

# PRELIMINARY PLAN ELKRISE HILL LOTS 1-7, OPEN SPACE LOT 8 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

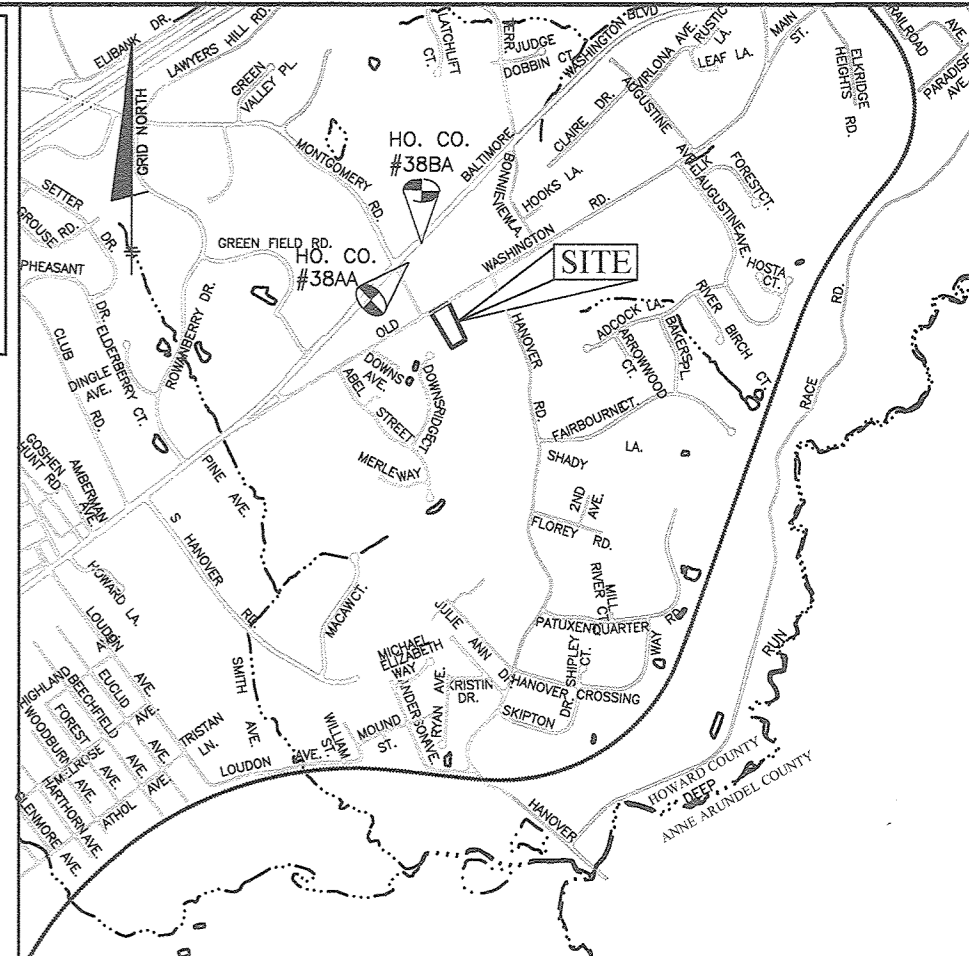
SHEET INDEX	
NO.	DESCRIPTION
1	COVER SHEET
2	EXISTING CONDITIONS PLAN
3	LAYOUT PLAN
4	GRADING PLAN
5-7	STORMWATER MANAGEMENT PLAN
8	STORM DRAINAGE AREA MAP
9	SEDIMENT AND EROSION CONTROL PLAN
10	SEDIMENT AND EROSION CONTROL NOTES AND DETAILS
11	LANDSCAPE PLAN & FOREST CONSERVATION WORKSHEET

ESD - SWM PRACTICES			
LOT NUMBER	ADDRESS	MICRO BIO-RETENTION (M-6) QUANTITY	SURFACE SAND FILTER (F-1) QUANTITY
1	OLD WASHINGTON ROAD ELKRISE MD. 21075	1	0
2	OLD WASHINGTON ROAD ELKRISE MD. 21075	1	0
3	OLD WASHINGTON ROAD ELKRISE MD. 21075	1	0
4	OLD WASHINGTON ROAD ELKRISE MD. 21075	1	0
5	OLD WASHINGTON ROAD ELKRISE MD. 21075	1	0
6	OLD WASHINGTON ROAD ELKRISE MD. 21075	1	0
7	OLD WASHINGTON ROAD ELKRISE MD. 21075	1	0
O.S. 8	OLD WASHINGTON ROAD ELKRISE MD. 21075	0	1

BOUNDARY COORDINATES		
POINT #	NORTHING	EASTING
1	560593.7152	1389969.9348
2	560690.6358	1390132.8697
3	560227.5017	1390408.6009
4	560130.5810	1390245.6660

BENCHMARKS NAD83  
HO. CO. #38AA  
STAMPED DISK SET ON TOP OF CONCRETE BASE  
N 561156.817 E 1389726.33  
ELEVATION: 220.094

HO. CO. #38BA  
STAMPED DISK SET ON TOP OF CONCRETE BASE  
N 562531.31 E 1390967.86  
ELEVATION: 166.184



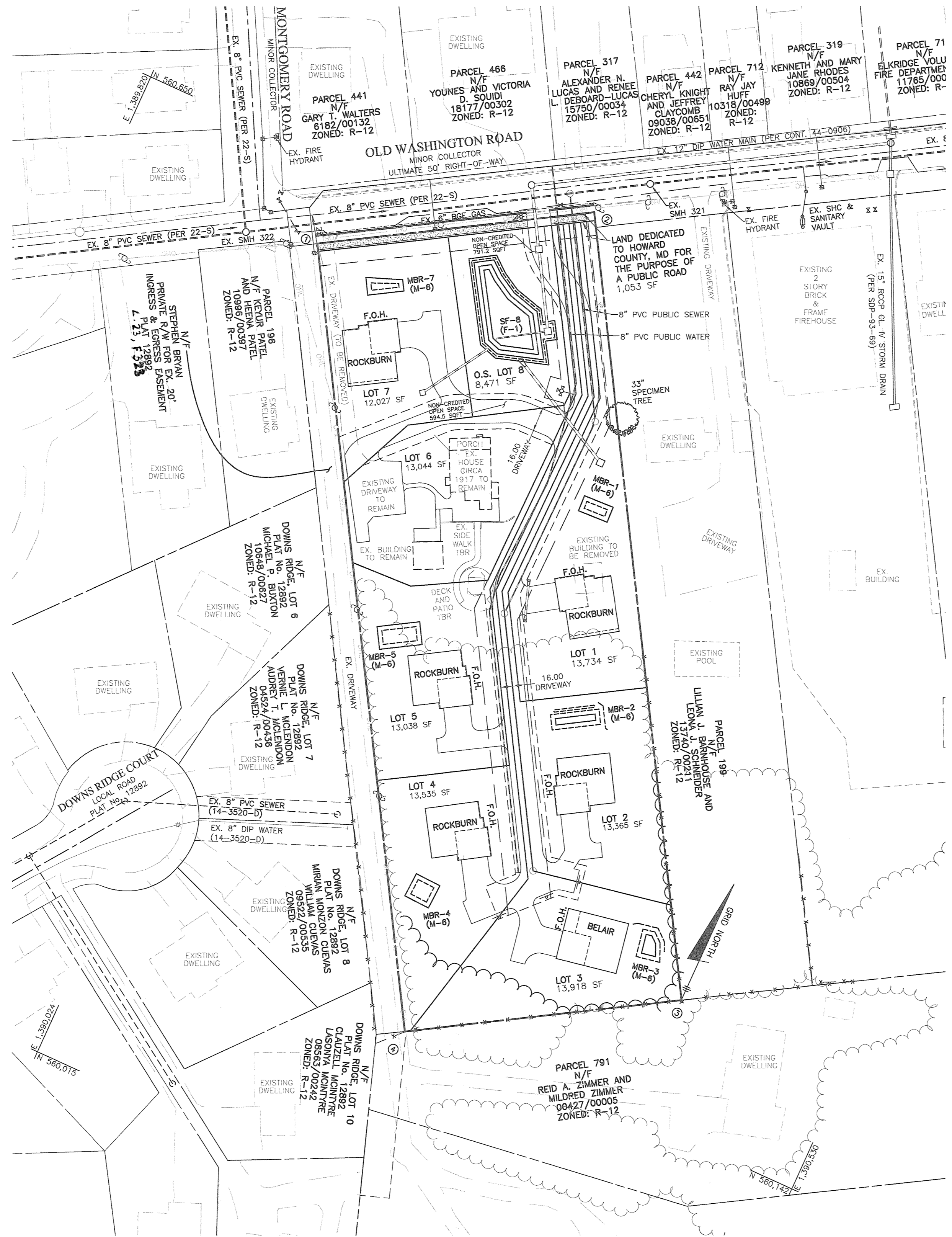
MINIMUM LOT SIZE CHART			
LOT NO.	GROSS AREA	PIPESTEM AREA	MIN. LOT SIZE
1	13,734 SF	1,202 SF	12,532 SF
2	13,365 SF	1,365 SF	12,000 SF
3	13,918 SF	1,826 SF	12,092 SF
4	13,535 SF	1,534 SF	12,001 SF
5	13,038 SF	1,028 SF	12,010 SF
6	13,044 SF	500 SF	12,544 SF

### GENERAL NOTES

- THIS PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- SUBJECT PROPERTY ZONED R-12 PER THE 10-06-2013 COMPREHENSIVE ZONING PLAN.
- DEED REFERENCE: 17498/00082.
- THE EXISTING TOPOGRAPHY ON-SITE IS TAKEN FROM FIELD SURVEY WITH 2 FOOT CONTOUR INTERVALS PREPARED BY BENCHMARK ENGINEERING, INC. DATED APRIL, 2017. SURROUNDING TOPOGRAPHY IS TAKEN FROM HOWARD COUNTY GIS.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENTS NO. 38AA AND 38BA WERE USED FOR THIS PROJECT.
- PROJECT BOUNDARY IS BASED ON A FIELD RUN BOUNDARY SURVEY PERFORMED BY BENCHMARK ENGINEERING, INC. DATED APRIL, 2017.
- THIS LOT WILL UTILIZE A CUSTOM SEDIMENT AND EROSION CONTROL SINCE THE LIMIT OF DISTURBANCE IS FOR MORE THAN ONE LOT.
- PUBLIC WATER MAIN WILL CONNECT TO CONTRACT 44-0906. DRAINAGE IS MIDDLE PATENT/UT.
- PUBLIC SEWER MAIN WILL CONNECT TO CONTRACT 22-S. DRAINAGE IS MIDDLE PATENT/UT.
- THERE IS ONE EXISTING DWELLING ON SITE. IT IS TO BE RETAINED. ONE ACCESSORY STRUCTURE IS TO BE REMOVED AND ONE IS TO BE RETAINED.
- EXISTING UTILITIES ARE SHOWN ON FIELD SURVEY LOCATIONS. CONTRACT DRAWINGS AND HOWARD COUNTY GIS.
- STORMWATER MANAGEMENT SYSTEM SHOWN ON SHEET 2 IS AN APPROXIMATION OF THE SIZE, SHAPE AND LOCATION. IT IS UNDERSTOOD THAT THIS SYSTEM HAS NOT BEEN DESIGNED AND THE ACTUAL DESIGN MAY CHANGE, ALTERING THE NUMBER OF UNITS ALLOCATED FOR THIS DEVELOPMENT.
- A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
- TRAFFIC STUDY WAS PREPARED BY MARS GROUP ON MAY 3, 2017 AND APPROVED UNDER THE REVIEW OF S-18-004.
- FREE FLOW SPEED STUDY WAS PREPARED BY MARS GROUP ON MAY 10, 2017 AND THE SIGHT DISTANCE ANALYSIS WAS APPROVED UNDER S-18-004.
- THE FOREST STAND DELINEATION WAS PERFORMED BY ECO-SCIENCE PROFESSIONALS, INC. THERE IS ONE SPECIMEN TREE LOCATED JUST OFF SITE AND THE TREE IS TO REMAIN. THE FSD WAS APPROVED UNDER S-18-004.
- THERE ARE NO WETLANDS, STREAMS, THEIR REQUIRED BUFFERS, 100-YEAR FLOODPLAIN OR STEEP SLOPES LOCATED ON THE SITE.
- TO THE BEST OF OUR KNOWLEDGE AND BELIEF THERE ARE NO CEMETERIES ON-SITE. THE EXISTING DWELLING ON-SITE IS HISTORIC AND IS LISTED ON THE HISTORIC SITES INVENTORY AS HO-803 AS PART OF THE OLD WASHINGTON ROAD SURVEY DISTRICT.
- ECP-18-026 WAS APPROVED BY DEED PER LETTER DATED APRIL 23, 2018. THE ORIGINAL MYLARS WERE SIGNED ON 10/17/18.
- THE REQUIRED PRESUBMISSION COMMUNITY MEETING WAS HELD ON MARCH 12, 2018 AT 6:00PM AT MELVILLE CHAPEL UMC.
- THIS PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT AND PUBLIC WATER AND SEWER SHALL BE UTILIZED WITHIN THIS DEVELOPMENT.
- A PRIVATE RANGE OF ADDRESS SIGN ASSEMBLY SHALL BE FABRICATED AND INSTALLED BY HOWARD COUNTY BUREAU OF HIGHWAYS AT THE DEVELOPERS/OWNERS EXPENSE. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT 410-313-2430 FOR DETAILS AND COST ESTIMATES.
- THE FOREST CONSERVATION REQUIREMENTS FOR THIS SUBDIVISION SHALL BE ADDRESSED PRIOR TO RECORDATION OF THE FINAL SUBDIVISION PLAT AND SHALL BE PROVIDED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.1200 OF THE SUBDIVISION REGULATIONS AND FOREST CONSERVATION MANUAL. THE FOREST CONSERVATION OBLIGATION FOR THIS SUBDIVISION SHALL BE SATISFIED BY THE USE OF AN OFFSITE MITIGATION BANK OR PAYMENT OF A FEE-IN-LIEU.
- THIS DEVELOPMENT IS DESIGNED TO BE IN ACCORDANCE WITH SECTION 16.127 - RESIDENTIAL INFILL DEVELOPMENT - OF THE 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.
- THIS PROJECT IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS PER COUNCIL BILL 45-2003 AND THE ZONING REGULATIONS, AS AMENDED BY COUNCIL BILL 75-2003. 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, WAIVER PETITION APPLICATION, OR BUILDING/GRADING PERMIT.
- THE PERIMETER LANDSCAPING REQUIREMENTS SHALL BE ADDRESSED PRIOR TO RECORDATION OF THE FINAL SUBDIVISION PLAT AND SHALL BE PROVIDED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- THE PROJECT IS SUBJECT TO SECTION 13.402 OF THE COUNTY CODE FOR MODERATE INCOME HOUSING UNITS (MIHU).
- APPROVAL OF A DESIGN MANUAL WAIVER WILL BE NECESSARY FOR HOWARD COUNTY DESIGN MANUAL ROADS AND BRIDGES, VOLUME III, SECTION 2.6(A), 2.6(B) AND APPENDIX "A" TO ALLOW MORE THAN 6 LOTS ACCESSING A PUBLIC ROAD VIA A PRIVATE DRIVEWAY. THE JUSTIFICATION IS THAT THE INTERSECTION WITH MONTGOMERY ROAD, THE LOCATION OF THE HIGH POINT OF OLD WASHINGTON ROAD AND TONING REGULATIONS SECTION 16.127(c)(4) LIMIT THE BEST SINGLE ACCESS POINT TO THE NORTHERN PART OF THE PROPERTY. ADEQUATE INTERSECTION AND STOPPING SIGHT DISTANCE IS AVAILABLE AT THE LOCATION SHOWN.
- THERE ARE ERODIBLE SOILS WITHIN THE PROPERTY LIMITS.
- OPEN SPACE WILL BE PROVIDED BY LOT 8 AND A PAYMENT OF A FEE-IN-LIEU OF OPEN SPACE OF \$1500 PER LOT FOR SIX LOTS PER RECREATION AND PARKS REVIEW. SEE SITE ANALYSIS DATA CHART.
- THIS PLAN WENT BEFORE THE HISTORIC PRESERVATION COMMISSION FOR ADVISORY COMMENTS ON FEBRUARY 1, 2018 IN CASE HPC-18-06. THE COMMENTS OFFERED INCLUDING A REQUEST TO MOVE THE PROPOSED DRIVEWAY FROM THE EAST SIDE OF THE HISTORIC STRUCTURE. THE DRIVEWAY HAS BEEN RECONFIGURED, THE HOUSE AND BUILDING ARE TO REMAIN. HISTORIC SITE INVENTORY NUMBER HO-803.
- THE R1-1 ("STOP") SIGN AND THE STREET NAME SIGN (SNS) ASSEMBLY FOR THIS DEVELOPMENT MUST BE INSTALLED BEFORE THE BASE PAVING IS COMPLETED.
- THE TRAFFIC CONTROL DEVICE LOCATIONS SHOWN ON THE BASE 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.
- ALL TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUMUTD).
- 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.
- APPROVAL OF THE SKETCH PLAN S-18-004 DOES NOT CONSTITUTE APPROVAL OF THE FINAL LAYOUT OR APPROVAL OF NEEDED DESIGN MANUAL WAIVERS OR ALTERNATIVE COMPLIANCE APPLICATIONS. MORE DETAILED COMMENTS MAY BE MADE ON FUTURE SUBMISSIONS THAT MAY ALTER THE FINAL LOT LAYOUT, INCLUDING BUT NOT LIMITED TO SITE ACCESS, FUTURE PLAN APPROVALS WILL BE SUBJECT TO APPROVAL OF A DESIGN MANUAL WAIVER BY DEED TO ALLOW 7 LOTS TO USE A SHARED DRIVEWAY, AND APPROVAL OF AN ALTERNATIVE COMPLIANCE APPLICATION FROM DLD TO SECTION 16.120(c)(2) TO ALLOW ACCESS VIA AN EASEMENT WITHOUT A PIPESTEM PROVIDING ROAD FRONTAGE TO LOT 7.
- UTILITIES TO THE EXISTING HOUSE MAY HAVE TO BE RELOCATED IN ORDER TO PROVIDE SERVICE TO THE HOUSE WHILE NOT BEING LOCATED ON DIFFERENT LOT OR WITHIN OPEN SPACE.
- A DESIGN MANUAL WAIVER TO WAIVE SECTION 2.6.A, 2.6.B AND APPENDIX "A" FROM THE DESIGN MANUAL VOLUME III TO ALLOW A TOTAL OF 7 LOTS TO ACCESS OLD WASHINGTON ROAD VIA A 16' PRIVATE USE-IN-COMMON DRIVEWAY HAS BEEN APPROVED SUBJECT TO SUFFICIENT SIGHT DISTANCE PROVIDED AT OLD WASHINGTON ROAD ACCESS. THE APPROVAL DATE BY HOWARD COUNTY DPW IS MARCH 06, 2019.
- ALTERNATIVE COMPLIANCE, WP-19-079, TO WAIVE SECTION 16.920(c)(2), TO ALLOW LOT 7 ACCESS TO THE PUBLIC ROAD VIA EASEMENTS THROUGH LOT 6 AND OPEN SPACE LOT 8 INSTEAD OF REQUIRING AN ADDITIONAL ACCESS POINT USING LOT 7'S ROAD FRONTAGE, WAS CONDITIONALLY APPROVED BY THE DIRECTOR OF PLANNING AND ZONING ON JUNE 7, 2019. THE CONDITIONS OF APPROVAL ARE:
  - INDICATE THIS ALTERNATIVE COMPLIANCE FILE NUMBER (WP-19-079), SECTIONS, REQUEST, ACTION, DATE AND CONDITIONS OF APPROVAL ON ALL SUBMITTED PLANS, INCLUDING P-19-002.
  - COMPLIANCE WITH ANY CONDITIONS AND COMMENTS FROM DPW REGARDING APPROVAL OF THE DESIGN MANUAL WAIVER TO ALLOW 7 USERS ON A PRIVATE USE-IN-COMMON DRIVEWAY.

