

SHEET INDEX	
SHEET NO.	DESCRIPTION
1	SITE DEVELOPMENT PLAN
2	SEDIMENT & EROSION CONTROL NOTES & DETAILS

SOILS LEGEND			
SOIL	NAME	CLASS	C FACTOR
GfB	Gladstone-Urbn land complex, 0 to 8 percent slopes	B	0.28
GfC	Gladstone-Urbn land complex, 8 to 15 percent slopes	B	0.28

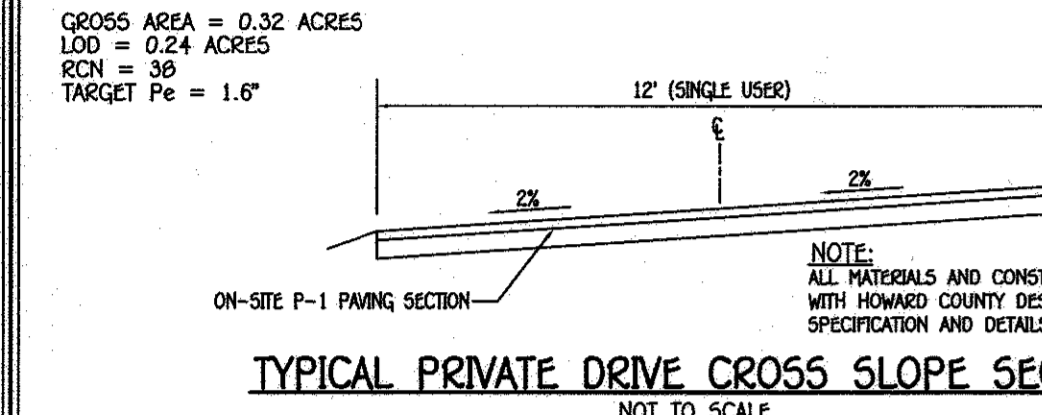
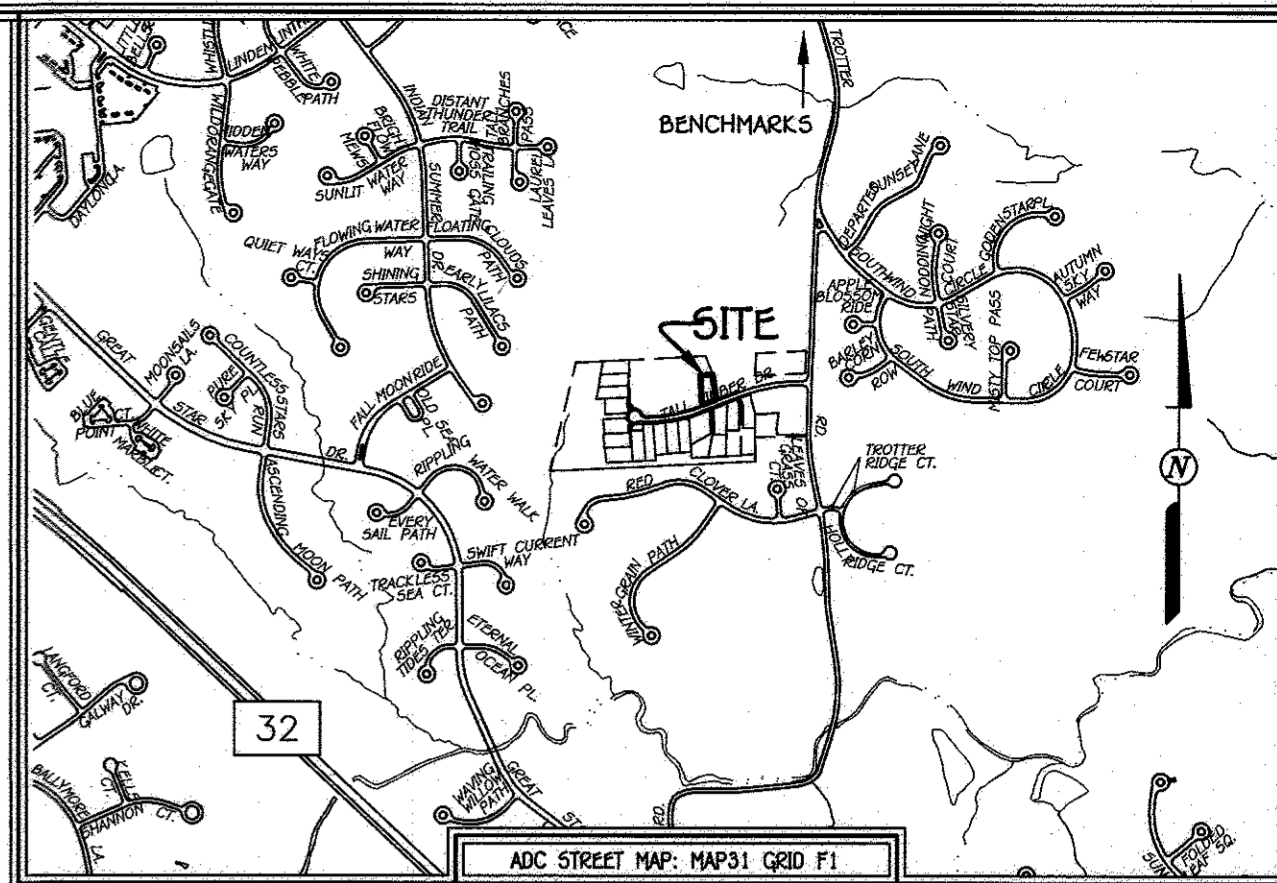
STORMWATER MANAGEMENT SUMMARY			
AREA ID.	ESDV REQUIRED CU.FT.	ESDV PROVIDED CU.FT.	REMARKS
SITE	417	476	DRY WELLS (M-5)
TOTAL	417	476	

LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
---48E---	EXISTING 2' CONTOURS	---	PROPOSED CONTOUR
---	EXISTING 10' CONTOURS	---	SPOT ELEVATION
GfB	SOILS LINES AND TYPE	---	LIMITS OF DISTURBANCE
GfC	SOILS LINES AND TYPE	---	PROPOSED TREE LINE
---	EXISTING TREE LINE	---	SILT FENCE
---	EXISTING FENCE LINE	---	EROSION CONTROL MATTING
---	PROPOSED PAVING	---	SUPER SILT FENCE
---	DRAINAGE AREA DIVIDE	---	STABILIZES CONSTRUCTION ENTRANCE
---	EXISTING TREES	---	CURB INLET PROTECTION

