER TO HOWARD COUNTY DETAILS W-3.28 OUTSIDE METER SETTINGS.

**OWNER**  
MAGNOLIA MANOR LLC  
C/O TRINITY QUALITY HOMES  
3675 PARK AVE., SUITE 301  
ELLCOTT CITY, MD 21043  
(410) 480-0023

**DEVELOPER**  
TRINITY HOMES MARY LAND, LLC  
3675 PARK AVE., SUITE 301  
ELLCOTT CITY, MD 21043  
(410) 480-0023

NO. \_\_\_\_\_ REVISION \_\_\_\_\_ DATE \_\_\_\_\_

**PRELIMINARY PLAN**  
**SITE LAYOUT**  
**MAGNOLIA MANOR WEST**  
LOTS 1 - 7 AND OPEN SPACE LOT 8  
A SUBDIVISION OF TAX MAP 47 - PARCEL 558  
AND A RESUBDIVISION OF TAX MAP 47 - PARCEL 157  
(GIDDINGS PROPERTY - LOTS 1 AND 2) (PLAT 5708)

TAX MAP: 47 PARCELS: 157 & 558  
BLOCK: 19 ZONING: R-SC  
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**ROBERT H. VOGEL ENGINEERING, INC.**  
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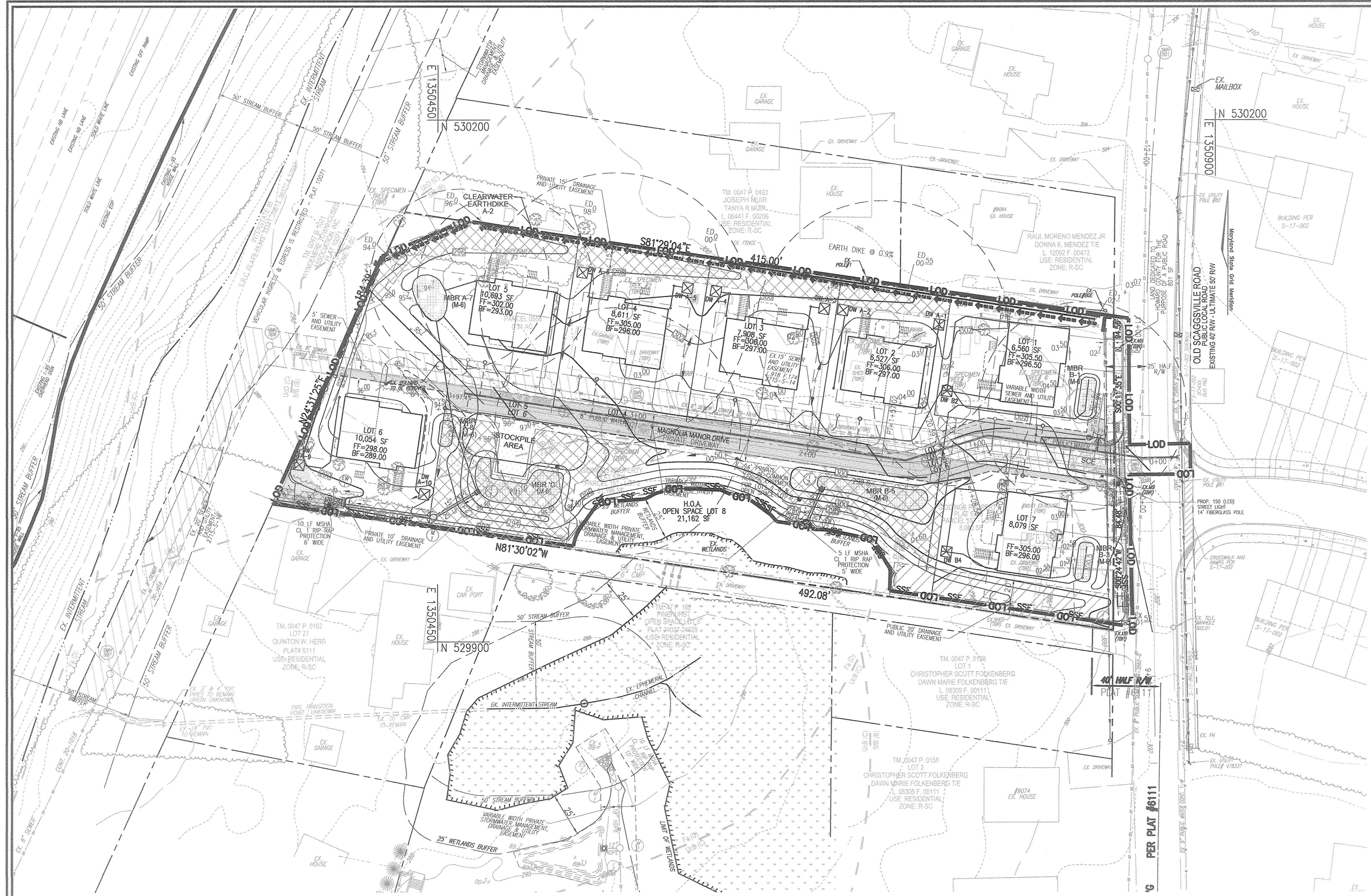
DESIGN BY: RHV/EDS.  
DRAWN BY: KG/EDS.  
CHECKED BY: RHV.  
DATE: NOVEMBER 2017  
SCALE: AS SHOWN  
W.O. NO.: 16-15

PROFESSIONAL CERTIFICATE  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE NO. 18193 EXPIRATION DATE 09-27-2018

2 SHEET OF 7

TENTATIVELY APPROVED  
DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY

12-1-17  
DATE



**LEGEND:**

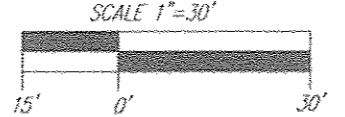
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- EXISTING CURB AND GUTTER
- EXISTING UTILITY POLE
- EXISTING MAILBOX
- EXISTING SIGN
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY LINE
- EXISTING CLEANOUT
- EXISTING FIRE HYDRANT
- EXISTING WATER LINE
- EXISTING STORM DRAIN
- EXISTING OVER HEAD LINE
- PROPOSED STORM DRAIN
- EXISTING TREES (FIELD LOCATED)
- EXISTING SPECIMEN TREES
- EXISTING TREELINE
- EXISTING FENCE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- MICRO-BREEDITION (M-6)
- EXISTING WETLAND
- EXISTING WETLAND BUFFER
- PROP. DRAINAGE AND UTILITY EASEMENT
- PROP. 24' PRIVATE USE IN COMMON ACCESS EASEMENT
- PROP. WATER MAIN, SEWER AND UTILITY EASEMENT
- SOILS BOUNDARY
- CLEAR WATER EARTH DIKE
- SUPER SALT FENCE
- LIMIT OF DISTURBANCE
- CIP CURB INLET PROTECTION
- AGIP AT GRADE INLET PROTECTION
- STABILIZED CONSTRUCTION ENTRANCE
- EX. STREAM
- EX. STREAM BUFFER
- EROSION SOILS

**NOTE:** LOCATE STOCKPILE AS SHOWN HEREON OR AS DIRECTED BY THE SEDIMENT CONTROL INSPECTOR. STOCKPILES EXCEEDING 15 FEET IN HEIGHT SHALL BE BENCHED.

**OWNER**  
MAGNOLIA MANOR LLC  
C/O TRINITY QUALITY HOMES  
3675 PARK AVE., SUITE 301  
ELLCOTT CITY, MD 21043  
(410) 480-0023

**DEVELOPER**  
TRINITY HOMES MARY LAND, LLC  
3675 PARK AVE., SUITE 301  
ELLCOTT CITY, MD 21043  
(410) 480-0023

**GRADING PLAN**  
SCALE: 1"=30'



**SOILS LEGEND**  
HOWARD COUNTY SOILS MAP #24 - SAVAGE SW

SYMBOL	NAME / DESCRIPTION	GROUP	K FACTOR	ERODIBLE	FAMLAND	HYDRIC
Fa	Fallsington sandy loams, 0 to 2 percent slopes.	D	0.02	NO	YES	YES
SfB	Sassafras gravelly sandy loam, 2 to 5 percent slopes	B	0.24	NO	YES	NO
UcB	Urban land-Chillum-Bethsville complex, 0 to 5 percent slopes	C	0.37	YES	NO	NO
UcD	Urban land-Chillum-Bethsville complex, 5 to 15 percent slopes	C	0.37	YES	NO	NO

**NOTE:** TAKEN FROM: USDA, SCS-WEB SOIL SURVEY, HOWARD COUNTY  
HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT  
OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR K GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT

**NOTE:** FALLSINGTON SOILS HAVE SEVERE LIMITATIONS FOR HOME CONSTRUCTION.

TENTATIVELY APPROVED  
DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY

*William J. J...*  
PLANNING DIRECTOR  
12-1-17  
DATE

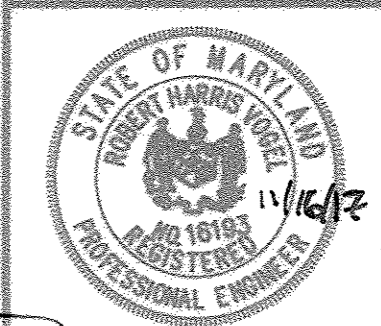
NO.	REVISION	DATE

**PRELIMINARY PLAN  
GRADING, SOIL EROSION AND SEDIMENT  
CONTROL PLAN AND SOILS MAP  
MAGNOLIA MANOR WEST**

LOTS 1 - 7 AND OPEN SPACE LOT 8  
A SUBDIVISION OF TAX MAP 47 - PARCEL 558  
AND A RESUBDIVISION OF TAX MAP 47 - PARCEL 157  
"GIDDINGS PROPERTY - LOTS 1 AND 2" (PLAT 5708)