### LEGEND

- PROPERTY BOUNDARY
- ADJACENT PROPERTY OWNER
- EXISTING EASEMENT
- PROPOSED EASEMENT
- PROPOSED LOT LINE
- SOILS CLASSIFICATION
- SOILS DELINEATION
- EXISTING WOODS LINE
- PROPOSED TREE LINE
- EXISTING WATER MAIN
- EXISTING SEWER MAIN
- EXISTING GAS LINE
- EXISTING STORM DRAIN
- PROPOSED STORM DRAIN
- PROPOSED HOUSE



### SITE DATA TABULATION

- GENERAL SITE DATA
  - PRESENT ZONING: R-12
  - LOCATION: TAX MAP 38 - GRID 8 - PARCEL 198
  - APPLICABLE DPZ FILE REFERENCES: ECP-18-026, S-18-004, WP-19-079, HPC-18-06
  - DEED REFERENCE: S17498 / F.00062
  - PROPOSED USE OF SITE: 6 NEW SINGLE FAMILY DETACHED RESIDENCES, RETENTION OF 1 EXISTING SINGLE FAMILY DETACHED RESIDENCE.
  - PROPOSED WATER AND SEWER: PUBLIC WATER AND PUBLIC SEWER.
- AREA TABULATION
  - TOTAL AREA OF SITE: 2.35 Ac.±
  - AREA OF 100 YEAR FLOODPLAIN (APPROX.): 0.00 Ac.±
  - AREA OF STEEP SLOPES (25% OR GREATER): 0.09 Ac.±
  - NET AREA OF SITE: 2.35 Ac.±
  - AREA OF THIS PLAN SUBMISSION: 2.35 Ac.±
  - LIMIT OF DISTURBANCE (APPROX.): 2.21 Ac.±
  - AREA OF PROPOSED BULDBLE LOTS: 2.13 Ac.±
  - AREA OF OPEN SPACE LOTS: 0.19 Ac.±
  - AREA OF PROPOSED PUBLIC ROAD: 0.00 Ac.±
  - AREA OF PROPOSED PUBLIC R/W DEDICATION: 0.02 Ac.±
- DENSITY TABULATION
  - NET AREA OF SITE: 2.35 Ac.±
  - TOTAL NUMBER OF LOTS ALLOWED PER ZONING: 1 UNIT PER 12,000 GROSS SQUARE FEET ALLOWED BY RIGHT.....8
- UNIT/LOT TABULATION
  - TOTAL NUMBER OF BULDBLE LOTS PROPOSED ON THIS SUBMISSION: 7
  - TOTAL NUMBER OF NON-BULDBLE OPEN SPACE LOTS PROPOSED ON THIS SUBMISSION: 1
- OPEN SPACE
  - REQUIRED OPEN SPACE (FULL OBLIGATION): 8,189 sf
  - OPEN SPACE PROVIDED: 8,471 sf
  - NON-CREDIT OPEN SPACE: 1,386 sf
  - CREDITED OPEN SPACE: 7,085 sf
  - PERCENT OF OPEN SPACE PROVIDED: 87%
  - FEE IN LIEU OF OPEN SPACE REQUIREMENT (SIX LOTS): \$9,000
  - FEE-IN-LIEU APPROVED UNDER S-18-004

MODERATE INCOME HOUSING UNITS (MIHU) ALLOCATION EXEMPTIONS TRACKING	
Total Number of Lots/Units Proposed	7
Number of MIHU Required	0.7
Number of MIHU Provided Onsite (exempt from APFO allocations)	0
Number of APFO Allocations Required (remaining lots/units)	6
MIHU Fee-in-Lieu (indicate lot/unit numbers)	1-5, 7

NO.	DATE	REVISION

**BENCHMARK ENGINEERING, INC.**  
ENGINEERS & LAND SURVEYORS & PLANNERS  
8480 BALTIMORE NATIONAL PIKE & SUITE 315 & ELLICOTT CITY, MARYLAND 21043  
(P) 410-465-8105 (F) 410-465-8644  
WWW.BE-ENGINEERING.COM

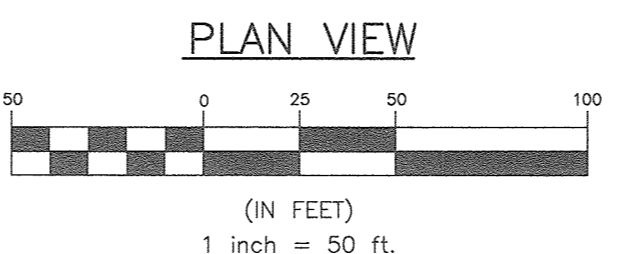
Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 45577, Expiration Date: 06-08-2020.

*S. M. Coy*  
8/12/19

TENTATIVELY APPROVED  
DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY  
*William J. Kelly*  
PLANNING DIRECTOR  
8-19-19  
DATE

SYMBOL	HYDRIC	HYDROLOGIC GROUP	ALTERNATE GROUP	NAME	K-VALUE
RSC	C			RUSSETT FINE SANDY LOAM 8 TO 10 PERCENT SLOPES	0.43
RSD	C			RUSSETT FINE SANDY LOAM 10 TO 15 PERCENT SLOPES	0.37
UCB	D	B/C		URBAN LAND-CHILLUM-BELTSVILLE COMPLEX 0 TO 5 PERCENT SLOPES	0.37
UCD	D	B/C		URBAN LAND-CHILLUM-BELTSVILLE COMPLEX 5 TO 15 PERCENT SLOPES	0.37

\*\* INDICATES HYDRIC SOILS  
HIGHLY ERODIBLE SOILS: SOILS WITH K OF 0.35 OR GREATER AND ON GRADES 5% OR STEEPER; OR SOILS ON GRADES 15% OR GREATER.  
SOILS ARE TAKEN FROM THE NRCS WEB SOIL SURVEY APRIL 2017, MAP 20.



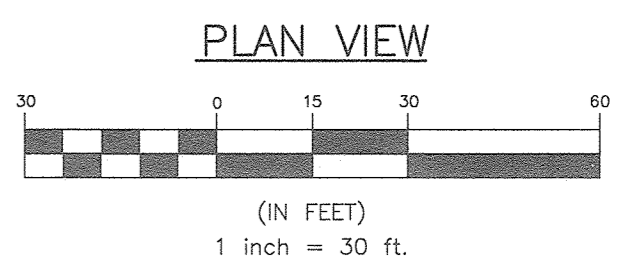


**LEGEND**

- PROPERTY BOUNDARY
- ADJACENT PROPERTY OWNER
- EXISTING EASEMENT
- SOILS CLASSIFICATION
- SOILS DELINEATION
- EXISTING WOODS LINE
- EXISTING WATER MAIN
- EXISTING SEWER MAIN
- EXISTING GAS LINE
- EXISTING STORM DRAIN
- EXISTING OVERHEAD LINES
- EXISTING STRUCTURE
- SLOPES 25% OR GREATER
- SLOPES BETWEEN 15% AND 25%
- BGE PLANTING ZONE: GREEN
- BGE PLANTING ZONE: YELLOW

SOILS CHART - SOIL SURVEY HOWARD COUNTY, MARYLAND					
SYMBOL	HYDRIC	HYDROLOGIC GROUP	ALTERNATE GROUP	NAME	K-VALUE
R <sub>s</sub> C		C		RUSSETT FINE SANDY LOAM, 5 TO 10 PERCENT SLOPES	0.24
R <sub>s</sub> D		C		RUSSETT FINE SANDY LOAM, 10 TO 15 PERCENT SLOPES	0.24
U <sub>c</sub> B		D	B/C	URBAN LAND-CHILLUM-BELTSVILLE COMPLEX 0 TO 5 PERCENT SLOPES	0.37
U <sub>c</sub> D		D	B/C	URBAN LAND-CHILLUM-BELTSVILLE COMPLEX 5 TO 15 PERCENT SLOPES	0.37

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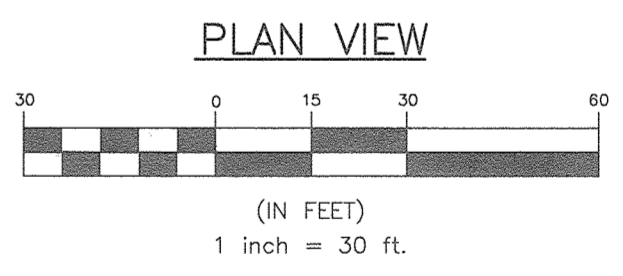
NO.		DATE		REVISION	
 <b>BENCHMARK ENGINEERING, INC.</b> ENGINEERS & LAND SURVEYORS & PLANNERS 8480 BALTIMORE NATIONAL PIKE & SUITE 315 • ELLICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644 WWW.BE-CIVILENGINEERING.COM				 J. H. Cey PROFESSIONAL ENGINEER	
OWNER/DEVELOPER:				<b>ELKRIS HILL</b>	
HARMONY BUILDERS INC 4228 COLUMBIA ROAD ELLICOTT CITY, MD 21042 410-461-0833				LOTS 1-7 AND OPEN SPACE LOT 8  TAX MAP: 38, GRID: 08, PARCEL: 198, ZONED: R-12 6289 OLD WASHINGTON ROAD ELKRIDGE, MD 21075 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND	
RELEVANT FILE NUMBERS:				PRELIMINARY PLAN	
ECP-18-026, S-18-004, WP-19-079, & HPC-18-06				EXISTING CONDITIONS PLAN	
DESIGN: JC		DRAWN: MP		DATE: AUGUST, 2019	BEI PROJECT NO: 2818
				SCALE: AS SHOWN	SHEET 2 OF 11

TENTATIVELY APPROVED  
 DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY  
  
 PLANNING DIRECTOR  
 8-19-19  
 DATE



**LEGEND**

- PROPERTY BOUNDARY
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- EXISTING SEWER MAIN
- EXISTING GAS LINE
- EXISTING STORM DRAIN
- PROPOSED STORM DRAIN
- PROPOSED HOUSE



STREET LIGHT SCHEDULE			
SYMBOL	STREET	LOCATION	NOTES
	OLD WASHINGTON RD.	27' FROM E N 560659.0753' E 1380095.5340'	LED-100 PREMIER COLONIAL POST-TOP ON A 14" BLACK FIBERGLASS POLE.

