	PERM	IT IN	FORMAT	'ION	BLOC	CK^{*}
SUBDIVISION N	IAME: SCHAFER F	ROPERTY	SECTION/AREA:	N/A	PARCE	EL: 64 AND 3
PLAT NO. 23180	BLOCK(S) 7	ZONING R-12	TAX MAP NO. 38		DISTRICT RST	CENSUS TRACT 6023.03

INDEX OF DRAWINGS

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

<u>DEVELOPER</u> HARMONY BUILDERS 4228 COLUMBIA ROAD

ELLICOTT CITY, MARYLAND 21042 410-461-0833

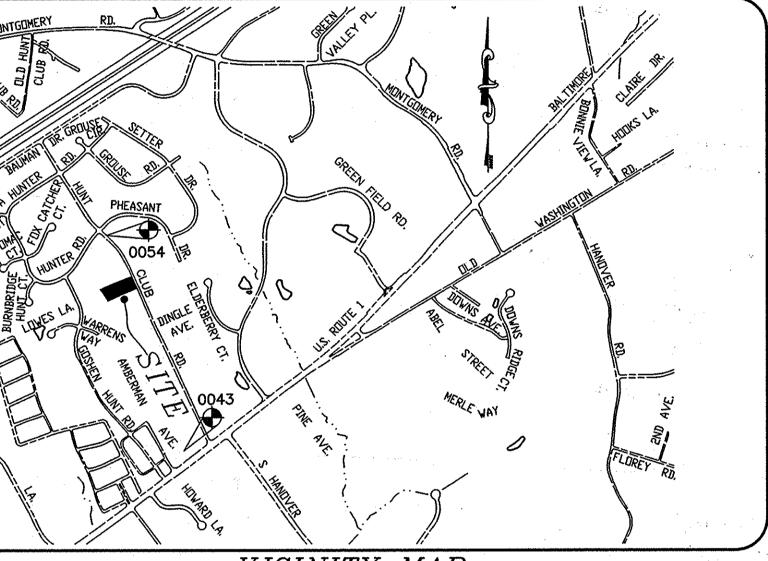
<u>ADDF</u>	<u>RESS_CHART</u>						
LOT #	ADDRESS						
2	6006 CHRIS WAY						
3	6010 CHRIS WAY						

ADDRESS 2 6006 CHRIS WAY 3 6010 CHRIS WAY

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 PERIODIC ON-SITE INSPECTION. ---- 38.00' 2.00'---OPT. 9.75'x2 ENGINEER'S CERTIFICATE BREAKFAST 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 NATURAL RESOURCE CONSERVATION SERVICE. 1,351 SQ.FT. GARAGE ____ 6.75'- iGA 2/5/15 4' OPTIONAL 2 CAR GARAGE 34.00' DATE SIGNATURE OF ENGINEER R JACOB HIKMAT, P.E. 34.00' PRINTED NAME OF ENGINEER THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT. BELAIR SCALE: 1'=30' ROCKBURNE 34 <u>/17/</u>/S SCALE 1"=30' APPROVED: DEPARTMENT OF PLANNING AND ZONING WIREENIOUS AREA OF ANY OF THE HOUSES IS LESS THAN 2,000.00 SF. 3.3.15 COBI And Lande 4.6 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM DATE CHIEF, DEVELOPMENT ENGINEERING DIVISION A DULY LICENSED PROFESSIONAL ENGINEER UNDER VertShen 3/06/15 THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17942, EXP. DATE 9/03/16. woll CHIEF, DIVISION OF LAND DEVELOPMENT DATÉ 3/6/15 2/5/1 (er

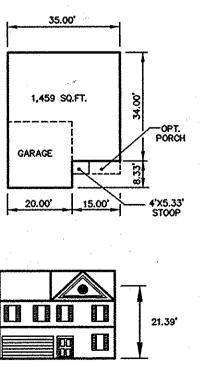
DATE

SITE DEVELOPMENT PLAN SCHAFER PROPERTY LOTS 2 AND 3 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND



VICINITY MAP SCALE: 1"=1000' ADC MAP: 35, GRID C-2

		STORMWATER MANAGEMENT PRACTICES													
								ENHANCED FILTERS							
	A-1 (Y/N)	A-2 (Y/N)	A-3 (Y/N)	N-1 (NUMBER)	N-2 (Y/N)	N-3 (Y/N)	M-1 (NUMBER)	M-2 (NUMBER)	M-3 (NUMBER)	M-4 (NUMBER)	M-5 (NUMBER)	M-6 (NUMBER)	M-7 (NUMBER)	M-8 (NUMBER)	M-9 (NUMBER)
٦				4	Y							0			
									- <mark>1</mark> - 1			1			



DATE

JACOB HIKMAT, P.E.

------ 36.00' -------** A** 42.33 _ _ _

GENERIC FOOTPRINT SCALE: 1"=30'

> PLEASE NOTE THAT ALL LOTS /RESIDENTIAL UNITS IN THE 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.

