

BIO-RETENTION PLANTING AREA

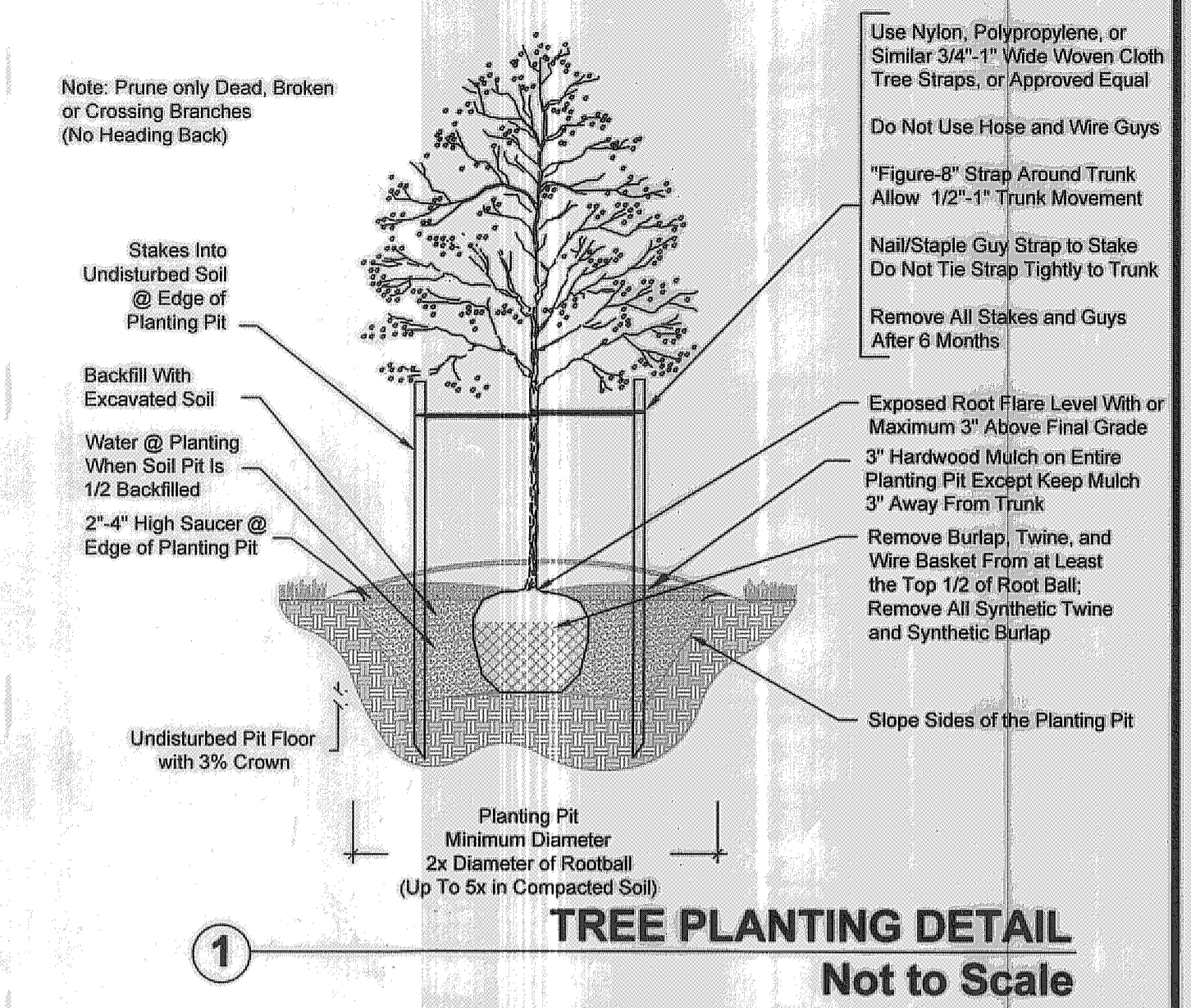
PLANTING SCHEDULE

ID	Common Name	Scientific Name	Size	QTY	Spacing	Notes
BA	White Ash	Fraxinus americana	2.5' Cal	4	10' O.C.	Balled & Burlapped
BA	Red Maple	Acer rubrum	2.5' Cal	4	10' O.C.	Balled & Burlapped
BA	Eastern Red Cedar	Juniperus virginiana	2.5' Cal	4	10' O.C.	Balled & Burlapped
BA	Red Osier Dogwood	Cornus stolonifera	2 Gal.	16	3' O.C.	24" Height min.
BA	Spicebush	Lindera benzoin	2 Gal.	16	3' O.C.	24" Height min.
BA	Cardinal Flower	Lobelia cardinalis	1 Gal.	50	2' O.C.	
BA	Yellow Iris	Iris pseudacorus	1 Gal.	50	2' O.C.	
BA	Broomsedge	Andropogon virginicus	1 Gal.	100	2' O.C.	

