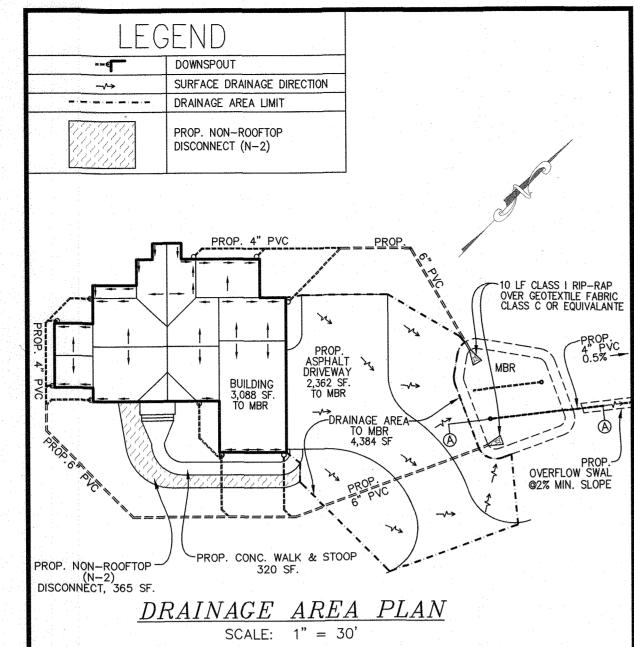
-EXISTING GRADE -4" DOME GRATE CAP ELEV=524.65 - 3.0' WITH 0% SLOPE ELEV=524.90 ELEV=523.90— ELEV=523.64— ─3" MULCH LAYER -24" PLANTING MEDIA 4" #8 STONE 19" #2 STONE 3" ABOVE UNDERDRAIN 12" BELOW UNDERDRAIN ELEV=520.73-ELEV=519.73-4"-SCH 40 PERFORATED OR SLOTTED PVC PIPE WRAPPED WITH 1/4" GALV. 518 HARDWARE MESH SECTION A-A CROSS SECTION OF THE MICRO-BIO RETENTION (M-6) SCALE: HORIZ. I" = 30' VERT. I'' = 3'



AS-BUILT FACILITY DIMENSIONS LENGTH . FACILITY SHALL BE MINIMUM OF 10FT FROM ANY BUILDING. 2. FACILITY SHALL BE INSTALLED IN EXCAVATED VIRGIN SOIL (NOT FILL). 3. FACILITY SHALL BE MINIMUM 4" ABOVE THE SEASONAL HIGH WATER TABLE. 4. REGULAR INSPECTIONS SHALL BE REQUIRED DURING FOLLOWING STAGES OF воттом AS-BUILT FACILITY ELEVATIONS E1 _____FT. CORNER THE CONSTRUCTION 4.1. DURING EXCAVATION TO SUBGRADE AND PLACEMENT AND BACKFILL OF E2 _____FT. CORNER UNDERDRAIN SYSTEM. E3 _____FT. CORNER DURING PLACEMENT OF PLANTING MEDIA. E4 _____FT. CORNER DURING CONSTRUCTION OF APPURTENANT CONVEYANCE. UPON COMPLETION OF FINAL GRADING AND ESTABLISHMENT OF E5 _____FT. CENTER LE3 PERMANENT STABILIZATION. E1 TO E9 AS-BUILT SPOT ELEVATION LOCATIONS. THIS STANDARD IS A REFERENCE TO SHOW THE ELEMENTS AND MINIMUM E6 _____FT. LOW SIDE AT TOP OF THE SLOP 8 CONTOUR E7 _____FT. OUTFALL DIMENSIONS FOR A MICRO-BIO RETENTION FACILITY. EACH FACILITY SHALL 6 CONTOUR BE DESIGNED AND APPROVED ON A SITE SPECIFIC BASIS. THIS DETAIL E8 _____FT. TOP OF INLET PROVIDES BLANK SPACES TO INFORM WHERE AS-BUILT INFORMATION IS E9 _____FT. TOP OF OVERFLOW THE PERFORATED UNDER DRAIN IS NO CONSECTED TO 4" DOME GRATE CAP ÈLEV=524.65 -CLEANOUT WITH WATERPROOF CAP -FI FV=523 Q -3:1 MAX.— 3" MULCH LAYER -HORIZONTAL DIMENSIONS 24" PLANTING MEDIA -4" #8 STONE ----STONE RESERVOIR 19" #2 STONE— 3" ABOVE UNDERDRAIN 12" BELOW UNDERDRAIN 4"-SCH 40 PERFORATED OR IMPERMEABLE LINER -SLOTTED PVC PIPE @ 0.5% ALL SIDES AND BOTTOM WRAPPED WITH 1/4" GALV. HARDWARE MESH (5' MIN. O/C SEPARATION FROM UNDERDRAIN PIPE TO THE OVERDRAIN PIPE) SECTION A-A TYPICAL MICRO-BIORETENTION (M-6)DETAIL (NOT TO SCALE)

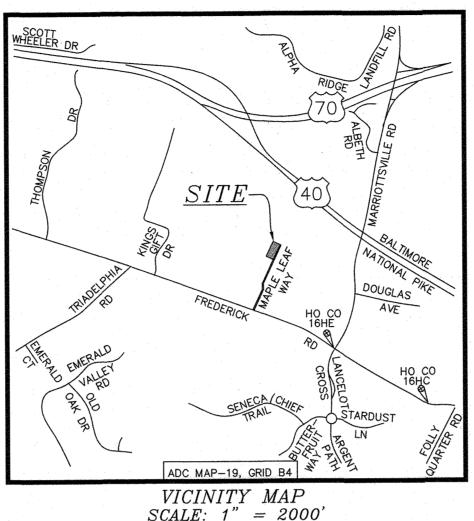
SITE DEVELOPMENT PLAN

MAPLE VIEW

PLAT No. 23512-23515 TAX MAP 16, GRID 15, PARCEL 88

ZONED: RC-DEO

HOWARD COUNTY, MARYLAND 3RD ELECTION DISTRICT



Appendix B.4. Construction Specifications for Environmental Site Design Practices