	*		
			date FEB. 2015 engineering MMM/MMT approval RJH
1	<u>GENERAL</u> NOTES: SUBJECT PROPERTY ZONED "R-12" PER HOWARD COUNTY ZONING REGULATIONS EFFECTIVE 10/06/13.		
2.	ALL ASPECTS OF THE PROJECT ARE IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS.		project 3-006 stration MM/MMT ile "=30'
3.	SITE ANALYSIS DATA: LOCATION: TAX MAP : 38 PARCEL: 64; BLOCK: 7 ELECTION DISTRICT : FIRST	्र स्	project 13-006 Illustration MMM/M scale 1"=30'
	ZONING: $R-12$ TOTAL AREA : 0.59 AC.± LIMIT OF DISTURBED AREA: 0.61 AC.±		
	PROPOSED USE FOR SITE : RESIDENTIAL. TOTAL NUMBER OF UNITS : 2 TYPE OF PROPOSED UNIT : SFD DPZ FILE NO: ECP-13-069, F-14-047		5 / 2015 date
4.	ON-SITE TOPOGRAPHY SHOWN HEREON IS BASED ON A FIELD RUN SURVEY CONDUCTED BY MILDENBERG, BOENDER & ASSOCIATES ON OR ABOUT		
	APRIL 2013. HORIZONTAL AND VERTICAL DATUMS ARE RELATED TO THE MARYLAND STATE PLANE COORDINATE SYSTEM AS PROJECTED FROM HOWARD	i de la companya de	4.255/A.22
	COUNTY CONTROL STATIONS NO. 0043 AND 0054. STATION NO. 0043 N 558479.008 E 1386642.060 EL. 189.501 STATION NO. 0054 N 560818.409 E 1385770.210 EL. 235.681		- 1
6.	IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, WINDOW WELLS, ORIELS, VESTIBULES, BALCONIES, CHIMNEYS, HEATING OR AIR CONDITIONING UNITS, AND EXTERIOR STAIRWAYS OR RAMPS WHICH ARE ABOVE		ROCKBUAN
	OR BELOW GROUND LEVEL MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACK OR A REQUIRED DISTANCE BETWEEN BUILDINGS, PROVIDED THE FEATURE HAS A MAXIMUM WIDTH OF 16 FEET; EXTERIOR STAIRWAYS OR RAMPS WHICH ARE ABOVE OR		GARAGE TO R. Jescription revisions
•	BELOW GROUND LEVEL MAY PROJECT NOT MORE THAN 10 FEET INTO A FRONT SETBACK OR A SETBACK FROM A PROJECT BOUNDARY OR A DIFFERENT ZONING DISTRICT AND 16 FEET INTO A REAR SETBACK; OPEN AND ENCLOSED PORCHES AND		CAR GAR
	DECKS MAY PROJECT NOT MORE THAN 10 FEET INTO A FRONT OR REAR SETBACK, A SETBACK FROM A PROJECT BOUNDARY, A SETBACK FROM A DIFFERENT ZONING DISTRICT OR A REQUIRED DISTANCE BETWEEN BUILDINGS.		THO THO
	NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, OR PLACEMENT OF NEW PAVING OR STRUCTURES IS PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAM(S), OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100-YEAR FLOODPLAIN.		DED OTTO
	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	4 s.	
	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 SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE. MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE. 	ig tw	e da
9.	LANDSCAPING FOR LOTS 2 AND 3 IS PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF HOWARD COUNTY CODE AND LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED		ND 3 MARYLAND
10.	LANDSCAPING (6 SHADE TREES) IN THE AMOUNT OF \$1,800.00 WILL BE PROVIDED WITH THE GRADING PERMIT APPLICATION FOR LOTS 2 AND 3. THIS PROJECT COMPLIES WITH THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST		
. 11	CONSERVATION BY PAYMENT OF A FEE-IN-LIEU OF 0.18 ACRES (7,840.80 SQ.FT.) OF AFFORESTATION IN THE AMOUNT OF \$5,881.00 TO THE FOREST CONSERVATION FUND UNDER F-14-047. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION		Z A ounty,
,	INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR OT THE START OF WORK. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST 48 HOURS PRIOR TO		NU
	EXCAVATION WORK BEING DONE. MISS UTILITY 800–257–7777 VERIZON TELEPHONE COMPANY (410) 725–9976		DTS CLLING GRID: HOWARD
	HOWARD COUNTY BUREAU OF UTILITIES (410) 313-4900 AT&T CABLE LOCATION DIVISION (410) 393-3533 BALTIMORE GAS & ELECTRIC (410) 685-0123		
1 72	STATE HIGHWAY ADMINISTRATION (410) 531-5533 STORMWATER MANAGEMENT IS PROVIDED VIA NON-ROOFTOP DISCONNECTIONS AND MICRO-BIORETENTION FACILITY		Y, D, HE
	IN ACCORDANCE WITH THE 2007 MDE STORMWATER DESIGN MANUAL USING ESD METHODS, APPROVED UNDER F-14-047. EXISTING UTILITIES ARE BASED ON ACTUAL FIELD LOCATIONS, IN COMBINATION WITH EXISTING WATER	<i>v</i> .	R SRC
	AND SEWER CONTRACTS. ANY DAMAGE TO THE COUNTY RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.	- 	
17.			CC CC
	NO HISTORIC STRUCTURE EXISTS ON SITE. NO STREAMS OR THEIR BUFFER AND FLOODPLAINS OR THEIR BUFFERS EXIST ON SITE. NO STEEP SLOPES EXIST ON SITE.		PRO SINGLI AX MAP: ICT C
21.	NO WETLANDS EXIST ON SITE. PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT. PUBLIC WATER AND SEWER		IR P SI DISTRICT
23.	WILL BE UTILIZED UNDER CONTRACT 44-3298-D AND 14-4799-D. WATER AND SEWER SERVICE TO THESE LOTS WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.122.B		
24.	OF THE HOWARD COUNTY CODE. PUBLIC WATER AND SEWAGE ALLOCATIONS WILL BE GRANTED AT THE TIME OF ISSUANCE OF THE BUILDING PERMIT IF CAPACITY IS AVAILABLE AT THAT TIME.		HAF
25.	A PRIVATE RANGE OF ADDRESS SIGN SHALL BE FABRICATED AND INSTALLED BY HOWARD COUNTY BUREAU OF HIGHWAYS AT THE DEVELOPERS/OWNERS EXPENSE. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT (410) 313-2430.		
26.	SIGNS AND THE STREET NAME SIGN (SNS) ASSEMBLIES MUST BE INSTALLED BEFORE THE BASE PAVING IS COMPLETED. THE OPEN SPACE REQUIREMENT OF SECTION 16.121(a)(2) OF THE SUBDIVISION REGULATIONS WAS SATISFIED UNDER		FIRST
27.	F-14-047 BY PAYMENT OF A FEE-IN-LIEU IN THE AMOUNT OF \$3,000.00. THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF	2	
	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	ng 181	
28.	WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED. AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS HEREWITH LISTED AND		
. ъс ³	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		NC:
	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.		
29.	SHOULD ANY TREE DESIGNATED FOR PRESERVATION, FOR WHICH LANDSCAPING CREDIT IS GIVEN, DIE PRIOR TO RELEASE OF BONDS, THE OWNER WILL BE REQUIRED TO REPLACE THE TREE WITH THE EQUIVALENT SPECIES OR WITH A TREE WHICH WILL OBTAIN THE SAME HEIGHT, SPREAD, AND		OC., yors 21044 Fax.
30	GROWTH CHARACTERISTICS. THE REPLACEMENT TREE MUST MEET SIZE AND INSTALLATION REQUIREMENTS AS SPECIFIED IN THE LANDSCAPE MANUAL. FOR FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED		ASSOC Surveyors Varyland 2104 997-0298 Fa
.*	TO THE JUNCTION OF THE FLAG OR PIPESTEM AND ROAD RIGHT-OF-WAY LINE AND NOT ONTO THE PIPESTEM LOT DRIVEWAY.	5	
51.	PLEASE NOTE THAT ALL LOTS/RESIDENTIAL UNITS IN THE 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.		BERG Reanners Columbia, Ut. (410)
32.	COMMUNITY MEETING FOR THIS PROJECT WAS HELD ON MAY 8, 2013 AT 6:00 PM AT THE ELKRIDGE LIBRARY.	., w	EL AL
33.	THE HEALTH DEPARTMENT MUST BE NOTIFIED IF ANY WELLS OR SEPTIC SYSTEMS ARE ENCOUNTERED DURING THE CONSTRUCTION PROCESS. ANY WELL OR SEPTIC SYSTEMS DISCOVERED MUST BE PROPERLY ABANDONED.		LDEN. ENDE gineers Grace Drive, 997-0296 B
ц. * Ч			MI. BO. 7350-B (410)
,		종 산	
			(1 of 3)
		.*	SDP-14-085