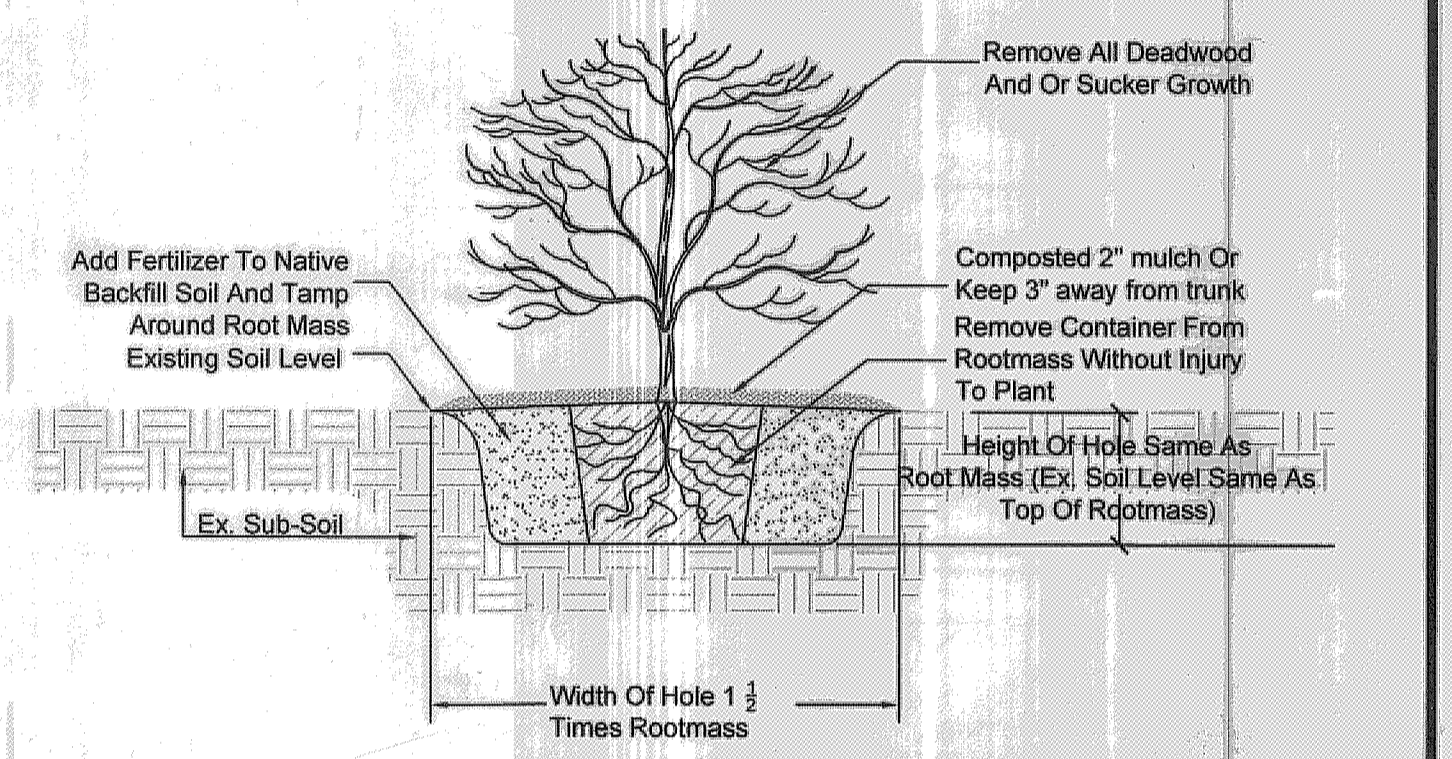
BA = Bio-retention Area

STORMWATER FILTERING SPECIFICATIONS

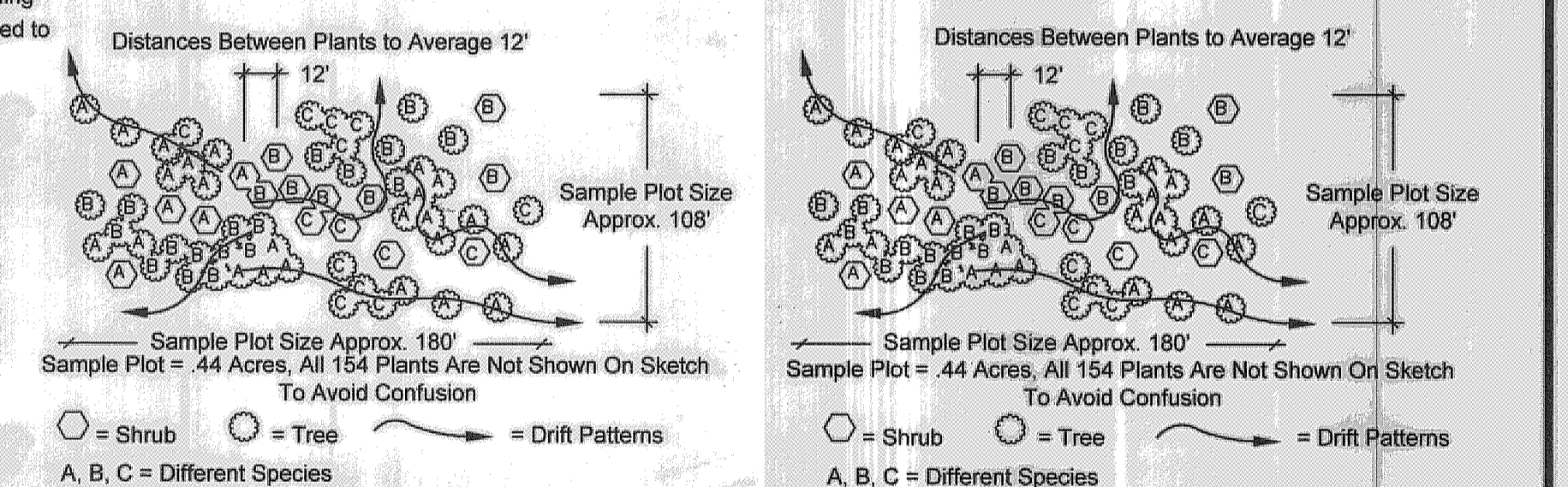
- Soil Texture and Structure**  
Topsoil for bioretention shall have a sandy loam, loamy sand, or loam texture per USDA textural triangle. Maximum clay content is 5%; soil mixture shall be 50-60% sand; 20-30% leaf mulch; and 20-30% topsoil. The soil shall be a uniform mix, free of stones, stumps, roots, or other similar objects larger than two inches. No other materials or substances shall be mixed or dumped within the bioretention that may be harmful to plant growth, or prove a hindrance to the planting or maintenance operations. The planting soil shall be free of Bermuda Grass, Quackgrass, Johnson Grass, Mugwort, Nutsedge, Poison Ivy, Canadian Thistle, Tearthumb, or other noxious weeds.
- Soil Testing**  
Planting soil for bioretention areas must be tested prior to installation for pH and organic matter. The soil should meet the following criteria: pH Range: 5.5-6.5 Organic Matter: 1.5-3.0% It is required that a sieve analysis, pH, and organic matter test be performed per each bioretention area.
- Soil Placement**  
Placement of the planting soil in the bioretention area should be in lifts of 12 to 18 inches and lightly compacted. Minimal compaction effort can be applied to the soil by tamping with a bucket from a dozer or backhoe. Refer also to Section 6 - Compaction.
- Mulch Specifications**  
Individual planting shall be mulched (refer to landscaping details, this sheet). Acceptable mulch shall be shredded hardwood only. Mulch must be well aged, uniform in color, and free of foreign material including plant material. Well aged mulch is defined as mulch that has been stockpiled or stored for at least twelve (12) months.
- Sand Specifications**  
Provide clean sand, free of deleterious materials. Sand shall meet AASHTP M-6 or ASTM C-33 with grain size of 0.02"-0.04". Sand must be silica based, no limestone products may be used. If the material is white or gray in color it may be rejected. Sand must be clean. Natural, unwashed sand deposits may not be used. Likewise, sand that has become contaminated by improper storage or installation practices will be rejected. Manufactured sand or stone dust is not acceptable under any circumstances.
- Compaction**  
It is very important to minimize compaction of both the base of the bioretention area and the required backfill. When possible, use excavation hoes to remove original soil. If bioretention areas are excavated using a loader, the contractor should use wide track or marsh track equipment, or light equipment with turf type tires. Use of equipment with narrow tracks or narrow tires, rubber tires with large lugs, or high pressure tires will cause excessive compaction resulting in reduced infiltration rates and storage volumes and is not acceptable. Compaction will significantly contribute to design failure. Compaction can be alleviated at the base of the bioretention facility by using a primary tilling operation such as a chisel plow, ripper, or subsoiler. These tilling operations are to restructure the soil profile through the 12 inch compaction zone. Substitute methods must be approved by the engineer. Rototillers typically do not till deep enough to reduce the effects of compaction from heavy equipment. When back filling the bioretention facility, place soil in lifts 12" or greater. Do not use heavy equipment within the bioretention basin. Heavy equipment can be used around the perimeter of the basin to supply soils and sand. Grade bioretention materials with light equipment such as a compact loader or a dozer/loader with marsh tracks.
- Gravel Filter Specifications**  
Underdrain gravel blanket shall be double washed, MSHA #57 gravel.
- Inspection Requirements**
  - The contractor shall arrange a "preconstruction meeting" with the owner and architect/engineer prior to beginning work on the bioretention facility.
  - At the completion of excavation to inspect subgrade preparation.
  - During underdrain and filter installation
  - Back fill of soil into the bioretention areas. Soil certifications for back fill are required.
  - The final topsoil layers should be thoroughly wetted achieve settlement of the soil/sand backfill mix.
  - Additional soil backfill should be placed as required to achieve the design top surface elevations.
  - The work shall be inspected by the owner/architect prior to final stabilization and planting.
  - Sediment & erosion control practices may be removed upon approval by the County inspector.
  - The plant root ball should be planted so 1/8th of the ball is above final grade surface.
- Fertilization**: The topsoil specifications provide enough organic material to adequately supply nutrients from natural cycling. The primary function of the bioretention structure is to improve water quality. Adding fertilizers defeats, or at a minimum, impedes this goal. Only add fertilizer if wood chips or mulch is used to amend the soil. Rototill urea fertilizer at a rate of 2 pounds per 1000 square feet.
- Grass Seeding**: Seed areas according to the following schedule:
  - Panicum virgatum (Switchgrass) 0.25 lb. per 1000 sq. ft.
  - Poa trivialis (Rough-stalked bluegrass) 1.00 lb. per 1000 sq. ft.
  - Festuca ovina var. duriuscula (Hard fescue) 1.00 lb. per 1000 sq. ft.



