

i. Length - minimum of 50' (* 30' for a single residence lot). 2. Width - 10t minimum, should be flored at the existing road to provide a

 Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. ** The plan approval authority may not require single family residences to use geotextile. Stone - crushed aggregate (2" to 3") or recialmed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.

5. Surface Nater - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable bern with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey, a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.

Location – A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized con-struction entrance.

DETAIL 1 - EARTH DIKE

CROSS SECTION

POSITIVE DRAINAGE SUFFICIENT TO DRAIN

PLAN VIEW

Seed and cover with Erosian Control Matting or line with sod.
 4* - 7* stone or recycled concrete equivalent pressed into

. All temporary earth dikes shall have uninterrupted positive

undisturbed, stabilized area at a non-erocive velocity.

or other irregularities which will impede normal flow.

6. Fill shall be compacted by earth moving equipment.

Construction Specifications

grade to an outlet. Spot elevations may be necessary for grades less than It

2. Runoff diverted from a disturbed area shall be conveyed to a sediment

3. Runoff diverted from an undisturbed area shall outlet directly into an

4. All trees, brush, stumps, obstructions, and other objectional material

shall be removed and disposed of so as not to interfere with the proper

5. The dike shall be excavated or shaped to line, grade and cross section as required to meet the criteria specified herein and be free of bank projections

7. All earth removed and not needed for construction shall be placed so that it will not interfere with the functioning of the dike.

8, inspection and maintenance must be provided periodically and often

FLOW CHANNEL STABILIZATION

24 SLOPE OR FLATTER

FLOW

EXCAVATE TO PROVIDE

a-DIKE HEIGHT 18°

b-DIKE WIDTH 24°

c-FLOW MIDTH 4'

d-FLOW DEPTH 12"

PAGE HARYLAND DEPARTMENT OF ENVIRONMENT
A - 1 - 6 HATER MANAGEMENT ADMINISTRATION

DIKE A DIKE B

STANDARD SYMBOL

A-2 B-3

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

21 SLOPE OR FLATTER.

CUT OR FILL SLOPE - V

GRADE LINE

Seed and cayer with straw mulch.

34" MINIMUN 36' MINIMUM - 8ª MINIMUM ----- 55F ----. Fencing shall be 42" in height and constructed in occordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6' length 2. Chain link fence shall be fastened securely to the fence posts with wire ties. 3. Filter cloth shall be fastened securely to the chain link fence with ties spaced 4. Filter cloth shall be embedded a minimum of θ^{ψ} into the ground. 5. When two sections of filter cloth adjoin each other, they shall be overlapped 6. Maintenance shall be performed as needed and silt buildups removed when "builges"

develop in the silt fence, or when silt reaches 50% of fence height

DETAIL 30 - EROSION CONTROL MATTING

Key-in the matting by placing the top ends of the matting in a narrow trench, 6st in depth. Backfill the trench and tamp firmly to conform to the channel cross-section. Secure with a row of staples about 4st down slope from the trench. Spacing between staples is 6st.

2. Staple the 4" overlap in the channel center using an 18" spacing

Before stapling the outer edges of the matting, make sure the matting is smooth and in firm contact with the soil.

4. Stoples shall be placed 2' apart with 4 rows for each strip, 2

5. Where one roll of matting ends and another begins, the end of the top strip shall overlap the upper end of the lower strip by 4*,

6. The discharge end of the matting liner should be similarly

spaced 6° apart in a staggered pattern on either side.

secured with 2 double rows of stoples.

effected by the flow must be keyed-in.

DATE

shiptop fashion. Reinforce the overlap with a double row of staples

Note: If flow will enter from the edge of the matting then the area

U.S. DEPARTMENT OF AGRICULTURE PAGE MARYLAND DEPARTMENT OF ENVIRONMENT SOIL CONSERVATION SERVICE G - 22 - 2 WATER MANAGEMENT ADMINISTRATION

Tensile Strength

Filtering Efficiency 75% (min.)

U.S. DEPARTMENT OF AGRICULTURE PAGE

Tensile Modulus

CROSS-SECTION

7. Fliter cloth shall be fastened securely to each fence post with wire ties or

 $T \cap$

TYPICAL STAPLES NO. II

staples at top and mild section and shall meet the following requirements for

20 lbs/in (mln.)

