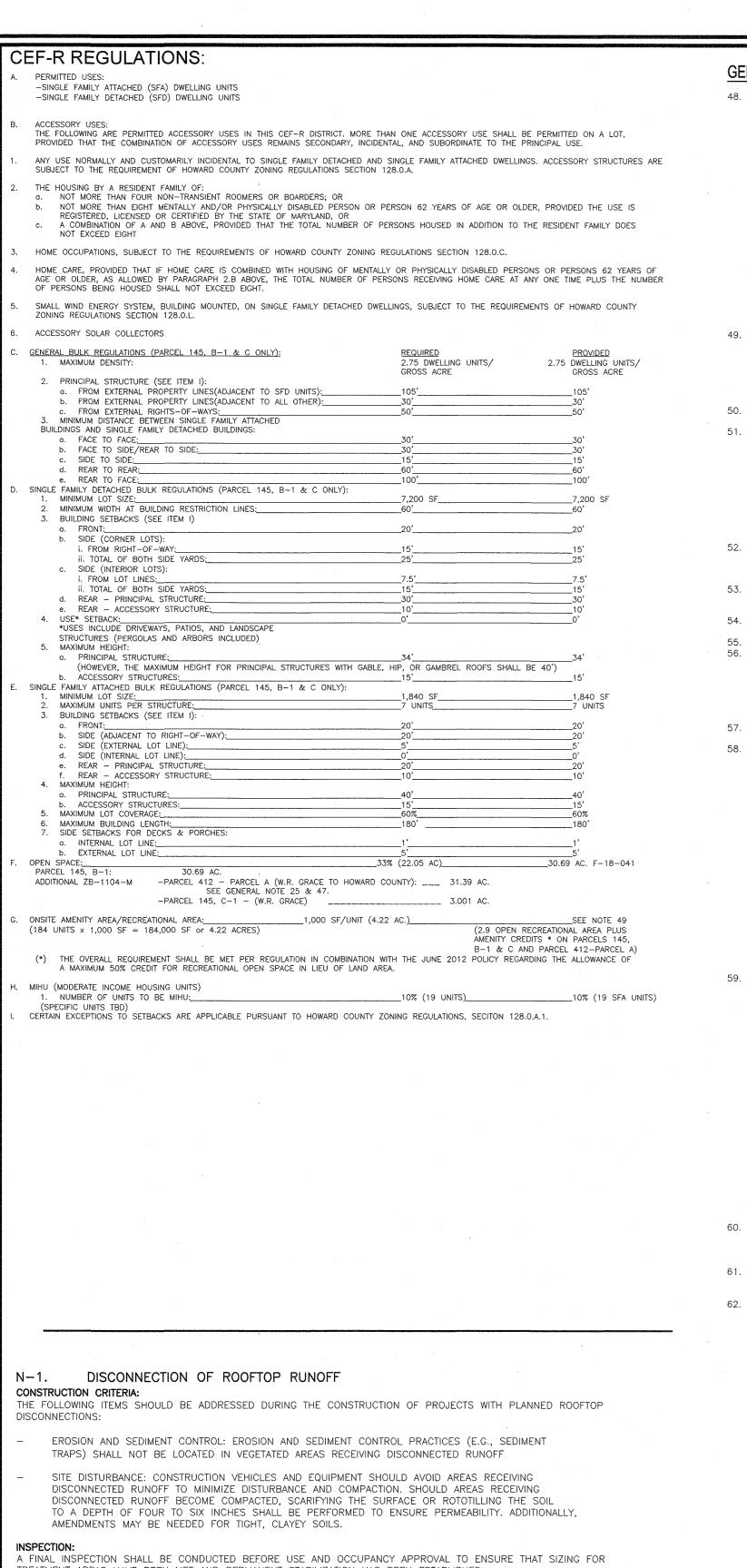
SITE DEVELOPMENT PLAN BENCHMARKS THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO START OF WORK. BM 35HA* N 553,966.7457 E 1,340,476.9524 THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK. ALL ASPECTS OF THE PROJECT ARE IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS ALTERNATIVE COMPLIANCES HAVE CEDAR CREEK - PHASE 1 NAD 83 (Adj 07) THE SUBJECT PROPERTY IS ZONED "CEF-R" PER ZONING BOARD DECISION AND ORDER FOR CASE ZB1104M, APPROVED ON APRIL 6, 2015 AND IS SUBJECT TO THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS EFFECTIVE 10/2/03 PER COUNCIL BILL 75-2003. ELEV. 404.584 BEING A STAMPED BRASS OR ALUMINUM DISC SET ON TOP -HOWARD COUNTY ZONING BOARD CASE ZB-1104-M, APPROVED ON APRIL 6, 2015, CONTAINED THE FOLLOWING CONDITIONS OF OF A 3 FOOT DEEP COLUMN OF CONCRETE LOTS 1, 2, AND 47-51 A. THE ZONING BOARD, WHILE FULLY SUPPORTING THIS COMMUNITY BEING ANNEXED INTO THE VILLAGE OF RIVER HILL WANTS TO ENSURE THAT THE ACCESSORY USE PROVISIONS APPLICABLE TO THIS DEVELOPMENT BE THE SAME AS THOSE APPLICABLE TO RIVER HILL IF THE PROPERTY IS TO BE ANNEXED, OR SUBSTANTIALLY SIMILAR TO R-SC- TYPE DEVELOPMENTS, IF THE PROPERTY IS NOT ANNEXED. APPROXIMATELY 90'± NORTH OF GRACE DRIVE AND 160'± EAST OF THE EASTERN MOST ENTRY DRIVE FOR THE PROPERTY LINE PROPERTY. (ALSO KNOWN AS "R-109" AND "0068"). THEREFORE, THE BOARD APPROVED FOR THIS DEVELOPMENT IF IT IS ANNEXED INTO THE VILLAGE OF RIVER HILL THE ACCESSORY USE RIGHT-OF-WAY LINE PROVISIONS APPLICABLE TO RIVER HILL, WHETHER THEY BE ANY SPECIFIC ACCESSORY USE PROVISIONS IN THE RECORDED FINAL HOWARD COUNTY, MARYLAND <u>BM 35HB*</u> ADJACENT PROPERTY LINE DEVELOPMENT PLAN FOR THE SECTION OF RIVER HILL ADJOINING THE SUBJECT PROPERTY, OR THE ACCESSORY USE PROVISIONS OF N 554,836.4156 E 1,337,888.3861 SECTION 110.0 (R-SC DISTRICT), OR ANY COMBINATION THEREOF; THE BOARD ALTERNATIVELY APPROVES FOR THIS DEVELOPMENT IF IT IS CENTERLINE OF EXISTING STREAM NOT ANNEXED INTO THE VILLAGE OF RIVER HILL, THE PROPOSED ACCESSORY USE PROVISIONS ORIGINALLY PROPOSED IN PETITIONER'S NAD 83 (Adj 07) BOOKLET (PETITIONER'S EXHIBIT 2A'S ACCESSORY USE PROVISIONS WITH THE DELETIONS FOR SECTIONS B.5., 6., AND 8. REMOVED) EXISTING TREELINE NAVD 88 ELEV. 449.699 *B. THE PETITIONER SHALL PROVIDE ON THE SUBSEQUENT SITE DEVELOPMENT PLAN FOR THE SUBJECT PROPERTY'S DEVELOPMENT PROPOSED ADDITIONAL SCREENING AS NECESSARY ON PIPE STEM LOTS 3, 12, 15, 24, 27, 35, 38, AND 45 TO ENSURE APPROPRIATE === EXISTING CURB AND GUTTER BEING A STAMPED BRASS OR ALUMINUM DISC SET ON TOP PROPOSED CURB AND GUTTER OF A 3 FOOT DEEP COLUMN OF CONCRETE AT THE *C. THE PETITIONER SHALL PROVIDE ON THE SUBSEQUENT SITE DEVELOPMENT PLAN FOR THE SUBJECT PROPERTY'S DEVELOPMENT A INTERSECTION OF GUILFORD ROAD AND WHITEGATE ROAD, CONNECTION BETWEEN THE NEIGHBORHOOD TRAIL AND THE CUL-DE-SAC BETWEEN LOTS 25 AND 26 SIMILAR TO THAT PROVIDED BETWEEN LOTS 13 AND 14 AND LOTS 36 AND 37 AS SHOWN ON THE CONCEPT PLAN. APPROXIMATELY 5'± NORTH OF GUILFORD ROAD. * ITEMS B & C ABOVE ARE NO LONGER APPLICABLE DUE TO THE SITE CHANGES ASSOCIATED WITH THE SECOND HEARING. -IN ACCORDANCE WITH SECTION 121.0; THE HOWARD COUNTY ZONING BOARD HELD A SECOND HEARING FOR A DETERMINATION OF MINOR MODIFICATION (CASE ZB-1104-M). ON NOVEMBER 10, 2016 THE HOWARD COUNTY ZONING BOARD APPROVED THE REQUEST AND 1. S-15-007 PROPOSES MINOR MODIFICATIONS TO THE APPROVED DEVELOPMENT CONCEPT PLAN IN THIS MATTER IN ACCORDANCE VICINITY MAP WITH ZONING REGULATION SEC. 121.0.L S-15-007, AS APPROVED, SHALL CONSTITUTE THE NEW DEVELOPMENT CONCEPT PLAN IN THIS CASE; SCALE: 1"=2000 . THE PETITIONER IS NOT REQUIRED TO COMMENCE A NEW CEF APPLICATION FOLLOWING THE SAME PROCEDURES USED FOR A ADC MAP COORDINATE: 32 PETITION TO CREATE A NEW CEF DISTRICT; AND GRID B-3, C-3, B-4 & C-4 4. SECTION C.2.OF THE BULK REGULATIONS IN THIS CASE IS APPROVED TO BE AMENDED FROM SPECIFYING A 105' SETBACK FOR "BUILDING/USE" TO A 105' SETBACK FOR "PRINCIPAL STRUCTURE". THE PROJECT BOUNDARY SHOWN HERON IS BASED ON AN AERIAL SURVEY PERFORMED BY MORRIS & RITCHIE ASSOCIATES, INC. IN NOVEMBER 2008 AND UPON MDR PLATS 23334-23337, RECORDED MAY 2015. BOUNDARY VERIFIED BY VOGEL ENGINEERING + TIMMONS GROUP, INC., AUGUST 2018. SHEET INDEX THE EXISTING TOPOGRAPHY SHOWN HEREON IS BASED ON F-18-041. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND DESCRIPTION SHEET NO. STATE PLANE COORDINATE SYSTEM, HOWARD COUNTY MONUMENTS BM 35HA AND BM 35HB WERE USED FOR THIS PROJECT THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. GENERAL NOTES AND STORMWATER MANAGEMENT NOTES & DETAILS DEVELOPMENT OR CONSTRUCTION OF THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN FFFFCT AT THE TIME OF SITE LAYOUT PLAN SUBMISSION OF THE SITE DEVELOPMENT PLAN, ALTERNATIVE COMPLIANCE, OR BUILDING AND GRADING PERMITS. SOILS MAP, GRADING AND SOIL EROSION & SEDIMENT CONTROL PLAN STORMWATER MANAGEMENT FOR THE PROJECT IS PROVIDED BY THE USE OF ON-LOT NON STRUCTURAL PRACTICES & MICRO-SCALE PRACTICES IN GRADING AND SOIL EROSION & SEDIMENT CONTROL PLAN - DETAILS ACCORDANCE WITH ENVIRONMENTAL SITE DESIGN CRITERIA. ON-LOT MICRO-SCALE PRACTICES INCLUDE DRYWELLS. -ONLOT FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED. THE PROPOSED UNITS SHALL HAVE AN AUTOMATIC FIRE PROTECTION SPRINKLER SYSTEM. HOUSE TYPES AND HOUSE BOX MATRIX PLAN EXISTING UTILITIES LOCATED FROM ROAD CONSTRUCTION PLANS AND AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTORS INFORMATION: CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE TO THE COUNTY'S RIGHTS-OF-WAY, PAVING, OR EXISTING UTILITIES SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE SHC ELEVATIONS ARE LOCATED AT THE PROPERTY LINE/EDGE OF EASEMENT. 4. THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING BGE (CONSTRUCTION SERVICES) 410-637-8713 OPEN SPACE LOT 131 BGE (EMERGENCY) 410-685-0123 BUREAU OF UTILITIES 410-313-4900 410-795-1390 COLONIAL PIPELINE CO 1-800-257-77 MISS UTILITY STATE HIGHWAY ADMINISTRATION THERE ARE NO EXISTING DWELLING/STRUCTURES LOCATED ON THIS SITE. DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE LOT 2 FOLLOWING MINIMUM REQUIREMENTS: A) WIDTH - 12 FEET (16 FEET IF SERVING MORE THAN ONE RESIDENCE) B) SURFACE - 6" OF COMPACTED CRUSHER RUN BASE W/TAR AND CHIP COATING (1-1/2" MIN.) C) GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE, AND MINIMUM 45 FOOT D) STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING) E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD EVENTS WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE F) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE ALL DRIVEWAY ENTRANCES SHALL UTILIZE HOWARD COUNTY STANDARD DETAIL NO. R-6.03. . NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS, STREAM(S) OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100 YEAR FLOODPLAIN. TRASH & RECYCLING COLLECTION WILL BE AT THE COUNTY ROADWAYS WITHIN FIVE FEET (5') OF THE COUNTY ROADWAY. THIS PROPERTY IS WITHIN THE METROPOLITAN DISTRICT. -WATER FOR THIS PROJECT IS PUBLIC CONTRACT NO. 24-5009-D -SEWER FOR THIS PROJECT IS PUBLIC CONTRACT NO. 24-5009-D. . WATER AND SEWER SERVICE TO THESE LOTS WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.122.B OF THE HOWARD COUNTY CODE. PUBLIC WATER AND SEWER ALLOCATION WILL BE GRANTED AT THE TIME OF ISSUANCE OF THE BUILDING PERMIT IF CAPACITY IS AVAILABLE AT . ALL WATER HOUSE CONNECTIONS SHALL BE OUTSIDE METER SETTING UNLESS OTHERWISE NOTED ON THE PLANS OR IN SPECIFICATIONS. . TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO BURIAL GROUNDS OR CEMETERIES LOCATED ON THIS PROPERTY OR THE COUNTY'S MIHU AGREEMENT GRACE DRIVE IS CLASSIFIED AS A MINOR COLLECTOR. THE PROPOSED ACCESS POINT SHOWN HEREON **FUTURE** IN ACCORDANCE WITH SECTION 121.0 OF THE 10/06/13 COMPREHENSIVE ZONING -THE PROPOSED ARE CLASSIFIED AS PUBLIC MINOR COLLECTOR, AND ACCESS STREET LOTS REGULATIONS, AND THE BULK REGULATIONS APPROVED UNDER HOWARD COUNTY ZONING WETLANDS AND STREAMS SHOWN FOR THE PROJECT ARE BASED ON THE DELINEATION BY GEO-TECHNOLOGY ASSOCIATES, INC. DATED MAY BOARD CASE ZB-1104-M BULK REGULATIONS, THIS SUBDIVISION IS SUBJECT TO 31, 2013 AND FEBRUARY 2016 AND APPROVED AUGUST 23, 2016. MODERATE INCOME HOUSING UNITS. SEE NOTE 46 -FOREST STAND DELINEATION REPORT DATED MAY 29, 2015 AND FEBRUARY 2016 WAS PREPARED BY GEO-TECHNOLOGY ASSOCIATES, INC. AT LEAST 10% OF THE DWELLINGS SHALL BE MODERATE INCOME HOUSING UNITS (MIHU) FOREST CONSERVATION EASEMENTS HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE $184 \times 10\% = 19 \text{ UNITS}.$ HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE HOWARD COUNTY FOREST CONSERVATION MANUAL. -19 SFA UNITS SHALL BE PROVIDED FOR THIS PROJECT. - THE CEDAR CREEK PROJECT FOREST CONSERVATION OBLIGATION HAS BEEN FULFILLED UNDER F-18-041. - F-18-041 - PHASE 1 REQUIRES: 13 UNITS (129 LOT X 10% = 13) NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, HOWEVER, FOREST MANAGEMENT F-18-109 - PHASE 2 REQUIRES: 6 UNITS (55 LOTS X 10% = 6) ユ書の PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED. A TRAFFIC STUDY WAS PREPARED BY TRAFFIC GROUP, ENTITLED "TRAFFIC IMPACT ANALYSIS" WAS APPROVED JANUARY 19, 2016. A NOISE STUDY BEEN PREPARED BY ROBERT H. VOGEL ENGINEERING, INC., DATED JANUARY 2017 AND APPROVED ON OCTOBER 5, 2017. MODERATE INCOME HOUSING UNITS (MIHU) ALLOCATION EXEMPTIONS TRACKING W R GRACE CO. -THE 65 DBA NOISE CONTOUR LINE DRAWN ON THIS SITE DEVELOPMENT PLAN IS ADVISORY AS REQUIRED BY THE HOWARD COUNTY DESIGN MANUAL, CHAPTER 5, REVISED FEBRUARY, 1992 AND CANNOT BE CONSIDERED TO EXACTLY LOCATE THE 65 DBA NOISE 7500 ROUTE 32 TOTAL NUMBER OF LOTS/UNITS PROPOSED EXPOSURE. THE 65 DBA NOISE LINE WAS ESTABLISHED BY HOWARD COUNTY TO ALERT DEVELOPERS, BUILDERS AND FUTURE RESIDENTS THAT AREAS BEYOND THIS THRESHOLD MAY EXCEED GENERALLY ACCEPTED NOISE LEVELS ESTABLISHED BY THE U.S. PARCEL A DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT. NUMBER OF MIHU REQUIRED L. 273 F. 186 THE GEOTECHNICAL AND ESD TEST. PIT REPORTS WERE PREPARED BY GEO-TECHNOLOGY ASSOCIATES, INC. FEBRUARY 2015 AND OPEN SPACE LOT 130 PLAT# 21235 JANUARY 2017 RESPECTIVELY. NUMBER OF MIHU PROVIDED ONSITE (EXEMPT FROM APFO ALLOCATIONS) -THE PRE-SUBMISSION COMMUNITY MEETING WAS HELD FOR THIS PROJECT ON MARCH 2014 AT THE ROBINSON NATURE CENTER. 54.802 AC. -THE DESIGN ADVISORY PANEL MEETING WAS HELD FOR THIS PROJECT AS SIMPSON OAKS ON MARCH 26, 2014. ZONING: PEC THE ENVIRONMENTAL CONCEPT PLAN (ECP15-080) WAS APPROVED PER LETTER DATED AUGUST 23, 2016 NUMBER OF APFO ALLOCATIONS REQUIRED USE: OFFICE CAMPUS (REMAINING LOTS/UNITS) . A PRELIMINARY PLAN (P-17-002) WAS APPROVED ON SEPTEMBER 13, 2017. TAX ACCOUNT #05-35125 . A FINAL PLAN (F-18-041) WAS APPROVED ON MARCH 21, 2019. A LANDSCAPE PLAN WAS PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT N/A (INDICATE LOT/UNIT NUMBERS) REGULATIONS AND THE LANDSCAPE MANUAL AND APPROVED UNDER F-18-041 THE FINANCIAL SURETY WAS POSTED AS PART OF THE F-18-041 DEVELOPER'S AGREEMENT. PUBLIC STREET TREES ARE PROVIDED FOR THIS PROJECT UNDER F-18-041 IN ACCORDANCE WITH SECTION 16.124(e)(1) OF THE SUBDIVISION REGULATIONS, THE LANDSCAPE MANUAL AND THE ZONING BOARD DECISION AND ORDER ZB-1104-M. FINANCIAL SURETY WAS POSTED AS PART OF THE F-18-041 DEVELOPER'S AGREEMENTS. OWNER **BUILDER** THE PROPOSED SUBDIVISION AND RELATED CONSTRUCTION WILL NOT IMPACT ENVIRONMENTAL FEATURES OR BUFFERS. **LOCATION MAP** SIMPSON OAKS CRP3, LL NVR HOMES . SOIL TYPES SHOWN HEREON ARE IN ACCORDANCE WITH THE WEB SOIL SURVEY HOWARD COUNTY, MARYLAND - CLARKSVILLE NE MAP #17. 4750 OWINGS MILLS BOULEVARD 9720 PATUXENT WOODS DRIVE FLOODPLAINS ARE LOCATED ONSITE SCALE: 1"= 100' OWINGS MILLS, MARYLAND 211 COLUMBIA, MD 21046 -THE FLOODPLAIN SHOWN ON THE SUBJECT PROPERTY (MIDDLE PATUXENT RIVER) IS PER HOWARD COUNTY DFIRM. 