

SHEET INDEX	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	SUPPLEMENTAL & LANDSCAPE PLAN
3	NOTES & DETAILS
4	SEDIMENT & EROSION CONTROL PLAN, NOTES & DETAILS

SOILS LEGEND			
SOIL	NAME	CLASS	K FACTOR
Gba	Gladstone loam, 0 to 3 percent slopes	B	0.28
GmC	Glenville silt loam, 8 to 15 percent slopes	C	0.43

STORMWATER MANAGEMENT SUMMARY			
AREA ID.	ESD REQUIRED CU.FT.	ESD PROVIDED CU.FT.	REMARKS
SITE	3,950	4,051	DRY WELLS (M-5), GRASS SWALE (M-8), AND ROOFTOP DISCONNECTIONS (N-1)
TOTAL	3,950	4,051	

GROSS AREA = 3.03 ACRES
 LOD = 2.74 ACRES
 RCN = 574
 TARGET Pe = 1.4'

DESIGN NARRATIVE

Introduction:
 This report will demonstrate how the criteria set forth in the Maryland Stormwater Design Manual, Volumes I and II (effective October 2000, revised May 2009) will be satisfied on this project. The goal of creating hydrology similar to that of "Woods in Good Condition" will be accomplished through the use of the practices contained within Chapter 5 of said manual. The achievement of this goal will remove the requirement of providing Channel Protection Volume.

General Site Conditions:
 Terry's Place is a six lot single family lot subdivision including one existing house and existing accessory structures to be removed. Property is zoned R-20 and located on Tax Map 16, Grid 23, Parcel No. 17, Lot 2 of the Howard County, Maryland Tax Map Database System. The property is an existing lot of record located at 10778 Frederick Road. Subdivision will utilize a proposed public water and sewer extension. The property is located in the Ellicott City area of Howard County in the watershed of an unnamed tributary of the Little Patuxent River (02131105). This property is relatively rectangular in shape and runoff on-site is mainly from west to east. The existing houses sit at the high point of the lots, and existing driveway will be widened to 16 feet and is located at a high point in Frederick Road. No forest exists on-site. Also, according to a field inspection conducted by Eco-Science Professionals (ESP) dated September 2014, no wetlands or streams are present on-site. The Web Soil Survey shows soils on the site consist of Gladstone loam (Gba), Type "B" soils and Glenville silt loam (GmC), Type "C" soils exist on the property. The runoff from the roofs of the proposed houses is to be directed overland and be treated by rooftop disconnection and through roof leaders to eleven (11) dry wells to be located on Lots 1 thru 6 in the front and rear of the proposed houses. Runoff from the proposed driveways will flow overland and be treated with Grass Swale.

- Natural Resource Protection:**
 Environmentally sensitive areas do not exist on-site (steep slopes, wetlands, wetland buffer, floodplain, stream, and stream buffer), therefore no effort to protect natural resources on-site is required.
- Maintenance of Natural Flow Patterns:**
 It is the intent of the proposed design to discharge runoff similar to the characteristics and direction of this site prior to any of the proposed improvements.
- Reduction of Impervious Areas through better site design, alternative surfaces and Nonstructural Practices:**
 The design of this project utilizes a common driveway and individual driveways for the two new lots. Non-Structural practices as permitted in Chapter 5, eleven (11) Dry Wells (M-5), Grass Swale (M-8), and Rooftop Disconnection (N-1) will be used to address ESD to the MEP requirements.
- Integration of Erosion and Sediment Controls into Stormwater Strategy:**
 Since this is a small drainage area (site sheet flows from the common driveway (along east property) to western property line, silt fence, super silt fence, and erosion control matting will be utilized for erosion and sediment control. There is no direct discharge of runoff directly to a stream. All site runoff will discharge to the existing ground then eventually to the Little Patuxent River. No drainage easements will be required. It is anticipated that all cut will be utilized on-site for construction at time of Site Development Plans.
- Implementation of ESD Planning Techniques and practices to the Maximum Extent Practicable (MEP):**
 The full required ESD volume is being provided.
- Request for a Design Manual Waiver:**
 No Waivers related to stormwater management are being requested in this project.

SITE ANALYSIS DATA CHART

- TOTAL AREA OF THIS SUBMISSION = 3.03 AC.±
- LIMIT OF DISTURBED AREA = 2.74 AC.±
- PRESENT ZONING DESIGNATION = R-20 (PER 10/06/2013 COMPREHENSIVE ZONING PLAN)
- PROPOSED USE: RESIDENTIAL
- PREVIOUS HOWARD COUNTY FILES: F-80-15; VP-79-87.
- TOTAL AREA OF FLOODPLAIN LOCATED ON SITE = 0.00 AC.
- TOTAL AREA OF SLOPES IN EXCESS OF 15% = 0.00 AC.
- TOTAL AREA OF WETLANDS (INCLUDING BUFFER) = 0.00 AC.
- TOTAL AREA OF EXISTING FOREST = 0.00 AC.
- TOTAL GREEN OPEN AREA = 2.36 AC.±
- TOTAL IMPERVIOUS AREA = 0.67 AC.±
- AREA OF ERODIBLE SOILS = 0.58 AC.
- AREA OF ROAD DEDICATION = 0.00 AC.

OWNER

DAVID WOESSNER
 309 MAGOTHY ROAD
 SEVERNA PARK, MARYLAND 21146
 410-461-0837

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Kathleen L... 3-11-15
 Chief, Division of Land Development
Chad E... 2-23-15
 Chief, Development Engineering Division

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. 38386, EXPIRATION DATE: 01/12/2016.

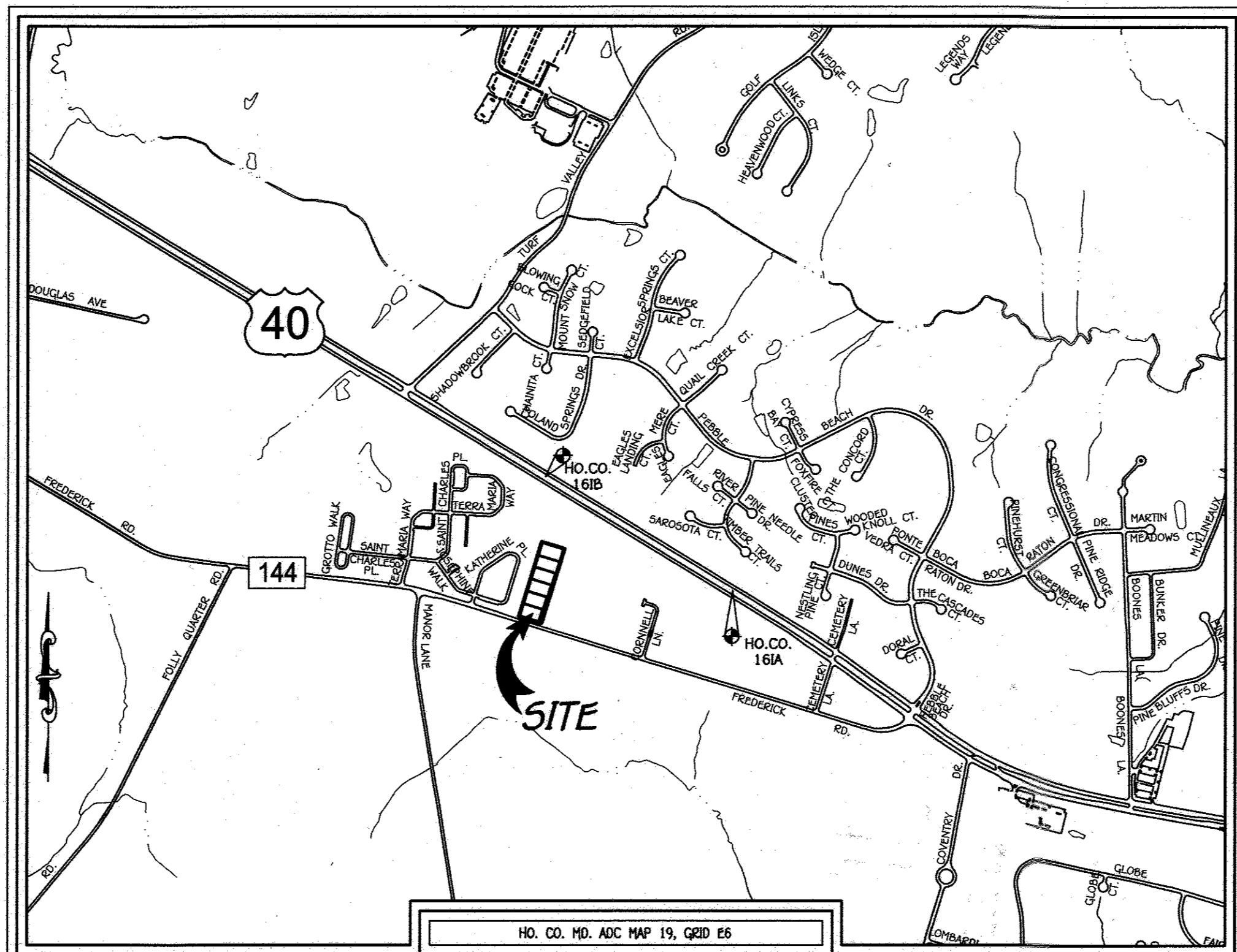
Stephanie J... 2/9/15
 Signature Of Professional Engineer DATE



NO.	REVISION	DATE
1	REVISE SUBDIVISION NAME	1/16/17
	REVISION	WFE

SUPPLEMENTAL PLAN ELLICOTT OVERLOOK LOTS 1 THRU 6

TAX MAP No. 16 GRID No. 23 PARCEL NO. 17 LOT NO. 1
 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND



VICINITY MAP
 SCALE: 1" = 1000'

BENCHMARK INFORMATION

B.M.#1 - HOWARD COUNTY CONTROL STATION #161A - HORIZONTAL - NAD '83
 N 509,509.413
 E 1,345,343.626
 ELEVATION = 462.92 - VERTICAL - (NAVD '86)

B.M.#2 - HOWARD COUNTY CONTROL STATION #161B - HORIZONTAL - (NAD '83)
 N 590,475.297
 E 1,344,753.928
 ELEVATION = 469.84 - VERTICAL - (NAVD '86)

LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
---452---	EXISTING 2' CONTOURS	---452---	PROPOSED CONTOUR
---490---	EXISTING 10' CONTOURS	+362.5	SPOT ELEVATION
GLB2 MLC2	SOILS LINES AND TYPE	---	LIMITS OF DISTURBANCE
---	EXISTING TREELINE	---	EXISTING SEPTIC EASEMENT TO BE REMOVED
---	PROPOSED TREELINE	---	PROPOSED PAVING
---	NON-ROOFTOP DISCONNECTION (N-2)	B-1	BORING HOLE
---	EXISTING PAVING TO BE MILLED AND OVERLAIN	---SF---	SILT FENCE
---	PROPOSED DRYWELL (M-5)	ECH	EROSION CONTROL MATTING
---	ROOFTOP DISCONNECTION (N-1)	---SSF---	SUPER SILT FENCE
---	FLOW ARROW	---	STABILIZES CONSTRUCTION ENTRANCE
---	EXISTING POWER POLE	---	DRAINAGE AREA DIVIDE
ST1	SPECIMEN TREE	---	TREE PROTECTION