1 TREE PLANTING DETAIL Not to Scale



2 SHRUB PLANTING DETAIL Not to Scale



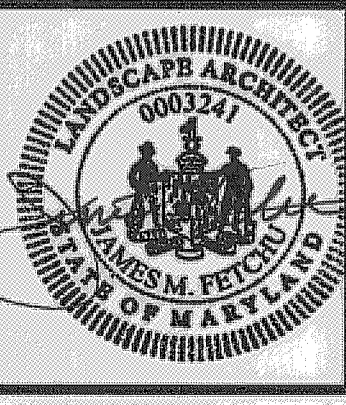
3 PLANTING LAYOUT DETAIL (Aggregate distribution drift theory)

HOWARD COUNTY DPW - ENVIRONMENTAL SERVICES  
6751 COLUMBIA GATEWAY DRIVE, SUITE 514  
COLUMBIA, MD 21046  
PHONE: (410) 313-6415  
ATTN: RICHARD POWELL

HOWARD COUNTY, MD  
PARCEL 106  
ELECTION DISTRICT # 4  
MAP 14

Danmark Drive/Burntwoods Road Basin  
Choi Property Trench Retrofit  
Planting Notes and Details

DATE:	02/06				
DESIGNED:	JMF/TCS				
DRAFTED:	HT				
CHECKED:	TCS				
BASE DATA:	J.A. RICE	NO.	REVISIONS	BY	DATE

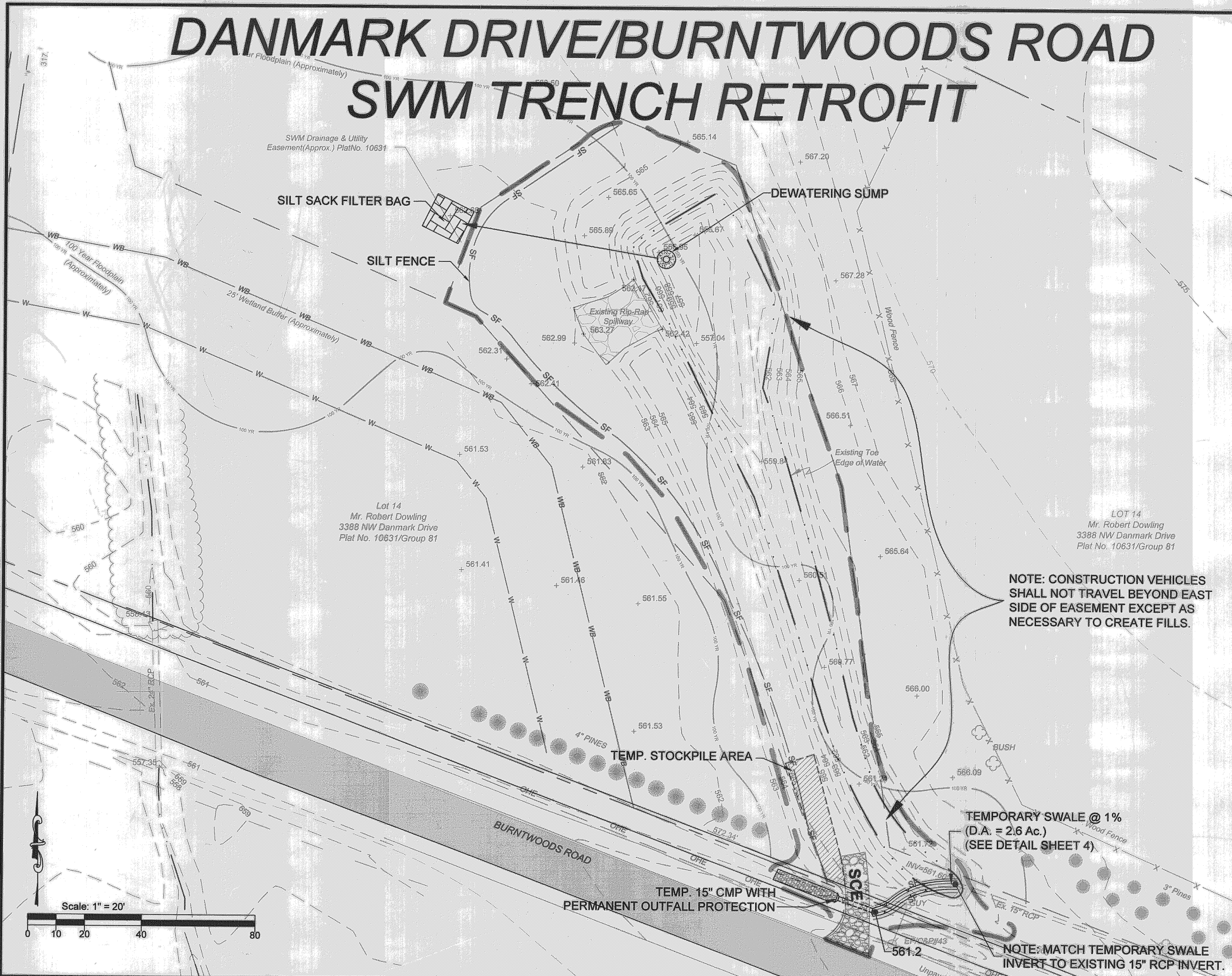


**CPJ** Charles P. Johnson & Associates, Inc.  
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Phone: (301) 434-7000 E-mail: cpj@cpja.com Fax: (301) 434-9994  
FREDERICK, MD FAIRFAX, VA