410-356-9900 (410) 379-5956 -THE ONSITE FLOODPLAINS ALONG THE VILLAGE OF RIVER HILL AMND W.R. GRACÉ PROPERTY BOUNDARIES WERE DELINEATED BASED ON A REPORT PREPARED BY ROBERT H. VOGEL ENGINEERING, INC. DATED MAY 2017 AND APPROVED ON OCTOBER 5, 2017. STEEP SLOPES OVER 20,000 SF CONTIGUOUS ARE SHOWN HEREON. - IN ACCORDANCE WITH DESIGN MANUAL-VOLUME 3, CHAPTER 2 - SECTION 2.9.B. PARKING IS REQUIRED AT TWO (2) SPACES PER UNIT OFF STREET PARKING TO INCLUDE GARAGE SPACE, DRIVEWAY AND PARKING PADS. GARAGES COUNT AS A FULL SPACE. THE ONE (1) GARAGE SPACE MAY NOT BE CONVERTED TO LIVING SPACE AND SHALL ONLY BE UTILIZED FOR VEHICULAR PARKING SPACE. REFER TO PARKING TABULATION. THE HOMEOWNERS ASSOCIATION DOCUMENTS HAVE BEEN RECORDED WITH THE MARYLAND STATE DEPARTMENT OF ASSESSMENTS AND TAXATION SITE ANALYSIS DATA REVISE THE PLAN TO REPLACE THE PREVIOUS HOUSE MODELS ON LOTS 1, 2 AND 7-29-20 THIS PROJECT IS SUBJECT TO WP-16-073. ON JANUARY 4, 2016; THE PLANNING DIRECTOR APPROVED THE REQUEST FOR ALTERNATIVE COMPLIANCE 47-51 WITH A GENERIC BOX AND ADD ARCHITECTURAL MODELS TO SECTION 16.144(D)(2) FOR A REVISED SUBMISSION OF A SKETCH PLAN WITHIN 45 DAYS AND SECTION 16.104(B)(1) FOR A REVISED SUBMISSION OF PHASE 1 - SECTION 1 - 66.81 AC AREA OF PLAN SUBMISSION: PHASE 1 - SECTION 1 - 0.685 AC (LOT 1,2, 47-51) APPROVAL IS SUBJECT TO THE FOLLOWING CONDITION 1. WITHIN 90 DAYS FROM THE DATE OF THE APPROVAL LETTER (APRIL 3, 2016) THE DEVELOPER SHALL RESUBMIT TO THE DEPARTMENT OF PLANNING AND ZONING THE REVISED SKETCH PLAN, S-15-007, AND REVISED ALTERNATIVE COMPLIANCE WP-16-038. IF THE SKETCH PLAN AND ALTERNATIVE COMPLIANCE ARE NOT RESUBMITTED WITHIN 90 DAYS, THE SKETCH PLAN WILL BE VOIDED AND THE ALTERNATIVE COMPLIANCE WILL BE LIMIT OF DISTURBANCE: PRESENT ZONING DESIGNATION: (REVISED) SITE DEVELOPMENT PLAN PARKING TABULATION: PROPOSED USES FOR SITE AND DENIED. AFTER 90 DAYS ANY PLANS RESUBMITTED MUST BE PROCESSED AS A NEW SKETCH PLAN AND A NEW ALTERNATIVE COMPLIANCE REQUEST. STRUCTURES: SINGLE FAMILY DETACHEL SINGLE FAMILY ATTACHED THIS PROJECT IS SUBJECT TO A DESIGN MANUAL WAIVER. ON OCTOBER 22, 2015, THE CHIEF OF THE DEVELOPMENT ENGINEERING DIVISION TOTAL NUMBER OF DWELLING UNITS PROPOSED: 7 **COVER SHEET** F. FLOOR SPACE ON EACH LEVEL DEFFERED THE REQUEST TO WAIVE THE REQUIREMENTS OF SECTION 2.5.B OF DESIGN MANUAL VOLUME III; WHICH REQUIRES A MINIMUM OF 250 FEET OF BUILDING PER USE: SPACING BETWEEN INTERSECTING ROAD CENTERLINES -OFF-STREET PARKING SPACES REQUIRED: 2 SPACES PER UNIT G. TOTAL NUMBER OF UNITS ALLOWED -A REQUEST FOR RECONSIDERATION WAS SUBMITTED AND ON APRIL 25, 2016, THE CHIEF OF THE DEVELOPMENT ENGINEERING DIVISION APPROVED **CEDAR CREEK - PHASE 1** 7 SPACES $(7 \times 2 = 14)$ THE REQUEST TO WAIVE SECTION 2.5.B.1 TO REDUCE THE INTERSECTION SPACING FROM 250 FEET TO 240.79 FEET AND SECTION 2.3.A.3.E WHICH FOR PROJECT AS SHOWN ON FINAL PLAT(S): 184 TOTAL UNITS 129 BUILDABLE LOTS (PHASE 1 F-18-041) -GUEST PARKING SPACES REQUIRED: REQUIRES A SECOND MEANS OF ACCESS WHEN VOLUME EXCEEDS 1,000 ADT, PROVIDING AN ALTERNATE DESIGN AND SECTION 2.3.A.1 FOR 0.5 SPACES PER SFD UNIT X 2 = 1 SPACES REDUCTIONS IN CENTERLINE RADII. APPROVAL IS SUBJECT TO THE CONDITION TO PROVIDE THE PAVEMENT WIDTH OF 22 FEET ON NORTH AND 55 BUILDABLE LOTS (PHASE 1 F-18-109) LOTS 1, 2, 47-51 2 SFD, AND 5 SFA 0.5 SPACES PER SFA UNIT X 5 = 2 SPACES SOUTHBOUND ROAD A BETWEEN ROAD B & GRACE DRIVE AND PARKING ALONG REDUCED HORIZONTAL CURVES BE RESTRICTED H. TOTAL NUMBER OF UNITS PROPOSED: ON THIS SUBMISSION: 7 BUILDABLE LOTS (THIS SDP) TOTAL PARKING REQUIRED: 18 IN ACCORDANCE WITH SECTION 128.0 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN MAXIMUM NUMBER OF EMPLOYEES, 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 TENANTS ON SITE PER USF: PARKING SPACES PROVIDED: 10 FEET INTO THE FRONT OF REAR YARD SETBACK. REFER TO SHEET 2 FOR ADDITIONAL NOTES J. NUMBER OF PARKING SPACES REQUIRED TAX MAP 35 GRID 21 ---- 5TH ELECTION DISTRICT SFD = 2 GARAGE/2 DRIVEWAY ZONED: CEF-R IN ACCORDANCE WITH SECTION 121.0 OF THE HOWARD COUNTY ZONING REGULATIONS AND THE BULK REGULATIONS APPROVED UNDER HOWARD COUNTY BY HO.CO. ZONING REGULATIONS: 2 SPACE IN GARAGE = 4 SPACES (FOR 2 UNITS) ZONING BOARD CASE ZB-1104-M BULK REGULATIONS, THE OPEN SPACE REQUIREMENTS FOR THIS CEF-R PROJECT IS 33% OF GROSS AREA. K. NUMBER OF PARKING SPACES PROVIDED SEE PARKING TABULATION HEREON 2 SPACES ON DRIVEWAY = 4 SPACES (FOR 2 UNITS) SEE TABULATION HEREON. -OPEN SPACE LOTS 130-141 SHALL BE OWNED AND MAINTAINED BY THE H.O.A. **VOGEL ENGINEERING** OPEN SPACE ON SITE: REFER TO F-18-041 = 30.82 AC ADDRESS CHART / STORMWATER MANAGEMENT PRACTICES -PARCEL C-1 SHALL BE OWNED AND MAINTAINED BY W.R. GRACE 22' SFA = 2 GARAGE/2 DRIVEWAY (INTERIOR UNIT) AREA OF RECREATION OPEN SPACE IN ACCORDANCE WITH SECTION 121.0 OF THE HOWARD COUNTY ZONING REGULATIONS AND THE BULK REGULATIONS APPROVED UNDER HOWARD COUNTY ZONING 2 SPACE IN GARAGE = 6 SPACES (FOR 3 UNITS) LOT | STREET ADDRESS REQUIRED BY SUBDIVISION & LAND REFER TO F-18-041 BOARD CASE ZB-1104-M BULK REGULATIONS, THE RECREATION OPEN SPACE FOR THIS CEF-R PROJECT IS 1,000 SF / UNIT. SEE TABULATION HEREON. 2 SPACE ON DRIVEWAY = 6 SPACES (FOR 3 UNITS) DEVELOPMENT REGULATIONS: -THE OVERALL REQUIREMENT SHALL BE MET PER REGULATION IN COMBINATION WITH THE JUNE 2012 POLICY REGARDING THE ALLOWANCE OF A MAXIMUM 50% BUILDING COVERAGE OF SITE CREDIT FOR RECREATIONAL OPEN SPACE IN LIEU OF LAND AREA. 24' SFA = 2 GARAGE/2 DRIVEWAY (EXTERIOR UNIT) APPLICABLE DPZ FILE REFERENCES: P-17-002, F-18-041 TIMMONS GROUP PARCEL 145 - WP-09-227, F-10-023, F-15-095, WP-15-094, 2 SPACES IN GARAGE = 4 SPACES (FOR 2 UNITS) 607 CROSS CREEK DRIVE DRYWELL (M-5), ROOFTOP DISCONNECT (N-REFER TO SHEET 2 FOR ADDITIONAL GENERAL NOTES: PLATS 23334-23337. 2 SPACES IN DRIVEWAY = 4 SPACES (FOR 2 UNITS) '611 CROSS CREEK DRIVE PROJECT - ZB-1104-M, ECP-15-080, S-15-007, WP-16-038, 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043 WP-16-073, P-17-002, 24-5009-D, F-18-041, GUEST PARKING SPACES PROVIDED: P: 410.461.7666 F: 410.461.8961 www.timmons.com WP-17-108, WP-20-010, WP-20-035 = REFER TO OFF-STREET EXCESS. 5 MAINSTREAM WAY 7 MAINSTREAM WAY ROOFTOP DISCONNECT (N-PROFESSIONAL CERTIFICATE P. ANY OTHER INFORMATION WHICH MAY TOTAL PARKING SPACES PROVIDED: = 28 SPACES OFF-STREET APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING 9 MAINSTREAM WAY ROOFTOP DISCONNECT (N-1)TAX MAP 35, GRID 21, PARCEL 145 BE RELEVANT: 5TH ELECTION DISTRICT DESIGN BY: E PREPARED OR APPROVED BY ME, AND ON-STREET PARKING AS DIRECTED BY TRAFFIC ENGINEERING Q. FLOOR AREA RATIO: THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193 EXPIRATION DATE: 09-27-2020 REFER TO F-18-041 DRAWN BY: EDS CHECKED BY: PERMIT INFORMATION CHART *THE H.O.A SHALL BE RESPONSIBLE FOR ENFORCING THE PARKING 1.3.20 DATE: DECEMBER 2019 REQUIREMENTS ON EACH RESIDENTIAL LOT. GARAGE SPACES LOTS/PARCEL # SHALL REMAIN OPEN FOR VEHICLE PARKING USE. THE GARAGE CEDAR CREEK N/A SPACES MAY NOT BE CONVERTED TO LIVING SPACE AND SHALL ONLY TAX MAP | ELECT. DIST. | CENSUS TR BE UTILIZED FOR VEHICULAR PARKING. BLOCK NO. ZONE Jan Sove W.O. NO.: 15-55 CEF-R 35 5TH 605505 SHEET OF ROBERT H. VOGEL, PE No.16193 25254-25269