----r-----NOTE : ALL MATERIALS GOSHEN¹ESTATES LOT 10 PLAT 12733 R-12 -REMOVE BURLA FROM TOP MEPACTED BACKFILL ATERIALS 6" MIN. TYPICAL DECIDUOUS TREE PLANTING DETAIL NOT TO SCALE OSHEN ESTATES DA=10.000 R-12 OUTFALL PROTECTION 6'X6' STONE BLANKET WITH 4" #57 AGGREGATE EX. STORM DRAIN DEVELOPER'S /OWNER'S CERTIFICATE I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE R-12 ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE, AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING. 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 SOLL CONSERVATION DISTRICT IS AUTHORIZED SCHEDULE A : PERIMETER LANDSCAPE EDGE TO PERIODIC ON-SITE INSPECTION. ADJACENT TO PERIMETER PROPERTIES CATEGORY LANDSCAPE TYPE A (PERIMETER 4) LINEAR FEET OF PERIMETER 97.64 LF [4][nogh \sim CREDIT FOR EXISTING VEGETATION NO NO SIGNATURE OF DEVELOPER (YES, NO, LINEAR FEET) PRINTED NAME OF DEVELOPER NUMBER OF PLANTS REQUIRED 2 SHADE TREES 0 EVERGREEN TREES SHADE TREES EVERGREEN TREES ENGINEER'S CERTIFICATE 0 SHRUBS SHRUBS 0 SHRUBS 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 NATURAL RESOURCE CONSERVATION SERVICE. NUMBER OF PLANTS PROVIDED 2 SHADE TREES 4 SHADE TREES 0 EVERGREEN TREES 0 EVERGREEN TREES SHADE TREES EVERGREEN TREES OTHER TREES (2:1 SUBSTITUTION) O SUBSTITUTION TREES O SUBSTITUTION TREES SHRUBS (10:1 SUBSTITUTION) O SHRUBS O SHRUBS 215/15 LANDSCAPE REQUIREMENT PLANTING SCHEDULE QUANTITY SYMBOL BOTANICAL NAME COMMON NAME SIGNATURE OF ENGINEER DATE 533 333 R JACOB HIKMAT, PE ACER RUBRUM 'RED SUNSET' 6 OR EQUIVALENT AS OUTLINED IN THE OR EQUIVALENT AS OUTLINED IN THE HOWARD COUNTY LANDSCAPE MANUAL. HOWARD COUNTY LANDSCAPE MANUAL PRINTED NAME OF ENGINEER THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT 6 TREES (6 SHADE TREES) CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT. **DEVELOPER** HARMONY BUILDERS 4228 COLUMBIA ROAD ELLICOTT CITY, MARYLAND 21042 APPROVED: DEPARTMENT OF PLANNING AND ZONING 410-461-0833 Chy Edunter 3-3/15 HEREBY CERTIFY THAT THESE DOCUMENTS WERE CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE PREPARED OR APPROVED BY ME AND THAT I AM VetSle A DULY LICENSED PROFESSIONAL ENGINEER 3/06/15 wa UNDER THE KAWS OF THE STATE OF MARYLAND, CHIEF, DIVISION OF LAND DEVELOPMENT DATE LICENSE NO. 17942, EXP DATE 9/3/16. Marsh m-le-ell 215115 YONA DIRECTOR R. MACOB HIKMAT, P.E. DATE