TENTATIVELY APPROVED  
 DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY  
  
 PLANNING DIRECTOR **8-19-19** DATE

NO.		DATE		REVISION	
 ENGINEERS & LAND SURVEYORS & PLANNERS 8480 BALTIMORE NATIONAL PIKE A SUITE 315 A ELLICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644 WWW.BEI-ENGINEERING.COM					
OWNER/DEVELOPER:			ELKRISE HILL		
HARMONY BUILDERS INC 4228 COLUMBIA ROAD ELLICOTT CITY, MD 21042 410-461-0833			LOTS 1-7 AND OPEN SPACE LOT 8		
TAX MAP: 3B, GRID: 08, PARCEL: 198, ZONED: R-12 6289 OLD WASHINGTON ROAD ELKRISE, MD 21075 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND					
PRELIMINARY PLAN LAYOUT PLAN					
RELEVANT FILE NUMBERS:		DATE:		BEI PROJECT NO:	
ECP-18-026, S-18-004, WP-19-079, & HPC-18-06		AUGUST, 2019		2818	
DESIGN: JC	DRAWN: MP	SCALE: AS SHOWN	SHEET 3 OF 11		

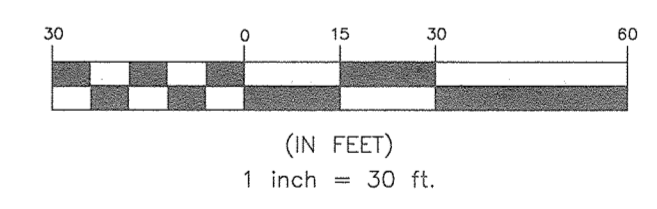
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 44577 (Expiration Date: 06-08-2020).  
  
 8/12/19



**LEGEND**

- SOILS CLASSIFICATION Ma.D
- SOILS DELINEATION ---
- EXISTING CONTOURS (BEI 05/17) -500-498
- PROPOSED CONTOURS -500-498
- EXISTING WOODS LINE ~ ~ ~ ~
- PROPOSED WOODS LINE ~ ~ ~ ~
- EXISTING STRUCTURE [ ]
- SLOPES 25% OR GREATER [X X X X]
- SLOPES BETWEEN 15% AND 25% [ / / / / ]
- LIMIT OF DISTURBANCE - - - -

**PLAN VIEW**



TENTATIVELY APPROVED  
 DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY  
 8-19-19  
 PLANNING DIRECTOR

NO.	DATE	REVISION

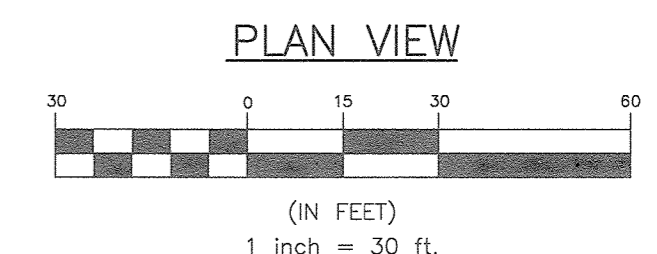
**BENCHMARK**  
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 (P) 410-465-8105 (F) 410-465-6844  
 WWW.BE-CVLENGINEERING.COM

OWNER/DEVELOPER: HARMONY BUILDERS INC 4228 COLUMBIA ROAD ELLCOTT CITY, MD 21042 410-461-0833	<b>ELKRISE HILL</b> LOTS 1-7 AND OPEN SPACE LOT 8
RELEVANT FILE NUMBERS: ECP-18-028, S-18-004, WP-19-079, & HPC-18-06	TAX MAP: 38, GRID: 08, PARCEL: 198, ZONED: R-12 6289 OLD WASHINGTON ROAD ELKCRIDGE, MD 21075 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND
DESIGN: JC DRAWN: MP	DATE: AUGUST, 2019 BEI PROJECT NO: 2818 SCALE: AS SHOWN SHEET 4 OF 11



**LEGEND**

- SOILS CLASSIFICATION
- SOILS DELINEATION
- EXISTING CONTOURS (BEI 05/17)
- PROPOSED CONTOURS
- EXISTING WOODS LINE
- PROPOSED WOODS LINE
- EXISTING STRUCTURE
- SLOPES 25% OR GREATER
- SLOPES BETWEEN 15% AND 25%



**SOILS CHART - SOIL SURVEY HOWARD COUNTY, MARYLAND**

SYMBOL	HYDRIC	HYDROLOGIC GROUP	ALTERNATE GROUP	NAME	K VALUE
R1C		C		RUSSETT FINE SANDY LOAM, 5 TO 10 PERCENT SLOPES	0.43
R1D		C		RUSSETT FINE SANDY LOAM, 10 TO 15 PERCENT SLOPES	0.43
U1B		B1C		URBAN LAND-CHILLUM-BELTSVILLE COMPLEX 5 TO 8 PERCENT SLOPES	0.37
U1D		B1C		URBAN LAND-CHILLUM-BELTSVILLE COMPLEX 5 TO 15 PERCENT SLOPES	0.37

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 SOILS ARE TAKEN FROM THE NRCS WEB SOIL SURVEY APRIL 2017, MAP 20.

TENTATIVELY APPROVED  
 DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY  
  
 PLANNING DIRECTOR  
 8-19-19  
 DATE

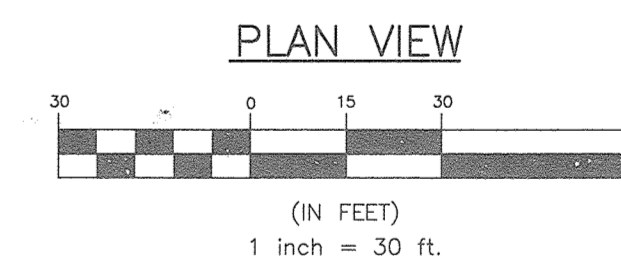
NO.		DATE		REVISION	
 <b>BENCHMARK ENGINEERING, INC.</b> ENGINEERS & LAND SURVEYORS & PLANNERS 8480 BALTIMORE NATIONAL PIKE A SUITE 315 A ELLICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644 WWW.BEI-CIVILENGINEERING.COM					
OWNER/DEVELOPER: HARMONY BUILDERS INC 4228 COLUMBIA ROAD ELLICOTT CITY, MD 21042 410-461-0833					
<b>ELKRISE HILL</b> LOTS 1-7 AND OPEN SPACE LOT 8 TAX MAP: 38, GRID: 08, PARCEL: 198, ZONED: R-12 6289 OLD WASHINGTON ROAD ELKRISE, MD 21075 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND					
PRELIMINARY PLAN STORMWATER MANAGEMENT EXISTING 10-YR DA MAP					
RELEVANT FILE NUMBERS: ECP-18-026, S-18-004, WP-19-079, & HPC-18-06		DATE: AUGUST, 2019		BEI PROJECT NO: 2818	
DESIGN: JC	DRAWN: MP	SCALE: AS SHOWN	SHEET	5 OF 11	

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. 45577, Expiration Date: 06-08-2020.  
  
 8/12/19



**LEGEND**

SOILS CLASSIFICATION	<i>M.A.D.</i>
SOILS DELINEATION	—
EXISTING CONTOURS (BEI 05/17)	— 500 — 498 —
PROPOSED CONTOURS	— 500 — 498 —
EXISTING WOODS LINE	~~~~~
PROPOSED WOODS LINE	~~~~~
EXISTING STRUCTURE	—
SWM DRAINAGE DIVIDE 10 YR	—
EX. SWM DRAINAGE DIVIDE	—
SWM DRAINAGE DIVIDE ESDV	—



NO.	DATE	REVISION

<p><b>BENCHMARK</b> ENGINEERS &amp; LAND SURVEYORS &amp; PLANNERS <b>ENGINEERING, INC.</b> 8480 BALTIMORE NATIONAL PIKE SUITE 315 &amp; ELLICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644 WWW.BEI-CIVILENGINEERING.COM</p>	
<p><b>ELKRISE HILL</b> LOTS 1-7 AND OPEN SPACE LOT 8</p>	
<p>TAX MAP: 38, GRID: 08, PARCEL: 198, ZONED: R-12 6289 OLD WASHINGTON ROAD ELKRIDGE, MD 21075 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND</p>	
<p>PRELIMINARY PLAN STORMWATER MANAGEMENT DEVELOPED 10-YR DA MAP</p>	
<p>RELEVANT FILE NUMBERS: ECP-18-026, S-18-004, WP-19-079, &amp; HPC-18-06</p>	<p>DATE: AUGUST, 2019 BEI PROJECT NO: 2818</p>
<p>DESIGN: JC DRAWN: MP</p>	<p>SCALE: AS SHOWN SHEET 6 OF 11</p>

\* INDICATES HYDRIC SOILS  
 \*\* HIGHLY ERODIBLE SOILS: SOILS WITH K OF 0.35 OR GREATER AND ON GRADES 5% OR STEEPER; OR SOILS ON GRADES 15% OR GREATER.  
 SOILS ARE TAKEN FROM THE NRCS WEB SOIL SURVEY APRIL, 2017, MAP 20.

TENTATIVELY APPROVED  
 DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY  
  
 PLANNING DIRECTOR  
 8-19-19 DATE

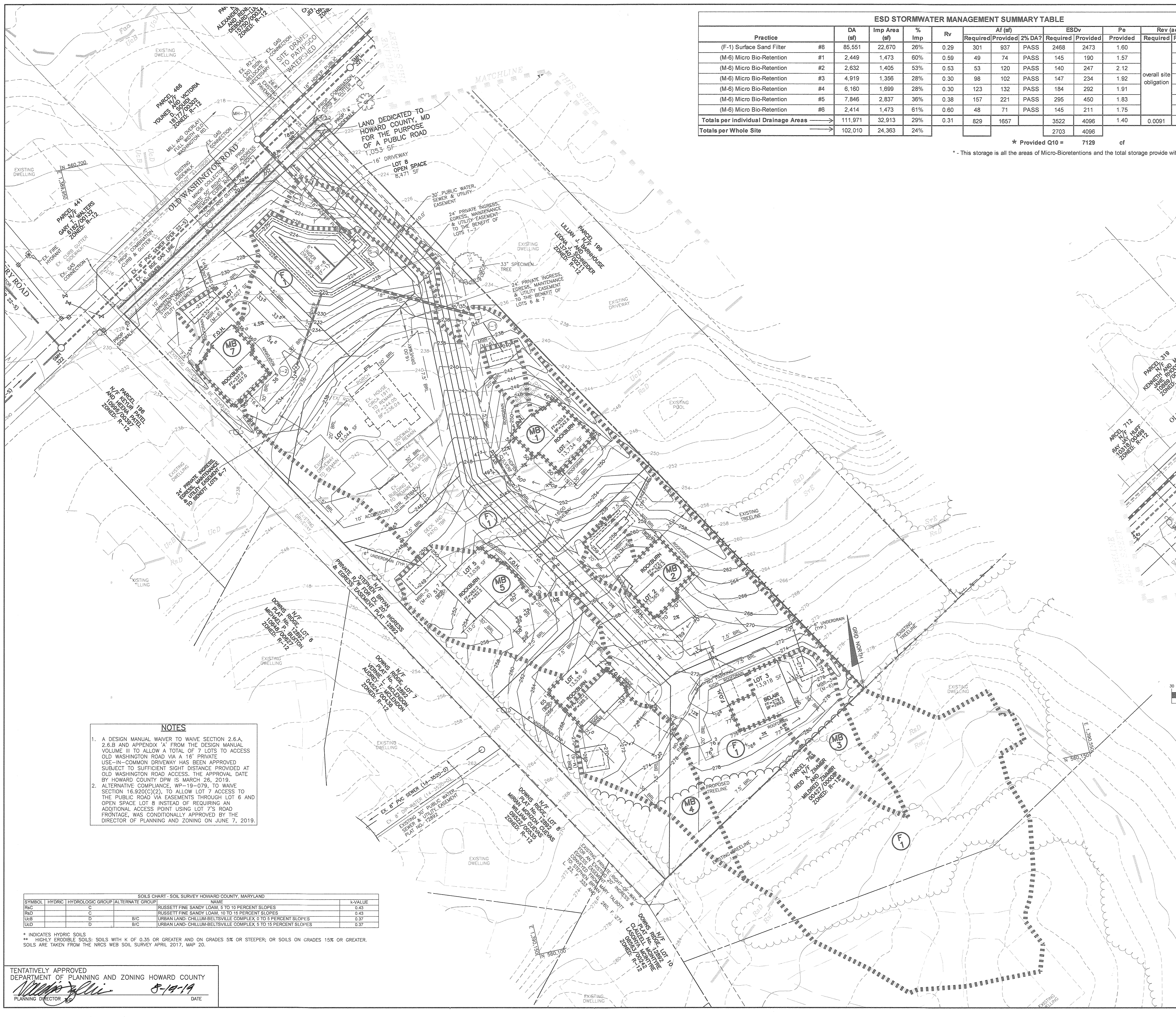
Practice	DA (sf)	Imp Area (sf)	% Imp	Rv	Af (sf)		ESDv		Pe Provided	Rev (ac-ft)		Ownership	
					Required	Provided	Required	Provided		Required	Provided		
(F-1) Surface Sand Filter	#8	85,551	22,670	26%	0.29	301	937	PASS	2468	2473	1.60	0.0043	Private
(M-6) Micro Bio-Retention	#1	2,449	1,473	60%	0.59	49	74	PASS	145	190	1.57	0.0008	Private
(M-6) Micro Bio-Retention	#2	2,632	1,405	53%	0.53	53	120	PASS	140	247	2.12	0.0009	Private
(M-6) Micro Bio-Retention	#3	4,919	1,356	28%	0.30	98	102	PASS	147	234	1.92	0.0012	Private
(M-6) Micro Bio-Retention	#4	6,160	1,699	28%	0.30	123	132	PASS	184	292	1.91	0.0011	Private
(M-6) Micro Bio-Retention	#5	7,846	2,837	36%	0.38	157	221	PASS	295	450	1.83	0.0017	Private
(M-6) Micro Bio-Retention	#6	2,414	1,473	61%	0.60	48	71	PASS	145	211	1.75	0.0009	Private
Totals per individual Drainage Areas		111,971	32,913	29%	0.31	829	1657		3522	4096	1.40	0.0091	0.0109
Totals per Whole Site		102,010	24,363	24%					2703	4096			

\* Provided Q10 = 7129 cf

\* - This storage is all the areas of Micro-Biorententions and the total storage provide within the composite "F-1"

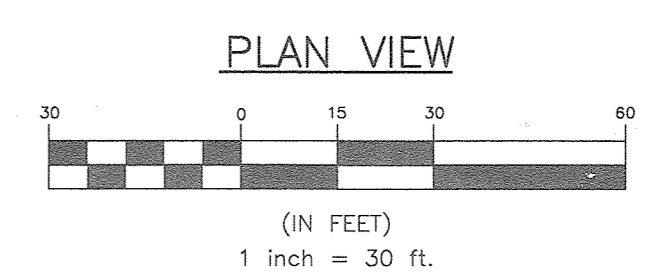
LEGEND

- SOILS CLASSIFICATION *Ma.D*
- SOILS DELINEATION
- EXISTING CONTOURS (BEI 05/17)
- PROPOSED CONTOURS
- EXISTING WOODS LINE
- PROPOSED WOODS LINE
- EXISTING STRUCTURE
- SWM DRAINAGE DIVIDE 10 YR
- EX. SWM DRAINAGE DIVIDE
- SWM DRAINAGE DIVIDE ESDv



**NOTES**

- A DESIGN MANUAL WAIVER TO WAIVE SECTION 2.6.A, 2.6.B AND APPENDIX 'A' FROM THE DESIGN MANUAL VOLUME III TO ALLOW A TOTAL OF 7 LOTS TO ACCESS OLD WASHINGTON ROAD VIA A 16' PRIVATE USE-IN-COMMON DRIVEWAY HAS BEEN APPROVED SUBJECT TO SUFFICIENT SIGHT DISTANCE PROVIDED AT OLD WASHINGTON ROAD ACCESS. THE APPROVAL DATE BY HOWARD COUNTY DPW IS MARCH 26, 2019.
- ALTERNATIVE COMPLIANCE, WP-18-079, TO WAIVE SECTION 16.920(C)(2), TO ALLOW LOT 7 ACCESS TO THE PUBLIC ROAD VIA EASEMENTS THROUGH LOT 6 AND OPEN SPACE LOT 8 INSTEAD OF REQUIRING AN ADDITIONAL ACCESS POINT USING LOT 7'S ROAD FRONTAGE, WAS CONDITIONALLY APPROVED BY THE DIRECTOR OF PLANNING AND ZONING ON JUNE 7, 2019.