Table B.4.1 Materials Spe	ecifications for Micro-Bioreto	ention, Rain Gardens &	Lanuscape innuration-	16. THE SUBJECT PROPERTY IS ZONED "RC-DEO" PER THE 10-06-2013 COMPREHENSIVE
Material	Specification	Size	Notes	ZONING PLAN. 17. A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
Plantings	see Appendix A, Table A.4	n/a	plantings are site-specific	18. ALL REINFORCED CONCRETE FOR STORM DRAIN STRUCTURES SHALL HAVE
Planting soil [2' to 4' deep]	loamy sand (60 - 65%) & compost (35 - 40%) or	n/a	USDA soil types loamy sand or sandy loam; clay content < 5%	A MINIMUM OF 28 DAYS STRENGTH OF 3500 P.S.I. 19. ALL STORMDRAIN PIPE BEDDING IS TO BE CLASS 'C', AS REQUIRED BY AASHTO-180. 20. ALL BUILDINGS TO HAVE ROOF LEADERS WHICH EMPTY INTO STORM
	sandy loam (30%), coarse sand (30%) & compost (40%)			DRAIN SYSTEM OR DIRECTLY TO ROOF—TOP DISCONNECTION POINTS. 21. ANY EXISTING STREET TREES DAMAGED OR DESTROYED DURING CONSTRUCTION OF THIS SITE SHALL BE REPLACED BY THE CONTRACTOR. 22. THE PERIMETER LANDSCAPING OBLIGATION OF THIS SITE HAS BEEN MET AS PART OF THE APPROVAL PROCESS OF F—14—073.
Organic content	Min. 10% by dry weight (ASTM D 2974)			23. THE SUBJECT PROPERTY COMPLIES WITH THE FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1200 OF THE HOWARD COUNTY CODE AS THEY ARE RESOLVED AS PART OF THE APPROVAL PROCESS OF F-14-073.
Mulch	shredded hardwood		aged 6 months, minimum; no pine or wood chips	24. NO RARE, THREATENED OR ENDANGERED SPECIES. WERE OBSERVED ON
Pea gravel diaphragm	pea gravel: ASTM-D-448	NO. 8 OR NO. 9 (1/8" TO 3/8")		THIS PROPERTY. 25. THIS PROJECT IS. SUBJECT TO COMPLIANCE WITH THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. DEVELOPMENT OR CONSTRUCTION ON THIS PROPERTY MUST COMPLY WITH
Curtain drain	ornamental stone: washed cobbles	stone: 2" to 5"		SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION APPLICATIONS OR BUILDING/ GRADING PERMIT APPLICATIONS.
Geotextile		n/a	PE Type 1 nonwoven	26. MAPLE LEAF WAY IS NOT A SCENIC ROAD.
Gravel (underdrains and infiltration berms)	AASHTO M-43	NO. 57 OR NO. 6 AGGREGATE		27. TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO CEMETERIES OR GRAVE SITES LOCATED ON THE SUBJECT PROPERTY.
Underdrain piping	F 758, Type PS 28 or AASHTO	(3/8" to 3/4") 4" to 6" rigid schedule 40	Slotted or perforated pipe; 3/8" perf. @ 6" on center, 4 holes per	28. 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 AREAS AND 100 YEAR FLOODPLAIR
	M-278	PVC or SDR35	row; minimum of 3" of gravel over pipes; not necessary underneath pipes. Perforated pipe shall be wrapped with ¼-inch galvanized hardware cloth	29. STORM WATER MANAGEMENT TO BE PROVIDED FOR THIS DEVELOPMENT BY ENVIRONMENTAL SITE DESIGN UTILIZING ONE MICRO-BIO RETENTION (M-6), ONE NON-ROO DISCONNECT (N-2).
Poured in place concrete (if required)	MSHA Mix No. 3; f' _c = 3500 psi @ 28 days, normal weight,	n/a	on-site testing of poured-in-place concrete required: 28 day strength and slump test; all concrete design (cast-in-place	30. THIS SITE IS NOT LOCATED IN A HISTORIC DISTRICT, NOR ARE THERE ANY HISTORIC STRUCTURES ON SITE.
required)	air-entrained; reinforcing to meet ASTM-615-60		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	31. STOCKPILING WILL BE PERMITTED ON SITE. 32. THERE ARE NO STEEP SLOPES 25% OR GREATER, WETLANDS, WETLAND BUFFERS, STREAMS, STREAM BUFFERS OR FLOODPLAIN ON THIS SITE.
			- 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	33. DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS: A) WIDTH - 12 FEET (16 FEET IF SERVING MORE THAN ONE RESIDENCE)
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.	B) SURFACE — 6" OF COMPACTED CRUSHER RUN BASE W/TAR AND CHIP COATING (1-1/2" MIN.); PERMEABLE SURFACE — 12" ASTM C-33 3/4" TO 2" STONE WITH 7" PERMEABLE CONCRETE C) GEOMETRY — MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE, AND D) STRUCTURES (CULVERTS/BRIDGES) — CAPABLE OF SUPPORTING 25

B.4.7

STORMWATER MANAGEMENT PRACTICES

						JKMWAIE		GEMEN		ACTICES						
Γ No.	ADDRESS	GREEN ROOF	PERMEABLE PAVEMENT	REINFORCED TURF	DISCONNECTION OF ROOFTOP	ROOFTOP	SHEETFLOW TO CONSERVATION AREA	RAINWATER HARVESTING LOT No.	SUBMERGE GRAVEL WETLAND	LANDSCAPE INFILTRATION	INFLTRATION BERMS	DRY WELLS	MICRO- BIORETENTION	RAIN GARDENS		ENHANCED FILTER
	2921	A-1 (Y/N)	A-2 (Y/N)	A-3 (Y/N)	RUNOFF N-1 (NUMBER)	RUNOFF 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)
2	MAPLE LEAF WAY	N	N	N	0	Y	N	0	0	0	0	0	1	0	0	0

