PERMIT INFORMATION BLOCK							
SUBDIVISION NAME: SECTION/AREA: PARCEL: ELKDALE GLENN PROPERTY N/A 871							
PLAT NO. BLOCK(S) ZONING 24910−11 15 R−12		TAX MAP NO. 38	ELECTION (CENSUS TRACT 0000		

ADDRESS CHART

LOT #	ADDRESS
1	6151 PHELPS LANE
2	6155 PHELPS LANE
3	6159 PHELPS LANE
4	6163 PHELPS LANE
5	6167 PHELPS LANE
6	6171 PHELPS LANE
7	6168 PHELPS LANE
8	6164 PHELPS LANE

SITE DEVELOPMENT PLAN ELKDALE GLENN PROPERTY

LOTS 1 THRU 8 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

VICINITY MAP

SCALE: 1"=1000'

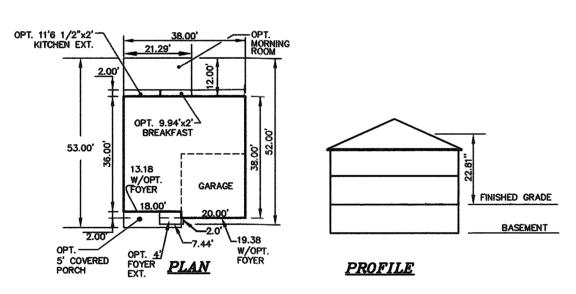
ADC MAP: 35 GRID: E-4

INDEX OF DRAWINGS

grandom and the same and the sa	
NO.	DESCRIPTION
1	COVER SHEET
2	SITE DEVELOPMENT PLAN
3	GRADING, SEDIMENT CONTROL, SOILS & LANDSCAPE PLAN
4	STORMWATER MANAGEMENT DETAILS AND SOIL BORINGS
5	SEDIMENT CONTROL NOTES AND DETAILS

STORMWATER MANAGEMENT PRACTICES CHART

LOT NO.	FACILITY NO.	MICRO— BIORETENTION M-7 (NUMBER)
1	N/A	0
2	RG #1	1
3	N/A	0
4	RG #2	1
5	RG #3	1
6	RG #4	N/A
7	RG #5	_
8	RG #6	



OWNER/DEVELOPER

HARMONY BUILDERS, INC. 4228 COLUMBIA ROAD ELLICOTT CITY, MD 21042 (410)461-0833

DEVELOPERS CERTIFICATE

ROCKBURNE 38 SCALE 1"=30'

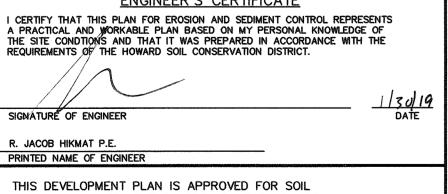
1. HOUSE AREA SHOWN INCLUDES ALL OPTIONS.

MIHU TRACKING	CHART
TOTAL NUMBER OF LOTS/UNITS	7
NUMBER OF MIHU REQUIRED	7
NUMBER OF MIHU PROVIDED ONSITE (EXEMPT FROM APFO ALLOCATIONS)	0
NUMBER OF APFO ALLOCATION REQUIRED (REMAINING LOTS/UNITS)	0
MIHU FEE-IN-LIEU (INDICATED LOT/UNIT NUMBERS	LOTS 1, 2 & 4-8

LOT 1-2 AND 4-8 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.

(1,780 S.F.)

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 BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION OPT. 11'6"x2'-BY THE HOWARD SOIL CONSERVATION DISTRICT. KITCHEN EXT. SIGNATURE OF DEVELOPER WM. SCAT GODSTREY 53.00 PRINTED NAME OF DEVELOPER **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 $\emptyset F$ the howard soil conservation district 5' COVERED

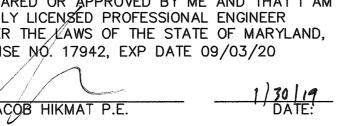


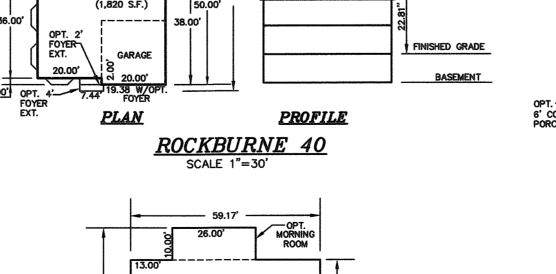
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

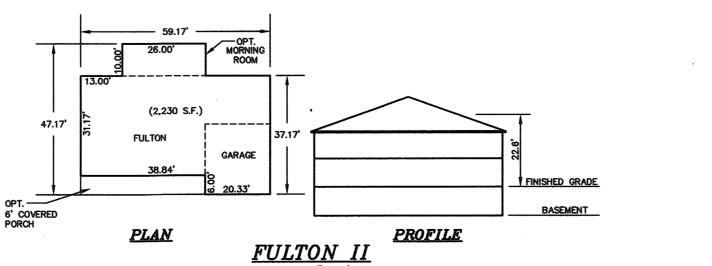
/		<u>. </u>
PROVED: DEPARTMENT OF PLANNING AND ZONING		
Ilm Edmin	2.26.19	12.7
IEF, DEVELOPMENT ENGINEERING DIVISION	DATE	111
Kent Slewlyohn	3.12.19	11111
HIEF, DIVISION OF LAND DEVELOPMENT NH	DATE	1
Mayo Jelli-	3-12-19	
RECTOR CONTRACTOR	DATE	

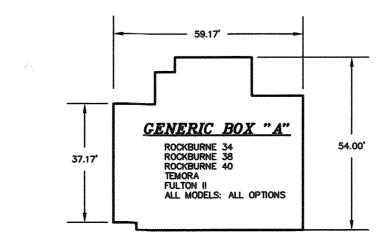


HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NÓ. 17942, EXP DATE 09/03/20



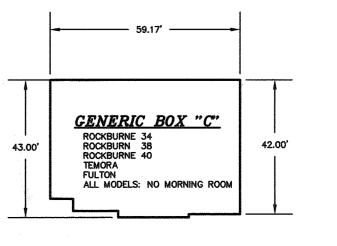






PROFILE

ABOVE MODELS: ALL OPTION



GENERAL NOTES:

- 1. SUBJECT PROPERTY ZONED "R-12" PER THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN
- 2. ALL ASPECTS OF THE PROJECT ARE IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS.
- 3. SITE ANALYSIS DATA: LOCATION: TAX MAP: 38 PARCEL: 871 GRID: 15 ELECTION DISTRICT: FIRST ADDRESS: 6200 HANOVER RD. HANOVER, MD 21076 RECORD PLAT#: 24910-11 TOTAL AREA OF SUBDIVISION: 3.26 AC.± AREA OF PLAN SUBMISSION: 2.09 AC.± LIMIT OF DISTURBED AREA: 1.95 AC.± PROPOSED USE FOR SITE: RESIDENTIAL TOTAL NUMBER OF UNITS: 8

TYPE OF PROPOSED UNIT: SFD DPZ FILE NO: ECP-16-063, F-17-107, 14-5001-D, SP-17-004

4. COORDINATES BASED ON NAD'83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 38GA AND 38DA

STA. No. 38DA N 556,796.309 E 1,390,221.433 ELEV. 126.15

- 5. EXISTING CONTOURS BASED ON CONDITION OF FINAL PLAN F-17-107.
- 6. IN ACCORDANCE WITH SECTION 128 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 SETBACKS, PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK. (SUNROOM AND ROOM EXTENSIONS FOR R-20 LOTS MAY EXTEND 10' INTO A REAR SETBACK).
- 7. 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:
 - WIDTH 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE). - SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE
 - WITH TAR AND CHIP COATING (1-1/2 INCH MINIMUM).
 - GEOMETRY MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM OF 45—FOOT TURNING RADIUS.
 - STRUCTURES (CULVERT/BRIDGES) CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING) - DRAINAGE ELÈMENTS-CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN
 - 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
- MAINTENANCE SUFFICIENT TO ENSURE ALL WEATHER USE. 8. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST 48 HOURS PRIOR TO EXCAVATION
 - WORK BEING DONE. MISS UTILITY

MICO CILLIT	000 =0
VERIZON TELEPHONE COMPANY	(410) 725-997
HOWARD COUNTY BUREAU OF UTILITIES	(410) 313-490
AT&T CABLE LOCATION DIVISION	(410) 393-353
BALTIMORE GAS & ELECTRIC	(410) 685-012
STATE HIGHWAY ADMINISTRATION	(410) 531-553