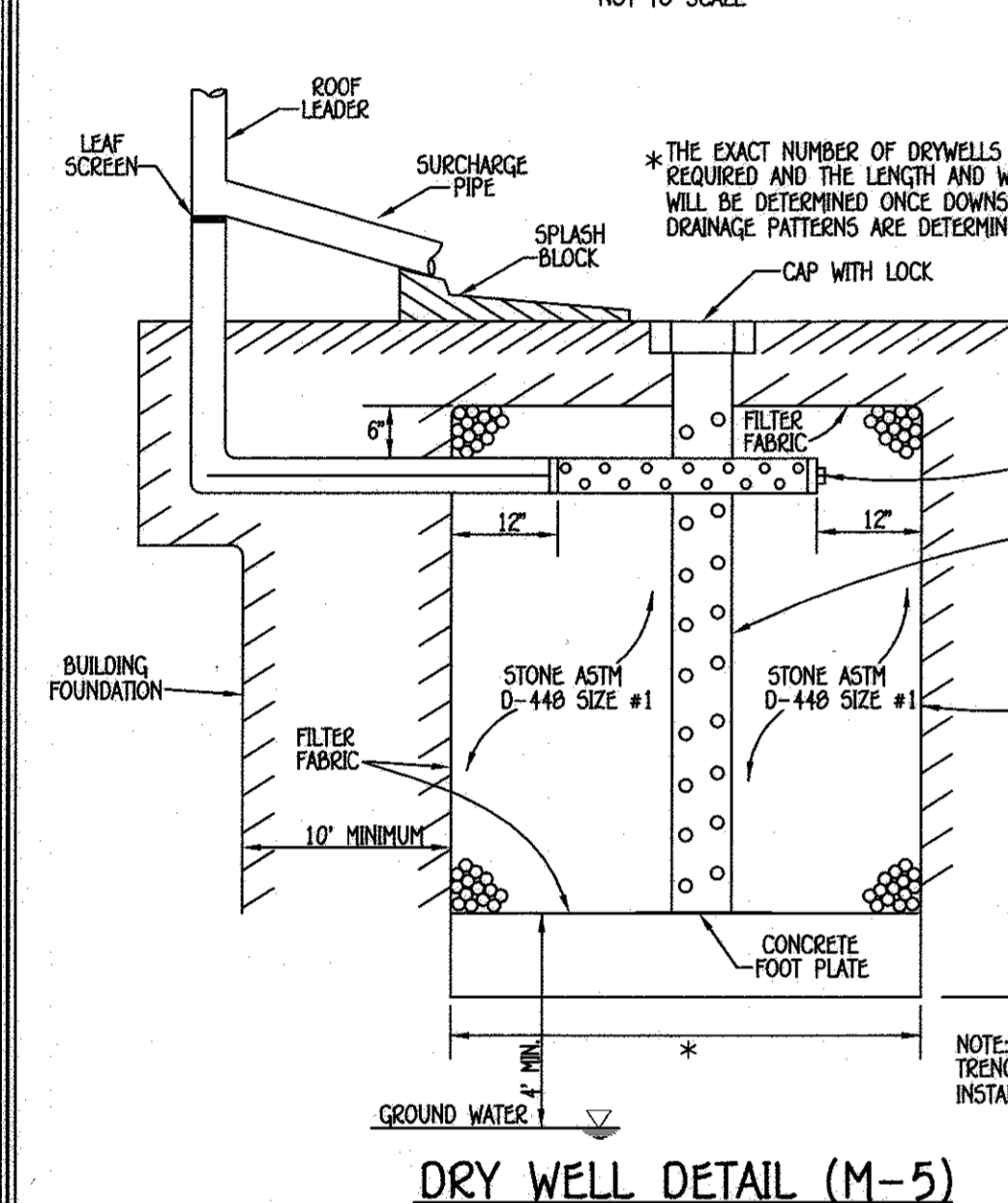
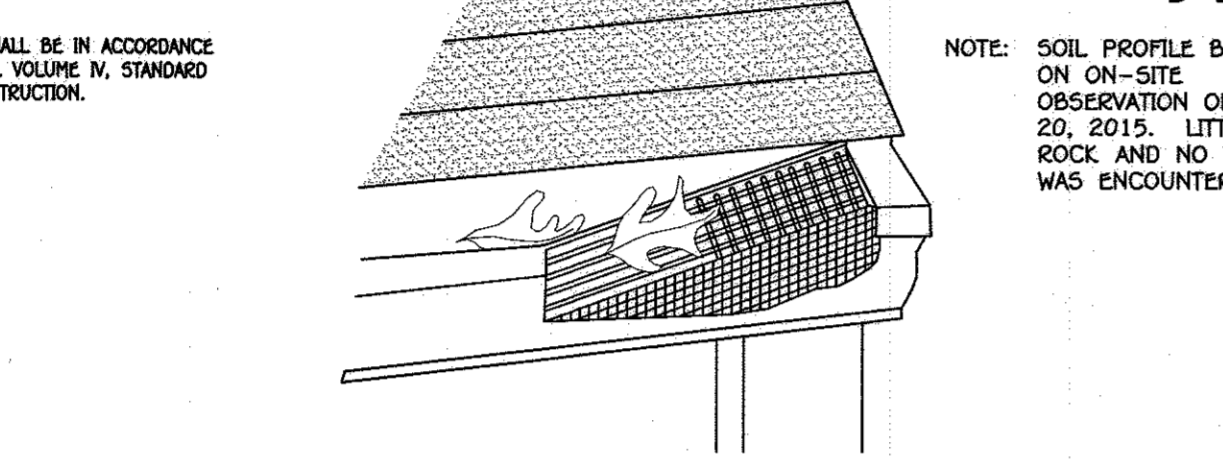
STORMWATER MANAGEMENT PRACTICES					
LOT NO.	ADDRESS	DISCONNECTION OF ROOFTOP RUNOFF (N-1) Y/N, NUMBER	DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2) Y/N, NUMBER	DRY WELLS (M-5) Y/N, NUMBER	MICRO-BIOTRETION (M-6) Y/N, NUMBER
24	11832 TALL TIMBER DRIVE	NO	NO	YES, FIVE (5)	NO

SEWER ELEVATION CONNECTION INFORMATION		
LOT NO.	EX. ELEV. AT PROPERTY LINE	PROP. ELEV. AT HOUSE
24	420.84	421.84

BENCHMARK INFORMATION	
B.M.#1 - HOWARD COUNTY CONTROL STATION #29CA - HORIZONTAL - (NAD '83)	(LOCATED AT NORTHWEST CORNER OF INTERSECTION OF TROTTER WOODS & MD RT 108)
N 566,867.417	E 1,333,325.606
ELEVATION = 450.83 - VERTICAL - (NAVD '88)	
B.M.#2 - HOWARD COUNTY CONTROL STATION #29G5 - HORIZONTAL - (NAD '83)	(LOCATED AT SOUTHEAST CORNER OF INTERSECTION OF MD RT 108 & MIDDLE PATUXENT COURT)
N 568,341.182	E 1,335,392.455
ELEVATION = 380.10 - VERTICAL - (NAVD '88)	



SITE ANALYSIS DATA CHART	
A.	TOTAL AREA OF THIS SUBMISSION = 14,003 SQ.FT. OR 0.32 AC.
B.	LIMIT OF DISTURBED AREA = 10,335 SQ.FT. OR 0.24 AC.
C.	PRESENT ZONING DESIGNATION = R-20 (PER 10/06/2013 COMPREHENSIVE ZONING PLAN)
D.	PROPOSED USE: RESIDENTIAL
E.	PREVIOUS HOWARD COUNTY FILES: F-81-119; PLAT 4917, F-83-96; PLAT 5590; S-97-02; P-98-01; F-98-099; PLAT 13449; SDP-00-032; ECP-15-072.
F.	TOTAL AREA OF FLOODPLAIN LOCATED ON-SITE = 0.00 AC
G.	TOTAL AREA OF MODERATE STEEP SLOPES (15% TO 24.9%) = 0.00 AC
H.	TOTAL AREA OF STEEP SLOPES (25% OR GREATER) = 0 AC
I.	TOTAL AREA OF WETLANDS (INCLUDING BUFFER) = 0.00 AC
J.	TOTAL AREA OF EXISTING FOREST = 0.00 AC
K.	TOTAL GREEN OPEN AREA = 0.23 AC
L.	TOTAL IMPERVIOUS AREA = 0.09 AC
M.	TOTAL AREA OF ERODIBLE SOILS = 0.00 AC
N.	TOTAL AREA OF ROAD DEDICATION = 0.00 AC