SYMBOL	HYDRIC	HYDROLOGIC GROUP/ALTERNATE GROUP	NAME	K-VALUE
R1C	C		RUSSETT FINE SANDY LOAM, 5 TO 10 PERCENT SLOPES	0.43
R1D	C		RUSSETT FINE SANDY LOAM, 10 TO 15 PERCENT SLOPES	0.43
U1B	D	B1C	URBAN LAND-CHILLUM-BELTSVILLE COMPLEX 5 TO 8 PERCENT SLOPES	0.37
U1D	D	B1C	URBAN LAND-CHILLUM-BELTSVILLE COMPLEX 5 TO 15 PERCENT SLOPES	0.37

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 SOILS ARE TAKEN FROM THE NRCS WEB SOIL SURVEY APRIL 2017, MAP 20.

TENTATIVELY APPROVED  
 DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY  
 [Signature] 8-19-19  
 PLANNING DIRECTOR DATE

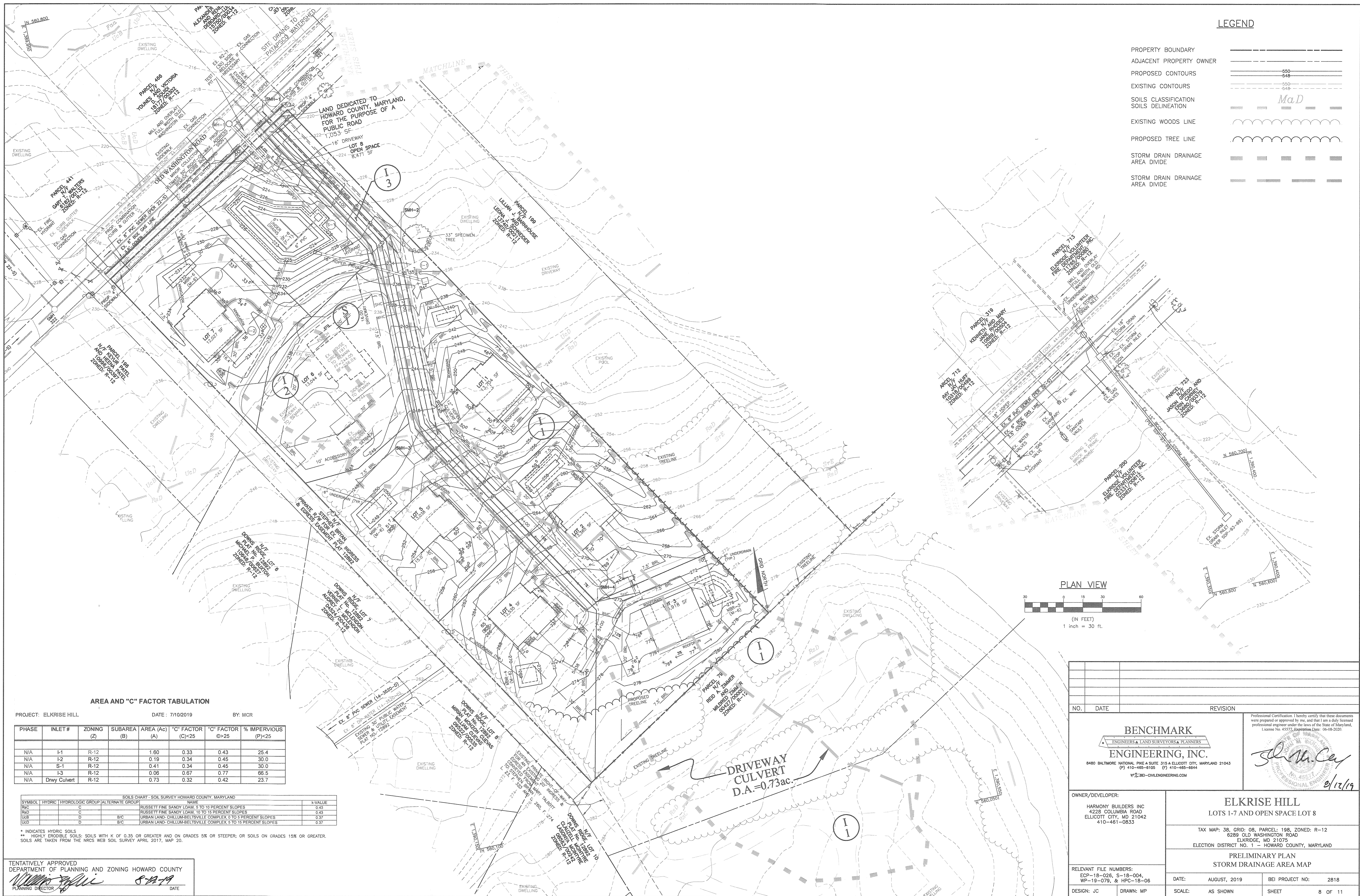
NO.	DATE	REVISION

**BENCHMARK**  
 ENGINEERS & LAND SURVEYORS & PLANNERS  
**ENGINEERING, INC.**  
 8480 BALTIMORE NATIONAL PIKE A SUITE 315 A ELLICOTT CITY, MARYLAND 21043  
 (P) 410-465-6105 (F) 410-465-6644  
 WWW.BEI-CIVILENGINEERING.COM

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. 46573 Expiration Date: 06-09-2020.

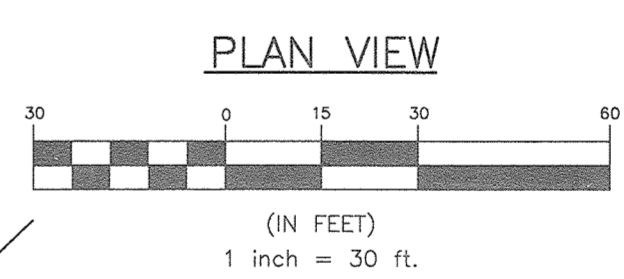
[Signature] 8/19/19

OWNER/DEVELOPER: HARMONY BUILDERS INC 4228 COLUMBIA ROAD ELLCOTT CITY, MD 21042 410-461-0833	<b>ELKRISE HILL</b> LOTS 1-7 AND OPEN SPACE LOT 8	TAX MAP: 3B, GRID: 08, PARCEL: 198, ZONED: R-12 6289 OLD WASHINGTON ROAD ELKRISE, MD 21075 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND
<b>PRELIMINARY PLAN</b> STORMWATER MANAGEMENT DEVELOPED ESDv DA MAP		
RELEVANT FILE NUMBERS: ECP-18-026, S-18-004, WP-19-079, & HPC-18-06	DATE: AUGUST, 2019	BEI PROJECT NO: 2818
DESIGN: JC	DRAWN: MP	SCALE: AS SHOWN SHEET 7 OF 11



**LEGEND**

- PROPERTY BOUNDARY
- ADJACENT PROPERTY OWNER
- PROPOSED CONTOURS
- EXISTING CONTOURS
- SOILS CLASSIFICATION
- SOILS DELINEATION
- EXISTING WOODS LINE
- PROPOSED TREE LINE
- STORM DRAIN DRAINAGE AREA DIVIDE
- STORM DRAIN DRAINAGE AREA DIVIDE



**AREA AND "C" FACTOR TABULATION**

PROJECT: ELKRISE HILL      DATE: 7/10/2019      BY: MCR

PHASE	INLET #	ZONING (Z)	SUBAREA (B)	AREA (AC) (A)	"C" FACTOR (C)<25	"C" FACTOR (C)>25	% IMPERVIOUS (P)<25
N/A	I-1	R-12		1.60	0.33	0.43	25.4
N/A	I-2	R-12		0.19	0.34	0.45	30.0
N/A	S-1	R-12		0.41	0.34	0.45	30.0
N/A	I-3	R-12		0.06	0.67	0.77	66.5
N/A	Dwv Culvert	R-12		0.73	0.32	0.42	23.7

**SOILS CHART - SOIL SURVEY HOWARD COUNTY, MARYLAND**

SYMBOL	HYDRIC	HYDROLOGIC GROUP	ALTERNATE GROUP	NAME	K-VALUE
R1c	C			RUSSETT FINE SANDY LOAM, 5 TO 10 PERCENT SLOPES	0.43
R1d	C			RUSSETT FINE SANDY LOAM, 10 TO 15 PERCENT SLOPES	0.43
U3P	D	B/C		URBAN LAND-CHILLUM-BELTSVILLE COMPLEX 5 TO 8 PERCENT SLOPES	0.37
U3D	D	B/C		URBAN LAND-CHILLUM-BELTSVILLE COMPLEX 5 TO 15 PERCENT SLOPES	0.37

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 DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY  
  
 PLANNING DIRECTOR      DATE: 8-11-19

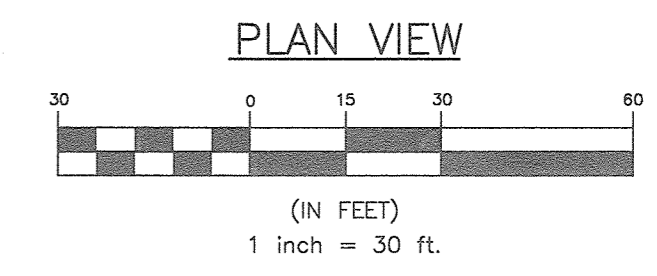
NO.		DATE		REVISION	
 <b>BENCHMARK ENGINEERING, INC.</b> 8480 BALTIMORE NATIONAL PIKE SUITE 315 A ELKRICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644 WWW.BEI-ENGINEERING.COM				Professional Certification I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 45577 (Expiration Date: 06-05-2025)  J. M. Cay 8/12/19	
OWNER/DEVELOPER:				ELKRISE HILL	
HARMONY BUILDERS INC 4228 COLUMBIA ROAD ELKRICOTT CITY, MD 21042 410-461-0833				LOTS 1-7 AND OPEN SPACE LOT 8	
RELEVANT FILE NUMBERS: ECP-18-026, S-18-004, WP-19-079, & HPC-18-06				TAX MAP: 38, GRID: 08, PARCEL: 198, ZONED: R-12 6289 OLD WASHINGTON ROAD ELKRICOTT CITY, MD 21075 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND	
DESIGN: JC    DRAWN: MP				PRELIMINARY PLAN STORM DRAINAGE AREA MAP	
DATE: AUGUST, 2019    BEI PROJECT NO: 2818				SHEET 8 OF 11	





**LEGEND**

SOILS CLASSIFICATION	<i>Mo,D</i>
SOILS DELINEATION	—
EXISTING CONTOURS (BEI 05/17)	---
EXISTING WOODS LINE	~
PROPOSED WOODS LINE	~
EXISTING STRUCTURE	—
SLOPES 20% OR GREATER	▽
LIMIT OF DISTURBANCE	---
SUPER SILT FENCE	SSF
SILT FENCE	SF
SEDIMENT CONTROL DRAINAGE DIVIDE	---
EROSION CONTROL MATTING	---
DIVERSION FENCE	DF
EARTH DIKE	←
STABILIZED CONSTRUCTION ENTRANCE	SC
MOUNTABLE BERM	MB
GABION INFLOW PROTECTION	GP
SEC DRAINAGE DIVIDE	---



NO.	DATE	REVISION

**BENCHMARK ENGINEERING, INC.**  
 ENGINEERS & LAND SURVEYORS & PLANNERS  
 8480 BALTIMORE NATIONAL PIKE A SUITE 315 & ELLICOTT CITY, MARYLAND 21043  
 (P) 410-465-6105 (F) 410-465-6844  
 WWW.BEI-CIVILENGINEERING.COM

*[Signature]*  
 PROFESSIONAL ENGINEER  
 LICENSE NO. 44597 (EXPIRES 06-08-2020)