SCALE AS SHOWN  
SHEET 6  
OF 6 SHEETS  
JOB NO. 34-513

CP.05.57

# DANMARK DRIVE/BURNTWOODS ROAD SWM TRENCH RETROFIT

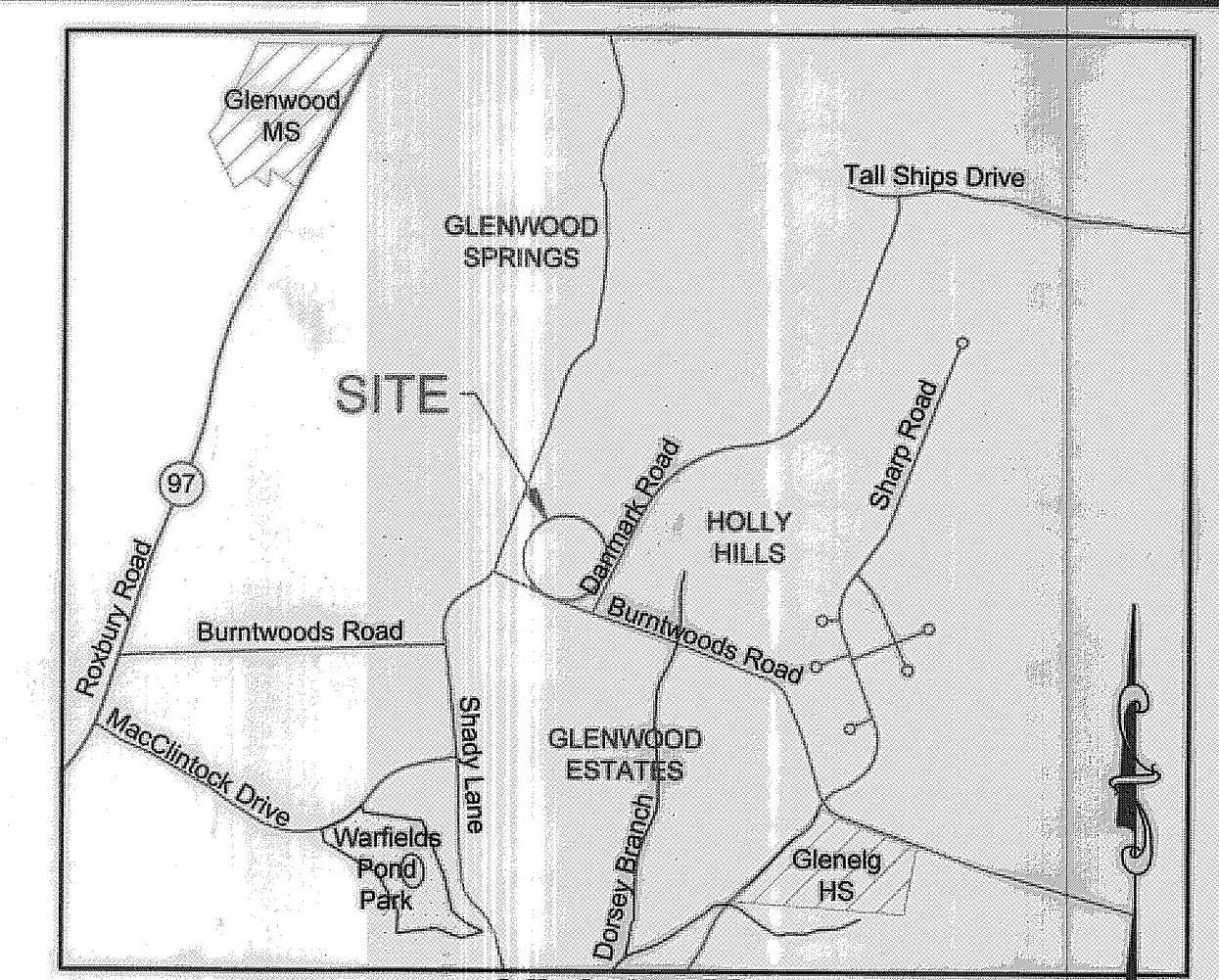


### Legend

- OHE Overhead Wire
- SF Silt Fence
- 100 Year Floodplain
- Ex. Fence
- 426 Existing Contours
- Tree Line
- Property Line
- w Wetland
- wb Wetland Buffer
- GEP
- Sand Bag Diversion
- SCE Stabilized Construction Entrance
- Limits of Disturbance
- Existing Tree
- Proposed Pipe
- Dewatering Sump
- Silt Sack
- Temp. Swale

### Sheet Index

1. Title Sheet with Sediment Control
2. Design View
3. Profiles
4. Sediment Control Notes and Details
5. Vegetative Stabilization Notes
6. Planting Notes and Details



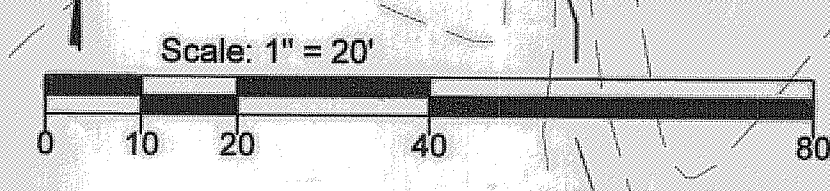
- ### Sequence of Construction
- Danmark Drive Infiltration Trench Rehabilitation (Original Plan # F-89-167)
1. Obtain county and state permits.
  2. Clear and grub in preparation to install the stabilized construction entrance with 15" CMP, silt fence, and temporary swale (1 day).
  3. Install sediment control items (1 day).
  4. Install de-watering sump pit and de-water basin area if permanent pool saturated soils exist (1 day).
  5. Excavate previously failed soil media to depth shown on plans. Re-grade berm area as shown on plans and temporarily stabilize the seed. Soil removed from berm shall be used as fill along east side of existing pond, and for compacted backfill between forsbay and sand filter (see profile C-C) (2 days).
  6. Install sand underdrain system and drainage/planting media as shown on plans (2 days).
  7. Install SM 1 without flow pipes (1 day).
  8. Install rip rap at new forsbay (1 day).
  9. During 48 hours of predicted dry weather, connect old 15" RCP to SM 1 (1 day).
  10. Install plantings and permanent seeding (1 day).
  11. Install 10" PVC overflow from SM 1 to outfall swale (1 day)
  12. With sediment control inspectors permission remove remaining sediment control devices and stabilize areas disturbed by this process. (Install 8" PVC overflow pipe from SM 1 to outfall swale). (1 day).
- Total = 13 days**

- ### General Notes
1. De-watered areas shall be pumped to a silt sack or other acceptable device.
  2. MDE tracking number: 200563406, approved under general waterway construction permit.
  3. These plans were prepared with the field information at the time of project survey. It is possible that field conditions as of the date of construction vary from these plans and it is the contractor's responsibility to verify field conditions such as elevations, depths, etc. prior to proceeding with work. It is the contractor's responsibility to verify with the supplier / manufacturer of any proprietary product that their product will function per the design for the field conditions at time of construction. The design engineer should be notified immediately if any deviations from the design plan are found.
  4. All specified and/or proprietary products shown hereon may be subject to substitution with other products recommended by the contractor, subject to written review and approval by the design engineer.
  5. All construction shall be in accordance with the latest standards and specifications of Howard County.
  6. The contractor shall notify the Department of Public Works / Bureau of Engineering / Construction Inspection Division at (410) 313-4900 at least five (5) working days prior to the start of work.
  7. The contractor shall notify the Maryland Department of the Environment, Inspection Division at 410-631-3510 at least five (5) days prior to start of work.
  8. The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
  9. The coordinates shown hereon are based upon the Howard County Geodetic control which is based upon the Maryland State Plane Coordinate System.
  10. Approximate location of existing utilities at time of construction are shown. These utilities were obtained by plans from Boender Associates approved in January 1991. The contractor shall take all necessary precautions to protect the existing utilities and maintain uninterrupted service. Any damage incurred due to contractor's operation shall be repaired immediately at the contractor's expense. Existing utilities are shown based on available information.
  11. The contractor shall field visit and familiarize themselves with the site prior to bidding and construction.
  12. Original Plan # F-89-167
  13. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current Maryland Standards and Specifications for Soil and Erosion and Sediment Control and any revisions thereto.
  14. The appropriate federal/state and local permits must be obtained before work commences.
  15. Source of existing topography is Howard County G.I.S. dated 1999 and J.A. Rice Inc. field survey dated June 2003.
  - Horizontal datum: based on the Maryland State Plane Coordinate System (NAD 27) as shown on the record plat of "Choi Property" by Boender Associates, dated 12/9/88 and recorded in plat file 10631 among the land records of Howard County, Maryland.
  - Vertical datum: based on the Maryland NAVD 29 based on two concrete monuments (#53 & #25) as shown on the as-built drawings of the "road construction plan" of the Choi Property, dated Nov. 8, 1995 and filed under F-89-167.
  - The easements shown hereon are approximate. They are graphically depicted from the record plat (10631) due to incorrect bearings and distances defining the existing easements.
  16. Contractor shall not store any material and/or equipment within 2 feet of private property.
  17. Contractor shall take caution not to damage any existing trees, except those designated on the plan to be removed. Any damaged tree shall be replaced at contractor's expense.
  18. 100 year floodplain shown hereon from Boender Associates dated 1991.
  19. Wetlands shown hereon were taken from plans prepared by Boender Associates in 1991. Per a site visit by CPJ in May of 2003, no wetlands exist within the limits of disturbance as shown.
  20. All quantities are estimates only. The contractor is responsible for verifying quantities through a field visit and his own quantity takeoffs.
  21. Trench is exempt from review as a MD-378 pond because it has less than 40,000 cubic feet of storage and embankment height is less than 6 feet.

NOTE: CONSTRUCTION VEHICLES SHALL NOT TRAVEL BEYOND EAST SIDE OF EASEMENT EXCEPT AS NECESSARY TO CREATE FILLS.

TEMPORARY SWALE @ 1% (D.A. = 2.6 Ac.) (SEE DETAIL SHEET 4)

NOTE: MATCH TEMPORARY SWALE INVERT TO EXISTING 15" RCP INVERT.



BY THE OWNER:  
I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, 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 INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Howard E. Saltzman 2/23/06  
HOWARD COUNTY DEPT. OF PUBLIC WORKS DATE

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

Timothy Schueler 2.23.06  
ENGINEER/TIMOTHY SCHUELER DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

USDA - NATURAL RESOURCES CONSERVATION SERVICE  
DATE 3/9/06

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Howard E. Saltzman 3/9/06  
HOWARD SOIL CONSERVATION DISTRICT DATE

**MISS Utility**  
Call "Miss Utility" at 1-800-257-7777, 48 hours prior to the start of work. The excavator must notify all public utility companies with underground facilities in the area of proposed excavation and have those facilities located by the utility companies prior to commencing excavation.

