

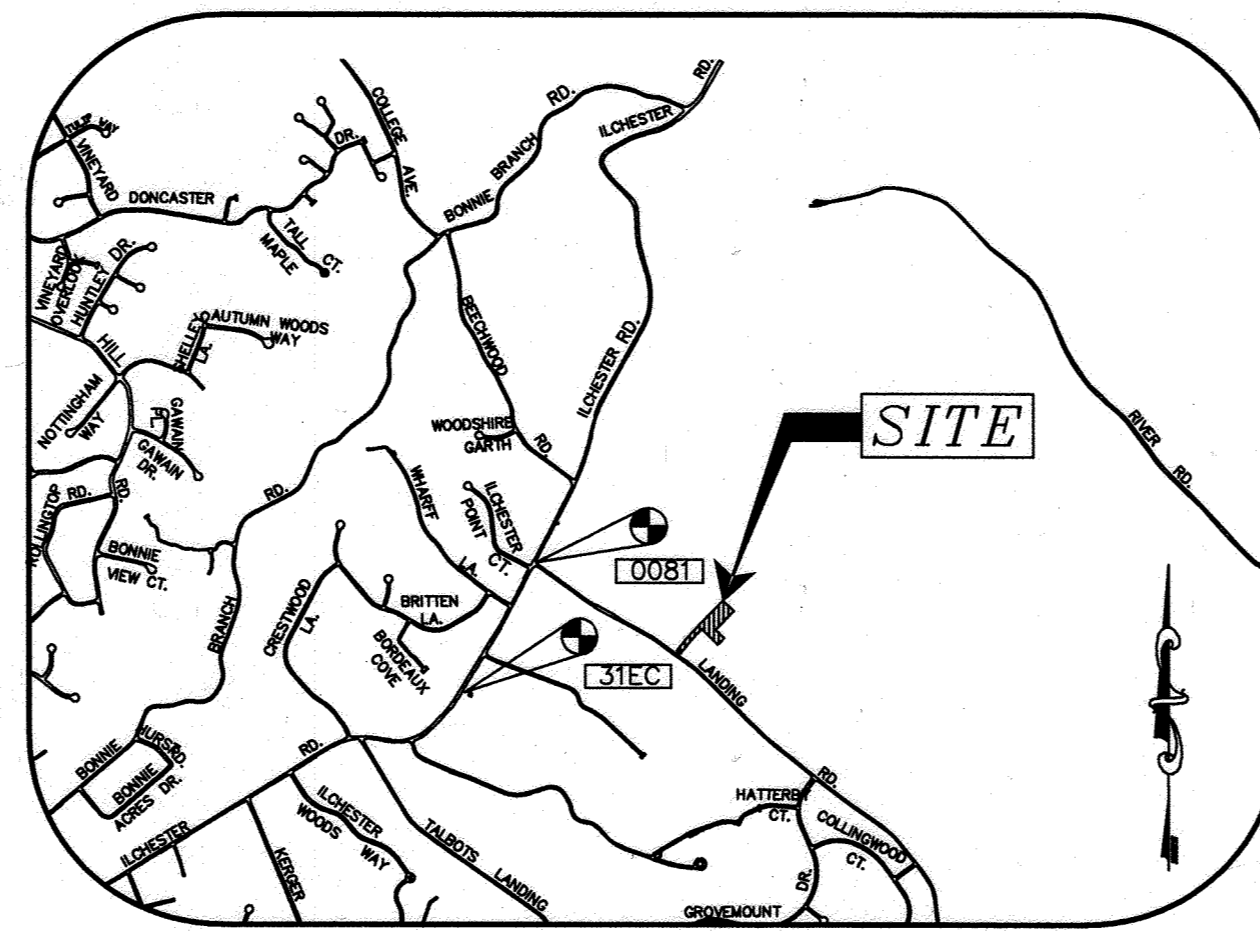
**INDEX OF DRAWINGS**

NO.	DESCRIPTION
1	COVER SHEET
2	SITE DEVELOPMENT AND LANDSCAPE PLAN
3	DETAILS AND SPECIFICATIONS
4	SEDIMENT CONTROL NOTES AND DETAILS

**ADDRESS CHART**

LOT #	ADDRESS
5	5013 LANDING ROAD
6	5015 LANDING ROAD
7	5017 LANDING ROAD

# SITE DEVELOPMENT PLAN BAUGHAN PROPERTY LOTS 5 THRU 7 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

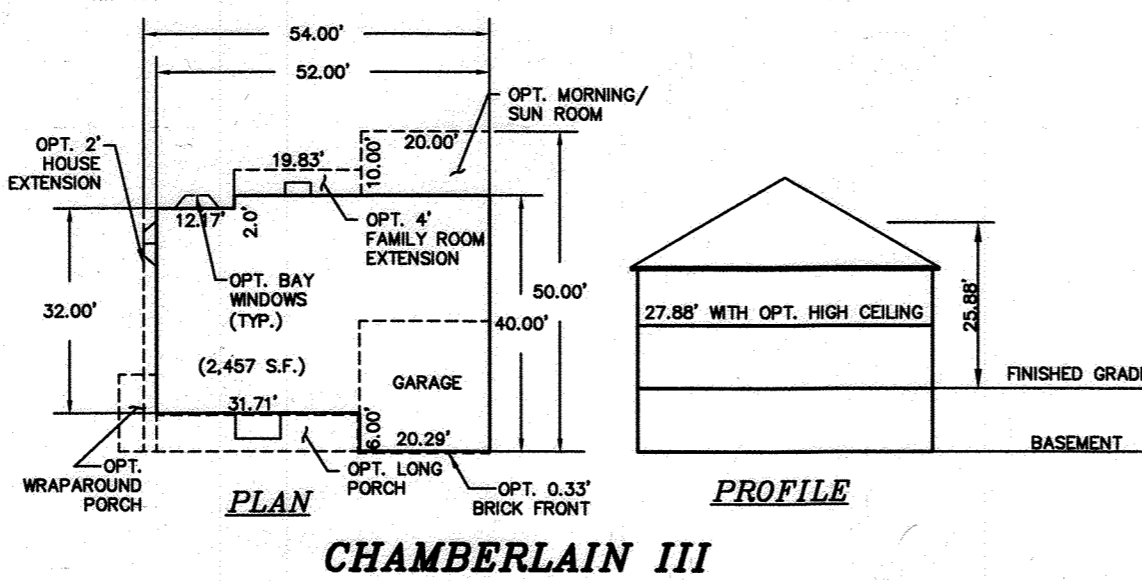


**VICINITY MAP**  
SCALE: 1" = 2000'  
ADC MAP 11, GRID B2

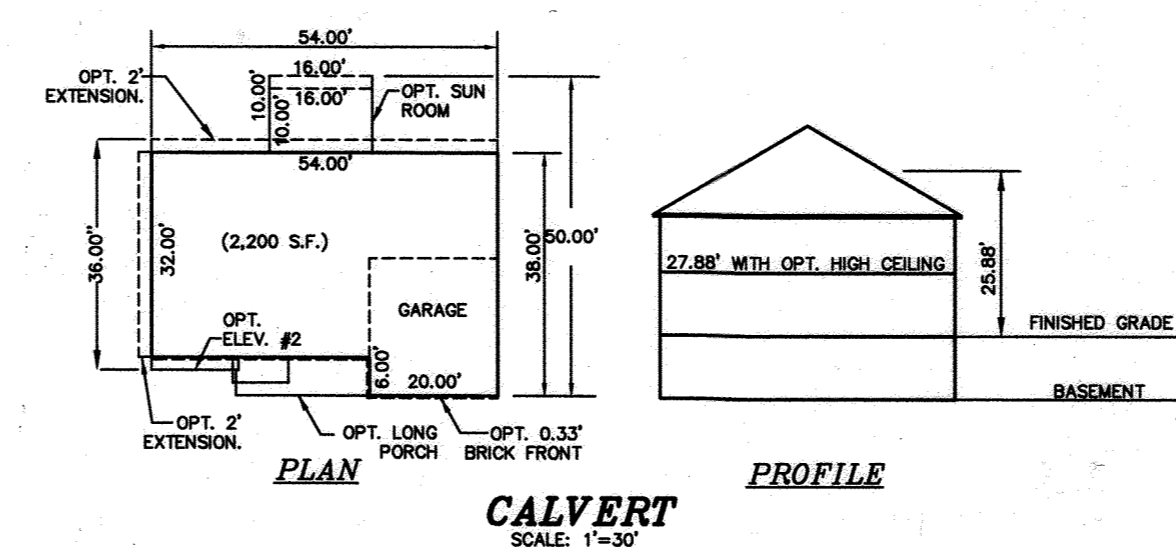
MIHU TRACKING CHART	
TOTAL NUMBER OF LOTS/UNITS	3
NUMBER OF MIHU REQUIRED	0
NUMBER OF MIHU PROVIDED ON-SITE (EXEMPT FROM APFO ALLOCATIONS)	0
NUMBER OF APFO ALLOCATION REQUIRED (REMAINING LOTS/UNITS)	0
MIHU FEE-IN-LIEU (INDICATED LOT/UNIT NUMBERS)	5-7

**OWNER/DEVELOPER**

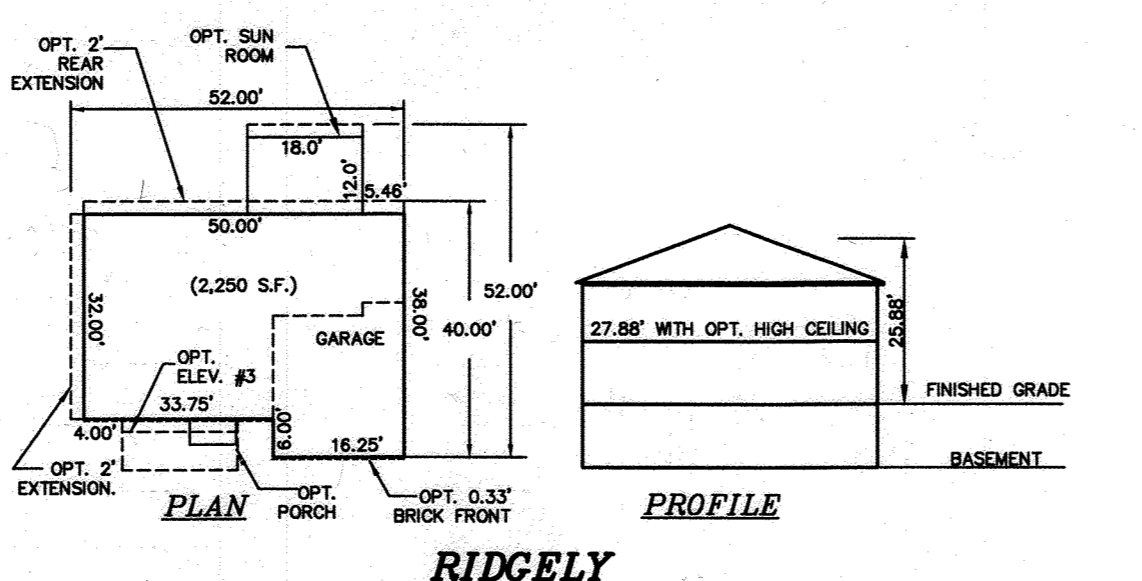
DORSEY FAMILY HOMES, INC.  
10717 BIRMINGHAM WAY  
WOODSTOCK, MARYLAND 21163  
(410)465-5739



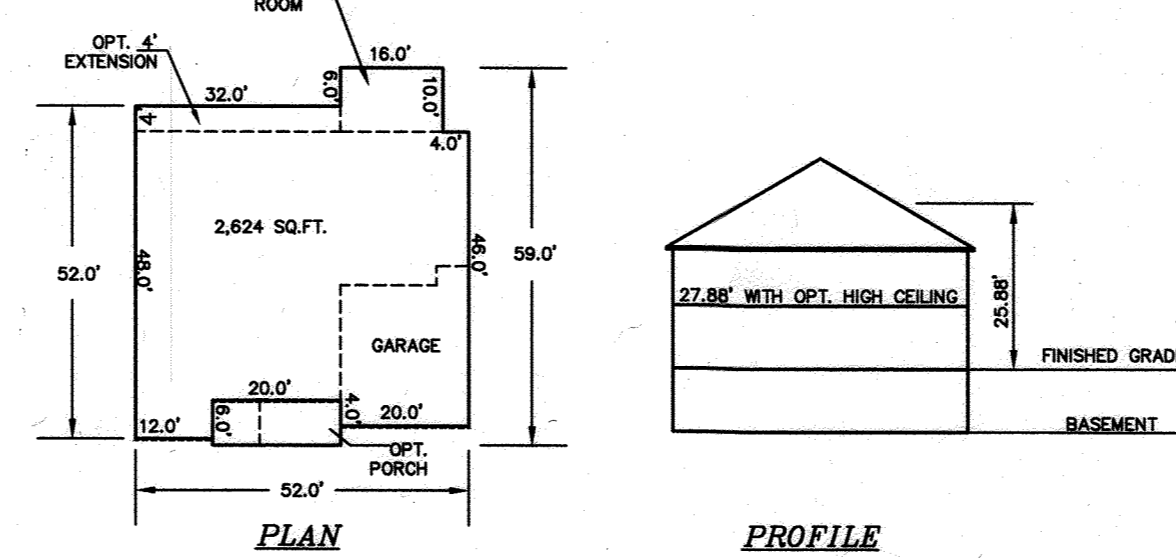
**CHAMBERLAIN III**  
SCALE: 1"=30'