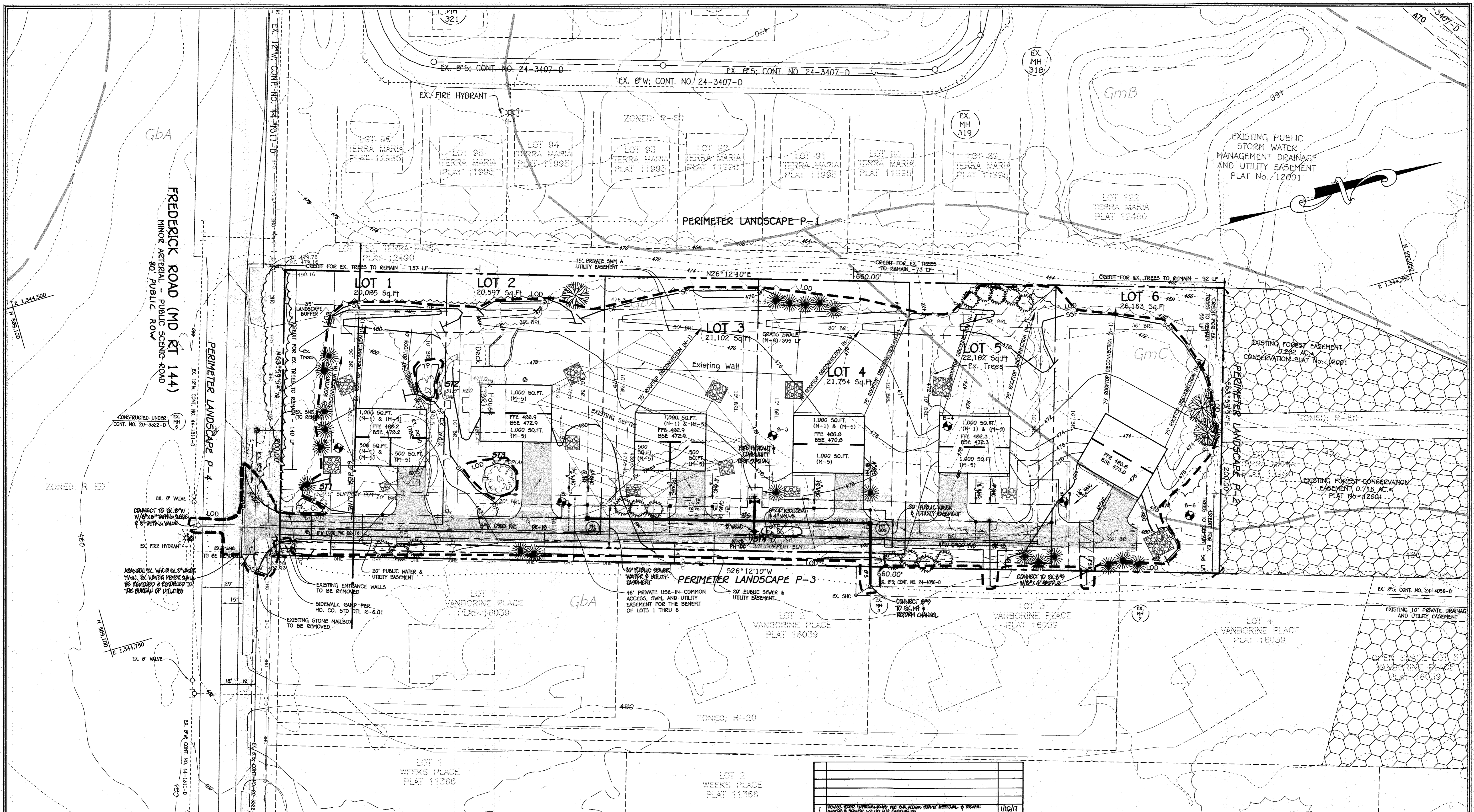
General Notes:

- Subject Property Zoned R-20 Per 10/06/13 Comprehensive Zoning Plan.
- Coordinates Based On NAD '83, Maryland Coordinate System As Projected By Howard County Geodetic Control Stations No. 16A And No. 16B.
 Station No. 16A North 599,509.413 East 1,345,343.626
 Station No. 16B North 590,475.297 East 1,344,753.928
- This Plat is Based On Field Run Monumented Boundary Survey Performed On Or About September, 2014, By Fisher, Collins & Carter, Inc.
- B.L. Denotes Building Restriction Line.
- Denotes Iron Pin Set With Cap "F.C.C. 106".
- Denotes Iron Pipe Or Iron Bar Found.
- Denotes Angular Change In Bearing Of Boundary Or Right-Of-Way.
- Denotes Concrete Monument Set With Cap "F.C.C. 106".
- Denotes Concrete Monument Or Stone Found.
- For Flag Or Pipestem Laps, Surface Collection, Snow Removal And Road Maintenance Are Provided To The Junction Of The Flag Or Pipestem And Road Right-Of-Way Line And Not On The Pipestem Lot Driveway.
- Driveways Shall Be Provided Prior To Issuance Of A Use And Occupancy Permit For Any New Dwellings 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 - Six (6") Inches Of Compacted Crusher Run Base With Tar And Chip Coating, (1 - 1/2" Minimum);
 c) Geometry - Maximum 15% Grade, Maximum 10% Grade Change And 45-Foot Turning Radius;
 d) Structures (Gutters/Bridges) - Capable Of Supporting 25 Gross Tons (HS-Loading);
 e) Drainage Elements - Capable Of Safely Passing 100 Year Flood With No More Than 1 Foot Depth Over Surface;
 f) Structure Clearances - Minimum 12 Feet;
 g) Maintenance - Sufficient To Ensure All Weather Use.
- All Lot Areas Are More Or Less (+).
- Distances Shown Are Based On Surface Measurement And Not Reduced To NAD '83 Grid Measurement.
- Stormwater Management Requirements For Lots 1, 3 Thru 6 Will Be Met Using Environmental Site Design To The Maximum Extent Possible In Accordance With The Maryland Stormwater Design Manual Volumes I & II, Effective In May Of 2010. All Lots Will Utilize Drywells (M-5), Grass Swale (M-8), And Rooftop Disconnection (N-1) For Stormwater Management.
- ATCO Traffic Evaluation Letter Dated September, 2014 Was Prepared By The Traffic Group.
- No Cemeteries Exist On This Site Based On A Visual Site Visit And Based On An Examination Of The Howard County Cemetery Inventory Map And No Historic Structures Sites Or Features Exist.
- The Forest Conservation Requirements Of Section 16.1200 Of The Howard County Code And Forest Conservation Act For This Subdivision Will Be Fulfilled By Providing A Fee In Lieu Payment Of \$14,701.50 (0.45 Acres x 43,560 Sq.Ft./Acre x 0.75\$/Sq.Ft.).
- Water And Sewer Service To These Lots Will Be Granted Under The Provisions Of Section 16.122B Of The Howard County Code.
- Public Water And Sewer Allocations Will Be Granted At Time Of Issuance Of The Building Permit If Capacity Is Available At That Time.
- Approval Of A Site Development Plan Is Required For The Development Of Residential Lots 1, 3 Thru 6 Within This Subdivision Prior To Issuance Of Any Grading Or Building Permits For New House Construction In Accordance With Section 16.155 Of The Subdivision And Land Development Regulations.
- Property Subject To Department Of Planning And Zoning File No. ECP-15-023.
- This Property Is Located Within The Metropolitan District And Will Be Served By Public Water And Sewer.
- There Is An Existing Dwelling/Structure(s) Located On Lot 2 To Remain. No New Buildings, Extensions Or Additions To The Existing Dwellings Are To Be Constructed At A Distance Less Than The Zoning Regulation Requirements For The Existing Dwelling/Structure(s). There Are No Environmental Features Including Wetland, Floodplain, Stream And Their Buffers, Located On This Property.
- A Letter Of Findings Dated 9/25/14 Was Prepared By Eco-Science Professionals For The Forest Stand Delineation And Wetland Delineation For This Project.
- This Plan Is In Compliance With The Amended Fifth Edition Of The Subdivision And Land Development Regulations And The Zoning Regulations As Amended By Council Bill 32-2013. Development Or Construction On These Lots Must Comply With Setback And Buffer Regulations In Effect At The Time Of Submission Of The Site Development Plan, Water Pollution Application, Or Building/Grading Permit.
- This Plat Establishes A Private Shared Use-In-Common Driveway Easement With Maintenance Agreement And Has Been Recorded In The Land Records Of Howard County, Maryland Simultaneously With The Recording Of This Subdivision Plat.
- Open Space Requirements Are Provided By A Fee-In-Lieu Payment Of \$7,500.00.
- This Development Is Designed To Be In Accordance With Section 16.127-Residential Infill Development-Of Subdivision And Land Development Regulations. The Developer Of This Project Shall Create Compatibility With The Existing Neighborhood Through The Use Of Enhanced Perimeter Landscaping, Berms, Fences, Similar Housing Unit Types And The Directional Orientation Of The Proposed Houses.
- A Community Meeting Was Conducted On September 4, 2014 For The Purpose Of The Developer To Provide Information To The Community Regarding The Proposed Residential Development And To Allow The Community To Ask Questions And To Make Comments, Per Section 16.129(d), Of The Subdivision Regulations.
- This Property Is Adjacent To A Scenic Road (Frederick Road).
- The Perimeter Landscaping Obligation For Lots 1, 3 Thru 6 Is Provided In Accordance With A Certified Landscape Plan. In Accordance With Section 16.124 Of The Howard County Code And The Landscape Manual, A Landscape Surety In The Amount Of \$8,500 Based On 3 Shade Trees @ \$300/Shade Tree And 36 Evergreen Trees @ \$150/Evergreen Tree Is Bonded With The Public Water And Sewer Developer's Agreement.
- Subdivision Is Subject To Section 104.0.F. Of The Zoning Regulations. At Least 10% Of The Dwelling Units Shall Be Moderate Income Housing (M.I.H.U.) Or An Alternative Compliance Will Be Provided. The Developer Shall Execute A M.I.H.U. Agreement With The Department Of Housing To Indicate How The M.I.H.U. Requirement Will Be Met. The M.I.H.U. Agreement And Covenants Will Be Recorded Simultaneously With This Plat In The Land Records Office Of Howard County, Maryland. This Development Will Meet M.I.H.U. Alternative Compliance By A Payment Of A Fee-In-Lieu To The Department Of Housing For Each Required Unit.
 Subdivision Is Required To Provide M.I.H.U. (Moderate Income Housing Unit).
 a. M.I.H.U. Required = 0.5 M.I.H.U.
 (5 Lots x 10% M.I.H.U./Lot)
- Noise Study Dated September, 2014 Prepared By M&S Group For Noise Evaluation For U.S. Route 40 And A Noise Study Dated September, 2014 Prepared By The Traffic Group For Noise Evaluation For Maryland Route 144. The Unmitigated 65dBA Noise Contour Line Drawn On This Plat Is Advisory As Required By The Howard County Design Manual, Chapter 5, Revised February, 1992 And Cannot Be Considered To Exactly Locate The 65dBA Noise Exposure. The Unmitigated 65dBA Noise Contour Line Was Established By Howard County To Alert Developers, Builders And Future Residents That Areas Beyond This Threshold May Exceed Generally Accepted Noise Levels Established By The U.S. Department Of Housing And Urban Development.
- All Construction Shall Be In Accordance With The Latest Standards And Specifications Of Howard County Plus MSHA Standards And Specifications If Applicable.
- The Contractor Shall Notify The Department Of Public Works/Bureau Of Engineering/Construction Inspection Division At (410) 313-1880 At Least Five (5) Working Days Prior To The Start Of Work.
- The Contractor Shall Notify "Miss Utility" At 1-800-257-7777 At Least 48 Hours Prior To Any Excavation Work Being Done.
- Traffic Control Devices, Markings And Signage Shall Be In Accordance With The Latest Edition Of The Manual Of Uniform Traffic Control Devices (MUTCD). All Street And Regulatory Signs Shall Be In Place Prior To The Placement Of Any Asphalt.
- The Existing Topography Is Taken From A Field Run Topographic Survey With (Minimum Two Foot) Contour Intervals Prepared By Fisher, Collins & Carter, Inc. Dated September, 2014 And Supplemented With Howard County GIS Topography.
- All Specimen Trees On-Site Are To Be Preserved And Protected.