- 9. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/CONSTRUCTION INSPECTIONS AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- 10. EXISTING UTILITIES ARE BASED ON ACTUAL FIELD LOCATIONS, IN COMBINATION WITH EXISTING WATER AND SEWER CONTRACTS AND FINAL PLAN F-17-107.
- 11. ANY DAMAGE TO THE COUNTY RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- 12. SEWER HOUSE CONNECTION ELEVATIONS SHOWN ARE LOCATED AT THE PROPERTY LINE OR EASEMENT LINE.
- 13. FOR DRIVEWAY ENTRANCE DETAILS FOR LOTS 1-8, REFER TO HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD
- DETAIL R-6.03.
- 14. NO STEEP SLOPES EXIST ON-SITE.
- 15. FOREST CONSERVATION OBLIGATIONS IN ACCORDANCE WITH SECTION 16.1200 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION ACT FOR THIS SUBDIVISION HAS BEEN FULFILLED UNDER F-17-107 BY OFF-SITE CONSERVATION EASEMENT FOR 1.00 ACRES OF RETENTION AT AMBREEN WOODS (F-17-036). NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT; HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
- 16. LANDSCAPING FOR LOTS 1 THRU 8 IS PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. A LANDSCAPE SURETY FOR THE REQUIRED LANDSCAPING IN THE AMOUNT OF \$11,100.00 (20 SHADE TREES, 34 EVERGREEN TREES) WILL BE POSTED WITH THE GRADING PERMIT APPLICATION.
- 17. STORMWATER MANAGEMENT IS PROVIDED BY MICRO BIO-RETENTION AND RAIN GARDENS, PLAN WAS APPROVED UNDER F-17-107. ALL STORMWATER MANAGEMENT FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED.
- 18. PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT. PUBLIC WATER AND SEWER WILL BE UTILIZED UNDER
- CONTRACT # 14-5001-D. 19. FLOODPLAIN EXISTS ON SITE AND WAS DELINEATED BASED ON RECORDED PLATS NO. 13062 AND 18903
- 20. WETLANDS, STREAM AND ITS BUFFER EXIST ON SITE AS CERTIFIED IN THE WETLAND REPORT PREPARED BY
- ECO-SCIENCE PROFESSIONALS, INC. IN FEBRUARY 2016.
- 21. NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT. 22. NO HISTORIC STRUCTURES, CEMETERIES, OR GRAVE SITES EXIST ON-SITE.
- 23. SITE IS NOT ADJACENT TO A DESIGNATED SCENIC ROAD.
- 24. ALL NEW LOTS/RESIDENTIAL UNITS IN THIS SUBDIVISION ARE SUBJECT TO THE 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.
- 25. APFO ROAD TEST IS NOT REQUIRED. THERE IS NO INTERSECTION OF MAJOR COLLECTOR ROADS (OR HIGHER ROAD
- CLASSIFICATION) WITHIN 1.5 MILE FROM THE ENTRANCE TO THIS SUBDIVISION.
- 26. THIS DEVELOPMENT PLAN 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 LOTS MUST COMPLY WITH SETBACK AND BUFFER
- REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE BUILDING / GRADING PERMIT 27. A PRE-SUBMISSION COMMUNITY MEETING FOR THIS PROJECT WAS HELD ON DECEMBER 21, 2015 AT 6:00 PM AT THE ELKRIDGE LIBRARY.
- 28. THIS PROPERTY IS SUBJECT TO THE DESIGN MANUAL WAIVER, VOLUME III, SECTION 1.1.D.2, TO ALLOW 8 DWELLING UNITS ON ONE USE-IN-COMMON DRIVEWAY. WAIVER WAS DENIED ON MARCH 17, 2017 WITH THE RECOMMENDATION TO PROVIDE SECOND USE IN COMMON DRIVEWAY ACCESSED FROM THE SIDE LEG OF THE TEE-TURNAROUND.
- 29. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY
- 30. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD
- COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- 31. THIS PROPERTY IS LOCATED WITHIN THE BW AIRPORT ZONING DISTRICT. MAA PERMIT NO 17-220, WAS ISSUED ON NOVEMBER 09, 2017.
- A DESIGN MANUAL WAIVER REQUEST FOR WAIVER OF BASEMENT GRAVITY SEWER SERVICE TO LOTS 4.8 WAS SUBMITTED TO THE DEPT OF PUBLIC WORKS AND WAS APPROVED ON 8/14/17.

SO

SHC CHART

LOT NO.	ELEVATION AT R/W
1	171.47
2	169.82
3	159.40
4	158.68
5	157.88
6	157.71
7	158.36
8	158.43

ELEVATION'S SHOWN ARE AT EASEMENT LINE

\underline{LEGEND}

EXISTING PRIVATE UIC ACCESS AND UTILITY EASMENT **EXISTING PUBLIC**

WATER, SEWER & UTILITY EASMENT AREA OF WETLANDS

100 YR. FLOODPLAIN

RAIN GARDEN NUMBER

<u>EX. 8"SEWER</u> EX. 8" SEWER MAIN

_EX. 6" WATER MAIN EX. 15" HDPE EX. STORM DRAIN PIPE EX. STORM DRAIN INLET

OWNER/DEVELOPER

HARMONY BUILDERS, INC. 4228 COLUMBIA ROAD ELLICOTT CITY, MD 21042 (410)461-0833

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. I ALSO AUTHORIZE PERIODIC ON—SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT. SIGNATURE OF DEVELOPER PRINTED NAME OF DEVELOPER **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 R. JACOB HIKMAT P.E. PRINTED NAME OF ENGINEER THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION JP

CHIEF, DIVISION OF LAND DEVELOPMENT NA

R. JAÇØB HIKMAT P.E.

2.26.19

DATE

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. 17942, EXP DATE 09/03/20

1/38/19 DATE:

OPEN SPACE LOT 13
DEDICATED TO HOWARD COUNTY,
MARYLAND AND MAINTAINED BY
DEPARTMENT OF RECREATION AND cakOLYM le _121-14-JONATHAN LE ADAM Z. KRAFI ANN K. KRAFI PARKS ROOPA BEIHAMANGALAW SHADY LANE CROSSING PLAT NOS. 22595-22597 OPEN SPACE LOT 13 FOREST CONSERVATION
EXSEMENT CPEN SPACE LOT 83 WILLIAMS KNOLL PLAT#12351 Zening: Rec LOT 2 FOREST CONSERVATION EX. 100 YEAR FLOODPLAIN PLAT# 13062 STEPHEN M HARDESTY

| DEANN L HARDESTY
| PLAT NO. 13565 12,430 SQ. F G.=182.33 F.F.=184,33 B.=175.⋬3 MCE=17/4.77 O/S
LOT 10 .
DEDICATED TO .
LET DEPART G.=169.3,3 F.F.=171/33 EX. 24' PRIVATE UIC ACCESS, AND UTILITY EASEMENT PLAT # 24910-11 THE DEDARTMENT B.=162,33 RECREATION AND PARKS EX. PRIVATE USE-IN-COMMON

ACCESS, STORMDRAIN
AND UTILITY EASEMENT ALFRED J RAMIL PJAT NO. 13565 12,684 SQ. FT F,F.=185.88 B.=176.88 /(5R) / MCE=174.32 13,077 SQ. FT /EAST POINT SECTION 1 PLAT # 21100 G.=170.83 F.F.=172.83 B.=163.83 MCE=162.14 LOT 6 13,540 SQ. FT "B" LOT 14 OPEN SPACE LIVE FEARLESS IN **LOT** 5
13,239 SQ. FT CHRIST LLC G.=162.33 DEDICATED TO HOWARD EAST POINT COUNTY MARYLAND F.F.=164.33 "C" G.=167.33 F.F.=169.33 B.=160.33 CNS FOREST CONSERVATION B.=155.33 PLATS 2/1345-21346 EASEMENT (SUMMER HAVEN LIVE FEARLESS IN \ \
OHRIST LLC PLÄK\$ 18902-1890/4 Z0NED:/R-12 EAST POINT/ SECTION 2 PLATS 21345-2 346 LOW 7
LIVE FEARLESS IN CHRISTIVEC EAST POINT SECTION 2 EX. 20' PUBLIC DRAINAGE & UTILITY EASEMENT XONED: R-12 PLATS/21345-21346 LOT 8 > LIVE FEARLESS IN CHRIST LLC ZONED: R-12 _OPEN SPACE_LOF 4 EX. PUBLIC STORMWATER MANAGEMENT, 162 - STORMDRAIN & UTILITY EASEMENT PLAT 21106 ∠RAY & JENNY FALLARIA SUMMER HAVEN PLATS 18902-18904 JASON NÉWMAN **?**∕-12 SUMWER HAVEN / PLATS /18902--18904

GRAPHIC SCALE

(IN FEET) 1 inch = 30 ft.