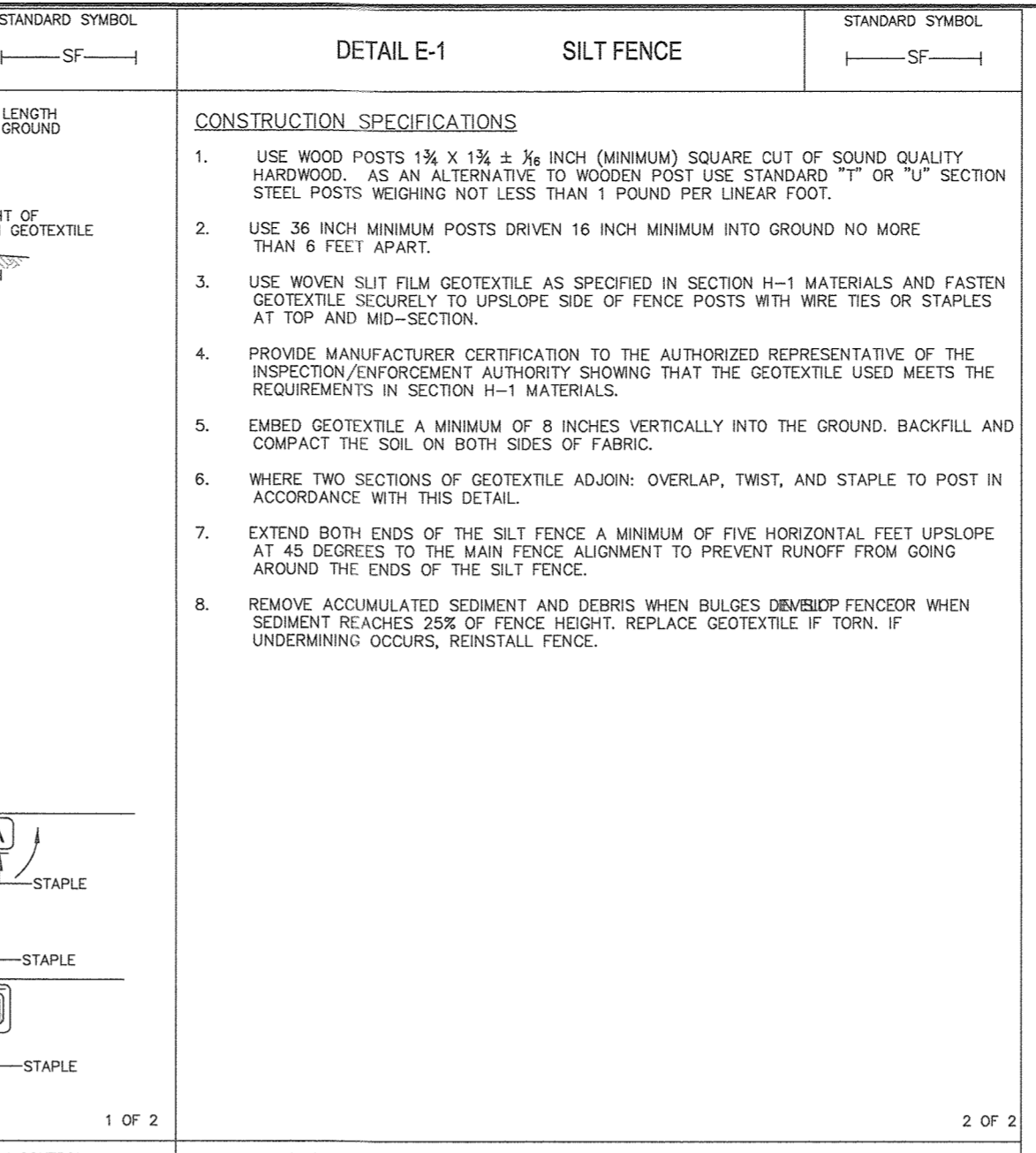
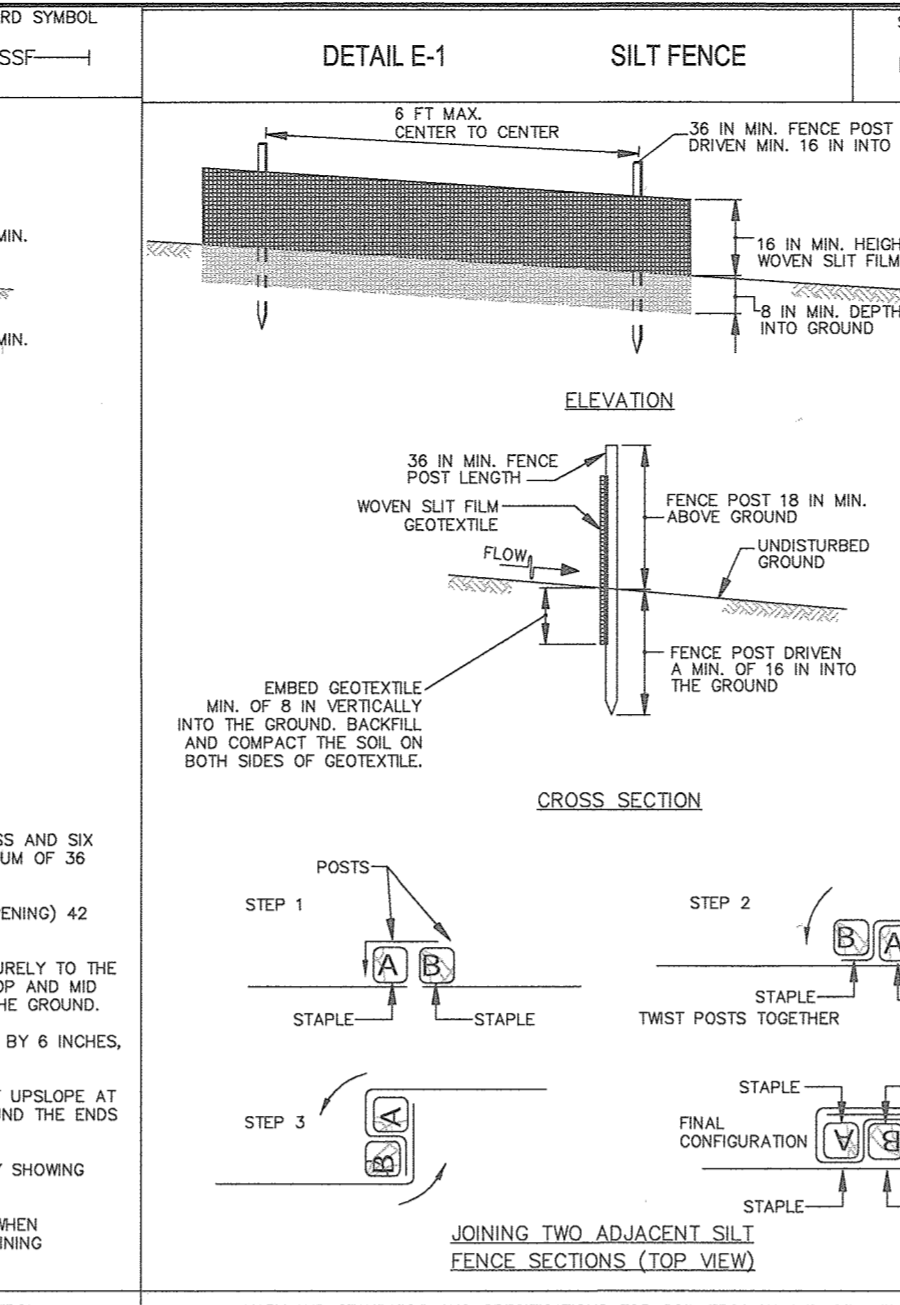
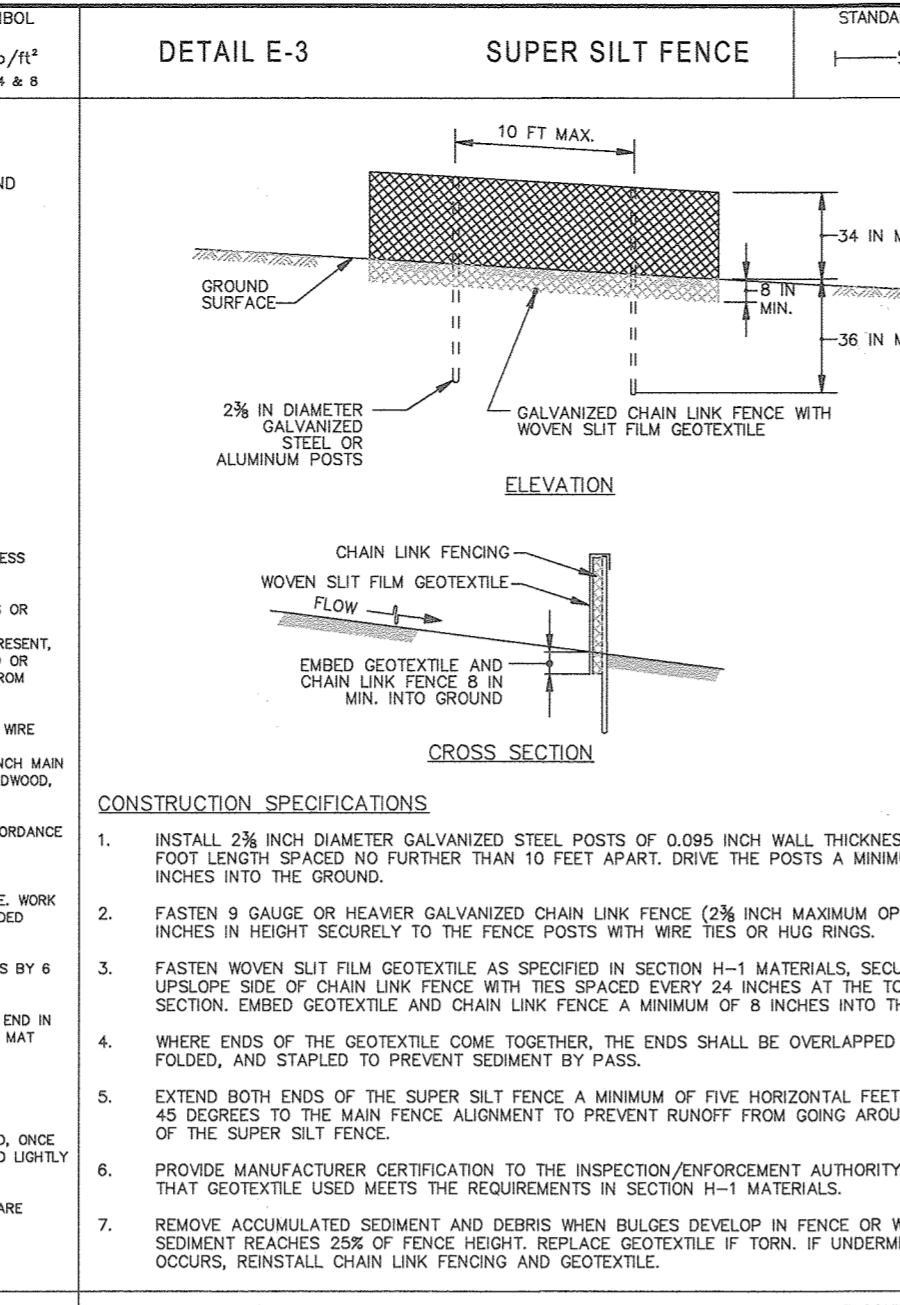
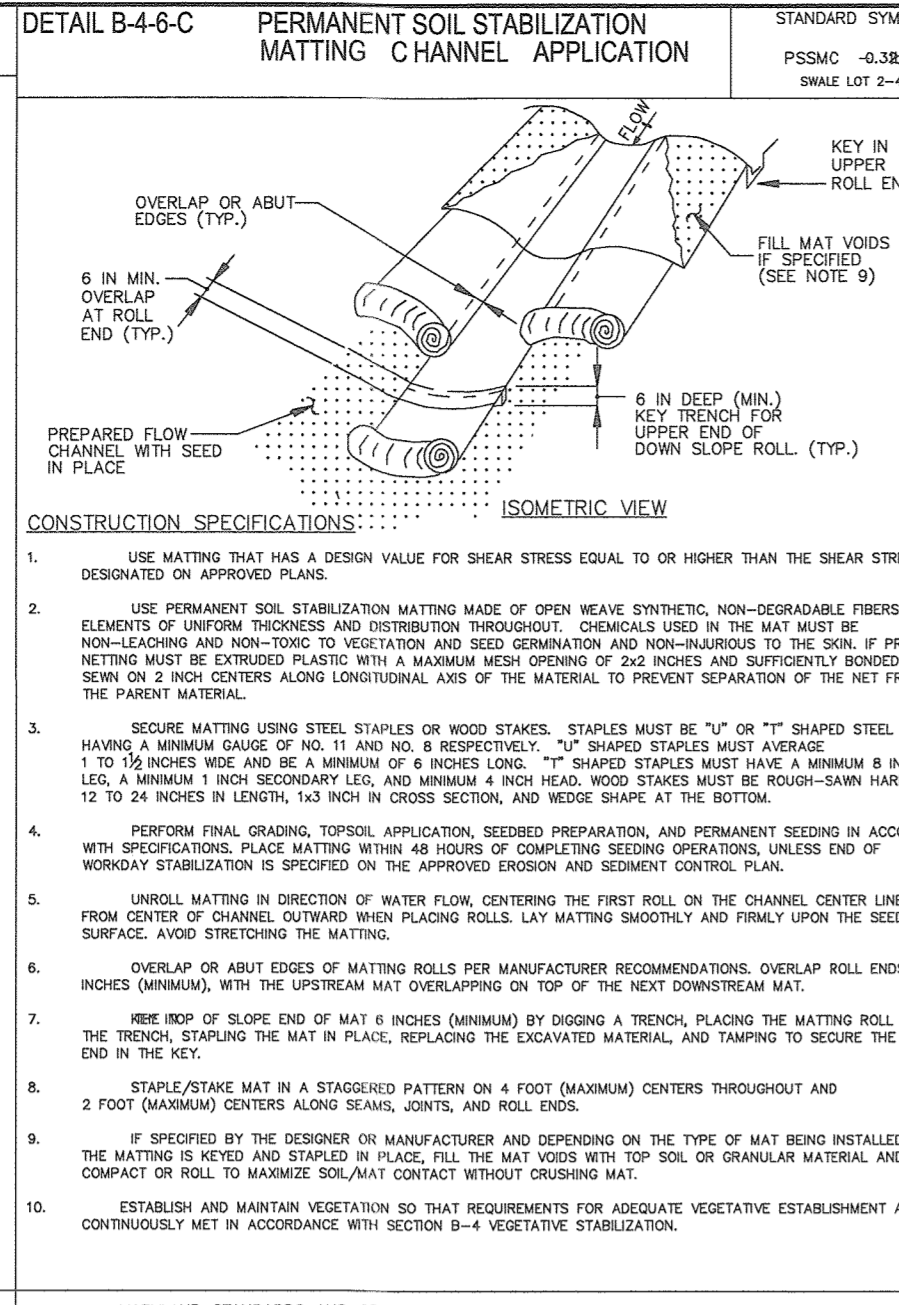
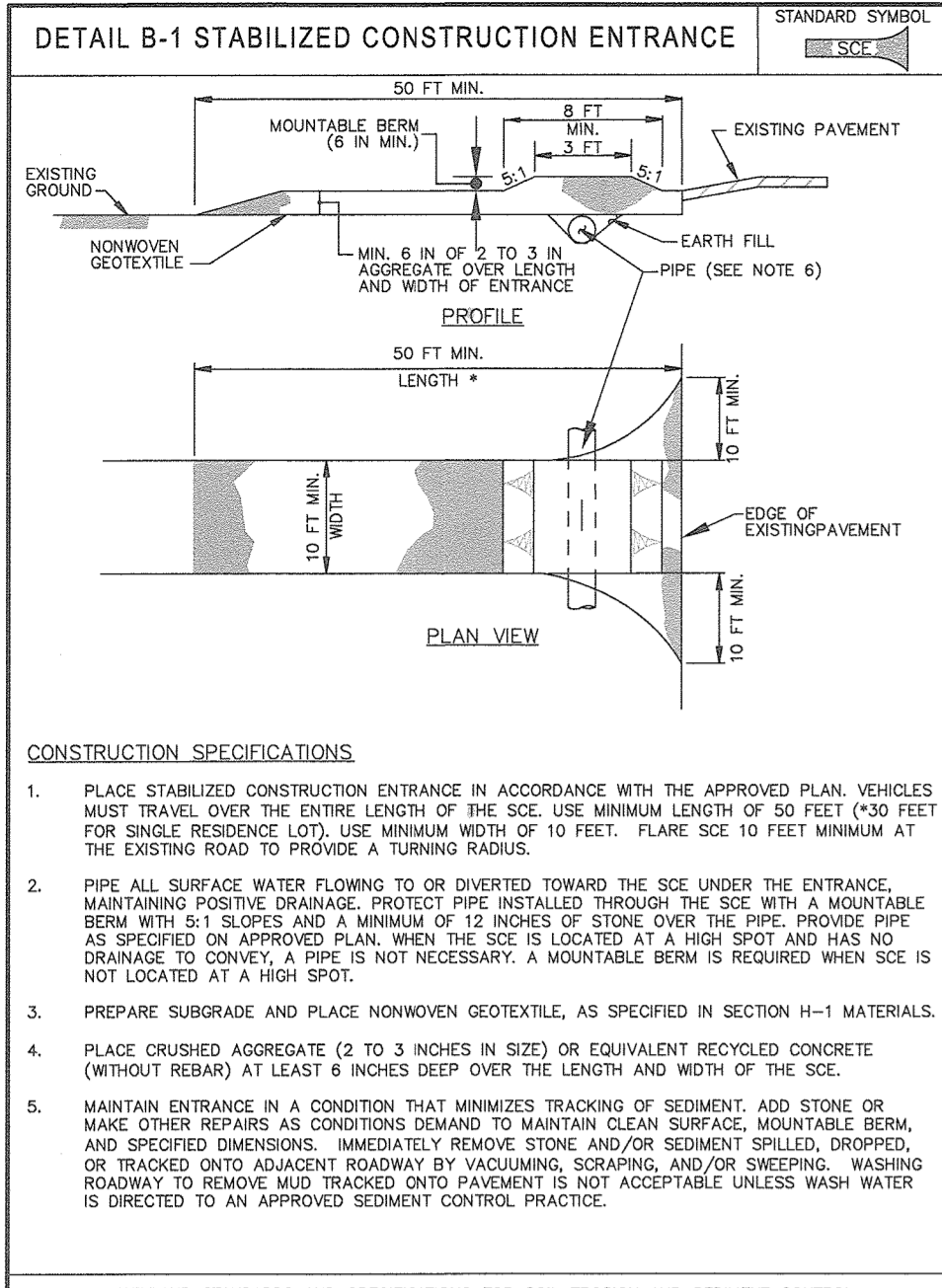
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RELEVANT FILE NUMBERS: ECP-18-026, S-18-004, WP-19-079, & HPC-18-06	PRELIMINARY PLAN SEDIMENT AND EROSION CONTROL PLAN
DATE: AUGUST, 2019	BEI PROJECT NO: 2818
DESIGN: JC	DRAWN: MP
SCALE: AS SHOWN	SHEET 9 OF 11