TITLE SHEET ELLICOTT OVERLOOK LOTS 1 THRU 6 ZONED R-20

TAX MAP NO. 16 GRID NO. 23 PARCEL NO. 17 LOT NO. 1
 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: FEBRUARY, 2015
 SHEET 1 OF 4

F-15-025



NOTE: THIS PLAN SHEET IS NOT TO BE UTILIZED FOR CONSTRUCTION OR INSTALLATION OF SEDIMENT CONTROLS. THIS PLAN SHEET IS NOT TO BE USED TO OBTAIN A GRADING / BUILDING PERMIT.

DEVELOPER'S / BUILDER'S CERTIFICATE
 I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A LETTER OF LANDSCAPE INSTALLATION ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

LANDSCAPING PLANT LIST

QTY.	KEY	NAME	SIZE
3		TILIA CODATA 'GREENSPIRE' (GREENSPIRE LITTLELEAF LINDEN)	2 1/2" - 3" CAL. FULL CROWN, BAB
15		ILEX X 'NELLIE R. STEVENS' (NELLIE STEVENS HOLLY)	5'-6" HT. BAB
21		THUJA STANDISHE X PULCATA (GREEN GANT ARBORVITAE)	5'-6" HT. BAB

TOTAL: 3 SHADE TREES, 36 EVERGREEN TREES

PERIMETER 3 - CREDIT IS BEING TAKEN FOR AN EXISTING 30" SLIPPERY ELM TO REMAIN. PERIMETER 4 CREDIT IS BEING TAKEN FOR AN EXISTING 30" SLIPPERY ELM TO REMAIN.

SCHEDULE A - PERIMETER LANDSCAPE EDGE

PERIMETER	ADJACENT TO PERIMETER PROPERTIES		ADJACENT TO PERIMETER PROPERTIES		TOTAL
	A	B	A	B	
LINEAR FEET OF PERIMETER	660 L.F.	200 L.F.	660 L.F.	200 L.F.	
CREDIT FOR EXISTING VEGETATION LINEAR FEET (L.F.) OF CREDIT REMAINING PERIMETER (L.F.)	308 L.F. OF EX. TREES / 352 L.F. REMAINING	0 L.F. OF EX. TREES / 94 L.F. REMAINING	N/A	24 L.F. OF ENTRANCE / 140 L.F. OF EX. TREES / 36 L.F. REMAINING	
NUMBER OF PLANTS REQUIRED	6 (308/60 = 6)	2 (94/60 = 1.6 OR 2)	11 (660/60 = 11)	1 (36/36 = 1 OR 1)	19
CREDIT FOR EXISTING VEGETATION					
SHADE TREES	0	0	1	1	2
SMALL/MEDIUM DECIDUOUS OR EVERGREEN TREES (E1 SUBSTITUTION)	0	0	0	0	0
NUMBER OF PLANTS PROVIDED	1	2	0	0	3
SHADE TREES	10	0	20	6	36
SMALL/MEDIUM DECIDUOUS OR EVERGREEN TREES (E1 SUBSTITUTION)					

OWNER
 DAVID WOESSNER
 308 MAGDOOTH ROAD
 SEVERNA PARK, MARYLAND 21146
 410-461-0837

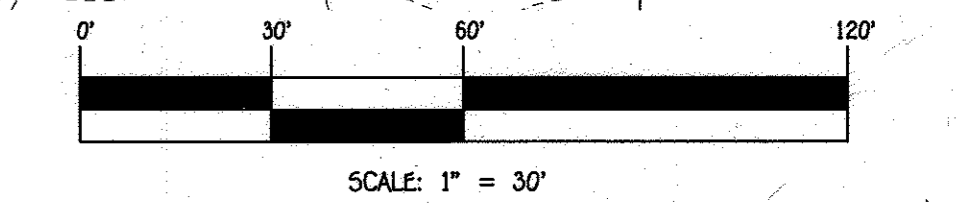
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Kate S. D... 3-11-15
 Chief, Division of Land Development

Chad... 2-23-15
 Chief, Development Engineering Division

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. 38386, EXPIRATION DATE: 01/12/2016.

Christopher... 2/9/15
 Signature of Professional Engineer DATE



SUPPLEMENTAL & LANDSCAPE PLAN
ELLICOTT OVERLOOK
 LOTS 1 THRU 6
 ZONED R-20
 TAX MAP NO.: 16 GRID NO.: 23 PARCEL NO.: 17 LOT NO.: 1
 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1"=30' DATE: FEBRUARY, 2015
 SHEET 2 OF 4

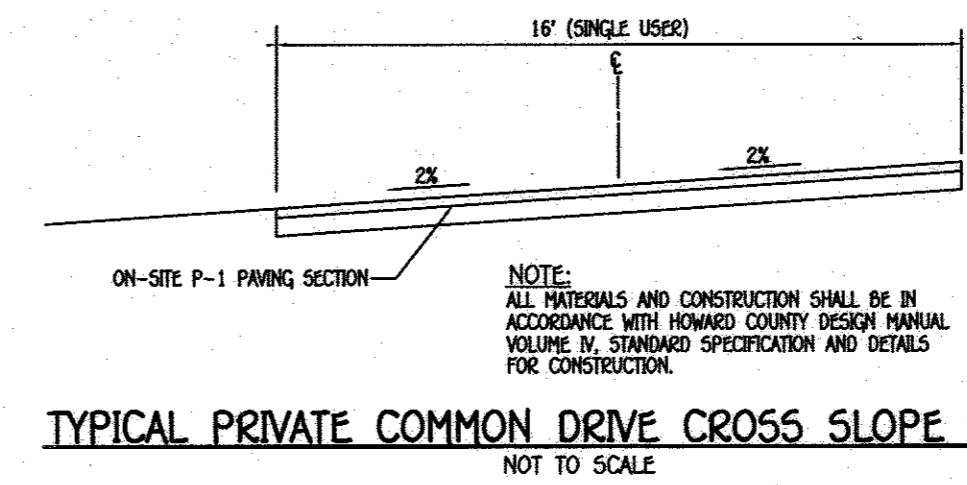
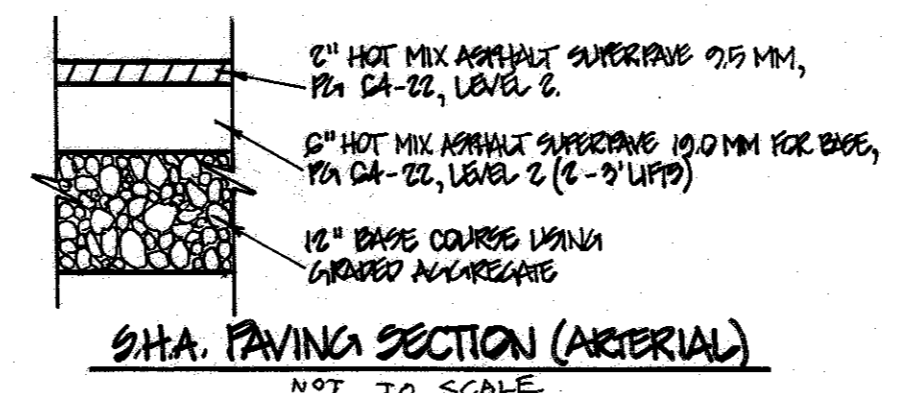
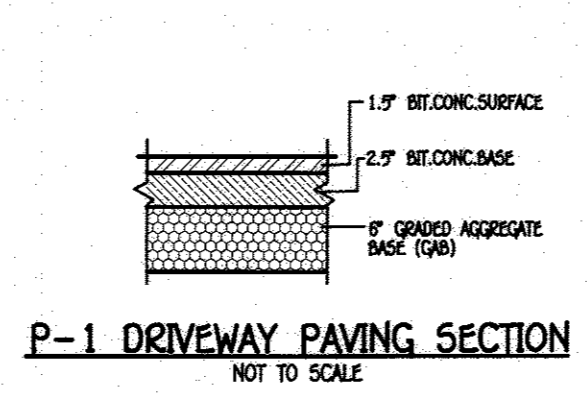
I:\2014\14017\Engineering\Drawings\Supplemental Plans\dwg_219\2015.12.45.17 PM.11

Table B.4. Materials Specifications for Micro-Bioretenion, Rain Gardens & Landscape Infiltration