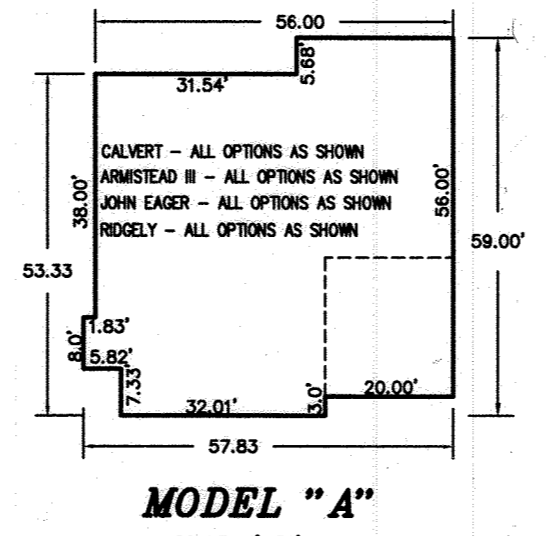
**CALVERT**  
SCALE: 1"=30'



**RIDGELY**  
SCALE: 1"=30'



**JOHN EAGER**  
SCALE: 1"=30'



**MODEL "A"**  
SCALE: 1"=30'

**NOTE:**  
1. HOUSE AREA SHOWN INCLUDES ALL OPTIONS.

**GENERAL NOTES**

- SUBJECT PROPERTY ZONED R-ED AS PER THE OCTOBER 6, 2013 HOWARD COUNTY ZONING REGULATIONS.
- ALL ASPECTS OF THE PROJECT ARE IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS.
- SITE ANALYSIS DATA:**  
ADDRESS: 5003 LANDING ROAD, ELK RIDGE, MD 21075  
LOCATION: TAX MAP - 31 PARCEL: 758 GRID 11  
ELECTION DISTRICT: FIRST  
DEED REFERENCE: 1717/00053  
PREVIOUS DPZ FILE NUMBERS: ECP-13-004, F-13-077, WP-14-075, ECP-18-032, F-19-023, WP-19-022  
PROPOSED USE FOR SITE: RESIDENTIAL  
TOTAL NUMBER OF UNITS: 3  
TYPE OF PROPOSED UNIT: SFD  
TOTAL AREA: 2.01 ACRES  
AREA OF FLOODPLAIN: 3.162 S.F. (0.07 ACRES)  
NET TRACT AREA: 1.94 ACRES  
NUMBER OF BUILDABLE LOTS: 3
- THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY MILDBERG, BOENDER & ASSOCIATES ON OR ABOUT MARCH 2012.
- COORDINATES BASED ON NAD '83 (HORIZONTAL) AND NAD '88 (VERTICAL) MARYLAND COORDINATE SYSTEM AS PROVIDED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 0081 & 31EC.  
STA. No. 0081 EL. 477.89, N 572335.3648, E 1377504.0126  
STA. No. 31EC EL. 477.73, N 570387.0462, E 1376436.6974
- PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT.
- THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS (COUNTY BILL 45-2003). DEVELOPMENT OR CONSTRUCTION OF THESE LOTS MUST COMPLY WITH THE SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION APPLICATION, OR BUILDING/GRADING PERMIT.
- FOREST STAND AND WETLAND DELINEATIONS ARE BASED ON A STUDY PERFORMED BY ECO-SOURCE PROFESSIONALS IN OCTOBER 2012, UPDATED IN JANUARY, 2019 UNDER F-19-023.
- 100-YEAR FLOODPLAIN DELINEATION BASED ON A STUDY PREPARED BY MILDBERG, BOENDER, & ASSOCIATES, INC. IN SEPTEMBER 2018, UNDER F-19-023.
- SOIL DELINEATION IS BASED ON HOWARD COUNTY SOIL SURVEY MAP 2003.
- NO EXISTING STRUCTURES EXIST ON-SITE. THE 1920 HISTORIC HOUSE HAD A LOG CABIN WITHIN THE INTERIOR OF THE HOUSE THAT WAS DOCUMENTED IN 2017 BY THE COUNTY'S ARCHITECTURAL HISTORIAN. THE HOUSE WAS DEMOLISHED IN 2019.
- SLOPES GREATER THAN 25% DO NOT EXIST ON SITE.
- NO BURIAL GROUNDS OR CEMETERIES EXIST ON SITE.
- SITE IS ADJACENT TO A DESIGNATED SCENIC ROAD.
- LOTS 5 THROUGH 7 WILL BE SERVED BY A PRIVATE USE-IN-COMMON DRIVEWAY. DESIGN MANUAL WAIVER REQUEST TO SECTION 2.6.B OF VOLUME II WAS APPROVED ON JULY 12, 2018 BY DED/DPW TO ALLOW CONSTRUCTION OF USE-IN-COMMON DRIVEWAY IN LIEU OF A PUBLIC ROAD THROUGH THE 100-YEAR FLOODPLAIN.
- FOREST CONSERVATION, IN ACCORDANCE WITH SECTION 16.1202 OF THE FOREST CONSERVATION MANUAL WAS PROVIDED UNDER F-19-023.
- THE CONSTRUCTION THROUGH THE STREAM, STREAM BUFFER, AND 100-YEAR FLOODPLAIN IS CONSIDERED "NECESSARY DISTURBANCE" PER SECTION 16.1161(O)(IV) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AS NO ACCESS TO THE PROPERTY CAN BE ATTAINED WITHOUT DOING SO.
- FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING (37 SHADE TREES, 48 EVERGREEN TREES AND AN ADDITIONAL 4 SHADE TREES PROVIDED AS A CONDITION OF THE APPROVED WAIVER WP-19-022) IN THE AMOUNT OF \$19,500.00 IS TO BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT.
- STORMWATER MANAGEMENT IS PROVIDED BY M-5 DRY WELLS AND M-6 MICRO-BIORETENTION FACILITIES IN ACCORDANCE WITH THE 2007 MARYLAND STORMWATER DESIGN MANUAL. ALL SWM FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED. SWM FOR THIS PROJECT WAS APPROVED UNDER F-19-023.
- 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 SUBSTITUTION OR REDUCTION 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 THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.
- OPEN SPACE REQUIREMENTS FOR THIS PROJECT WERE PROVIDED UNDER F-19-023.
- THIS R-ED ZONED SUBDIVISION IS BEING DEVELOPED UNDER THE R-20 REGULATIONS IN ACCORDANCE WITH SECTION 107.01.1 OF THE ZONING REGULATIONS. LAND DEVELOPED PURSUANT TO THIS SECTION IS NOT SUBJECT TO THE R-ED DISTRICT REGULATIONS, INCLUDING THE REQUIREMENT FOR PLANNING BOARD REVIEW.
- A PRIVATE RANGE OF ADDRESS SIGN SHALL BE FABRICATED AND INSTALLED BY THE HOWARD COUNTY BUREAU OF HIGHWAYS AT THE DEVELOPER'S / OWNER'S EXPENSE. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT 410-313-2430 FOR DETAILS AND COST ESTIMATE.
- RESIDENTIAL DRIVEWAY ENTRANCE, HOWARD COUNTY STANDARDS R-6.06 ARE TO BE USED.
- 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.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MARYLAND STATE HIGHWAY ADMINISTRATION 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.
- EXISTING UTILITIES ARE BASED ON AS-BUILT PLANS FOR WATER AND SEWER CONTRACTS AND ARE VERIFIED BY FIELD RUN SURVEY CONDUCTED BY MILDBERG, BOENDER & ASSOC., INC.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST 48 HOURS PRIOR TO EXCAVATION WORK BEING DONE:  
MISS UTILITY 800-257-7777  
VERIZON TELEPHONE COMPANY (410) 725-7976  
HOWARD COUNTY BUREAU OF UTILITIES (410) 313-4900  
AT&T CABLE LOCATION DIVISION (410) 393-3533  
BALTIMORE GAS AND ELECTRIC (410) 685-0123  
STATE HIGHWAY ADMINISTRATION (410) 531-5533
- NO NOISE OR TRAFFIC STUDIES ARE REQUIRED FOR THIS PROJECT.
- A PRE-SUBMISSION COMMUNITY MEETING WAS HELD FOR THIS PROJECT ON APRIL 23, 2018 AT THE ELK RIDGE LIBRARY AT 6:00 PM.
- A TOTAL OF FIVE (5) SPECIMEN TREES EXIST ON-SITE. TWO TREES ARE PROPOSED TO BE REMOVED AND THREE TREES ARE PROPOSED TO REMAIN. THIS PLAN IS SUBJECT TO WP-19-022, SEEKING AN ALTERNATIVE COMPLIANCE TO SECTIONS 16.1205(a)(7) WHICH STATES THAT STABLE AND DIAMETER OF THE TREE SHALL BE THE DIAMETER OF STATE CHAMPION TREES AND TREES 30" IN DIAMETER OR LARGER SHALL BE LEFT IN AN UNDISTURBED CONDITION DURING CONSTRUCTION. THIS ALTERNATIVE COMPLIANCE WAS APPROVED ON OCTOBER 10, 2018, SUBJECT TO THE FOLLOWING CONDITIONS:  
1. ADD THE ALTERNATIVE COMPLIANCE PETITION WP-19-022, ON F-19-023, BAUGHAN PROPERTY AS A GENERAL NOTE STATING THE REQUEST, THE APPROVAL DATE AND CONDITIONS.  
2. SHOW THE 2-SPECIMEN TREES BEING REMOVED AND LABELED PER WP-19-022 ON THE SUPPLEMENTAL PLAN. THE SPECIMEN TREE REMOVAL WILL BE MITIGATED BY THE 2 TO 1 PLANTING OF 4 PERIMETER LANDSCAPE TREES OF 2 1/2" TO 3" CALIPER NATIVE TREES.  
3. THE APPLICANT SHALL TAKE THE NECESSARY STEPS TO PROTECT THE THREE REMAINING SPECIMEN TREES DURING THE CONSTRUCTION ACTIVITY TO PROTECT THEM AND THEIR CRITICAL ROOT ZONES.  
34. FOR FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND ROAD RIGHT-OF-WAY LINE AND NOT ONTO THE PIPESTEM LOT DRIVEWAY.  
35. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.  
36. IN ACCORDANCE WITH SECTION 128.0 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACK, PORCHES OR DECKS, OPEN OR ENCLOSED, MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.  
37. DRIVEWAYS 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 (18 FEET SERVING MORE THAN ONE RESIDENCE, A WIDER WIDTH MAY BE REQUIRED IN CERTAIN CASES-SEE NOTE 17).  
B) SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2").  
C) GEOMETRY - MAX. 15% GRADE, MAX. 10% GRADE CHANGE AND MIN. OF 45 FOOT TURNING RADIUS.  
D) STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING).  
E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD PLAIN WITH NO MORE THAN 1 FOOT OF DEPTH OVER DRIVEWAY SURFACE.  
F) STRUCTURE CLEARANCES - MINIMUM 12 FEET.  
G) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
- PER SECTION 16.127 OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, THIS SUBDIVISION IS CONSIDERED TO BE AN INFILL DEVELOPMENT.
- SEWER HOUSE CONNECTIONS SHOWN ARE LOCATED AT THE PROPERTY LINE.
- WATER AND SEWER ARE PUBLIC. SEWER CONTRACT 14-4080-D AND WATER W-8305.

**PERMIT INFORMATION BLOCK**

SUBDIVISION NAME:		SECTION/AREA:		PARCEL:	
BAUGHAN PROPERTY, LOTS 5-7		N/A		758	
PLAT NO.	BLOCK(S)	ZONING	TAX MAP NO.	ELECTION DISTRICT	CENSUS TRACT
25591-92	11	R-ED	31	FIRST	601104

LOTS 5-7 IN THIS PROJECT ARE SUBJECT TO THE MODERATE INCOME HOUSING UNIT (MIHU) FEE-IN-LIEU REQUIREMENT THAT IS TO BE CALCULATED AND PAID TO THE DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS AT THE TIME OF BUILDING PERMIT ISSUANCE BY THE PERMIT APPLICANT.