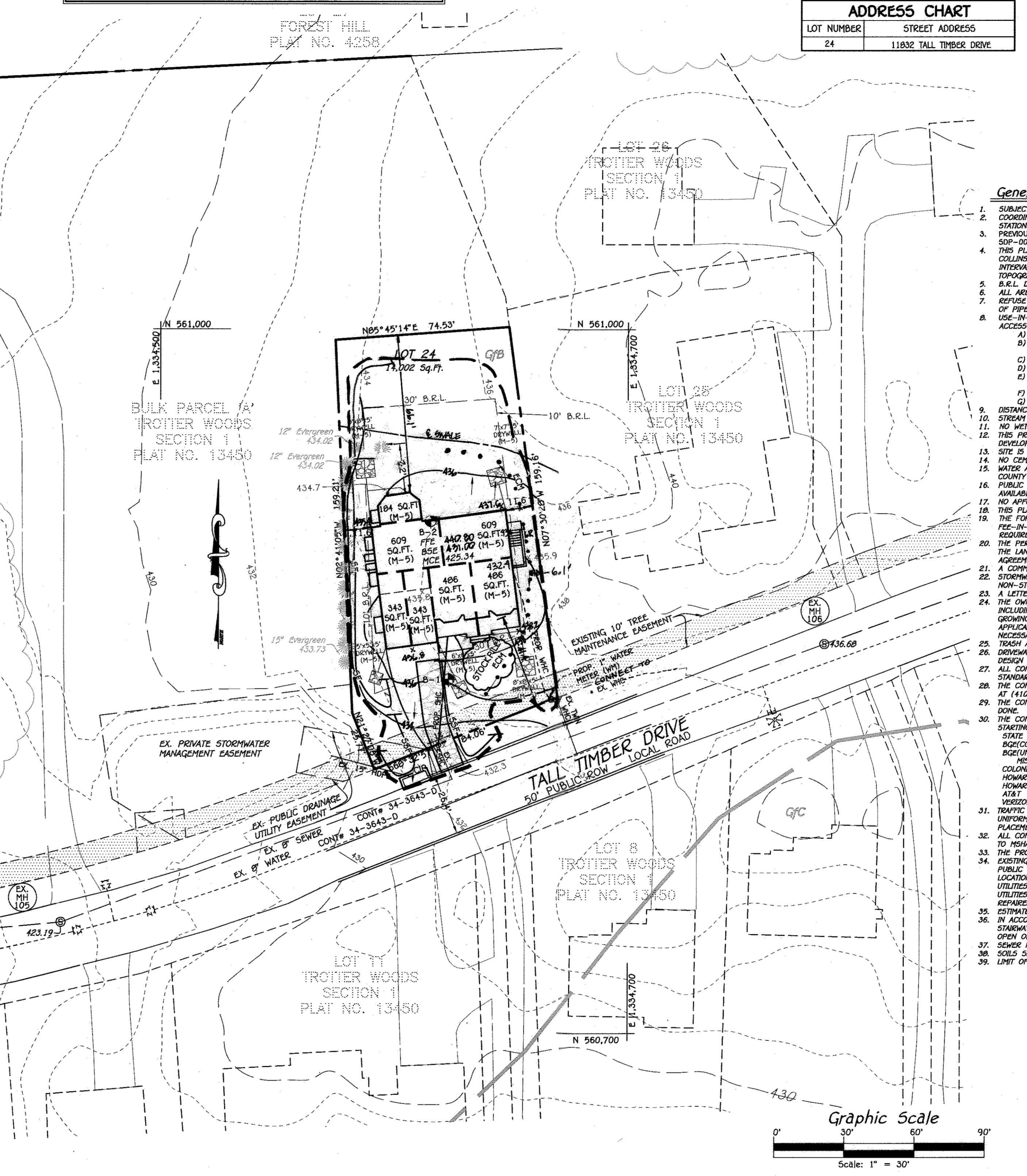


DRY-WELL CHART					
DRYWELL NO.	AREA OF ROOF PER DOWN SPOUT	VOLUME REQUIRED	VOLUME PROVIDED	AREA OF TREATMENT	L W D
GAR (LT)	343 SQ. FT.	44 C.F.	50 C.F.	100%*	5' x 5' x 5'
GAR (RT)	343 SQ. FT.	44 C.F.	72 C.F.	100%*	6' x 6' x 5'
FRONT (RT)	972 SQ. FT.	124 C.F.	128 C.F.	100%*	8' x 8' x 5'
REAR (LT)	793 SQ. FT.	101 C.F.	128 C.F.	100%*	8' x 8' x 5'
REAR (RT)	609 SQ. FT.	78 C.F.	98 C.F.	100%*	7' x 7' x 5'

* AREA OF TREATMENT EXCEEDS THAT REQUIRED.

Material	Specification	Size	Notes
Plantings	see Appendix A Table A.4	n/a	plantings are site-specific
Planting soil	loamy sand 60-65% compost 35-40% or sandy loam 30% coarse sand 30% compost 40%		USDA soil series 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	
Pea gravel/drainage	pea gravel: ASTM-D-448	No. 8 or No. 9 (1/8" to 3/8")	
Curbs	ornamental stone: washed cobble	stone: 2" to 5"	
Geotextile		n/a	PE Type 1 nonwoven
Gravel (underdrains and infiltration berms)	ASTM M-43	No. 57 or No. Aggregate (3/8" to 3/4")	
Underdrain piping	1/2" Type PS 28 or AASHTO N-678	4" to 6" rigid schedule 40 PVC or 50035	Slotted or perforated pipe: 3/8" perft. @ 8" on center, 4 holes per row, minimum of 2' 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 = 3500 psi at 28 days, normal weight, air-entrained or pre-cast) not using previously approved C10 or local standards requires design drawings sealed and approved by a professional structural engineer licensed to the State of Maryland - design to include meeting ACI Code 308.6/89; vertical loading D1-10 or H-20; allowable horizontal loading based on soil pressure; and analysis of potential cracking	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 C10 or local standards requires design drawings sealed and approved by a professional structural engineer licensed to the State of Maryland - design to include meeting ACI Code 308.6/89; vertical loading D1-10 or H-20; allowable horizontal loading based on soil pressure; and analysis of potential cracking
Sand	AASHTO-M-6 or ASTM-C-33	0.075 to 0.075	Sand substitutions such as diatomaceous earth (ASTM) #10 are not acceptable. No calcium carbonate or dolomitic sand substitutions are acceptable. No "rock dust" can be used for sand.

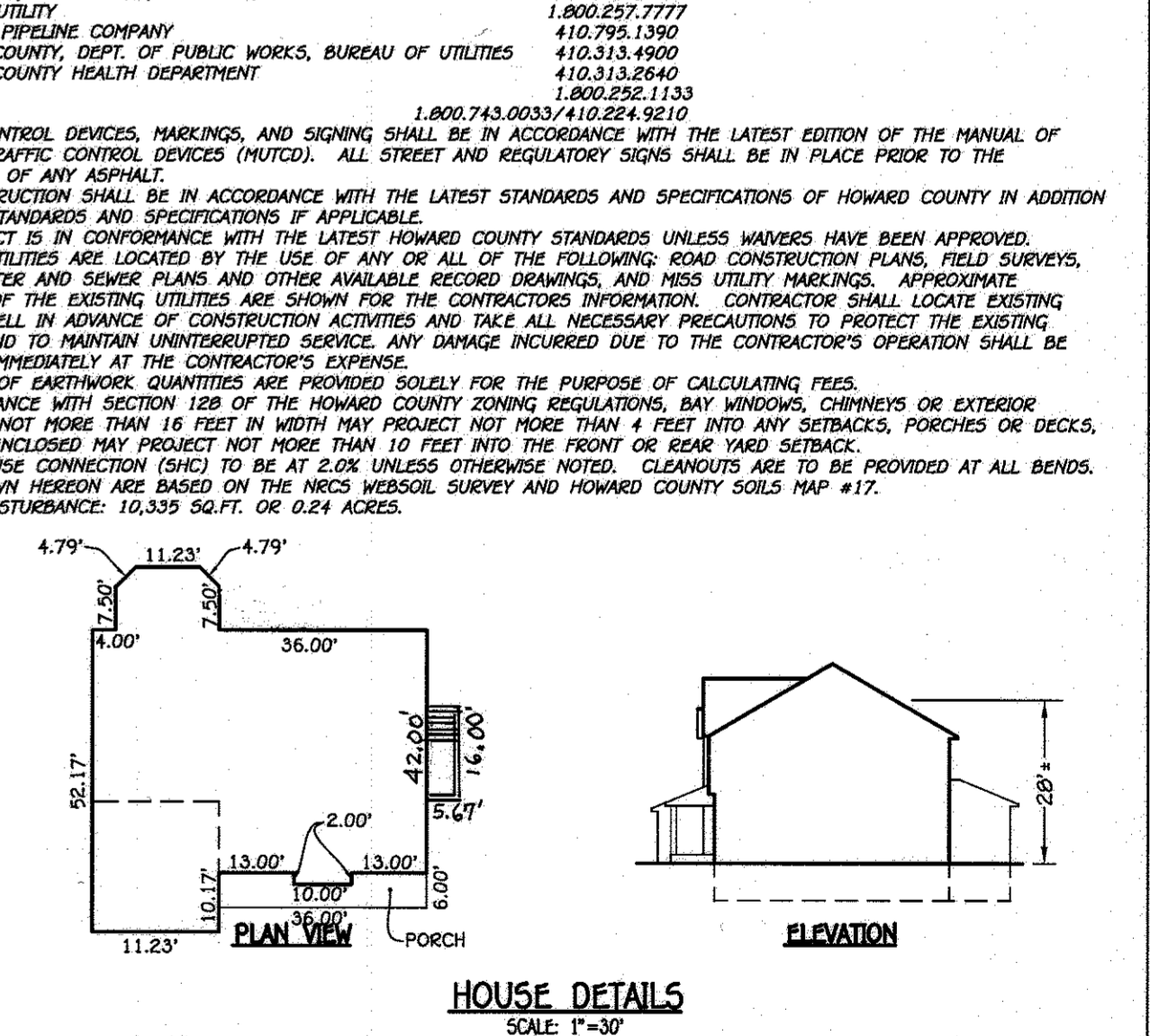
OPERATION & MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DRY WELLS (M-5)			
A.	THE OWNER SHALL INSPECT THE MONITORING WELLS AND STRUCTURES ON A QUARTERLY BASIS AND AFTER EVERY HEAVY STORM EVENT.		
B.	THE OWNER SHALL RECORD THE WATER LEVELS AND SEDIMENT BUILD UP IN THE MONITORING WELLS OVER A PERIOD OF SEVERAL DAYS TO ENSURE TRENCH DRAINAGE.		
C.	THE OWNER SHALL MAINTAIN A LOG BOOK TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.		
D.	WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN A SEVENTY-TWO (72) HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE TAKEN.		
E.	THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.		
F.	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.		



ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
24	11832 TALL TIMBER DRIVE

- General Notes:**
- SUBJECT PROPERTY ZONED R-20 PER 10/06/13 COMPREHENSIVE ZONING PLAN.
 - COORDINATES BASED ON NAD '83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 29CA AND 29G5.
 - PREVIOUS DDP FILE NUMBERS: F-81-119; PLAT 4917, F-83-96; PLAT 5590; S-97-02; P-98-01; F-98-099; PLAT 13449; SDP-00-032; ECP-15-072.
 - THIS PLAN IS BASED ON FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT MARCH, 2014 BY FISHER, COLLINS & CARTER, INC. THE EXISTING TOPOGRAPHY IS TAKEN FROM A FIELD RUN SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY FISHER, COLLINS & CARTER, INC. DATED MARCH, 2014 AND SUPPLEMENTED WITH HOWARD COUNTY GIS TOPOGRAPHY AT 5' CONTOUR INTERVAL INTERPOLATED FOR 2' CONTOUR INTERVAL.
 - B.S.L. DENOTES BUILDING RESTRICTION LINE.
 - ALL AREAS ARE MORE OR LESS (±).
 - REFUSE, COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE TO BE PROVIDED AT THE JUNCTION OF DRIVEWAY AND ROAD. DRIVEWAY SHALL BE MAINTAINED BY THE OWNER AND NOT ONTO THE FLAG/PIPE STEM DRIVEWAY.
 - USE-IN-COMMON DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A BUILDING PERMIT TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY SERVICES FOR THE FOLLOWING (MINIMUM) REQUIREMENTS:
 - WIDTH - 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE).
 - SURFACE - SIX (6") INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING.
 - STRUCTURE CLEARANCES - MINIMUM 12 FEET:
 - MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
 - DISTANCES SHOWN ARE BASED ON SURFACE MEASUREMENT AND NOT REDUCED TO NAD '83 GRID MEASUREMENT.
 - STORM AND SEWER SERVICES TO BE PROVIDED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 18.122B OF THE HOWARD COUNTY CODE.
 - NO WETLANDS OR WETLAND BUFFERS, STEEP SLOPES, 100 YEAR FLOODPLAIN, OR CEMETERIES EXIST ON-SITE.
 - THIS PROPERTY IS LOCATED INSIDE THE METROPOLITAN DISTRICT. PUBLIC WATER AND SEWER WILL BE UTILIZED FOR THIS DEVELOPMENT. CORN 24-3843-D.
 - SITE IS NOT ADJACENT TO A SCENIC ROAD.
 - NO CEMETERY OR HISTORIC STRUCTURES EXIST WITHIN THE LIMITS OF THIS PLAT SUBMISSION.
 - WATER AND SEWER SERVICE TO THESE LOTS WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.122B OF THE HOWARD COUNTY CODE.
 - PUBLIC WATER AND SEWER ALLOCATIONS WILL BE GRANTED AT THE TIME OF ISSUANCE OF THE BUILDING PERMIT IF CAPACITY IS AVAILABLE AT THAT TIME.
 - NO APFD TRAFFIC REPORT OR NOISE STUDY IS REQUIRED.
 - THIS PLAN IS IN COMPLIANCE WITH THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, AGREEMENT WITH E-98-099 FOR PLANTINGS ALONG THE PERIMETER OF THE TROTTER WOODS SUBDIVISION.
 - THE FOREST CONSERVATION OBLIGATIONS FOR THIS LOT WERE PROVIDED UNDER F-98-099. REQUIREMENTS WERE MET WITH A FEE-IN-LIEU PAYMENT ALONG WITH RETENTION OF ON-SITE FOREST AND ON-SITE REFORESTATION. NO FURTHER OBLIGATION IS REQUIRED.
 - THE PERIMETER LANDSCAPE OBLIGATION WAS PROVIDED IN ACCORDANCE WITH SECTION 18.12A OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL A LANDSCAPE SURVEY IN THE AMOUNT OF \$3,300 WAS BONDED AS PART OF THE DRW DEVELOPERS AGREEMENT WITH E-98-099 FOR PLANTINGS ALONG THE PERIMETER OF THE TROTTER WOODS SUBDIVISION.
 - A COMMUNITY MEETING WAS NOT REQUIRED AT TIME OF SUBDIVISION.
 - STORMWATER MANAGEMENT IS IN ACCORDANCE WITH THE M.D.E. STORMWATER DESIGN MANUAL, VOLUMES 1 & 2, REVISED 2009. NON-STRUCTURAL PRACTICES WITH CHAPTER 3 ARE BEING UTILIZED. FIVE (5) DRYWELLS (M-5) ARE PROPOSED.
 - A LETTER OF FINDINGS OF NO WETLANDS DATED MAY, 2015 WAS PREPARED BY FISHER, COLLINS & CARTER, INC.
 - THE OWNER, TOWN AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND BERRIES, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED LANDSCAPING WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
 - TRASH AND RECYCLABLES COLLECTION WILL BE AT DAILY ROAD WITHIN 5' OF THE COUNTY ROADWAY.
 - DRIVEWAY FOR LOT 24 SHALL BE PROVIDED IN ACCORDANCE WITH HOWARD COUNTY STANDARD DETAIL, R-606 IN THE VOL. IV DESIGN MANUAL.
 - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
 - THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1890 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
 - THE CONTRACTOR SHALL NOTIFY MESA UTILITY AT 1-800-527-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
 - THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:

STATE HIGHWAY ADMINISTRATION	410.531.9533
BGE(CONTRACTOR SERVICES)	410.650.4620
BGE(UNDERGROUND DAMAGE CONTROL)	410.787.9088
MESA UTILITY	1.800.257.7777
COLONIAL PIPELINE COMPANY	410.793.1390
HOWARD COUNTY, DEPT. OF PUBLIC WORKS, BUREAU OF UTILITIES	410.313.4900
HOWARD COUNTY HEALTH DEPARTMENT	410.313.2640
AT&T	1.800.257.7777
VERIZON	1.800.743.0033/410.224.9210
 - TRACING CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
 - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY IN ADDITION TO MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
 - THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
 - ALL UTILITIES ARE LOCATED BY THE USE OF ANY OR ALL OF THE FOLLOWING: ROAD CONSTRUCTION PLANS, FIELD SURVEYS, PUBLIC WATER AND SEWER PLANS AND OTHER AVAILABLE RECORDED DRAWINGS, AND MESA UTILITY MARKINGS. APPROXIMATE LOCATION OF THE 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 INCURRED DUE TO THE CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
 - ESTIMATES OF EARTHWORK QUANTITIES ARE PROVIDED SOLELY FOR THE PURPOSE OF CALCULATING FEES.
 - IN ACCORDANCE WITH SECTION 12B OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS MAY PROJECT MORE THAN 4 FEET INTO ANY SETBACKS, PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.
 - SEWER HOUSE CONNECTION (SHC) TO BE AT 2.0X UNLESS OTHERWISE NOTED. CLEANOUTS ARE TO BE PROVIDED AT ALL BENDS.
 - SOILS SHOWN HEREON ARE BASED ON THE NCS VESSEL SURVEY AND HOWARD COUNTY SOILS MAP #17.
 - LIMIT OF DISTURBANCE: 10,335 SQ.FT. OR 0.24 ACRES.



OWNERS / DEVELOPER			
TYSON TALL TIMBER INC. 11830 TALL TIMBER DRIVE CLARKSVILLE MD 21029-1213 410-370-3406			
FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTONAL SQUARE OFFICE PARK - 10272 MULTIPURPOSE NATIONAL PIKE GILBERT CITY, MARYLAND 21042 (410) 461-2995			
NO.	REVISION	DATE	X
1	REMOVE PERMITS & ADD PERMITS TO BUILD CONDITIONS	8/20/15	
2	REMOVE PERMITS & ADD PERMITS TO BUILD CONDITIONS	9/30/15	
3	CONNECTION TO EX. MHC		

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 38386, EXPIRATION DATE: 01/31/2016.

Stephen J. Jantz 8/20/15
Signature of Professional Engineer DATE

BUILDER/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 ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

John F. Jantz 8/20/15
Signature of Developer DATE

ENGINEER'S CERTIFICATE

I/WE CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Stephen J. Jantz 8/20/15
Signature of Engineer DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>John G. G...</i> Director, Department of Planning and Zoning	9-19-15 Date
<i>Katherine...</i> Chief, Division of Land Development	9-17-15 Date
<i>William...</i> Chief, Development Engineering Division	9-16-15 Date

SITE DEVELOPMENT PLAN

TROTTER WOODS
LOT 24
ZONED R-20
TAX MAP No. 35 GRID No. 8 PARCEL No. 21
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: AUGUST, 2015
SHEET 1 OF 2

DEED BLOCK NO. ZONE TAX/ZONE ELEC. DIST. CENSUS TR.
4934/ 437 1 R-20 35 FIFTH 605905

SDP-15-062

SOIL PREPARATION, TOPSOILING AND SOIL AMENDMENTS (B-4-2)

- A. Soil Preparation
1. Temporary Stabilization
a. Seeded preparation consists of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment...
b. Apply fertilizer and lime as prescribed on the plans.
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 7.2.
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...
iv. Soil contains 1.5 percent minimum organic matter by weight.
v. Soil contains sufficient pore space to permit adequate root penetration.
b. Application of amendments or topsoil is required if on-site soils do not meet the above conditions.
c. Graded areas must be maintained in a true and even grade as specified on the approved plan, then scarified or otherwise loosened to a depth of 3 to 5 inches.
d. Apply soil amendments as specified on the approved plan or as indicated by 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.
f. Mix soil amendments into the top 3 to 5 inches of soil by disking or other suitable means.
g. Smooth the surface, remove large objects like stones and branches, and ready the area for seed application.
h. Loosen surface soil with a heavy chain or other equipment to roughen the surface where conditions will not permit normal seeded preparation.
i. Track slopes 3:1 or flatter with tracked equipment leaving the soil in an irregular condition with ridges running parallel to the contour of the slope.
j. Leave the top 1 to 3 inches of soil loose and friable. Seeded loosening may be unnecessary on newly disturbed areas.