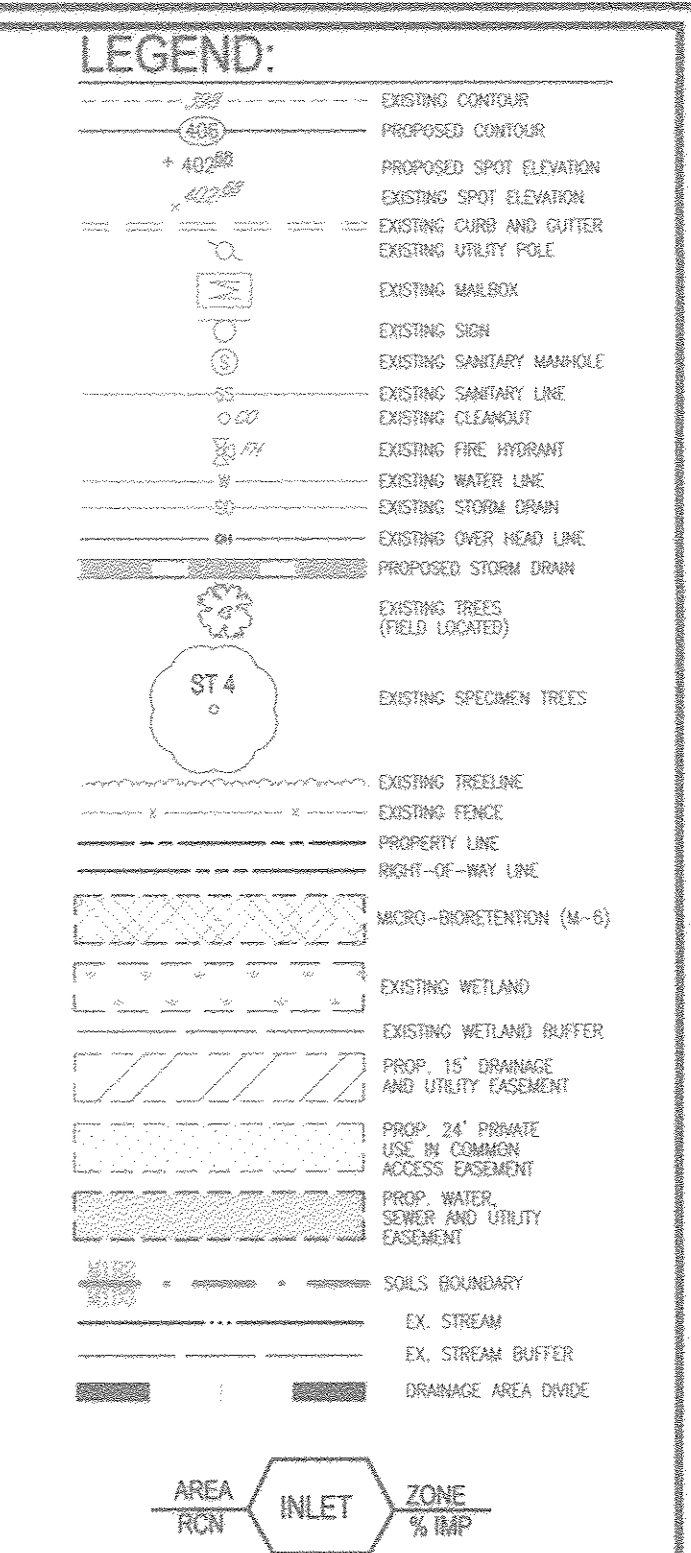
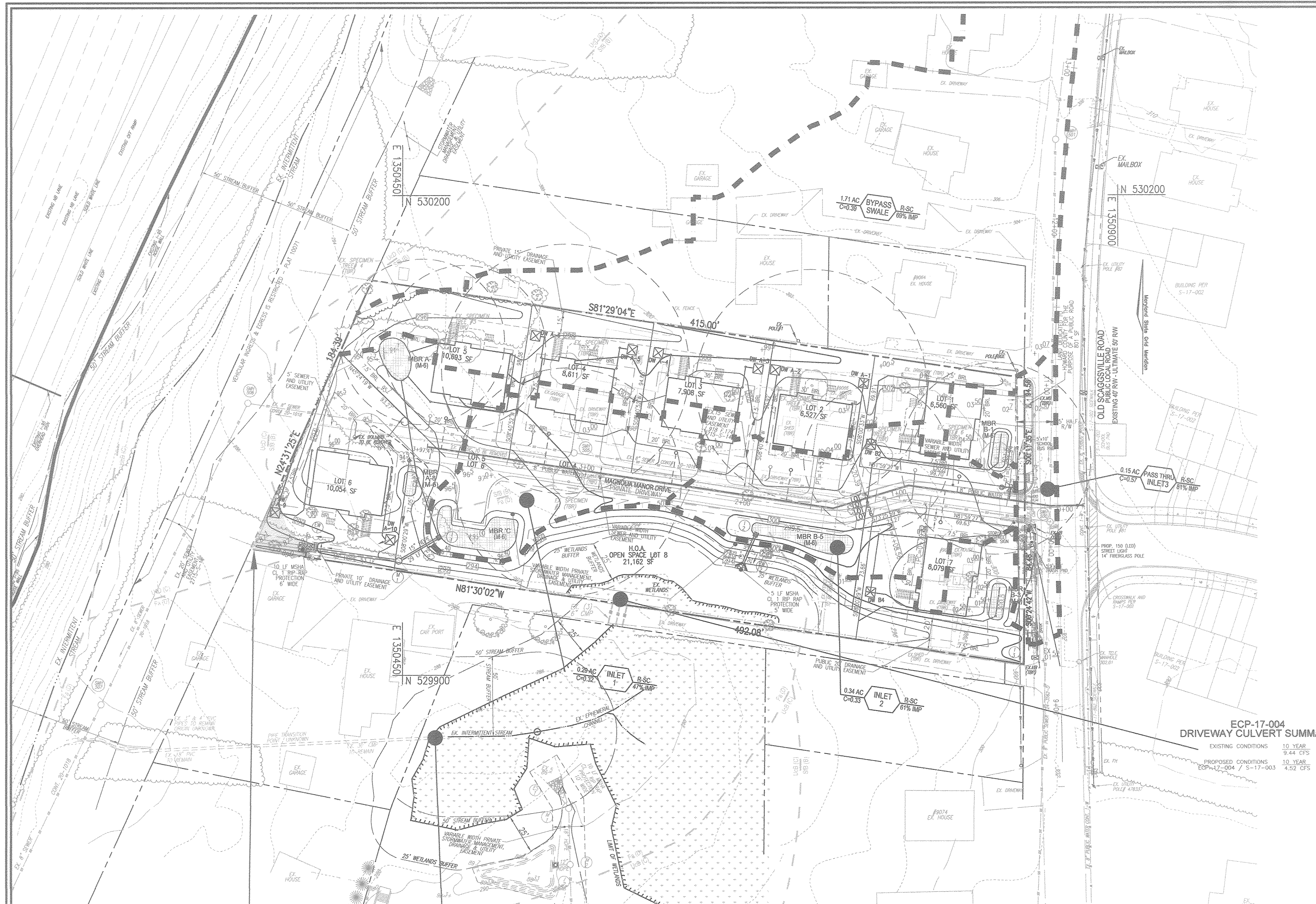
TAX MAP 47 PARCELS: 157 & 558  
6TH ELECTION DISTRICT

**ROBERT H. VOGEL  
ENGINEERING, INC.**  
ENGINEERS • SURVEYORS • PLANNERS  
8407 MAIN STREET  
ELLCOTT CITY, MD 21043  
TEL: 410.461.7666  
FAX: 410.461.8961



**PROFESSIONAL CERTIFICATE**  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16183, EXPIRATION DATE: 12-31-2018.

DESIGN BY: RHW/EDS.  
DRAWN BY: KG/EDS.  
CHECKED BY: RHW.  
DATE: NOVEMBER 2017.  
SCALE: AS SHOWN  
W.O. NO.: 16-15



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**ECP-17-004  
DRIVEWAY CULVERT SUMMARY**

EXISTING CONDITIONS	PROPOSED CONDITIONS
10 YEAR 9.44 CFS	10 YEAR 9.44 CFS
10 YEAR 4.52 CFS	10 YEAR 4.52 CFS

NO.	REVISION	DATE

**PRELIMINARY PLAN  
STORM DRAIN DRAINAGE AREA MAP  
MAGNOLIA MANOR WEST**  
LOTS 1 - 7 AND OPEN SPACE LOT 8  
A SUBDIVISION OF TAX MAP 47 - PARCEL 558  
AND A RESUBDIVISION OF TAX MAP 47 - PARCEL 157  
"GIDDINGS" PROPERTY - LOTS 1 AND 2" (PLAT 5708)

TAX MAP: 47 PARCELS 157 & 558      BLOCK: 19 ZONING: R-SC  
6TH ELECTION DISTRICT      HOWARD COUNTY, MARYLAND

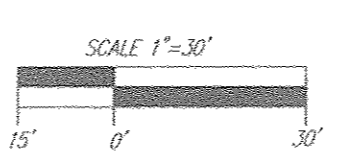
**ROBERT H. VOGEL  
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ELlicOTT CITY, MD 21043      FAX: 410-461-8961

**DESIGN BY:** RHW/EDS  
**DRAWN BY:** KG/EDS  
**CHECKED BY:** RHW  
**DATE:** NOVEMBER 2017  
**SCALE:** AS SHOWN  
**W.O. NO.:** 16-15

**PROFESSIONAL CERTIFICATE**  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DAILY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 18183 EXPIRES ON 05-27-2018

4 SHEET OF 7

**STORM DRAIN - DRAINAGE AREA MAP**  
SCALE: 1"=30'



GRASS SWALE TO PROPERTY LINE  
BOTTOM = 2.0'  
SIDE SLOPES = 2:1  
SLOPE = 2.0%  
N=0.30  
Q10=3.00 CFS  
V10=2.97 FPS  
Q10=0.37

F-16-002 CULVERT ANALYSIS SHOWS:  
0.05' INCREASE IN LOW POINT OVERTOPPING IN 10 YR STORM  
0.20' INCREASE IN LOW POINT OVERTOPPING IN 100 YR STORM

THIS PLAN REDUCES DRAINAGE AREA AND RESULTS IN THE FOLLOWING SUMMARY:

**WETLAND CULVERT SUMMARY**

EXISTING CONDITIONS	2 YEAR	10 YEAR	100 YEAR
F-16-002 - PROPOSED CONDITIONS	9 CFS	21 CFS	35 CFS
PROPOSED CONDITIONS	2 YEAR	10 YEAR	100 YEAR
ECP-17-004 / S-17-003	8 CFS	19 CFS	33 CFS