**ENGINEER'S CERTIFICATE**  
I 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 IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

\_\_\_\_\_  
SIGNATURE OF ENGINEER  
SAMER A. ALOMER P.E.  
PRINTED NAME OF ENGINEER

2/24/21  
DATE

---

**DEVELOPER'S CERTIFICATE**  
I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. HOWARD SOIL CONSERVATION DISTRICT IS AUTHORIZED TO CONDUCT PERIODIC ON-SITE INSPECTION.

\_\_\_\_\_  
SIGNATURE OF DEVELOPER  
ROBERT WISSEMAN JR.  
PRINTED NAME OF DEVELOPER

2/24/21  
DATE

---

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

\_\_\_\_\_  
HOWARD SOIL CONSERVATION DISTRICT

03/08/21  
DATE

---

APPROVED: DEPARTMENT OF PLANNING AND ZONING

\_\_\_\_\_  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

4.1.21  
DATE

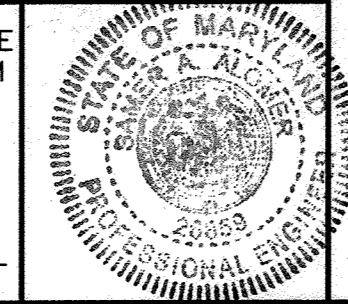
\_\_\_\_\_  
CHIEF, DIVISION OF LAND DEVELOPMENT

4/22/21  
DATE

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. 26859, EXP DATE 08/08/21

\_\_\_\_\_  
SAMER A. ALOMER P.E.

2/24/21  
DATE



date	FEB. 2021	approval	RH
project	17-001	scale	1"=30'
illustration	MM	description	
	MM	revisions	

date		approval	
project		scale	
illustration		description	
		revisions	

**COVER SHEET**

BAUGHAN PROPERTY  
LOTS 5 THRU 7  
TAX MAP 31, GRID 11, PARCEL 758  
HOWARD COUNTY, MARYLAND  
FIRST ELECTION DISTRICT

**MILDBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
7350-B Grace Drive, Columbia, Maryland 21044  
(410) 997-0296 Tel. (410) 997-0296 Fax.

**SCHEDULE A: PERIMETER LANDSCAPED EDGE**

CATEGORY	ADJACENT TO PERIMETER PROPERTIES						ADJACENT TO ROADWAYS	TOTAL
	B (PERIMETER 1)	B (PERIMETER 2)*	B (PERIMETER 3)**	B (PERIMETER 4)	B (PERIMETER 5)**	B (PERIMETER 6)***		
LINEAR FEET OF PERIMETER	711.50 LF	158.03 LF	270.00 LF	127.97 LF	94.50 LF	231.30 LF	338.09 LF	50.00 LF
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) OR # OF TREES	NO	NO	NO	NO	1 SHADE TREE	1 SHADE TREE	NO	N/A
CREDIT FOR WALL, FENCE, OR BERM (YES, NO, LINEAR FEET)	NO	NO	NO	NO	NO	NO	NO	N/A
NUMBER OF PLANTS REQUIRED	14 SHADE TREES 18 EVERGREEN TREES 0 SHRUBS	3 SHADE TREES 4 EVERGREEN TREES 0 SHRUBS	5 SHADE TREES 7 EVERGREEN TREES 0 SHRUBS	3 SHADE TREES 3 EVERGREEN TREES 0 SHRUBS	2 SHADE TREES 2 EVERGREEN TREES 0 SHRUBS	5 SHADE TREES 6 EVERGREEN TREES 0 SHRUBS	7 SHADE TREES 8 EVERGREEN TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS
NUMBER OF PLANTS PROVIDED	14 SHADE TREES 18 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS (1:1 SUBSTITUTION)	3 SHADE TREES 4 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	5 SHADE TREES 7 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	3 SHADE TREES 3 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	2 SHADE TREES 2 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	5 SHADE TREES 6 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	7 SHADE TREES 8 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS
NUMBER OF PLANTS PROVIDED	14 SHADE TREES 18 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS (1:1 SUBSTITUTION)	3 SHADE TREES 4 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	5 SHADE TREES 7 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	3 SHADE TREES 3 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	2 SHADE TREES 2 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	5 SHADE TREES 6 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	7 SHADE TREES 8 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS

\* PERIMETER 3 - 4 SHADE TREES HAVE BEEN ADDED AS PER THE CONDITION OF WP-19-022.  
 \*\* PERIMETER 5 - CREDIT TAKEN FOR EX. 36" POPLAR TO REMAIN.  
 \*\*\* PERIMETER 6 - CREDIT TAKEN FOR EX. 40" ELM TO REMAIN.

**PERIMETER LANDSCAPE REQUIREMENT PLANTING SCHEDULE**

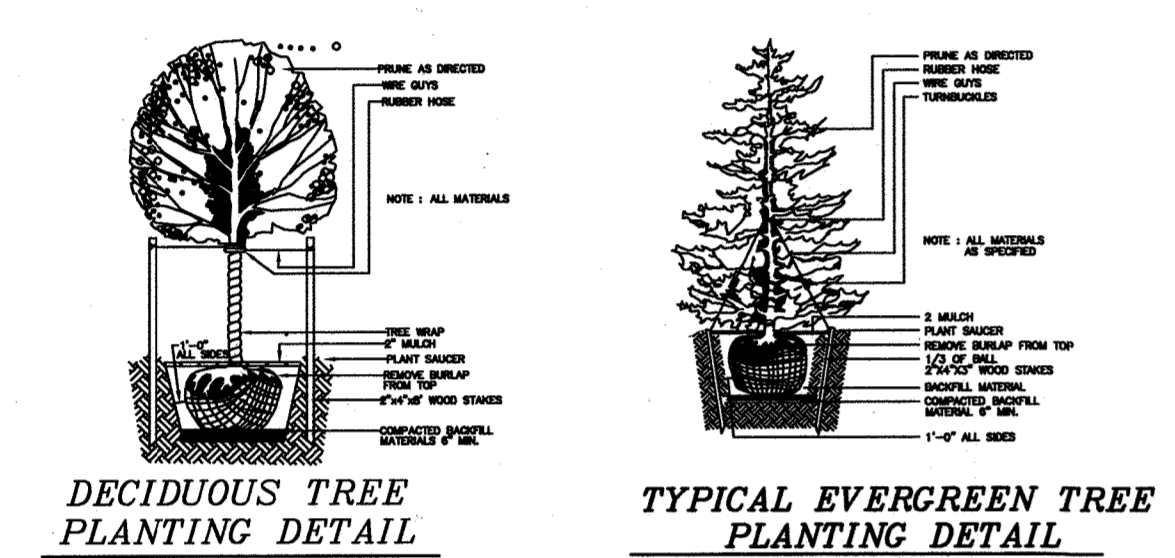
QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
18		RUBRUM 'RED SUNSET' OR EQUIVALENT AS OUTLINED IN THE HOWARD COUNTY LANDSCAPE MANUAL	RED SUNSET RED MAPLE OR EQUIVALENT	2.5"-3" CAL.
13		GLEDISIA TRIACANTHOS 'IMPERIAL' OR EQUIVALENT AS OUTLINED IN THE HOWARD COUNTY LANDSCAPE MANUAL	IMPERIAL THORNLESS HONEYLOCUST OR EQUIVALENT AS OUTLINED IN THE HOWARD COUNTY LANDSCAPE MANUAL	2.5"-3" CAL.
10		PRUNUS SARGENTII OR EQUIVALENT AS OUTLINED IN THE HOWARD COUNTY LANDSCAPE MANUAL	SARGENT CHERRY OR EQUIVALENT AS OUTLINED IN THE HOWARD COUNTY LANDSCAPE MANUAL	2.5"-3" CAL.
48		CUPRESSOCYPARIS LEYLANDI OR EQUIVALENT AS OUTLINED IN THE HOWARD COUNTY LANDSCAPE MANUAL	LEYLAND CYPRESS OR EQUIVALENT AS OUTLINED IN THE HOWARD COUNTY LANDSCAPE MANUAL	6"-8" HEIGHT
TOTAL				89 TREES (41 SHADE TREES, 48 EVERGREENS)

**TEMPORARY STONE OUTLET STRUCTURE #1**  
 DRAINAGE AREA: 13,200 S.F. (0.30 AC.)  
 TOTAL STORAGE REQUIRED: 540 C.F. (18000CF/AC.)  
 TOTAL STORAGE PROVIDED: 900 C.F.

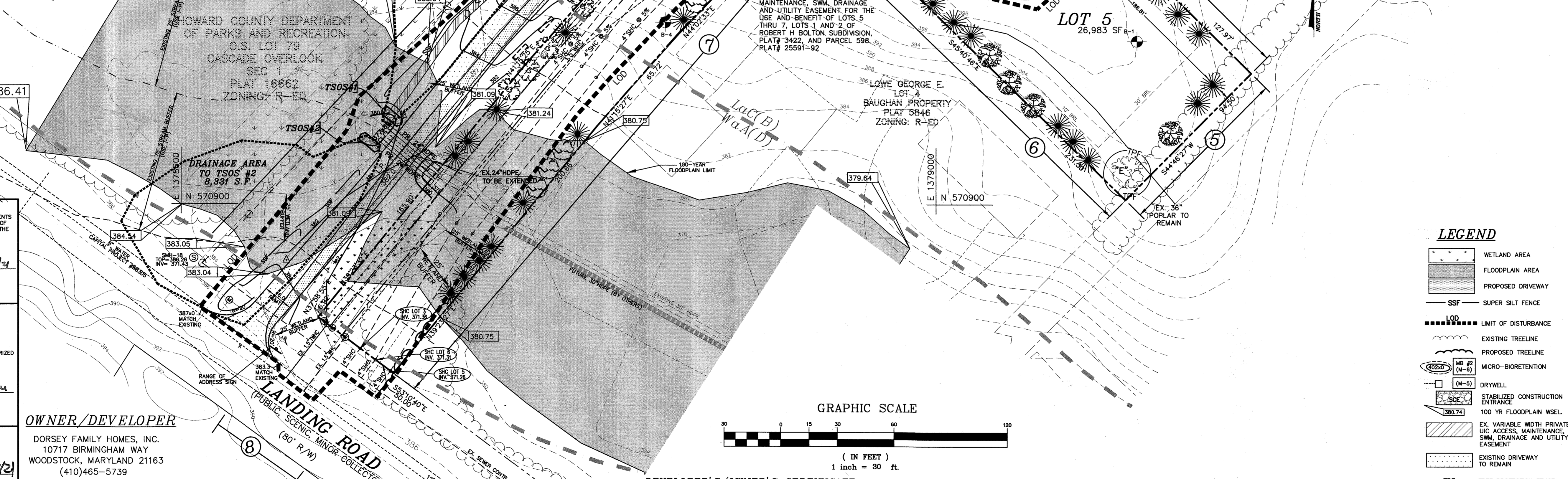
**TEMPORARY STONE OUTLET STRUCTURE #2**  
 DRAINAGE AREA: 8,331 S.F. (0.19 AC.)  
 TOTAL STORAGE REQUIRED: 342 C.F. (18000CF/AC.)  
 TOTAL STORAGE PROVIDED: 600 C.F.

**SOILS DESCRIPTION**

DESIGNATION	HYDROLOGICAL GROUP	DESCRIPTION
LoB	B	LAGORE SILT LOAM, 3 TO 8 PERCENT SLOPES
LoC	B	LAGORE SILT LOAM, 8 TO 15 PERCENT SLOPES
WaA	D	WATCHUNG SILT LOAM, 0 TO 3 PERCENT SLOPES



**EROSION CONTROL MATTING**  
 DRAINAGE AREA: 3 AC  
 SOIL GROUP: "D"  
 C FACTOR: 0.28  
 100 (5 MIN): 4.5  
 Q10 = CIA: 0.714 CFS  
 S (SLOPE): 3%  
 BOTTOM WIDTH: 1.5 FT  
 SIDE SLOPE: 3:1  
 V0 (VELOCITY): 2.2 CFS  
 R (HYDRAULIC RADIUS): 0.072 FT  
 Y (WATER WEIGHT DENSITY): 64.2 lb/c.f.  
 SHEAR STRESS = (V0/R)(S): 0.336 lb/c.f.