14 L

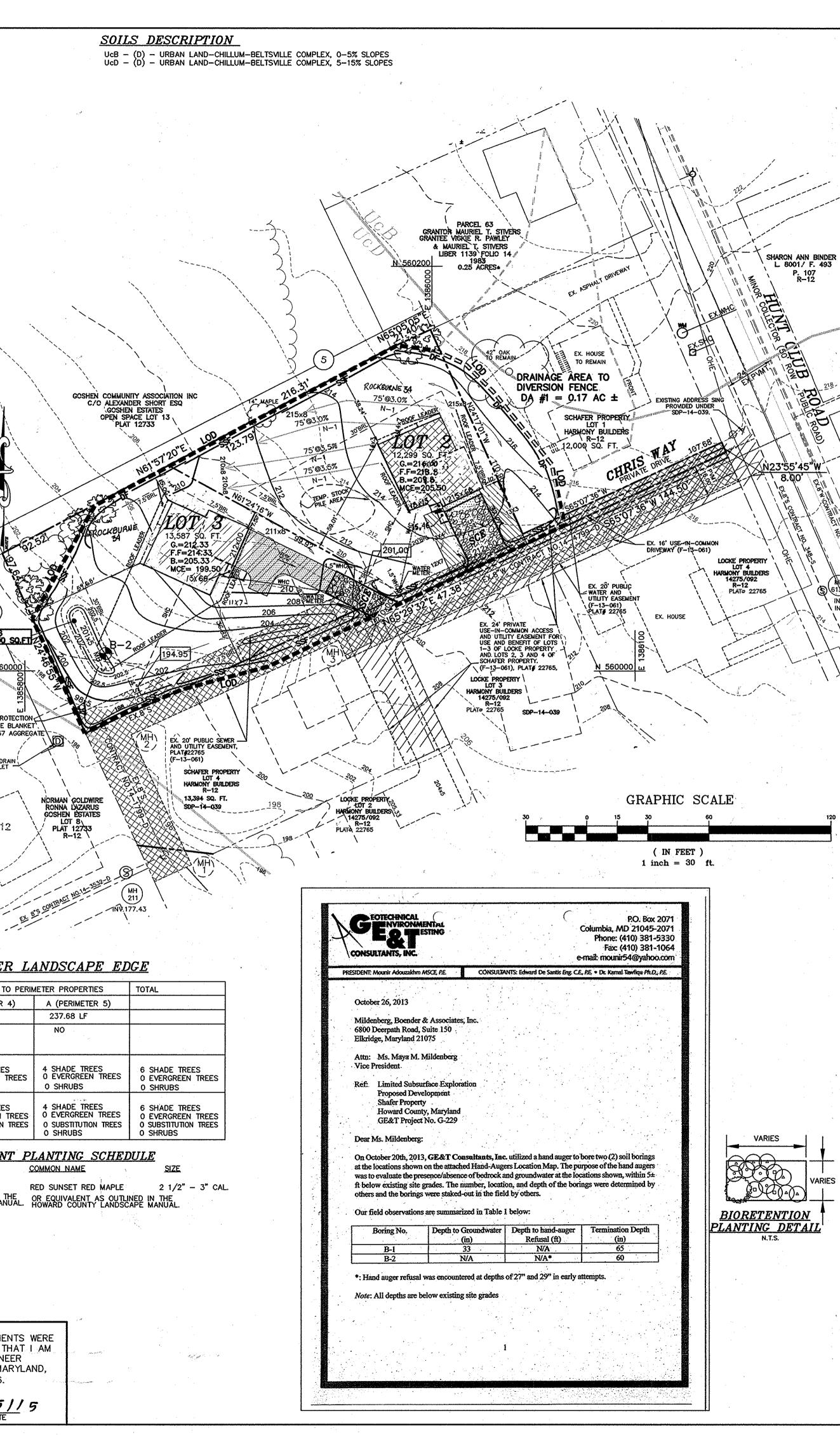


	Image: Constraint of the second se	MICRO-BIORET LIMIT OF DIST SUPER SILT FI DIVERSION FEN N-1, ROOFTOF IMPERVIOUS A N-1, ROOFTOF AREA OF PAV N-2, NON-RO	ERIMETER EDGE ENTION FACILITY (M- URBANCE ENCE ODISCONNECTION REA TREATED BY DISCONNECTION EMENT TREATED BY DOFTOP DISCONNECTION	N	project date	1 Rev. HSz. ELEVS TO (REFRECE AS-BUILT COND) 7/35 MMM/MMT MMM/MMT 1 Siteo Rocksurk 34 on Lors 2:3 5/15 5/15 scale approv no. description date 1"=30" RJH
QUANTITY LOT 3 SYME 4 Q 12 @ 8 @	ILEX GLABRA INK BERRY LOBELIA GREAT BLU SIPHILITICA LOBELIA ONOCLEA SENSITIVE SENSIBILIS FERN	AREA TREATED STABILIZED CO NG DESIGN NG WEIR ELEVATION 202.5 22-3' HT. 22-3' HT. 202.5 1 GAL. CONTAINER 1 GAL. CONTAINER	, NON-ROOFTOP DISC D BY M-6, MICRO-BI DNSTRUCTION ENTRAN UNDERDRAIN UNDERDRAIN INV. IN INV.OUT 199.0 198.5	ORETENTION	SCHAFER PROPERTY	LOTS 2 AND 3 TAX MAP: 38 PARCEL: 64, GRID: 7 HOWARD COUNTY, MARYLAND SITE DEVELOPMENT PLAN
10' MIN. SETE/ FROM HOUS DOWNSPOUT SPLASHBLOCK	ASTER NOVAE-ANGLIAE NEW ENGLA ASTER INIALS, 4 SHRUB ACK AT NON-PERFORATED CLEANOUT WITH CAP ON EACH UNDERDRAI BOTTOM EL BOTTOM EL BOTTOM BOTT	N WEIR EL FILTI INV.IN D HOPE UN A" NON-PE OUTLET PI	ER FABRICI SIDE ONLY	PROTECTION NKET 57 AGGREGATE	MILDENBERG,	BOENDER & ASSOC, INC. Engineers Planners Surveyors 7350-B Grace Drive, Columbia, Maryland 21044 (410) 997-0296 Balt. (410) 997-0298 Fax.

