



OPERATION AND MAINTENANCE SCHEDULE FOR LANSCAPE INFILTRATION (M-3), MICRO-BIORETENTION (M-6), RAIN GARDENS (M-7), BIORETENTION SWALE (M-8), AND ENHANCED FILTERS (M-9)

APPENDIX B.4.C SPECIFICATIONS FOR MICRO-BIORETENTION. RAIN GARDEN, LANDSCAPE INFILTRATION &

INFILTRATION BERMS 1. MATERIAL SPECIFICATIONS

PROPERTY LINE RIGHT-OF-WAY LINE ADJACENT PROPERTY LINE EXISTING PAVING — — — 330 — — EXISTING 10' CONTOUR - - - - 328 - - - EXISTING 2' CONTOUR SOILS

SfC2 EXISTING TREELINE . PROPOSED TREELINE PROPOSED PAVING -430 PROPOSED CONTOUR

> EXISTING MAILBOX EXISTING JUNCTION BOX EXISTING SIGN EXISTING UTILITY POLE

EXISTING SPECIMEN TREE

LÍMIT OF DISTURBED AREA NON-ROOF TOP DISCONNECT

> MICRO BIO-RETENTION SILT FENCE

STABILIZED CONSTRUCTION ENTRANCE

Material	Specification	Size	Notes
Plantings	see Appendix A, Table A.4	n/a	plantings are site-specific
Planting soil [2' to 4' deep]	loamy sand (60 - 65%) & compost (35 - 40%) or sandy loam (30%), coarse sand (30%) & compost (40%)	n/a	USDA soil types loamy sand or sandy loam; clay content < 5%
Organic content	Min. 10% by dry weight (ASTM D 2974)		
Mulch	shredded hardwood		aged 6 months, minimum; no pine or wood chips
Pea gravel diaphragm	pea gravel: ASTM-D-448	NO. 8 OR NO. 9 (1/8" TO 3/8")	
Curtain drain	ornamental stone: washed cobbles	stone: 2" to 5"	
Geotextile		n/a	PE Type 1 nonwoven
Gravel (underdrains and infiltration berms)	AASHTO M-43	NO. 57 OR NO. 6 AGGREGATE (3/8" to 3/4")	
Underdrain piping	F 758, Type PS 28 or AASHTO M-278	4" to 6" rigid schedule 40 PVC or SDR35	Slotted or perforated pipe; 3/8" perf. @ 6" on center, 4 holes per row; minimum of 3" of gravel over pipes; not necessary underneath pipes. Perforated pipe shall be wrapped with 1/4-inch galvanized hardware cloth
Poured in place concrete (if required)	MSHA Mix No. 3; f' <sub>0</sub> = 3500 psi @ 28 days, normal weight, air-entrained; reinforcing to meet ASTM-615-60	n/a	on-site testing of poured-in-place concrete required:  28 day strength and slump test; all concrete design (cast-in-place or pre-cast) not using previously approved State or local standards requires design drawings sealed and approved by a professional structural engineer licensed in the State of Maryland - design to include meeting ACI Code 350.R/89; vertical loading [H-10 or H-20]; allowable horizontal loading (based on soil pressures); and analysis of potential cracking
Sand	AASHTO-M-6 or ASTM-C-33	0.02" to 0.04"	Sand substitutions such as Diabase and Graystone (AASHTO) #10 are not acceptable. No calcium carbonated or dolomitic sand substitutions are acceptable. No "rock dust" can be used for sand.

ANY SUBSEQUENT AND ASSOCIATED BUILDING AND/OR GRADING

2. REVIEW OF THIS PLAN FOR COMPLETE COMPLIANCE WITH ZONING AND SUBDIVISION AND LAND DEVELOPMENT REGULATIONS SHALL OCCUR AT THE SITE DEVELOPMENT STAGE AND THEREFORE, THIS PLAN IS SUBJECT TO ADDITIONAL AND MORE DETAILED COMMENTS AS THE PLAN PROGRESSES THROUGH THE SITE DEVELOPMENT

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NO.		REVISION			DATE
	ENVI	RONMENTAL	CONCEPT	ΓPLAN	
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TAX MAI 6TH ELE	P 43 BLOCK 14 ECTION DISTRICT			HOWARD COUNTY,	ARCEL 491 MARYLAND
	TIN	L ENG  MONS  RIDGE ROAD, SUITE: 1.7666 F: 410.461.	GRO	<b>OUP</b> CITY, MD 21043	
A TA	OF MARKELLE	DESIGN BY:	RHV	PROFESSIONAL CERTI I HEREBY CERTIFY THAT THE WERE PREPARED OR APPROV THAT I AM A DULY LICENSET	SE DOCUMENTS /ED By ME, AND

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