**SOILS LEGEND**  
HOWARD COUNTY SOILS MAP #24 - SAVAGE SW

SYMBOL	NAME / DESCRIPTION	GROUP	K FACTOR	ERODIBLE	FAMLAND	HYDRIC
Fa	Fallsington sandy loams, 0 to 2 percent slopes	D	0.02	NO	YES	YES
SfB	Sassafras gravelly sandy loam, 2 to 5 percent slopes	B	0.24	NO	YES	NO
UcB	Urban land-Chillum-Beltsville complex, 0 to 5 percent slopes	C	0.37	YES	NO	NO
UcD	Urban land-Chillum-Beltsville complex, 5 to 15 percent slopes	C	0.37	YES	NO	NO

NOTE:  
TAKEN FROM USDA, SCS-WEB SOIL SURVEY, HOWARD COUNTY  
HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR K GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT

NOTE:  
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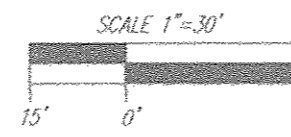
TENTATIVELY APPROVED  
DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY

*William J. ...*  
PLANNING DIRECTOR

12-1-17  
DATE

**LANDSCAPE & FOREST CONSERVATION PLAN**

SCALE: 1"=30'



**LEGEND:**

	EXISTING CONTOUR
	EXISTING FENCE
	EXISTING CURB AND GUTTER
	EXISTING UTILITY POLE
	EXISTING MANHOLE
	EXISTING SIGN
	EXISTING SANITARY MANHOLE
	EXISTING SANITARY LINE
	EXISTING CULCHWAY
	EXISTING FIRE HYDRANT
	EXISTING WATER LINE
	EXISTING STORM DRAIN
	EXISTING OVERHEAD LINE
	PROPOSED STORM DRAIN
	EXISTING TREES (FIELD LOCATED)
	EXISTING SPECIMEN TREES
	EXISTING TREE LINE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	MICRO-IRRIGATION (M-4)
	EXISTING WETLAND
	EXISTING WETLAND BUFFER
	PROP. 15' DRAINAGE AND UTILITY EASEMENT
	PROP. 24' PRIVATE USE IN COMMON ACCESS EASEMENT
	PROP. WATER, SEWER AND UTILITY EASEMENT
	EX. STREAM
	EX. STREAM BUFFER
	PERIMETER OR STREET TREE - PLANTING OBLIGATION
	ADDITIONAL LANDSCAPE PLANTINGS - WP-17-059

**DPZ'S POLICIES GOVERNING THE PLACEMENT OF LANDSCAPING AND STREET TREES IN PROXIMITY TO BGE'S POWER LINES OR TRANSMISSION RIGHT-OF-WAY ARE BASED ON BGE'S PUBLISHED "PLANTING ZONE CONCEPT" WHICH STIPULATES THE MAXIMUM ALLOWABLE SIZE OF PLANT MATERIALS FOR THREE DEFINED ZONES. AS THE DISTANCE FROM BGE EQUIPMENT INCREASES, SO DOES THE SIZE OF THE ALLOWABLE PLANT MATERIALS. THESE THREE ZONES ARE DEFINED AS FOLLOWS:**

ZONE	DISTANCE FROM THE BGE POWER LINE OR TRANSMISSION RIGHT-OF-WAY	MAXIMUM HEIGHT OF VEGETATION
GREEN	UP TO 20 FEET	25 FEET
YELLOW	BETWEEN 20 FEET AND 45 FEET	40 FEET
RED	BEYOND 45 FEET	ABOVE 40 FEET

- BG&E NOTES:**
- BGE RESERVES THE RIGHT TO TRIM, TOP OR CUT DOWN ANY TREE IN PROXIMITY TO THE LINE THAT IN THE OPINION OF BGE SHALL BE DEEMED A HAZARD TO THE SAFE AND RELIABLE DELIVERY OF ELECTRICITY.
  - THE DEPARTMENT OF PLANNING AND ZONING MAY AUTHORIZE THE TRIMMING OR REMOVAL OF TREES OR VEGETATION IMMEDIATELY ADJACENT TO THE BGE R/W OR EASEMENT, IF BGE DETERMINES THE TREES ARE COMPROMISING THE SAFETY OF A TRANSMISSION LINE LOCATED WITHIN THEIR R/W OR EASEMENT. IF BGE INTENDS TO TRIM OR REMOVE TREES WITHIN A FOREST CONSERVATION EASEMENT, A LETTER SPECIFYING THE LOCATION AND SCOPE OF WORK NEEDS TO BE SENT TO DPZ AT LEAST 30 DAYS IN ADVANCE OF UNDERTAKING THE WORK. DPZ UNDERSTANDS CONSTELLATION ENERGY'S NEED TO PROTECT ITS TRANSMISSION LINES AND WILL NOT UNREASONABLE WITHHOLD PERMISSION.
  - CALL MESS UTILITY TO MARK UP THE LOCATION OF EXISTING GAS LINE BEFORE PLANTING STREET TREES ALONG OLD SCAGGSVILLE ROAD & PLANT STREET TREES 10' AWAY FROM EXISTING GASLINE AS REQUIRED.

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**SCHEDULE A PERIMETER LANDSCAPE EDGE**

CATEGORY	ADJACENT TO ROADWAYS AND PERIMETER PROPERTIES				TOTAL
	1A	1B	2	4	
PERIMETER FRONTAGE DESIGNATION	N/A	N/A	A	A	415
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	72'	89'	492'	184'	415'
CREDIT FOR EXISTING VEGETATION (YES/NO LINEAR FEET DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO	NO
CREDIT FOR WALL, FENCE OR BERM (YES/NO LINEAR FEET DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO	NO
NUMBER OF PLANTS REQUIRED	**	**	1,809	1,603	19
EVERGREEN TREES	**	**	-	-	-
SHRUBS	**	**	-	-	-
NUMBER OF PLANTS PROVIDED	-	-	9	3	12
SHADE TREES (2:1 SUBSTITUTION)	-	-	-	-	-
EVERGREEN TREES	-	-	-	-	-
OTHER TREES (2:1 SUBSTITUTION)	-	-	-	-	-
EX. SPECIMEN TREES TO REMAIN DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED	-	-	-	-	-
** PROVIDED 4 SHADE TREES FROM PERIMETER 4 AT PERIMETER 2	-	-	-	-	-
** LANDSCAPING NOT REQUIRED	-	-	-	-	-

**STREET TREE CALCULATIONS**

STREET NAME	LINEAR FEET	NO. REQUIRED	NO. PROVIDED
OLD SCAGGSVILLE ROAD	179/40	5	5

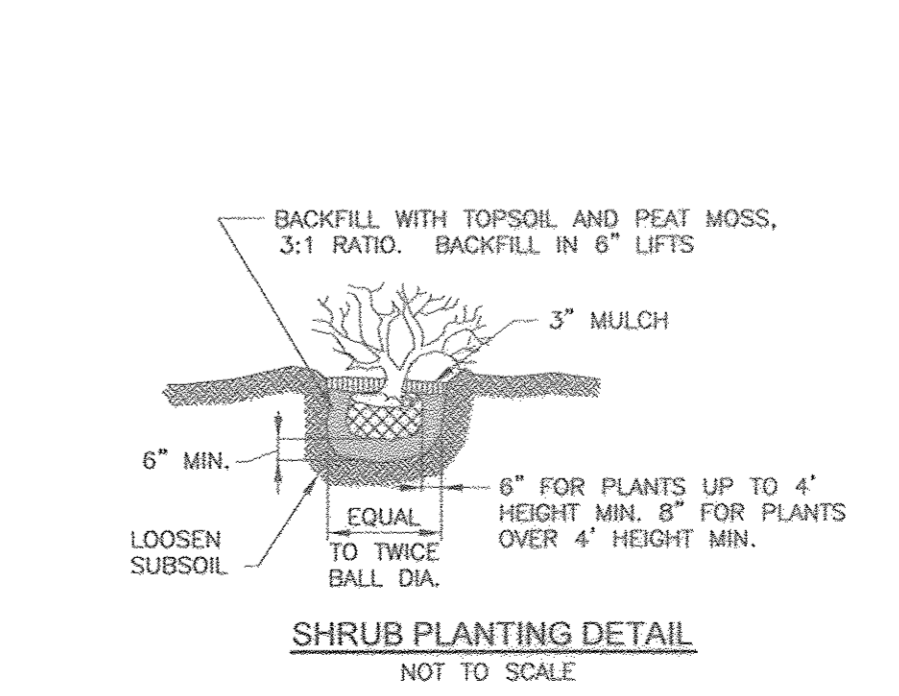
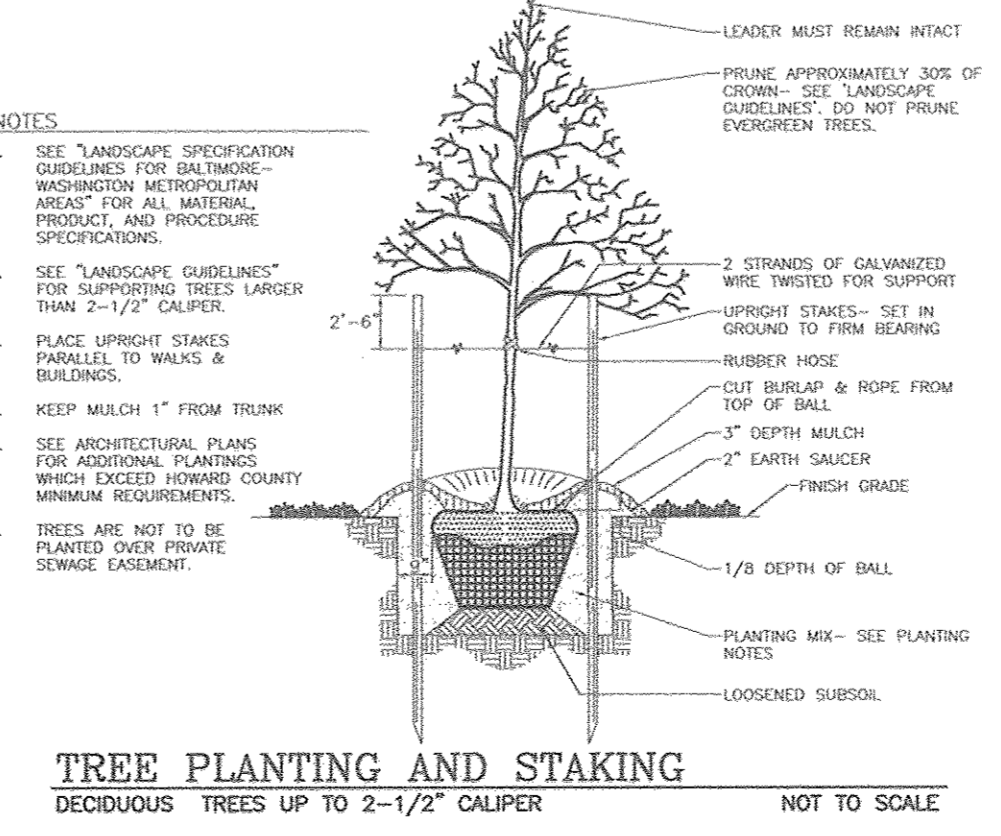
- GENERAL NOTES:**
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. THE LANDSCAPE REQUIREMENTS FOR THIS PROJECT ARE 19 SHADE TREES.
  - PUBLIC STREET TREES ARE PROVIDED FOR THIS PROJECT IN ACCORDANCE WITH SECTION 16.124(e)(1) OF THE SUBDIVISION REGULATIONS AND THE LANDSCAPE MANUAL. FINANCIAL SURETY (\$1500) SHALL BE POSTED AS PART OF THE FINAL PLAN DEVELOPER'S AGREEMENT FOR THE REQUIRED 5 STREET TREES.
  - THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, PLANT MATERIALS, BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
  - AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS LISTED HERewith AND APPROVED FOR THIS SITE SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF LANDSCAPING MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.
  - THE REMOVAL OF TREES 30" OR GREATER DHB IS PROHIBITED WITHOUT COUNTY APPROVAL.
  - FINANCIAL SURETY FOR THE REQUIRED 19 SHADE TREES 5 SHRUBS (TRASH PAD) AND 14 SPECIMEN REPLACEMENT TREES.
  - THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. DEVELOPMENT OR CONSTRUCTION OF THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION, OR BUILDING AND GRADING PERMITS.
  - THERE ARE NO BURIAL GROUNDS, CEMETERIES, OR HISTORIC STRUCTURES LOCATED ON THIS PROPERTY.
  - NO LANDSCAPING TO BE INSTALLED WITHIN ANY PUBLIC EASEMENT FOR WATER, SEWER, OR STORMDRAIN.
  - ANY EXISTING STREET TREES DAMAGED OR DESTROYED DURING CONSTRUCTION WILL BE REPLACED BY THE CONTRACTOR.