SDP-14-085

2 OF 3

STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS	STANDARDS AND SPECIFICATIONS FO SEEDING AND MULCHING
DEFINITION THE PROCESS OF PREPARING THE SOILS TO SUSTAIN ADEQUATE VEGETATIVE STABILIZATION. PURPOSE	DEFINITION THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER PURPOSE
TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. CONDITIONS WHERE PRACTICE APPLIES	TO PROTECT DISTURBED SOILS FROM EROSION DURING AND AT THE END CONDITIONS WHERE PRACTICE APPLIES
WHERE VEGETATIVE STABILIZATION IS TO BE ESTABLISHED. <u>CRITERIA</u> A. SOIL PREPARATION	TO THE SURFACE OF ALL PERIMETER CONTROLS, SLOPES, AND ANY DISTU CRITERIA A. SEEDING
1. TEMPORARY STABILIZATION a. SEEDBED PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF	1. SPECIFICATIONS a. ALL SEED MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE
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	TO RE-TESTING BY A RECOGNIZED SEED LABORATORY. ALL SEED USE MONTHS IMMEDIATELY PRECEDING THE DATE OF SOWING SUCH MATERI B.4 REGARDING THE QUALITY OF SEED. SEED TAGS MUST BE AVAILAB
TRACKED WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. b. APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS. c. INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER	VERIFY TYPE OF SEED AND SEEDING RATE. b. MULCH ALONE MAY BE APPLIED BETWEEN THE FALL AND SPRING SEED FROZEN. THE APPROPRIATE SEEDING MIXTURE MUST BE APPLIED WHEN
2. PERMANENT STABILIZATION a. A SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 15 ACRES OR MORE. THE MINIMUM SOIL	C. INOCULANTS: THE INOCULANT FOR TREATING LEGUME SEED IN THE SEL OF NITROGEN FIXING BACTERIA PREPARED SPECIFICALLY FOR THE SPEC LATER THAN THE DATE INDICATED ON THE CONTAINER. ADD FRESH INC
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).	USE FOUR TIMES THE RECOMMENDED RATE WHEN HYDROSEEDING. NOT INOCULANT AS COOL AS POSSIBLE UNTIL USED. TEMPERATURES ABOVE WEAKEN_BACTERIA AND MAKE THE INOCULANT LESS EFFECTIVE.
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	d. SOD OR SEED MUST_NOT BE PLACED ON SOIL WHICH HAS BEEN TREA CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELA DISSIPATION OF PHYTO-TOXIC MATERIALS.
EXCEPTION: IF LOVEGRASS WILL BE PLANTED, THEN A SANDY SOIL (LESS THAN 30 PERCENT SILT FLUS CLAY) WOULD BE ACCEPTABLE. IV. SOIL CONTAINS 1.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT.	2. APPLICATION 9. DRY SEEDING: THIS INCLUDES USE OF CONVENTIONAL DROP OR BROAD
 V. SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION. b. APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT MEET THE ABOVE CONDITIONS. c. GRADED AREAS MUST BE MAINTAINED IN A TRUE AND EVEN GRADE AS SPECIFIED ON THE APPROVED PLAN, 	I. INCORPORATE SEED INTO THE SUBSOIL AT THE RATES PRESCRIBED PERMANENT SEEDING TABLE B.3, OR SITE—SPECIFIC SEEDING SUMM/ II. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER.
 drade as becaused for an and the state of th	EACH DIRECTION. ROLL THE SEEDED AREA WITH A WEIGHTED ROLLE CONTACT. b. DRILL OR CULTIPACKER SEEDING: MECHANIZED SEEDERS THAT APPLY
e. 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	 CULTIPACKING SEEDERS ARE REQUIRED TO BURY THE SEED IN SUCH 1/4 INCH OF SOIL COVERING. SEEDBED MUST BE FIRM AFTER PLAN II. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER.
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 AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. LEAVE THE TOP	EACH DIRECTION. c. HYDROSEEDING: APPLY SEED UNIFORMLY WITH HYDROSEEDER (SLURRY
1 TO 3 INCHES OF SOIL LOOSE AND FRIABLE. SEEDBED LOOSEINING MAY BE UNNECESSARY ON NEWLY DISTURBED AREAS.	I. IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE AP THE FOLLOWING: NITROGEN, 100 POUNDS PER ACRE TOTAL OF SOLU 200 POUNDS PER ACRE; K20 (POTASSIUM), 200 POUNDS PER ACRE
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	II. LIME: USE ONLY GROUND AGRICULTURAL LIMESTONE (UP TO 3 TON HYDROSEEDING). NORMALLY, NOT MORE THAN 2 TONS ARE APPLIED
MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.	TIME. DO NOT USE BURNT OR HYDRATED LIME WHEN HYDROSEEDIN III. MIX SEED AND FERTILIZER ON SITE AND SEED IMMEDIATELY AND W IV. WHEN HYDROSEEDING DO NOT INCORPORATE SEED INTO THE SOIL.
2. TOPSOIL SALVAGED FROM AN EXISTING SITE MAY BE USED PROVIDED IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-MRCS	B. MULCHING 1. MULCH MATERIALS (IN ORDER OF PREFERENCE)
USDANRCS. 3. TOPSOILING IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE: a. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE	a. STRAW CONSISTING OF THOROUGHLY THRESHED WHEAT, RYE, OAT, OR COLOR. STRAW IS TO BE FREE OF NOXIOUS WEED SEEDS AS SPECIFIEI MUSTY, MOLDY, CAKED, DECAYED, OR EXCESSIVELY DUSTY. NOTE: USE
GROWTH. b. 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.	AREAS WHERE ONE SPECIES OF GRASS IS DESIRED. b. WOOD CELLULOSE FIBER MULCH (WCFM) CONSISTING OF SPECIALLY PR PROCESSED INTO A UNIFORM FIBROUS PHYSICAL STATE.
 c. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOKIC TO PLANT GROWTH. d. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE. 4. AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN. 	I. WCFM IS TO BE DYED GREEN OR CONTAIN A GREEN DYE IN THE PA APPROPRIATE COLOR TO FACILITATE VISUAL INSPECTION OF THE UNI II. WCFM, INCLUDING DYE, MUST CONTAIN NO GERMINATION OR GROWTH
5. TOPSOIL SPECIFICATIONS: SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING CRITERIA: a. TOPSOIL MUST BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, OR LOAMY SAND.	CELLULOSE FIBER MULCH WILL REMAIN IN UNIFORM SUSPENSION IN A BLEND WITH SEED, FERTILIZER AND OTHER ADDITIVES TO FORM A HO
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	MATERIAL MUST FORM A BLOTTER-LIKE GROUND COVER, ON APPLIC. AND PERCOLATION PROPERTIES AND MUST COVER AND HOLD GRASS WITHOUT INHIBITING THE GROWTH OF THE GRASS SEEDLINGS.
FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1½ INCHES IN DIAMETER. b. TOPSOIL MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACK	 IV. WCFM MATERIAL MUST NOT CONTAIN ELEMENTS OR COMPOUNDS AT BE PHYTO-TOXIC. V. WCFM MUST CONFORM TO THE FOLLOWING PHYSICAL REQUIREMENTS:
GRASS, JOHNSON GRASS, NUT SEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED. c. TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL	
TOPSOIL. 6. TOPSOIL APPLICATION 9. EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINT/INED WHEN APPLYING TOPSOIL.	2. APPLICATION a. APPLY MULCH TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING. b. WHEN STRAW MULCH IS USED, SPREAD IT OVER ALL SEEDED AREAS
b. 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	UNIFORM LOOSE DEPTH OF 1 TO 2 INCHES. APPLY MULCH TO ACHIE SO THAT THE SOIL SURFACE IS NOT EXPOSED. WHEN USING A MULC APPLICATION RATE TO 2.5 TONS PER ACRE.
IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS MUST BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS. c. TOPSOIL MUST NOT BE PLACED IF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN	c. WOOD CELLULOSE FIBER USED AS MULCH MUST BE APPLIED AT A N ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER TO ATTAIN A N OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.
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)	3. ANCHORING a. PERFORM MULCH ANCHORING IMMEDIATELY FOLLOWING APPLICATION OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHO
1. 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	UPON THE SIZE OF THE AREA AND EROSION HAZARD: I. A MULCH ANCHORING TOOL IS A TRACTOR DRAWN IMPLEMENT DESIC INTO THE SOIL SURFACE A MINIMUM OF 2 INCHES. THIS PRACTICE IS
ENGINEERING PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSES. 2. FERTILIZERS MUST BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION	BUT IS LIMITED TO FLATTER SLOPES WHERE EQUIPMENT CAN OPERA THIS PRACTICE SHOULD FOLLOW THE CONTOUR.
BY APPROPRIATE EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM TH APPROPRIATE APPROVAL AUTHORITY. FERTILIZERS MUST ALL BE DELIVERED TO THE SITE FULLY LABELED ACCORDING TO THE APPLICABLE LAWS AND MUST BEAR THE MAME, TRADE NAME OR TRADEMARK AND	HE WEIGHT OF 750 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBE 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATI III. SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRO-TACK), DCA-70
WARRANTY OF THE PRODUCER. 3. 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	TACK AR OR OTHER APPROVED EQUAL MAY BE USED. FOLLOW APPI MANUFACTURER. APPLICATION OF LIQUID BINDERS NEEDS TO BE HEA CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF BANKS
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.	USE OF ASPHALT BINDERS IS STRICTLY PROHIBITED. IV. LIGHTWEIGHT PLASTIC NETTING MAY BE STAPLED OVER THE MULCH RECOMMENDATIONS. NETTING IS USUALLY AVAILABLE IN ROLLS 4 TO
 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 PLACEMENT OF TOPSOIL.	1) A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DE
	LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF (313-1855). 2) ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDIN
	THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT "MARY SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", AND REVISIONS TO
	 FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMI SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, AND AND AND CONFECTION THAN 3:11
	AND ALL SLOPES GREATER THAN 3:1, B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJ 4) ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED WITH THE 1001 MARY AND STANDARDS AND SPECIFICATIONS FOR SOIL FROMING
DEVELOPERS CERTIFICATE I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL	WITH THE 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION FOR PERMANENT SEEDING (SEC.51), SOD (SEC. 54), TEMPORARY SEEDING (SEC. (SEC.52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE SEEDING DATES DO NOT ALLOW FOR REPORT OF MULLATION AND SETABLICATION WITH AND SETABLICATION OF AND SETABLICATION AND SETABLICATION OF AND SETABLICATION AND SETABLIC
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	SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT 5) ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO E OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAI
BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE NATURAL RESOURCE CONSERVATION SERVICE.	COUNTY SEDIMENT CONTROL INSPECTOR. 6) SITE ANALYSIS: N/A TOTAL AREA OF SITE:
SIGNATURE OF DEVELOPER	AREA DISTORBED:
PRINTED NAME OF BEVELOPER	TOTAL FILL: 100 CU. YDS. TOTAL WASTE/BORROW AREA LOCATION:
ENGINEER'S CERTIFICATE	OWN QUANTITIES MEASUREMENTS. 7) ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY I UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATURAL RESOURCE CONSERVATION SERVICE.	 8) ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY SEDIMENT CONTROL INSPECTOR. 9) ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF
	SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROS CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OF BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL
SIGNATURE OF ENGINEER DATE	BY THE INSPECTION AGENCY IS MADE. 10) TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LE BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHO
R. JACOB HIKMAT P.E. PRINTED NAME OF ENGINEER	11) ANY CHANGES OR REVISIONS TO THE SEQUENCE OF CONSTRUCTION MUST BE I BY THE PLAN APPROVAL AUTHORITY PRIOR TO PROCESSING WITH CONSTRUCTION
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD	12) A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE ACREAGE OF 20 AC. PER GRADING UNIT) AT A TIME. WORK MAY PROCEED TO UNIT WHEN AT LEAST 50 PERCENT OF THE DISTURBED AREA IN THE PRECEDIN STABULIZED AND APPROVED BY THE ENFORCEMENT AUTHORITY UNITESS OTHER
SOIL CONSERVATION OSTRICT	STABILIZED AND APPROVED BY THE ENFORCEMENT AUTHORITY. UNLESS OTHER APPROVED BY THE APPROVAL AUTHORITIES, NO MORE THAN 30 ACRES CUMUL AT A GIVEN TIME.
HOWARD SOIL CONSERVATION DISTRICT	
	EREBY CERTIFY THAT THESE DOCUMENTS WERE
A D	PARED OR APPROVED BY ME AND THAT I AM OULY LICENSED PROFESSIONAL ENGINEER
	DER THE LAWS OF THE STATE OF MARYLAND, ENSE NO. 17942, EXP DATE 9/3/16.
CHIEF, DIVISION OF LAND DEVELOPMENT	2/5/15 4228 COLUM ELLICOTT CITY, M
DIRECTOR DATE	JACOB HIKMAT, P.E. DATE 410-461