TREATMENT AREAS HAVE BEEN MET AND PERMANENT STABILIZATION HAS BEEN ESTABLISHED.

MAINTENANCE OF AREAS RECEIVING DISCONNECTED RUNOFF IS GENERALLY NO DIFFERENT THAN THAT REQUIRED FOR OTHER LAWN OR LANDSCAPED AREAS. THE AREAS RECEIVING RUNOFF SHOULD BE PROTECTED FROM FUTURE COMPACTION (E.G., BY PLANTING TREES OR SHRUBS ALONG THE PERIMETER). IN COMMERCIAL AREAS, FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.

HOWARD COUNTY - OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DISCONNECTION OF ROOFTOP RUNOFF (N-1), DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2)

MAINTENANCE OF AREAS RECEIVING DISCONNECTED RUNOFF IS GENERALLY NO DIFFERENT THAN THAT REQUIRED FOR OTHER LAWN OR LANDSCAPED AREAS. THE OWNER SHALL ENSURE THE AREAS RECEIVING RUNOFF ARE PROTECTED FROM FUTURE COMPACTION OR DEVELOPMENT OF IMPERVIOUS AREA. IN COMMERCIAL AREAS, FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLA	ANNING AND ZONING
Of Charles	1.2.20
CHIEF, DEVELOPMENT ENGINEERING DIVISION	S DATE
I Malu	1.3.20
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
100 Gov	F 3-20
DIRECTOR	DATE

ON-LOT STORMWATER MANAGEMENT PRACTICES						
000-0000000000000000000000000000000000		M-5	M-1	N-1		
Lot	Project		Rain	Rooftop		
Number	Phase	Drywell	Barrel	Disconnect		
Lot 1	PHASE 1	2	-	2		
Lot 2	PHASE 1	3	-	1		
Lot 47	PHASE 1	- -	-	-		
Lot 48	PHASE 1	-	-	2		
Lot 49	PHASE 1		-	2		
Lot 50	PHASE 1		-	2		
Lot 51	PHASE 1	-	_	2		
		2				

GENERAL NOTES (CONTINUED)

- 48. THIS PROJECT IS SUBJECT TO WP-16-038. ON DECEMBER 5, 2016; THE PLANNING DIRECTOR APPROVED THE REQUEST FOR ALTERNATIVE COMPLIANCE TO SECTION 16.1205(A)(7)&(10) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, WHICH REQUIRES THE RETENTION OF STATE CHAMPION TREES, TREES 75% OF THE DIAMETER OF STATE CHAMPION TREES, AND TREES 30" IN DIAMETER OR LARGER. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
 - . APPROVAL IS TO REMOVE 41 SPECIMEN TREES IDENTIFIED ON THE ALTERNATIVE COMPLIANCE EXHIBIT. A SEPARATE ALTERNATIVE COMPLIANCE REQUEST MUST BE SUBMITTED AND APPROVED BY THE DEPARTMENT OF PLANNING AND ZONING FOR ANY OTHER SPECIMEN TREE TO BE REMOVED, UNLESS OTHERWISE NOTED IN THESE CONDITIONS OF APPROVAL. 2. SPECIMEN TREES WHERE THE CRITICAL ROOT ZONE IS IMPACTED BY THE LIMIT OF DISTURBANCE WILL REQUIRE PRE, DURING, AND POST CONSTRUCTION PRACTICES AND MEASURES TO MINIMIZE IMPACT TO THE TREES. THESE SPECIFIC PRACTICES WILL BE IDENTIFIED WITHIN THE
 - FINAL SUBDIVISION PLAN AND SHALL BE IMPLEMENTED AND/OR SUPERVISED IN THE FIELD BY A CERTIFIED ARBORIST. 3. SPECIMEN TREES WHERE THE CRITICAL ROOT ZONE IS IMPACTED BY THE LIMIT OF DISTURBANCE, AND INDICATED IN THE ALTERNATIVE COMPLIANCE EXHIBIT TO BE IN POOR OR FAIR CONDITION, MAY BE REMOVED UNDER THIS ALTERNATIVE COMPLIANCE REQUEST IF A CERTIFIED ARBORIST DETERMINES SURVIVAL OF THE TREE IS IMPROBABLE OR THE TREE MAY BE A POTENTIAL HAZARD TO THE DEVELOPMENT. PRIOR TO REMOVING THE TREE, THE APPLICANT SHALL SUBMIT A REPORT FROM THE CERTIFIED ARBORIST TO THE DEPARTMENT OF PLANNING AND ZONING DETAILING THE TREES CONDITION, THE PRACTICES EXAMINED TO SAVE THE TREE, AND THE REASONING FOR THE TREE'S
 - 4. REMOVAL OF THE 41 SPECIMEN TREES WILL REQUIRE MITIGATION AS ADDITIONAL LANDSCAPE PLANTINGS OR 1" CALIPER FOREST CONSERVATION PLANTINGS, OR A COMBINATION THEREOF. MITIGATION WILL BE DETERMINED BY THE DEPARTMENT OF PLANNING AND ZONING DURING THE REVIEW OF THE PRELIMINARY PLAN OR FINAL PLAN WHEN SITE DESIGN IS FURTHER ENGINEERED.
 - F-18-041 MET THE OBLIGATION BY PROVIDING 1" CALIPER FOREST CONSERVATION PLANTINGS.

REINFORCEMENT SHALL BE IN ACCORDANCE WITH HOWARD COUNTY DETAIL R-6.03.

16.144(G) OF THE CODE, REQUIRING A PRELIMINARY PLAN FOR PHASE 2:

- 49. IN ACCORDANCE WITH THE ZB-1104M CEF-R REGULATIONS, THIS SUBDIVISION IS SUBJECT TO MODERATE INCOME HOUSING UNITS. A MIHU AGREEMENT AND MIHU COVENANTS WILL BE REQUIRED IN ACCORDANCE WITH SECTION 13,402 OF THE HOWARD COUNTY CODE. THE MIHU REQUIREMENTS FOR THIS SUBDIVISION WILL BE 19 UNITS (10% OF 184 UNITS). -PHASE 1 REQUIRES 129 X 10% = 13 UNITS -PHASE 2 REQUIRES 55 X 10% = 6 UNITS
- NO MODERATE INCOME HOUSING UNITS ARE PROPOSED ON THIS "MODEL HOME" SITE DEVELOPMENT PLAN. ALL SIDEWALKS ADJACENT TO PUBLIC STORMWATER MANAGEMENT EASEMENTS SHALL BE TRAFFIC BEARING FOR THE LIMITS OF THE PUBLIC EASEMENT.
- TRAFFIC CONTROL DEVICES: A. THE R1-1(STOP) SIGNS AND STREET NAME SIGN (SNS) ASSEMBLIES FOR THIS DEVELOPMENT MUST BE INSTALLED BEFORE THE BASE PAVING IS COMPLETE. B. THE TRAFFIC CONTROL DEVICE LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MUST BE FIELD APPROVED BY HOWARD COUNTY TRAFFIC DIVISION (410-313-2430) PRIOR TO THE INSTALLATION OF ANY OF THE TRAFFIC CONTROL DEVICES. C. ALL TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE 'MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES' (MDMUTCD).
- D. ALL SIGN POST USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, ("QUICK PUNCH") SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE - 3' LONG). THE ANCHOR SHALL NOT EXTEND MORE THAN TWO "QUICK PUNCH" HOLES ABOVE GROUND LEVEL. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON THE TOP OF EACH POST.
- STREET LIGHTING IN ACCORDANCE WITH SECTION 16.135 OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, THE HOWARD COUNTY DESIGN MANUAL AND THE ZONING BOARD DECISION AND ORDER, ZB-1104-M HAS BEEN PROVIDED UNDER F-18-041. STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURES AND POLES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III, SECTION
- 5.5.A. A MINIMUM OF 20 FEET SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE. 53. ON APRIL 18, 2016 THE HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING DETERMINED THE EXISTING ENCROACHMENT FOR THE STORM DRAIN OCCURING ALONG GRACE DRIVE, THE DISTURBANCE REQUIRED TO CONNECT TO PUBLIC SEWER, AND THE RECONSTRUCTION OF THE OFF SITE POND TO MEET MD-378 STANDARDS ARE
- 54. ON JUNE 22, 2017 THE HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING DETERMINED THAT THE DISTURBANCE OF STEEP SLOPES FOR INSTALLATION OF A
- SANITARY SEWER IS NECESSARY FOR REASONABLE DEVELOPMENT OF THE PROPERTY. NO STREET TREE CAN BE PLANTED WITHIN 30' OF A PROPOSED "STOP" SIGN LOCATION (APPROACH DIRECTION). THIS PROJECT IS SUBJECT TO WP-17-108. ON JULY 20, 2017; THE PLANNING DIRECTOR APPROVED THE REQUEST FOR ALTERNATIVE COMPLIANCE WITH SUBSECTION
- APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS . APPLICANT SHALL SUBMIT A FINAL PLAN APPLICATION BASED ON P-17-002, ONCE APPROVED, AND SHALL RECORD A SUBDIVISION PLAT WITH THE LAND RECORDS OFFICE OF HOWARD COUNTY BASED ON SAID FINAL PLAN. THE FINAL PLAT SHALL INDICATE PHASE 1 AND PHASE 2 OF THE SIMPSON OAKS SUBDIVISION. THE PHASE 1 FINAL PLAN WILL INCLUDE BUILDING LOTS, NON-BUILDABLE BULK PARCELS, OPEN SPACE LOTS AND ROAD CONSTRUCTION DRAWINGS FOR THE ENTIRE PROJECT. THE PHASE 2 FINAL PLAN WILL ONLY SHOW THE RESUBDIVISION OF NON-BUILDABLE PARCELS INTO THE REMAINING BUILDABLE LOTS.
- THE DEVELOPER WILL BE RESPONSIBLE FOR CONSTRUCTING A NATURAL SURFACE TRAIL AND SUSPENSION BRIDGE FROM THIS SUBDIVISION THROUGH OPEN SPACE LOT 140 TO THE ROBINSON NATURE CENTER. SEE SDP-19-025 FOR DETAILS. THIS PROJECT IS SUBJECT TO WP-20-010. ON SEPTEMBER 12 2019; THE PLANNING DIRECTOR APPROVED THE REQUEST FOR ALTERNATIVE COMPLIANCE TO SECTION 16.144(p) WHICH REQUIRES THE DEVELOPER TO PAY ALL REQUIRED FEES TO THE COUNTY WITHIN 120 DAYS OF RECEIVING APPROVAL OF THE FINAL PLAN; AND, IF SUBJECT TO A DEVELOPER AGREEMENT OR MAJOR FACILITY AGREEMENT, SHALL POST ALL MONIES AND FILE APPROPRIATE SURETY COVERING THE DEVELOPER'S FINANCIAL OBLIGATIONS FOR THE REQUIRED PUBLIC OR PRIVATE
- IMPROVEMENTS THE PLANNING DIRECTOR ALSO APPROVED THE REQUEST FOR AN ALTERNATIVE COMPLIANCE OF SECTION 16.144(a) WHICH REQUIRES THE DEVELOPER TO SUBMIT THE FINAL SUBDIVISION PLAT TO THE DEPARTMENT OF PLANNING AND ZONING FOR SIGNATURES AND RECORDATION WITHIN 180 DAYS OF FINAL PLAN APPROVAL. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
 - THE DEVELOPER SHALL PAY ALL REQUIRED FEES TO THE COUNTY; AND, IF SUBJECT TO A DEVELOPER AGREEMENT OR MAJOR FACILITY AGREEMENT, SHALL POST ALL MONIES AND FILE APPROPRIATE SURETY COVERING THE DEVELOPER'S FINANCIAL OBLIGATIONS FOR THE REQUIRED PUBLIC OR PRIVATE IMPROVEMENTS AS INDICATED WITHIN THE EMAIL FROM KENT SHEUBROOKS, DIVISION CHIEF; DIVISION OF LAND DEVELOPMENT, DATED JULY 11, 2019, WITHIN 60 DAYS OF THE PREVIOUS DEADLINE DATE OF AUGUST 18, 2019 (OR UNTIL
 - OCTOBER 17, 2019). THE DEVELOPER SHALL SUBMIT THE FINAL SUBDIVISION PLAT TO THE DEPARTMENT OF PLANNING AND ZONING FOR SIGNATURES AND RECORDATION AS INDICATED WITHIN THE EMAIL FROM KENT SHEU.BROOKS, DIVISION CHIEF, DIVISION OF LAND DEVELOPMENT, DATED JULY 11, .2019, WITHIN 60 DAYS OF THE PREVIOUS DEADLINE DATE OF SEPTEMBER 17, 2019 (OR UNTIL NOVEMBER 16, 2019).
 - F-18-109, CEDAR CREEK- PHASE 2 THE DEVELOPER SHALL SUBMIT THE FINAL SUBDIVISION PLAT TO THE DEPARTMENT OF PLANNING AND ZONING FOR SIGNATURES AND RECORDATION AS INDICATED WITHIN THE DPZ TECHNICALLY COMPLETE LETTER DATED APRIL 11, 2019, WITHIN 60 DAYS OF THE
- PREVIOUS DEADLINE DATE OF OCTOBER 8, 2019 (OR UNTIL DECEMBER 7, 2019). 59. THIS PROJECT IS SUBJECT TO WP-20-035. ON OCTOBER 18 2019; THE PLANNING DIRECTOR APPROVED THE REQUEST FOR ALTERNATIVE COMPLIANCE TO SECTION 16.144(p) WHICH REQUIRES THE DEVELOPER TO PAY ALL REQUIRED FEES TO THE COUNTY WITHIN 120 DAYS OF RECEIVING APPROVAL OF THE FINAL PLAN: AND, IF SUBJECT TO A DEVELOPER AGREEMENT OR MAJOR FACILITY AGREEMENT, SHALL POST ALL MONIES AND FILE APPROPRIATE SURETY COVERING THE DEVELOPER'S FINANCIAL OBLIGATIONS FOR THE REQUIRED PUBLIC OR PRIVATE IMPROVEMENTS THE PLANNING DIRECTOR ALSO APPROVED THE REQUEST FOR AN ALTERNATIVE COMPLIANCE OF SECTION 16.144(q) WHICH REQUIRES?THE DEVELOPER TO SUBMIT THE FINAL SUBDIVISION PLAT TO THE DEPARTMENT OF PLANNING AND ZONING FOR SIGNATURES AND RECORDATION WITHIN 180 DAYS OF FINAL PLAN APPROVAL APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
 - F-18-041 CFDAR CREEK PHASE 1 THE DEVELOPER SHALL PAY ALL REQUIRED FEES TO THE COUNTY; AND, IF SUBJECT TO A DEVELOPER AGREEMENT OR MAJOR FACILITY AGREEMENT, SHALL POST ALL MONIES AND FILE APPROPRIATE SURETY COVERING THE DEVELOPER'S FINANCIAL OBLIGATIONS FOR TH REQUIRED PUBLIC OR PRIVATE IMPROVEMENTS AS INDICATED WITHIN THE ALTERNATIVE COMPLIANCE APPROVAL LETTER FROM KENT SHEUBROOKS, DIVISION CHIEF; DIVISION OF LAND DEVELOPMENT, DATED SEPTEMBER 12, 2019, WITHIN 60 DAYS OF THE PREVIOUS
 - DEADLINE DATE OF OCTOBER 17, 2019 (OR UNTIL DECEMBER 16, 2019). THE DEVELOPER SHALL SUBMIT THE FINAL SUBDIVISION PLAT TO THE DEPARTMENT OF PLANNING AND ZONING FOR SIGNATURES AND RECORDATION AS INDICATED WITHIN THE ALTERNATIVE COMPLIANCE APPROVAL LETTER FROM KENT SHEUBROOKS, DIVISION CHIEF, DIVISION OF LAND DEVELOPMENT, DATED SEPTEMBER 12, .2019, WITHIN 60 DAYS OF THE PREVIOUS DEADLINE DATE OF NOVEMBER 16, 2019 (OR UNTIL JANUARY 15, 2020).
- F-18-109, CEDAR CREEK- PHASE 2 THE DEVELOPER SHALL SUBMIT THE FINAL SUBDIVISION PLAT TO THE DEPARTMENT OF PLANNING AND ZONING FOR SIGNATURES AND RECORDATION AS INDICATED WITHIN THE ALTERNATIVE COMPLIANCE APPROVAL LETTER FROM KENT SHEUBROOKS, DIVISION CHIEF, DIVISION OF LAND DEVELOPMENT, DATED SSEPTEMBER 12, 2019, WITHIN 60 DAYS OF THE PREVIOUS DEADLINE DATE OF
- DECEMBER 7, 2019 (OR UNTIL FEBRUARY 5, 2020) 60. ADDITIONAL OPEN SPACE IS BEING PROVIDED ON THE VILLAGE OF HICKORY RIDGE - SECTION 3 AREA 14 - PARCEL A - PARCEL A - PLAT MDR NO. 13640. PARCEL A SHALL BE DEDICATED TO HOWARD COUNTY DEPARTMENT OF RECREATION AND PARKS BY W.R.GRACE. PARCEL 'A' IS KNOWN AS TAX MAP 35, PARCEL 412. PARCEL 412 (PARCEL 'A') IS CONVEYING 31.39 ACRES OF OPEN SPACE TO THE
- 61. IN AN EMAIL DATED NOVEMBER 19, 2019, KENT SHEUBROOKS, DIVISION CHIEF; DIVISION OF LAND DEVELOPMENT; GRANTED A 90 DAY EXTENSION
- FOR THE COMPLETION OF THE DEVELOPERS AGREEMENTS AND SUBMISSION OF THE SDP ORIGINALS FOR SDP-19-022, "CEDAR CREEK" TO ON OR BEFORE FEBRUARY 17, 2020. IN AN EMAIL DATED DECEMBER 18, 2019, TANYA MAENHARDT, ACTING CHIEF: DIVISION OF LAND DEVELOPMENT; GRANTED A 60 DAY EXTENSION FOR THE COMPLETION OF THE DEVELOPERS AGREEMENTS, PAYMENT OF FEES AND SUBMITTAL OF PLAT MYLARS FOR F-18-041. "CEDAR CREEK" (ALSO WP-20-035) TO ON OR BEFORE FEBRUARY