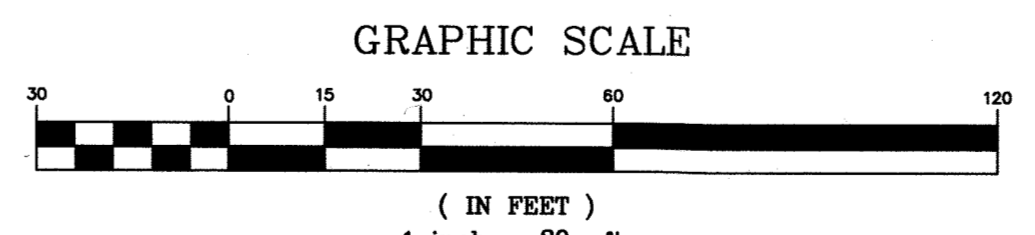
**ENGINEER'S CERTIFICATE**  
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.  
 SIGNATURE OF ENGINEER: *[Signature]* DATE: 2/24/24  
 SAMER A. ALOMER P.E.  
 PRINTED NAME OF ENGINEER

**DEVELOPERS CERTIFICATE**  
 I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. HOWARD SOIL CONSERVATION DISTRICT IS AUTHORIZED TO CONDUCT PERIODIC ON-SITE INSPECTION.  
 SIGNATURE OF DEVELOPER: *[Signature]* DATE: 2/24/24  
 PRINTED NAME OF DEVELOPER

**OWNER/DEVELOPER**  
 DORSEY FAMILY HOMES, INC.  
 10717 BIRMINGHAM WAY  
 WOODSTOCK, MARYLAND 21163  
 (410)465-5739

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. 26859, EXP DATE 08/08/21  
 SIGNATURE OF OWNER: *[Signature]* DATE: 2/24/24  
 SAMER A. ALOMER P.E.  
 PRINTED NAME OF OWNER

**DEVELOPER'S/OWNER'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, 1/4" FURTHER CERTIFY THAT UPON COMPLETION A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.  
 SIGNATURE OF DEVELOPER/OWNER: *[Signature]* DATE: 2/24/24



**LEGEND**

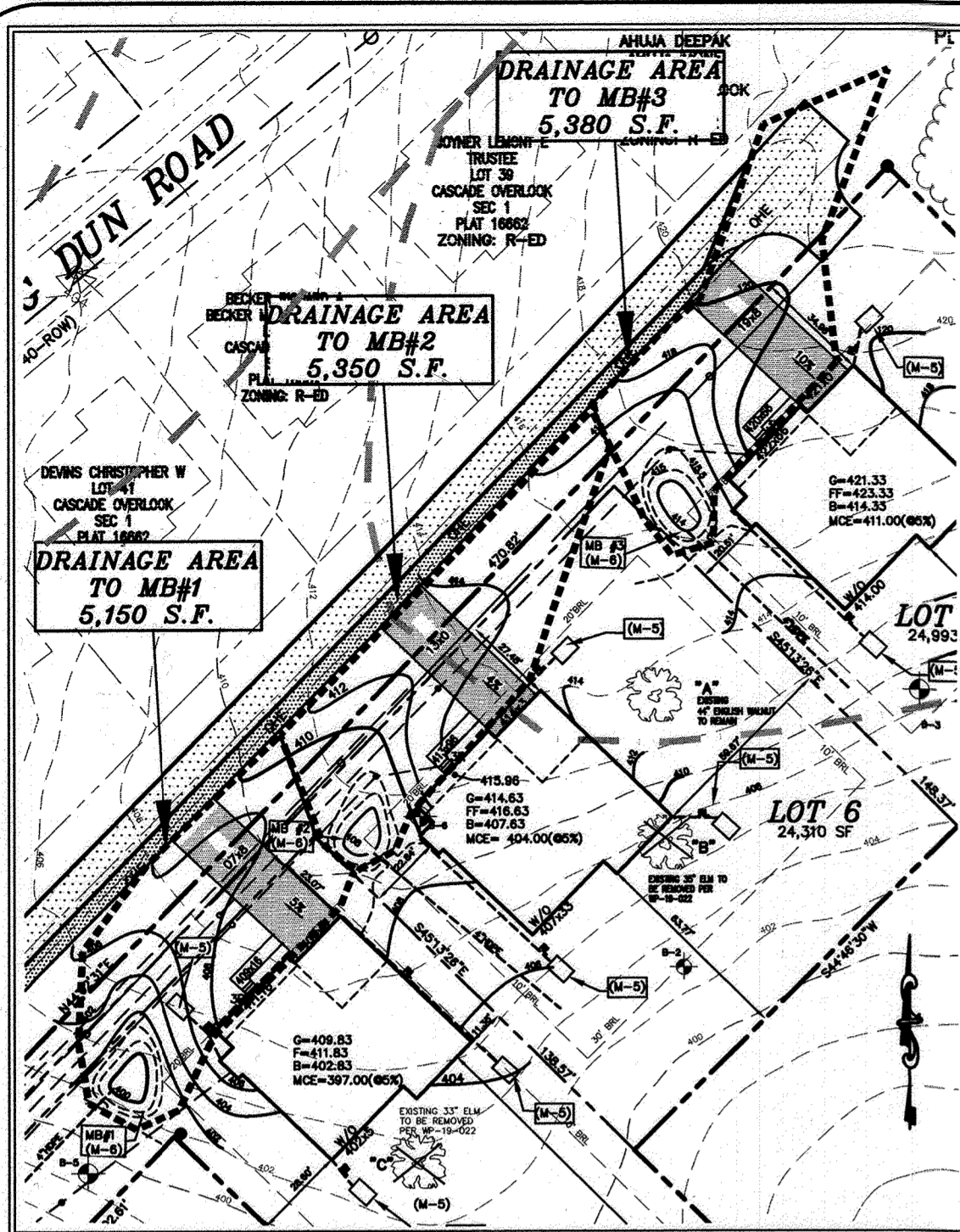
	WETLAND AREA
	FLOODPLAIN AREA
	PROPOSED DRIVEWAY
	SUPER SILT FENCE
	LIMIT OF DISTURBANCE
	EXISTING TREELINE
	PROPOSED TREELINE
	MICRO-BIORETENTMENT
	DRYWELL
	STABILIZED CONSTRUCTION ENTRANCE
	100 YR FLOODPLAIN WSEL
	EX. VARIABLE WIDTH PRIVATE LIC. ACCESS, MAINTENANCE, SWM, DRAINAGE AND UTILITY EASEMENT
	EXISTING DRIVEWAY TO REMAIN
	TREE PROTECTION FENCE
	TEMPORARY STONE OUTLET STRUCTURE

date	FEB. 2021	engineering	approval
project	17-001	illustration	MMM
revision		scale	1"=30'

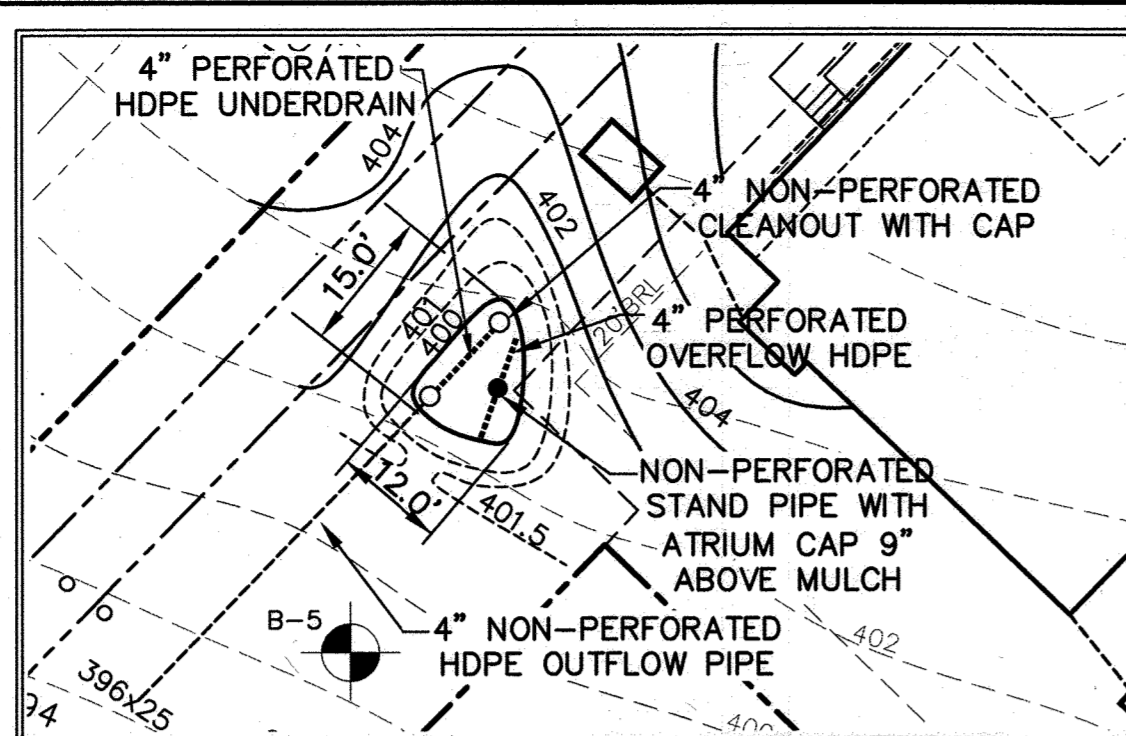
date	10/20/21	description	revisions
1		APPROXIMATE HOUSE MODEL CHANGES TO LOT 5, REWORK GRADING AND CONCEPTS FOR LOCATION OF SECONDARY 'TREE A'	

**BAUGHAN PROPERTY**  
 LOTS 5 THRU 7  
 TAX MAP 3L, GRID 1L, PARCEL 758  
 HOWARD COUNTY, MARYLAND  
 FIRST ELECTION DISTRICT  
 SITE DEVELOPMENT PLAN

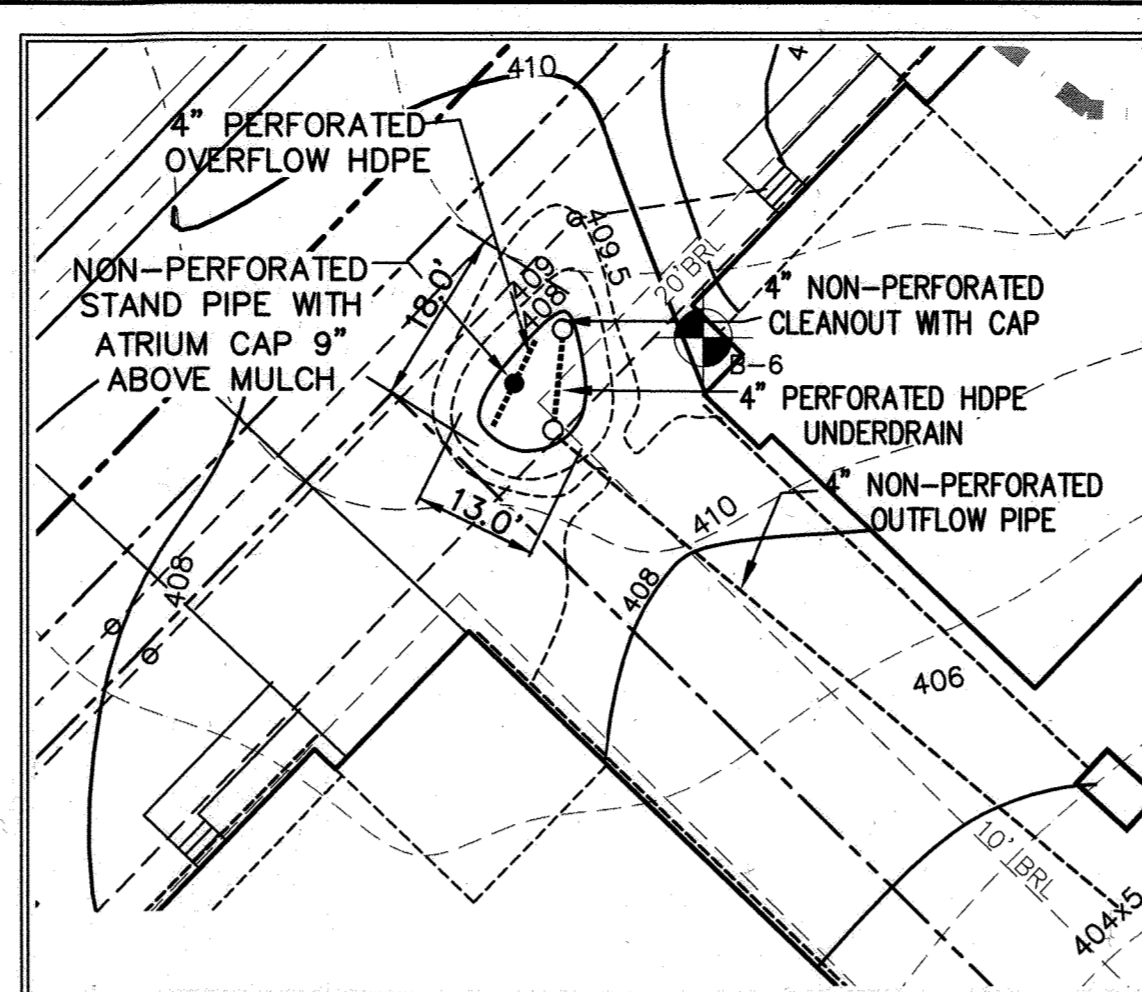
**MILDENBERG, BOENDER & ASSOC., INC.**  
 Engineers Planners Surveyors  
 7350-R Grace Drive, Columbia, Maryland, 21044  
 (410) 997-0296 Tel. (410) 997-0296 Fax.