- LANDSCAPE NOTES**
- SHOULD ANY TREE DESIGNATED FOR PRESERVATION FOR WHICH LANDSCAPING CREDIT IS GIVEN, DIE PRIOR TO RELEASE OF BONDS, THE OWNER WILL BE REQUIRED TO REPLACE THE TREE WITH THE EQUIVALENT SPECIES OR WITH A TREE WHICH WILL OBTAIN THE SAME HEIGHT, SPREAD, AND GROWTH CHARACTERISTICS. THE REPLACEMENT TREE MUST BE A MINIMUM OF 3 INCHES IN CALIPER AND INSTALLED AS REQUIRED IN THE HOWARD COUNTY LANDSCAPE MANUAL.
  - PLANTINGS SHOWN HEREON ARE THE RESPONSIBILITY OF THE DEVELOPER TO INSTALL DURING THE CONSTRUCTION OF THE FINAL PLAN.
  - SURETY FOR THE PROPOSED LANDSCAPING SHALL BE BASED ON THE NUMBER OF PLANTINGS REQUIRED.

**SPECIMEN TREE - REPLACEMENT CALCULATIONS**

NO. TO BE REMOVED	NO. REPLACEMENT REQUIRED	NO. PROVIDED
7	14	14
		3-1/2" CAL.

REFER TO WP 17-059 - 3-1/2" CALIPER NATIVE SHADE TREES REQUIRED



**TRASH PAD LANDSCAPING**

SYMBOL	QTY.	DESCRIPTION	SIZE	REMARKS
⊙	5	DWARF JAPANESE YEW	3'-4" HT	B & B

TENTATIVELY APPROVED  
DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY

*Nathan J. Jolin*  
PLANNING DIRECTOR

12-1-17  
DATE

**PRELIMINARY PLAN  
PRELIMINARY LANDSCAPE PLAN,  
NOTES & DETAILS  
MAGNOLIA MANOR WEST**

LOTS 1 - 7 AND OPEN SPACE LOT 8  
A SUBDIVISION OF TAX MAP 47 - PARCEL 558  
AND A RESUBDIVISION OF TAX MAP 47 - PARCEL 157  
("GIDDINGS PROPERTY - LOTS 1 AND 2" (PLAT 5708))

TAX MAP: 47 PARCELS: 157 & 558  
6TH ELECTION DISTRICT

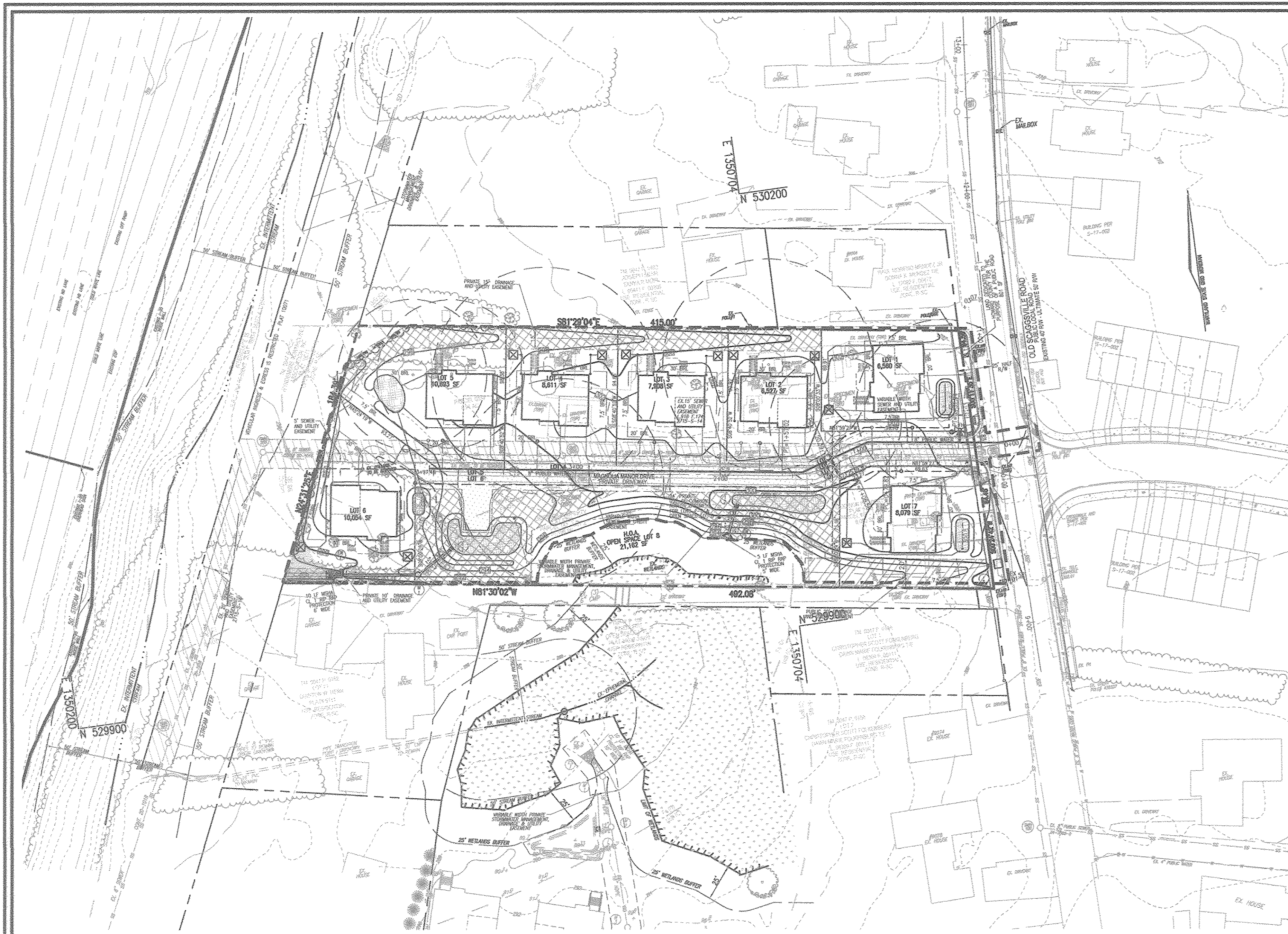
BLOCK: 19 ZONING: R-SC  
HOWARD COUNTY, MARYLAND

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DESIGN BY: RHV/EDS  
DRAWN BY: KG/EDS  
CHECKED BY: RHV  
DATE: NOVEMBER 2017  
SCALE: AS SHOWN  
W.O. NO.: 16-15

PROFESSIONAL CERTIFICATE  
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. 17848 EXPIRATION DATE 09-27-2018

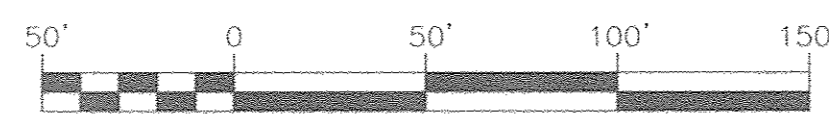
5 SHEET OF 7



**LEGEND:**

[Symbol]	PROPERTY LINE
[Symbol]	RIGHT-OF-WAY LINE
[Symbol]	ADJACENT PROPERTY LINE
[Symbol]	EXISTING CURB AND GUTTER
[Symbol]	EXISTING EDGE OF PAVING
[Symbol]	EXISTING WETLANDS
[Symbol]	EXISTING WETLAND BUFFER
[Symbol]	EXISTING STREAM
[Symbol]	EXISTING STREAM BUFFER
[Symbol]	EXISTING UTILITY POLE
[Symbol]	EXISTING LIGHT POLE
[Symbol]	EXISTING MAILBOX
[Symbol]	EXISTING SIGN
[Symbol]	EXISTING SANITARY MANHOLE
[Symbol]	EXISTING SANITARY LINE
[Symbol]	EXISTING CLEANOUT
[Symbol]	EXISTING FIRE HYDRANT
[Symbol]	EXISTING WATER LINE
[Symbol]	EXISTING TIE LINE
[Symbol]	EXISTING TREES
[Symbol]	EXISTING WOOD FENCE
[Symbol]	EXISTING METAL FENCE
[Symbol]	EXISTING 10' CONTOUR
[Symbol]	EXISTING 2' CONTOUR
[Symbol]	SOILS