### Summary of Environmental Impacts

	Tree Removal (each)	Stream Disturbance (lf)	Wetland Disturbance (sq.ft)	Limits of Disturbance (sq.ft)	Limits of Disturbance (ac)
Total	0	0	0	18,710	0.43

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HOWARD COUNTY, MD  
PARCEL 106  
ELECTION DISTRICT # 4  
MAP 14

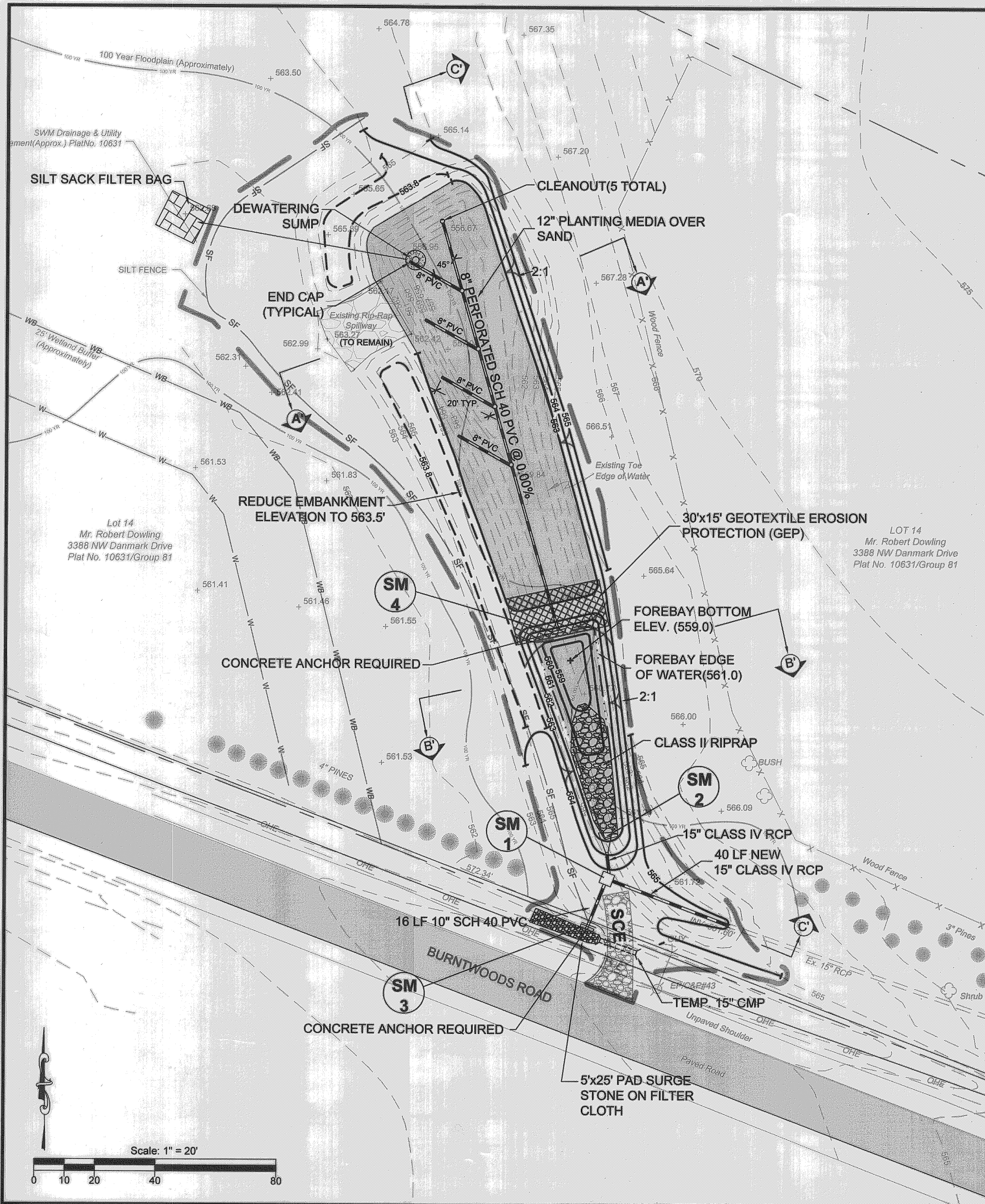
**Danmark Drive/Burntwoods Road Basin  
Choi Property Trench Retrofit**  
Title Sheet-Sediment Control For Trench Retrofit

DATE:	02/06				
DESIGNED:	JMF/TCS				
DRAFTED:	HT				
CHECKED:	TCS				
BASE DATA:	J.A. RICE	NO.	REVISIONS	BY	DATE

**CPJ Associates**  
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FREDERICK, MD FAIRFAX, VA

SCALE AS SHOWN  
SHEET 1 OF 6 SHEETS  
JOB NO. 34-513

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HOWARD COUNTY, MD  
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**Danmark Drive/Burntwoods Road Basin**  
**Choi Property Trench Retrofit**  
Design with Sediment Control Features Super Imposed