PERSPECTIVE VIEW EMBED GEOTEXTILE CLASS F — A MINIMUM OF 8" VERTICALLY - FENCE POST MINIMUM OF CROSS SECTION STAPLE! JOINING TWO ADJACENT SILT FENCE SECTIONS Construction Specifications Fence posts shall be a minimum of 36" long, driven 16" minimum into the ground. Hood posts shall be 1 1/2" x 1 1/2" square (minimum) cut, or 1 3/4" diameter (minimum) round and shall be of sound quality handwood. Steel posts will be standard T or U section weighing not less than 1.00 pound per linear foot. Tenelle Strength Tenelle Modulus 50 lbs/in (min.) 0.5 gal ft /minute (max.) Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to provent sediment bypass. Slit Pence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reaches 50% of the fabric helant.

DETAIL 22 - SILT FENCE STANDARD SYMBOL

Test: M9MT 509 20 lbs/in (min.) Test: MSMT 509
0.3 gal/ft /minute (max.) Test: MSMT 322 U.S. DEPARTMENT OF AGRICULTURE PAGE MATYLAND DEPARTMENT OF ENVIRONMENT SOIL CONSERVATION SERVICE N - 26 - 3 WATER MANAGEMENT ADMINISTRATION

PAGE MARYLAND DEPARTMENT OF ENVIRONMENT
E - 5 - 3 WATER MANAGEMENT ADMINISTRATION

SEQUENCE OF CONSTRUCTION

1. Obtain Grading permit, 2. Notify Howard County Department of Inspections, License and Permits at (410) 313-1880 at least 24 hours before starting

any work. 3. Install stablized construction entrance, earth dikes, super silt fence, and silt fence. (I week) 4. Clear, grub, and rough grade site. (4 weeks)

5. Construct driveway culvert and grass channel along existing drainage ditch. (3 weeks) 6. Construct substation site, access drive, equipment foundations

and control building, (4 months) 7. Construct entrance. (2 weeks)

8. Construct remaining grass swales and fine grade site. Install all erosion control matting. (2 weeks) 9. Install landscaping buffer plantings. (1 week)

10. Flush driveway culvert. (1 day) 11. During grading and after each rainfall, contractor will inspect

and provide necessary maintenance to the sediment control measures on this plan. 12. Following initial soil disturbance or any redisturbances, permanent or temporary stabilization shall be completed

A. 7 calender days for all perimeter sediment control structures, dikes, swales and all slopes greater than 3:1, B. 14 calender days for all other

disturbed areas. 13. Upon stabilization of all disturbed areas and with the permission of the sediment control inspector, remove all sediment control measures and stabilize any remaining disturbed area. (I week)

21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL

iii. For sites having disturbed areas over 5 acres:
i. On soil meeting topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
a. pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
b. Organic content of topsoil shall be not less than 1.5 percent by weight.
c. Topsoil having soluble salt content greater than 500 parts per million shall not be used.
d. No sod or seed shall be placed on soil 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.

phyto-toxic materials.

NOTE: Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by

Place topsoil (if required) and apply soil ammendments specified in 20.0 Vegetative Stabilization-Section I-Vegetative Stabilization Methods and Materials.

When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and

II. Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4⁵
 8⁸ higher in elevation.

preading shall be performed in such a monner that soddition or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions

iv. Topsoil shall not be place while 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.

iii. Topsoil shall be uniformly distributed in a 4" - 8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding

V. Topsoli Application

iii. For sites having disturbed areas over 5 acres:

Definition Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

To provide a suitable soil medium for vegetable growth.

Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or Conditions Where Practice Applies

This practice is limited to areas having 2:1 or flatter 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

1. For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

Construction and Material Specifications Topsoil salvaged from the existing site may be used provided that 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 published by USDA-SCS in cooperation with Maryland Agricultural Experimental Station.