**FOREST CONSERVATION PLAN**  
SCALE: 1" = 50'

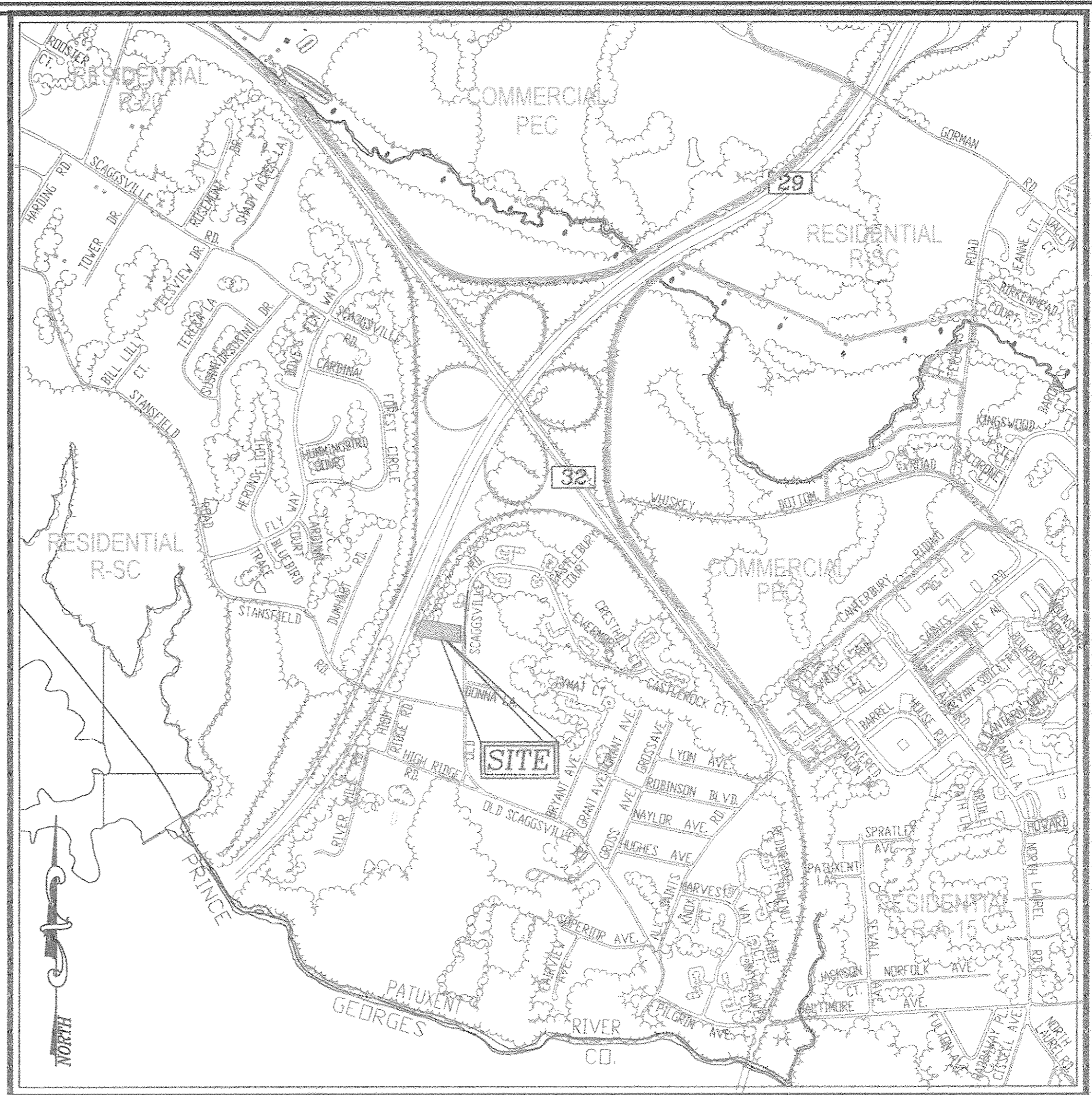


**Specimen Tree Chart**

Key (X#)	Species	Size (in.d.b.h)	CRZ (feet radius)	Comments
1	Willow Oak	47.5	71.25	poor condition, substantial dieback
2	White Oak	52	78	good condition
3	Southern Red Oak	34	51	good condition
4	Southern Red Oak	34.5	51.75	fair condition, trimmed some dieback
5	Silver Maple	48.5	72.75	good condition
6	Norway Maple	40	60	good condition, not native
7	Red Maple	30.5	45.75	good condition

THIS PROJECT IS SUBJECT TO WP-17-059. ON MARCH 9, 2017, THE PLANNING DIRECTOR APPROVED THE REQUEST FOR AN ALTERNATIVE COMPLIANCE OF SECTION 16.1205(A)(7) FOR REMOVAL OF SEVEN SPECIMEN TREES SUBJECT TO THE FOLLOWING CONDITIONS:

- ADD A GENERAL NOTE FOR THE ALTERNATIVE COMPLIANCE WP-17-059, ON S17-003 MAGNOLIA MANOR WEST STATING THE REQUEST, SECTION REFERENCE NUMBER, THE APPROVAL DATE AND CONDITIONS;
- SHOW THE SPECIMEN TREES BEING REMOVED AND LABELED PER WP-17-059 ON THE PLAN MYLAR ORIGINAL, FOR S-17-003.
- REMOVAL OF THE 7 SPECIMEN TREES IS SUBJECT TO PROVIDING THE REPLACEMENT OF FOURTEEN 30" MINIMUM CALIPER NATIVE SHADE TREES AS STATED IN THE ALTERNATIVE COMPLIANCE JUSTIFICATION TO BE LOCATED AT A MORE APPROPRIATE LOCATION.



**HOWARD COUNTY FOREST CONSERVATION WORKSHEET**

**ZONED R-SC NET TRACT AREA:**

A. TOTAL TRACT AREA	1.81 AC
B. AREA WITHIN 100 YEAR FLOODPLAIN	0.00 AC
C. AREA TO REMAIN IN AG PRODUCTION	0.00 AC
D. NET TRACT AREA	1.81 AC

**LAND USE CATEGORY**  
INPUT THE NUMBER "1" UNDER THE APPROPRIATE LAND USE ZONING, AND LIMIT TO ONLY ONE ENTRY. ZONED R-ED-MXD-3

ARA	MDR	IDA	HDR	MPD	CIA
0	0	0	1	0	0

**EXISTING FOREST COVER:**

E. AFFORESTATION THRESHOLD	15% x 1.81 = 0.27 AC
F. CONSERVATION THRESHOLD	20% x 1.81 = 0.36 AC
G. EXISTING FOREST COVER	= 0.00 AC (FSD REPORT)
H. AREA OF FOREST ABOVE AFFORESTATION THRESHOLD	= 0.00 AC
I. AREA OF FOREST ABOVE CONSERVATION THRESHOLD	= 0.00 AC

**BREAK EVEN POINT:**  
(2 X 1) + F = BREAK EVEN POINT (0 AC)

J. FOREST RETENTION ABOVE THRESHOLD W/ NO MITIGATION	= 0.00 AC
K. FOREST CLEARING PERMITTED WITHOUT MITIGATION	= 0.00 AC

**VICINITY MAP**  
SCALE: 1"=1,000'  
ADC MAP COORDINATE: 40- 46

**BENCHMARKS**

HOWARD COUNTY BENCHMARK 47H2 (CONC. MON.)  
N 529706.4221 E 1355445.3364 ELEV. 256.068  
LOCATION: ALL SAINTS ROAD, 240'+/- SOUTH OF NORTH LAUREL ROAD, 2.66 FEET FROM STORM DRAIN INLET; 1' EAST OF CURB, 0.6 BELOW SURFACE

HOWARD COUNTY BENCHMARK 47GC (CONC. MON.)  
N 528939.7281 E 1354223.5536 ELEV. 226.272  
LOCATION: MEDIUM ISLAND 29 FEET WEST OF ALL SAINTS RD RT 216 INTERSECTION; 1.4 FEET WEST OF SOUTHWEST INLET CORNER

**Eco-Science Professionals, Inc.**  
Consulting Ecologists  
P.O. Box 5006 Glen Arm, Maryland 21057 Telephone (410) 632-2480 Fax (410) 632-2488

**MD DNR Qualified Professional USACOE Wetland Delineator**  
Certification # WDCP93MD0610044B2  
John P. Canoles

- SFSD NOTES:**
- No rare, threatened or endangered species or their appropriate habitat were observed on the property.
  - Surrounding land use is medium-high density residential development.
  - No regulated forest is present on the site. Approximately 0.25 acres of forest is present within 100 feet of the property.
  - No streams, stream buffers or 100 year floodplain is present on the property. Wetlands and 25 foot wetland buffers are present on the property.
  - No steep slopes are present on the property.
  - Specimen trees are present on the property.
  - The property is located in the Use 1 watershed of the Patuxent River (02-13-11)
  - No cemeteries or historic elements were noted on the property.

**SOILS LEGEND**  
HOWARD COUNTY SOILS MAP #24 - SAVAGE SW

SYMBOL	NAME / DESCRIPTION	GROUP	K FACTOR	ERODIBLE	FAMLAND	HYDRIC
Fd	Fallsington sandy loams, 0 to 2 percent slopes	D	0.02	NO	YES	YES
SfB	Sassafras gravelly sandy loam, 2 to 5 percent slopes	B	0.24	NO	YES	NO
UcB	Urban land-Chillum-Beltsville complex, 0 to 5 percent slopes	C	0.37	YES	NO	NO
Ucd	Urban land-Chillum-Beltsville complex, 5 to 15 percent slopes	C	0.37	YES	NO	NO

**NOTE:**  
TAKEN FROM: USDA, SCS-WEB SOIL SURVEY, HOWARD COUNTY  
HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR K GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT

**NOTE:**  
FALLSINGTON SOILS HAVE SEVERE LIMITATIONS FOR HOME CONSTRUCTION.

TENTATIVELY APPROVED  
DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY

*William J. P...*  
PLANNING DIRECTOR

12-1-17  
DATE

**PROPOSED FOREST CLEARING:**

L. TOTAL AREA OF FOREST TO BE CLEARED	= 0.00 AC
M. TOTAL AREA OF FOREST TO BE RETAINED	= 0.00 AC (IN FCE)

**PLANTING REQUIREMENTS:**

N. REFORESTATION FOR CLEARING ABOVE CONSERVATION THRESHOLD (L X 25)	= 0.00 AC
P. REFORESTATION FOR CLEARING BELOW CONSERVATION THRESHOLD	= 0.00 AC
Q. CREDIT FOR RETENTION ABOVE CONSERVATION THRESHOLD (M-F)	= 0.00 AC
R. TOTAL REFORESTATION REQUIRED (N+P-Q)	= 0.00 AC
S. TOTAL AFFORESTATION REQUIRED	= 0.27 AC
T. TOTAL PLANTING REQUIREMENT (REFORESTATION AND AFFORESTATION)	= 0.27 AC

TOTAL FOREST CONSERVATION OBLIGATION OF THIS PROJECT TO BE FULFILLED BY PAYMENT OF FEE-IN-LIEU OR PURCHASE IN A FOREST CONSERVATION BANK.