DIRECTOR

ECIFICATIONS FOR

LISH VEGETATIVE COVER.

RING AND AT THE END OF CONSTRUCTION.

SLOPES, AND ANY DISTURBED AREA NOT UNDER ACTIVE GRADING.

THE MARYLAND STATE SEED LAW. ALL SEED MUST BE SUBJECT RATORY. ALL SEED USED MUST HAVE BEEN TESTED WITHIN THE 6 SOWING SUCH MATERIAL ON ANY PROJECT. REFER TO TABLE AGS MUST BE AVAILABLE UPON REQUEST TO THE INSPECTOR TO

FALL AND SPRING SEEDING DATES ONLY IF THE GROUND IS MUST BE APPLIED WHEN THE GROUND THAWS. GUME SEED IN THE SEED MIXTURES MUST BE A PURE CULTURE IFICALLY FOR THE SPECIES. INOCULANTS MUST NOT BE USED TAINER. ADD FRESH INOCULANTS AS DIRECTED ON THE PACKAGE. EN HYDROSEEDING. NOTE: IT IS VERY IMPORTANT TO KEEP TEMPERATURES ABOVE 75 TO 80 DEGREES FAHRENHEIT CAN ESS EFFECTIVE. WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR UFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT

TIONAL DROP OR BROADCAST SPREADERS. HE RATES PRESCRIBED ON TEMPORARY SEEDING TABLE B.1, PECIFIC SEEDING SUMMARIES.

ULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN ITH A WEIGHTED ROLLER TO PROVIDE GOOD SEED TO SOIL SEEDERS THAT APPLY AND COVER SEED WITH SOIL. JRY THE SEED IN SUCH A FASHION AS TO PROVIDE AT LEAST

BE FIRM AFTER PLANTING. JULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN

HYDROSEEDER (SLURRY INCLUDES SEED AND FERTILIZER). AE OF SEEDING, THE APPLICATION RATES SHOULD NOT EXCEED R ACRE TOTAL OF SOLUBLE NITROGEN; P2 05 (PHOSPHOROUS), 200 POUNDS PER ACRE.

MESTONE (UP TO 3 TONS PER ACRE MAY BE APPLIED BY AN 2 TONS ARE APPLIED BY HYDROSEEDING AT ANY ONE WE WHEN HYDROSEEDING.

ED IMMEDIATELY AND WITHOUT INTERRUPTION. SEED INTO THE SOIL.

WHEAT, RYE, OAT, OR BARLEY AND REASONABLY BRIGHT IN ELY DUSTY. NOTE: USE ONLY STERILE STRAW MULCH IN STING OF SPECIALLY PREPARED WOOD CELLULOSE

L STATE GREEN DYE IN THE PACKAGE THAT WILL PROVIDE AN INSPECTION OF THE UNIFORMLY SPREAD SLURRY. ERMINATION OR GROWTH INHIBITING FACTORS. D AND PROCESSED IN SUCH A MANNER THAT THE WOOD IFORM SUSPENSION IN WATER UNDER AGITATION AND WILL

DDITIVES TO FORM A HOMOGENEOUS SLURRY. THE MULCH IND COVER, ON APPLICATION, HAVING MOISTURE ABSORPTION OVER AND HOLD GRASS SEED IN CONTACT WITH THE SOIL ASS SEEDLINGS. ITS OR COMPOUNDS AT CONCENTRATION LEVELS THAT WILL

YSICAL REQUIREMENTS: FIBER LENGTH OF PPROXIMATELY 1 MILLIMETER, PH RANGE OF 4.0 TO 8.5, ID WATER HOLDING CAPACITY OF 90 PERCENT MINIMUM.

ATELY AFTER SEEDING. VER ALL SEEDED AREAS AT THE RATE OF 2 TONS PER ACRE TO PURPOSE D. WHEN USING A MULCH ANCHORING TOOL, INCREASE THE

IST BE APPLIED AT A NET DRY WEIGHT OF 1500 POUNDS PER WATER TO ATTAIN A MIXTURE WITH A MAXIMUM OF 50 POUNDS EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR 6 MONTHS OR MORE. S OF WATER.

DLLOWING APPLICATION OF MULCH TO MINIMIZE LOSS BY WIND THE FOLLOWING METHODS (LISTED BY PREFERENCE), DEPENDING RAWN IMPLEMENT DESIGNED TO PUNCH AND ANCHOR MULCH

CHES. THIS PRACTICE IS MOST EFFECTIVE ON LARGE AREAS, EQUIPMENT CAN OPERATE SAFELY. IF USED ON SLOPING LAND, ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY

WOOD CELLULOSE FIBER WITH WATER AT A MAXIMUM OF 100 GALLONS OF WATER. (AGRO-TACK), DCA-70, PETROSET, TERRA TAX II, TERRA BE USED, FOLLOW APPLICATION RATES AS SPECIFIED BY THE DERS NEEDS TO BE HEAVIER AT THE EDGES WHERE WIND

IIRITED. LED OVER THE MULCH ACCORDING TO MANUFACTURER AILABLE IN ROLLS 4 TO 15 FEET WIDE AND 300 TO 3,000

TROL NOTES

HE HOWARD COUNTY DEPARTMENT OF

RIOR TO THE START OF ANY CONSTRUCTION, BE INSTALLED ACCORDING TO THE PROVISIONS OF MOST CURRENT "MARYLAND STANDARDS AND ROL", AND REVISIONS THERETO.