11. Topsoil Specifications - Sail to be used as topsoil must meet the following:

i. Topsoit shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or a soil scientist and approved by the appropriate approval authority. Recardless, subsolls and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger that 1 and 1/2" in

II. Topsoil must be free of plants or plant parts such as Bermuda grass, avackgrass, Johnsongrass, nutsedge, poison ivy, thistle, or others as specified.

iii. Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tilliage operations as described in the following procedures.

II. For sites having disturbed areas under 5 acresi Place topsoil (If required) and apply soil amendments as specified in <u>20.0 Vegetative Stabilization</u> -Section I - Vegetative Stabilization Methods and Materials. PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE

SEEDBED PREPARATION: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously

SOIL AMENDMENTS: In lieu of soil test recommendations, use one of the following schedules:

1) Preferred-Apply 2 tons per acre dolomitic limestone (92 lbs/100 sq.ft.) and 600 lbs per acre 10-10-10 fertilizer (14 lbs./1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil. At the time of seeding, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq.ft.) 2) Acceptable-Apply 2 tons per acre dolamatic limestone (92 lbs/ 1000 sq.ft.) and apply 1000 lbs. per acre 10-10-10- fertilizer (23 lbs./1000 sq.ft.) before seeding. Harrow or disc into upper

three inches of soil. SEEDING: For the periods March I thru April 30, and August I thru October 15, seed with 60 lbs. per acre (1.4 lbs/1000 sq.ft.) of Kentucky 3I Tall Fescue. For the period May I thru July 3I, seed with 60 lbs. Kentucky 3I Tall Fescue per acre and 2 lbs. per acre (.05 lbs./1000 sq.ft.) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs/acre Kentucky 3I Tall Fescue and mulch with 2 tons/acre well anchored straw.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq.ft.) for anchoring.

MAINTENANCE: Inspect all seeded areas and make needed repairs,

replacements and reseedings.

TEMPORARY SEEDING NOTES SEEDBED PREPARATION: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously

SOIL AMENDMENTS: Apply 600 lbs. per acre 10-10-10 fertilizer

SEEDING: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per acre of annual rye (3.2 lbs./1000 sq.ft.) For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (.07 lbs./1000 sq.ft.). For the period November 1 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 saft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gai/1000 saft.) for anchoring.

REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT

SEDIMENT CONTROL NOTES

and revisions thereto.

project site.

1. A minimum of 48 hours notice must be given to the Howard County Department of Inspection, License and Permits Sediment Control Division prior to the start of any construction (313-1855)

2. All vegetation and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

3. Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: (a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes, and all slopes greater than 3:1, (b) 14 days as to all other disturbed or graded areas on the

4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 7, HOWARD COUNTY DESIGN MANUAL, Storm Drainage.

5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding, sod, temporary seeding, and mulching (Sec. G). Temporary stabilization with mulch alone shall be done when recommended seeding dates do not allow for proper germination and establishment of arasses.

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 obtained from the Howard County Sediment Control Inspector.

7. Site Analysis

Total Area _ 2.75 Acres 0.98 Acres Area Disturbed Area to be roofed or paved 1.77 Acres 1209 CY Area to be vegetatively stabilized Total Cut -Total Fill Offsite waste/borrow area location

8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.

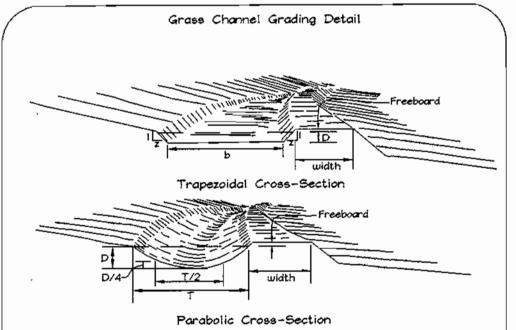
Howard County Sediment Control Inspector.

9. Additional sediment controls must be provided, if deemed necessary by the

10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.

II. Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and stabilized within one working day, whichever is shorter

* To be determined by contractor, with pre-approval of the Sediment Control Inspector with an approved and active grading permit



Construction Specifications 1. All trees, brush, stumps, obstructions and other objectionable materials shall be removed and disposed of so as not to interfere with the proper functioning of the

diversion.