**GENERAL NOTES**

- WATERSHED NAME: PATUXENT RIVER UPPER  
WATERSHED NUMBER: 2131104
- |  |             |
|--|-------------|
| A. GROSS SITE AREA:                      | 1.81 AC     |
| NET SITE AREA:                           | 1.81 AC     |
| B. AREA OF 100-YEAR FLOODPLAIN:          | 0.00 AC     |
| C. AREA OF WETLANDS AND BUFFERS(ONSITE): | 0.14 AC     |
| AREA OF STREAM AND BUFFERS(ONSITE):      | 0.00 AC     |
| D. AREA OF > 25% STEEP SLOPES:           | 0.00 AC     |
| E. EXISTING FOREST (FSD):                | 0.00 AC     |
| F. ZONED:                                | R-SC        |
| G. EXISTING USE:                         | RESIDENTIAL |
| H. PROPOSED USE:                         | RESIDENTIAL |

**OWNER:**  
MAGNOLIA MANOR LLC  
C/O TRINITY QUALITY HOMES  
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ELLIOTT CITY, MD 21043  
(410) 480-0023

**DEVELOPER:**  
TRINITY HOMES MARY LAND, LLC  
3675 PARK AVE., SUITE 301  
ELLIOTT CITY, MD 21043  
(410) 480-0023

**PRELIMINARY PLAN**  
**FOREST CONSERVATION PLAN**  
**MAGNOLIA MANOR WEST**  
LOTS 1 - 7 AND OPEN SPACE LOT 8  
A SUBDIVISION OF TAX MAP 47 - PARCEL 558  
AND A RESUBDIVISION OF TAX MAP 47 - PARCEL 157  
"GIDDINGS" PROPERTY - LOTS 1 AND 2" (PLAT 5708)

TAX MAP: 47 PARCELS: 157 & 558  
BLOCK: 19 ZONING: R-SC  
5TH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

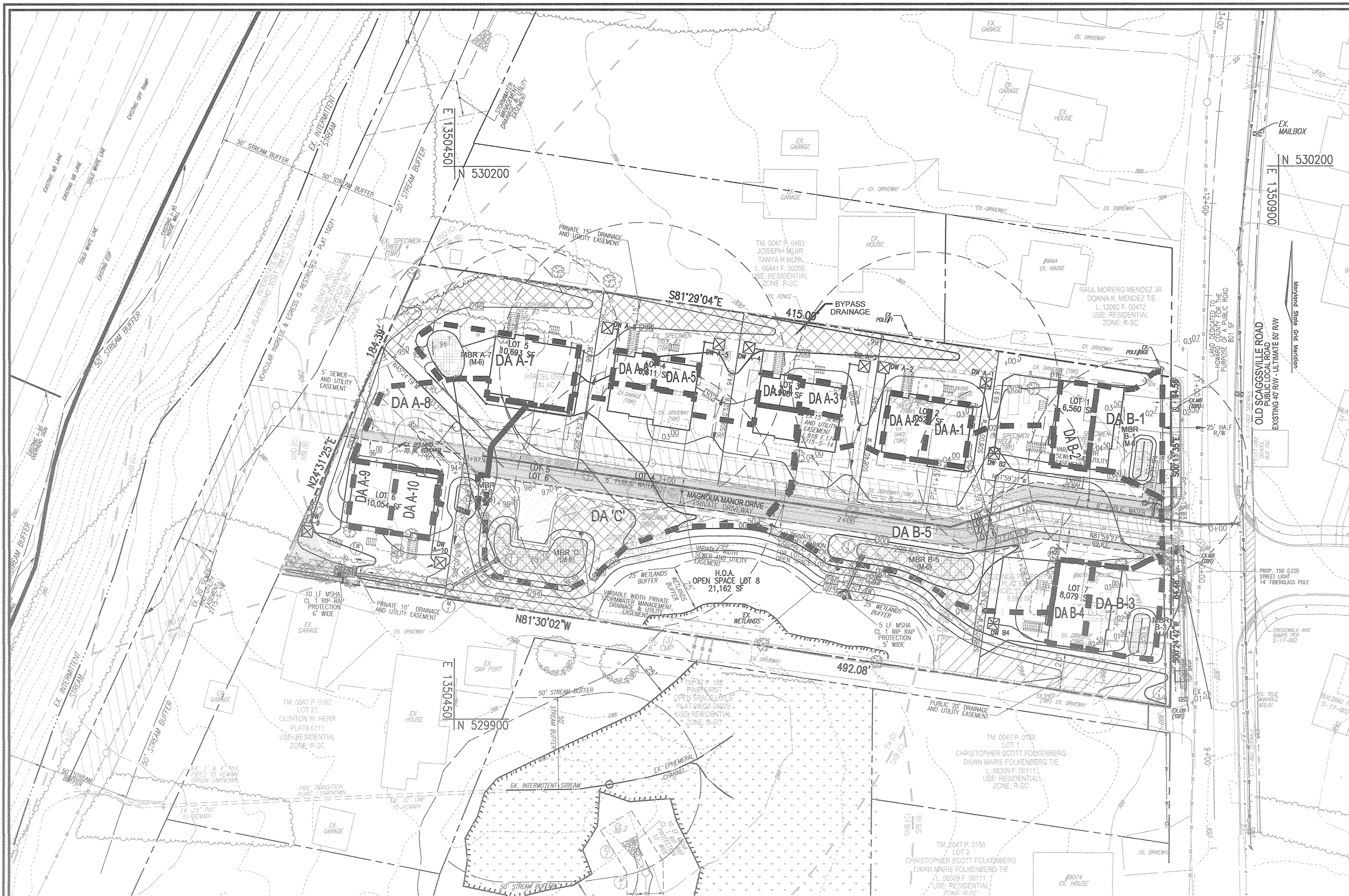
**ROBERT H. VOGEL ENGINEERING, INC.**  
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**PROFESSIONAL CERTIFICATE**

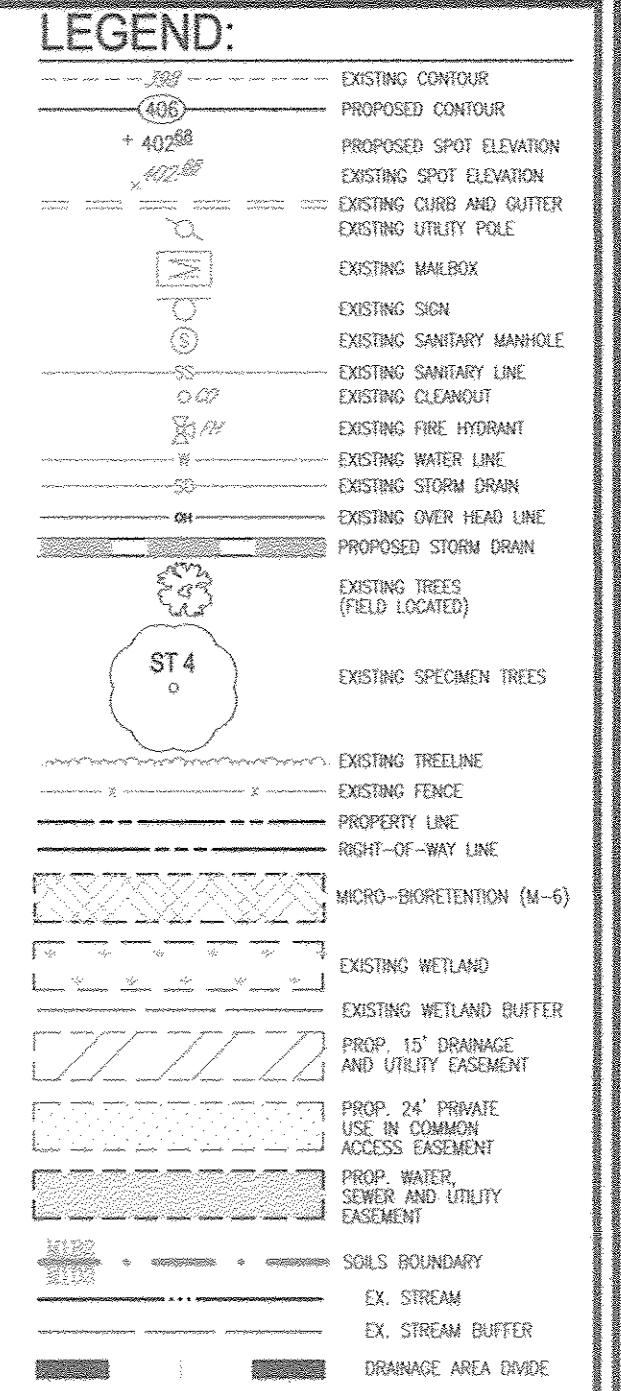
DESIGN BY: RHW/EDS  
DRAWN BY: KG/EDS  
CHECKED BY: RHW  
DATE: NOVEMBER 2017  
SCALE: AS SHOWN  
W.O. NO.: 16-15

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. 16193, EXPIRATION DATE 08-27-2019.