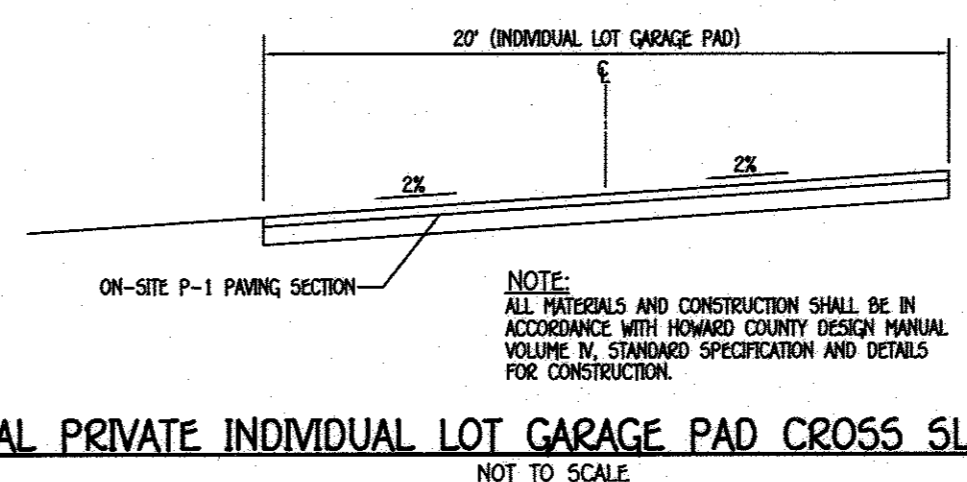
Material	Specification	Size	Notes
Plantings	see Appendix A Table A.4	n/a	plantings are site-specific
Filtering soil (2' to 4' deep)	loamy sand 60-60% compost 35-40% or sandy loam 30% coarse sand 30% compost 40%		USDA soil types loamy sand or sandy loam; clay content <5%
Organic Content	Min. 10% by dry weight (ASTM D 2974)		
Mulch	shredded hardwood		aged 6 months, minimum
Pea gravel diaphragm	pea gravel: ASTM-D-448	No. 8 or No. 9 (1/8" to 3/8")	
Curtain drain	ornamental stone: washed cobbles	stone: 2" to 5"	
Geotextile		n/a	PE Type 1 nonwoven
Gravel (underdrains and infiltration berms)	ASHTO M-43	No. 57 or No. Aggregate (3/8" to 3/4")	
Underdrain piping	7.75" Type PS 28 or ASHTO M-276	4" to 6" rigid schedule 40 PVC or 50825	Slotted or perforated pipe; 3/8" perf. @ 8" on center, 4 holes per row, minimum of 2" of gravel over pipes; not necessary underneath pipes. Perforated pipe shall be wrapped with 1/4" thick galvanized hardware cloth
Formed in place concrete (if required)	MSHA Mix No. 3; f = 3500 psi at 28 days, normal weight, air-entrained; reinforcing to meet ASTM-615-60	n/a	on-site testing of poured-in-place concrete required: 28 day strength and slump test; all concrete design (cast-in-place or pre-cast) not using previously approved 57Mile or local standards requires design drawings sealed and approved by a professional structural engineer licensed in the State of Maryland - design to include meeting ACI Code 308.6/89; vertical loading (1-10 or 1-22) allowable horizontal loading (based on soil pressures); and analysis of potential cracking
Sand	ASHTO-M-6 or ASTM-C-33	0.02" to 0.04"	Sand substitutions such as Diabase and Graystone (ASHTO #10 are not acceptable. No calcium carbonated or dolomitic sand substitutions are acceptable. No "rock dust" can be used for sand.

SECTION NUMBER	ROAD AND STREET CLASSIFICATION	CALIFORNIA BEARING RATIO (CBR)		3 TO <5		5 TO <7		>7	
		MIN HMA WITH GAB	HMA WITH CONSTANT GAB	3 TO <5	5 TO <7	3 TO <5	5 TO <7	>7	
P-5	MINOR ARTERIAL	PAVEMENT MATERIAL (INCHES)							
		HMA SUPERPAVE FINAL SURFACE 9.5 MM, PG 64-22, LEVEL 1 (ESAL)		2.0	2.0	2.0	2.0	2.0	2.0
		HMA SUPERPAVE INTERMEDIATE SURFACE N/A		2.0	2.0	2.0	2.0	2.0	2.0
		HMA SUPERPAVE BASE 19.0 MM, PG 64-22, LEVEL 1 (ESAL)		6.0	6.0	6.0	7.0	5.0	4.0
		GRADED AGGREGATE BASE (GAB)		11.0	5.0	4.0	8.0	8.0	8.0

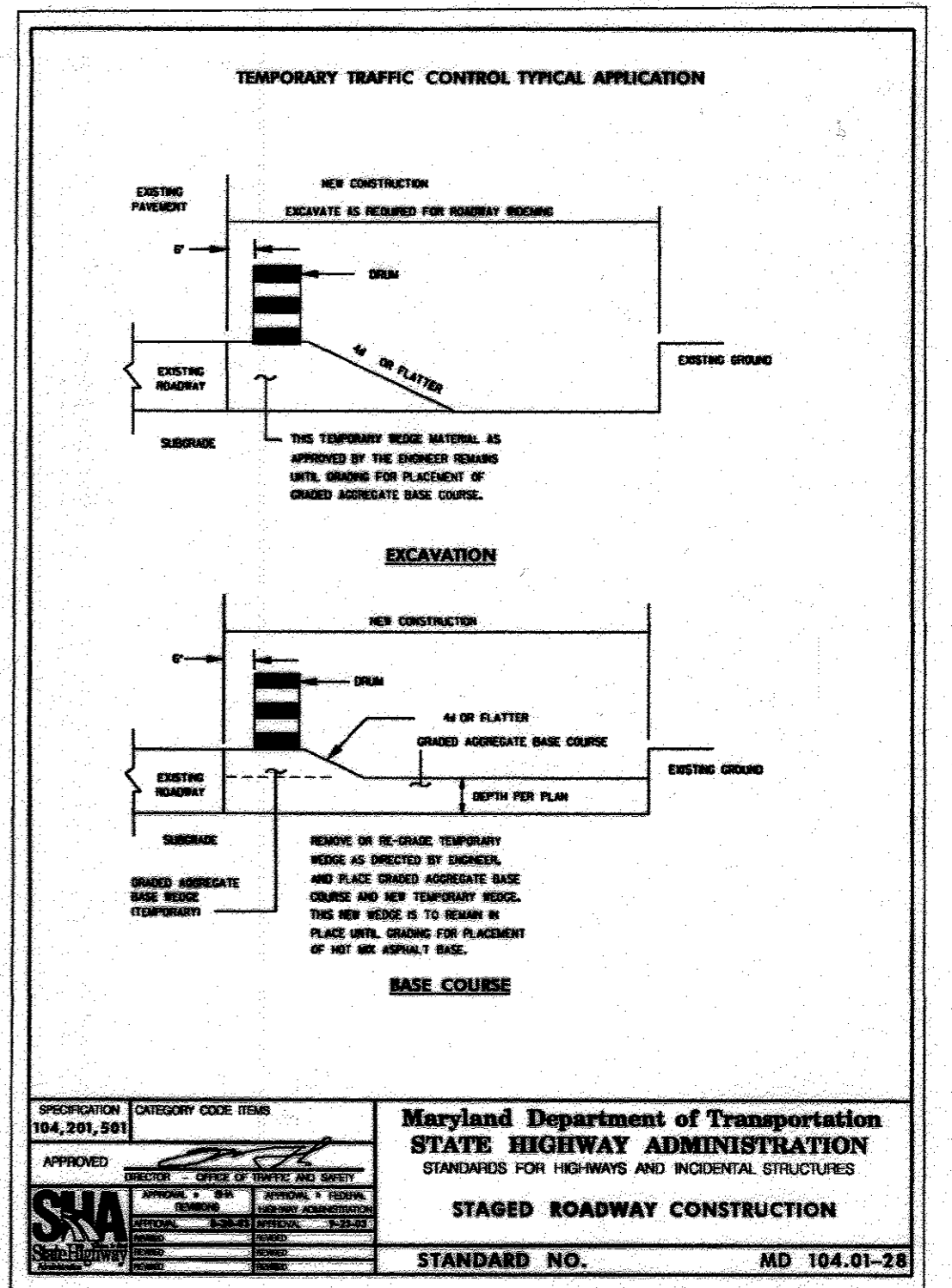
FREDERICK ROAD WIDENING PAVING SECTION NOT TO SCALE



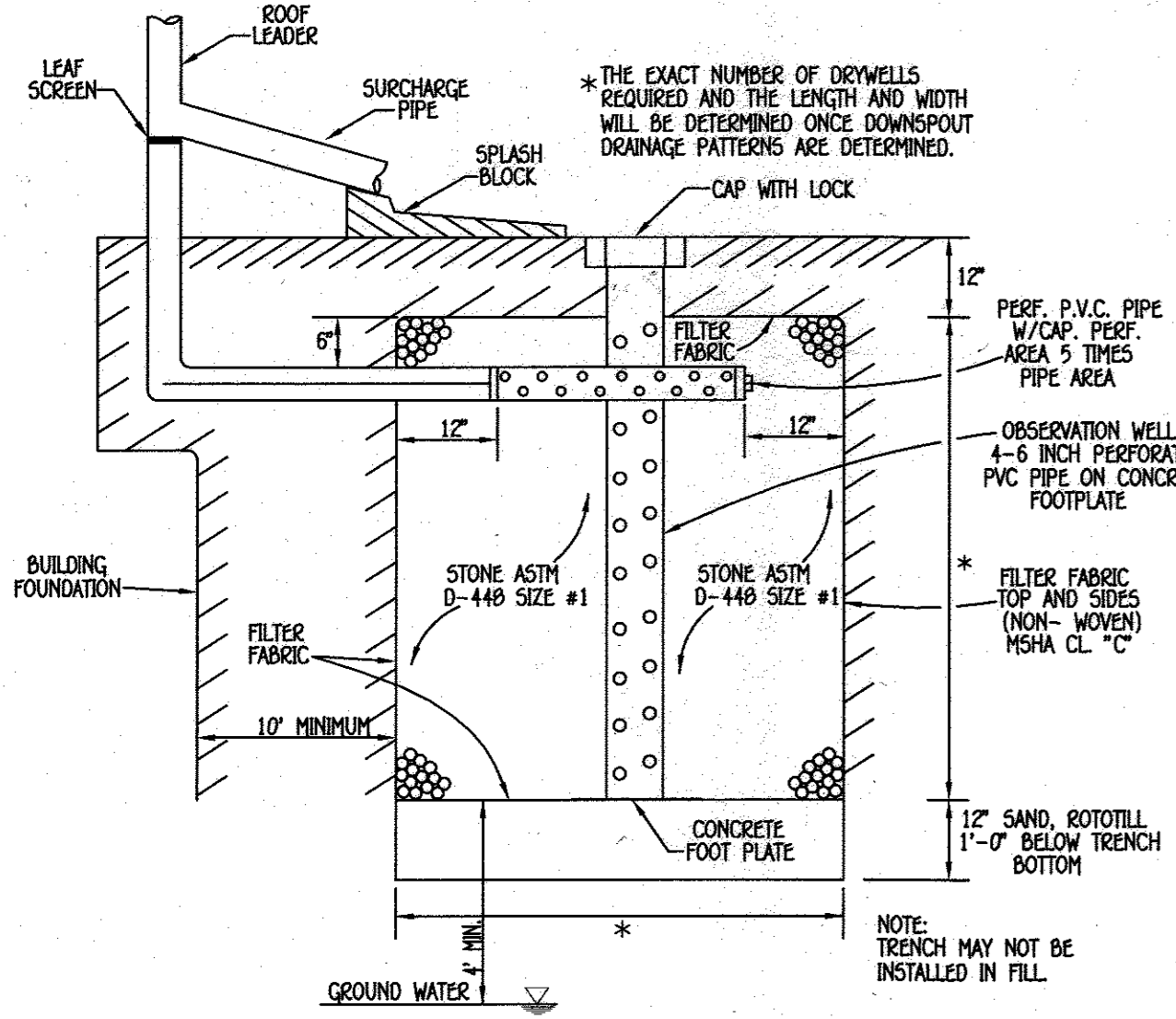
TYPICAL PRIVATE COMMON DRIVE CROSS SLOPE SECTION NOT TO SCALE



TYPICAL PRIVATE INDIVIDUAL LOT GARAGE PAD CROSS SLOPE SECTION NOT TO SCALE



TEMPORARY TRAFFIC CONTROL TYPICAL APPLICATION MOT STANDARD MD 104.02-01



DRY WELL DETAIL (M-5) NOT TO SCALE

OPERATION & MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED, DISCONNECTION OF ROOFTOP RUNOFF (N-1)

1. MAINTENANCE OF AREAS RECEIVING DISCONNECTION RUNOFF IS GENERALLY NO DIFFERENT THAN THAT REQUIRED FOR OTHER LAWN OR LANDSCAPED AREAS. THE AREAS RECEIVING RUNOFF SHOULD BE PROTECTED FROM FUTURE COMPACTION OR DEVELOPMENT OF IMPERVIOUS AREA IN COMMERICAL AREAS FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.