OUNTY HEALTH OFFICER WO. CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION APPROVED: HOWARD SOIL CONSERVATION DISTRICT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD THE HOWARD SOIL CONSERVATION DISTRICT. SOIL CONSERVATION DISTRICT. 3/8/2021

DATE

n

REVISIONS

DETAILS

ESDV PROVIDED = 1,168 CF

ESDv REQUIRED = 848 CF

ESD $_{\rm V}$ SURPLUS = +320 CF

HOWARD SOIL CONSERVATION DISTRICT DEPARTMENT OF PLANNING AND ZONING CHIEF, DEVELOPMENT ENGINEERING DIVISION 4 CHIEF, DIVISION OF LAND DEVELOPMENTY DATE

STORMWATER MANAGEMENT SUMMARY

1,168 CF

APPROVED: HOWARD COUNTY HEALTH DEPARTMENT

MICRO-BIO RETENTION

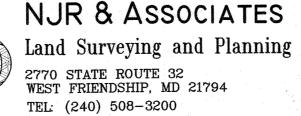
NON-ROOFTOP DISCONNECT

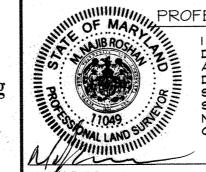
1,143 CF 1.6" 2.6"

25 CF 1.6" 1.0"

HIS DEVELOPMENT PLAN IS APPROVED FOR PUBLIC WATER & PRIVATE SEWAGE SYSTEMS.

PLAN PREPARED BY:





PROFESSIONAL CERTIFICATE HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NUMBER 11049 WITH EXPIRATION DATE OF FEBRUARY 10, 2023. 3/8/20.2

Supp. 1

DEVELOPER'S CERTIFICATE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF DEVELOPEI

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE AND THAT ALL 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

GENERAL NOTES

MISS UTILITY:

5. PROJECT BACKGROUND:

CONTRACTOR'S EXPENSE.

PRIOR TO CONSTRUCTION.

PURPOSE OF CALCULATING. FEES.

BUREAU OF UTILITIES:

B.G.&E. (EMERGENCY):

COLONIAL PIPELINE CO.:

TOTAL LOT AREA: 1.348 AC.

NET LOT AREA: 1.245 AC.

PRESENT ZONING: RC-DEO

B.G.&E. (CONSTRUCTION SERVICES):

STATE HIGHWAY ADMINISTRATION:

CUT: 290± CY FILL: 790± CY

LOCATION: TAX MAP 16, BLOCK 15, PARCEL 88

6. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC

7. ANY DAMAGE TO PUBLIC RIGHT-OF-WAY, PAVING, OR EXISTING

UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

9. EXISTING UTILITIES LOCATED FROM ROAD CONSTRUCTION PLANS, FIELD

SURVEYS, PUBLIC WATER AND SEWER EXTENSION PLANS AND AVAILABLE

RECORD DRAWNGS. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE

EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND

CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE

10. TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM

SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.

12. SOIL COMPACTION SPECIFICATIONS, REQUIREMENTS, METHODS AND

PERFORMED BY NJR & ASSOC., LLC. DATED DECEMBER, 2019.

GEODETIC CONTROL MONUMENTS 16HC AND 16HE.

11. ESTIMATES OF EARTHWORK QUANTITIES ARE PROVIDED SOLELY FOR THE

TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE T

SHOWN FOR THE CONTRACTORS INFORMATION. CONTRACTOR SHALL LOCATE

TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS

MATERIALS ARE TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE

PROJECT GEOTECHNICAL ENGINEER. GEOTECHNICAL ENGINEER TO CONFIRM

ACCEPTABILITY OF PROPOSED PAVING SECTION, BASED ON SOIL TEST

13. THE COORDINATES SHOWN HEREON ARE BASED UPON HOWARD COUNTY

DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD EVENTS WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE

35. CONTRACTOR TO MAINTAIN POSITIVE SLOPE AWAY FROM THE FOUNDATION OF THE

39. NO WAIVER PETITION HAS BEEN REQUIRED FOR THE DEVELOPMENT OF THIS SITE.

40. IN ACCORDANCE WITH SECTION 128.0 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THEN 16 FEET IN WIDTH MAY PROJECT NOT MORE

THEN 4 FEET INTO ANY SETBACKS. PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT

42. ANY DAMAGE TO THE COUNTY RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.

OF FEE-IN-LUE AT THE TIME OF THE BUILDING PERMIT ISSUANCE BY THE APPLICANT.

43. FOR DRIVEWAY ENTRANCE DETAIL REFER TO HOWARD COUNTY DESIGNED MANUAL VOLUME IV, DETAIL R-6.06.

44. A COMMUNITY MEETING WAS CONDUCTED ON FEBRUARY 26. 2013 FOR THE PURPOSE OF THE DEVELOPER TO

ALLOW THE COMMUNITY TO ASK QUESTIONS AND TO MAKE COMMENTS, PER SECTION 16.12b(D) OF THE

PROVIDE INFORMATION TO THE COMMUNITY REGARDING THE PROPOSED RESIDENTIAL DEVELOPMENT AND TO

45. THE M.I.H.U. (MODERATE INCOME HOUSING UNIT) REQUIREMENT FOR THIS SITE WILL BE ADDRESSED BY PAYMENT

41. FLAG AND PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF FLAG OR PIPESTEM AND ROAD RIGHT-OF-WAY LINE AND NOT INTO THE PIPESTEM

MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE

34. THE ENVIRONMENTAL SITE DESIGN FACILITIES ON THIS LOT ARE TO BE PRIVATELY OWNED AND MAINTAINED BY THE HOMEOWNER.

36. THIS PROJECT IS LOCATED WITHIN THE PATUXENT RIVER WATERSHED.

MORE THEN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.