2. The diversion shall be excavated or shaped to line, grade and cross section as required to meet the criteria specified herein, and be free of irregularities which will impede normal flow. 3. Fills shall be compacted as needed to prevent unequal settlement that would cause damage in the competed diversion.

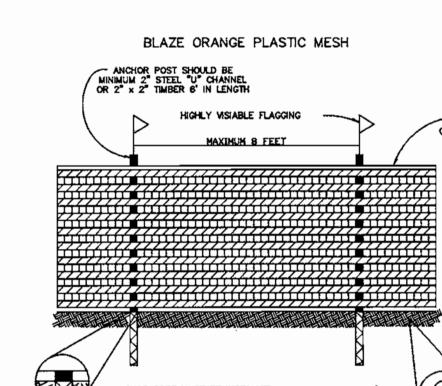
All earth removed and not needed in construction shall be spread or disposed of so that it will not interfere with the functioning of the diversion.

5. Stabilization shall be done according to the appropriate standard and specifications for vegetative practices.

A. For design velocities of less than 3.5 ft. per second., seeding and mulching may be used for the establishment of the vegetation. It is recommended that, when conditions permit, temporary diversions or other means be used to prevent water from entering

the diversion during the establishment of the vegetation.

b. For design velocities of more than 3.5 feet per second, the diversion shall be stabilized with sod, with seeding protected by jute or excelsior matting or with seeding and mulching including temporary diversion of water until the vegetation is established. See the standard and specifications for protective materials.



NOTES: FOREST PROTECTION DEVICE ONLY.

RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.

BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.

ROOT DAMAGE SHOULD BE AVOIDED.

PROTECTIVE SIGNAGE MAY ALSO BE USED.

DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.

TREE PROTECTION DETAIL



8318 FORREST STREET ELLICOTT CITY, MARYLAND 21043 TEL: (410) 750-1150 FAX:(410) 750-7350

Engineers Planners Surveyors 8318 Forrest Street Ellicott City, MD 21043 Tel:410-750-2251 Fax: 410-750-7350

E-mail: FSHAssociates@cs.com

UPDATE YOUR PRINT TO REFLECT "AS BUILT" STATE &

RETURN A COPY TO THE APPLICABLE DESIGN UNIT

	REV.	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED	AUTOCAD	EROSION AND SEDIMENT COTROL	
	i		D01492 INSTALL NEW 34.5-13.8KV SUBSTATION. 3 FDR POS & 2 FDR'S #8913,8914	ENGINEERING CIVIL ELEC PROJ. ENG. PROJ. MGR. PRIN ENG. SUPV. ENG		DETAILS Parcel F—2 1st Election District Tax Map 37 Grid 23 Parcel 362 Howard County, Maryland SHEET 4 OF 6 34.5—13kV SUBSTATION		
1					DESIGN GROUP	MEADOWRIDGE		
			DRAWN ERI	DESIGNED ERI DRAWN ERI	SUBSTATION & SYSTEM PROTECTION			
						CHECKED APPROVED DATE20MAR2003	BGE SCALE 1"=30' REV	

DEPARTMENT OF PLANNING AND ZONING REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL

CONSERVATION DISTRICT.

DEVELOPER'S CERTIFICATE

DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL,

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

AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION

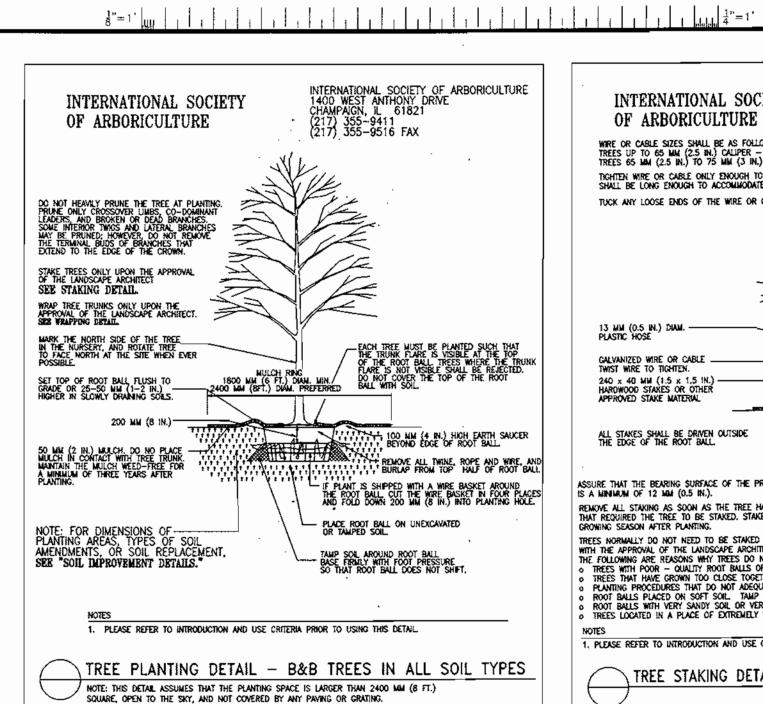
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE

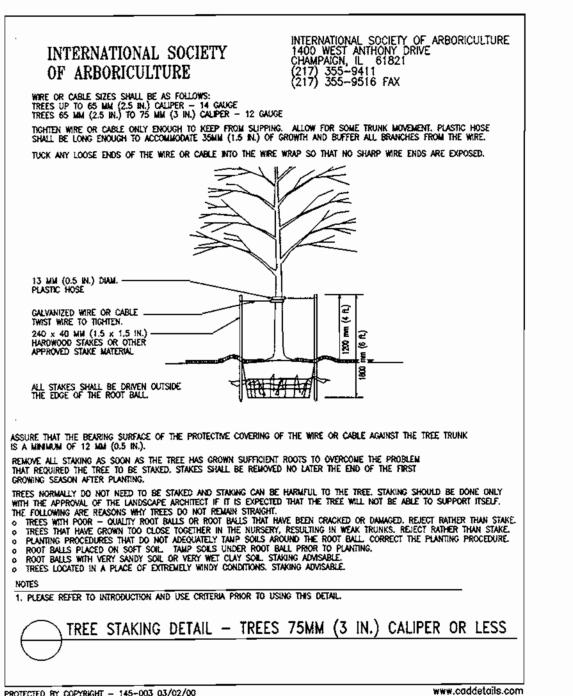
HOWARD SCD

"I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION 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.

tacharia SIGNATURE OF ENGINEER ZACHARIA Y. FISCH

SDP-03-74





	INTERNATIONAL CONIETY OF ADDODICULTUDE
IETY	INTERNATIONAL SOCIETY OF ARBORICULTURE 1400 WEST ANTHONY DRIVE CHAMPAIGN, IL 61821
	(217) 355-9411 (217) 355-9516 FAX
OWS: · 14 GAUGE › CALIPER - 12 GAL	UGE
KEEP FROM SUPPI	HIG. ALLOW FOR SOME TRUNK MOVEMENT. PLASTIC HOSE OF GROWTH AND BUFFER ALL BRANCHES FROM THE WIRE.
CABLE INTO THE WIF	RE WRAP SO THAT NO SHARP WIRE ENDS ARE EXPOSED.
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ROTECTIVE COVERING	OF THE WIRE OR CABLE AGAINST THE TREE TRUNK
	INT ROOTS TO OVERCOME THE PROBLEM WED NO LATER THE END OF THE FIRST
	BE HARMFUL TO THE TREE. STAKING SHOULD BE DONE ONLY
not remain straigh	TED THAT THE TREE WILL NOT BE ABLE TO SUPPORT ITSELF. HAVE BEEN CRACKED OR DAMAGED, REJECT RATHER THAN STAKE.
THER IN THE NURSE JATELY TAMP SOILS	TRY, RESULTING IN WEAK TRUNKS. REJECT RATHER THAN STAKE. AROUND THE ROOT BALL CORRECT THE PLANTING PROCEDURE.
RY WET CLAY SOIL !	i Ball prior to Planting, Staking Admsable, Staking admsable,
	1900a Dec 0710
CRITERIA PRIOR TO	
AIL - TREE	S 75MM (3 IN.) CALIPER OR LESS
	www.anddotella.ana
3	www.caddetails.com
 	