OPERATION & MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DRY WELLS (M-5)

- A. THE OWNER SHALL INSPECT THE MONITORING WELLS AND STRUCTURES ON A QUARTERLY BASIS AND AFTER EVERY HEAVY STORM EVENT.
- B. THE OWNER SHALL RECORD THE WATER LEVELS AND SEDIMENT BUILD UP IN THE MONITORING WELLS OVER A PERIOD OF SEVERAL DAYS TO ENSURE TRENCH DRAINAGE.
- C. THE OWNER SHALL MAINTAIN A LOG BOOK TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
- D. WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN A SEVENTY-TWO (72) HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE TAKEN.
- E. THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
- F. 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.

FOREST CONSERVATION WORKSHEET VERSION 1.0

BASIC SITE DATA:

A. TOTAL TRACT AREA 3.03 Ac

B. AREA WITHIN 100 YEAR FLOODPLAIN 0

C. NET TRACT AREA 3.03 Ac

LAND USE CATEGORY: (from table 3.2.1, page 40, Manual)

AREA MDR IDA HDR MPD CIA

INFORMATION FOR CALCULATIONS:

D. AFFORESTATION THRESHOLD 0.15% x D = 0.45

E. FOREST CONSERVATION THRESHOLD 0.20% x D = 0.61

EXISTING FOREST COVER:

F. EXISTING FOREST COVER WITHIN NET TRACT AREA 0

G. AREA OF FOREST ABOVE CONSERVATION THRESHOLD 0

BREAK EVEN POINT:

H. FOREST RETENTION ABOVE THRESHOLD WITH NO MITIGATION 0

I. CLEARING PERMITTED WITHOUT MITIGATION 0

PROPOSED FOREST CLEARING:

J. TOTAL AREA OF FOREST TO BE CLEARED 0

K. TOTAL AREA OF FOREST TO BE RETAINED 0

PLANTING REQUIREMENTS:

L. REFORESTATION FOR CLEARING ABOVE CONSERVATION THRESHOLD 0

M. REFORESTATION FOR CLEARING BELOW CONSERVATION THRESHOLD 0

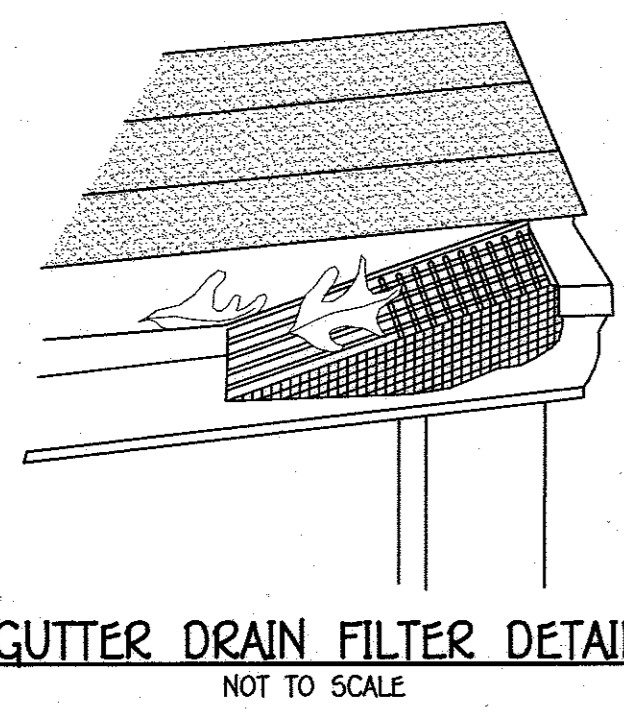
N. CREDIT FOR RETENTION ABOVE CONSERVATION THRESHOLD 0

O. TOTAL REFORESTATION REQUIRED 0

P. TOTAL AFFORESTATION REQUIRED 0.45

Q. TOTAL REFORESTATION AND AFFORESTATION REQUIRED 0.45

R. EXCESS FOREST CREDIT 0



GUTTER DRAIN FILTER DETAIL NOT TO SCALE

STORMWATER MANAGEMENT NOTES

1. STORMWATER MANAGEMENT IS PROVIDED IN ACCORDANCE WITH CHAPTER 5, "ENVIRONMENTAL SITE DESIGN" OF THE 2007 MARYLAND STORMWATER MANAGEMENT DESIGN MANUAL, EFFECTIVE MAY 4, 2010.
2. MAXIMUM CONTRIBUTING ROOF TOP AREA TO EACH DOWNSPOUT SHALL BE 1,000 SQ. FT. OR LESS.
3. DRYWELLS SHALL BE PROVIDED AT LOCATIONS WHERE THE LENGTH OF DISCONNECTION IS LESS THAN 75' AT 5% THE SIZE AND CONSTRUCTION OF THE DRYWELL SHALL BE IN ACCORDANCE WITH THE DETAIL SHOWN ON THIS SHEET.
4. FINAL GRADING IS SHOWN ON THIS SITE DEVELOPMENT PLAN.

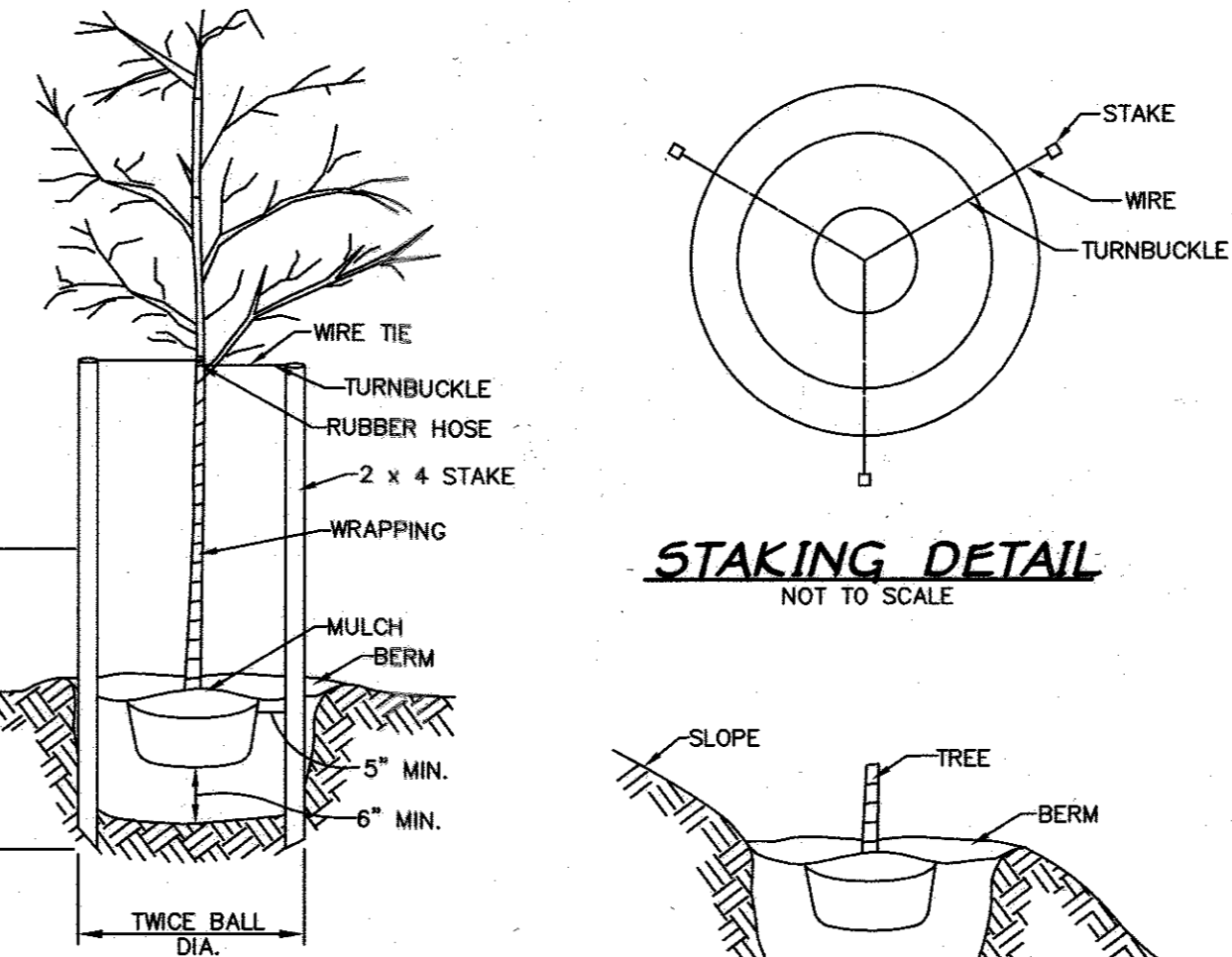
DRY WELL CHART

DRYWELL NO.	AREA OF ROOF PER DOWN SPOUT	VOLUME REQUIRED	VOLUME PROVIDED	AREA OF TREATMENT	L	D	W
1 (FT LT)	500 SQ. FT.	16 C.F.	280 C.F.	100%*	12'	12'	5'
1 (FT RT)	500 SQ. FT.	56 C.F.	72 C.F.	100%*	6'	6'	5'
1 (REAR)	1,000 SQ. FT.	32 C.F.	280 C.F.	100%*	12'	12'	5'
2 (FT RT)	1,000 SQ. FT.	111 C.F.	200 C.F.	100%*	10'	10'	5'
2 (REAR)	1,000 SQ. FT.	111 C.F.	280 C.F.	100%*	12'	12'	5'
3 (FT LT)	500 SQ. FT.	56 C.F.	160 C.F.	100%*	8'	10'	5'
3 (FT RT)	500 SQ. FT.	16 C.F.	200 C.F.	100%*	10'	10'	5'
3 (REAR)	1,000 SQ. FT.	32 C.F.	280 C.F.	100%*	12'	12'	5'
4 (FT LT)	1,000 SQ. FT.	111 C.F.	154 C.F.	100%*	7'	11'	5'
4 (REAR)	1,000 SQ. FT.	32 C.F.	280 C.F.	100%*	12'	12'	5'
5 (FT LT)	1,000 SQ. FT.	111 C.F.	154 C.F.	100%*	7'	11'	5'
5 (REAR)	1,000 SQ. FT.	32 C.F.	330 C.F.	100%*	13'	13'	5'
6 (FT RT)	1,000 SQ. FT.	111 C.F.	205 C.F.	100%*	16'	16'	2'

* AREA OF TREATMENT EXCEEDS THAT REQUIRED.