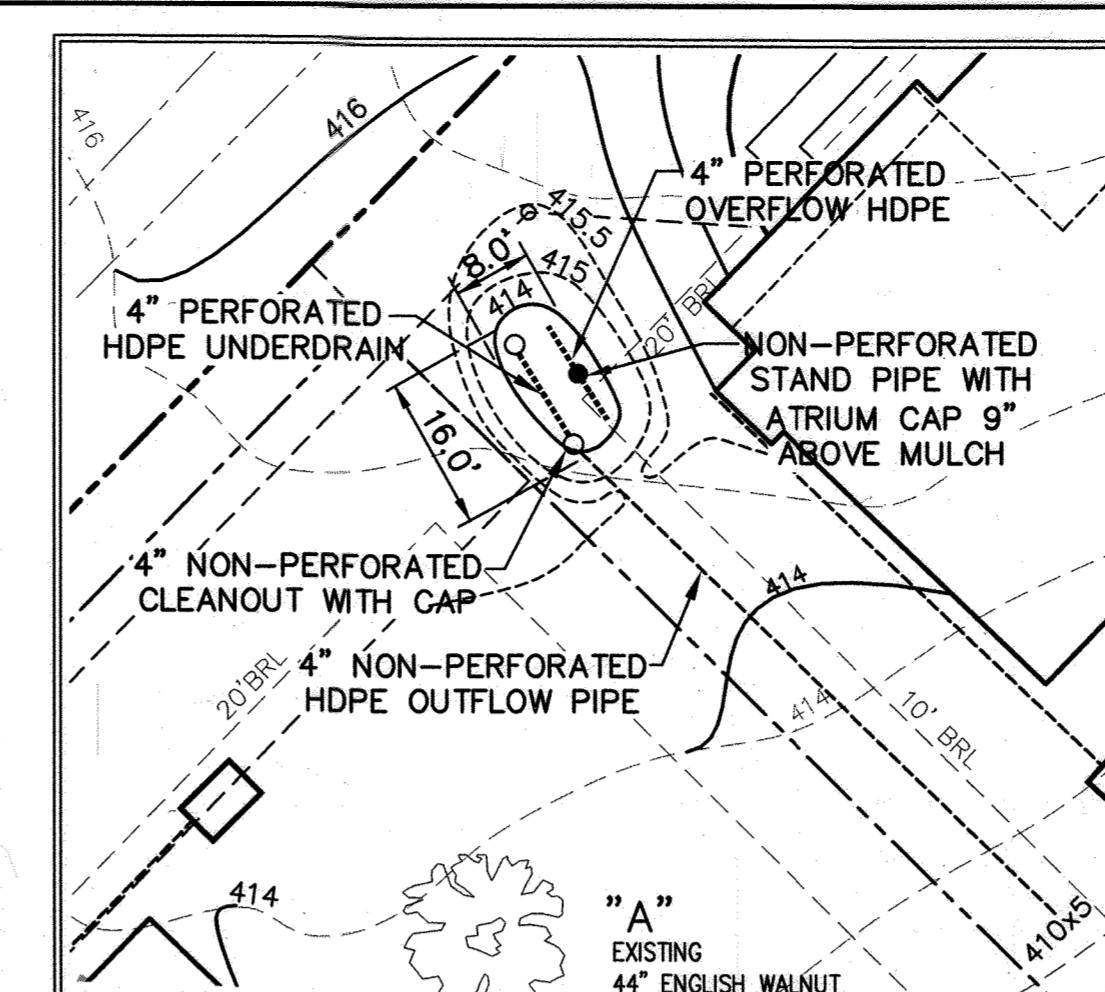
**DRAINAGE AREA MAP TO MICRO-BIORETENTIONS**  
SCALE: 1"=50'



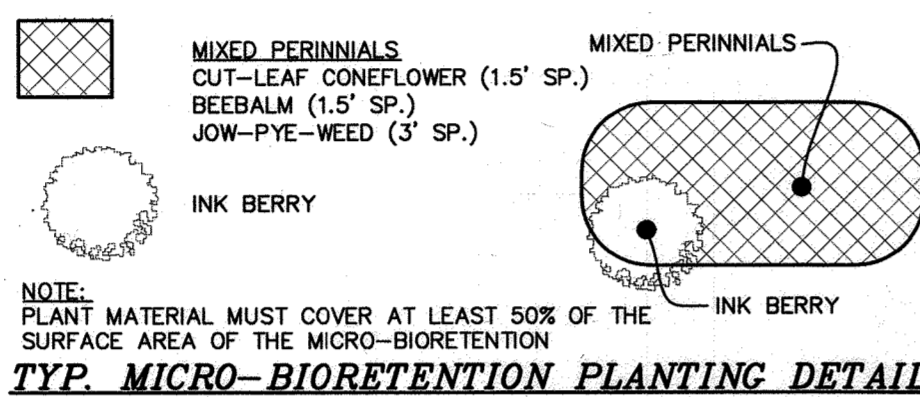
**MICRO-BIORETENTION #1 DETAIL**  
SCALE: 1"=20'



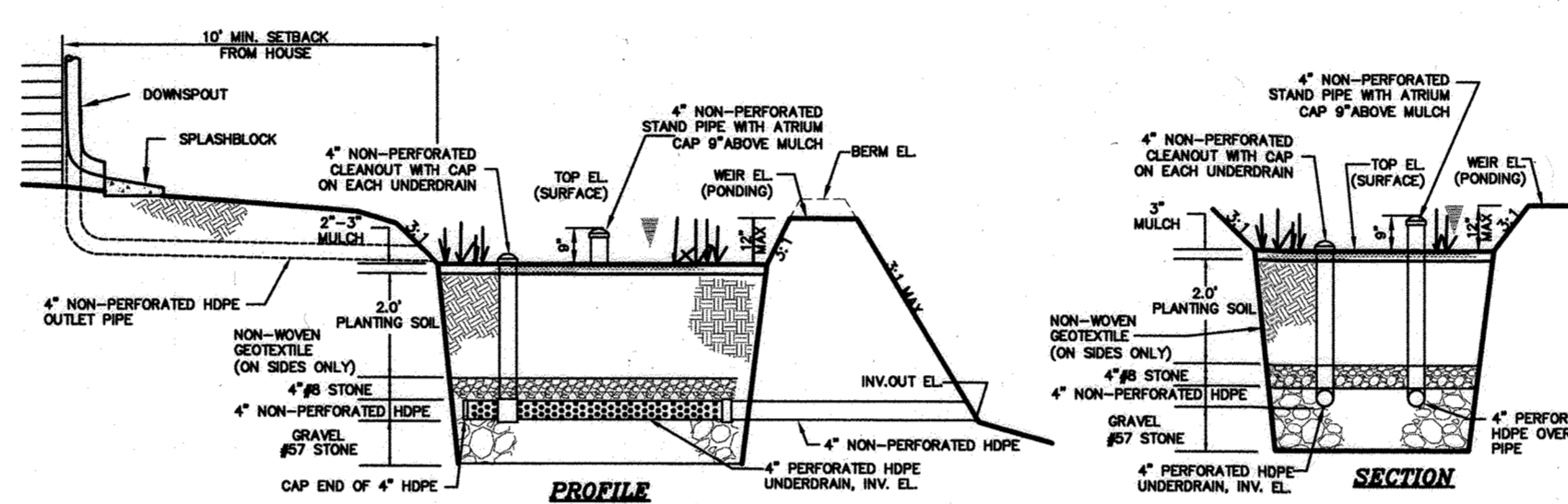
**MICRO-BIORETENTION #2 DETAIL**  
SCALE: 1"=20'



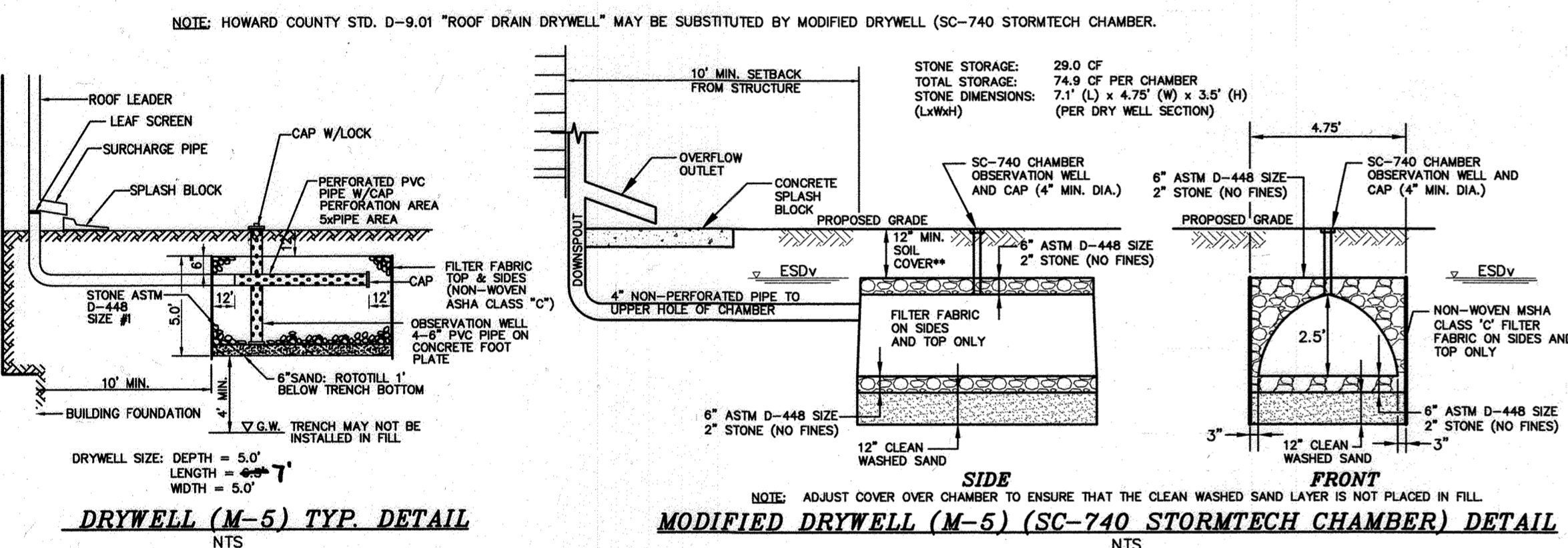
**MICRO-BIORETENTION #3 DETAIL**  
SCALE: 1"=20'



**TYP. MICRO-BIORETENTION PLANTING DETAIL**  
NTS



**TYPICAL MICRO-BIORETENTION (M-6) DETAIL**  
NTS



**DRYWELL (M-5) TYP. DETAIL**  
NTS

**MODIFIED DRYWELL (M-5) (SC-740 STORMTECH CHAMBER) DETAIL**  
NTS

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

- THE OWNER SHALL RECORD THE MONITORING WELLS AND STRUCTURES ON A QUARTERLY BASIS AND AFTER EVERY HEAVY STORM EVENT.
- 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.
- THE OWNER SHALL MAINTAIN A LOG BOOK TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
- 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.
- THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO ENSURE 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.

**OPERATION AND MAINTENANCE SCHEDULE FOR MICRO-BIORETENTION (M-6)**

- 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 AND 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 INSPECTION 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, TRIM 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.