MILDENBERG,
BOENDER & ASSOC.,

FOR CONSTRUCTION OF RGI THRU RGG, SEE TYPICAL RAIN GARDEN (MB-7)

DETAIL ON SHEET 4 OF 5

SOILS TABLE

SYMBOL	RATING	NAME	K FACTOR	MAP #	HYDRIC
Fa	(D)	FALLSINGTON SANDY LOAM 0-2% SLOPES	0.20	19	YES
RsB	(c)	RUSSETT FINE SANDY LOAM, 2-5% SLOPES.	0.37	19	NO
RsC	(c)	RUSSETT FINE SANDY LOAM, 2-5% SLOPES.	0.37	19	NO
SaB	(B)	SASSAFRAS LOAM SAND, 2-5% SLOPES	0.37	19	NO
SfB	(B)	SASSAFRAS GRAVELLY SAND LOAM, 2-5% SLOPES	0.24	19	NO

LANDSCAPE NOTES

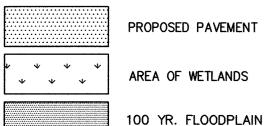
- NO CLEARING OF EXISTING VEGETATION IS PERMITTED WITHIN THE LANDSCAPE EDGE FOR WHICH CREDIT IS BEING TAKEN; HOWEVER, LANDSCAPE MAINTENANCE IS AUTHORIZED.
- THE OWNER, TENANT AND / OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, PLANT MATERIALS, BERMS, FENCES, AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
- 3. 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 THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.
- SHOULD ANY TREE DESIGNATED FOR PRESERVATION, FOR WHICH CREDIT IS GIVEN, BI REMOVED OR DIE PRIOR TO RELEASE OF BONDS, THE OWNER WILL BE REQUIRED TO

TREES) WILL BE POSTED WITH THE GRADING PERMIT APPLICATION.

REPLACE THE TREE WITH THE EQUIVALENT SPECIES OR WITH A TREE WHICH WILL OBTAIN THE , SPREAD AND GROWTH CHARACTERISTICS. THE REPLACEMENT TREE MUST BE A MINIMUM OF 3 INCHES IN CALIPER AND INSTALLED AS REQUIRED IN THE LANDSCAPE MANUAL. LANDSCAPING FOR LOTS 1 THRU 8 IS PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. A LANDSCAPE SURETY FOR THE

REQUIRED LANDSCAPING IN THE AMOUNT OF \$11,100.00 (20 SHADE TREES , 34 EVERGREEN

LEGEND



_ EX. 8"SEWER _ EX. 8" SEWER MAIN

_EX. 6" WATER MAIN

EX. 15" HDPE EX. STORM DRAIN PIPE

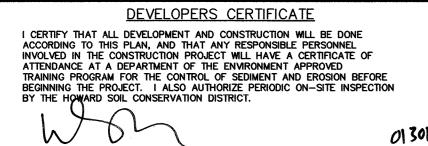
EX. STORM DRAIN INLET

LIMIT OF DISTURBANCE

RAIN GARDEN NUMBER

STABILIZED CONSTRUCTION **ENTRANCE**

OWNER/DEVELOPER HARMONY BUILDERS, INC. 4228 COLUMBIA ROAD ELLICOTT CITY, MD 21042 (410)461-0833



SIGNATURE OF DEVELOPER PRINTED NAME OF DEVELOPER

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 R. JACOB HIKMAT P.E. PRINTED NAME OF ENGINEER

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

APPROVED: DEPARTMENT OF PLANNING AND ZONING CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE West Sherlesoles CHIEF, DIVISION OF LAND DEVELOPMENT NA 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. 17942, EXP DATE 09/03/20

DEVELOPER'S/OWNER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE

AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT

UPON COMPLETION A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED

ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE,

BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

R. JACOB HIKMAT P.E.

DETAIL ON SHEET 4 OF 5

DEDICATED TO HOWARD COUNTY, CAROLYN LE MARYLAND AND WAINTAINED BY TOT 15 SUNIL RAD DEPARIMENT OF RECREATION AND _121-14--JONATHAN LE SIEVE DORRIS ADAM Z. KRAFT ROOPA BETHAMANGALAW LAUREN M DORRIS ANN K. KRAFT EASEMENT PLAT # 24910-11 SHADY LANE CROSSING PLAT NGS. 22595-23597 EX.30' PUBLIC WATER, SEWER AND UTILITY EASEMENT PLAT # 24910-11 OPEN SPACE LOT 13 EX. 6 WATER CONTRACTS TA-SUUL-D-FOREST CONSERVATION OPEN SPACE EASEMENT LOT 83 WILLIAMS KNOLL PLAT#18351 EX. 15"HDPE Zening: 7880° FOREST CONSERVATION STEPHEN M HARDES! / DEANN L HARDESTY PLAT NO. 13565 G.=182.33 F.F.=184/.33 B.=175.33 -EX.30' PUBLIC
WATER, SEWER AND
UTILITY EASEMENT
PLAT# 24910-11 EX. HOUSE TO REMAIN MCE=17/4.77 13,292/SQ. FT G.=169.33 F.F.=171/33 Yak department B.=162,33 F.F.=166.83 RECREATION AND PAR B.=157.83 USE-IN-COMMON ACCESS, STORMDRAIN NO. 13565 G.⇒182.53 F,F.=185.88 B.=176.88 √(5R) √ MCE=174.32 √17.594 SQ. FI 13,077 SQ. FT G.=170.83 SECTION F.F.=172.83 B.=16³.83 MCE=162.14 13,540 SQ. F LIVE FEARLESS IN OPEN SPACE DEDICATED TO HOWARD CREDIT TAKEN
OAK 15" CHRIST LLC G.=162.33 13,239 SQ. F EAST POINT COUNTY MARYLAND F.F.=164.33 FOREST CONSERVATION B.=155.33 G.=167.33 PLATS 2/1345-21346 EASEMENT F.F.=169.33 SUMMER HAVEN B.=160.33 LIVE FEARLESS IN PLATS 18902-18904 Z0NED:/R-12 EAST POINT/ SECTION 2 PLATS 21345-2\346 LIME FEARLESS AN CHRISTVELC SECTION 2 XONED: R-12 PLATS/21345-21346 ENTER SECOND LOT 8 LIVE FEARLESS IN EAST POINT SECTION 1---PLAT # 21106 ZONED: R-12 COPEN SPACE_LOF 4 EX. PUBLIC STORMHATER MANAGEMENT, /RAY & JENNY 162-STORMORAIN & UTILITY EASEMENT FALLARIA PLAT 21106 SUMMER HAVEN PLATS 18902-18904 GRAPHIC SCALE

FOR CONSTRUCTION OF RGI THRU RGG, SEE TYPICAL RAIN GARDEN (MB-7)

(IN FEET) 1 inch = 30 ft.

2'- 2 1/2' HGT.

----PLANT SAUCE REMOVE BURLAP FROM TOP 2"x4"x8' WOOD STAKE

SCHEDILLE A . DEPIMETED LANDSCAPED EDCE

TYPICAL DECIDUOUS TREE PLANTING DETAIL

SCHEDULE A : P	<u>ERIMETER LA</u>	<i>NDSCAPED E</i>	DGE	HOT TO SCALE		NOT TO SCALE	
CATEGORY	ADJACENT TO ROADWAY	ADJACEN	ADJACENT TO PERIMETER PROPERTIES				
LANDSCAPE TYPE	B (PERIMETER 1)	B (PERIMETER 1-A)	B (PERIMETER 2)	B (PERIMETER 3)	B (PERIMETER 4)	D (PERIMETER 4-A)	
LINEAR FEET OF PERIMETER	83.87 LF	111.82 LF	504.65 LF	225.42 LF	395.51 LF	233.00 LF	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	NO	NO	NO	YES 4 EXISTING SHADE TREES	YES 3 EXISTING SHADE TREES	NO	
CREDIT FOR WALL, FENCE, OR BERM (YES, NO, LINEAR FEET)	NO	NO	NO	NO	NO	YES, 233 LF OF PRIVACY WALL	
Number of Plants Required Shade Trees Evergreen Trees Shrubs	2 SHADE TREES 2 EVERGREEN TREES 0 SHRUBS	2 SHADE TREES 3 EVERGREEN TREES 0 SHRUBS	10 SHADE TREES 13 EVERGREEN TREES 0 SHRUBS	5 SHADE TREES 6 EVERGREEN TREES 0 SHRUBS	8 SHADE TREES 10 EVERGREEN TREES 0 SHRUBS	4 SHADE TREES 23 EVERGREEN TREES 0 SHRUBS	31 SHADE TREES 57 EVERGREEN TREES 0 SHRUBS
Number of Plants Provided Shade trees Evergreen trees Other trees (2:1 Substitution) Shrubs (10:1 Substitution)	2 SHADE TREES 2 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	2 SHADE TREES 3 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	10 SHADE TREES 13 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	1 SHADE TREES 6 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	5 SHADE TREES 10 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	233 LF OF PRIVACY WALL O SHADE TREES O EVERGREEN TREES O SUBSTITUTION TREES O SHRUBS	

LANDSCAPE REQUIREMENT PLANTING SCHEDULE QUANTITY SYMBOL BOTANICAL NAME COMMON NAME ACER RUBRUM 'RED SUNSET'
OR EQUIVALENT AS OUTLINED IN THE
HOWARD COUNTY LANDSCAPE MANUAL.