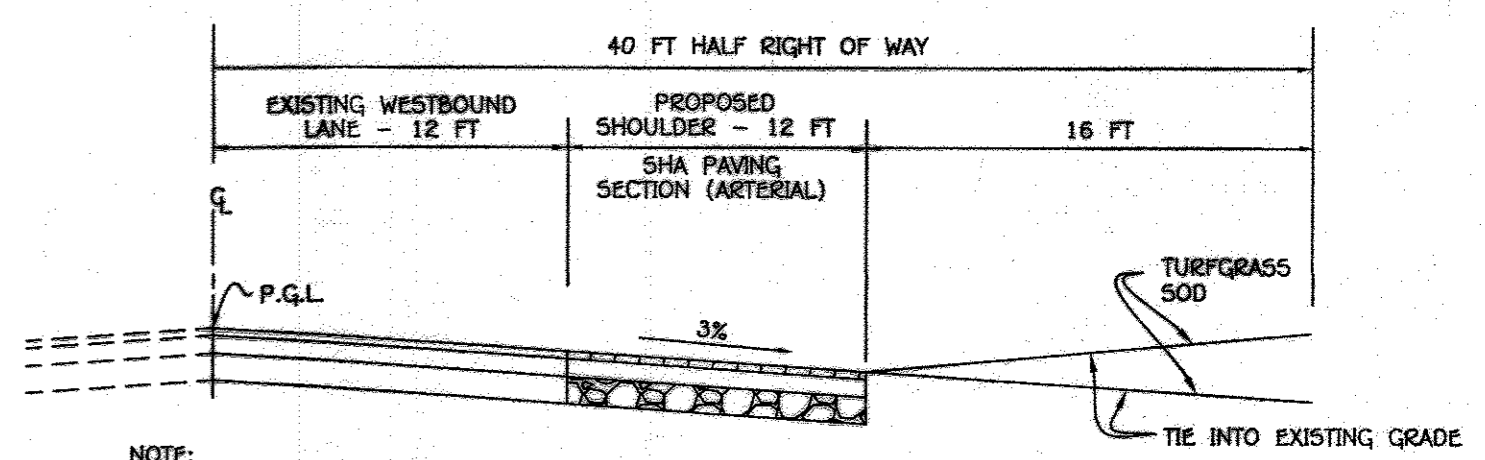
SPECIMEN TREE TABLE

KEY	SPECIES	SIZE (DBH)	CRZ (FT RADIUS)	COMMENTS
1	ULMUS RUBRA	30.5"	45.75	TO REMAIN
2	QUERCUS RUBRA	31.5"	47.25	TO REMAIN
3	POPULUS SP.	34"	51	TO REMAIN
4	ULMUS RUBRA	30"	45	TO REMAIN



STAKING DETAIL NOT TO SCALE

GRADING FOR PLANTING ON SLOPES NOT TO SCALE



TYPICAL ROADWAY SECTION NO SCALE

NOTES & DETAILS ELLICOTT OVERLOOK

LOTS 1 THRU 6 ZONED R-20
 TAX MAP NO.: 16 GRID NO.: 23 PARCEL NO.: 17 LOT NO.: 1
 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: NOT TO SCALE DATE: FEBRUARY, 2015
 SHEET 3 OF 4

I:\2014\14017\Engineering\Drawings\14017 Supplemental Plan REV.dwg, 1/20/2015 11:27:41 AM, 11
 I:\2014\14017\Engineering\Drawings\14017 Supplemental Plan.dwg, 2/6/2015 12:51:54 PM, 11

OWNER
 DAVID WOESSNER
 308 MAGOTHY ROAD
 SEVERNA PARK, MARYLAND 21146
 410-461-0837

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALDORNE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 (410) 481-3992

NO.	REVISION	DATE
1	ADD SHA DETAILS FOR SHA ACCESS PERMIT APPROVAL	1/16/15

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Ket S. ...
 Chief, Division of Land Development ** 3-16-15 Date