SUBDIVISION REGULATIONS, AT THE TIME OF THE SUBDIVISION.

37. THERE IS NO EXISTING STRUCTURE LOCATED ON THIS PROPERTY.

38. THIS PROPERTY DOES NOT CONTAIN ERODIBLE SOIL.

4. THE BOUNDARY & TOPOGRAPHY SHOWN HEREON IS BASED ON A SURVEY

. THIS PROPERTY IS LOCATED IN THE METROPOLITAN DISTRICT AND IS TO BE SERVED BY PUBLIC

DEED REFERENCES: L. 19167 / F. 418

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST

2. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777

AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK ON THESE

USE OF STRUCTURE: RESIDENTIAL PROPOSED BUILDING COVERAGE: 3,088 SF (0.071 AC)

PROPOSED NEW PAVED AREA ON SITE: 2,682 SF. (0.062 AC.)

PROPOSED LIMIT OF DISTURBED AREA: 23,413 SF. (0.537 AC.)

WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT

(410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO START OF WORK.

8. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARD AND

SPECIFICATION OF THE MARYLAND STATE HIGHWAY ADMINISTRATION, IF APPLICABLE.

DPZ REFERENCES: PLAT No. 3413, 13165 AND 23512-23515, F-76-053, F-14-073,

-14-0735, ECP-14-018 AND F-98-65

1-800-257-7777

410-313-4900

410-637-8713

410-531-5533

410-795-1390

1-800-252-1133

1-800-743-0033

AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.

3. THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR

STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY STANDARDS AND

SPECIFICATIONS. ALL WORK AND MATERIALS SHALL COMPLY WITH O.S.H.A

DEVELOPER CARUSO HOMES (301) 261-0277

2120 BALDWIN AVENUE, SUITE-200 CROFTON, MD 21144 OWNER

BO SUN & YIJING LU

4937 WINDPOWER WAY

ELLICOTT CITY, MD 21043

(202) 256-6826

GRASS AREA PROP. SIDEWALK EQUAL WIDTH TO PROP. SIDEWALK 2% SLOPE 5% SLOPE MAX. TYPICAL SIDEWALK SECTION <u>FOR NON-ROOFTOP DISCONNECT</u> NOT TO SCALE

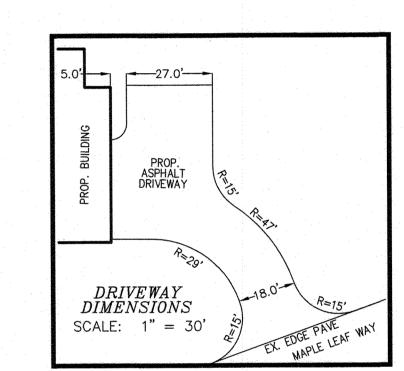
OPERATION AND MAINTENANCE SCHEDULE FOR DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2) MAINTENANCE OF AREA RECEIVING DISCONNECTED RUNOFF IS GENERALLY NO DIFFERENT THEN THAT REQUIRED FOR OTHER LAWN OR LANDSCAPED AREAS. THE OWNER SHALL ENSURE THE AREA RECEIVING RUNOFF ARE PROTECTED FROM FUTURE COMPACTION OR DEVELOPMENT OF IMPERVIOUS AREA.

GUTTER DRAIN FILTER DETAIL

NOT TO SCALE

OPERATION AND MAINTENANCE SCHEDULE FOR MICRO-BIO RETENTION (M-6) 1. The Owner shall maintain the plant material, mulch layer and soil layer annually. Maintenance of mulch and soil is limited to correcting areas of erosion or wash out. Any mulch replacement shall be done in the spring. Plant material shall be checked for disease and insect infestation and maintenance will address dead material and pruning. Acceptable replacement plant material is limited to the following: 2000 Maryland Stormwater Design Manual Volume II, Table A.4.1 and 2.

- 2. The Owner shall perform a plant in the spring and in the fall of each year. During the inspection, the Owner shall remove dead and diseased vegetation considered beyond treatment, replace dead plant material with acceptable replacement plant material, treat diseased trees and shrubs, and replace all deficient stakes and
- 3. The Owner shall inspect the mulch each spring. The mulch shall be replaced every two to three years. The previous mulch layer shall be removed before the new layer
- 4. The Owner shall correct soil erosion on an as needed basis, with a minimum of once per month and after each heavy storm.

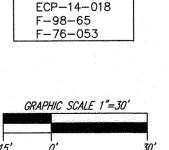


F	ROADWAY INFORM	MATION CHART	
ROAD NAME	CLASSIFICATION	DESIGN SPEED	EASEMENT WIDTH
MAPLE LEAF WAY	USE-IN-COMMON	15 MPH	36' – 40'

		22 CT 1 PO.
	MODERATE INCOME HOUSING UNITS (N Allocations Exemptions Tracking	MIHU) g
lease	TOTAL NUMBER OF LOTS/UNITS PROPOSED	1
	NUMBER OF MIHU REQUIRED	0.6
	NUMBER OF MIHU PROVIDED ONSITE (exempt from APFO allocations)	0
	NUMBER OF APFO ALLOCATION REQUIRED (remaining lots/units)	0
	MIHU FEE-IN-LIEU (indicate lots/units numbers)	* 1

·	PE	RMIT INF	ORMATIO	N C	1AR	Γ.
SUBDIVIS MAPL	ION N		SECTION N/A			OT No2 ARCEL-88
PLAT No. 23512- 23515		ZONE RC-DEO	TAX MAP	ELEC DIST	RICT	CENSUS TRACT 603004-02