- B. Topsoiling
1. Topsoil is placed over prepared subsoil prior to establishment of permanent vegetation. The purpose is to provide a suitable soil medium for vegetative growth.
2. Topsoil salvaged from an existing site may be used provided it meets the standards as set forth in these specifications.
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 furnish continuing supplies of moisture and plant nutrients.
c. 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 design.
5. Topsoil Specifications: Topsoil to be used as topsoil must meet the following criteria:
a. Topsoil must be a loam, sandy loam, clay loam, silty loam, sandy clay loam, or loamy sand.
b. Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nut sedge, poison ivy, plastic, or other plants specified.
c. Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.
6. Topsoil Application
a. Erosion and sediment control practices must be maintained when applying topsoil.
b. Uniformly distribute topsoil in a 5 to 10 inch layer and lightly compact to a minimum thickness of 4 inches.
c. Topsoil must be placed in a condition that will not be detrimental to proper grading and seeded preparation.
7. Soil Amendments (Fertilizer and Lime Specifications)
1. Soil tests must be performed to determine the exact rates and application rates for both lime and fertilizer on sites having disturbed areas of 5 acres or more.
2. Fertilizers must be uniform in composition, free flowing and suitable for accurate application by appropriate equipment.
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).
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.

- C. Soil Amendments (Fertilizer and Lime Specifications)
1. Soil tests must be performed to determine the exact rates and application rates for both lime and fertilizer on sites having disturbed areas of 5 acres or more.
2. Fertilizers must be uniform in composition, free flowing and suitable for accurate application by appropriate equipment.
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).
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B-4-3 STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING

- The application of seed and mulch to establish vegetative cover.
Purpose: To protect disturbed soils from erosion during and at the end of construction.
Conditions Where Practice Applies: To the surface of all perimeter controls, slopes, and any disturbed area not under active grading.
1. Seeding
a. Specifications
i. All seed must meet the requirement of the Maryland State Seed Law.
ii. All seed must be subject to re-testing by a recognized seed laboratory.
iii. All seed used must have been tested within the 6 months immediately preceding the date of sowing such material on any project.
iv. 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.
v. Mulch alone may be applied between the fall and spring seeding dates only if the ground is frozen.
vi. Inoculant: The inoculant for treating legume seed in the seed mixtures must be a pure culture of nitrogen fixing bacteria prepared specifically for the species.
vii. Inoculants must be used later than the date indicated on the container.
viii. Inoculants are to be applied to the seed, not the soil.
ix. Inoculants are to be applied to the seed, not the soil.
x. Inoculants are to be applied to the seed, not the soil.
b. Application
i. Dry Seeding: This includes use of conventional drop or broadcast spreaders.
ii. Incorporate seed into the subsoil at the rates prescribed on Temporary Seeding Table B.1, Permanent Seeding Table B.3, or site-specific seeding summaries.
iii. Apply seed in two directions, perpendicular to each other.
iv. Apply seed in two directions, perpendicular to each other.
v. Apply seed in two directions, perpendicular to each other.
vi. Apply seed in two directions, perpendicular to each other.
vii. Apply seed in two directions, perpendicular to each other.
viii. Apply seed in two directions, perpendicular to each other.
ix. Apply seed in two directions, perpendicular to each other.
x. Apply seed in two directions, perpendicular to each other.
2. Mulching
a. Straw consisting of thoroughly threshed wheat, rice, oat, or barley and reasonably bright in color.
b. Wood Cellulose Fiber Mat (WCFM) consisting of specially prepared wood cellulose processed into uniform fibrous physical state.

- 1. WCFM is to be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread slurry.
2. WCFM, including dye, must contain no germination or growth inhibiting factors.
3. WCFM material can be manufactured and processed in such a manner that the wood cellulose fiber mat will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry.
4. WCFM material must contain no toxic elements or compounds at concentrations levels that will be phytotoxic.
5. 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, cationic content of 1.6 percent maximum and water holding capacity of 80 percent minimum.
6. 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.
c. Wood cellulose fiber used as mulch must be applied to a net dry weight of 1500 pounds per acre.
d. Wood cellulose fiber used with water to obtain a mixture with a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
7. Anchoring
a. Perform mulch anchoring immediately following application of mulch to minimize loss by wind or water.
b. A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface to a minimum of 2 inches.
c. Wood cellulose fiber may be used for anchoring straw.
d. Synthetic binders such as Acrylic BLR (Aqua-Lock), DCA-70, Petrosol, Terra Tex, Terra, Tack LR or other approved equal may be used.
e. Lightweight plastic netting may be applied over the mulch according to manufacturer recommendations.
8. Temporary Seeding Summary
Hardness Zone (from Figure B.3): Bb
Seed Mixture (from Table B.1):
Species Application Rate (lb/acre) Seeding Dates Seeding Depth Fertilizer Rate (10-20-20) Lime Rate (2 tons/acre)
BARLEY 96 3/1 - 5/15, 1" 436 lb/acre (10 lb/1000 sq ft) 2 tons/acre (90 lb/1000 sq ft)
OATS 72 8/15 - 10/15 1"
RYE 112 1"

TEMPORARY SEEDING NOTES (B-4-4)

- 1. Select one or more of the species or seed mixtures listed in Table B.1 for the appropriate Plant Hardness Zone (from Figure B.3), and enter them in the Temporary Seeding Summary below along with application rates, seeding dates and seeding depths.
2. For sites having soil tests performed, use and show the recommended rates by the testing agency.
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.
Conditions Where Practice Applies: Exposed soils where ground cover is needed for a period of 6 months or less.
Purpose: To stabilize disturbed soils with vegetation for up to 6 months.
To use fast growing vegetation that provides cover on disturbed soils.

Table with columns: Species, Application Rate (lb/acre), Seeding Dates, Seeding Depth, Fertilizer Rate (10-20-20), Lime Rate (2 tons/acre). Rows include BARLEY, OATS, and RYE.

PERMANENT SEEDING NOTES (B-4-5)

- A. Seed Mixtures
1. General Use
a. Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardness Zone (from Figure B.3) and based on the site condition or purpose found on Table B.2.
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 areas over 5 acres, use and show the rates recommended by the soil testing agency.
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.
c. Kentucky Bluegrass: Full Sun Mixture: For use in areas that receive intensive management.
d. Kentucky Bluegrass/Perennial Ryegrass: Full Sun Mixture: For use in full sun areas where rapid establishment is necessary.
e. Tall Fescue/Kentucky Bluegrass: Full Sun Mixture: For use in drought prone areas and/or for areas receiving low to medium maintenance.
f. Kentucky Bluegrass/Fine Fescue: Shade Mixture: For use in areas with shade in bluegrass lawns.
Notes: 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.
Idea Times of Seeding for Turf Grass Mixtures:
Western MD: March 15 to June 1, August 1 to October 1 (Hardness Zones: 5b, 6a)
Central MD: March 1 to May 15, August 15 to October 15 (Hardness Zones: 6b)
Southern MD, Eastern Shore: March 1 to May 15, August 15 to October 15 (Hardness Zones: 7a)
d. Till areas to receive seed by disking or other approved methods to a depth of 1/2 to 4 inches, level and rake the areas to prepare a proper seedbed.
e. If soil moisture is deficient, supply new seedlings with adequate water for plant growth.
f. If soil moisture is deficient, supply new seedlings with adequate water for plant growth.

Table with columns: Hardness Zone, Seed Mixture, Application Rate, Seeding Dates, Seeding Depth, Fertilizer Rate, Lime Rate. Rows include TALL FESCUE and other seed mixtures.