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DA-1	1	R	1	402.00	401.00	397.00	396.00	9.5' X 9.5'	4	1
DA-3B	2	F	1	403.64	402.64	398.64	397.64	10' X 11'	4	1
DA-1	2	R	1	401.90	400.90	396.90	395.90	9.5' X 9.5'	4	1
DA-1	2	R	1	404.00	403.00	399.00	398.00	9.5' X 9.5'	4	1
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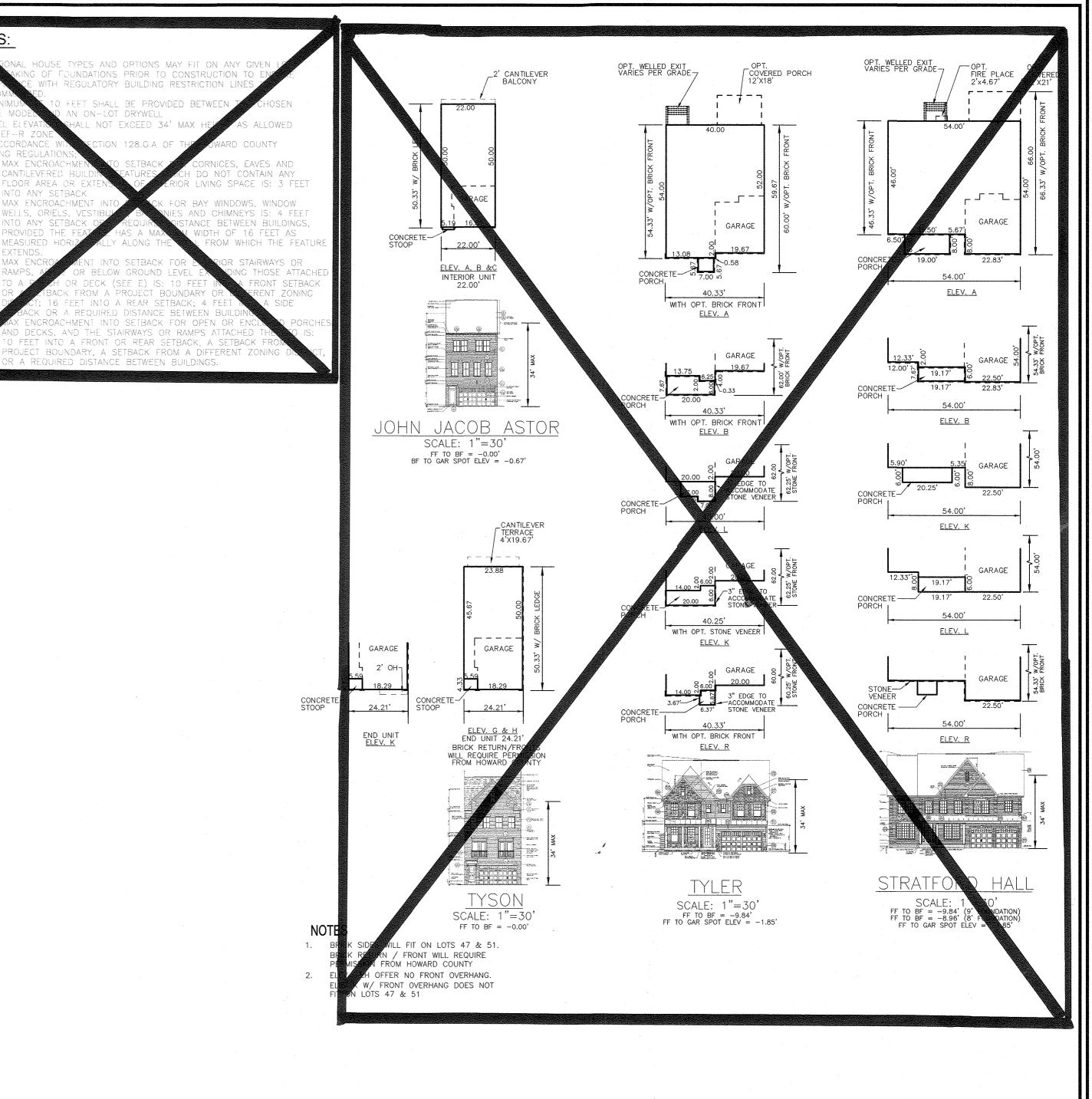
OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED STORMWATER DRY WELLS (M-5)