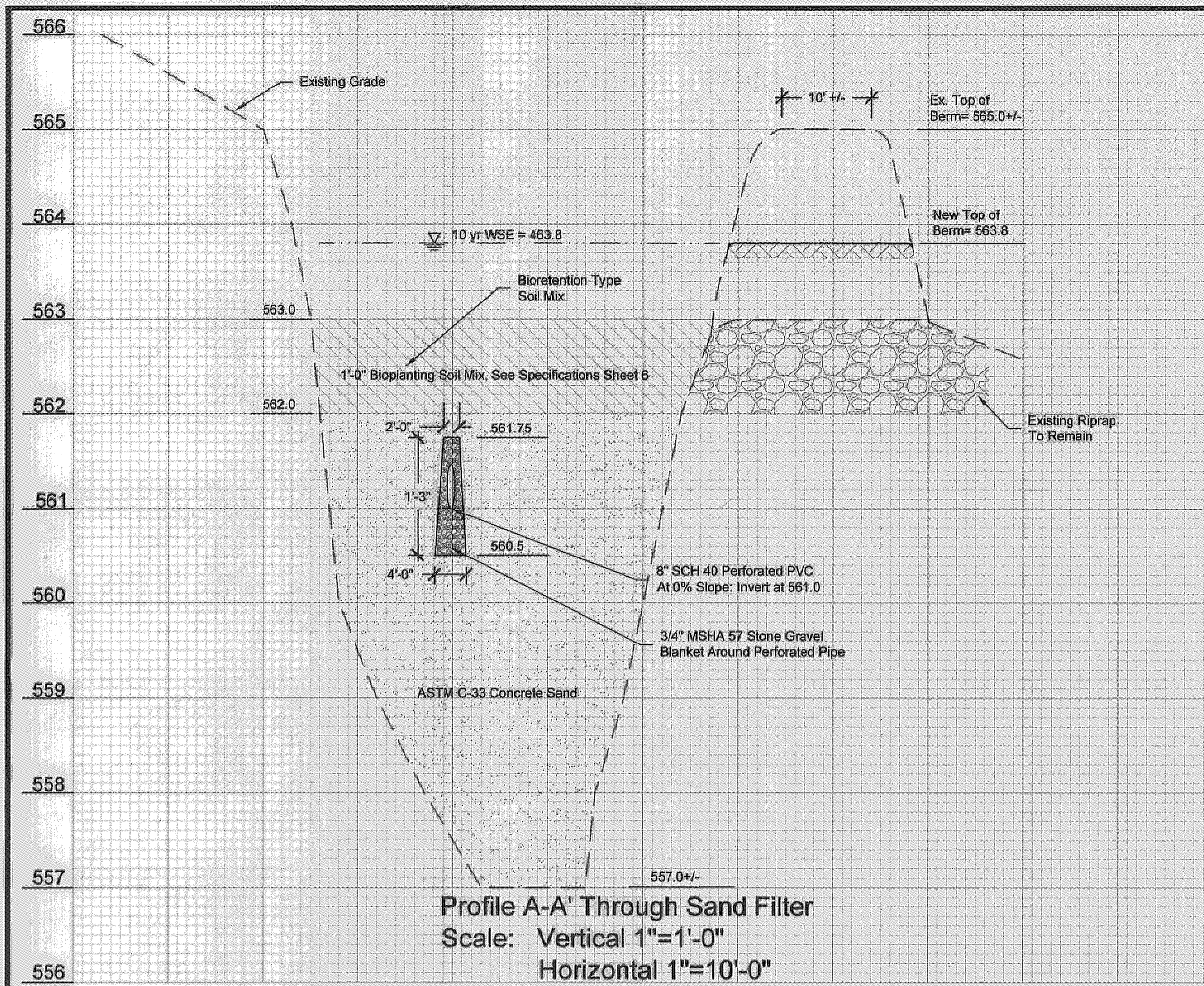
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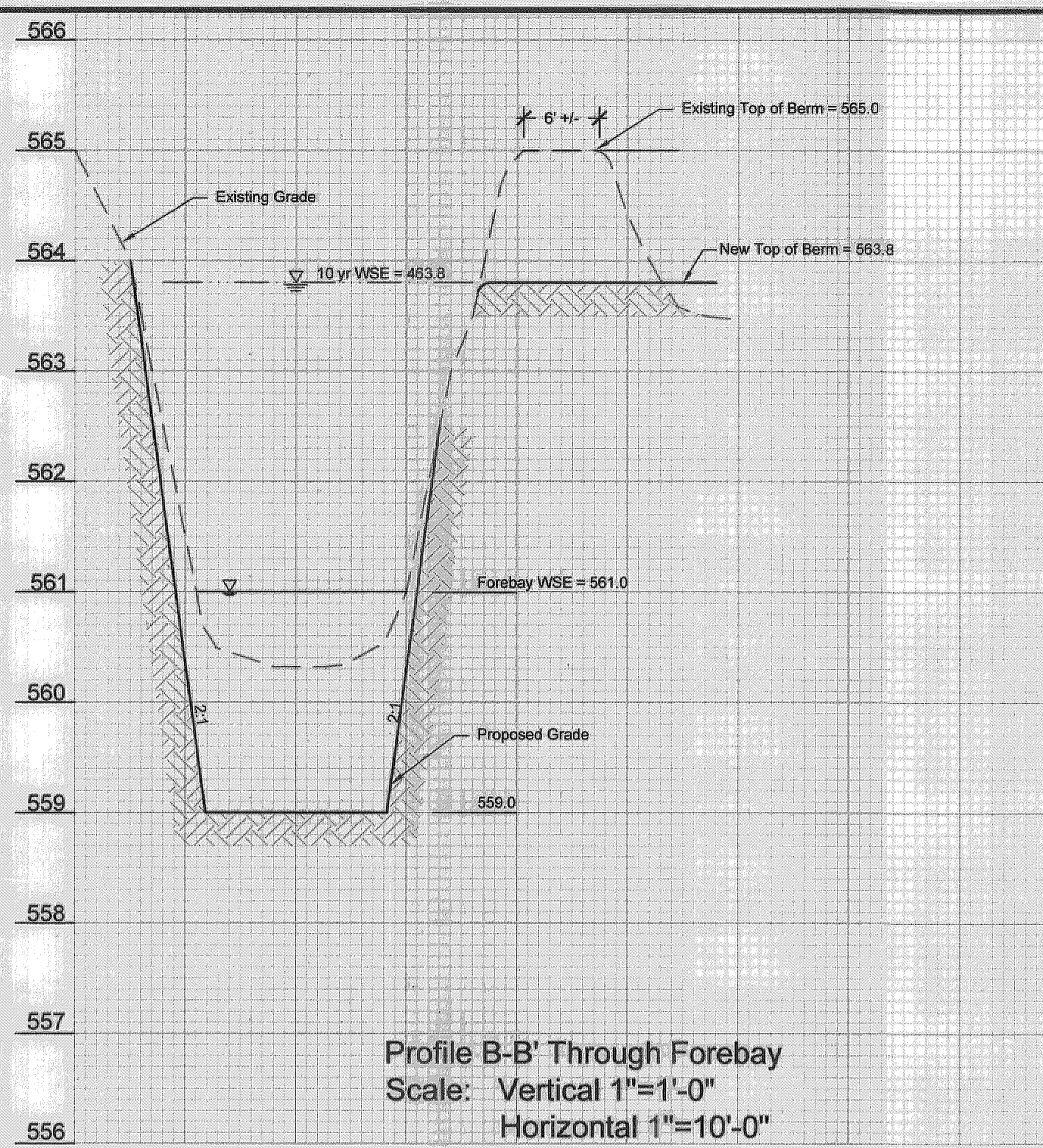
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SCALE AS SHOWN  
SHEET 2 OF 6 SHEETS  
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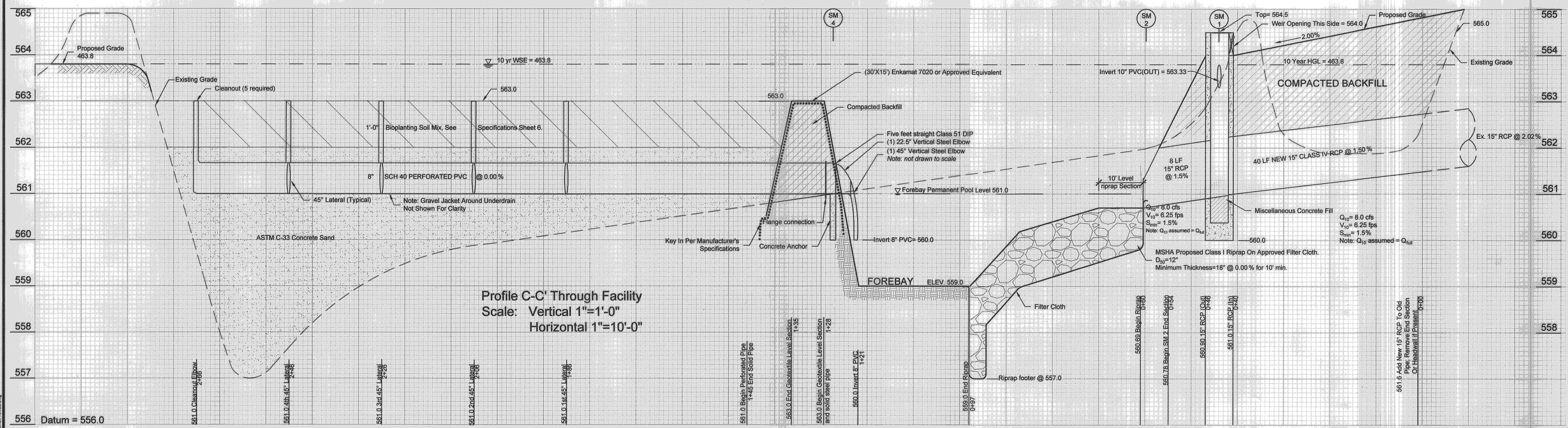
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Profile A-A Through Sand Filter  
Scale: Vertical 1"=1'-0"  
Horizontal 1"=10'-0"



Profile B-B Through Forebay  
Scale: Vertical 1"=1'-0"  
Horizontal 1"=10'-0"



Profile C-C Through Facility  
Scale: Vertical 1"=1'-0"  
Horizontal 1"=10'-0"

Pipe Schedule

From	To	Size	Type	Length
end 15" RCP	SM 1	15 inch	RCP - Class IV	40
SM 1	SM 2	15 inch	RCP - Class IV	8
SM 1	Ditch	10 inch	PVC - Sch 40	16
Forebay	Planting Area	8 inch	PVC - Sch 40 - Perforated	202
Forebay	Planting Area	8 inch	PVC - Sch 40 - Solid	17
Forebay	Planting Area	8 inch	Class 51	