**GEOTECHNICAL CONSULTANTS, INC.**  
RD. Box 2071  
Columbia, MD 21045-2071  
Phone: (410) 381-5330  
Fax: (410) 381-1064  
e-mail: mroun54@geotek.com

March 23, 2013  
Mildenberg, Bender & Associates, Inc.  
6800 Deeprock Road, Suite 15  
Ellicott City, Maryland 21037  
Attn: Mr. Jeff Stoltz, P.E.  
Re: Limited Subsurface Exploration  
Proposed Residential Buildings  
Baughan Property, Lots 5 through 7 and Bulk Parcel "A"  
Howard County, Maryland  
GEAT Project No. G-21

Our field observations are summarized in Table 1 below:

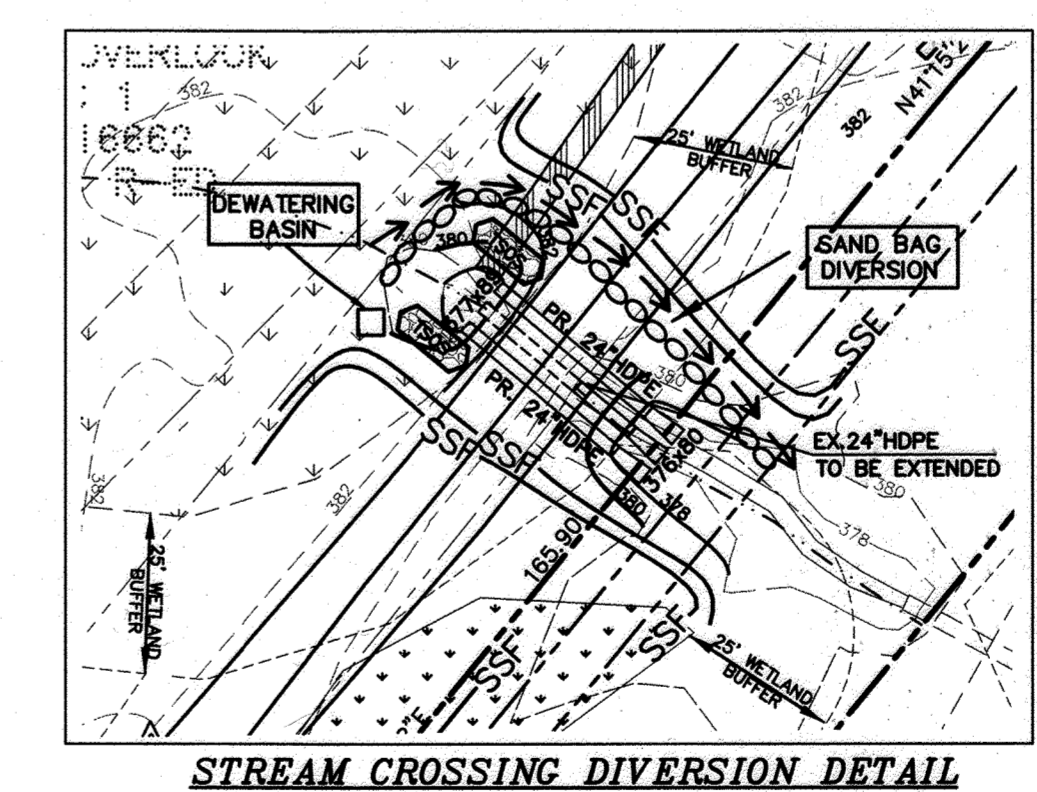
Boring No.	Depth to Groundwater	Depth to sand-silt layer	Termination Depth (ft)
B-1	N/A	1.5'	5.0'
B-2	N/A	N/A	5.0'
B-3	N/A	N/A	5.0'
B-4	N/A	N/A	7.0'
B-5	N/A	N/A	8.5'
B-6	N/A	4.5'	7.0'

Note: All depths are below existing ground surface.  
It should be noted that the actual level of groundwater and the amount and level of perched water should be monitored by fluctuation through the year, depending on variations in precipitation, surface run-off, infiltration, site topography, drainage, and other factors not evident at the time of our exploration. GEAT can not be responsible for changes in groundwater conditions at the site due to seasonal variations and changes caused by other factors such as grading operations at the site.

GEAT appreciates the opportunity to provide this geotechnical engineering service to you. Should you have any questions regarding this letter report, or require additional services, please feel free to contact our office.

Sincerely,  
Mount Alshouse, PE

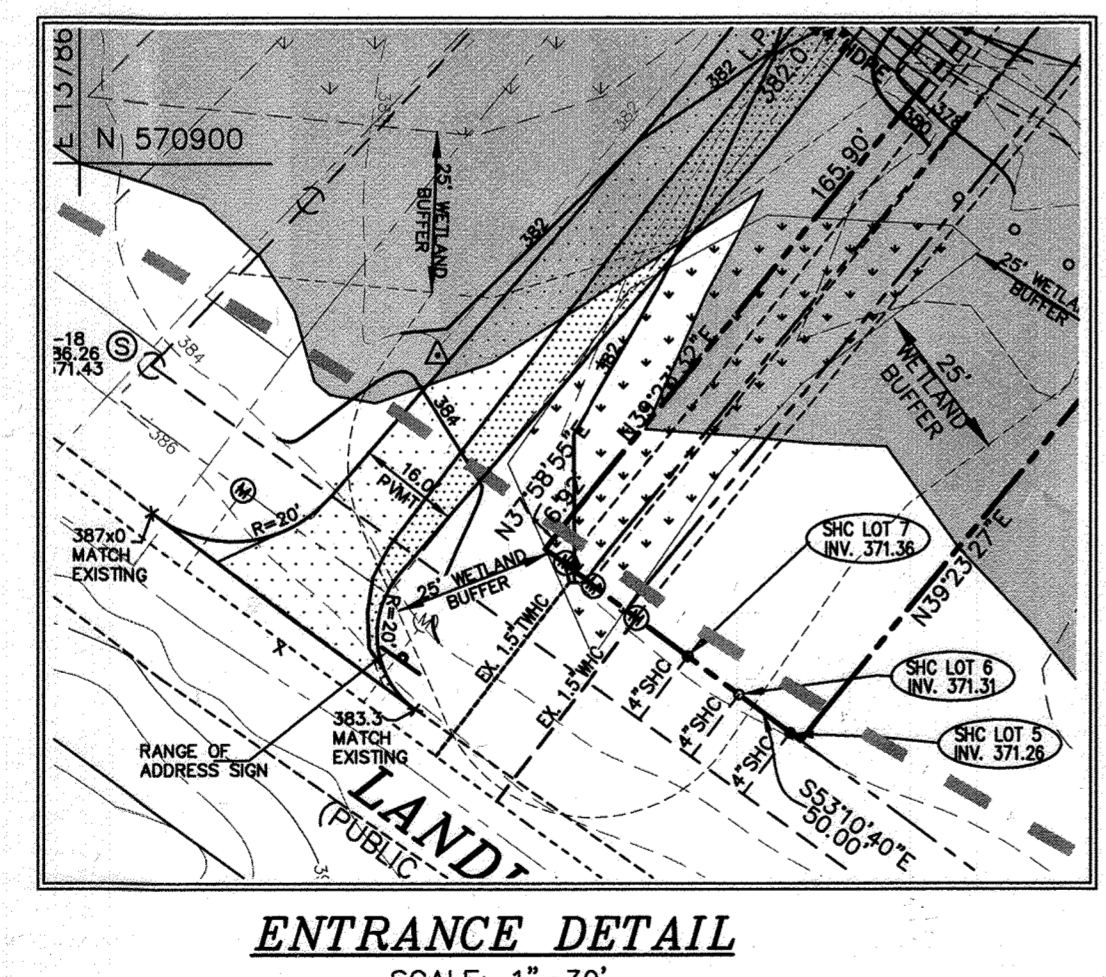
**USE MDE WATERWAY CONSTRUCTION GUIDELINES MGWC 4.3 FOR CULVERT INSTALLATION**



**STREAM CROSSING DIVERSION DETAIL**  
SCALE: 1"=30'

**SWM PRACTICES SCHEDULE**

AREA	PROPOSED PRACTICES	REQUIRED ESDV	PROVIDED ESDV
LOT 5	M-6, MICRO-BIORETENTION (MB #2) M-5, DRYWELLS (3 EACH)	189 C.F. 208,102 C.F.	240 C.F. 210,105 C.F.
LOT 6	M-6, MICRO-BIORETENTION (MB #3) M-5, DRYWELLS (3 EACH)	178 C.F. 208,102 C.F.	229 C.F. 210,105 C.F.
LOT 7	M-6, MICRO-BIORETENTION (MB#4) M-5, DRYWELLS (3 EACH)	184 C.F. 208,102 C.F.	248 C.F. 210,105 C.F.
EX. UIC PVMT	M-5, GRAVEL TRENCHES	49 C.F.	72 C.F.
TOTAL		1,224 7,146 C.F.	1,410 7,374 C.F.



**ENTRANCE DETAIL**  
SCALE: 1"=30'

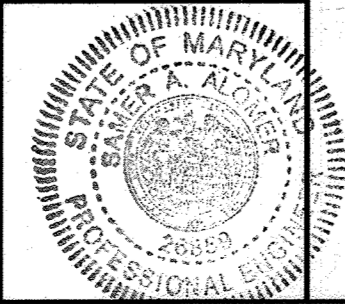
**TABLE B.4.1 MATERIALS SPECIFICATIONS FOR MICRO-BIORETENTION, RAIN GARDENS & LANDSCAPE INFILTRATION**

MATERIAL	SPECIFICATION	SIZE	NOTES
PLANTINGS	SEE APPENDIX A, TABLE 4.1	N/A	PLANTINGS ARE SITE-SPECIFIC
PLANTING SOIL (2" TO 4" DEEP)	LOAMY SAND (60 - 65%) & COMPOST (35 - 40%) OR SANDY LOAM (30%), COARSE SAND (30%) & COMPOST (40%)	N/A	USDA SOIL TYPES LOAMY SAND OR SANDY LOAM; CLAY CONTENT < 5%
ORGANIC CONTENT	MIN. 10% BY DRY WEIGHT (ASTM D 2974)		
MULCH	SHREDDED HARDWOOD	NO. 8 OR NO. 9 (1/8" TO 3/8")	AGED 6 MONTHS, MINIMUM; NO PINE OR WOOD CHIPS
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	
GRAVEL (UNDERDRAINS AND INFILTRATION BEDS)	AASHTO M-43	NO. 57 OR NO. 6 AGGREGATE (3/8" TO 3/4")	
UNDERDRAIN PIPING	F 758, TYPE PS 28 OR AASHTO M-278	4" TO 6" RIGID SCHEDULE 40 PVC OR SDR35	SLOTTED OR PERFORATED PIPE, 3/8" PERIF. 6" ON CENTER, 4 HOLES PER ROW, MINIMUM OF 3" OF GRAVEL OVER PIPES; NOT NECESSARY UNDERNEATH PIPES; PERFORATED PIPE SHALL BE WRAPPED WITH 1/4-INCH GALVANIZED HARDWARE CLOTH
POURED IN PLACE CONCRETE (IF REQUIRED)	MSHA MIX NO. 3; FC = 3500 PSI @ 28 DAYS, NORMAL WEIGHT, AIR-ENTRAINED; REINFORCING TO MEET ASTM-615-80	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 STATE 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 350.8/89; VERTICAL LOADING [H-10 OR H-20]; ALLOWABLE HORIZONTAL LOADING (BASED ON SOIL PRESSURES); AND ANALYSIS OF POTENTIAL CRACKING
SAND	AASHTO-M-6 OR ASTM-C-33	0.02" TO 0.04"	SAND SUBSTITUTIONS SUCH AS DIABASE AND GRAYSTONE (AASHTO) #10 ARE NOT ACCEPTABLE. NO CALCIUM CARBONATE OR DOLOMITIC SAND SUBSTITUTIONS ARE ACCEPTABLE. NO "ROCK DUST" CAN BE USED FOR SAND.

**OWNER/DEVELOPER**  
DORSEY FAMILY HOMES, INC.  
10717 BIRMINGHAM WAY  
WOODSTOCK, MARYLAND 21163  
(410)465-5739

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. 26859, EXP DATE 08/08/21

SAMER-A. ALOMER P.E. DATE: 2/21/21



**ENGINEER'S CERTIFICATE**  
I 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 IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF ENGINEER: [Signature] DATE: 2/24/21  
SAMER A. ALOMER P.E.  
PRINTED NAME OF ENGINEER

**DEVELOPER'S CERTIFICATE**  
I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. HOWARD SOIL CONSERVATION DISTRICT IS AUTHORIZED TO CONDUCT PERIODIC ON-SITE INSPECTION.

SIGNATURE OF DEVELOPER: [Signature] DATE: 2/24/21  
ROBERT DORSEY JR.  
PRINTED NAME OF DEVELOPER

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
DATE: 03/08/21  
Alexandra Butcher  
HOWARD SOIL CONSERVATION DISTRICT

DATE: 4-1-21  
DATE: 4/1/21  
DATE: 4/22/21  
DATE: 2/21/21

**MGWC 4.3: CULVERT INSTALLATION**

**DESCRIPTION**  
The following is a typical installation sequence for culverts which details the minimum requirements to be incorporated into the project.

**PURPOSE, USES & LIMITATIONS**  
This method has been chosen in order to illustrate a general sequence of construction and is not suitable for all projects. Therefore, the construction sequence should be reviewed and modified as necessary to meet specific project needs. Consideration of a bridge or bottomless arch should be made prior to selecting a culvert.

**CONSTRUCTION SEQUENCE**  
All erosion and sediment control devices, including dewatering basins, should be implemented as the first order of business according to a plan approved by the WMA or local jurisdiction. Once the proposed installation sequence is approved, the construction sequence should be reviewed and modified as necessary to meet specific project needs. Consideration of a bridge or bottomless arch should be made prior to selecting a culvert.