CE, PERMANENT OR TEMPORARY STABILIZATION CONTROL STRUCTURES, DIKES, PERIMETER SLOPES

ED AREAS ON THE PROJECT SITE. TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE TIONS FOR SOIL EROSION AND SEDIMENT CONTROL MPORARY SEEDING (SEC. 50) AND MULCHING NE CAN ONLY BE DONE WHEN RECOMMENDED ION AND ESTABLISHMENT OF GRASSES.

IN PLACE AND ARE TO BE MAINTAINED IN MOVAL HAS BEEN OBTAINED FROM THE HOWARD

NLY. CONTRACTOR IS REQUIRED TO PROVIDE HIS BY GRADING ACTIVITY FOR PLACEMENT OF

STURBANCE. DEEMED NECESSARY BY THE HOWARD COUNTY 2 ACRES, APPROVAL OF THE INSPECTION AGENCY TION OF PERIMETER EROSION AND SEDIMENT

EARTH DISTURBANCE OR GRADING. OTHER DT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL

MITED TO THREE PIPE LENGTHS OR THAT WHICH CAN DAY, WHICHEVER IS SHORTER.

ONSTRUCTION MUST BE REVIEWED AND APPROVED SSING WITH CONSTRUCTION. ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM WORK MAY PROCEED TO A SUBSEQUENT GRADING AREA IN THE PRECEDING GRADING UNIT HAS BEEN THORITY. UNLESS OTHERWISE SPECIFIED AND THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED

<u>DEVELOPER</u>

HARMONY BUILDERS 4228 COLUMBIA ROAD ELLICOTT CITY, MARYLAND 21042 410-461-0833

EROSION AND SEDIMENT CONTROL NOTES

- 1. ALL SEDIMENT CONTROL OPERATIONS ARE TO BE DONE IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY VOLUME IV DESIGN MANUAL AND THE STANDARDS AND SPECIFICATIONS
- FOR SEDIMENT CONTROL IN DEVELOPING AREAS. 2. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED AS THE FIRST ORDER OF
- 3. ALL EXCAVATED MATERIALS SHALL BE STOCKPILED ON THE UPGRADE SIDE OF THE MAIN TRENCH.
- 4. EXCAVATION AND BACKFILL SHALL BE LIMITED TO THAT WHICH CAN BE STABILIZED WITHIN ONE WORKING DAY.
- 5. IMMEDIATELY FOLLOWING BACKFILL OF THE SEWER TRENCH, ALL DISTURBED AREAS ARE TO BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION AND SEEDING NOTES SHOWN
- 6. THROUGHOUT THE PROJECT, THE CONTRACTOR SHALL REGULARLY INSPECT ALL SEDIMENT CONTROL DEVICES AND PROVIDE ALL NECESSARY MAINTENANCE TO INSURE THAT ALL DEVICES ARE IN OPERATIVE CONDITION.
- 7. ALL SEDIMENT CONTROL FACILITIES SHALL REMAIN IN PLACE UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

SEQUENCE OF CONSTRUCTION

- 1. OBTAIN GRADING PERMIT (1 DAY) 2. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AT LOCATIONS SHOWN
- FOR THE HOUSE UNDER CONSTRUCTION (1 DAY). 3. PERFORM CLEARING AND GRUBBING NECESSARY FOR THE INSTALLATION OF DIVERSION FENCE AND SUPER SILT FENCE (1 DAY)
- 4. PERFORM CLEARING AND GRUBBING WITHIN INSTALLED PERIMETER CONTROLS 5. GRADE SITE PER PLAN (5 DAYS)
- 6. CONSTRUCT HOUSE (90 180 DAYS)
- 7. CONSTRUCT MICRO-BIORETENTION FACILITY (3 DAYS)
- 8. COMPLETE FINE GRADING OF SITE TO GRADES INDICATED (2 DAYS)_
- 9. SEED AND MULCH ALL REMAINING DISTURBED AREAS (1 DAY PER) 10. 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)

STANDARDS AND SPECIFICATIONS FORTEMPORARY STABILIZATION (B-4-4)

TO STABILIZE DISTURBED SOIL WITH VEGETATION FOR UP TO 6 MONTHS.

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

) WHEAT, RYE, OAT, OR BARLEY AND REASONABLE BRIGHT IN ED SEEDS AS SPECIFIED IN THE MARYLAND SEED LAW AND NOT CONDITIONS WHERE PRACTICE APPLIES WERE DUCTY NOTE: USE ONLY STEDILE STRAW MULCH IN 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.

- CRITERIA 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 AND 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 BY 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.

STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION (B-4-5) DEFINITION TO STABILIZE DISTURBED SOIL WITH PERMANENT VEGETATION.

PPLY MULCH TO ACHIEVE A UNIFORM DISTRIBUTION AND DEPTH TO USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER OF DISTURBED

CONDITIONS WHERE PRACTICE APPLIES

CRITERIA A. SEED MIXTURE

- 1. GENERAL USE A. 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 SOIL TESTING AGENCY.
- 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 A. AREAS WHERE TURFGRASS MAY BE DESIRE INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE. 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. I. 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 PERCENT OF THE TOTAL MIXTURE BY WEIGHT. 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 BY WEIGHT.
- 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) D. 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
- IOWING OF GRASS WILL POSE NO DIFFICULTY. 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, N ABNORMALLY DRY OR HOT SEASON, OR ON ADVERSE SITES.

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

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

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.

- 1. THE STOCKPILE LOCATION AND ALL RELATED SEDIMENT CONTROL PRACTICES MUST BE CLEARLY 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.
- 4. ACCESS THE STOCKPILE AREA FROM THE UPGRADE SIDE.
- 5. CLEAR WATER RUNOFF INTO THE STOCKPILE AREA MUST BE MINIMIZED BY USE OF A DIVERSION DEVICE 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-4-1 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 SHEETING.

MAINTENANCE 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.