ADDR	ESS CHART
LOT NUMBER	STREET ADDRESS
2	2921 MAPLE LEAF WAY

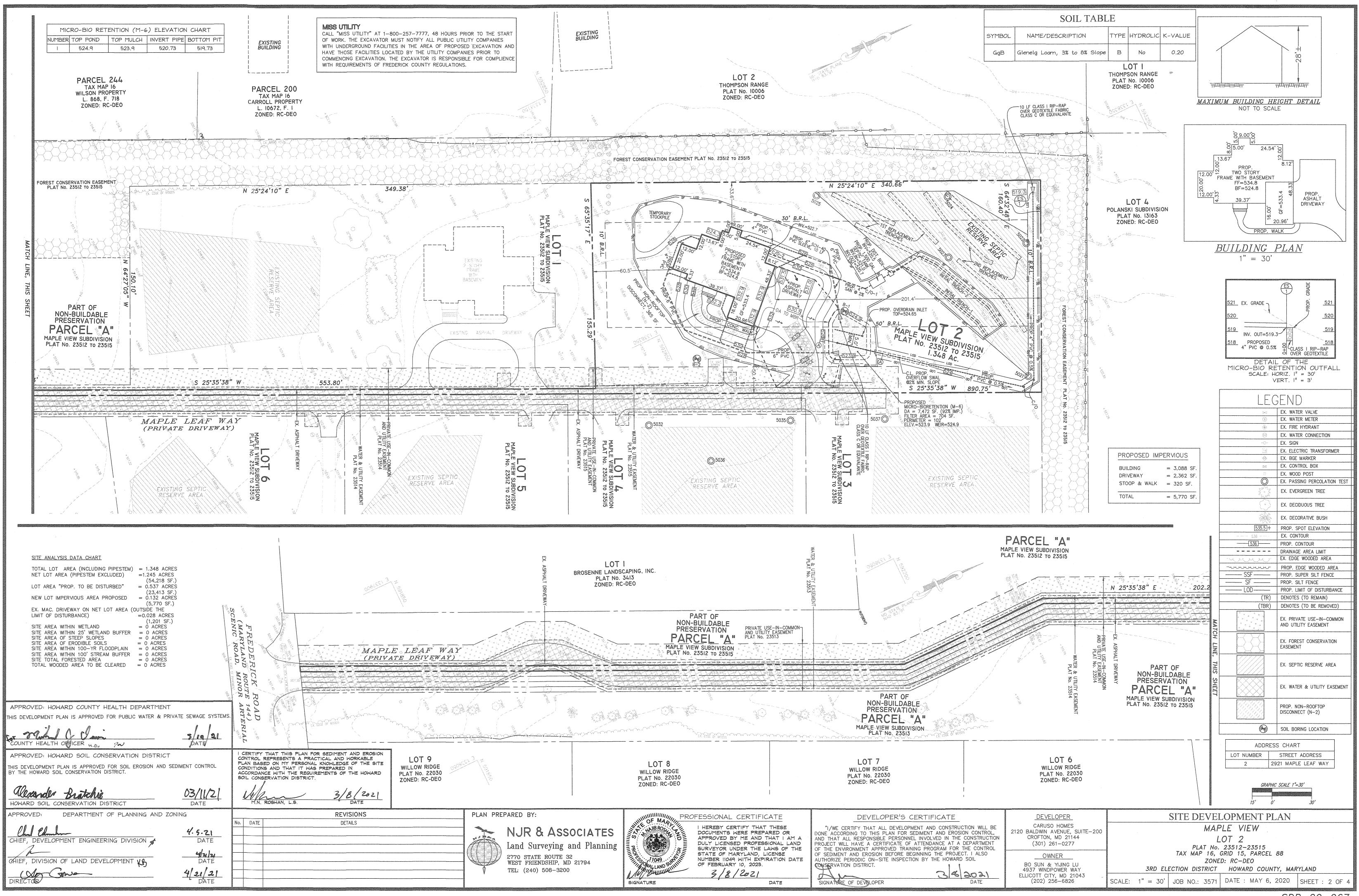


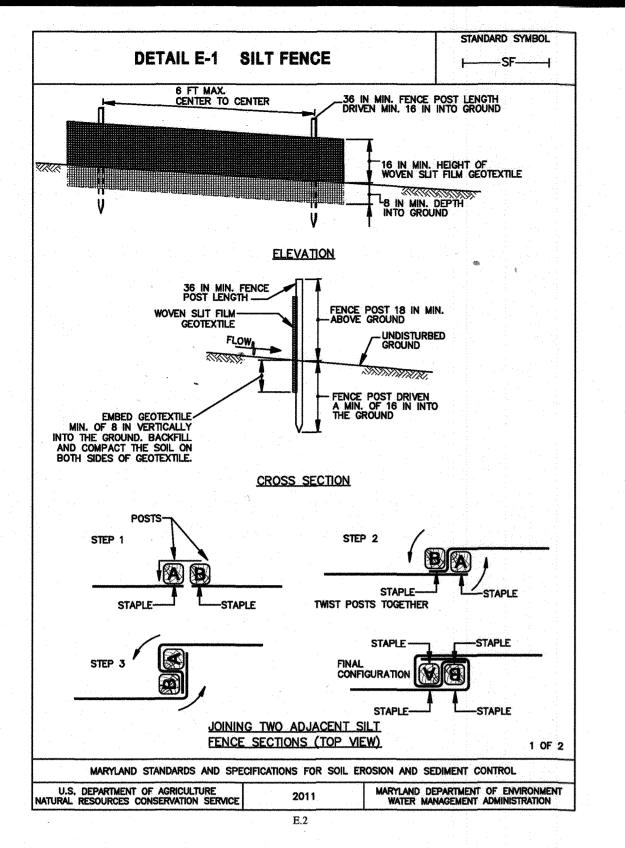
F-14-073 F-14-073S

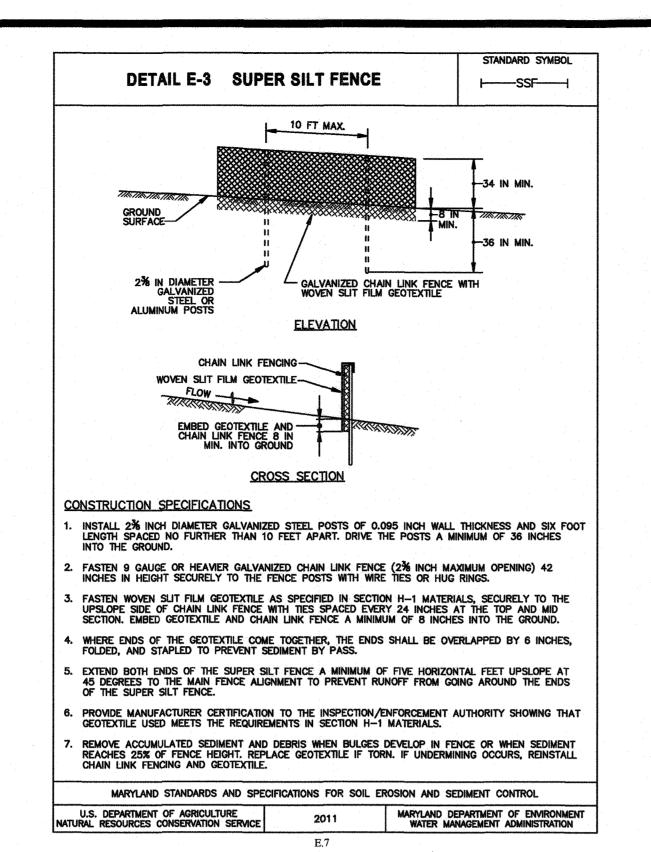
DECODIDETON	CHEET N
DESCRIPTION	SHEET No
TITLE SHEET AND STORMWATER MANAGEMENT DETAILS AND SPECIFICATIONS	1 OF 4
SITE DEVELOPMENT PLAN	2 OF 4
SEDIMENT & EROSION CONTROL NOTES & DETAILS	3 OF 4
ONSITE SEWAGE DISPOSAL SYSTEM DESIGN PLAN	4 OF 4

SHEET INDEX

TITLE SHEET AND STORMWATER MANAGEMENT DETAILS AND SPECIFICATIONS MAPLE VIEW PLAT No. 23512-23515 TAX MAP 16, GRID 15, PARCEL 88 ZONED: RC-DEO 3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: 1" = 30' JOB NO.: 3571 DATE: MAY 6, 2020 SHEET: 1 OF



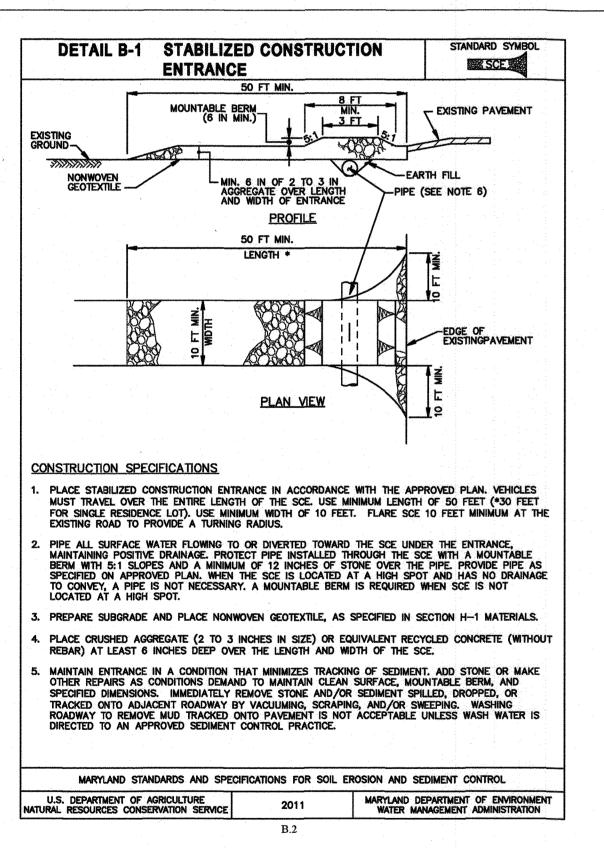




Report No		U	on ole Hemiler d Pro-	Estata Parala				Date: 9/	11/2020		
			es c/o Maryland Real - Lot 2: 2921 Maple L					D-1-41	. 120 101		
		AIGM	(1 of 1) Total Depth			T.		Project No. 120-181			
Boring No		land /		10 Elev: 526.5 Started: 9/9/2020		leted: 9/9/2		1	g Location Plan		
Type of B		ianu /	DESCRIPTION O		Comp		Sample	Driller: D. Rockwood			