...
 Chief, Development Engineering Division 2-23-15 Date

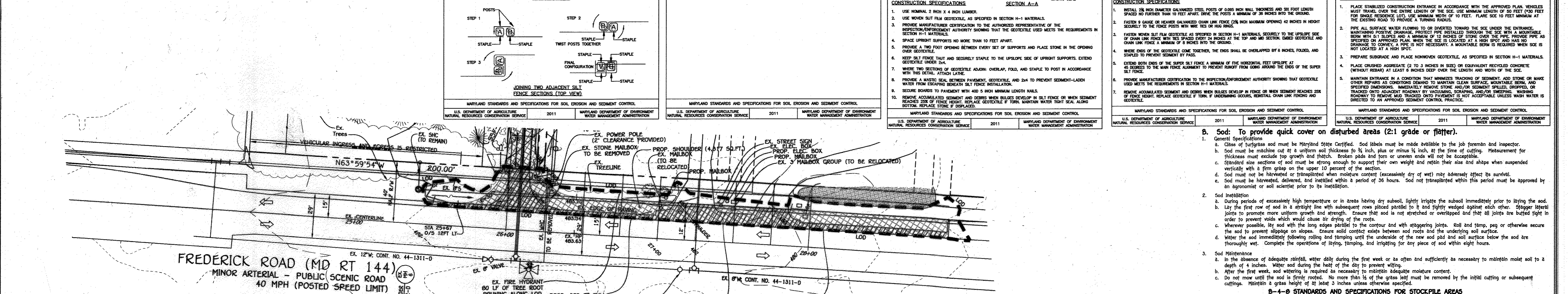
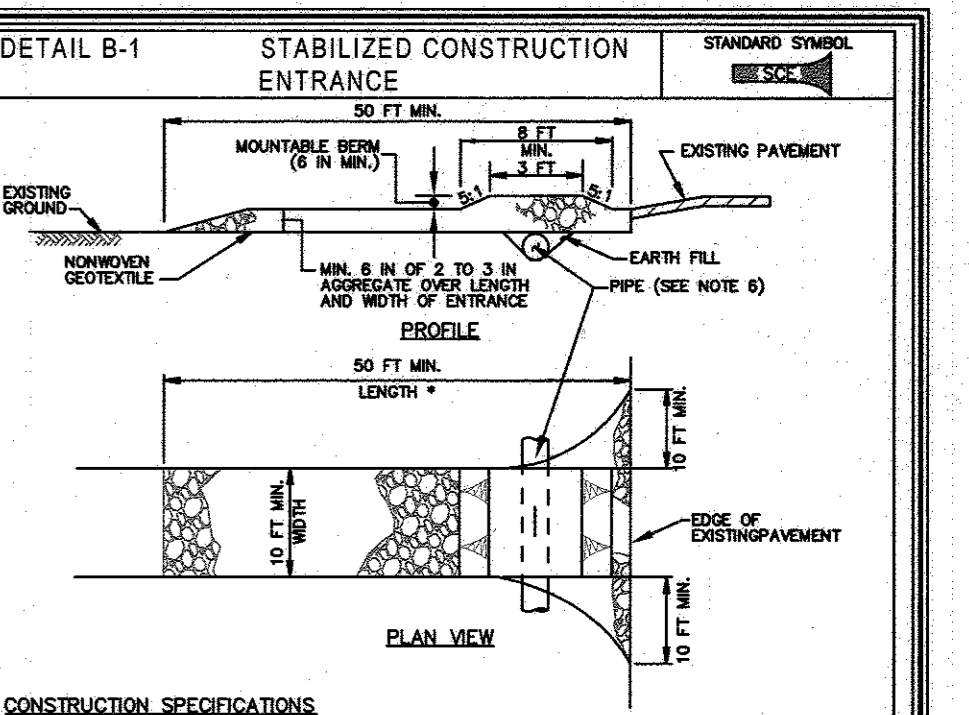
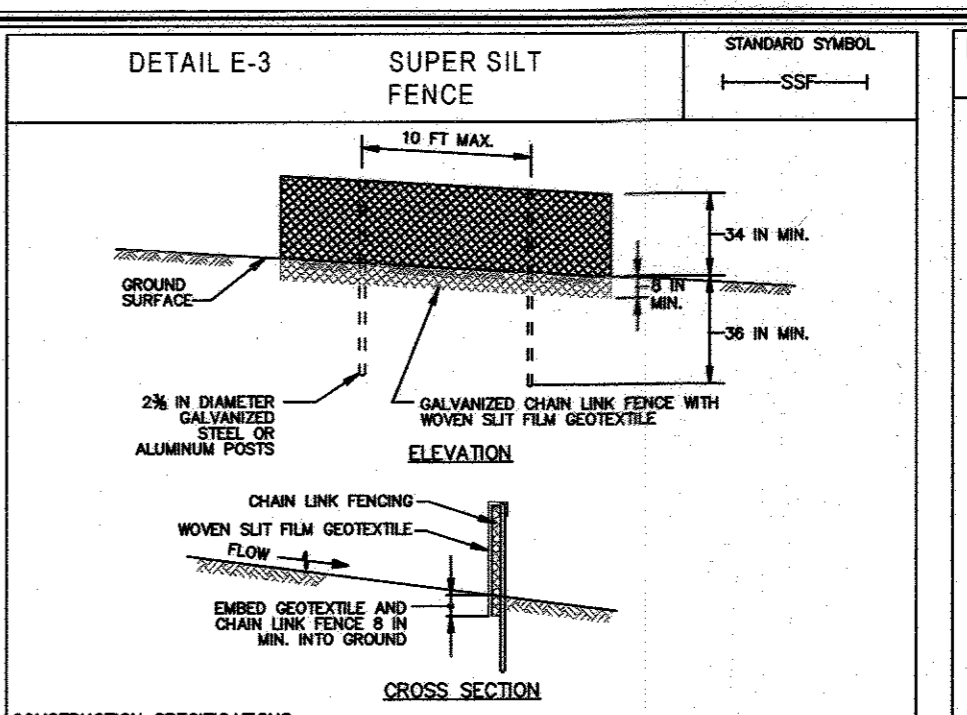
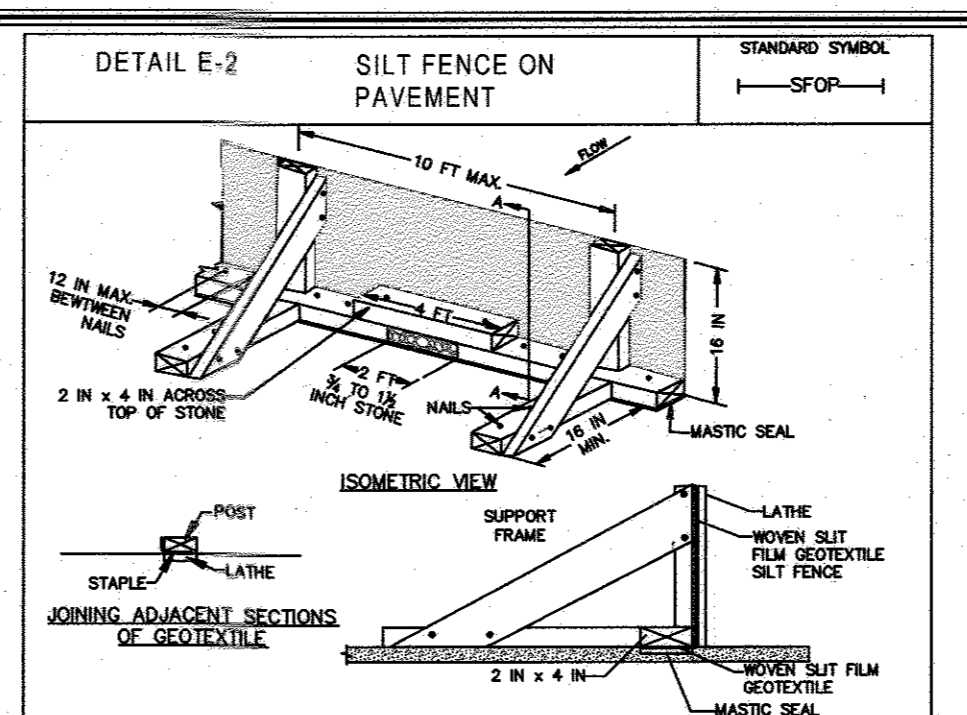
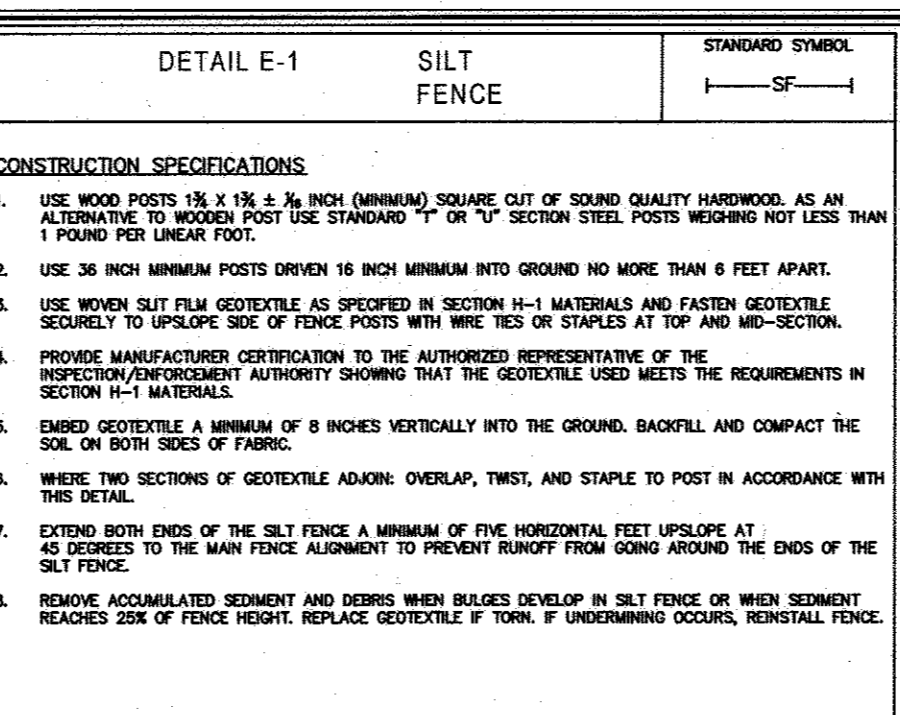
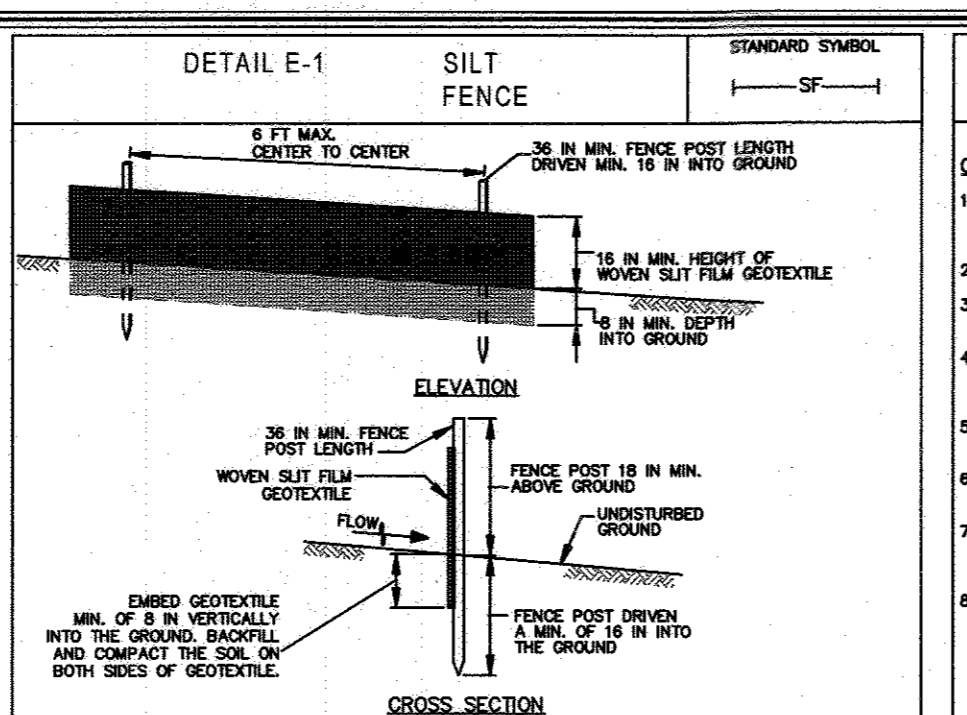
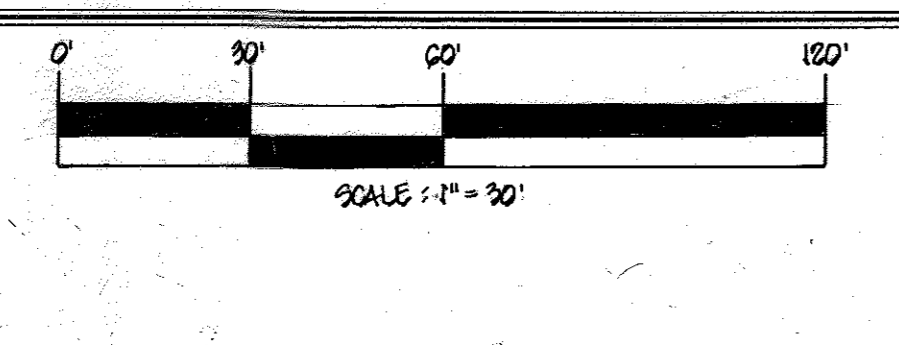
PROFESSIONAL CERTIFICATION

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. 38366, EXPIRATION DATE: 01/12/2016.

Stephanie ...
 Signature of Professional Engineer DATE



NO.	REVISION	DATE
1	ISSUE FOR PERMITS AND RECORDS	1/14/15



NOTE: EXISTING ASPHALT DRIVEWAY IS BEING UTILIZED AS A STABILIZED CONSTRUCTION ENTRANCE (SCE), SHOULD INSPECTOR REQUIRE AN AREA BE DESIGNATED ON-SITE, SEE DETAIL THIS SHEET SHALL BE UTILIZED.

SOIL PREPARATION, TOPSOILING AND SOIL AMENDMENTS (B-4-2)

- Soil Preparation**
 - Temporary Stabilization
 - Seeded preparation consists of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened, it must be rolled or dragged smooth but left in the roughened condition. Slopes 3:1 or flatter are to be tracked with ridges running parallel to the contour of the slope.
 - Apply fertilizer and lime as prescribed on the plans.
 - Incorporate lime and fertilizer into the top 3 to 5 inches of soil by disking or other suitable means.
 - Permanent Stabilization
 - A soil test is required for any earth disturbance of 5 acres or more. The minimum soil conditions required for permanent vegetative establishment are:
 - Soil pH between 6.0 and 7.0.
 - Soil soluble salts less than 500 parts per million (ppm).
 - Soil contains less than 40 percent clay but enough fine grained material (greater than 30 percent silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception: if loess/lime will be planted, then a sandy soil (less than 30 percent silt plus clay) would be acceptable.
 - Soil contains 1.5 percent minimum organic matter by weight.
 - Soil contains sufficient pore space to permit adequate root penetration.
 - Application of amendments or topsoil is required if on-site soils do not meet the above conditions.
 - Graded areas must be maintained in a true and even grade as specified on the approved plan, then scarified or otherwise loosened to a depth of 3 to 5 inches.
 - Apply soil amendments as specified on the approved plan or as indicated by the results of a soil test.
 - Mix soil amendments into the top 3 to 5 inches of soil by disking or other suitable means. Rotate lawn areas to smooth the surface, remove large objects like stumps and branches, and ready the area for seed application. Loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface where site conditions will not permit normal seed preparation. Track slopes 3:1 or flatter with tracked equipment leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. Leave the top 1 to 3 inches of soil loose and friable. Seeded loosening may be unnecessary on newly disturbed areas.
- Topsoiling**
 - Topsoil is applied over prepared subsoil prior to establishment of permanent vegetation. The purpose is to provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.
 - Topsoil salvaged from an existing site may be used provided it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-NRCS.
 - Topsoiling is limited to areas having 2:1 or flatter slopes where:
 - The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
 - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
 - The original soil to be vegetated contains material toxic to plant growth.
 - The soil is so acidic that treatment with limestone is not feasible.
 - Areas having slopes steeper than 2:1 require special consideration and design.
 - Topsoil Specifications: Soil to be used as topsoil must meet the following criteria:
 - Topsoil must be a loam, sandy loam, clay loam, silt loam, sandy clay loam, or loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Topsoil must not be a mixture of contrasting textured subsoils and must contain less than 5 percent by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2 inches in diameter.
 - Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nut sedge, poison ivy, hickory, or others as specified.
 - Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.

B-4-3 STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING

- Areas having slopes steeper than 2:1 require special consideration and design.
- Topsoil Specifications: Soil to be used as topsoil must meet the following criteria:
 - Topsoil must be a loam, sandy loam, clay loam, silt loam, sandy clay loam, or loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Topsoil must not be a mixture of contrasting textured subsoils and must contain less than 5 percent by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2 inches in diameter.
 - Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nut sedge, poison ivy, hickory, or others as specified.
 - Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.