RED SUNSET RED MAPLE
OR EQUIVALENT AS OUTLINED IN THE
HOWARD COUNTY LANDSCAPE MANUAL. 2 1/2" - 3" CAL. HOWARD COUNTY LANDSCAPE MANUAL.

IMPERIAL THORNLESS HONEYLOCUST 2 1/2" - 3" CAL. GLEDITSIA TRIACANTHOS INERMIS 'IMPERIAL' OR EQUIVALENT AS OUTLINED IN THE HOWARD COUNTY LANDSCAPE MANUAL.

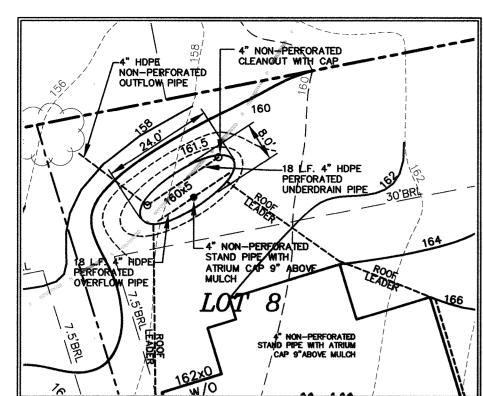
THUJA OCCIDENTALIS 'ELEGANTISSIMA' ELEGANTISSIMA ARBORVITAE
OR EQUIVALENT AS OUTLINED IN THE
HOWARD COUNTY LANDSCAPE MANUAL.
HOWARD COUNTY LANDSCAPE MANUAL. 54 TREES (20 SHADE TREES, 34 EVERGREEN TREES)

3 of 5

SDP-19-005

Surveyors , 2, T

MILDENBERG BOENDER &



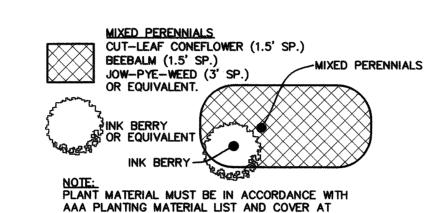
70	<u>`</u>	/	162XI	<u> </u>	/		/		
TYP	ICA	L .	RAIN	GAR	DEN	(MB-	7)	PLAN	
				SCALE:	1"=20'				

RAINGARDENS SCHEDULE

FACILITY	TOP EL.	TOP OF BERM	INV. IN	INV. OUT	AREA AT TOP EL.	PONDING DEPTH	GRAVEL DEPTH BELOW UNDERDRAIN		
RG #1	181.00	182.00	178.08	177.90	150 SF	12"	12"		
RG #2	168.50	169.50	165.58	165.45	150 SF	12"	12"		
RG #3	165.50	166.50	162.58	162.45	150 SF	12"	12"		
RG #4	158.50	159.50	155.58	155.45	150 SF	12"	12"		
RG #5	155.5	156.5	152.58	152.45	150 SF	12"	12"		
RG #6	160.50	161.50	157.58	157. 4 5	150 SF	12"	12"		
MB #1	155.00	156.00	152.08	151.90	1,430 SF	12"	12"		

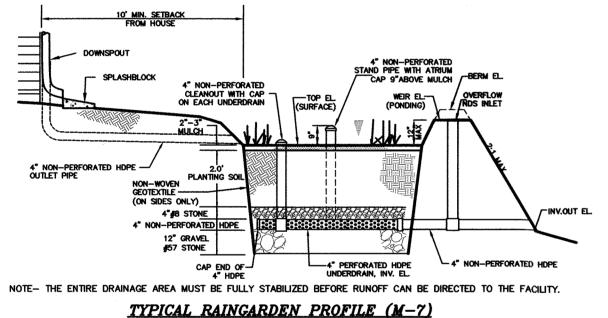
SWM SUMMARY TABLE

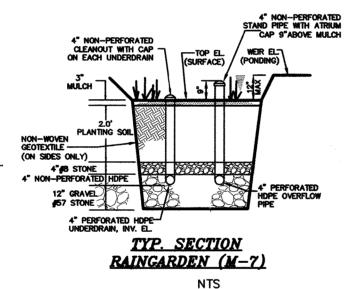
	SWM PRACTICE	ESD _V REQUIRED	ESDV PROVIDED
2	RAIN GARDEN (M-7)	209 C.F.	260 C.F.
3	N/A	N/A	N/A
4	RAIN GARDEN (M-7)	209 C.F.	260 C.F.
5	RAIN GARDEN (M-7)	209 C.F.	260 C.F.
6	RAIN GARDEN (M-7)	209 C.F.	260 C.F.
7	RAIN GARDEN (M-7)	209 C.F.	260 C.F.
8	RAIN GARDEN (M-7)	209 C.F.	260 C.F.
1 & ROADWAYS	MICRO-BIORETENTION (M-6)	2,040 C.F.	2,152 C.F.
TOTAL		3,294 C.F.	3,712 C.F.

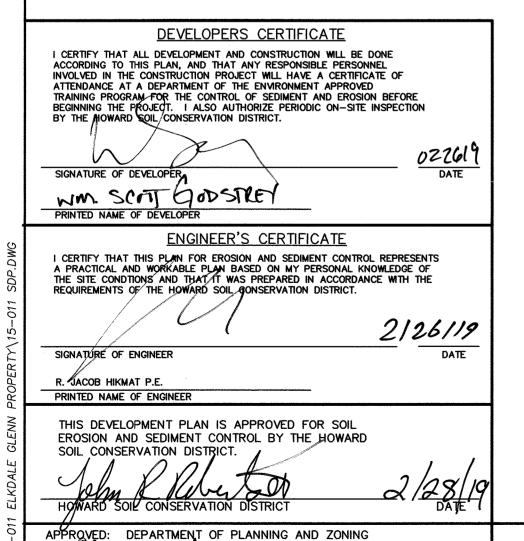




LEAST 50% OF THE SURFACE AREA OF THE





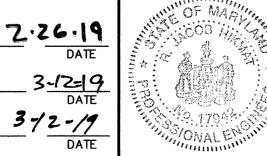


CHIEF, DEVELOPMENT ENGINEERING DIVISION

Kent Shenlook

CHIEF, DIVISION OF LAND DEVELOPMENT

OWNER/DEVELOPER HARMONY BUILDERS, INC. 4228 COLUMBIA ROAD ELLICOTT CITY, MD 21042 (410)461-0833



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. 17942, EXP DATE 09/03/20

2/26/19 R. JACOB HIKMAT P.E.

P.O. Box 2071 Columbia, MD 21045-2071 Phone: (410) 381-5330 Fax: (410) 381-1064 e-mail: mounir54@yahoo.com

CONSULTANTS: Edward De Santis Eng. C.E., P.E. . Dr. Karnal Tawfiqu Ph.D., P.E. PRESIDENT: Mounir Adouzakhm MSCE, RE.

December 4, 2016

Mildenberg, Boender & Associates, Inc. 7350-B Grace Drive Columbia, Maryland 21044

Attn: Ms. Maya M. Mildenberg

Vice President Ref: Limited Subsurface Exploration Proposed Development Greene Property 6200 Hanover Road, Hanover Howard County, Maryland

Tax Map 38, Grid 15, Parcel 871 GE&T Project No. G-246

Dear Ms. Mildenberg:

On November 26th, 2016, GE&T Consultants, Inc. utilized a truck mounted B-47 drilling rig to bore six (6) soil borings (B-1 through B-6) to depths ranging from 4 ft to 10 ft below existing site grades at the locations shown on the attached Borings Location Map. The purpose of the study was to evaluate the presence/absence of bedrock and local groundwater at the locations shown, within the depths explored. The number, location, and depth of the borings were determined by others and the borings were staked-out in the field by others.

Our field observations are summarized in Table 1 below:

Boring No.	Depth to	Depth to Auger	Boring	Remarks
	Groundwater (ft)	Refusal (ft)	Termination	
			Depth (ft)	
B-1	N/A	N/A	8.0	
B-2	N/A	N/A	6.5	
B-3	N/A	N/A	4.0	
B-4	N/A	N/A	6.0	
B-5	N/A	N/A	10.0	,
B-6	N/A	N/A	6.5	

Note: All depths are below existing site grades

It should be noted that the actual level of groundwater and the amount and level of perched water should be anticipated to fluctuate 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. GE&T 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. It should also be noted that soil description listed in the boring logs was based on visual classification and no laboratory testing was performed.

GE&T 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, GE&T Consultants, Inc



OPERATION AND MAINTENANCE SCHEDULE FOR MICRO-BIORETENTION (M-6) AND RAINGARDEN (M-7)

ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER AND SOIL LAYER IS REQUIRED. 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 AND MAA PLANTING MATERIAL LIST.

SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, TREATMENT OF ALL DISEASED TREES AND SHRUBS AND REPLACEMENT OF ALL DEFICIENT STAKES AND WIRES.