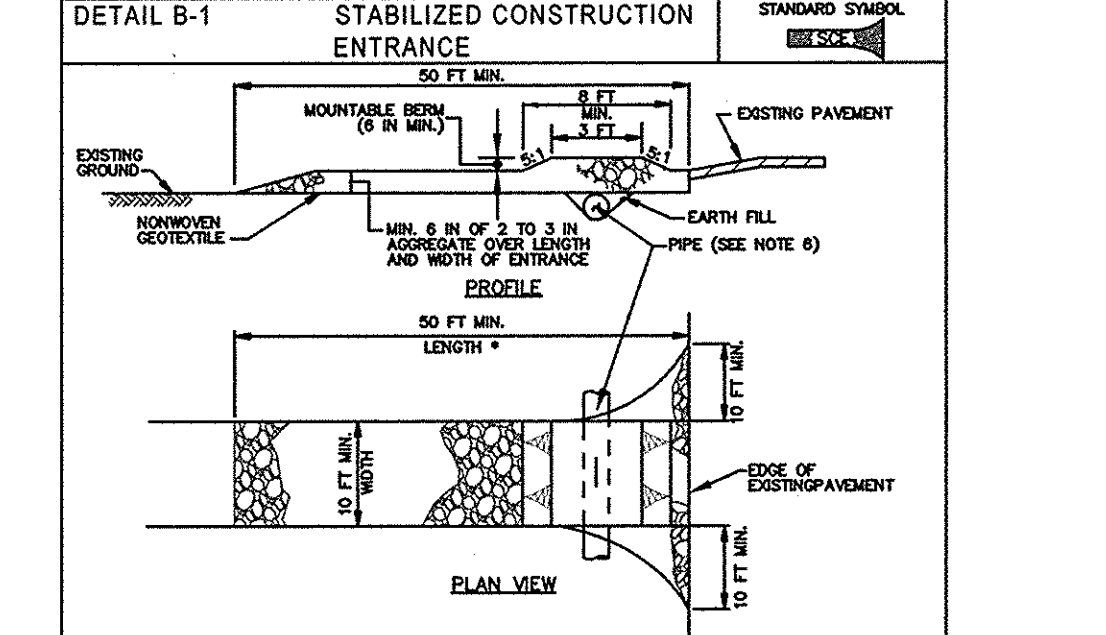
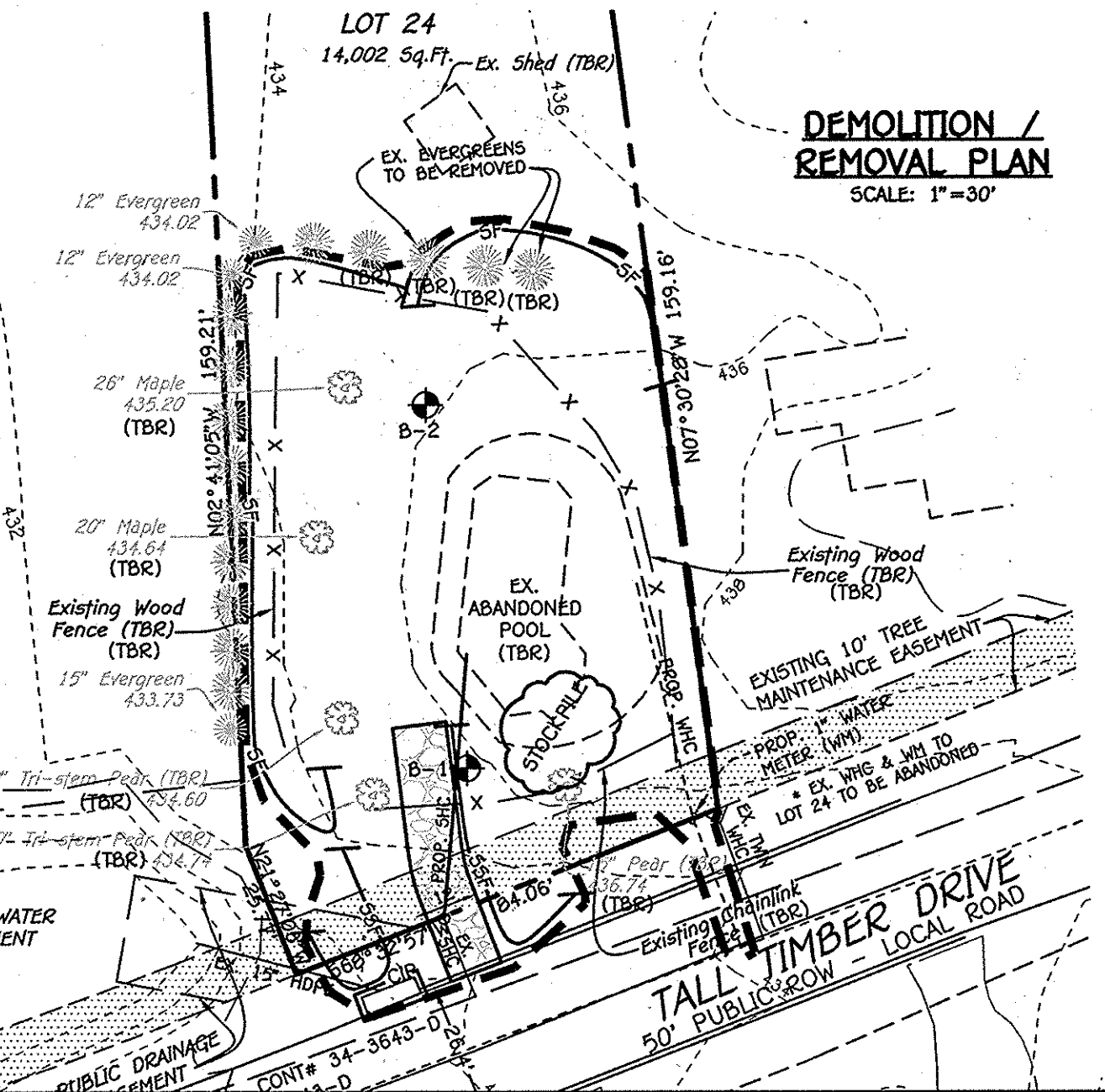
B. Sod: To provide quick cover on disturbed areas (2:1 grade or flatter).

- 1. General Specifications
a. Class of turfgrass sod must be Maryland State Certified.
b. Sod must be machine cut at a uniform soil thickness to 3/4 inch, plus or minus 1/8 inch, at the time of cutting.
c. Sod must be harvested, delivered, and installed within a period of 36 hours.
d. Sod must be transported 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.
c. Wherever possible, lay sod with the long edge parallel to the contour and with staggering joints.
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.
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 soil to a depth of 4 inches.
b. Do not mow until the grass has reached a minimum height of 3 inches.
c. Maintain a grass height of at least 3 inches unless otherwise specified.

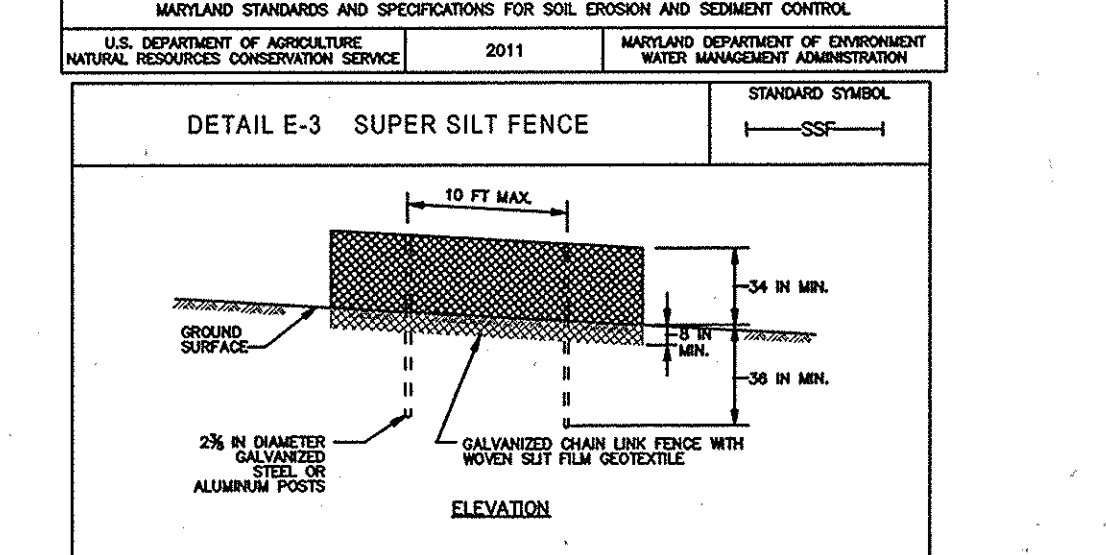
B-4-5 STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREAS

- A mound or pile of soil protected by appropriately designed erosion and sediment control measures.
Purpose: To provide a designated location for the temporary storage of soil that controls the potential for erosion, sedimentation, and changes to drainage patterns.
Conditions Where Practice Applies: Stockpile areas are utilized when it is necessary to abridge and store soil for later use.
1. The stockpile location and all related sediment control practices must be clearly indicated on the erosion and sediment control plan.
2. The footprint of the stockpile must be sized to accommodate the anticipated volume of material and based on a side slope ratio no steeper than 2:1.
3. Runoff from the stockpile area must drain to a suitable sediment practice.
4. Access the stockpile area from the upgrade side.
5. Clear water runoff from the stockpile area must be minimized by use of a diversion device such as an earth dike, temporary swale or diversion fence.
6. Stockpiles must be stabilized in accordance with the 3/7 day stabilization requirement as well as Standard B-4-1 Incremental Stabilization and Standard B-4-1 Temporary Stabilization.
7. If the stockpile is located on an impervious surface, a liner should be provided below the stockpile to facilitate cleanup.
8. Contaminated materials must be covered with impermeable sheeting.
HOWARD COUNTY SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL PLAN