B-4-4 STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREAS

- General Specifications
 - Class of turfgrass sod must be Maryland State Certified. Sod labels must be made available to the job foreman and inspector.
 - Sod must be machine cut at a uniform soil thickness to 3/4 inch, plus or minus 1/8 inch, at the time of cutting. Measurement for thickness must exclude top growth and thatch. Broken pads and torn or uneven ends will not be acceptable.
 - Standard size sections of sod must be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grasp on the upper 10 percent of the section.
 - Sod must be harvested or transplanted when moisture content (excessively dry or wet) may adversely affect its survival.
 - Sod must be harvested, delivered, and installed within a period of 36 hours. Sod not transplanted within this period must be approved by an agronomist or soil scientist prior to its installation.
- Sod Installation
 - During periods of excessively high temperature or in areas having dry subsoil, lightly irrigate the subsoil immediately prior to laying the sod.
 - Lay the sod in a staggered pattern and in a straight line and tightly wedged against each other. Stagger joints vertically to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would cause air drying of the roots.
 - Wherever possible, lay sod with the long edges parallel to the contour and with staggering joints. Roll and stamp, peg or otherwise secure the soil to prevent voids between sods and between sods and the underlying soil surface.
 - Water the sod immediately following rolling and stamping until the underside of the new sod pad and soil surface below are thoroughly wet. Complete the operations of laying, stamping, and irrigating for any piece of sod within eight hours.
- Sod Maintenance
 - In the absence of adequate rainfall, water daily during the first week or as often and sufficiently as necessary to maintain moist soil to a depth of 2 inches.
 - After the first week, sod watering is required as necessary to maintain adequate moisture content.
 - Do not mow until the sod is firmly rooted. No more than 1/3 of the grass leaf must be removed by the initial cutting or subsequent cuttings. Maintain a minimum of 1/2 inch of grass.

B-4-5 PERMANENT SEEDING NOTES (B-4-5)

- General Use**
 - Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardness Zone (from Figure B.3) and based on the site condition or purpose found on Table B.2. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The Summary is to be placed on the plan.
 - Additional planting specifications for exceptional sites such as shorelines, stream banks, or dunes or for special purposes such as wildlife or aesthetic treatment may be found in USDA-NRCS Technical Field Office Guide, Section 242 - Critical Area Planting.
- Mulching Materials (in order of preference)**
 - Straw consisting of thoroughly threshed wheat, rye, oat, or barley and reasonably bright in color. Straw is to be free of noxious weeds as specified in the Maryland Seed Law and not musty, moldy, decayed, or excessively dirty. Note: Use only sterile straw mulch in areas where one species of grass is desired.
 - Wood Cellulose Fiber Mulch (WCFM) consisting of specially prepared wood cellulose processed into a uniform fibrous physical state.
 - WCFM is to be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread dry.
 - WCFM material must contain no germination or growth inhibiting factors.
 - WCFM materials are to be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material must form a slurry that will adhere to the soil surface, allowing moisture absorption and percolation properties and must cover and hold grass seeds in contact with the soil without inhibiting the growth of the grass seedlings.
 - WCFM material must not contain elements or compounds at concentration levels that will be phytotoxic.
 - WCFM must conform to the following physical requirements: fiber length of approximately 10 millimeters, diameter approximately 1 millimeter, pH range of 4.0 to 8.5, an cation of 1.5 percent maximum and water holding capacity of 80 percent minimum.
- Application**
 - Apply mulch to all seeded areas immediately after seeding.
 - When straw mulch is used, spread it over all seeded areas at the rate of 2 tons per acre to a uniform loose depth of 1 to 2 inches. Apply mulch to achieve a uniform distribution and depth so that the soil surface is not exposed. When using a mulch anchoring tool, increase the application rate to 2.5 tons per acre.
 - Wood cellulose fiber used as mulch must be applied to a net dry weight of 1500 pounds per acre. Mix the wood cellulose fiber with water to attain a mixture with a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
- Anchoring**
 - Perform mulch anchoring immediately following application of mulch to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon the size of the area and erosion hazard:
 - A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of 2 inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping land, this practice should follow the contour.
 - Wood cellulose fiber may be used for anchoring straw. Apply the fiber binder at a net dry weight of 750 pounds per acre. Mix the wood cellulose fiber with water at a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
 - Synthetic binders such as Acrylic DLR (Ago-Tack), DCA-70, Petrosol, Terra Tex II, Terra Tack AR or other approved equal may be used. Follow application rates as specified by the manufacturer. Application of liquid binders is heavier at the edges where wind catches mulch, such as in valleys and on crests of banks. Use of asphalt binders is strictly prohibited in parks.
 - Lightweight plastic netting may be stapled over the mulch according to manufacturer recommendations. Netting is usually available in rolls 4-15 feet wide and 300 to 3,000 feet long.

TEMPORARY SEEDING NOTES (B-4-4)

- Use fast growing vegetation that provides cover on disturbed soils.
- Exposed soils where ground cover is needed for a period of 6 months or less. For longer duration of time, permanent stabilization practices are required.

TEMPORARY SEEDING SUMMARY

Species	Application Rate (lb/acre)	Seeding Dates	Seeding Depth	Fertilizer Rate (10-20-20)		Lime Rate
				N	P ₂ O ₅	
BARLEY	96	3/1 - 5/15	1"	435 lb/ac	10 lb/ac	2 tons/ac
OATS	72	8/15 - 10/15	1"	100 lb/ac	100 lb/ac	1000 lb/ac
RYE	112		1"			

OWNER
DAVID WOESENER
308 HAGGITY ROAD
SEVERNA PARK, MARYLAND 21146
(410) 461-0837

BUILDER/DEVELOPER'S CERTIFICATE
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT I WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

David Woesener 2-9-2015
SIGNATURE OF DEVELOPER DATE

ENGINEER'S CERTIFICATE
I/WE CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT I WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Stephanie State 2/9/15
SIGNATURE OF ENGINEER DATE

TEMPORARY SEEDING NOTES (B-4-4)
To stabilize disturbed soils with vegetation for up to 6 months.
Purpose: To use fast growing vegetation that provides cover on disturbed soils.

FISHER, COLLINS & CARTEE, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK • 16722 BALTIMORE NATIONAL PkE
ELLIOTT CITY, MARYLAND 21042
(410) 461-2955

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

John F. Reardon 3/10/15
DATE

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. 36366, EXPIRATION DATE: 01/12/2016.

Stephanie State 3-11-15
DATE

Stephanie State 2-23-15
DATE

TEMPORARY SEEDING NOTES (B-4-4)
To stabilize disturbed soils with vegetation for up to 6 months.
Purpose: To use fast growing vegetation that provides cover on disturbed soils.

PERMANENT SEEDING SUMMARY

No.	Species	Application Rate (lb/acre)	Seeding Dates	Seeding Depth	Fertilizer Rate (10-20-20)			Lime Rate
					N	P ₂ O ₅	K ₂ O	
1	TALL FESCUE	100	Mar. 1-May 15 Aug. 15-Oct. 15	1 1/4-1 1/2 in.	45 lbs. (1.0 lb/1000 sq ft)	90 lb/ac (2.0 lb/1000 sq ft)	90 lb/ac (2.0 lb/1000 sq ft)	2 tons/ac (900 lb/1000 sq ft)

PERMANENT SEEDING NOTES (B-4-5)
A. Seed Mixtures
1. General Use
a. Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardness Zone (from Figure B.3) and based on the site condition or purpose found on Table B.2. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The Summary is to be placed on the plan.
b. Additional planting specifications for exceptional sites such as shorelines, stream banks, or dunes or for special purposes such as wildlife or aesthetic treatment may be found in USDA-NRCS Technical Field Office Guide, Section 242 - Critical Area Planting.

HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
STANDARD SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (4-13-1999).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT HARBOR STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND EROSION PREVENTION.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 3 CALIBRATED AND VERIFIED STOCKPILE AREAS, b) PERMANENT STOCKPILING, c) TEMPORARY STABILIZATION (SEE B-4-1) AND MULCHING (SEE B-4-3). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SEED MIXTURES:
TOTAL AREA OF SITE AREA DISTURBED: 3.05 ACRES
AREA TO BE SEEDING OR PAVED: 0.23 ACRES
AREA TO BE VEGETATIVELY STABILIZED: 100 CUBIC YARDS
TOTAL FILL: 100 CUBIC YARDS
OFFICE: MASTERS/BOBBY AREA LOCATION
- ANY SEDIMENT CONTROL PRACTICE THAT IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERMANENT SEDIMENT CONTROL, BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING, OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORKDAY, WHICHEVER IS SHORTER.
- ANY CHANGES OR REVISIONS TO THE SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE PLANNING AUTHORITY PRIOR TO PROCEEDING WITH CONSTRUCTION.
- ALL SITES WITH DISTURBED AREAS THAT ARE GRADING ACTIVITIES BEGIN ON AN GRADING UNIT (MAXIMUM AVERAGE OF 20 ACRE PER GRADING UNIT) AT THE WORK MAY PROCEED TO A SUBSEQUENT GRADING UNIT WHEN AT LEAST 90 PERCENT OF THE DISTURBED AREA IN THE PREVIOUS GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY THE DISTRICT SEDIMENT CONTROL DIVISION. UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE APPROVAL AUTHORITY, NO MORE THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED AT A GIVEN TIME.

SEQUENCE OF CONSTRUCTION

- OBTAIN A GRADING PERMIT AND HOLD PRE-CONSTRUCTION MEETING WITH COUNTY INSPECTOR. (2 WEEKS)
- NOTIFY "NEIGH" LIST AT LEAST 48 HOURS BEFORE BEGINNING ANY WORK AT 1-800-257-7777. NOTIFY THE HOWARD COUNTY OFFICE OF CONSTRUCTION/INSPECTION AT 410-313-1330 AT LEAST 24 HOURS BEFORE STARTING WORK.
- INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE ON PARKWAY, SILT FENCE AND SUPER-SILT FENCE. (2 DAYS)
- REMOVE NECESSARY TREES AND TEMPORARILY SEED DISTURBED AREAS AS NECESSARY. (1 DAY)
- CONSTRUCT SEWER AND WATER MAINS AND WHAS AND SHAS. (21 DAYS)
- CONSTRUCT CURB & GUTTER, ROAD WIDENING, AND SIDEWALKS, INCLUDING HILL AND OVERLAY OF EXISTING PAVEMENT AS SHOWN ON THE PLANS. (100 DAYS)
- INSTALL PERMANENT SEEDING. (3 DAYS)
- ALL FINAL GRADING AND STABILIZATION SHOULD BE COMPLETED BEFORE ANY REMOVAL OF CONTROLS, WHEN ALL CONTRIBUTING AREAS TO THE SEDIMENT CONTROL DEVICES HAVE BEEN STABILIZED AND WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, THE SEDIMENT CONTROL DEVICES MAY BE REMOVED. (5 DAYS)

NOTE: THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE EACH RAINFALL AND ON A DAILY BASIS.

SEDIMENT & EROSION CONTROL PLAN, NOTES & DETAILS
ELLIGOTT OVERLOOK
LOTS 1 THRU 6
ZONED R-20
TAX MAP NO: 16 GRID NO: 23 PARCEL NO: 17 LOT NO: 1
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1"=30' DATE: FEBRUARY, 2015
SHEET 4 OF 4
F-15-025