Storm Drain Structure Schedule

ID	Type	Size	HC (DPW&T) No.	Other ID	Lowest Invert Out	Top Structure	Overall Depth of Structure to Lowest Invert Out	Notes
SM 1	Catch Basin	36x42	SD 4.36	na	560.9	564.5	3.6	One weir opening; MD-378.05 grate required
SM 2	End Section	15 inch	SD 5.51	na	na	na	na	na
SM 3 & 4	Anchor	See detail	NA	na	561.0	561.0	na	None

**LAW OFFICES OF ROBERT H. DOWLING, LLC**  
ATTORNEY AT LAW  
3833 Washington Road, Suite 110  
Columbia, MD 21115  
Office: (410) 487-1611  
Residence: (410) 534-1977  
Cell: (410) 534-1977  
www.rhd-law.com

July 15, 2015

Sent Via U.S. Mail & Facsimile (410-313-6490)

Richard Powell, P.E.  
Department of Public Works  
Bureau of Environmental Services  
6751 Columbia Gateway Drive, Suite 514  
Columbia, Maryland 21046

Re: Improvements to Storm Water Facility

Dear Mr. Powell:

I would like to thank you for taking the time to review the proposed improvements to the storm water facility located on our property at 3588 Danmark Drive, Glenwood, Maryland 21738 with my wife and I. Please allow this correspondence to memorialize our approval of the proposed improvements to the storm water facility along with our authorization for the County to work outside of its easement on our property to complete said improvements.

Further, to the best of my knowledge, the current storm water facility located on our property has not affected our septic system.

If I may be of further assistance to you, please do not hesitate to call me directly. Once again, I would like to thank you for the effort that you have put forth in preparing the proposed improvements.

Very truly yours,  
*Robert H. Dowling, III*  
Robert H. Dowling, III

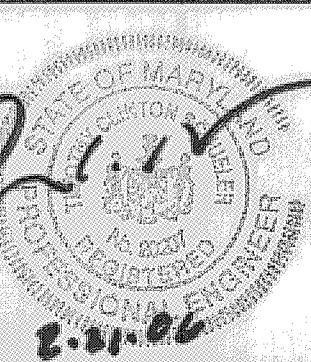
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**Danmark Drive/Burntwoods Road Basin**  
**Choi Property Trench Retrofit**  
Profiles