SEC 2015 COUNTY OF THE PROPERTY OF THE PROPERT
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DRAINAGE AREA MAP — CULVERT

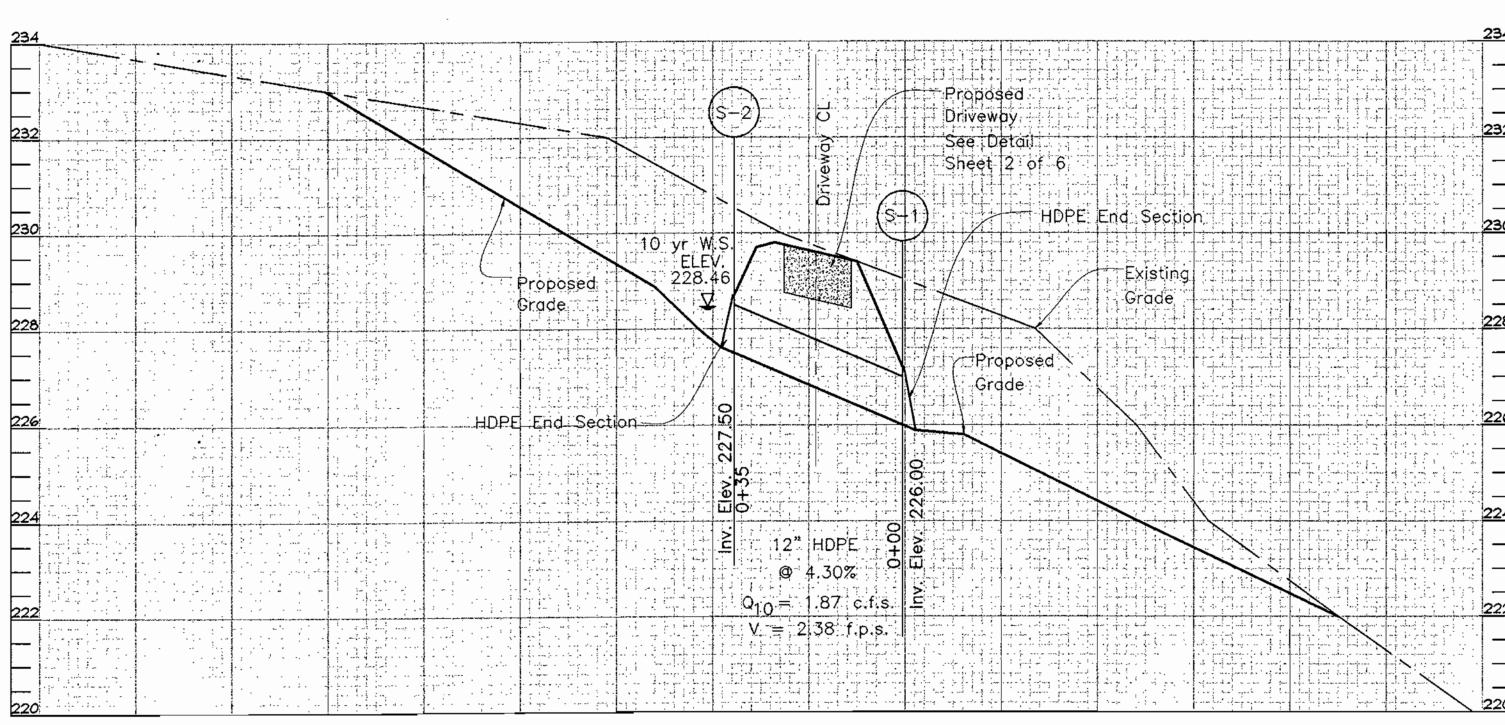
- 1								
	NO.	TYPE	TYPE LOCATION			INV. OUT	REMARKS	
	S-1	12" HDPE End Section	N 552,428.03 E 1,376,849.15	227.17	226.00	225.88	Hancor o Equivalen	
	S-2	12" HDPE End Section	N 552,433.85 E 1,376,816.50	228.67	227.62	227.50	Hancor o Equivalen	
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STORM DRAIN STRUCTURE SCHEDULE