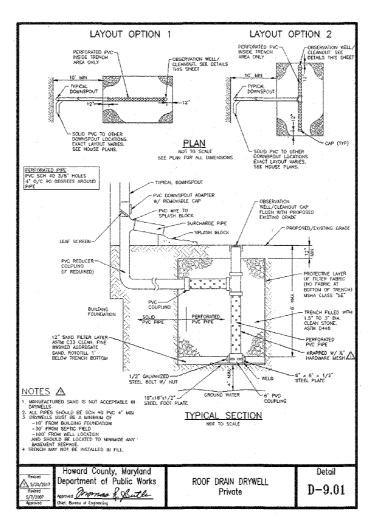
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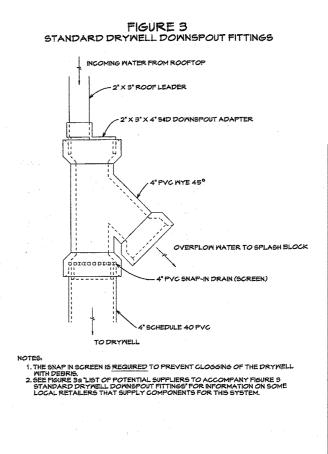
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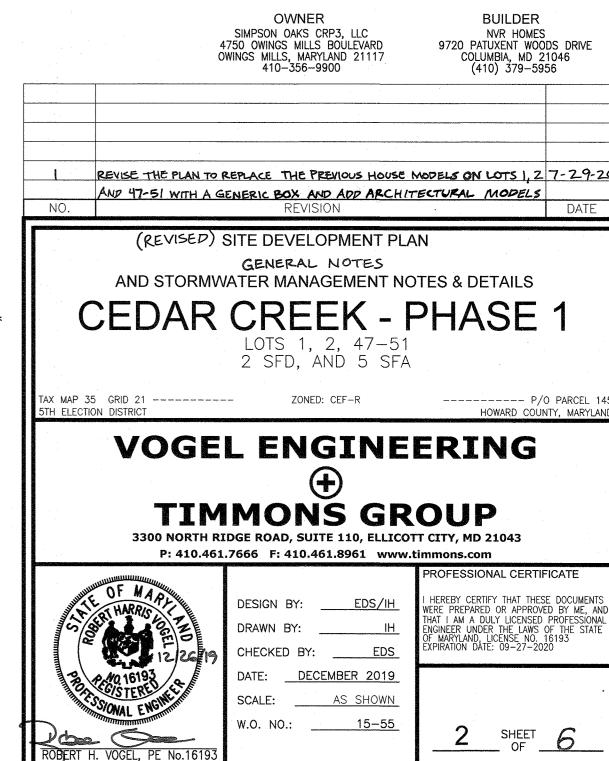
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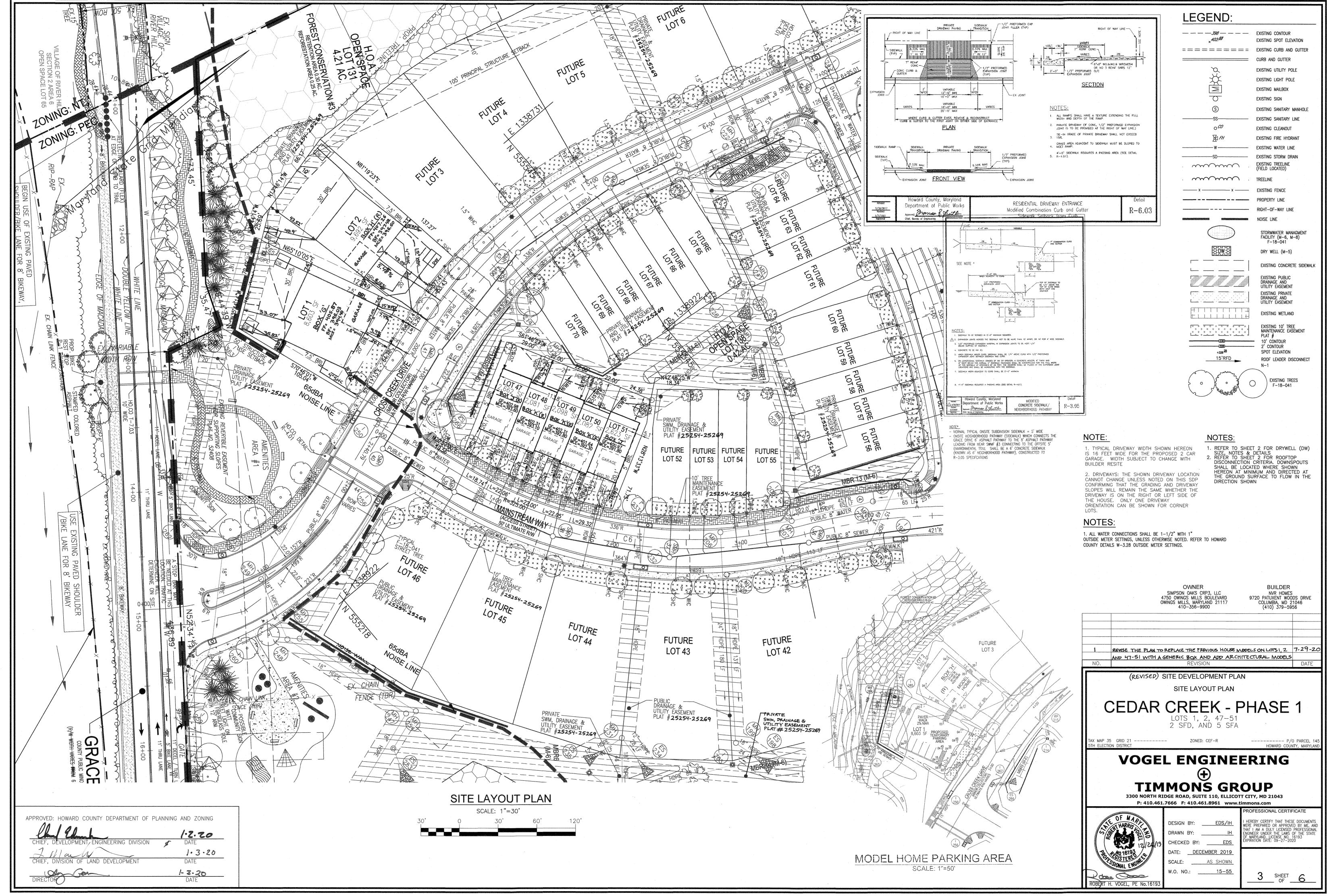
- 1. THE MONITORING WELLS AND STRUCTURES SHALL BE INSPECTED ON A QUARTERLY BASIS AND AFTER EVERY LARGE STORM EVENT.
- 2. WATER LEVELS AND SEDIMENT BUILD UP IN THE MONITORING WELLS SHALL BE RECORDED OVER A PERIOD OF SEVERAL DAYS TO INSURE TRENCH DRAINAGE
- 3. A LOG BOOK SHALL BE MAINTAINED TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
- 4. WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN THE 72 HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BF TAKEN.
- 5. THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
- 6. ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION FACILITY HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.

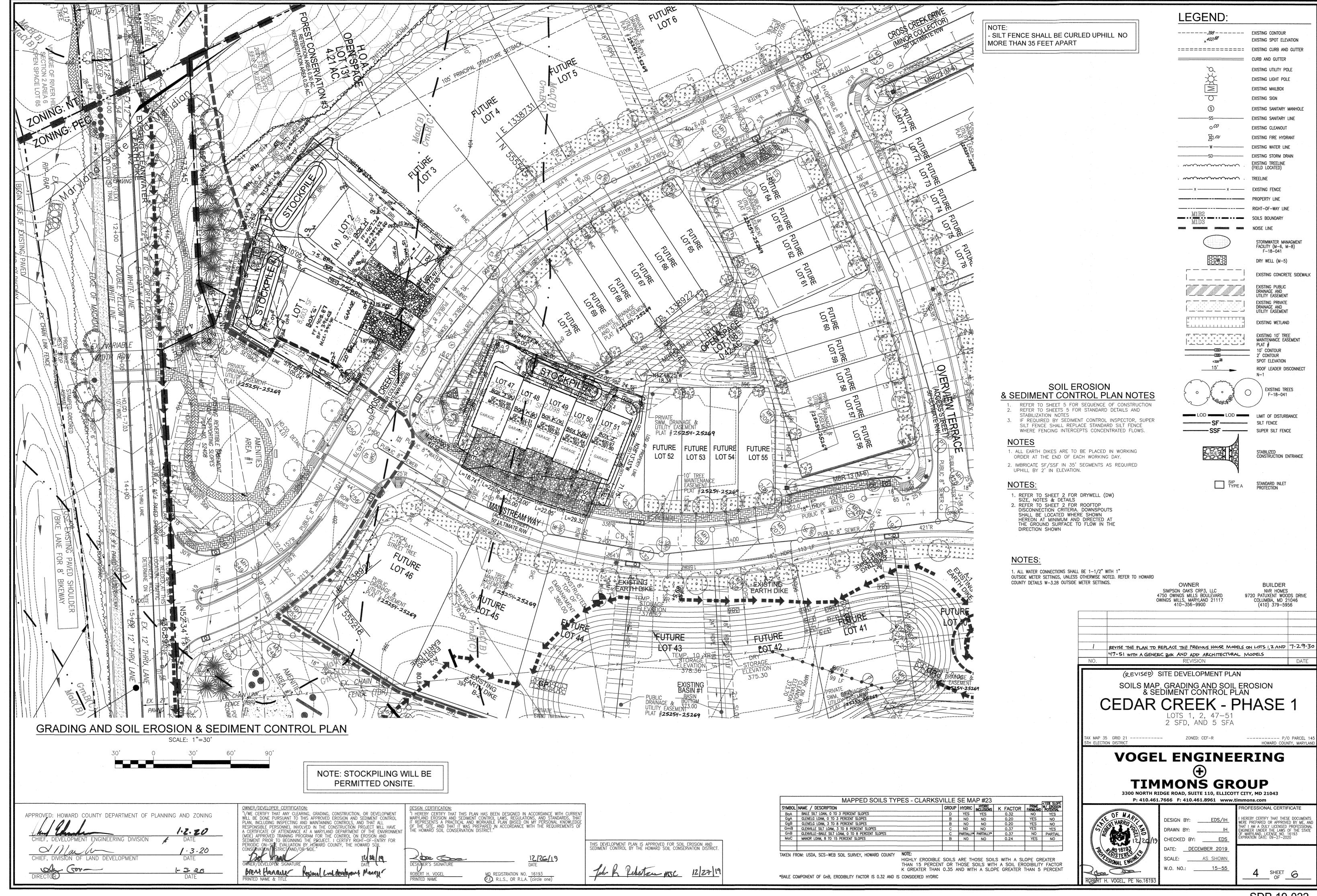












HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

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 FARTH DISTURBANCE B. UPON COMPLETION OF THE INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH
- PRIOR TO THE START OF ANOTHER PHASE OF CONSTRUCTION OR OPENING OF ANOTHER GRADING UNIT D. PRIOR TO THE REMOVAL OR MODIFICATION OF SEDIMENT CONTROL

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

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

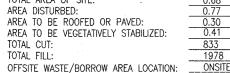
CONTROL, AND REVISIONS THERETO. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION IS REQUIRED WITHIN THREE (3) CALENDAR DAYS AS TO THE SURFACE OF LL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED AREAS ON THE PROJECT SITE EXCEPT FOR THOSE AREAS UNDER ACTIVE GRADING

ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS 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). ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE. AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN

SITE ANALYSIS: TOTAL AREA OF SITE: AREA DISTURBED: AREA TO BE ROOFED OR PAVED:

AVOID CONFLICTS WITH THIS PLAN.



(1) REFER TO ITEM 11 BELOW

7. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANC

ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED. IF DEFMED 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

ACRES

ACRES

ACRES

CU. YDS. TOTAL

CU. YDS. TOTAL

- 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
- 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. 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 DISTURBANCE SHALL NOT OCCUR OUTSIDE THE L.O.D. A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 AC PER GRADING LINIT) 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 CID. NO MORE THAN O ACRES CUMULATIVELY MAY BE DISTURBED AT A GIVEN TIME WASH WATER FROM ANY EQUIPMENT, VEHICLES, WHEELS, PAVEMENT, AND OTHER
- SOURCES MUST BE TREATED IN A SEDIMENT BASIN OR OTHER APPROVED WASHOUT 13. TOPSOIL SHALL BE STOCKPILED AND PRESERVED ON SITE FOR REDISTRIBUTION ONTO
- 14. ALL SILT FENCE AND SUPER SILT FENCE SHALL BE PLACED ON-THE-CONTOUR. AND BE IMBRICATED 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.

ITEM 11. REGARDING PROJECT DISTURBANCE IS NO LONGER A REQUIREMENT OF THE STATE OF MARYLAND, HOWEVER REMAINS A REQUIREMENT OF HOWARD COUNTY.

NOTE:

EITHER PERMANENT OR TEMPORARY STABILIZATION IS TO BE APPLIED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR REGARDLESS OF DAYS/DATES IN THE STANDARD SEDIMENT CONTROL NOTES AND/OR SEEDING SPECIFICATIONS.

B-4-5 STANDARDS AND SPECIFICATIONS PERMANENT STABILIZATION

TO STABILIZE DISTURBED SOILS WITH PERMANENT VEGETATION.

CONDITIONS WHERE PRACTICE APPLIES

TO USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER ON DISTURBED SOILS.

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

.A. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE 8.3 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE 8.3) AND BASED ON THE SITE CONDITION OR PURPOSE FOUND ON TABLE 8.2. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN. B. ADDITIONAL PLANTING SPECIFICATIONS FOR EXCEPTIONAL SITES SUCH AS SHORELINES STREAM BANKS, OR DUNES OR FOR SPECIAL PURPOSES SUCH AS WILDLIFE OR

AESTHETIC TREATMENT MAY BE FOUND IN USDA-NRCS TECHNICAL FIELD OFFICE GUIDE, SECTION 342 - CRITICAL AREA PLANTING. . FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, USE AND SHOW THE RATES RECOMMENDED BY THE SOIL TESTING AGENCY D. FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREA FORM FERTILIZER (46-0-0) AT 3-1/2 POUNDS PER 1000 SQUARE FEET (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 DESIRED INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANC B. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED BELOW BASED ON THE SITE CONDITIONS OR PURPOSE. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.

KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN AREAS THAT RECEIVE INTENSIVE MANAGEMENT. IRRIGATION REQUIRED IN THE AREAS OF CENTRAL MARYLAND AND EASTERN SHORE. RECOMMENDED CERTIFIED KENTUCKY BLUEGRASS CULTIVARS SEEDING RATE: 1.5 TO 2.0 POUNDS PER 1000 SQUARE FEET, CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35PERCENT OF THE TOTAL MIXTURE BY WEIGHT.

II. KENTUCKY BLUEGRASS/PERENNIAL RYE: FULL SUN MIXTURF: FOR USF IN FULL SUN AREAS WHERE RAPID ESTABLISHMENT IS NECESSARY AND WHEN TURF WILL RECEIVE MEDIUM TO INTENSIVE MANAGEMENT, CERTIFIED PERENNIAL RYEGRASS CULTIVARS/ CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 2 POUNDS MIXTURE PER 1000

SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUFGRASS CULTIVARS WITH

EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT. III. TALL FESCUE/KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN DROUGHT PRONE AREAS AND/OR FOR AREAS RECEIVING LOW TO MEDIUM MANAGEMENT IN FULL SUN TO MEDIUM SHADE. RECOMMENDED MIXTURE INCLUDES; CERTIFIED TALL FESCUE CULTIVARS 95 TO 100 PERCENT, CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 0 TO 5 PERCENT. SEEDING RATE: 5 TO 8 POUNDS PER 1000 SQUARE FEET. 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 TURF AREA. MIXTURE INCLUDES: CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 30 TO 40 PERCENT AND CERTIFIED FINE FESCUE AND 60 TO 70 PERCENT. SEEDING RATE: 11/2 TO 3 POUNDS PER 1000 SQUARE FEET.

SELECT TURFGRASS VARIETIES FROM THOSE LISTED IN THE MOST CURRENT UNIVERSITY OF MARYLAND PUBLICATION, AGRONOMY MEMO #77, "TURFGRASS CULTIVAR RECOMMENDATIONS FOR MARYLAND" CHOOSE CERTIFIED MATERIAL. CERTIFIED MATERIAL IS THE BEST GUARANTEE OF CULTIVAR PURITY. THE CERTIFICATION PROGRAM OF THE MARYLAND DEPARTMENT OF AGRICULTURE, TURF AND SEED SECTION, PROVIDES A RELIABLE MEANS OF CONSUMER PROTECTION AND ASSURES A PURE GENETIC

C. IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURES

- WESTEM MD: MARCH 15 TO JUNE 1, AUGUST ITO 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

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 STONES AND DEBRIS OVER 11/4 INCHES IN DIAMETER. THE RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL POSE NO DIFFICULTY. IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH (1/2 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 SEASONS, OR ON ADVERSE SITES.

SOD: TO PROVIDE QUICK COVER ON DISTURBED AREAS (2:1 GRADE OR FLATTER).

A. CLASS OF TURFGRASS SOD MUST BE MARYLAND STATE CERTIFIED. SOD LABELS MUST BE MADE AVAILABLE TO THE JOB FOREMAN AND INSPECTOR. B. SOD MUST BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 3/4 INCH, PLUS OR MINUS ¼ INCH, AT THE TIME OF CUTTING, MEASUREMENT FOR THICKNESS MUST EXCLUDE TOP GROWTH AND THATCH. BROKEN PADS AND TOM OR UNEVEN ENDS WILL NOT BE . STANDARD SIZE SECTIONS OF SOD MUST BE STRONG ENOUGH TO SUPPORT THEIR OWN

WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE SECTION. D. SOD MUST NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL. . SOD MUST BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPLANTED WITHIN THIS PERIOD MUST BE APPROVED BY AN AGRONOMIST OR SOIL SCIENTIST PRIOR TO ITS INSTALLATION.

2. SOD INSTALLATION A. DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, LIGHTLY IRRIGATE THE SUBSOIL IMMEDIATELY PRIOR TO LAYING THE SOD. B. LAY THE FIRST ROW OF SOD IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO IT AND TIGHTLY WEDGED AGAINST EACH OTHER. STAGGER LATERAL JOINTS TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. ENSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE AIR DRYING OF THE ROOTS. WHEREVER POSSIBLE, LAY SOD WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERING JOINTS. ROLL AND TAMP, PEG OR OTHERWISE SECURE THE SOD TO PREVENT

SLIPPAGE ON SLOPES. ENSURE SOLID CONTACT EXISTS BETWEEN SOD ROOTS AND THE UNDERLYING SOIL SURFACE D. WATER THE SOD IMMEDIATELY FOLLOWING ROLLING AND TAMPING UNTIL THE UNDERSIDE OF HE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET. COMPLETE THE OPERATIONS OF LAYING, TAMPING AND IRRIGATING FOR ANY PIECE OF SOD WITHIN EIGHT

SOD MAINTENANCE A. IN THE ABSENCE OF ADEQUATE RAINFALL, WATER DAILY DURING THE FIRST WEEK OR AS OFTEN AND SUFFICIENTLY AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF 4 INCHES. WATER SOD DURING THE HEAT OF THE DAY TO PREVENT WILTING. B. AFTER THE FIRST WEEK, SOD WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT.

C. DO NOT MOW UNTIL THE SOD IS FIRMLY ROOTED. NO MORE THAN 1/3 OF THE GRASS LEAF MUST BE REMOVED BY THE INITIAL CUTTING OR SUBSEQUENT CUTTINGS. MAINTAIN A GRASS HEIGHT OF AT LEAST 3 INCHES UNLESS OTHERWISE SPECIFIED. PERMANENT SEEDING SUMMARY

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

COOL SEASON T.F. 60 LB / AC MAR 1 TO

P.R. 20 LB / AC

WARM/COOL SEASON GRASS MIX DEFETIOUNGE CRF 20 LB / AC MAY 15 <>< MAY 15 <><> MAY 16 TO

CREEPING RED CWR. 5 LB / AC

SPECIES RATE (LB/AC) DATES DEPTHS

K.B. 40 LB / AC AUG 15 TO

SEED MIXTURE (FROM TABLE B.3):

R-4-2 STANDARDS AND SPECIFICATIONS

SOIL PREPARATION, TOPSOILING AND SOIL AMENDMENTS

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.

A. SOIL PREPARATION

A. 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. 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 SUITABLE MEANS. 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.

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, THEN SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO D. APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY

V. SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION.

THE RESULTS OF A SOIL TEST 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 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 CONTOLIR OF THE SLOPE, LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRIABLE, SEEDBED LOOSENING MAY BE UNNECESSARY ON NEWLY DISTURBED AREAS.

I. 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 CONCEM HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION. 2. TOPSOIL SALVAGED FROM AN EXISTING SITE MAY BE USED PROVIDED IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE

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 GROWTH. B. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FLIRNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT

REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-

THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC 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 5. TOPSOIL SPECIFICATIONS: SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING A. TOPSOIL MUST BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOA 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 11/2 INCHES IN DIAMETER. B. 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 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 A. EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED WHEN APPLYING 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 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 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)

I. 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 LISED FOR CHEMICAL ANALYSES . FERTILIZERS MUST BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR CCURATE 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

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 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. 4. 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. 5. 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.

DETAIL B-1 STABILIZED CONSTRUCTION SCE DETAIL E-1 SILT FENCE ENTRANCE CENTER TO CENTER -EARTH FILI -PIPE (SEE NOTE 6) PROFILE 50 FT MIN. PLAN_VIEW CONSTRUCTION NOTES . 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. 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 DRAINAGE 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. . PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT 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

B-4-3 STANDARDS AND SPECIFICATIONS SEEDING AND MULCHING

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

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

A. SEEDING

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

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 SEFDING TABLE 8.1, PERMANENT SEEDING TABLE 8.3, 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 SFFD TO SOIL CONTACT. 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 EACH DIRECTION. C. HYDROSEEDING: APPLY SEED UNIFORMLY WITH HYDROSEEDER (SLURRY INCLUDES SEED AND

1. 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; P205 (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.

I. MULCH MATERIALS (IN ORDER OF PREFERENCE) A. STRAW CONSISTING OF THOROUGHLY THRESHED WHEAT, LYE, 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

IV. WHEN HYDROSEEDING DO NOT INCORPORATE SEED INTO THE SOIL.

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 OPRIATE 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 ABSORPTION 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 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 A. APPLY MULCH TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING B. 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 MULCH ANCHORING TOOL, INCREASE THE APPLICATION RATE TO 2.5 TONS PER ACRE.

C. 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. ANCHORING A. 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 FROSION 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 DRY WEIGHT OF 750 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER AT A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER. 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 FEET

B-4-4 STANDARDS AND SPECIFICATIONS TEMPORARY STABILIZATION

DEFINITION TO STABILIZE DISTURBED SOILS WITH VEGETATION FOR UP TO 6 MONTHS.

TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURBED SOILS. 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.

1. SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE 8.1 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3), AND ENTER THEM IN THE TEMPORARY SEEDING SUMMARY BELOW ALONG WITH APPLICATION RATES, SEEDING DATES AND SEEDING DEPTHS. IF THIS SUMMARY IS NOT PUT ON THE PLAN AND COMPLETED, THEN TABLE 8.1 PLUS FERTILIZER AND LIME RATES MUST BE PUT ON THE PLAN

2. FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED. RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY 3. 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.1.B AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

TEMPORARY SEEDING SUMMARY

HARDINESS ZONE (FROM FIGURE B.3): ZONE 6b SEED MIXTURE (FROM TABLE B.1):					FERTILIZER RATE	LIME RATE	
NO	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS	(10-20-20)		
1	COOL SEASON ANNUAL RYEGRASS OR EQUAL	40 LB / AC	MAR 1 TO MAY 15 AUG 1 TO OCT 15	1/2 IN.	436 LB/AC (10 LB PER 1000 SF)	2 TONS/AC (90 LB PER 1000 SF)	
2	WARM SEASON FOXTAIL MILLET OR EQUAL	30 LB / AC	MAY 16 TO JUL 31	1/2 IN.			

FOR ALTERNATES, REFER TO THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL PAGE B.20. TABLE B.1. SHOWN ON SHFFT X

B-4-8 STANDARDS AND SPECIFICATIONS STOCKPILE AREA

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

STOCKPILE AREAS ARE UTILIZED WHEN IT IS NECESSARY TO SALVAGE AND STORE SOIL

CONDITIONS WHERE PRACTICE APPLIES

INTERCEPT THE DISCHARGE.

THE STOCKPILE LOCATION AND ALL RELATED SEDIMENT CONTROL PRACTICES MUST BE CLEARLY INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN. THE FOOTPRINT OF THE 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.

RUNOFF FROM THE STOCKPILE AREA MUST DRAIN TO A SUITABLE SEDIMENT CONTROL PRACTICE. ACCESS THE STOCKPILE AREA FROM THE UPGRADE SIDE. 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-FROSIVE MANNER WHERE RUNOFF CONCENTRATES ALONG THE TOE OF THE STOCKPILE FILL, AN

APPROPRIATE EROSION/SEDIMENT CONTROL PRACTICE MUST BE USED TO

STOCKPILES MUST BE STABILIZED IN ACCORDANCE WITH THE 3/7 DAY STABILIZATION REQUIREMENT AS WELL AS STANDARD B-4-1 INCREMENTAL 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 BE 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 A 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.