- A diversion pipe as shown in MGWC 1.4: Diversion Pipe or other measure should be installed and a sandbag or stone barrier as shown in MGWC 1.5: Sandbag/Stone Diversion should be constructed according to specifications to divert the streamflow into the diversion.
- A sandbag or stone barrier should be placed downstream to prevent the flow from backwashing into the construction area.
- Culverts should be installed such that the following requirements are met:
  - The culvert slope should match the streambed slope while not exceeding 3%.
  - Culverts should be depressed when possible to encourage siltation for improved fish passage as shown in MGWC 4.5: Depressed Culverts.
  - For non-depressed culverts, the culvert height should not exceed 5 inches (12 centimeters), and concrete aprons should be provided wherever possible.
  - The stable width/depth ratio of the bankfull stage stream channel should be maintained with the culvert design. Use of elliptical pipe may help attain the proper channel dimension, especially for B, C, and E stream types.
  - A low flow channel shall be constructed through the riprap placements across the stream bed.
- The disturbed sections of the channel, including the slopes and streambed, should be stabilized with methods approved by the WMA.
- The construction area should be dewatered, and the temporary stream diversion removed starting at the downstream section and moving upstream.
- Finally, the dewatering basin(s) should be restored to the original grade, the silt fence removed, and all disturbed areas seeded and mulched.

STREAM CROSSING: PAGE 4.3-1  
MARYLAND DEPARTMENT OF THE ENVIRONMENT  
WATERWAY CONSTRUCTION GUIDELINES  
REVISED NOVEMBER 2008

**Maryland's Guidelines To Waterway Construction**  
**DETAIL 4.3: CULVERT INSTALLATION-STAGES 1&2**

**STAGE 1**  
Installation Guidelines:  
1. provide sandbags or stones to divert the channel.  
2. remove the portion of pipe and the southeast abutment and headwall.  
3. install the last segment of pipe and build the headwall.  
4. stabilize the stream bed with Class 1 riprap.

**STAGE 2**  
Installation Guidelines:  
1. redirect the channel as shown.  
2. remove the northeast abutment and headwall.  
3. install the pipe and build the headwall.  
4. stabilize the remaining stream bed with Class 1 riprap.

STREAM CROSSING: PAGE 4.3-2  
MARYLAND DEPARTMENT OF THE ENVIRONMENT  
WATERWAY CONSTRUCTION GUIDELINES

**Maryland's Guidelines To Waterway Construction**  
**DETAIL 4.3: CULVERT INSTALLATION-STAGES 3&4**

**STAGE 3**  
Installation Guidelines:  
1. redirect the channel as shown.  
2. remove the remaining abutment and wingwall.  
3. build the last portion of pipe and headwall.  
4. stabilize the outlet with riprap.  
5. restore the road surface.

**STAGE 4**  
Installation Guidelines:  
1. remove traffic barriers.  
2. stabilize all disturbed areas with seed and mulch.  
3. remove sediment control devices.

STREAM CROSSING: PAGE 4.3-3  
MARYLAND DEPARTMENT OF THE ENVIRONMENT  
WATERWAY CONSTRUCTION GUIDELINES

**BAUGHAN PROPERTY**  
LOTS 5 THRU 7  
TAX MAP 3L, GRID 11, PARCEL 758  
HOWARD COUNTY, MARYLAND  
FIRST ELECTION DISTRICT

**DETAILS AND SPECIFICATIONS**

**MILDENBERG, BENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
7850-B Croce Drive, Columbia, Maryland 21044  
(410) 997-0286 TEL. (410) 997-0288 FAX.

3 OF 4  
SDP-20-068

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

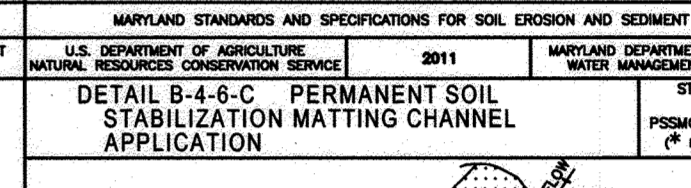
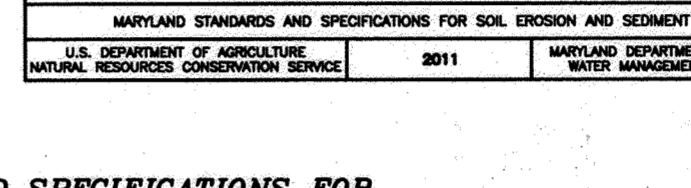
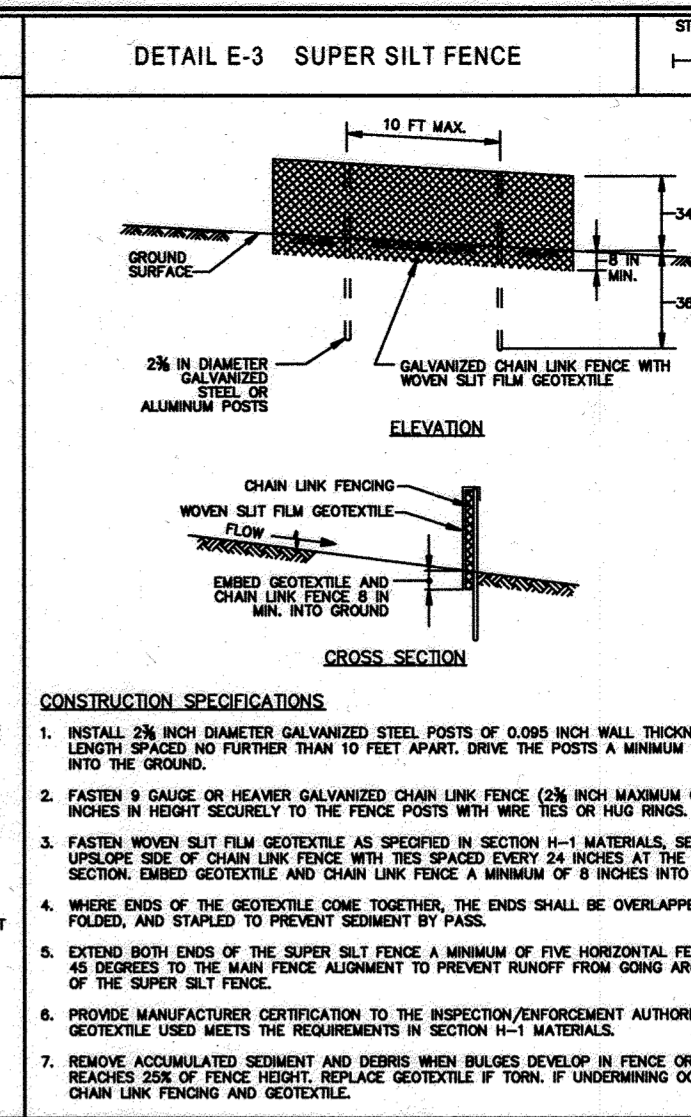
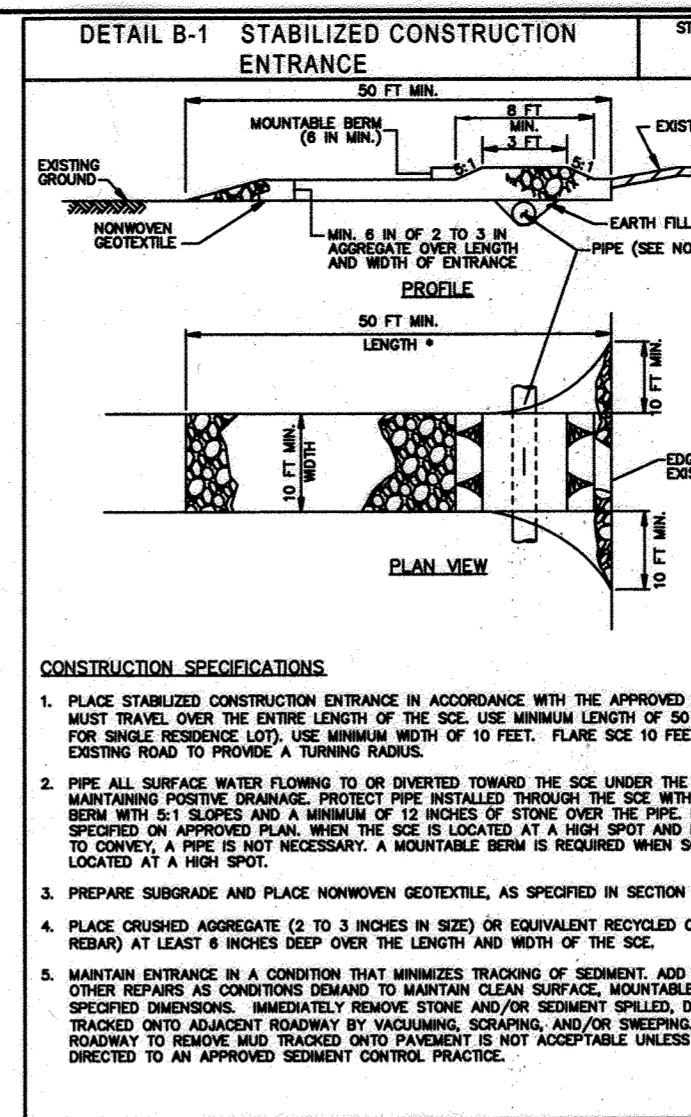
DEFINITION THE PROCESS OF PREPARING THE SOILS TO SUSTAIN ADEQUATE VEGETATIVE STABILIZATION. PURPOSE TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. CONDITIONS WHERE PRACTICE APPLIES WHERE VEGETATIVE STABILIZATION IS TO BE ESTABLISHED. CRITERIA A. SOIL PREPARATION 1. TEMPORARY STABILIZATION a. SEEDBED PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT...

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

DEFINITION THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER. PURPOSE TO PROTECT DISTURBED SOILS FROM EROSION DURING AND AT THE END OF CONSTRUCTION. CONDITIONS WHERE PRACTICE APPLIES TO THE SURFACE OF ALL PERIMETER CONTROLS, SLOPES, AND ANY DISTURBED AREA NOT UNDER ACTIVE GRADING. CRITERIA A. SEEDING 1. SPECIFICATIONS a. ALL SEED MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW...

(B-4-5) STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

DEFINITION TO STABILIZE DISTURBED SOIL WITH PERMANENT VEGETATION. PURPOSE TO USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER OF DISTURBED AREAS WHERE PRACTICE APPLIES EXPOSED SLOPES WHERE GROUND COVER IS NEEDED FOR 6 MONTHS OR MORE. CRITERIA A. SEED MIXTURES 1. SELECTION a. SELECT ONE OR MORE OF THE SPECIES OF MIXTURES LISTED IN TABLE B.3 FOR THE APPROPRIATE PLANT HARDINESS ZONE...



B. TOPSOILING

1. TOPSOIL IS PLACED 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. 2. TOPSOIL SALVAGED FROM AN EXISTING SITE MAY BE USED PROVIDED IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS...