MULCH SHALL BE INSPECTED EACH SPRING. REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY 2 TO 3 YEARS. SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS. REMOVE AND REPLACE TOP FEW INCHES OF PLANTING MEDIA IF WATER PONDS

FOR MORE THAN 24 HOURS FOLLOWING ANY STORM EVENT.

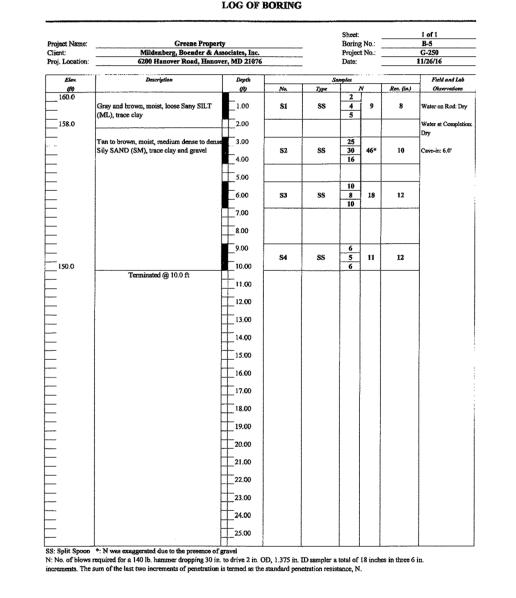


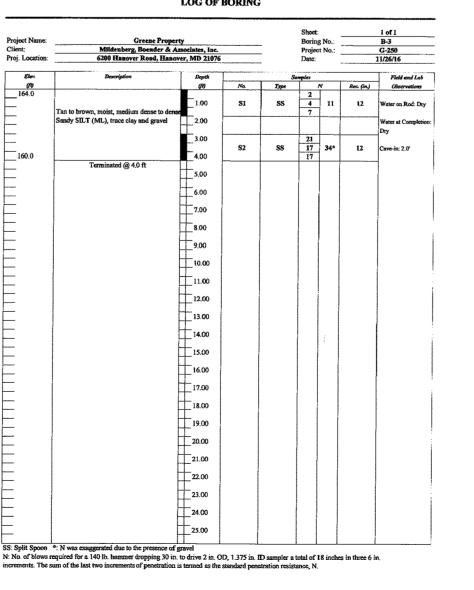
Project Name:	Greene Prop	erty			Boring	No.:		B-1	
Client:	Mildenberg, Boender & Associates, Inc.			Project No.:			G-250		
Proj. Location:	6209 Hanover Road, Han	over, MD 21976		-	Date:			11/26/16	
	-							1	
Elev.	Description	Depth	<u> </u>		i osp les			Field and Lab	
183.0		60	Na	Туре	3		Rec. (in.)	Olaervations	
183.0		1.00	S1	SS	6	13	6	Water on Rod: Dry	
_	Brown, moist, medium dense to desnse				7				
	Sandy SILT (ML), trace to little clay	2.00						Water at Completion:	
								Dry	
<u> </u>		3.00			12				
<u> </u>		-400	S2	SS	17	35	10	Cave-in: 5.0°	
<u> </u>		4.00			18			-	
_		5.00							
<u> </u>		5.00			10			1	
_		6.00	S3	SS	15	33	10	1	
					18				
		7.00			18				
	Í		84	. 88	17	37	12		
175.0	Terminated @ 8.0 ft	8.00			20			-	
-	TOTALISMENT (W 6.0 II	9.00			1 1				
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		25.00							
_	1	H							
SS: Split Spoon	*: N was exaggerated due to the presence of	of gravel			*				
N: No. of blows	required for a 140 lb. hammer dropping 30	in. to drive 2 in. C					es in three 6	in.	
increments. The	sum of the last two increments of penetration	n is termed as the	standard pen	etration resis	tance, N.				

Elev.	Description	Depth			amples			Field and
(f9	Disciplion .	69	Na	Type		v	Rec. (in.)	Observat
158.0				1 200	4	Ì		
	Gray and brown, moist, medium dense	1.00	81	SS	11	23	6	Water on Rod
156.0	Sandy SILT (ML), trace clay				12			
		2.00						Water at Com
_	Tan to brown, moist loose to medium dense							Dry
	Silty SAND (SM), trace clay	3.00		1	4			7
			S2	SS	3	6	10	Cave-in: 3.5
		4.00			3			_
		Ш						_
		5.00			5	1		
			S3	SS	8	29	10	
152.0		6.00		ļ	21			4
	Terminated @ 6.0 ft	H						
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SS: Split Spoon	*: N was exaggerated due to the presence of	gravel			a total of			

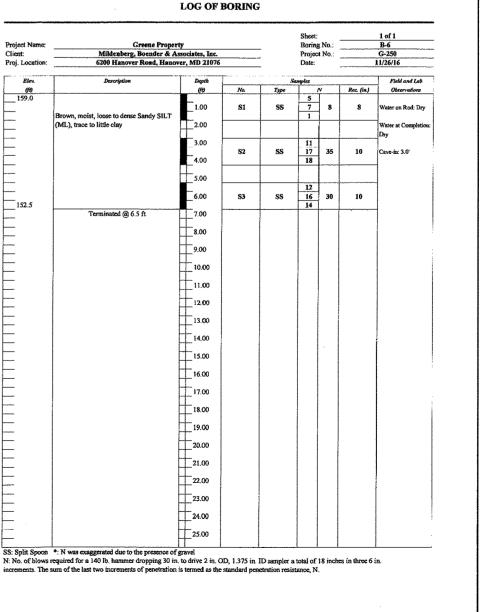


	0 2				Sheet			1 of 1
Project Name:	Mildenberg, Boender & Associates, Inc.			-	Boring			B-2
Client: Proj. Location:				Project No.: Date:			G-250 11/26/16	
roj. Location:	OZOG HERESTEI ROSSE, HERE	P. P. L. W. P.		-	Date:			E. M. 4407 1.Q
Elex	Description	Depth	I		iamples			Field and Lab
629		GO.	No.	Type		~	Rec. (in.)	Observations
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	1	1.00	Si	SS	7	15	8	Water on Red: Dry
	Tan to brown, moist, medium dense to den		1		8	1		1
_	Sandy SILT (ML), trace clay and gravel	2.00						Water at Completion
_		H	ĺ	1				Dry
_	1	3.00		†	15			1-7
_	1		S2	SS	20	430	10	Cave-in: 3.5'
-		4.00			23	-		
window					+			-
anamin .		5.00						
_		3.00		 	8			-
_		6.00	53	SS	10	22	10	1
157.5		0.00	3.5	33	12	مم	10	
131.3	Terminated @ 6.5 ft	7.00		 	1.4	-		1
	reminimed (a) 0.5 it	1.00						
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C. Calia Cara	*: N was exaggarated due to the presence of			L		t		L
		straves						









MILDENBERG
BOENDER &
Engineers Planners
7350-B Grace Drive, Columbi
(410) 997-0296 Tel. (410)

SSOC.

PARCEL 871, HOWARD COUNTY, MD
ILS AND SOIL BORINGS

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 CLEARLY IN THE FIELD. A MINIMUM OF 48 HOUR NOTICE TO CID MUST BE GIVEN AT THE FOLLOWING STAGES:
- PRIOR TO THE START OF EARTH DISTURBANCE. 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
- 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

- 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
- 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 HORIZONTAL TO 1 VERTICAL (3:1): AND SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED AREAS ON THE PROJECT SITE EXCEPT FOR 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 STABILIZATION 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. ALL CONCENTRATED FLOW, STEEP SLOPE, AND HIGHLY ERODIBLE 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

SITE ANALYSIS:	
TOTAL AREA OF SITE:	2.09ACRES
AREA DISTURBED:	1.95ACRES
AREA TO BE ROOFED OR PAVED:	0.48ACRES
AREA TO BE VEGETATIVE STABILIZED:	1.47ACRES
TOTAL CUT:	4,500CU. YDS
TOTAL FILL:	4,000CU. YDS
OFFSITE WASTE/BORROW AREA LOCAT	10N:

- 7. ANY SEDIMENT CONTROL PRACTICE WHICH 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 CID. THE SITE AND ALL CONTROLS 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
 - -MONITORING/SAMPLING
 - -MAINTENANCE AND/OR CORRECTIVE ACTION PERFORMED -OTHER INSPECTION ITEMS AS REQUIRED BY THE GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES (NPDES, MDE).
- 9. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN AND SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORKDAY, WHICHEVER IS SHORTER.
- 10. ANY MAJOR CHANGES OR REVISIONS TO THE PLAN OR SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE HSCD PRIOR TO PROCEEDING WITH CONSTRUCTION. MINOR REVISIONS MAY ALLOWED BY THE CID PER THE LIST OF HSCD-APPROVED FIELD CHANGES.
- 11. DISTURBANCE SHALL NOT OCCUR OUTSIDE THE L.O.D. A PROJECT IS TO BE SEQUENCED SO HAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 AC. PER GRADING UNIT) AT A TIME. WORK MAY PROCEED TO A SUBSEQUENT GRADING UNIT WHEN AT LEAST 50 PERCENT OF THE DISTURBED AREA IN THE PRECEDING GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY THE CID. UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE HSCD, NO MORE THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED AT A GIVEN TIME.
- 12. WASH WATER FROM ANY EQUIPMENT, VEHICLES, WHEELS, PAVEMENT, AND OTHER SOURCES MUST BE TREATED IN A SEDIMENT BASIN OR OTHER APPROVED WASHOUT STRUCTURE.
- 13. TOPSOIL SHALL BE STOCKPILED AND PRESERVED ON-SITE FOR REDISTRIBUTION ONTO FINAL
- 14. ALL SILT FENCE AND SUPER SILT FENCE SHALL BE PLACED ON-THE-CONTOUR, AND BE IMBERICATED AT 25' MINIMUM INTERVALS, WITH LOWER ENDS CURLED UPHILL BY 2' IN ELEVATION.
- 15. STREAM CHANNELS MUST NOT BE DISTURBED DURING THE FOLLOWING RESTRICTED TIME PERIODS (INCLUSIVE) USE I AND IP MARCH 1 - JUNE 15
- USE III AND IIIP OCTOBER 1 APRIL 30 USE IV MARCH 1 - MAY 31
- 16. A COPY OF THIS PLAN, THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND ASSOCIATED PERMITS SHALL BE ON-SITE AND AVAILABLE WHEN THE SITE IS ACTIVE.

DATE

	<u>DEVELOPERS CERTIFICATE</u>
	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. I ALSO AUTHORIZE PERIODIC ON—SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.
	SIGNATURE OF DEVELOPER DATE
	WM. SCOTT COSTLEY
	PRINTED NAME OF DEVELOPER
GLENN PROPERTY\15-011 SDP.DWG	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.
ΓΥ\15–011	SIGNATURE OF ENGINEER 1/30/19 DATE
PERT	R. JACOB HIKMAT P.E.
PRO	PRINTED NAME OF ENGINEER
E GLENN	THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
1 ELKDALE	HOWARD SOIL CONSERVATION DISTRICT PATE
004\15-011	APPROVED: DEPARTMENT OF PLANNING AND ZONING CHIEF, DEVELOPMENT ENGINEERING DIVISION & DATE
J 1	OINEL, DE VELOI MENT ENTONINELIMINO DI VISION IN DAIL

CHIEF, DIVISION OF LAND DEVELOPMENT **

(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.

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

- SEEDBED 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 NOT 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

2. PERMANENT STABILIZATION

- a. A SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 5 ACRES OR MORE. THE MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE:
- I. SOIL PH BETWEEN 6.0 AND 7.0.
- II. SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM). III. 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 LOVEGRASS WILL BE PLANTED, THEN A SANDY SOIL (LESS THAN 30 PERCENT SILT PLUS
- CLAY) WOULD BE ACCEPTABLE. IV. SOIL CONTAINS 1.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT. V. 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
- MIX SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. RAKE LAWN AREAS TO SMOOTH THE SURFACE, REMOVE LARGE OBJECTS LIKE STONES 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 SEEDBED PREPARATION. TRACK SLOPES 3:1 OR FLATTER WITH TRACKED EQUIPMENT LEAVING THE SOIL IN A IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRIABLE. SEEDBED LOOSENING MAY BE UNNECESSARY ON NEWLY DISTURBED AREAS.
- B. TOPSOILING
- 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
- 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
- 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
- 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 1½ 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, THISTLE, 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
- EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED WHEN APPLYING TOPSOIL UNIFORMLY DISTRIBUTE TOPSOIL IN A 5 TO 8 INCH LAYER AND LIGHTLY COMPACT TO A MINIMUM

THICKNESS OF 4 INCHES. SPREADING IS TO BE PERFORMED IN SUCH A MANNER THAT SODDING OR

- SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS MUST BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS. TOPSOIL MUST NOT BE PLACED IF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN
- THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.
- C. SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS)
- SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OF 5 ACRES OR MORE. SOIL ANALYSIS MAY BE PERFORMED BY A RECOGNIZED PRIVATE OR COMMERCIAL LABORATORY. SOIL SAMPLES TAKEN FOR ENGINEERING PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSES.
- FERTILIZERS MUST BE UNIFORM IN COMPOSITION. FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY APPROPRIATE EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM THE APPROPRIATE APPROVAL AUTHORITY. FERTILIZERS MUST ALL BE DELIVERED TO THE SITE FULLY LABELED ACCORDING TO THE APPLICABLE LAWS AND MUST BEAR THE NAME, TRADE NAME OR TRADEMARK AND
- LIME MATERIALS MUST BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE SUBSTITUTED EXCEPT WHEN HYDROSEEDING) WHICH CONTAINS AT LEAST 50 PERCENT TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE). LIMESTONE MUST BE GROUND TO SUCH FINENESS THAT AT LEAST 50 PERCENT WILL PASS THROUGH A #100 MESH SIEVE AND 98 TO 100 PERCENT WILL PASS THROUGH A #20 MESH SIEVE. LIME AND FERTILIZER ARE TO BE EVENLY DISTRIBUTED AND INCORPORATED INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
- WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, SPREAD GROUND LIMESTONE AT THE RATE OF 4 TO 8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE

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

A MOUND OR PILE OF SOIL PROTECTED BY APPROPRIATELY DESIGNED EROSION AND SEDIMENT CONTROL MEASURES. O 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.

- 1. THE STOCKPILE LOCATION AND ALL RELATED SEDIMENT CONTROL PRACTICES MUST BE CLEARLY INDICATED ON
- THE EROSION AND SEDIMENT CONTROL PLAN. 2. THE FOOTPRINT OF STOCKPILE MUST BE SIZED TO ACCOMMODATE THE ANTICIPATED VOLUME OF MATERIAL AND BASED ON A SIDE SLOPE RATIO NO STEEPER THAN 2:1. BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION B-3 LAND GRADING.
- 3. RUNOFF FROM THE STOCKPILE AREA MUST DRAIN TO A SUITABLE SEDIMENT CONTROL PRACTICE.

PERMANENT SEEDING SUMMARY

DEPTHS

4. ACCESS THE STOCKPILE AREA FROM THE UPGRADE SIDE.

HARDINESS ZONE (FROM FIGURE B.3): 6b

SEED MIXTURE (FROM TABLE B.3): 8

DATES

AUG 15-OCT 15 1/4"-1/2"

HEREBY CERTIFY THAT THESE DOCUMENTS WERE

PREPARED OR APPROVED BY ME AND THAT I AM

UNDER THE LAWS OF THE STATE OF MARYLAND,

A DULY LICENSED PROFESSIONAL ENGINEER

LICENSE NO. 1/7942, EXP DATE 09/03/20

RATE (LB/AC)

SPECIES

TALL FESCUE

- 5. CLEAR WATER RUNOFF INTO THE STOCKPILE AREA MUST BE MINIMIZED BY USE OF A DIVERSION DEVISE SUCH AS AN EARTH DIKE, TEMPORARY SWALE OR DIVERSION FENCE. PROVISIONS MUST BE MADE FOR DISCHARGING CONCENTRATED FLOW IN A NON-EROSIVE MANNER.
- 6. WHERE RUNOFF CONCENTRATES ALONG THE TOE OF THE STOCKPILE FILL, AN APPROPRIATE EROSION/SEDIMENT CONTROL PRACTICE MUST BE USED TO INTERCEPT THE DISCHARGE.
- 7. STOCKPILE MUST BE STABILIZED IN ACCORDANCE WITH THE 3/7 DAY STABILIZATION REQUIREMENT AS WELL AS
- STANDARD B-4-I INCREMENTAL STABILIZATION AND STANDARD B-4-4 TEMPORARY STABILIZATION. 8. IF THE STOCKPILE IS LOCATED ON AN IMPERVIOUS SURFACE, A LINER SHOULD BE PROVIDED BELOW THE STOCKPILE TO FACILITATE CLEANUP. STOCKPILES CONTAINING CONTAMINATED MATERIAL MUST COVERED WITH IMPERMEABLE

THE STOCKPILE AREA MUST CONTINUOUSLY MEET THE REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION. SIDE SLOPES MUST BE MAINTAINED AT NO STEEPER THAN 2:1 RATIO. THE STOCKPILE AREA MUST BE KEPT FREE OF EROSION. IF THE VERTICAL HEIGHT OF A STOCKPILE EXCEEDS 20 FEET FOR 2:1 SLOPES, 30 FEET FOR 3:1 SLOPES, OR 40 FEET FOR 4:1 SLOPES, BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION B-3 LAND GRADING.