WOVEN SLIT FILM GEOTEXTILE

1. A. OBTAIN GRADING PERMIT. (1 DAY) B. OBTAIN A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT (1 DAY) STAKEOUT LIMITS OF DISTURBANCE. (3 DAYS) INSTALL STABILIZED CONSTRUCTION ENTRANCE. (1 DAY) EXISTING GRADES SHOWN HEREON ARE THE PROPOSED GRADES FROM F-18-041

DETAIL E-1 SILT FENCE

CONSTRUCTION SPECIFICATIONS

-----SF-------

____36 IN MIN. FENCE POST LENGTH DRIVEN MIN. 16 IN INTO GROUND

FENCE POST 18 IN MIN. --- ABOVE GROUND

STAPLE-

TWIST POSTS TOGETHER

ELEVATION

CROSS SECTION

JOINING TWO ADJACENT SILT

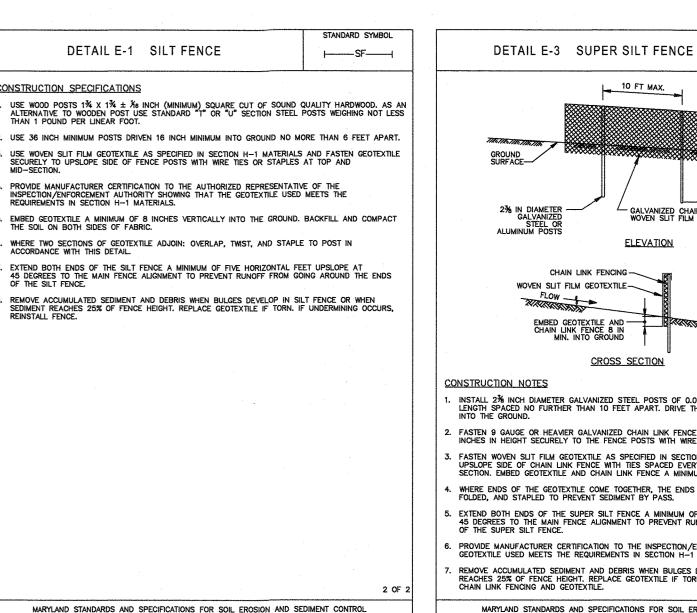
FENCE SECTIONS (TOP VIEW)

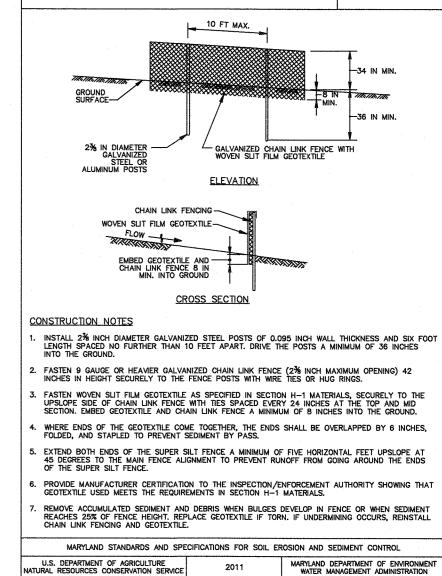
IF F-18-041 BASIN #1 HAS BEEN BACKFILLED, CONTRACTOR SHALL INSTALL ONLOT AFTER OBTAINING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR TO PROCEED, ROUGH GRADE INDIVIDUAL LOT FOR HOUSE CONSTRUCTION. (1 DAY) STOCKPILES SHALL BE STABILIZED AS DETAILED HEREON. (1 DAY)

FINE GRADE LOT AS DETAILED HEREIN AND PER SPOT ELEVATIONS AS SHOWN TO BE IN CONFORMANCE WITH STORMWATER MANAGEMENT SCHEME APPROVED FOR THE PROJECT. (1 DAY) Construct drywells. UPON COMPLETION OF HOME CONSTRUCTION AND WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, COMPLETE ANY REMAINING FINE GRADING, INSTALL ONLOT STORMWATER MANAGEMENT FACILITIES TO INCLUDE: DRYWELLS & ROOFTOP DISCONNECTIONS. INSTALL ROOF GUTTER DOWNSPOUTS TO DIRECT ROOFTOP RUNOFF

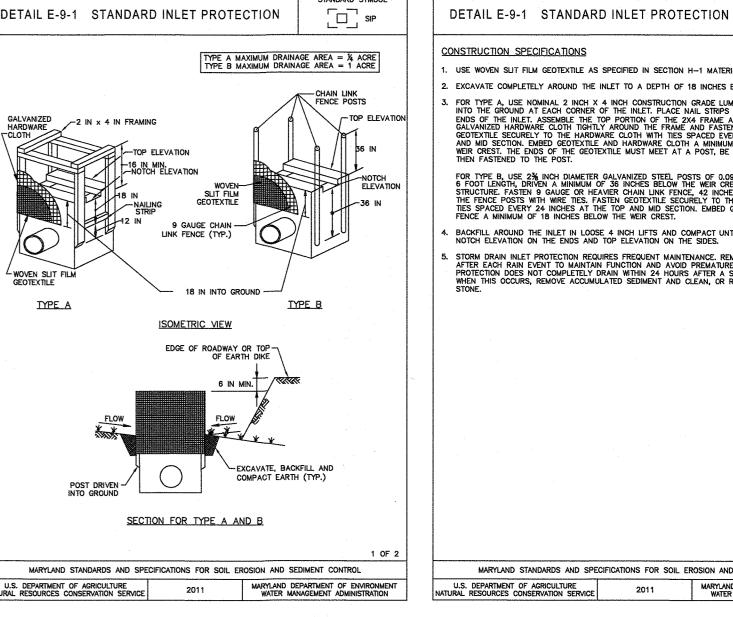
ADD TOPSOIL PER THE SPECIFICATIONS SHOWN HEREON. (1 DAY) WITH ALL ONLOT DISTURBANCES COMPLETED, STABILIZE WITH PERMANENT SEEDING MIXTURE AND STRAW MULCH OR EQUAL STABILIZATION, (1 DAY) AFTER PERMISSION HAS BEEN GIVEN BY SEDIMENT CONTROL INSPECTOR. REMOVE ANY REMAINING E/S CONTROLS AND STABILIZE THE DISTURBED AREAS FROM THE AFOREMENTIONED DISTURBANCES WITH PERMANENT SEEDING MIXTURE AND STRAW

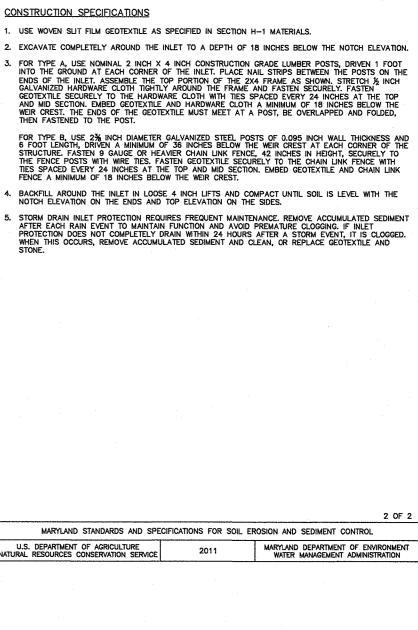
THE SEQUENCE OF CONSTRUCTION MUST PLAN APPROVAL AUTHORITY PRIOR TO





----SSF------





SEQUENCE OF CONSTRUCTION

CONTRACTOR SHALL UTILIZE THE EXISTING CONTROLS INSTALLED UNDER F-18-041

SEDIMENT CONTROL MEASURES AS SHOWN IN PLAN VIEW IN ACCORDANCE WITH DETAILS CONSTRUCT DETACHED HOUSES ON LOTS 1-2 AND ATTACHED HOUSES ON LOTS 47-51. THE FIRST FLOOR ELEVATIONS CANNOT BE MORE THAN 1' HIGHER OR 0.2' LOWER THAN THE FLEVATIONS SHOWN ON THIS PLAN. (6 MONTHS)

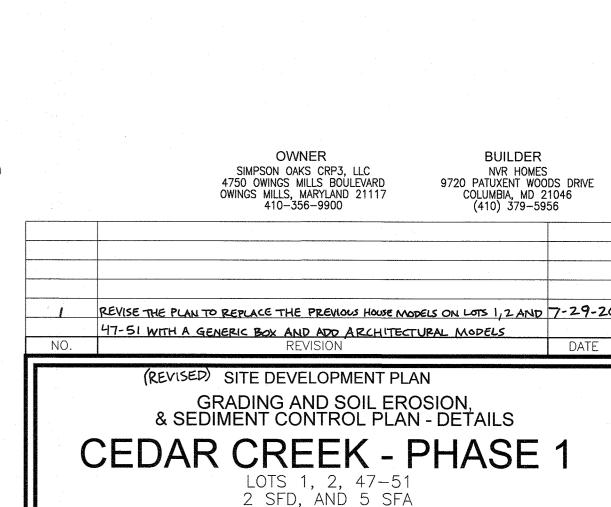
IF BASINS ARE IN PLACE. CONTRACTOR SHALL VERIFY STORM DRAIN DIVERSIONS ARE IN

PLACE. F-18-041 SEDIMENT BASINS ARE TO BE BACKFILLED AS PART OF F-18-041.

AS DIRECTED. LOT GRADING WHERE ROOFTOP DISCONNECTIONS. ARE PROPOSED SHALL BE 5% OR LESS FOR THE DETAILED LENGTH FOR PROPER "DISCONNECTION CREDIT".

MULCH. (1 DAY)

NOTE: ANY CHANGES OR REVISIONS TO PROCEEDING WITH CONSTRUCTION



AX MAP 35 GRID 21 -----ZONED: CEF-R ----- P/O PARCEL **VOGEL ENGINEERING** TIMMONS GROUP 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043 P: 410.461.7666 F: 410.461.8961 www.timmons.com



DESIGN BY: ___ DRAWN BY: CHECKED BY: DATE: <u>DECEMBER 2019</u> SCALE: AS SHOWN W.O. NO.: <u> 15–55</u>

HEREBY CERTIFY THAT THESE DOCUMENTS /ERE PREPARED OR APPROVED BY ME, AND NAT I AM A DULY LICENSED PROFESSIONAL NCINEER UNDER THE LAWS OF THE STATE F MARYLAND, LICENSE NO. 16193 (PIRATION DATE: 09-27-2020 SHEET __ OF _

ROFESSIONAL CERTIFICATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING 1. 2. Zo 11/author 1.3.20 CHIEF, DIVISION OF LAND DEVELOPMEN 1-3-20 (FOV-

OWNER/DEVELOPER CERTIFICATION: "I/WE CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL ON EROSION AND (MIDE) APPROVED INAINING PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND/OR MDE."

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FOR ALTERNATES, REFER TO THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS

FOR SOIL EROSION AND SEDIMENT CONTROL - PAGES B.26 - B.32

(10-20-20)

N P₂ O₅ K₂ O

1/4-1/2 IN. (1 LB PER (2 LB PER (2 LB PER (90 LB PER

45 LB/AC 90 LB/AC 90 LB/AC 2 TONS/AC

1000 SF) 1000 SF) 1000 SF) 1000 SF)

"I HEREBY CERTITION."

I HEREBY CERTITION.

II HEREBY CERTITION.

MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT." KBO COM

> MD REGISTRATION NO. 16193 P.E), R.L.S., OR R.L.A. (circle one)

DESIGNER'S SIGNATURE

ROBERT H. VOGEL