	STORM DRAIN PIPE SCHEDUL	E
SIZE	TYPE	LENGTH
12"	HDPE	35 LF

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	SOILS LEGEND	
SYMBOL	NAME / DESCRIPTION	SOIL GROUP
BeB2	Beltsville silt loam, 1-5 percent slopes, moderately eroded	С
BeC2	Beltsville silt loam, 5-10 percent slopes, moderately eroded	С
KhC2	Keyport silt loam, 3—10 percent slopes, moderately eroded	С
L1	Leonardtown silt loam	D
SfC2	Sassafras gravelly sandy loam, 5-10 percent slopes, moderately eroded	В
SsE	Sassafras soils, 15-40 percent slopes	В



STORM DRAIN STRUCTURE - PROFILE Horizontal Scale: 1" = 20' Vertical Scale: 1" = 2'

PLANTING NOTES

1. Riparian areas may be planted as soon as reasonable to do so. Late winter early spring plantings are preferred. Earliest planting dates will vary from year to year but planting may generally begin as soon as the ground is no longer frozen. Alternate planting dates may be considered as condition warrants.

Scale: 1" = 50'

2. Soil amendments and fertilization récommendations will be made based upon the results of soil analysis for nitrogen, phosphorus, potassium, organic matter content and pH. If required, fertilizer will be provided using a slow release, soluble 16-8-16 analysis designed to last 5-8 years contained in polyethylene perforated bags such as manufactured by ADCO Works, P.O. Box 310 Hollins, N.Y. 11423 or approved equal.

3. Plant materials will be planted in accordance with the Planting Distribution Diagram, Planting Details and plant schedule.

4. Plant material shall be nursery grown and inspected prior to planting. Plants not conforming to the American Standard for Nursery Stock specifications for size, form, vigor, or roots, or due to trunk wounds, breakage, desiccation, insect or disease must be replaced.

5. Planting stock must be protected from desiccation at all times prior to planting. Materials held for planting shall be moistened and placed in cool shaded areas until ready for placement.

6. Newly planted trees may require watering at least once per week during the first growing season depending on rainfall in order to get established. The initial planting operation should allow for watering during installation to completely soak backfill material.

7. Planting holes should be excavated to a minimum diameter of 2.5 to 3 times the diameter of the root ball or container. Mechanical angering is preferred with scarification of the sides of each hole.

8. Mulch shall be applied in accordance with the diagram provided and shall consist of composted, shredded hardwood bark mulch, free of wood alcohol.

9. One hundred per cent (100%) survival of plantings shall be guaranteed for one (1) year. Replacement plantings shall be provided after first year's growing season.



FSH Associates
Engineers Planners Surveyors
8318 Forrest Street Ellicott City, MD 21043
Tel:410-750-2251 Fax: 410-750-7350
E-mail: FSHAssociates@cs.com

UPDATE YOUR PRINT TO REFLECT "AS BUILT" STATE &

		E-Hall. Fo	rrassociales@cs.com	RETURN A COPY TO THE APPLICABLE DESIGN UNIT			
REV.	DATE	ACCOUNT NO	DESCRIPTION	APPROVED	AUTOCAD	STORM DRAIN & LANDSCAPING	
		D01492	INSTALL NEW 34.5-13.8KV SUBSTATION. 3 FDR POS & 2 FDR'S #8913,8914		ENGINEERING CIVIL ELEC. PROJ. ENG. PROJ. MGR. PRIN. ENG. SJPV. ENG.	NOTES AND DETAILS Parcel F—2 1st Election District Tax Map 37 Grid 23 Parcel 362 Howard County, Maryland SHEET 5 OF 6 34.5—13kV SUBSTATION	
					DESIGN GROUP DESIGNED ERI	MEADOWRIDGE	
					DRAWN ERI	SUBSTATION & SYSTEM PROTECTION	
					APPROVED DATE 20MAR2003	BGE SCALE AS SHOWN REV	

CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING, AND ZONING

8318 FORREST STREET ELLICOTT CITY, MARYLAND 21043 TEL: (410) 750-1150 FAX:(410) 750-7350

SDP-03-74