PER ACRE

FERTILIZER RATE

(10-20-20)

PER ACRE

(1 LB./1000 SF) (2 LB./1000 SF) (2 LB./1000 SF)

OWNER/DEVELOPER

HARMONY BUILDERS, INC 4228 COLUMBIA ROAD

ELLICOTT CITY, MD 21042

(410)461-0833

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

DEFINITION

THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER.

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. ALL SEED MUST BE SUBJECT TO RE—TESTING BY A RECOGNIZED SEED LABORATORY. ALL SEED USED MUST HAVE BEEN TESTED WITHIN THE 6 MONTHS IMMEDIATELY PRECEDING THE DATE OF SOWING SUCH MATERIAL ON ANY PROJECT. REFER TO TABLE B.4 REGARDING THE QUALITY OF SEED. SEED TAGS MUST BE AVAILABLE UPON REQUEST TO THE INSPECTOR TO VERIFY TYPE OF SEED AND SEEDING RATE.
- b. MULCH ALONE MAY BE APPLIED BETWEEN THE FALL AND SPRING SEEDING DATES ONLY IF THE GROUND IS FROZEN. THE APPROPRIATE SEEDING MIXTURE MUST BE APPLIED WHEN THE GROUND THAWS. c. INOCULANTS: THE INOCULANT FOR TREATING LEGUME SEED IN THE SEED MIXTURES MUST BE A PURE CULTURE OF NITROGEN FIXING BACTERIA PREPARED SPECIFICALLY FOR THE SPECIES. INOCULANTS MUST NOT BE USED LATER THAN THE DATE INDICATED ON THE CONTAINER. ADD FRESH INOCULANTS AS DIRECTED ON THE PACKAGE. USE FOUR TIMES THE RECOMMENDED RATE WHEN HYDROSEEDING. NOTE: IT IS VERY IMPORTANT TO KEEP INOCULANT AS COOL AS POSSIBLE UNTIL USED. TEMPERATURES ABOVE 75 TO 80 DEGREES FAHRENHEIT CAN WEAKEN BACTERIA AND MAKE THE INOCULANT LESS EFFECTIVE
- d. SOD OR SEED MUST NOT BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS.
- 2. APPLICATION a. DRY SEEDING: THIS INCLUDES USE OF CONVENTIONAL DROP OR BROADCAST SPREADERS I. INCORPORATE SEED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON TEMPORARY SEEDING TABLE B.1,
- PERMANENT SEEDING TABLE B.3, OR SITE-SPECIFIC SEEDING SUMMARIES. II. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION. ROLL THE SEEDED AREA WITH A WEIGHTED ROLLER TO PROVIDE GOOD SEED TO SOIL
- b. DRILL OR CULTIPACKER SEEDING: MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH SOIL.
 I. CULTIPACKING SEEDERS ARE REQUIRED TO BURY THE SEED IN SUCH A FASHION AS TO PROVIDE AT LEAST
- 1/4 INCH OF SOIL COVERING. SEEDBED MUST BE FIRM AFTER PLANTING. II. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN c. HYDROSEEDING: APPLY SEED UNIFORMLY WITH HYDROSEEDER (SLURRY INCLUDES SEED AND FERTILIZER).
- I. IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES SHOULD NOT EXCEED THE FOLLOWING: NITROGEN, 100 POUNDS PER ACRE TOTAL OF SOLUBLE NITROGEN; P, O5 (PHOSPHOROUS), 200 POUNDS PER ACRE; K20 (POTASSIUM), 200 POUNDS PER ACRE. II. LIME: USE ONLY GROUND AGRICULTURAL LIMESTONE (UP TO 3 TONS PER ACRE MAY BE APPLIED BY HYDROSEEDING). NORMALLY, NOT MORE THAN 2 TONS ARE APPLIED BY HYDROSEEDING AT ANY ONE
- TIME. DO NOT USE BURNT OR HYDRATED LIME WHEN HYDROSEEDING III. MIX SEED AND FERTILIZER ON SITE AND SEED IMMEDIATELY AND WITHOUT INTERRUPTION. IV. WHEN HYDROSEEDING DO NOT INCORPORATE SEED INTO THE SOIL.

- 1. MULCH MATERIALS (IN ORDER OF PREFERENCE) a. STRAW CONSISTING OF THOROUGHLY THRESHED WHEAT, RYE. OAT, OR BARLEY AND REASONABLY BRIGHT IN COLOR. STRAW IS TO BE FREE OF NOXIOUS WEED SEEDS AS SPECIFIED IN THE MARYLAND SEED LAW AND NOT MUSTY. MOLDY. CAKED, DECAYED, OR EXCESSIVELY DUSTY. NOTE: USE ONLY STERILE STRAW MULCH IN
- AREAS WHERE ONE SPECIES OF GRASS IS DESIRED. b. WOOD CELLULOSE FIBER MULCH (WCFM) CONSISTING OF SPECIALLY PREPARED WOOD CELLULOSE PROCESSED INTO A UNIFORM FIBROUS PHYSICAL STATE. I. 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 SLURRY. II. WCFM, INCLUDING DYE, MUST CONTAIN NO GERMINATION OR GROWTH INHIBITING FACTORS III. 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 BLOTTER-LIKE GROUND COVER, ON APPLICATION, HAVING MOISTURE ARSORPTION AND PERCOLATION PROPERTIES AND MUST COVER AND HOLD GRASS SEED IN CONTACT WITH THE SOIL WITHOUT INHIBITING THE GROWTH OF THE GRASS SEEDLINGS. IV. WCFM MATERIAL MUST NOT CONTAIN ELEMENTS OR COMPOUNDS AT CONCENTRATION LEVELS THAT WILL BE PHYTO-TOXIC
- V. 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, ASH CONTENT OF 1.6 PERCENT MAXIMUM AND WATER HOLDING CAPACITY OF 90 PERCENT MINIMUM. 2. 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 AT 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.
- 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: I. 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. II. WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DR
- 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. III. SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRO-TACK), DCA-70, PETROSET, TERRA TAX II, TERRA TACK AR OR OTHER APPROVED EQUAL MAY BE USED. FOLLOW APPLICATION RATES AS SPECIFIED BY THE MANUFACTURER. APPLICATION OF LIQUID BINDERS NEEDS TO BE HEAVIER AT THE EDGES WHERE WIND
- CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF BANKS. USE OF ASPHALT BINDERS IS STRICTLY PROHIBITED. IV. LIGHTWEIGHT PLASTIC NETTING MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER RECOMMENDATIONS. NETTING IS USUALLY AVAILABLE IN ROLLS 4 TO 15 FEET WIDE AND 300 TO 3,000

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

<u>DEFINITION</u>TO STABILIZE DISTURBED SOIL WITH VEGETATION FOR UP TO 6 MONTHS.

TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURB SOIL.

CONDITIONS WHERE PRACTICE APPLIES
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.

LIME RATE

- 1. SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B.1 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3), AND ENTER THEM IN THE TEMPORARY SEEDING SUMMARY ALONG WITH APPLICATION RATES, SEEDING DATES ND SEEDING DEPTHS. IF THIS SUMMARY IS NOT PUT ON THE PLAN AND COMPLETED. THEN TABLE B-1 PLUS FORTELIZER AND LIME RATES MUST BE PUT ON THE PLAN.
- FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING. WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING SEASON, APPLY SEED AND
- MULCH OR STRAW MULCH ALONE AS PRESCRIBED IN SECTION B-4-3.A.1b, AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

RECOMMENDED SEEDING DATED BY PLANT HARDINESS ZONE PLANT SPECIES LB/AC LB/ (INCHES) 5B AND 6A 7A AND 7B COOL SEASON GRASSES MAR 15 TO MAY 31; | MAR 1 TO MAY 15; | FEB.15 TO APR 30; PER ACRE (90 LBS / 1000 (LOLIUM PERENNE SSP. MULTIFLORUM AUG 1 TO SEP 30 AUG 1 TO OCT 15 MAR 15 TO MAY 31: | MAR 1 TO MAY 15: | FEB.15 TO APR 30: MIXTURES 1, 4-7, 9, AND 10 FROM TABLE B.3 OF THE 2011 MARYLAND STANDARD AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT AUG 1 TO SEP 30 | AUG 1 TO OCT 15 | AUG 15 TO NOV 30 (HORDEUM VULGARI MAR 15 TO MAY 31; | MAR 1 TO MAY 15; | FEB.15 TO APR 30; AUG 1 TO SEP 30 | AUG 1 TO OCT 15 | AUG 15 TO NOV 30 MAR 15 TO MAY 31: | MAR 1 TO MAY 15: | FEB.15 TO APR 30: AUG 1 TO SEP 30 | AUG 1 TO OCT 15 | AUG 15 TO NOV 30 (TRITICUM AESTIVUM MAR 15 TO MAY 31; MAR 1 TO MAY 15; FEB.15 TO APR 30; AUG 1 TO OCT 31 AUG 1 TO OCT 15 AUG 15 TO DEC 15 (SECALE ITALICA) WARM SEASON GRASSES 30 | 0.7 | 0.5 | JUN 1 TO JUL 31 | MAY 16 TO JUL 31 | MAY 1 TO AUG 14 (SETARIA ITALICA) JUN 1 TO JUL 31 | MAY 16 TO JUL 31 | MAY 1 TO AUG 14 (PENNISETUM GLAUCUM

TEMPORARY SEEDING FOR SITE STABILIZATION

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

TO STABILIZE DISTURBED SOIL WITH PERMANENT VEGETATION.