Elevation	Depth		(classifi			Sample Blows	Depth (Feet)	Moisture Content	REMARKS		
526.5 526.25	0.0		Grass with topsoil an Red-brown silty fine moist (USCS: SM / F	to medium SAND, w	et to	-			Groundwater was not encountered during drilling or at completion.		
525.5 7 525.25 7	1.0		Red SILT with some ML / FILL, USDA: Sil	t Loam)					-		
524.75 T	1.75	M	Light gray-brown silty SM / FILL, USDA: Sa		USCS:		2.0		_		
]	W	Orange-brown silty C		and		2.5	24.1	_		
			and little gravel, mois USDA: Clay Loam)					7	-		
523	3.5		Red-brown SILT with	some fine sand m	oist			-			
522.5	-		(USCS: ML / FILL, U	SDA: Silt Loam)			4.0		_		
	1						4.5	20			
521.5	5.0		Red-brown fine to co with little silt, little gra	evel and little clay, m					-		
520.5		***×	(USCS: SM, USDA:	Sandy Loam)			6.0		<u> </u>		
320.5							6.5	20.1	1		
	1						0.5				
	7 7								·		
-									-		
518.5	-						8.0				
	1						8.5				
	_								_		
517	1						9.5		1		
-	- 1	V. 6.					10	12.4	7		
516.5	10.0		End of Boring			-	120				
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-	- 1								1		