6 SHEET OF 7



- APPENDIX B.4.C SPECIFICATIONS FOR MICRO-BIOTENTION, RAIN GARDEN, LANDSCAPE INFILTRATION & INFILTRATION BERMS**
- MATERIAL SPECIFICATIONS**  
THE ALLOWABLE MATERIALS TO BE USED IN THESE PRACTICES ARE DETAILED IN TABLE B.4.1.
  - FILTERING MEDIA OR PLANTING SOIL**  
THE SOIL SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES. NO OTHER MATERIALS OR SUBSTANCES SHALL BE MIXED OR DUMPED WITHIN THE MICRO-BIOTENTION PRACTICE THAT MAY BE HARMFUL TO PLANT GROWTH, OR PROVIDE A HINDERANCE TO THE PLANTING OR MAINTENANCE OPERATIONS. THE PLANTING SOIL SHALL BE FREE OF BETAULUS GRASS, QUACKGRASS, JOHNSON GRASS, OR OTHER NOXIOUS WEEDS AS SPECIFIED UNDER COMAR 15.08.01.05. THE PLANTING SOIL SHALL BE TESTED TO MEET THE FOLLOWING CRITERIA:  
 \* SOIL COMPONENT - LOAMY SAND OR SANDY LOAM (ASTM SOIL TEXTURAL CLASSIFICATION).  
 \* ORGANIC CONTENT - MINIMUM 10% BY DRY WEIGHT (USDA D 2974). IN GENERAL, THIS CAN BE MET WITH A MIXTURE OF LOAMY SAND (60%-65%) AND COMPOST (35%-40%) OR SANDY LOAM (30%), COARSE SAND (30%), AND COMPOST (40%).  
 \* CLAY CONTENT - MEDIA SHALL HAVE A CLAY CONTENT OF LESS THAN 5%.  
 \* PH RANGE - SHOULD BE BETWEEN 5.5 - 7.0. AMENDMENTS (E.G., LIME, IRON SULFATE PLUS SULFUR) MAY BE MIXED IN TO THE SOIL TO INCREASE OR DECREASE PH.  
 THERE SHALL BE AT LEAST ONE SOIL TEST PER PROJECT. EACH TEST SHALL CONSIST OF BOTH THE STANDARD SOIL TEST FOR PH, AND ADDITIONAL TESTS OF ORGANIC MATTER, AND SOLUBLE SALTS. A TEXTURAL ANALYSIS IS REQUIRED FROM THE SITE STOCKPILED TOPSOIL. IF TOPSOIL IS IMPORTED, THEN A TEXTURE ANALYSIS SHALL BE PERFORMED FOR EACH LOCATION WHERE THE TOPSOIL WAS EXCAVATED.
  - COMPACTION**  
IT IS VERY IMPORTANT TO MINIMIZE COMPACTION OF BOTH THE BASE OF BIOTENTION PRACTICES AND THE REQUIRED BACKFILL. WHEN POSSIBLE, USE EXCAVATION HOES TO REMOVE ORIGINAL SOIL. IF PRACTICES ARE EXCAVATED USING LOADERS, THE CONTRACTOR SHOULD USE WIDE TRACK OR MASH TRACK EQUIPMENT, OR LIGHT EQUIPMENT WITH TIRE TREADS. USE OF EQUIPMENT WITH NARROW TRACKS OR NARROW TIRES, RUBBER TIRES WITH LARGE LUGS, OR HIGH-PRESSURE TIRES WILL CAUSE EXCESSIVE COMPACTION RESULTING IN REDUCED INFILTRATION RATES AND IS NOT ACCEPTABLE. COMPACTION WILL SIGNIFICANTLY CONTRIBUTE TO DESIGN FAILURE. COMPACTION CAN BE ALLEVATED AT THE BASE OF THE BIOTENTION FACILITY BY USING A PRIMARY TILLING OPERATION SUCH AS CHISEL PLOW, RIPPERS OR SUBSOILERS. THESE TILLING OPERATIONS ARE TO RESTRUCTURE THE SOIL PROFILE THROUGHOUT THE 12 INCH COMPACTION ZONE. SUBSTITUTE METHODS MUST BE APPROVED BY THE ENGINEER. ROTOTILLERS TYPICALLY DO NOT TILL DEEP ENOUGH TO REDUCE THE EFFECTS OF COMPACTION FROM HEAVY EQUIPMENT.  
 ROTOTILL 2 TO 3 INCHES OF SAND INTO THE BASE OF THE BIOTENTION FACILITY BEFORE BACKFILLING THE OPTIONAL SAND LAYER. PUMP ANY PONDED WATER BEFORE PREPARING (ROTOTILLING) BASE. WHEN BACKFILLING THE TOPSOIL OVER THE SAND LAYER, FIRST PLACE 3 TO 4 INCHES OF TOPSOIL OVER THE SAND, THEN ROTOTILL THE SAND/TOPSOIL TO CREATE A GRADATION ZONE. BACKFILL THE REMAINDER OF THE TOPSOIL TO FINAL GRADE. WHEN BACKFILLING THE BIOTENTION FACILITY, PLACE SOIL IN LIFTS 12" TO 18". DO NOT USE HEAVY EQUIPMENT WITHIN THE BIOTENTION BASIN. HEAVY EQUIPMENT CAN BE USED AROUND THE BIOTENTION TO SUPPLY SOILS AND SAND. GRADE BIOTENTION MATERIALS WITH LIGHT EQUIPMENT SUCH AS A COMPACT LOADER OR A DOZER/LOADER WITH MARSH TRACKS.
  - PLANT MATERIAL**  
RECOMMENDED PLANT MATERIAL FOR MICRO-BIOTENTION PRACTICES CAN BE FOUND IN APPENDIX A, SECTION A.2.3.
  - PLANT INSTALLATION**  
COMPOST IS A BETTER ORGANIC MATERIAL SOURCE, IS LESS LIKELY TO FLOAT, AND SHOULD BE PLACED IN THE INVERT AND OTHER LOW AREAS. MULCH SHOULD BE PLACED IN SURROUNDING TO A UNIFORM THICKNESS OF 2" TO 3". SHREDED OR CHIPPED HARDWOOD MULCH IS THE ONLY ACCEPTED MULCH. PINE MULCH AND WOOD CHIPS WILL FLOW AND MOVE TO THE PERIPHERY OF THE BIOTENTION AREA DURING A STORM EVENT AND ARE NOT ACCEPTABLE. SHREDED MULCH MUST BE WELL AERED (6 TO 12 MONTHS) FOR ACCEPTANCE.  
 ROOTSTOCK OF THE PLANT MATERIAL SHALL BE KEPT MOIST DURING TRANSPORT AND ON-SITE STORAGE. THE PLANT ROOT BALL SHOULD BE PLANTED 50% 1/2TH OF THE BALL IS ABOVE FINAL GRADE SURFACE. THE DIAMETER OF THE PLANTING PIT SHALL BE AT LEAST SIX INCHES LARGER THAN THE DIAMETER OF THE PLANTING BALL SET AND MANTAIN PLANT STEMMENT DURING THE ENTIRE PLANTING PROCESS. THOROUGHLY WATER GROUND BED COVER AFTER INSTALLATION. TREES SHALL BE BRACED USING 2" BY 2" STAKES ONLY AS NECESSARY AND FOR THE FIRST GROWING SEASON ONLY. STAKES ARE TO BE EQUALLY SPACED ON THE OUTSIDE OF THE TREE BALL. GRASSES AND LEGUME SEED SHOULD BE BROADCAST INTO THE SOIL TO A DEPTH OF AT LEAST ONE INCH. GRASS AND LEGUME PLANTS SHALL BE PLANTED FOLLOWING THE NON-GRASS GROUND COVER PLANTING SPECIFICATIONS. THE TOPSOIL SPRINKLER SHOULD BE USED TO IRRIGATE MATERIAL TO ADEQUATELY SUPPLY NUTRIENTS FROM NATURAL CYCLING. THE PRIMARY FUNCTION OF THE BIOTENTION STRUCTURE IS TO IMPROVE WATER QUALITY. ADDING FERTILIZERS, OR AT A MINIMUM, IMPEDES THIS GOAL. ONLY ADD FERTILIZER IF WOOD CHIPS OR MULCH ARE USED TO AMEND THE SOIL. ROTOTILL UREA FERTILIZER AT A RATE OF 2 POUNDS PER 1000 SQUARE FEET.
  - UNDERDRAINS**  
UNDERDRAINS MUST MEET THE FOLLOWING CRITERIA:  
 \* PIPE - SHOULD BE 4" TO 6" DIAMETER, SLOTTED OR PERFORATED RIGID PLASTIC PIPE (ASTM F 758, TYPE PE 201, OR ASTM D 1782) IN A GRAVEL LAYER. THE PREFERRED MATERIAL IS SLOTTED, 4" RIGID PIPE (E.G., PVC OF HOPE).  
 \* PERFORATIONS - IF PERFORATED PIPE IS USED, PERFORATIONS SHOULD BE 3/8" DIAMETER LOCATED 6" ON CENTER WITH A MINIMUM OF FOUR HOLES PER ROW. PIPE SHALL BE WRAPPED WITH A 1/4" (NO. 4 OR 4x4) GALVANIZED HARDWARE CLOTH.  
 \* GRAVEL - THE GRAVEL LAYER (NO. 57 STONE PREFERRED) SHALL BE AT LEAST 3" THICK ABOVE AND BELOW THE UNDERDRAIN.  
 \* THE MAIN COLLECTOR PIPE SHALL BE AT A MINIMUM 0.5% SLOPE.  
 \* A RIGID, NON-PERFORATED OBSERVATION WELL MUST BE PROVIDED (ONE PER EVERY 1,000 SQUARE FEET) TO PROVIDE A CLEAR-OUT POINT AND MONITOR PERFORMANCE OF THE FILTER.  
 \* A 4" LAYER OF PEA GRAVEL (1/8" TO 3/8" STONE) SHALL BE LOCATED BETWEEN THE FILTER MEDIA AND THE UNDERDRAIN TO PREVENT IMBIBITION OF FINES" IN TO THE UNDERDRAIN. THIS LAYER MAY BE CONSIDERED PART OF THE FILTER BED WHEN BED THICKNESS EXCEEDS 24".  
 THIS MAIN COLLECTOR PIPE FOR UNDERDRAIN SYSTEMS SHALL BE CONSTRUCTED AT A MINIMUM SLOPE OF 0.5%. OBSERVATION WELLS AND/OR CLEAN-OUT PIPES MUST BE PROVIDED (ONE MINIMUM PER EVERY 1,000 SQUARE FEET OF SURFACE AREA).
  - MISCELLANEOUS**  
THESE PRACTICES MAY NOT BE CONSTRUCTED UNTIL ALL CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.