**SOILS CHART - SOIL SURVEY HOWARD COUNTY, MARYLAND**

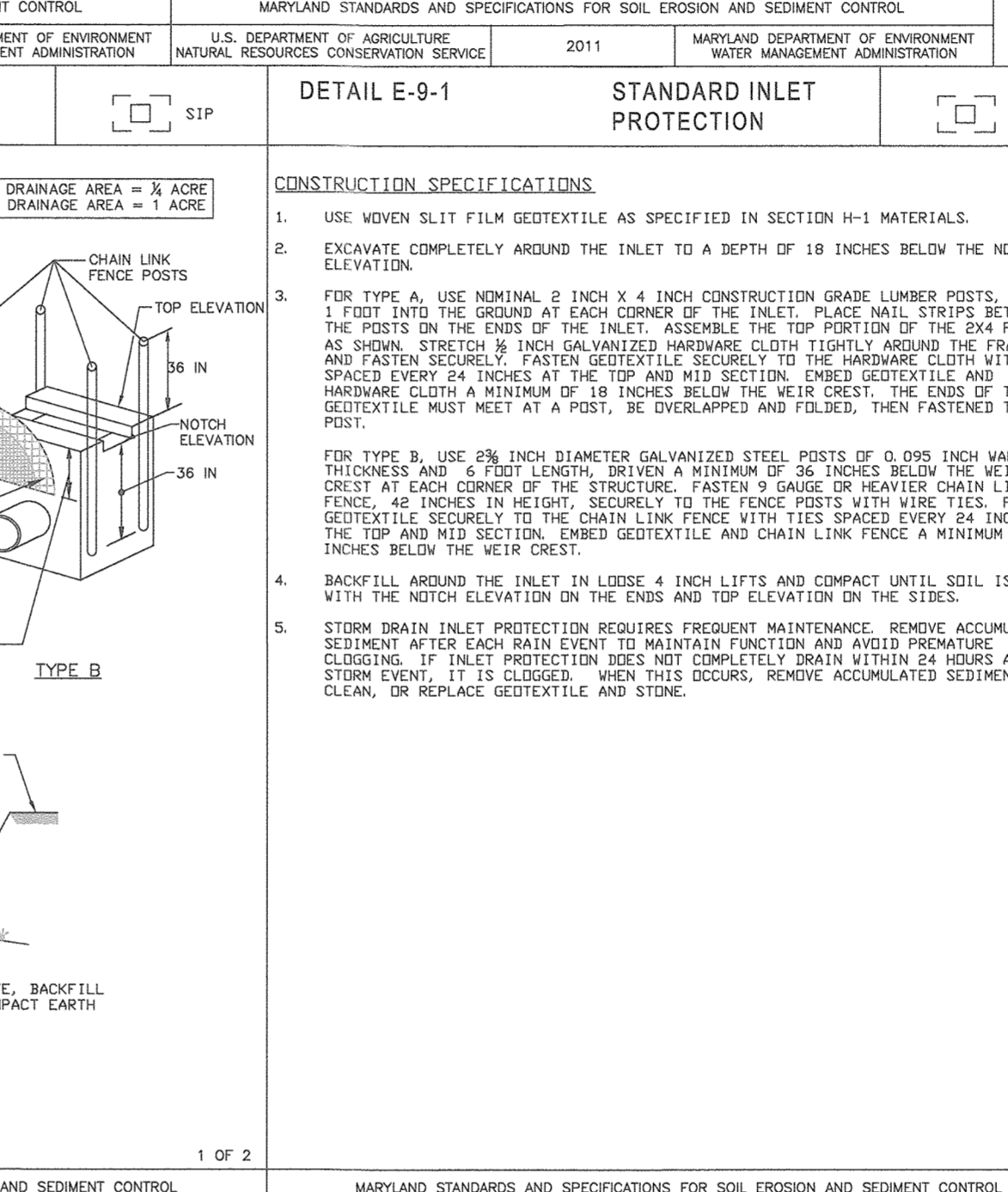
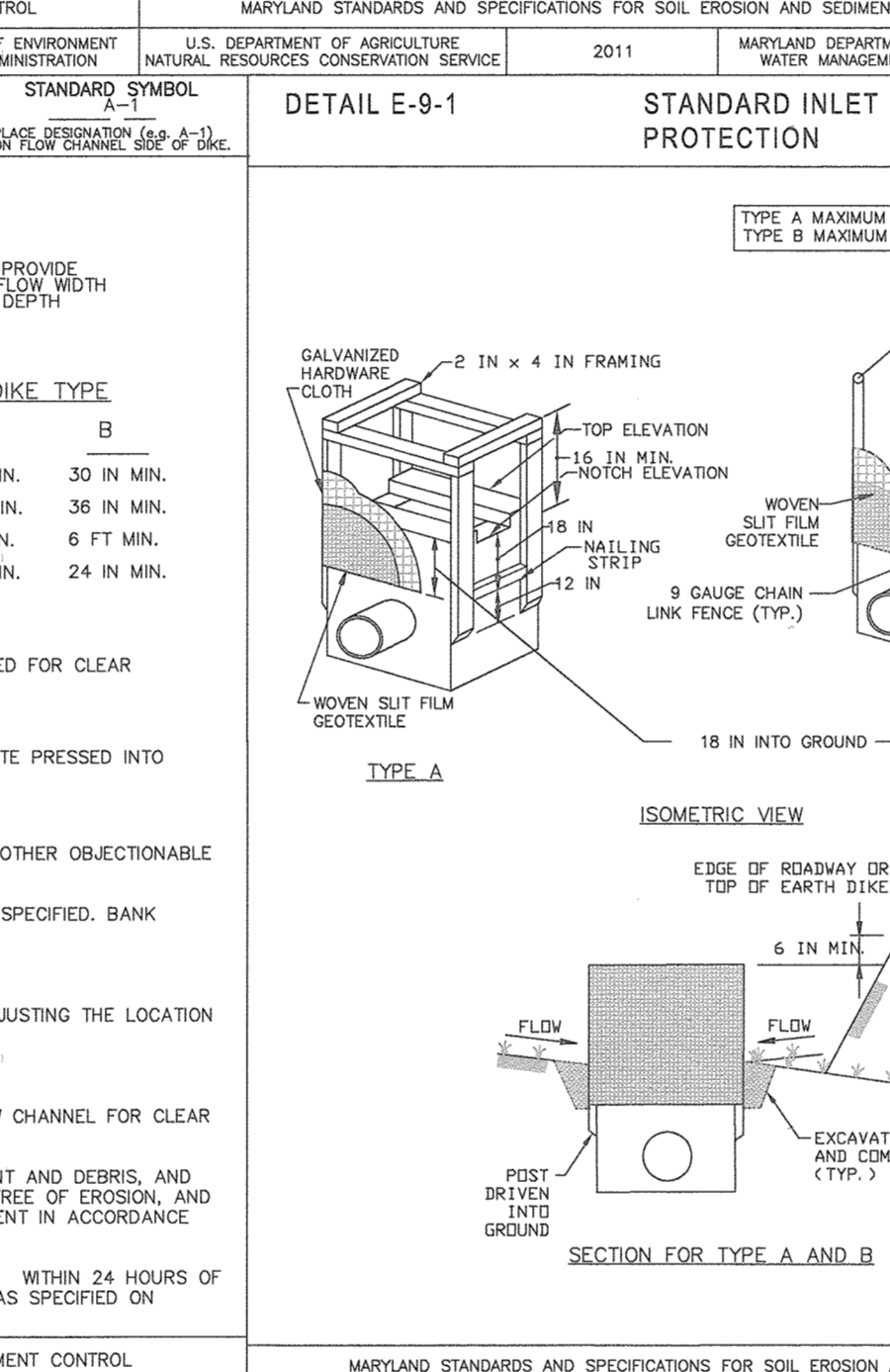
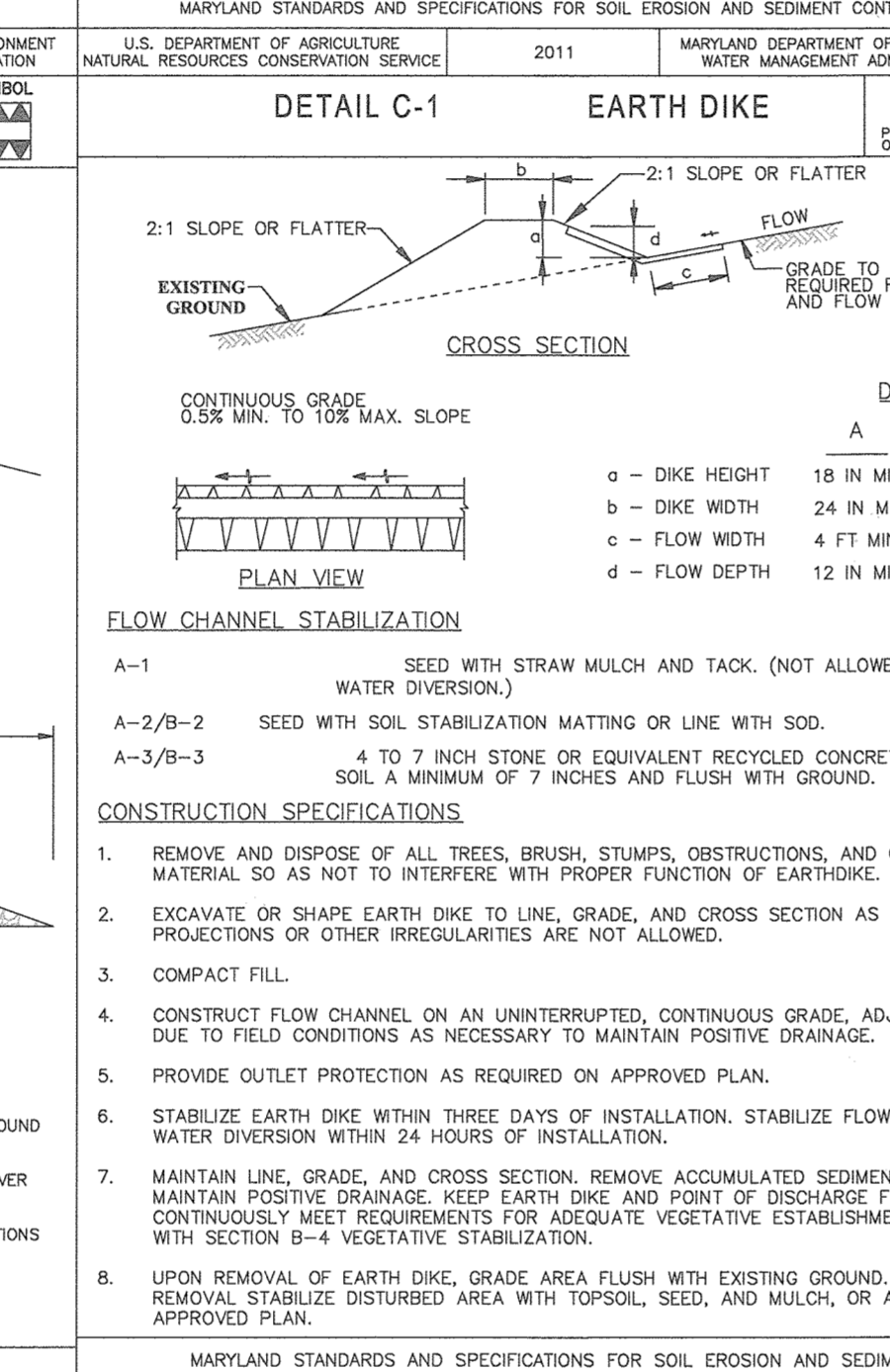
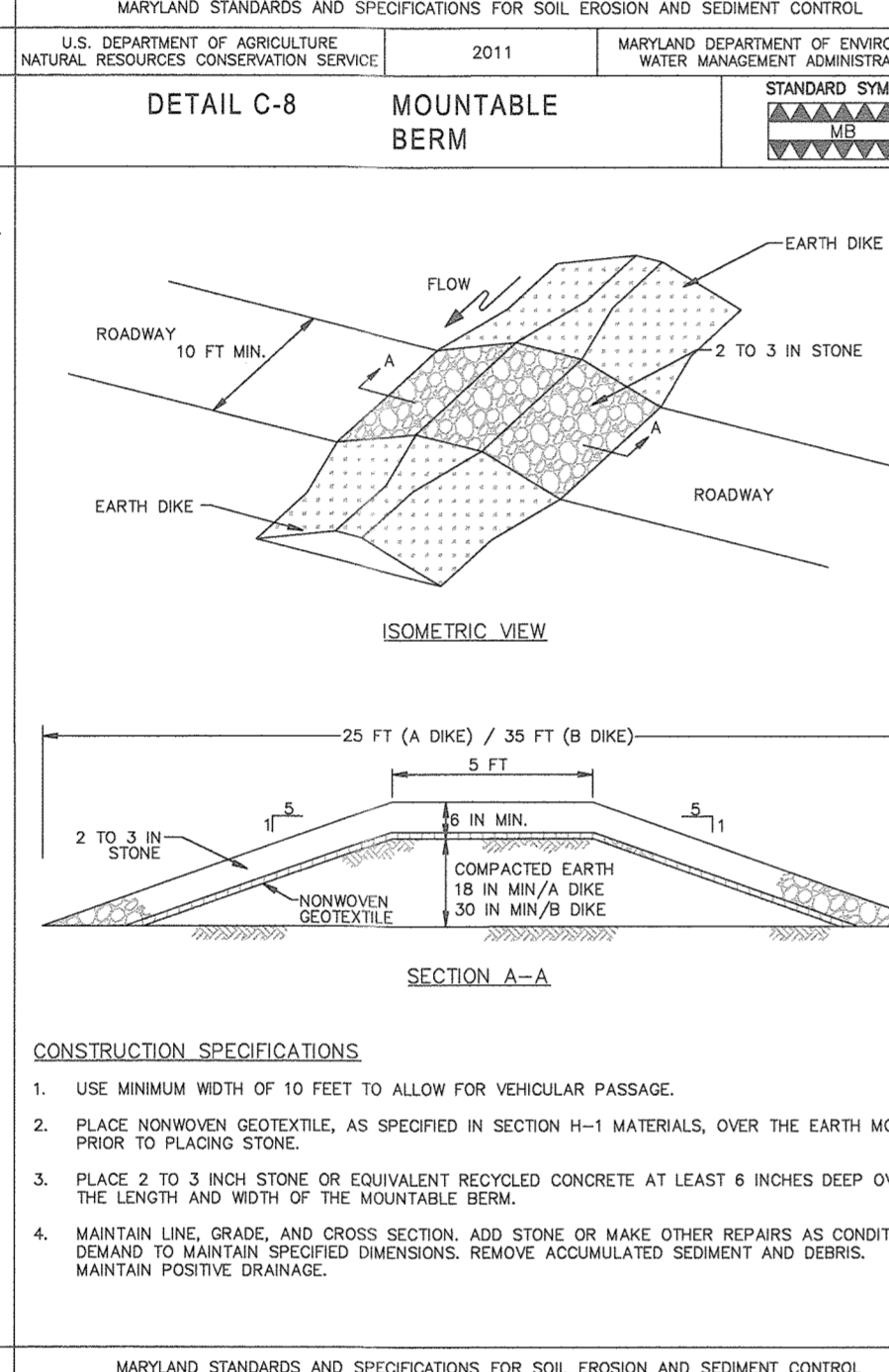
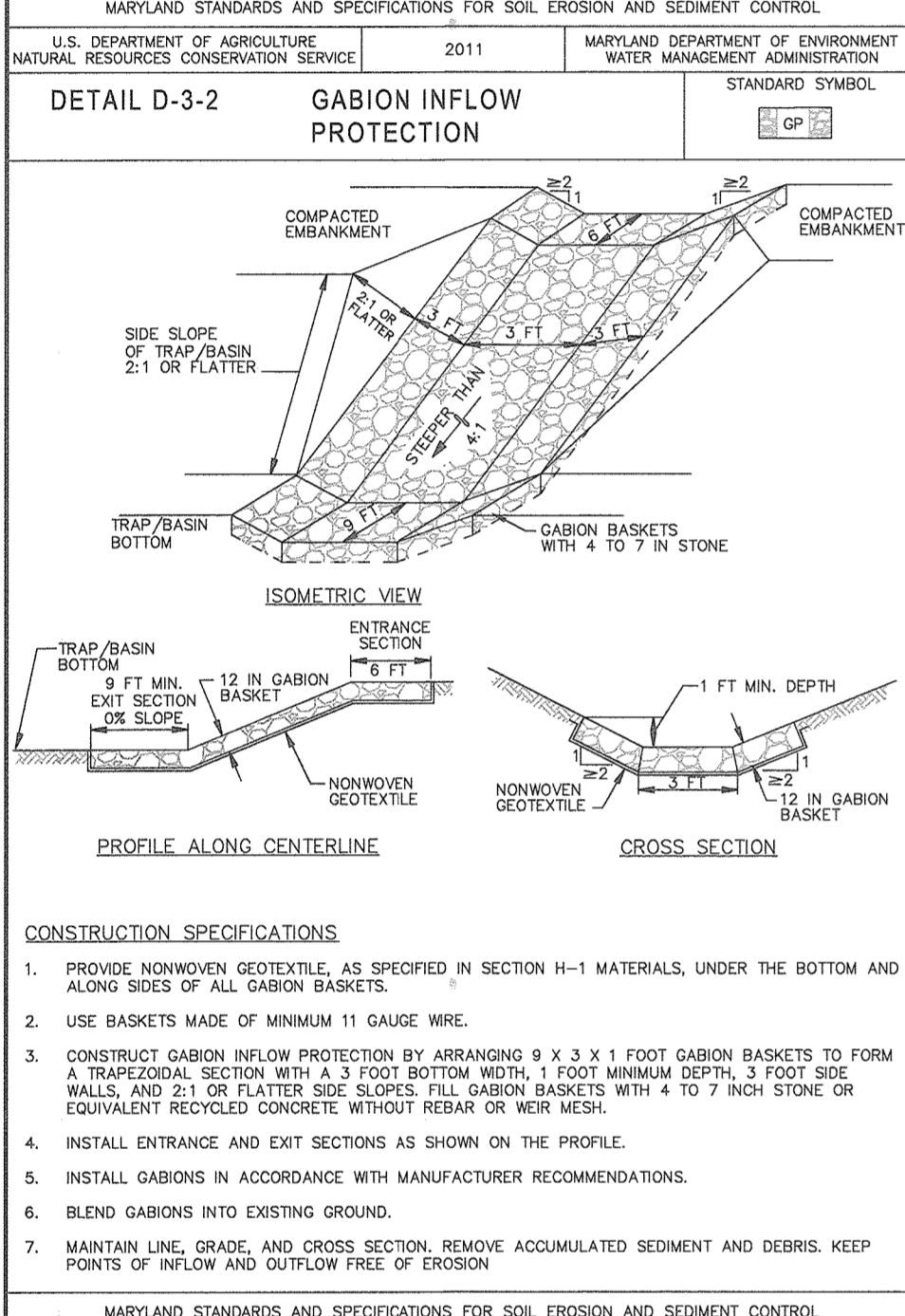
SYMBOL	HYDRIC	HYDROLOGIC GROUP	ALTERNATE GROUP	NAME	K-VALUE
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U3B	D	B1C		URBAN LAND-CHILLUM-BELTSVILLE COMPLEX 0 TO 3 PERCENT SLOPES	0.37
U3D	D	B1C		URBAN LAND-CHILLUM-BELTSVILLE COMPLEX 5 TO 15 PERCENT SLOPES	0.37