			Lot 2: 2	aryland Re 2921 Maple					·	Project N	No. 120-181
Boring N			(1	of 1) Total Depth	10	Elev: 528.0		l	ocation: Se		g Location Plan
		land A	uger			9/9/2020		eted: 9/9/2		1	. Rockwood
levation	Depth		-	DESCRIPTION (class	OF MATER	IALS		Sample Blows	Sample Depth (Feet)	Moisture Content	REMARKS
528 - 527.83	0.0 =			vith topsoil a							Groundwater was not encountered during drilling
527.25	0.75	1133E1 136C13 23CC13	(USCS:	ML / FILL, ay brown si	USDA: S	ilt Loam)			-		or at completion.
526.5	1.5		/ FILL, I Orange	JSDA: Sand -brown SIL	dy Loam) with little	e to some s	and and		2.0		
526	-		little cla Loam)	y, moist (US	SCS: ML	/ FILL, USD	A: Silt		2.5		
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BORING LOG



APPROVED: HOWARD SOIL CONSERVATION DISTRICT

BY THE HOWARD SOIL CONSERVATION DISTRICT.

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL

B-4-5 STANDARDS AND SPECIFICATIONS PERMANENT STABILIZATION To stabilize disturbed soils with permanent vegetation.

To use long-lived perennial grasses and legumes to establish permanent ground cover on disturbed soils. Conditions Where Practice Applies Exposed soils where ground cover is needed for 6 months or more.

Criteria

CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION

PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE

ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD

18/2021

CONTROL REPRESENTS A PRACTICAL AND WORKABLE

CONDITIONS AND THAT IT WAS PREPARED IN

SOIL CONSERVATION DISTRICT.

a. Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardiness Zone (from Figure B.3) and based on the site condition or purpose found on Table B.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. c. 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 'A 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 maintenance. 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. i. 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 35 percent of the total mixture

ii. Kentucky Bluegrass/Perennial Rye: Full Sun Mixture: For use in fill 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 bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by

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.

B-4-5 STANDARDS AND SPECIFICATIONS

PERMANENT STABILIZATION (CONTINUED)

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: 11/4 to 3 pounds per 1000 Notes: 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 line

c. Ideal Times of Seeding for Turf Grass Mixtures Western MD: March 15 to June 1. August 1 to October 1 (Hardiness Zones: 5b, 6a) Central MD: March Ito May 15, August 15 to October 15 (Hardiness Zone: 6b) Southern MD, Eastern Shore: March Ito May IS, August 15 to October 15 (Hardiness Zones: 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 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.

e. If soil moisture is deficient, supply new seedings with adequate water for plant growth (1/4 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.

Permanent Seeding Summary

		(from Figure B.3) rom Table B.3): _	F	Lime Rate				
No	. Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depth	N	P ₂ O ₅	к ₂ 0	Lime Nate
1	Cool Season Tall Fiscue	T.F. 60 lb/ac		1/4-1/2 in	45 pounds per acre	(2 lb/	(2 lb/	(90 lb/
	& Kentucky Bluegrass or equal	K.B. 40 lb/ac	Aug. 15 to Oct. 15.		(1.0 lb/ 1000 sf)	1000 sf)	1000 sf)	1000 sf)

B. Sod: To provide quick cover on disturbed areas (2:1 grade or flatter).

1. General Specifications 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 '/4 inch, at the time of cutting. Measurement for thickness must exclude top growth and thatch. Broken pads and torn or uneven ends will not be acceptable.

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

c. 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

d. Sod must not be harvested or transplanted when moisture content (excessively dry or wet) may adversely affect its survival.

e. 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. Staager 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.

c. 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 the 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 hours. 3. 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 t/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.

B-4-4 STANDARDS AND SPECIFICATIONS <u>FOR</u>

GEOLAB INC.

TEMPORARY STABILIZATION Definition To stabilize disturbed soils with vegetation for up to 6 months. <u>Purpose</u> 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

1. Select one or more of the species or seed mixtures listed in Table B.I for the appropriate Plant Hardiness Zone (from Figure B.3), and enter the 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 B.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 Seeding. 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. b and maintain until

the next seeding season. Temporary Seeding Summary

	•	from Figure B.3): m Table B.3): _	ZONE 6	b	Fertilizer	Limo Pato	
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depth	Rate (10-20-20)	Lime Rate	
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/	2 tons/ac (90 lb/ 1000 sf)	
2	Warm Season Foxtail Millet or Equal	30 lb/ac	May 16 to July 31.	1/2 In	1000 sf)		

SEQUENCE OF CONSTRUCTION

1. REQUEST FOR PRE-CONSTRUCTION MEETING WITH THE APPROPRIATE ENFORCEMENT AUTHORITY,

(2-WFFKS) 2. CLEARING AND GRUBBING AS NECESSARY FOR INSTALLATION OF PERIMETER CONTROLS, (1 DAY).

3. CONSTRUCTION AND STABILIZATION OF PERIMETER CONTROLS, (1 DAY). 4. REMAINING CLEARING AND GRUBBING WITHIN INSTALLED PERIMETER CONTROLS (1 DAY).

DRIVEWAY GRADING, (1 DAY). GRADING FOR THE REMAINDER OF THE SITE, (2 DAYS).

7. UTILITY INSTALLATION AND CONNECTIONS TO EXISTING STRUCTURES, (4 DAYS).

8. CONSTRUCTION OF BUILDING, ROADS, AND OTHER CONSTRUCTION, (4 MONTHS). 9. FINAL GRADING, LANDSCAPING, AND STABILIZATION, (3 DAYS).