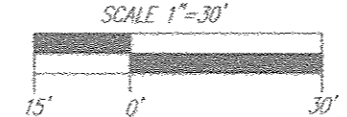
- OPERATION AND MAINTENANCE SCHEDULE FOR LANDSCAPE INFILTRATION (M-3), MICRO-BIOTENTION (M-6), RAIN GARDENS (M-1), BIOTENTION SWALE (M-8), AND ENHANCED FILTERS (M-9)**
- THE OWNER SHALL MAINTAIN THE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUALLY. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL, VOLUME II, TABLE A.4.1 AND 2.
  - THE OWNER SHALL PERFORM A PLANT IN THE SPRING AND IN THE FALL OF EACH YEAR. DURING THE INSPECTION, THE OWNER SHALL REMOVE DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT. REPLACE DEAD PLANT MATERIAL WITH ACCEPTABLE REPLACEMENT PLANT MATERIAL. TREAT DISEASED TREES AND SHRUBS, AND REPLACE ALL DEFICIENT STAKES AND WIRES.
  - THE OWNER SHALL INSPECT THE MULCH EACH SPRING. THE MULCH SHALL BE REPLACED EVERY TWO TO THREE YEARS. THE PREVIOUS MULCH LAYER SHALL BE REMOVED BEFORE THE NEW LAYER IS APPLIED.
  - THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.

- OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED STORMWATER DRY WELLS (M-5)**
- THE MONITORING WELLS AND STRUCTURES SHALL BE INSPECTED ON A QUARTERLY BASIS AND AFTER EVERY LARGE STORM EVENT.
  - WATER LEVELS AND SEDIMENT BUILD UP IN THE MONITORING WELLS SHALL BE RECORDED OVER A PERIOD OF SEVERAL DAYS TO INSURE TRENCH DRAINAGE CRITERIA.
  - A LOG BOOK SHALL BE MAINTAINED TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
  - WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN THE 72 HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE TAKEN.
  - THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
  - ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION FACILITY HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.

**OWNER**  
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(410) 480-0023

**DEVELOPER**  
TRINITY HOMES MARY LAND, LLC  
3675 PARK AVE., SUITE 301  
ELlicott CITY, MD 21043  
(410) 480-0023

**PLAN VIEW**  
SCALE: 1"=30'



**SOILS LEGEND**  
HOWARD COUNTY SOILS MAP #24 - SAVAGE SW

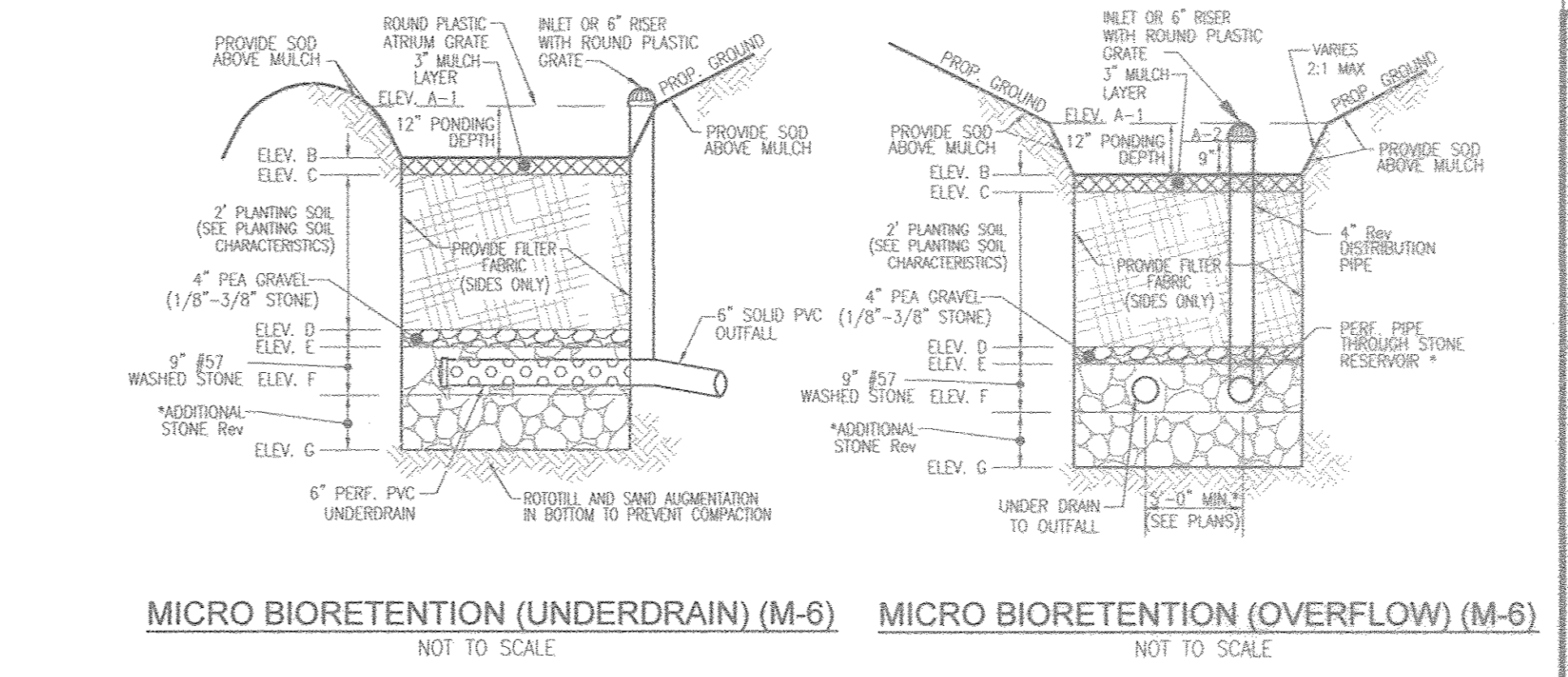
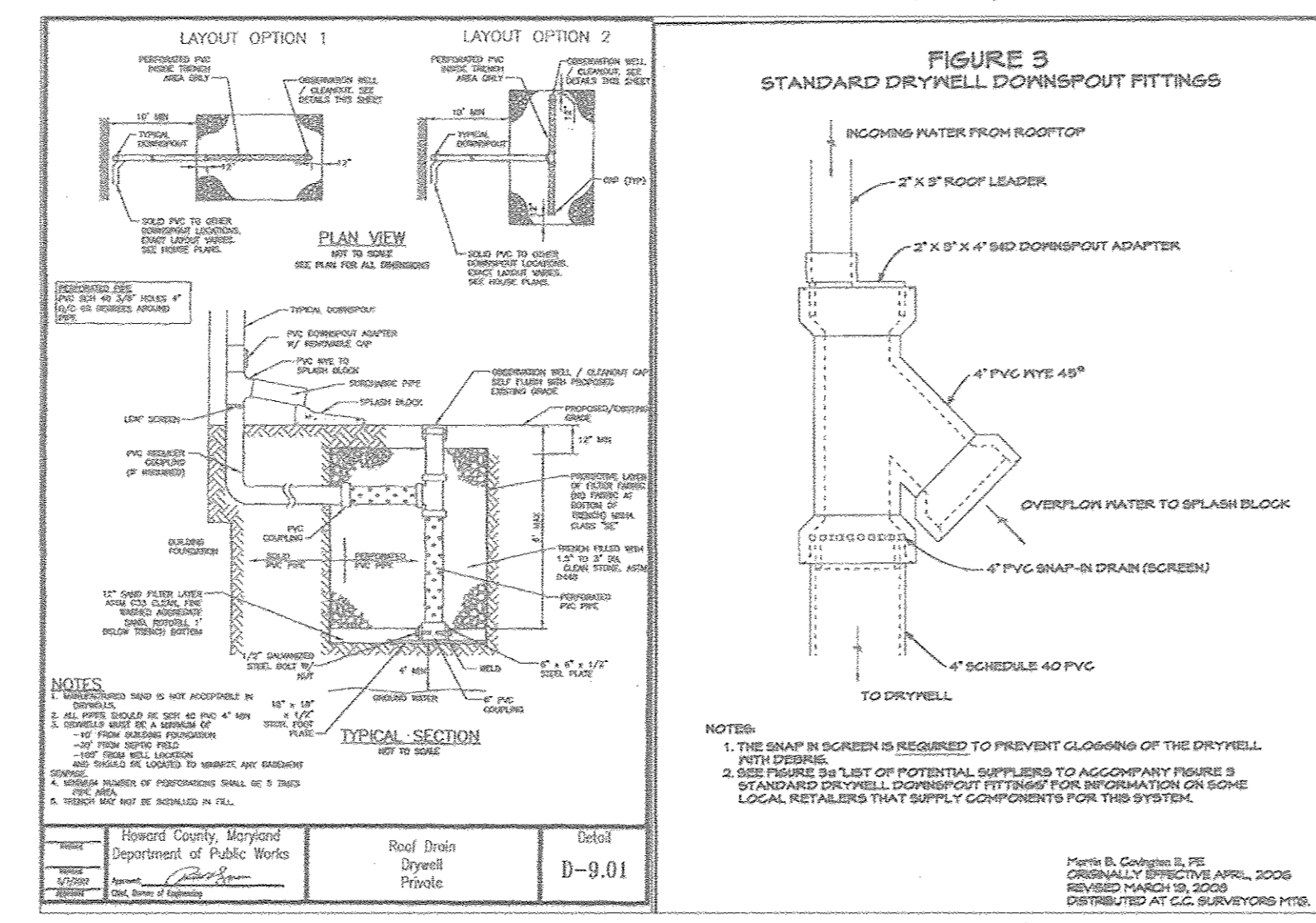
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NOTE: FALLSINGTON SOILS HAVE SEVERE LIMITATIONS FOR HOME CONSTRUCTION.

TENTATIVELY APPROVED  
DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY

PLANNING DIRECTOR  
DATE: 12-1-17



**PRELIMINARY PLAN**  
**STORM WATER MANAGEMENT DRAINAGE AREA MAP, NOTES AND DETAILS**  
**MAGNOLIA MANOR WEST**  
LOTS 1 - 7 AND OPEN SPACE LOT 8  
A SUBDIVISION OF TAX MAP 47 - PARCEL 558  
AND A RESUBDIVISION OF TAX MAP 47 - PARCEL 157  
\*SIDING PROPERTY - LOTS 1 AND 2\* (PLAT 5708)

TAX MAP 47 PARCELS: 157 & 558  
2018 ELECTION DISTRICT

**ROBERT H. VOGEL ENGINEERING, INC.**  
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PROFESSIONAL CERTIFICATE  
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. 16193, EXPIRATION DATE: 08-23-2018

DESIGN BY: RHY/EDS  
DRAWN BY: KG/EDS  
CHECKED BY: RHY  
DATE: NOVEMBER 2017  
SCALE: AS SHOWN  
W.O. NO.: 16-15

7 SHEET OF 7