INSTRUCTION SPECIFICATIONS

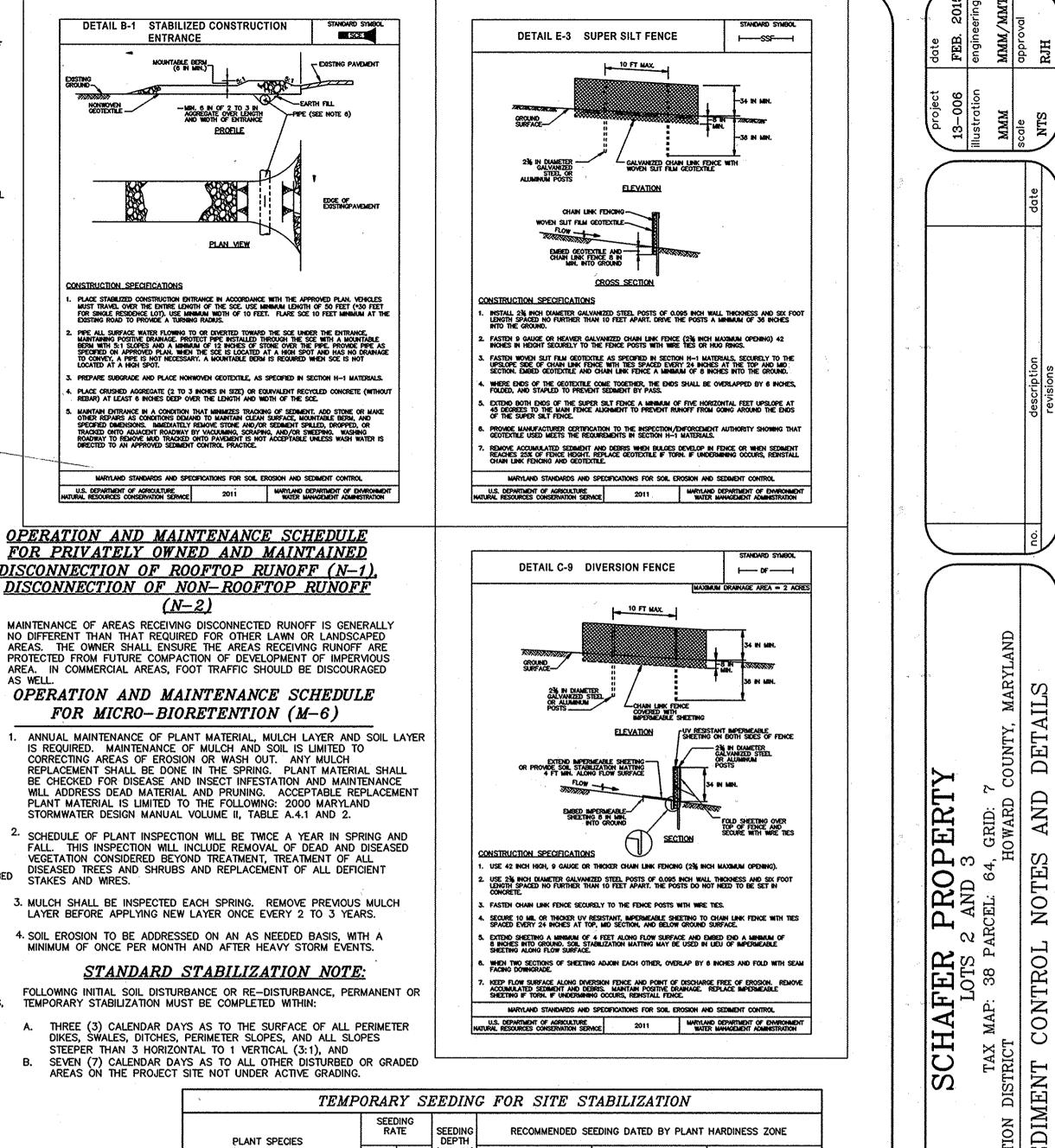
NONWOVEN GEOTEXTRE

- AS WELL

- STAKES AND WIRES.

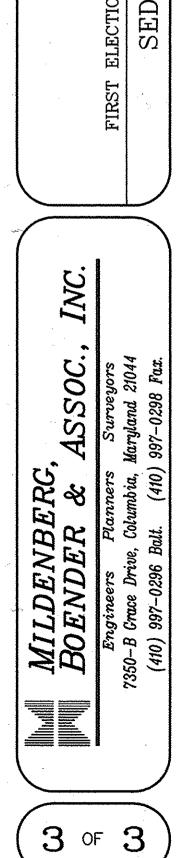
TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:

CONTROL MAY BE USED.



PLANT SPECIES		RATE		RECOMMENDED SEEDING DATED BY PLANT HARDINESS ZONE					
		LB/ 1000SF	DEPTH (INCHES)	5B AND 6A	6B	7A AND 7B			
COOL SEASON GRASSES									
ANNUAL RYEGRASS (LOLIUM PERENNE SSP. MULTIFLORUM)	40	1.0	0.5	MAR 15 TO MAY 31; AUG 1 TO SEP 30	MAR 1 TO MAY 15; AUG 1 TO OCT 15	FEB.15 TO APR 30; AUG 15 TO NOV 30			
BARLEY (HORDEUM VULGARE)	96	2.2	0.5	MAR 15 TO MAY 31; AUG 1 TO SEP 30	MAR 1 TO MAY 15; AUG 1 TO OCT 15	FEB.15 TO APR 30; AUG 15 TO NOV 30			
OATS (AVENA SATIVA)	72	1.7	0.5	MAR 15 TO MAY 31; AUG 1 TO SEP 30	MAR 1 TO MAY 15; AUG 1 TO OCT 15	FEB.15 TO APR 30; AUG 15 TO NOV 30			
WHEAT (TRITICUM AESTIVUM)	120	2.8	0.5	MAR 15 TO MAY 31; AUG 1 TO SEP 30	MAR 1 TO MAY 15; AUG 1 TO OCT 15	FEB.15 TO APR 30; AUG 15 TO NOV 30			
CEREAL RYE (SECALE ITALICA)	112	2.8	0.5	MAR 15 TO MAY 31; AUG 1 TO OCT 31	MAR 1 TO MAY 15; AUG 1 TO OCT 15	FEB.15 TO APR 30; AUG 15 TO DEC 15			
WARM SEASON GRASSES									
FOXTAIL MILLET (SETARIA ITALICA)	30	0.7	0.5	JUN 1 TO JUL 31	MAY 16 TO JUL 31	MAY 1 TO AUG 14			
PEARL MILLET (PENNISETUM GLAUCUM)	20	0.5	0.5	JUN 1 TO JUL 31	MAY 16 TO JUL 31	MAY 1 TO AUG 14			

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PERMANENT SEEDING SUMMARY											
HARDINESS ZONE (FROM FIGURE B.3): 6bFERTILIZER RATESEED MIXTURE (FROM TABLE B.3): 8(10-20-20)											
NŌ.	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS	N	P ₂ O ₅	K₂O	LIME RATE			
1	TALL FESCUE	100	MARCH 1-MAY 15 AUG 15-OCT 15	1/4"-1/2"	45 LBS. PER ACRE (1 LB./1000 SF)	90 LBS. PER ACRE (2 LB./1000 SF)	90 LBS. PER ACRE (2 LB./1000 SF)	2 TONS / ACRE (90 LBS / 1000 SF)			
MIXTURE	S 1, 4-7, 9,	AND 10 FROM	TABLE B.3 OF THE	2011 MARYL	AND STANDARD A	ND SPECIFICATION	S FOR SOIL EROS	ION AND SEDIMENT			



SDP-14-085