10. INSTALLATION OF STORMWATER MANAGEMENT MEASURES (4 DAYS).

11. APPROVAL OF THE APPROPRIATE ENFORCEMENT AUTHORITY PRIOR TO REMOVAL OF SEDIMENT CONTROLS, (1 WEEK).

12. REMOVAL OF CONTROLS AND STABILIZATION OF AREAS THAT ARE DISTURBED BY REMOVAL OF SEDIMENT CONTROLS, (2 DAYS).

NOTE: ANY CHANGES OR REVISIONS TO THE SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND

APPROVED BY THE PLAN APPROVAL AUTHORITY PRIOR TO PROCEEDING WITH CONSTRUCTION.

HOWARD SOIL CONSERVATION DISTRICT (HSCD) STANDARD SEDIMENT CONTROL NOTES

1. A pre-construction meeting must occur with the Howard County Department of Public Works, Construction Inspection Division (CID), 410-313-1855 after the future LOD and protected areas are marked clearly in the field. A minimum of 48 hour notice to CID must be

given at the following stages: a. Prior to the start of earth disturbance, Upon completion of the installation of perimeter erosion and

sediment controls, but before proceeding with any other earth disturbance or grading, c. Prior to the start of another phase of construction or opening of another grading unit,

d. Prior to the removal or modification of sediment control practices. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made. Other related state and federal permits shall be referenced, to ensure coordination and to

2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.

3. Following initial soil disturbance or re-disturbance, permanent or temporary stabilization is required within three (3) calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes steeper than 3 horizontal to 1 vertical (3:1); and seven (7) calendar days as to all other disturbed areas on the project site except for those areas under active grading.

avoid conflicts with this plan.

4. 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).

5. All sediment control structures are to remain in place, and are to be maintained in operative condition until permission for their removal has been obtained from the CID.

6. Site Analysis:

= 1.348 Acres. Total Area of Site: Area Disturbed: = 0.525 Acres Area to be roofed or paved: = 0.124 Acres. = 0.401 Acres. be vegetatively stabilized: Total Cut: $= 290 \pm Cu. Yds.$ $= 790\pm$ Cu. Yds.

Offsite waste/borrow area location: = To be determined. 7. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of

8. Additional sediment control must be provided, if deemed necessary by the CID. The site and all controls shall be inspected by the contractor weekly; and the next day after each rain event. A written report by the contractor, made available upon request, is part of every inspection and should include:

a) Inspection date) Inspection type (routine, pre—storm event, during rain event)

Name and title of inspector 1) Weather information (current conditions as well as time and amount of last recorded precipitation) e) Brief, description of project?s status (e.g., percent complete) and/or current activities

f) Evidence of sediment discharges

) Identification of plan deficiencies) Identification of sediment controls that require maintenance

Identification of missing or improperly installed sediment controls) Compliance status regarding the sequence of construction and

stabilization requirements k) Photographs

) Monitoring/samplin) Maintenance and/or corrective action performed

n) Other inspection items as required by the General Permit for Stormwater Associated with Construction Activities (NPDES, MDE). 9. Trenches for the construction of utilities is limited to three pipe

lengths or that which can and shall be back—filled and stabilized by the end of each workday, whichever is shorter.

10. Any major changes or revisions to the plan or sequence of construction must be reviewed and approved by the HSCD prior to proceeding with construction. Minor revisions may allowed by the CID per

the list of HSCD-approved field changes. 11. Disturbance shall not occur outside the L.O.D. A project is to be

sequenced so that grading activities begin on one grading unit (maximum acreage of 20 ac. per grading unit) at a time. Work may proceed to a subsequent grading unit when at least 50 percent of the disturbed area in the preceding grading unit has been stabilized and approved by the CID. Unless otherwise specified and approved by the HSCD, no more than 30 acres cumulatively may be disturbed at a given time.

12. Wash water from any equipment, vehicles, wheels, pavement, and other sources must be treated in a sediment basin or other approved washout

13. Topsoil shall be stockpiled and preserved on—site for redistribution onto final grade.

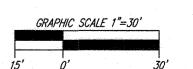
14. All Silt Fence and Super Silt Fence shall be placed on—the—contour, and be imbricated at 25? minimum intervals, with lower ends curled uphill

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.

> ADDRESS CHART STREET ADDRESS LOT NUMBER 2921 MAPLE LEAF WAY

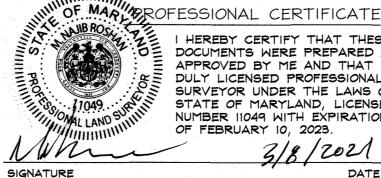


M.N. ROSHAN, L.S. HOWARD SOIL CONSERVATION DISTRICT REVISIONS DEPARTMENT OF PLANNING AND ZONING PLAN PREPARED BY: o. DATE DETAILS DEVELOPMENT ENGINEERING DIVISION & CHIEF, DIVISION OF LAND DEVELOPMENT 18



NJR & ASSOCIATES

Land Surveying and Planning 2770 STATE ROUTE 32 WEST FRIENDSHIP, MD 21794 TEL: (240) 508-3200



HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NUMBER 11049 WITH EXPIRATION DATE OF FEBRUARY 10, 2023.

3/8/2021

DEVELOPER'S CERTIFICATE "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL

ONSERVATION DISTRICT. 314 309

DEVELOPER CARUSO HOMES 20 BALDWIN AVENUE, SUITE-200 CROFTON, MD 21144 (301) 261-0277

OWNER BO SUN & YIJING LU 4937 WINDPOWER WAY ELLICOTT CITY, MD 21043 (202) 256-6826

SEDIMENT & EROSION CONTROL NOTES & DETAILS MAPLE VIEW PLAT No. 23512-23515 TAX MAP 16, GRID 15, PARCEL 88 ZONED: RC-DEO 3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: $1" = 30' \mid \text{JOB NO.: } 3571 \mid \text{DATE : MAY 6, 2020}$