TO USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER OF DISTURBED CONDITIONS WHERE PRACTICE APPLIES

EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR 6 MONTHS OR MORE

SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE

PERCENT OF THE TOTAL MIXTURE BY WEIGHT.

A. SEED MIXTURES 1. GENERAL US . SELECT ONE OR MORE OF THE SPIECES OF MIXTURES LISTED IN TABLE B.3 FOR THE APPROPRIATE

- PLANT HARDINESS ZONE (FROM FIGURE B.3) AND BASED IN THE SITE CONDITION OR PURPOSE FOUND ON TABLE B.2. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY ADDITIONAL PLANTING SPECIFICATIONS FOR EXCEPTIONAL SITES SUCH AS SHORELINES, STREAM BANKS,
- OR DINES OR FOR SPECIAL PURPOSES SUCH AS WILDLIFE OR AESTHETIC TREATMENT MAY BE FOUND IN USDA-NRCS TECHNICAL FIELD GUIDE, SECTION 342-CRITICAL AREA PLANTING. C. FOR SITES HAVING DISTURBAD AREA OVER 5 ACRES, USE AND SHOW RATES RECOMMENDED BY THE
- D. FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREA FROM FERTILIZED (40-0-01) AT 3 1/2 POUNDS PER 1000 S.F. (150 POUNDS PER ACRE) AT THE TIME OF SEEDING IN ADDITION TO THE SOIL AMENDMENTS SHOWN IN THE PERMANENT SEEDING SUMMARY. 2. TURFGRASS MIXTURES AREAS WHERE TURFGRASS MAY BE DESIRE INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL

B. SELECT ONE OR MORE OF THE SPECIES OF MIXTURES LISTED BELOW BASED ON THE SITE

- CONDITIONS OR PURPOSE. ENTER SELECTED MIXTURE(S), APPLOCATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN AREAS THAT RECEIVE INTENSIVE MANAGEMENT. IRRIGATION REQUIRED IN THE AREAS OF CENTRAL MARYLAND AND EASRERN SHORE RECOMMENDED CERTIFIED KENTUCKY BLUEGRASS SEEDING RETA: 1.5 TO 2.0 POUNDS PER 1000 S.F. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35
- II. KENTUCKY BLUEGRASS/PERENIAL RYE: FULL SUN MIXTURE: FOR USE IN FULL SUN AREAS WHERE RAPID ESTABLISHMENT'IS NECESSARY ABD WHEN TURF WILL RECEIVE MEDIUM TO INTENSUVE MANAGEMENT. CERTIFIED PERENIAL RYEGRASS CULTIVARS/CERTIFIED KENTUCKY BLUEGRASS SEEDINGRATE: 2 POUNDS MIXTURE PER 1000 S.F. SHOOSE A MINIMUM OF THREE KENTUCKYBLUEGRASS CULTIVARS EITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE
- III. TALL FESCUE/KENTUCKY BLUEGRASS: FULL MIXTURE: FOR USE IN DROUGHT AREAS AND/OR FOR AREAS RECEIVING LOW TO MEDIUM MANAGEENT IN FULL SUN TO MEDIUM SHADE. RECOMMENDED MIXTURE INCLUDES; CERTIFIED TALL FESCUE CULTIVARS 65 TO 100 PERCENT, CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 0 TO 5 PERCENT. SEEDING RATE: 5 TO 8 PERCENT PER 1000 S.F. ONE OR MORE CULTIVARS MAY BE BLENDED.
- IV. KENTUCKY BLUEGRASS/FINE FESCUE: SHADE MIXTURE: FOR USE IN AREAS WITH SHADE IN BLUEGRASS LAWNS. FOR ESTABLISHMENT IN HIGH QUALITY, INTENSIVELY MANAGED TIRF AREA. MIXTURE INCLUDES; CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 30 TO 40 PERCANT AND CERTIFIES FINE FESCUE AND 60 TO 70 PERCENT. SEEDING RATES 1 1/2 TO 3 POUNDS PER 1000 S.F. C. IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURE

WESTERN MD: MARCH 15 TO JUNE 1, AUGUST 1 TO OCTOBER 1 (HARDINESS ZONES: 5B,6A) CENTRAL MD: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONE: 6B) SOUTHERN MD. EASTERN SHORE: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONE: 7A, 7B) TILL AREAS TO RECEIVE SEED BY DISKING OR OTHER APPROVED METHODS TO A DEPTH OF 2 TO 4

INCHES, LEVEL AND RAKE THE AREAS TO PREPARE A PROPER SEEDBED. REMOVE STONE AND DEBRIS OVER 1.5 INCHES IN DIAMETER. THE RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE E. IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH 0.5 TO 1 INCH EVERY 3 TO 4 DAYS DEPENDING ON SOIL TEXTURE) UNTIL THEY ARE FIRMLY ESTABLISHED. THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE LATE IN THE PLANTING SEASON, IN ABNORMALLY DRY OR HOT SEASON, OR ON ADVERSE SITES.

STANDARD STABILIZATION NOTE:

FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:

A. THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1), AND SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON

SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT. (1 DAY)

THE PROJECT SITE NOT UNDER ACTIVE GRADING.

- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES AT LOCATIONS SHOWN (2 DAYS)
- 3. INSTALL SILT AND SUPER SILT FENCE AT LOCATIONS SHOWN. STANDARD FENCING IS TO REPLACED BY SSF AT THE DIRECTION OF THE CID INSPECTOR. (3 DAYS) 4. GRADE SITE PER PLAN (6 DAYS).
- 5. CONSTRUCT HOUSES AND STORMWATER MANAGEMENT FACILITIES (90 120 DAYS PER
- COMPLETE FINE GRADING OF SITE TO GRADES INDICATED. (2 DAYS PER HOUSE)

8. SEED AND MULCH ALL REMAINING DISTURBED AREAS. (1 DAY PER HOUSE).

WHEN ALL CONTRIBUTING DRAINAGE AREAS TO SEDIMENT CONTROL DEVICES HAVE BEEN STABILIZED, AND WITH PERMISSION OF SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE REMAINING DISTURBED AREAS (1 DAY).

DETAIL E-3 SUPER SILT FENCE

WOVEN SLIT FILM GEOTEXTILE -

CROSS SECTION

INSTALL 2% INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOO LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE EQUILID.

FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2% INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.

FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THI UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.

WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.

EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.

PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.

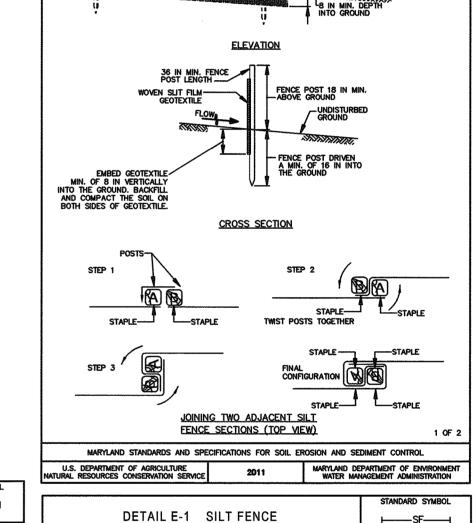
REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

2011

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GALVANIZED CHAIN LINK FENCE WITH WOVEN SLIT FILM GEOTEXTILE



DETAIL B-1 STABILIZED CONSTRUCTION

50 FT MIN

PLAN VIEW

PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.

2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAG TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.

PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.

5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.

DETAIL E-1 SILT FENCE

PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT

-EARTH FILL

-PIPE (SEE NOTE 6)

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ENTRANCE

CONSTRUCTION SPECIFICATIONS

DETAIL E-1 SILT FENCE ——SF—— USE WOOD POSTS 1% x 1% ± 1% inch (Minimum) square cut of sound quality hardwood. As an alternative to wooden post use standard "1" or "u" section steel posts weighing not less than 1 pound per linear foot. USE 36 INCH MINIMUM POSTS DRIVEN 16 INCH MINIMUM INTO GROUND NO MORE THAN 6 FEET APART USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS AND FASTEN GEOTEXTILE SECURELY TO UPSLOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES AT TOP AND MID—SECTION.

- PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS. EMBED GEOTEXTILE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND. BACKFILL AND COMPACT THE SOIL ON BOTH SIDES OF FABRIC.
- WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL. EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SILT FENCE.

REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL FENCE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MARYLAND DEPARTMENT OF ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION

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