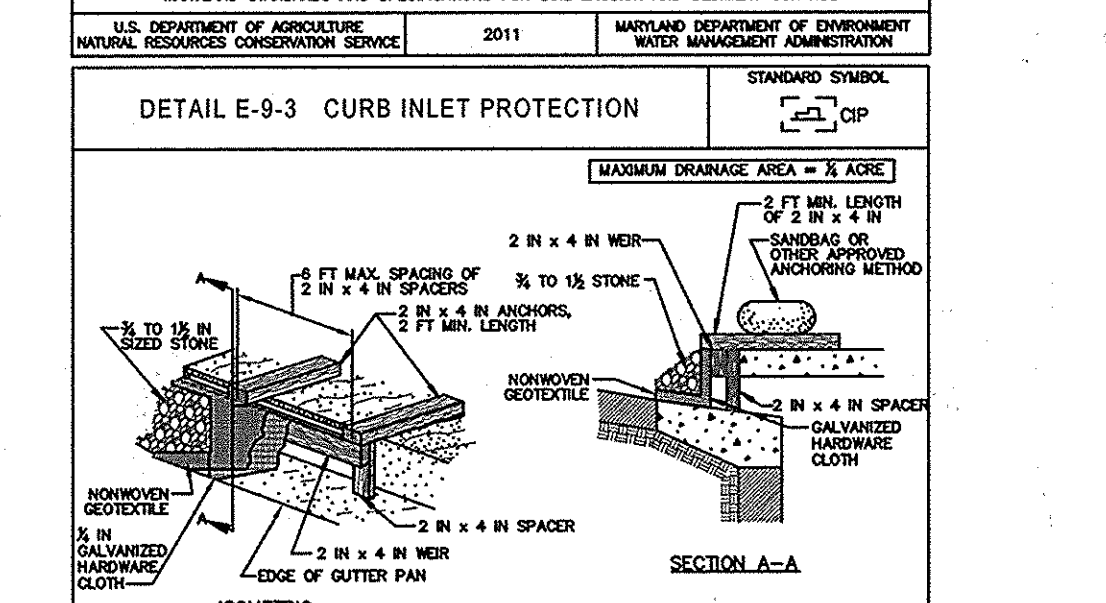
- 1. A MINIMUM OF 60 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS, CONSTRUCTION INSPECTIONS DIVISION (CID) PRIOR TO THE START OF ANY CONSTRUCTION (410-313-1895).
2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE CONDUCTED IN ACCORDANCE WITH THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THEREOF.
3. FOLLOWING INITIAL EROSION CONTROL DISTURBANCE OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN A 3 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1.
4. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE.
5. ANY SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
6. ANY ANALYSIS TOTAL AREA OF SITE AREA DISTURBED AREA TO BE ROOFED OR PAVED AREA TO BE VEGETATED/STABILIZED TOTAL CUT OFFSITE WASTE/BORROW AREA LOCATION ANY SEDIMENT CONTROL PRACTICE THAT IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
7. ANY ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
8. ANY CHANGES OR REMOVALS TO THE SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE PLAN APPROVAL AUTHORITY PRIOR TO PROCEEDING WITH CONSTRUCTION.
9. A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 ACRES PER GRADING UNIT) AT A TIME WHEN PROCEEDING TO A SUBSEQUENT GRADING UNIT WHEN AT LEAST 50 PERCENT OF THE DISTURBED AREA OF THE PREVIOUS GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY THE ENVIRONMENTAL AUTHORITY.
10. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE FEET LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORKDAY.
11. ANY CHANGES OR REMOVALS TO THE SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE PLAN APPROVAL AUTHORITY PRIOR TO PROCEEDING WITH CONSTRUCTION.
12. A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 ACRES PER GRADING UNIT) AT A TIME WHEN PROCEEDING TO A SUBSEQUENT GRADING UNIT WHEN AT LEAST 50 PERCENT OF THE DISTURBED AREA OF THE PREVIOUS GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY THE ENVIRONMENTAL AUTHORITY.
UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE APPROVAL AUTHORITY, NO MORE THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED AT A GIVEN TIME.



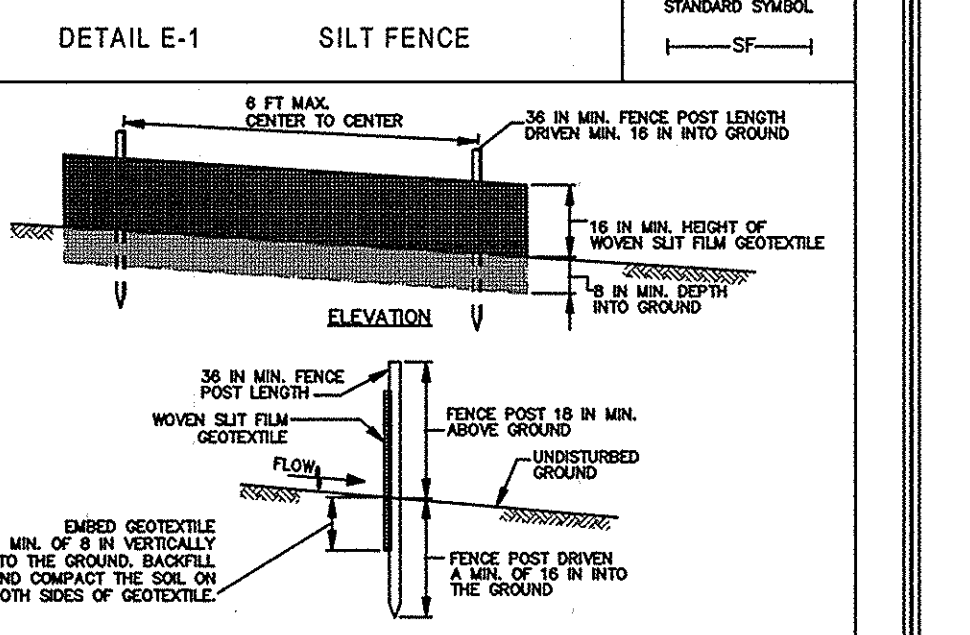
- CONSTRUCTION SPECIFICATIONS
1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE.
2. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE.
3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
4. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP WITHIN THE ENTRANCE AND WIDTH OF THE SCE.
5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT, ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE.
6. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT, ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE.
7. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT, ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE.
8. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT, ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE.



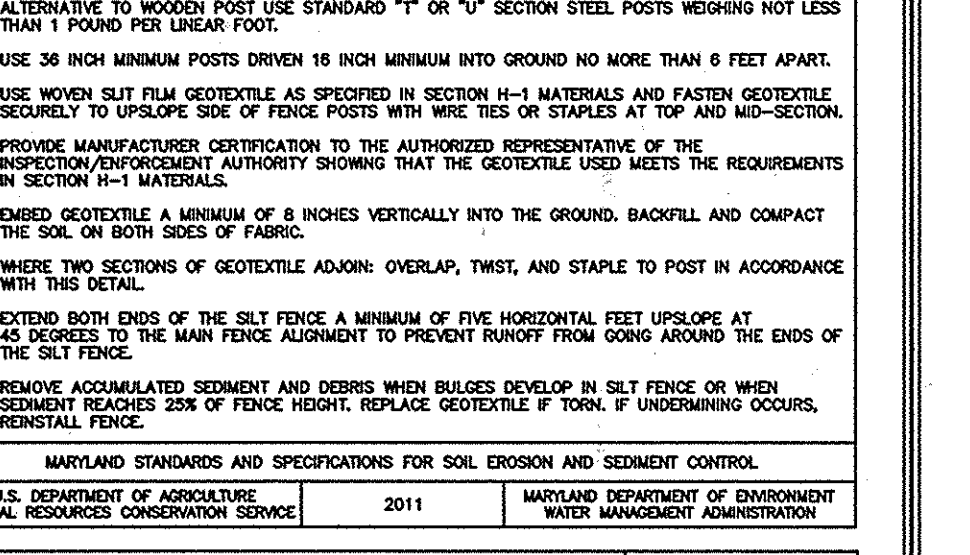
- CONSTRUCTION SPECIFICATIONS
1. INSTALL 24 IN MIN DIAMETER GALVANIZED STEEL POSTS OF 0.625 IN MIN WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART.
2. FASTEN 8 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (24 IN MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR RING TIES.
3. FASTEN WOVEN SIFT FLEM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS SECURELY TO THE CHAIN LINK FENCE WITH WIRE TIES SECURED EVERY 24 INCHES AT THE TOP AND MID SECTION.
4. WARE THE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLD, AND STAPLED TO PREVENT SEEDING BY PASS.
5. EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
6. PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
7. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN RAINFALL OCCURS IN FENCE OR WHEN SEDIMENT REACHES THE MAIN FENCE ALIGNMENT.
8. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT, ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE.