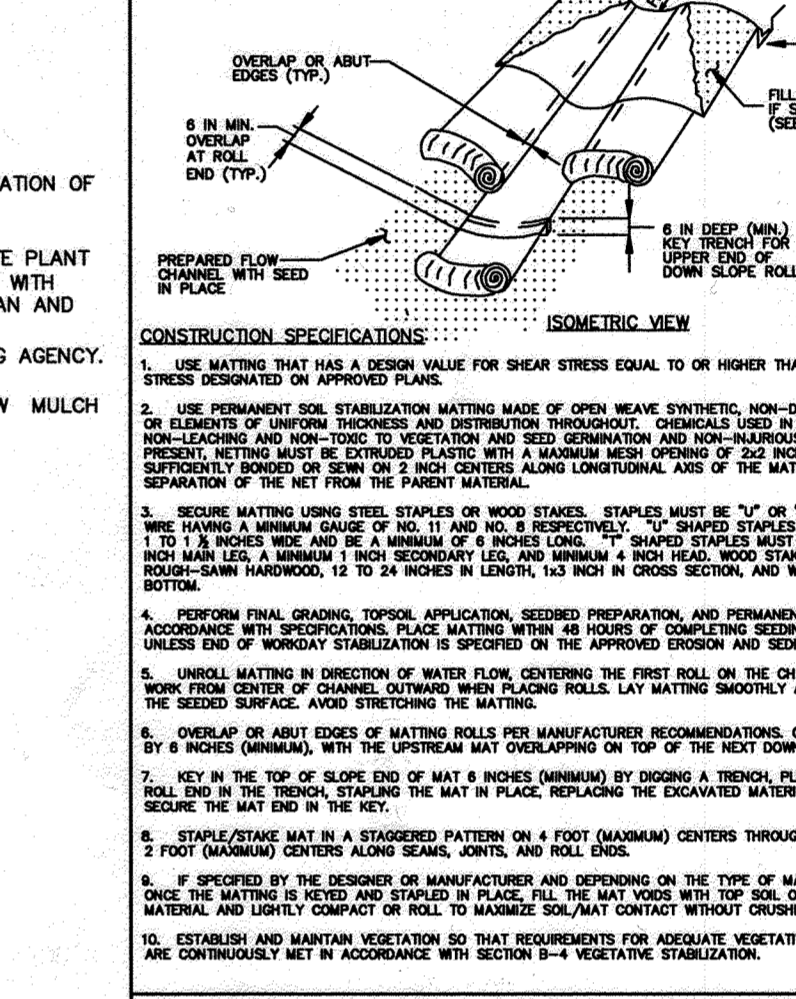
(B-4-8) STANDARDS AND SPECIFICATION FOR STOCKPILE AREA

DEFINITION A MOUND OR PILE OF SOIL PROTECTED BY APPROPRIATELY DESIGNED EROSION AND SEDIMENT CONTROL MEASURES. PURPOSE TO PROVIDE A DESIGNATED LOCATION FOR THE TEMPORARY STORAGE OF SOIL THAT CONTROLS THE POTENTIAL FOR EROSION, SEDIMENTATION AND CHANGES TO DRAINAGE PATTERNS. CONDITIONS WHERE PRACTICE APPLIES STOCKPILE AREAS ARE UTILIZED WHEN IT IS NECESSARY TO SALVAGE AND STORE SOIL FOR LATER USE. CRITERIA 1. THE STOCKPILE LOCATION AND ALL RELATED SEDIMENT CONTROL PRACTICES MUST BE CLEARLY INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN.

(B-4-4) STANDARDS AND SPECIFICATIONS FOR TEMPORARY STABILIZATION

DEFINITION TO STABILIZE DISTURBED SOIL WITH VEGETATION FOR UP TO 6 MONTHS. PURPOSE TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURB SOIL EXPOSED SLOPES WHERE GROUND COVER IS NEEDED FOR A PERIOD OF 6 MONTHS OR LESS. CRITERIA 1. SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B.1 FOR THE APPROPRIATE PLANT HARDINESS ZONE...

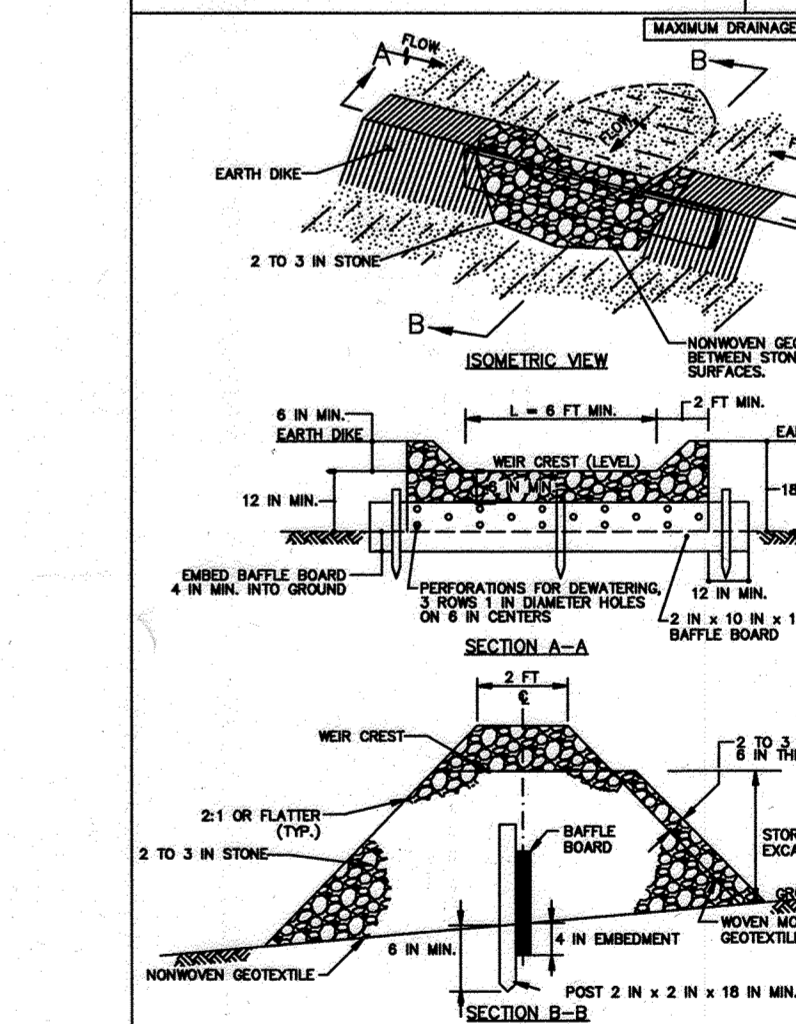
DETAIL B-4-B PERMANENT SOIL STABILIZATION MATTING CHANNEL APPLICATION



SEQUENCE OF CONSTRUCTION

- 1. OBTAIN GRADING PERMIT (1 DAY). 2. PERFORM CLEARING AND GRUBBING AS NECESSARY FOR THE INSTALLATION OF PERIMETER CONTROLS (5 DAYS). 3. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AT LOCATION INDICATED (1 DAY). 4. CONSTRUCT PERIMETER CONTROLS: SUPER SILT FENCES (SSP) (6 DAYS). 5. CLEAR AND GRUB SITE (2 DAYS). 6. GRADE SITE PER PLAN (6 DAYS). 7. INSTALL WATER AND SEWER HOUSE CONNECTIONS WITHIN THE EASEMENT (10 DAYS). 8. INSTALL TEMPORARY STONE OUTLET STRUCTURE OUTLET AS SHOWN ON THE PLAN. (2 DAYS). 9. EXTEND EXISTING 24" CMP PIPE AND INSTALL 24" HDPE UNDER EXISTING DRIVEWAY (7 DAYS). 10. UPGRADE EXISTING DRIVEWAY (14 DAYS). 11. CONSTRUCT HOUSES (90 - 120 DAYS PER HOUSE). 12. CONSTRUCT MICRO-BIORETENTION FACILITIES (7 DAYS). 13. COMPLETE FINE GRADING OF SITE TO GRADES INDICATED. (2 DAYS PER HOUSE). 14. SEED AND MULCH ALL REMAINING DISTURBED AREAS. (1 DAY PER HOUSE). 15. WITH THE APPROVAL OF SEDIMENT CONTROL INSPECTOR REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE REMAINING DISTURBED AREAS.

DETAIL E-2 TEMPORARY STONE OUTLET STRUCTURE



STANDARD SEDIMENT CONTROL NOTES

- 1. A PRE-CONSTRUCTION MEETING MUST OCCUR WITH THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS, CONSTRUCTION INSPECTION DIVISION (CID), 410-313-1855 AFTER THE FUTURE LOD AND PROTECTED AREAS ARE MARKED GRIFFIN IN THE FIELD. A MINIMUM OF 48 HOUR NOTICE TO CID MUST BE GIVEN AT THE FOLLOWING STAGES: a. PRIOR TO THE START OF EARTH DISTURBANCE b. UPON COMPLETION OF THE INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. c. PRIOR TO THE START OF ANOTHER PHASE OF CONSTRUCTION OR OPENING OF ANOTHER GRADING UNIT. d. PRIOR TO THE REMOVAL OR MODIFICATION OF SEDIMENT CONTROL PRACTICES. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE. OTHER RELATED STATE AND FEDERAL PERMITS SHALL BE REFERENCED, TO ENSURE COORDINATION AND TO AVOID CONFLICTS WITH THIS PLAN. 2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS THERE TO. 3. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION IS REQUIRED WITHIN THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3:1 HORIZONTAL TO 1 VERTICAL (3:1); AND SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED AREAS ON THE PROJECT SITE EXCEPT THOSE AREAS UNDER ACTIVE GRADING. 4. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 2011 MARYLAND STANDARD AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR TOPSOIL (SEC. B-4-2), PERMANENT SEEDING (SEC. B-4-5), TEMPORARY SEEDING (SEC. B-4-4) AND MULCHING (SEC. B-4-3). TEMPORARY SEEDING WITH MULCH ALONE CAN ONLY BE APPLIED BETWEEN THE FALL AND SPRING SEEDING DATES IF THE GROUND IS FROZEN. INCREMENTAL STABILIZATION (SEC. B-4-1) SPECIFICATIONS SHALL BE ENFORCED IN AREAS WITH >15% OF CUT AND/OR FILL STOCKPILES (SEC. B-4-8) IN EXCESS OF 20 FT. MUST BE BENCHED WITH STABLE OUTLET AT CONCENTRATED SLOPE, AND HIGHLY ERODABLE AREAS SHALL RECEIVE SOIL STABILIZATION MATTING (SEC. B-4-6). 5. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE, AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE CID. 6. SITE ANALYSIS: TOTAL AREA OF SITE: 2.01 ACRES AREA DISTURBED: 1.47 ACRES AREA TO BE ROOFED OR PAVED: 0.43 ACRES AREA TO BE VEGETATED STABILIZED: 1.04 ACRES TOTAL CUT: 5,000 CU. YDS. TOTAL FILL: 5,000 CU. YDS. OFFSITE WASTE/BORROW AREA LOCATION: 7. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR REPLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.

ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY. THE CID SHALL BE INSPECTED BY THE CONTRACTOR WEEKLY, AND THE NEXT DAY AFTER EACH RAIN EVENT. A WRITTEN REPORT BY THE CONTRACTOR, MADE AVAILABLE UPON REQUEST, IS PART OF EVERY INSPECTION AND SHOULD INCLUDE: -INSPECTION DATE -INSPECTION TYPE (ROUTINE, PRE-STORM EVENT, DURING RAIN EVENT) -NAME AND TITLE OF INSPECTOR -WEATHER INFORMATION (CURRENT CONDITIONS AS WELL AS TIME AND AMOUNT OF LAST RECORDED PRECIPITATION) -BRIEF DESCRIPTION OF PROJECT'S STATUS (E.G., PERCENT COMPLETE) AND/OR CURRENT ACTIVITIES -EVIDENCE OF SEDIMENT DISCHARGES -IDENTIFICATION OF PLAN DEFICIENCIES -IDENTIFICATION OF SEDIMENT CONTROLS THAT REQUIRE MAINTENANCE -IDENTIFICATION OF MISSING OR IMPROPERLY INSTALLED SEDIMENT CONTROLS -COMPLIANCE STATUS REGARDING THE SEQUENCE OF CONSTRUCTION AND STABILIZATION REQUIREMENTS -PHOTOGRAPHS -MONITORING/SAMPLING -MAINTENANCE AND/OR CORRECTIVE ACTION PERFORMED -OTHER INSPECTION ITEMS AS REQUIRED BY THE GENERAL PERMITS FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES (NPDES, MDC).

TEMPORARY SEEDING FOR SITE STABILIZATION. Table with columns: PLANT SPECIES, SEEDING RATE (LB/AC), SEEDING DEPTH (INCHES), RECOMMENDED SEEDING DATED BY PLANT HARDINESS ZONE (5B AND 6A, 6B, 7A AND 7B).

PERMANENT SEEDING SUMMARY. Table with columns: NO., SPECIES, APPLICATION RATE (LB/AC), SEEDING DATES, SEEDING DEPTHS, N, P2O5, K2O, LIME RATE.

ENGINEER'S CERTIFICATE I 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 IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. SIGNATURE OF ENGINEER: SAMER A. ALOMER P.E. DATE: 2/24/21

DEVELOPERS CERTIFICATE I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY NECESSARY PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. HOWARD SOIL CONSERVATION DISTRICT IS AUTHORIZED TO CONDUCT PERIODIC ON-SITE INSPECTION. SIGNATURE OF DEVELOPER: ROBERT L. DODDNEY JR. DATE: 2/24/21

HOWARD SOIL CONSERVATION DISTRICT APPROVED: DEPARTMENT OF PLANNING AND ZONING SIGNATURE OF CHIEF, DEVELOPMENT ENGINEERING DIVISION: DATE: 4/1/21 SIGNATURE OF CHIEF, DIVISION OF LAND DEVELOPMENT: DATE: 4/1/21

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. 26859, EXP DATE 08/08/21. SAMER A. ALOMER P.E. DATE: 2/24/21

OWNER/DEVELOPER DORSEY FAMILY HOMES 10717 BIRMINGHAM WAY WOODSTOCK, MD 21163

Professional Engineer Seal for Robert L. Doddney Jr., License No. 21044, State of Maryland. Includes contact information for Mildenberg, Boender & Assoc., Inc. and Baughan Property.