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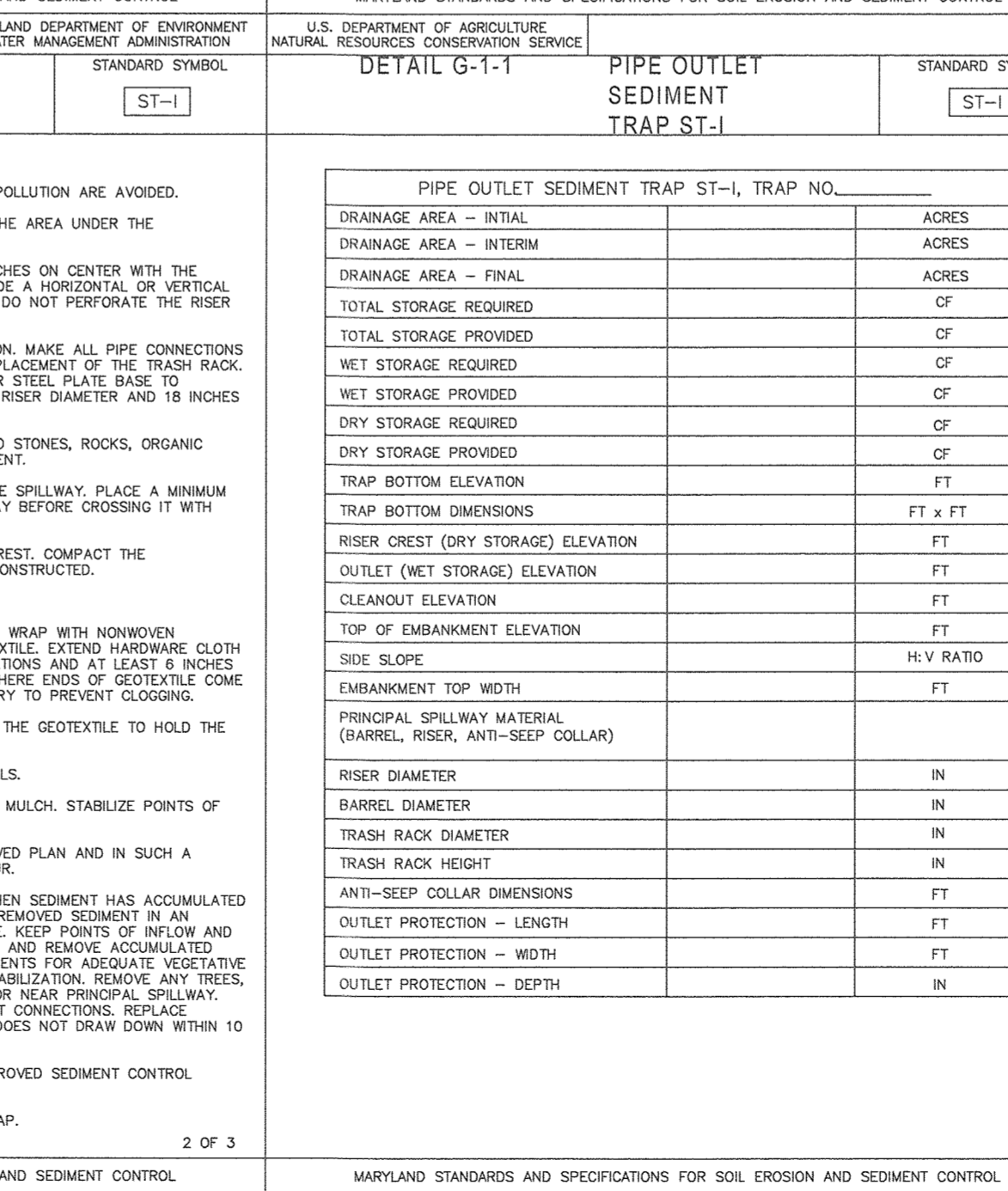
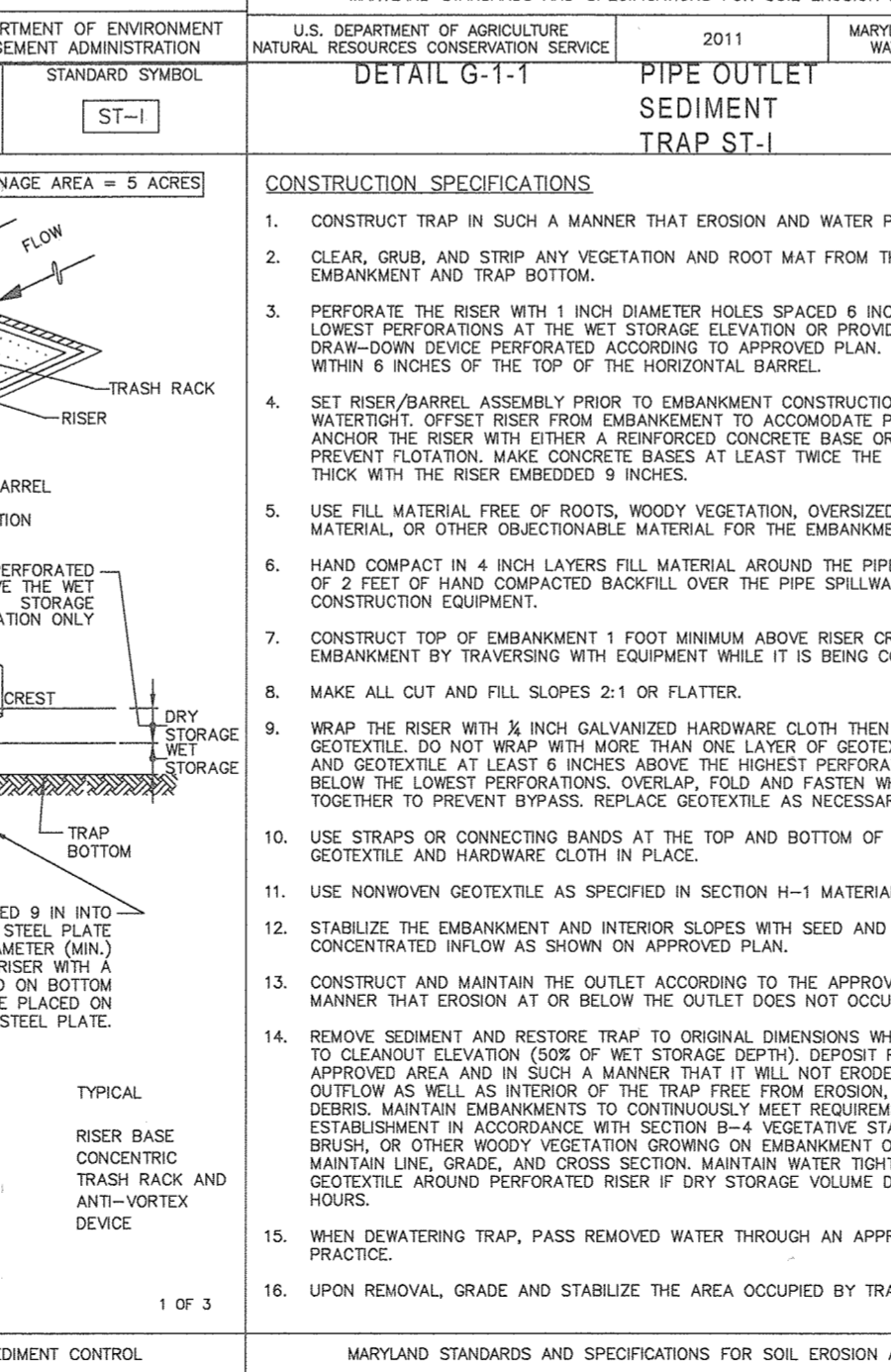
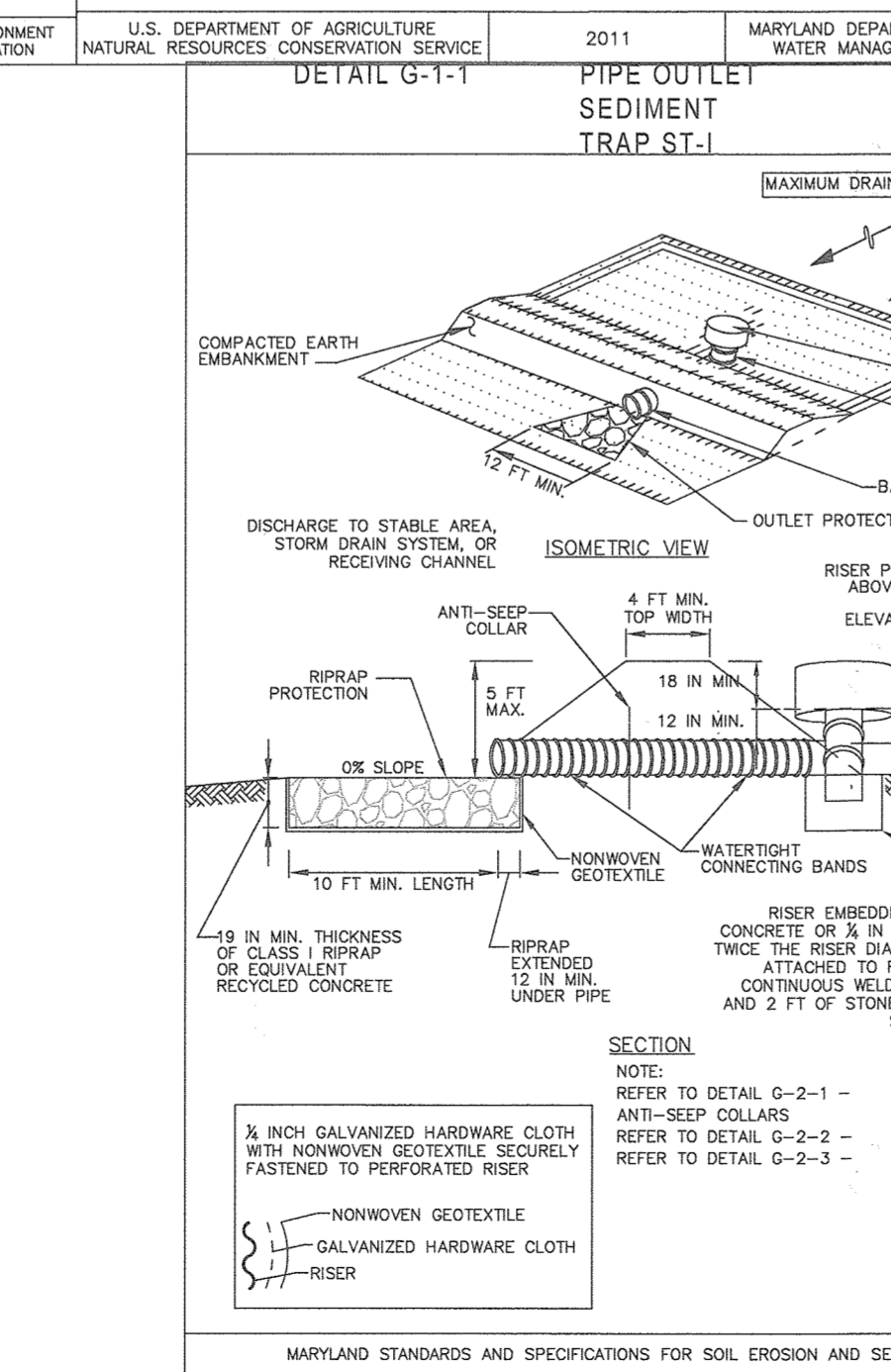
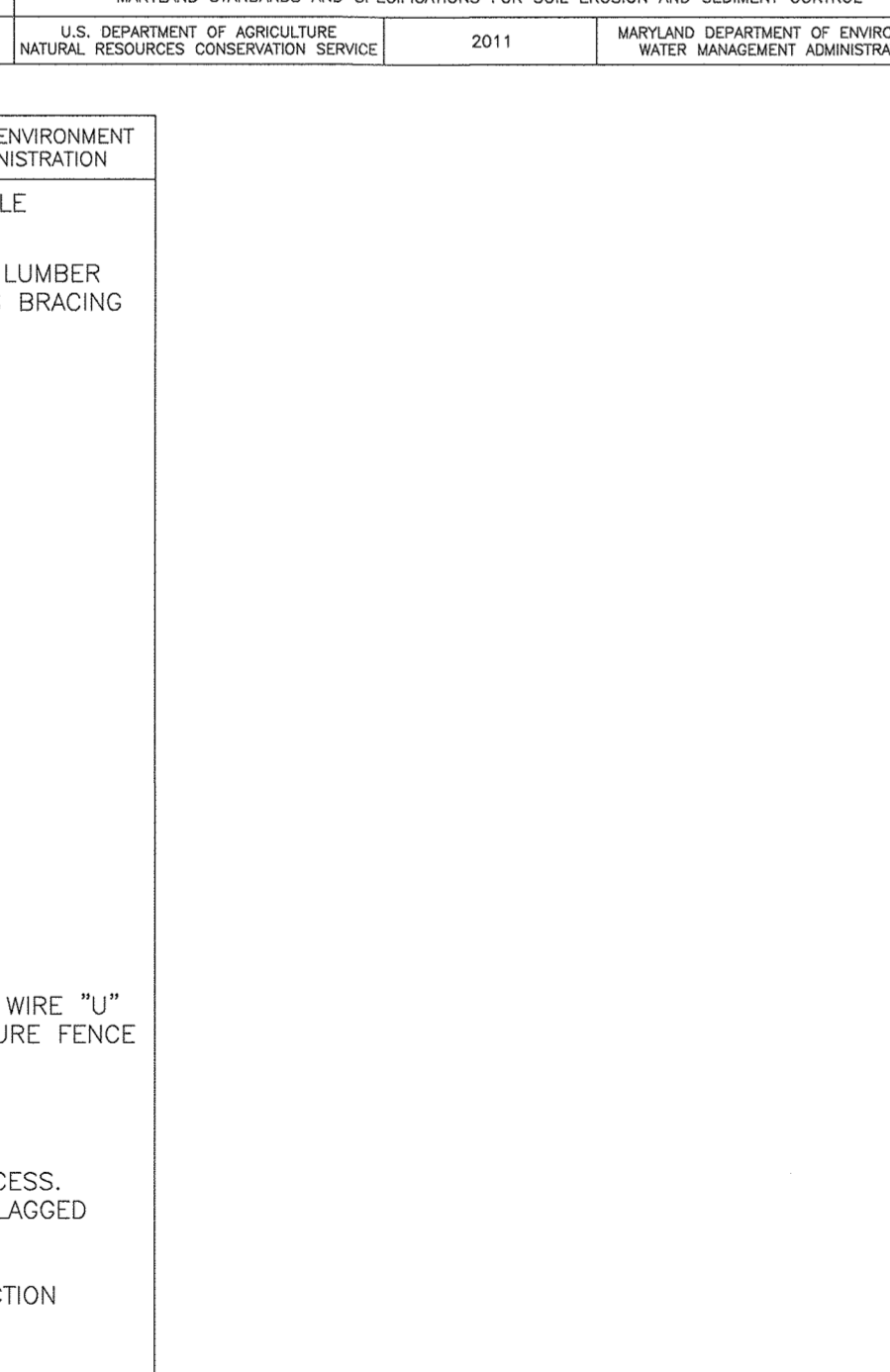
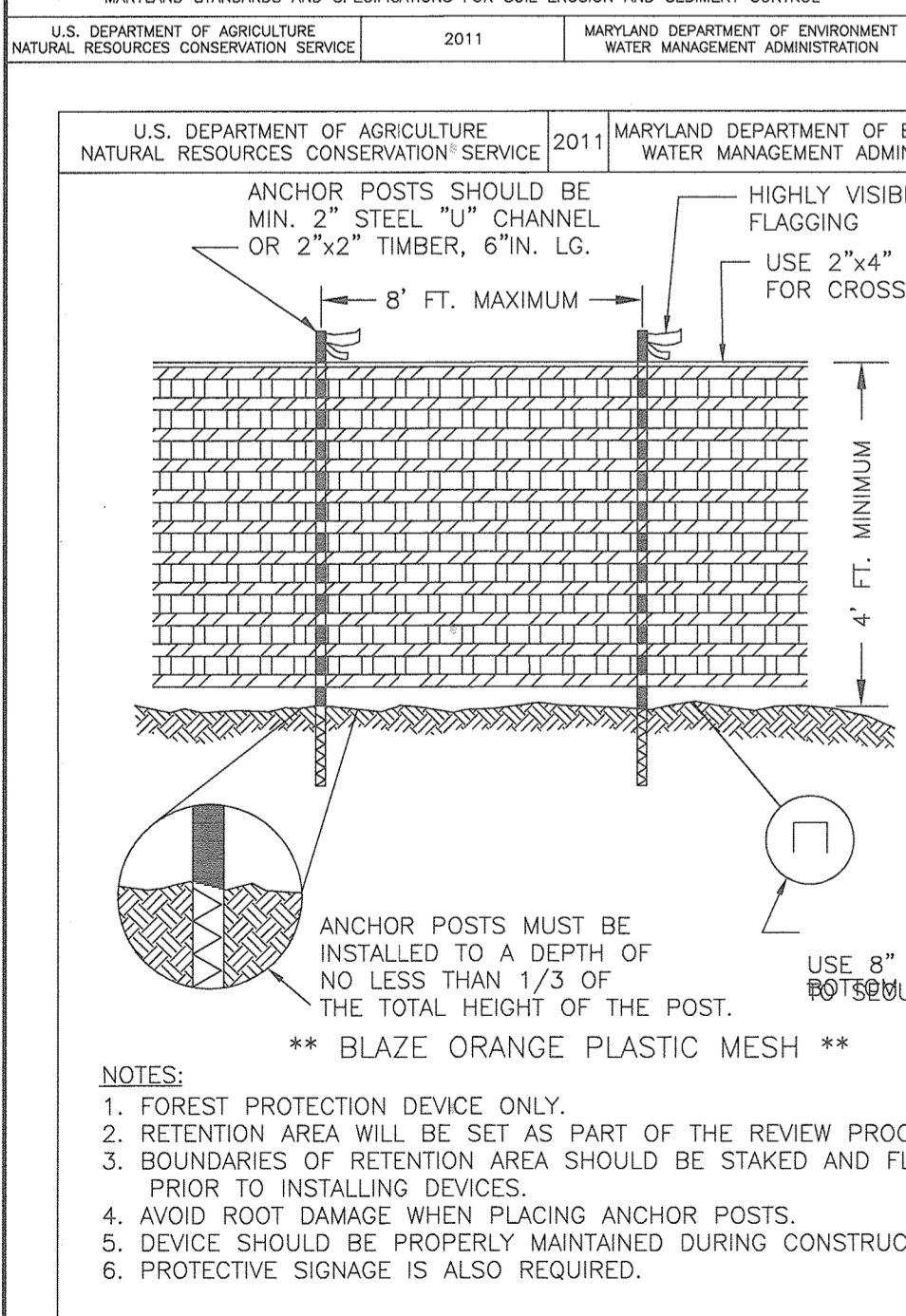
TENTATIVELY APPROVED  
 DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY  
*[Signature]*  
 PLANNING DIRECTOR  
 DATE: 8/12/19



MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL	
NATURAL RESOURCES CONSERVATION SERVICE	2011
U.S. DEPARTMENT OF AGRICULTURE	MARYLAND DEPARTMENT OF ENVIRONMENT
NATURAL RESOURCES CONSERVATION SERVICE	WATER MANAGEMENT ADMINISTRATION



MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL	
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MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL	
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NATURAL RESOURCES CONSERVATION SERVICE	WATER MANAGEMENT ADMINISTRATION

DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY  
 TENTATIVELY APPROVED  
 PLANNING DIRECTOR  
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MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL	
NATURAL RESOURCES CONSERVATION SERVICE	2011
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**ELKRISE HILL**  
 LOTS 1-7 AND OPEN SPACE LOT 8  
 TAX MAP: 38, GRID: 08, PARCEL: 198, ZONED: R-12  
 6289 OLD WASHINGTON ROAD  
 ELKRISE, MD 21075  
 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND

PRELIMINARY PLAN  
 SEDIMENT AND EROSION CONTROL NOTES AND DETAILS  
 DATE: AUGUST, 2019  
 BEI PROJECT NO: 2818  
 SHEET 10 OF 11



SCHEDULE A PERIMETER LANDSCAPE EDGE						
CATEGORY	ADJACENT TO ROADWAY		ADJACENT TO PERIMETER PROPERTIES			
	YES	NO	YES	NO		
PERIMETER NO.	P-1	P-2	P-3	P-4		
LANDSCAPE TYPE	NONE	A	A	A		
	0	1:60	1:60	1:60		
LINEAR FEET OF PERIMETER (FRONTAGE/ROADWAY)	-	533.6	189.6	533.3		
	-	0	0	0		
CREDIT FOR EXISTING VEGETATION: NO OR YES (W/LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO		
	-	-	-	-		
CREDIT FOR WALL, FENCE, OR BERM: NO OR YES (W/LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO		
	-	-	-	-		
NUMBER OF PLANTS REQUIRED:					TOTALS	
	SHADE TREES	0	8.9	3.2	8.9	21
	EVERGREEN TREES	0	0	0	0	0
	OTHER TREES (2:1 SUBSTITUTE)	0	0	0	0	0
	SHRUBS	0	0	0	0	0

\* A SUBSTITUTION OF 4 SHADE TREES TO 8 EVERGREEN TREES WILL BE PROPOSED FOR SCREENING OF LOT 1 EASTERN SIDE YARD  
 \* A SUBSTITUTION OF 4 SHADE TREES TO 8 EVERGREEN TREES WILL BE PROPOSED FOR SCREENING OF LOT 3 SOUTHERN SIDE YARD

**LANDSCAPING NOTES**

- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL.
- THE LANDSCAPING SHOWN ON THIS PLAN IS PICTORIAL FOR REQUIREMENT PURPOSES ONLY. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING IN THE AMOUNT OF \$6,500 FOR 21 SHADE TREES, SHALL BE POSTED IN ACCORDANCE WITH THE APPROVED FINAL LANDSCAPE PLAN, UNDER THE SUBSEQUENT FINAL PLAN OR SITE DEVELOPMENT PLAN. SURETY FOR STREET TREES SHALL BE POSTED WITH THE DEVELOPER'S AGREEMENT.
- THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND 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 OTHER 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 HERewith LISTED 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 REQUIRED PLANTINGS 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 RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.
- NO CREDIT IS TAKEN FOR THE RETAINED WOODED AREA AT THE SOUTHERN MOST CORNER.

STREET TREES		
165'	SMALL TREE 1:30'	6

\* SMALL TREES ARE REQUIRED DUE TO THE BGE GREEN AND YELLOW ZONES.

**FOREST CONSERVATION WORKSHEET**  
VERSION 1.0  
(Enter in Yellow Cells)

NET TRACT AREA:

A. Total tract area.....=	2.40
B. Area within 100 year floodplain.....=	0.00
C. Area to remain in agricultural production.....=	0.00
D. Net tract area.....=	2.40

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

Input the number "1" under the appropriate land use zoning, and limit to only one entry.

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

E. Afforestation Threshold.....=	15% x D =	0.40
F. Conservation Threshold.....=	20% x D =	0.50

EXISTING FOREST COVER:

G. Existing forest cover (excluding floodplain).....=	1.10
H. Area of forest above afforestation threshold.....=	0.70
I. Area of forest above conservation threshold.....=	0.60

BREAK EVEN POINT (BEP):

J. Forest retention above threshold with no mitigation (BEP).....=	0.60
K. Clearing permitted without mitigation.....=	0.50

PROPOSED FOREST CLEARING:

L. Total area of forest to be cleared.....=	1.10
M. Total area of forest to be retained.....=	0.00

PLANTING REQUIREMENTS:

N. Reforestation for clearing above conservation threshold.....=	0.20
P. Reforestation for clearing below conservation threshold.....=	1.00
Q. Credit for retention above conservation threshold.....=	0.00
R. Total reforestation required.....=	1.20
S. Total afforestation required.....=	0.00
T. Total reforestation and afforestation required.....=	1.20

**LEGEND**

- SOILS CLASSIFICATION: *MaD*
- SOILS DELINEATION: [Symbol]
- EXISTING WOODS LINE: [Symbol]
- PROPOSED WOODS LINE: [Symbol]
- EXISTING STRUCTURE: [Symbol]
- BGE PLANTING ZONE: GREEN: [Symbol]
- BGE PLANTING ZONE: YELLOW: [Symbol]

NO. DATE REVISION		
OWNER/DEVELOPER: HARMONY BUILDERS INC 4228 COLUMBIA ROAD ELLICOTT CITY, MD 21042 410-461-0833		<b>ELKRISE HILL</b> LOTS 1-7 AND OPEN SPACE LOT 8 TAX MAP: 38, GRID: 08, PARCEL: 198, ZONED: R-12 6289 OLD WASHINGTON ROAD ELKRISE, MD 21075 ELECTION DISTRICT NO. 1 - HOWARD COUNTY, MARYLAND
RELEVANT FILE NUMBERS: ECP-18-026, S-18-004, WP-19-079, & HPC-18-06		PRELIMINARY PLAN LANDSCAPE PLAN & FOREST CONSERVATION WORKSHEET
DESIGN: JC	DRAWN: MP	DATE: AUGUST, 2019 BEI PROJECT NO: 2818 SCALE: AS SHOWN SHEET 11 OF 11

TENTATIVELY APPROVED  
 DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY  
  
 PLANNING DIRECTOR  
 8-19-19 DATE