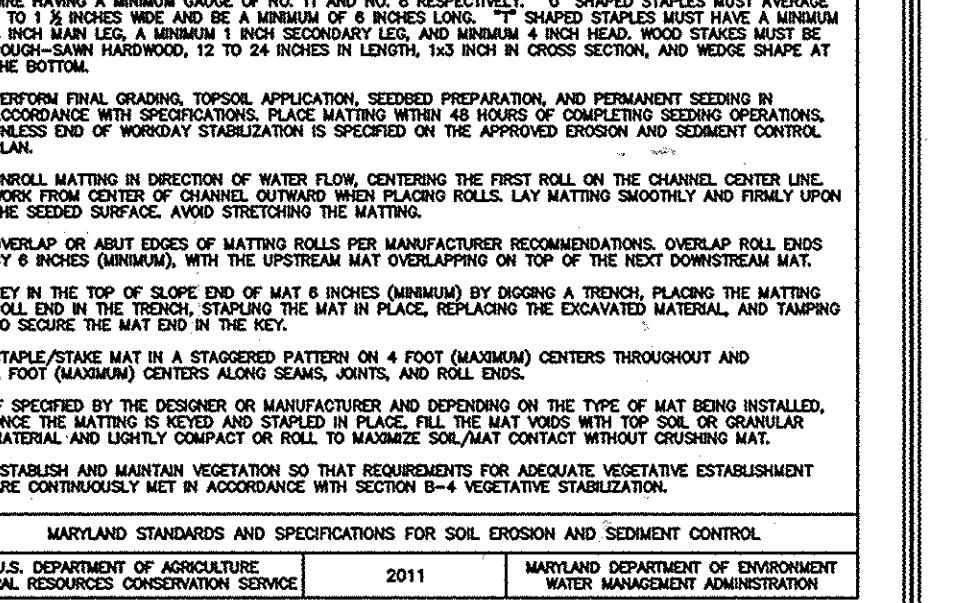
- CONSTRUCTION SPECIFICATIONS
1. USE NONWOVEN 2 INCH X 4 INCH LAMBER.
2. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
3. NAIL THE 2x4 W/ER TO 9 INCH LONG VERTICAL SPACERS (MAXIMUM 6 FEET APART).
4. ATTACH A CONTINUOUS ROLL OF 24 INCH GALVANIZED HARDWARE CLOTH WITH A MINIMUM WIDTH OF 24 INCHES AND A HOLE SIZE OF 1/2 INCH TO 3/4 INCH FROM THE FRONT OPENING TO THE 2x4.
5. PLACE A CONTINUOUS ROLL OF NONWOVEN GEOTEXTILE OF THE SAME DIMENSIONS AS THE HARDWARE CLOTH OVER THE HARDWARE CLOTH AND SECURELY ATTACH TO THE 2x4 W/ER.
6. PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL TO 2x4 ANCHORS (MINIMUM 2 FEET LENGTH) AND SECURE THE ANCHORS ACROSS THE INLET TOP AND HOLD IN PLACE BY SANDING OR OTHER APPROVED ANCHORING METHOD.
7. INSTALL END SPACERS A MINIMUM OF 1 FOOT BEYOND THE ENDS OF THE THROAT OPENING.
8. FROM THE UNDERSIDE OF THE CURB INLET TO THE FRONT EDGE AND FACE OF CURB TO SPAN THE INLET OPENING OVER THE HARDWARE CLOTH AND GEOTEXTILE WITH CLEAN 3/4 TO 1/2 INCH SPACERS.
9. AT NON-SAMP LOCATIONS, INSTALL A TEMPORARY SANDBOX OR ASPHALT BUMP TO PREVENT INLET BYPASS.
10. STABILIZE INLET PROTECTION REQUIRES PERMANENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PERMANENT CLOGGING. IF CLOGGING OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN OR REPLACE GEOTEXTILE AND STONE.



- CONSTRUCTION SPECIFICATIONS
1. USE WOOD POSTS 1 1/2 X 1 1/2 X 6 INCH (MINIMUM) SQUARE CUT OF SOUND QUALITY HARDWOOD, OR AN ALTERNATIVE TO WOODEN POSTS USE STANDARD 'T' OR 'U' SECTION STEEL POSTS WEARING HOLES LESS THAN 1/4 INCH IN DIAMETER.
2. USE 36 INCH MINIMUM POSTS SPACED 18 INCH MINIMUM INTO GROUND NO MORE THAN 6 FEET APART.
3. USE WOVEN SIFT FLEM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS AND FASTEN GEOTEXTILE SECURELY TO UPOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION.
4. PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
5. CHAIN LINK FENCE OVERLAP OF 6 INCHES VERTICALLY INTO THE GROUND, BACKROLL AND COMPACT THE SOIL ON BOTH SIDES OF FABRIC.
6. WARE TWO ENDS OF THE GEOTEXTILE ADJOIN OVERLAP, TWIST, AND STAPLE TO STAPLE IN ACCORDANCE WITH SECTION H-1 MATERIALS.
7. EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SILT FENCE.
8. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN RAINFALL OCCURS IN FENCE OR WHEN SEDIMENT REACHES 25 FEET HIGHER. REPLACE GEOTEXTILE IF TORN, IF UNDEFORMING OCCURS, REINSTALL FENCE.



- CONSTRUCTION SPECIFICATIONS
1. USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS DEMAND ON APPROVED PLAN.
2. USE PERMANENT SOIL STABILIZATION MATTING MADE OF EQUAL WEAR SYNTHETIC, NON-Biodegradable FIBERS OR ELEMENTS OF UNIFORM THICKNESS AND DISTRIBUTION THROUGHOUT.
3. MATTING SHALL BE AT LEAST 1/2 INCH THICK AND 18 INCHES WIDE AND BE A MINIMUM OF 18 INCHES LONG.
4. PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR SHOWING THAT THE MATTING USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
5. SECURE MATTING USING STEEL STAPLES ON WOOD STAPLES. STAPLES MUST BE 'T' OR 'U' SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 18 AND NO. 8 RESPECTIVELY.
6. STAPLES MUST BE AT LEAST 1/2 INCH WIDE AND BE A MINIMUM OF 18 INCHES LONG.
7. STAPLES MUST BE AT LEAST 1/2 INCH WIDE AND BE A MINIMUM OF 18 INCHES LONG.
8. STAPLES MUST BE AT LEAST 1/2 INCH WIDE AND BE A MINIMUM OF 18 INCHES LONG.
9. STAPLES MUST BE AT LEAST 1/2 INCH WIDE AND BE A MINIMUM OF 18 INCHES LONG.
10. STAPLES MUST BE AT LEAST 1/2 INCH WIDE AND BE A MINIMUM OF 18 INCHES LONG.



- CONSTRUCTION SPECIFICATIONS
1. UNROLL MATTING IN DIRECTION OF WATER FLOW, CENTERING THE FIRST ROLL ON THE CHANNEL CENTER LINE.
2. UNROLL MATTING IN DIRECTION OF WATER FLOW, CENTERING THE FIRST ROLL ON THE CHANNEL CENTER LINE.
3. UNROLL MATTING IN DIRECTION OF WATER FLOW, CENTERING THE FIRST ROLL ON THE CHANNEL CENTER LINE.
4. UNROLL MATTING IN DIRECTION OF WATER FLOW, CENTERING THE FIRST ROLL ON THE CHANNEL CENTER LINE.
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9. UNROLL MATTING IN DIRECTION OF WATER FLOW, CENTERING THE FIRST ROLL ON THE CHANNEL CENTER LINE.
10. UNROLL MATTING IN DIRECTION OF WATER FLOW, CENTERING THE FIRST ROLL ON THE CHANNEL CENTER LINE.

SEQUENCE OF CONSTRUCTION

- 1. OBTAIN A GRADING PERMIT AND HOLD PRE-CONSTRUCTION MEETING WITH COUNTY INSPECTOR. (2 WEEKS)
2. NOTIFY 'THIS UTILITY' AT LEAST 48 HOURS BEFORE BEGINNING ANY WORK AT 1-800-527-7777. NOTIFY THE HOWARD COUNTY OFFICE OF CONSTRUCTION/INSPECTION AT 410-313-1330 AT LEAST 24 HOURS BEFORE STARTING WORK.
3. INSTALL STABILIZED CONSTRUCTION ENTRANCE, CURB INLET PROTECTION, SILT FENCE, AND SUPER-SILT FENCE. (1 DAY)
4. REMOVE ABANDONED SHIMMING POOL & NECESSARY TREES AND ROUGH GRADE LOT. (5 DAYS)
5. INSTALL TEMPORARY SEEDING. (1 DAY)
6. CONSTRUCT BUILDING, PORCH, AND DRIVEWAY. INSTALL WATER AND SEWER HOUSE CONNECTIONS TO HOUSE. INSTALL EROSION CONTROL MATTING. (4 MONTHS)
7. INSTALL ROOF LEAKS, FINE GRADE SITE, INSTALL DRYWELLS, AND INSTALL PERMANENT MATTING. (1 DAY)
8. ALL FINAL GRADING AND STABILIZATION SHOULD BE COMPLETED BEFORE ANY REMOVAL OF CONTROLS. WHEN ALL CONTRIBUTING AREAS TO THE SEDIMENT CONTROL DEVICES HAVE BEEN STABILIZED AND WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, THE SEDIMENT CONTROL DEVICES MAY BE REMOVED. (3 DAYS)
NOTE: THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE EACH RAINFALL AND ON A DAILY BASIS.

OWNERS / DEVELOPER: TYSON TALL TIMBER INC. 11950 TALL TIMBER DRIVE, CLARKSVILLE, MD 21029-1213. 410-370-9406.

FISHER, COLLINS & CARTER, INC. ENGINEERING CONSULTANTS & LAND SURVEYORS. CENTRAL SQUARE OFFICE PARK, 10722 BELLEVILLE NATIONAL PIKE, CLARKSVILLE, MD 21029. (410) 461-2895.

PROFESSIONAL CERTIFICATION: JOHN K. ROBERTSON, CIVIL ENGINEER. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 38386, EXPIRATION DATE: 01/12/2016.

BUILDER/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 ANY RESPONSIBLE PROFESSIONAL ENGINEER 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.

APPROVED: DEPARTMENT OF PLANNING AND ZONING. Director: Department of Planning and Zoning. Chief, Division of Land Development. Chief, Development Engineering Division.

SEDIMENT & EROSION CONTROL NOTES & DETAILS. TROTTER WOODS, LOT 24, ZONED R-20. TAX MAP NO. 35, GRID NO. 8, PARCEL NO. 21. FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND. SCALE: AS SHOWN. DATE: AUGUST, 2015. SHEET 2 OF 2. SDP-15-062.