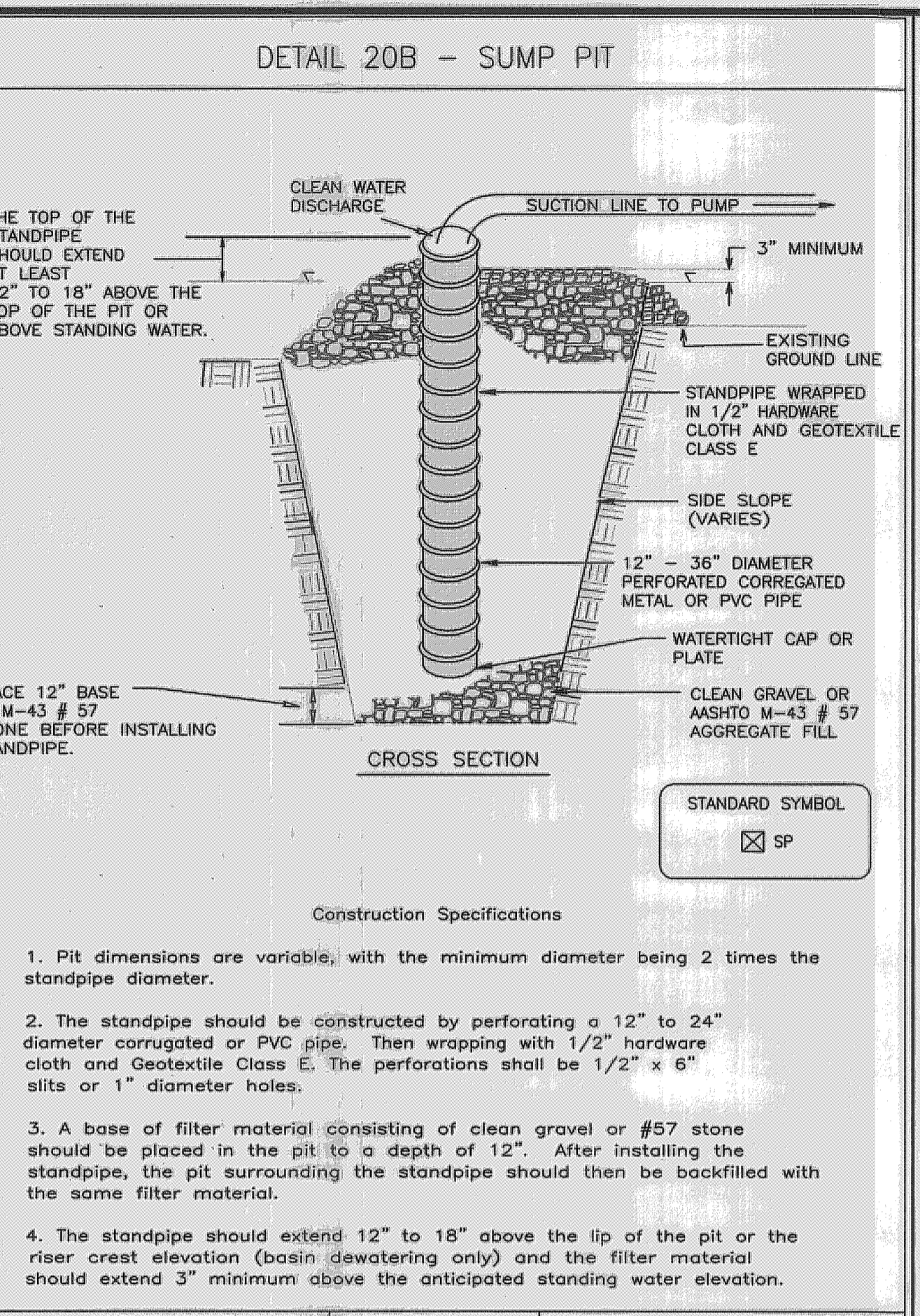
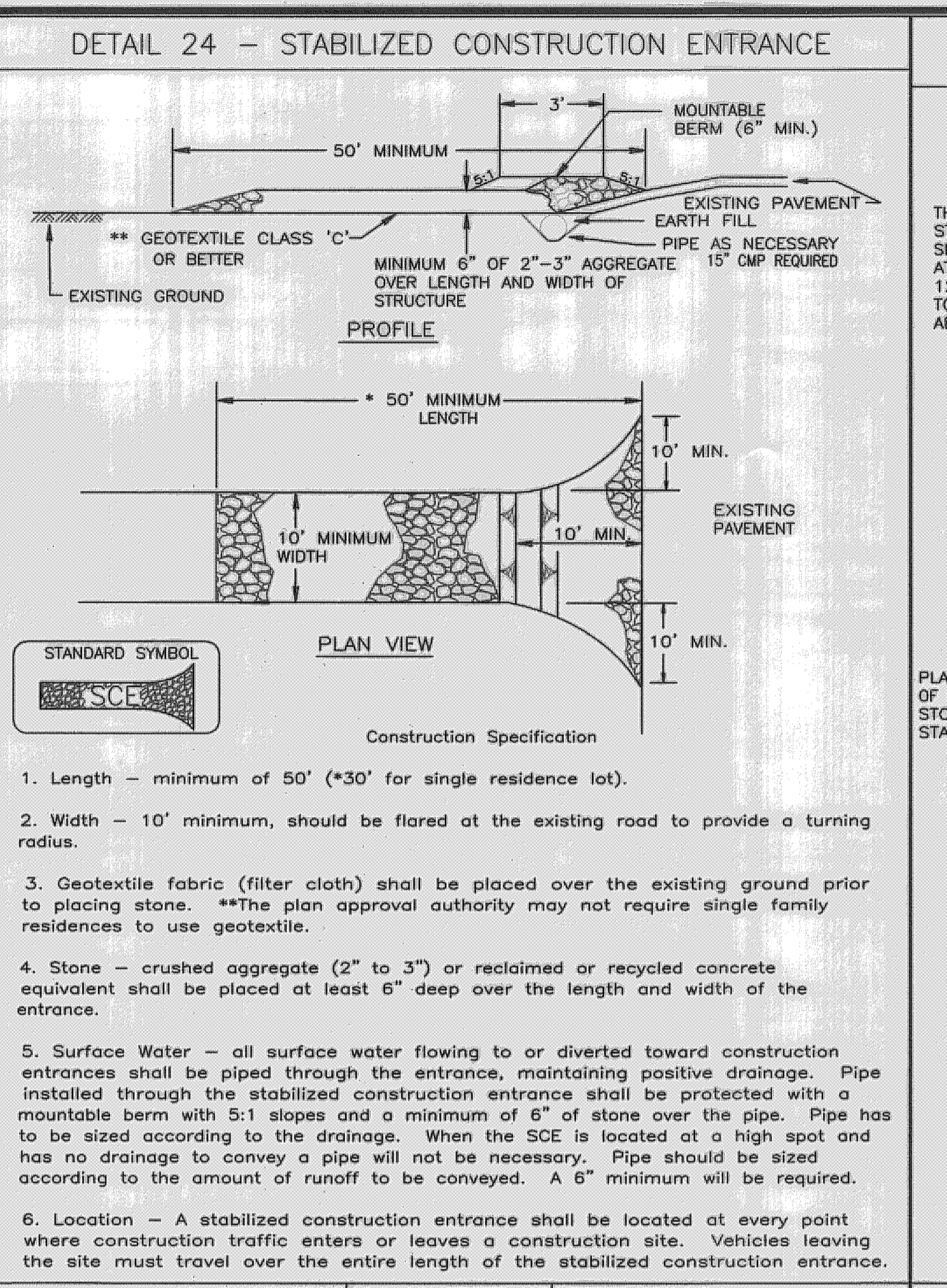
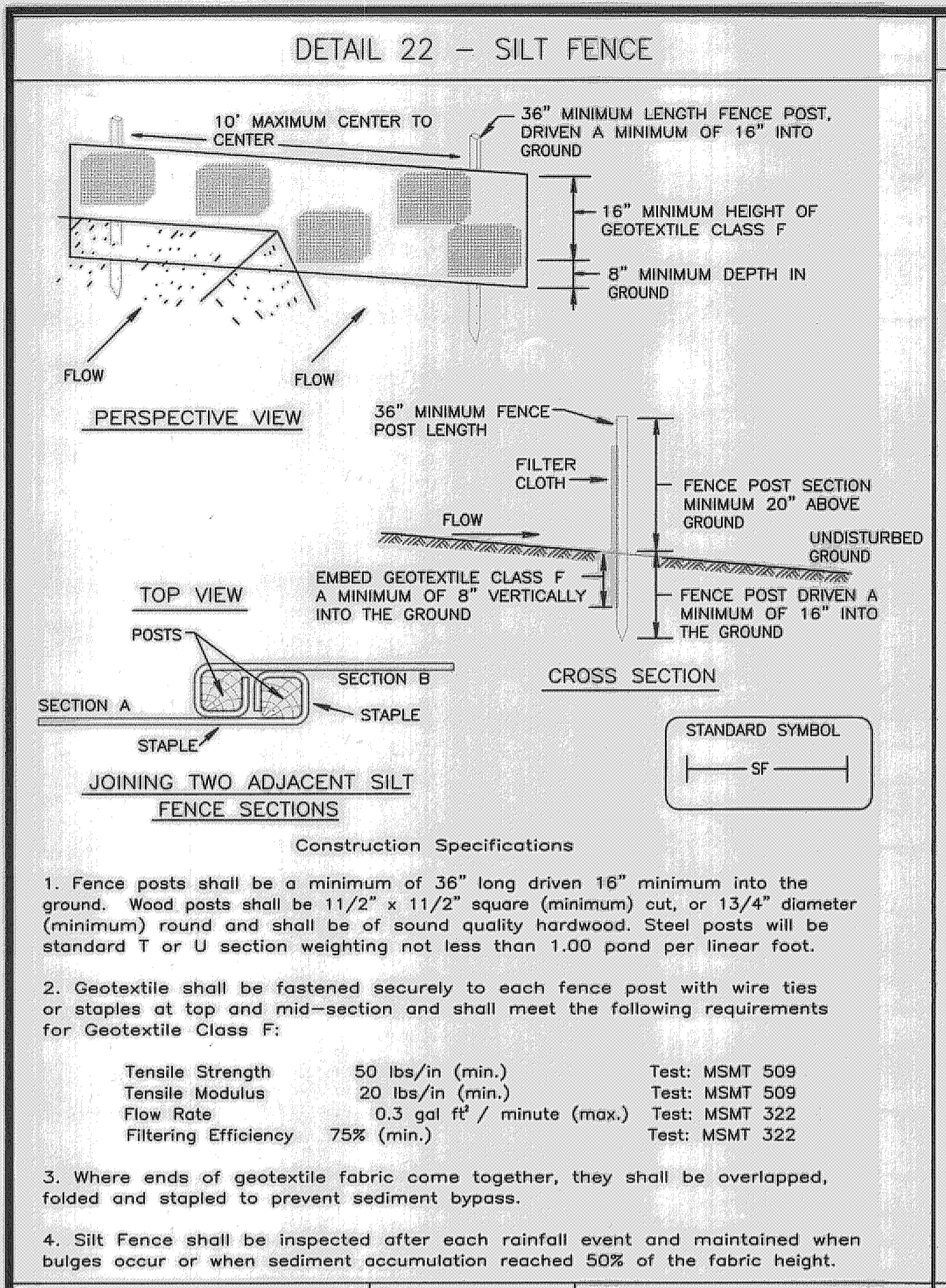
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SCALE AS SHOWN  
SHEET 3 OF 6 SHEETS  
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GA.05.57



### Sediment Control Notes

- A minimum of 48 hours notice must be given to the Howard County Department of Inspections and Permits prior to the start of any construction (410-313-1855).
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the Maryland Standards and Specifications for Soil and Erosion Control, revisions thereto.
- Following initial soil disturbance or redistribution, 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 other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around the perimeter in accordance with Vol. 1, Chapter 12, of the Howard County Design Manual, storm drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1991 Maryland Standards and Specifications for Soil and Erosion Control for permanent seedings (Sec. 51), sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- All sediment control structures are to remain in place and are to be maintained in operative condition until their removal has been obtained from the Howard County Sediment Control Inspector.
- Site Analysis:**

Total area of site:	4.01 acres
Area disturbed:	0.43 acres
Area that is roofed or paved:	0.0 acres
Area to be vegetatively stabilized:	0.43 acres
Drainage area:	4.6 acres
Total cut:	352 cu. Yds.
Total fill:	491 cu. Yds.
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment controls must be provided if deemed necessary by the Howard County Sediment Control Inspector.
- 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.
- Trenches for the construction of utilities is limited to three pipe lengths or that which can be backfilled and stabilized within one working day, whichever is shorter.
- Site grading will begin only after all perimeter sediment control measures have been installed and are in a functioning condition.
- Sediment will be removed from traps when its depth reaches clean out elevation shown on plans.
- Cut and fill quantities provided under site analysis do not represent bid quantities. These quantities do not distinguish between topsoil, structural fill or embankment material, nor do they reflect consideration of undercutting or removal of unsuitable material. The contractor shall familiarize himself/herself with site conditions which may affect the work.

### Standard and Specifications For Topsoil

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

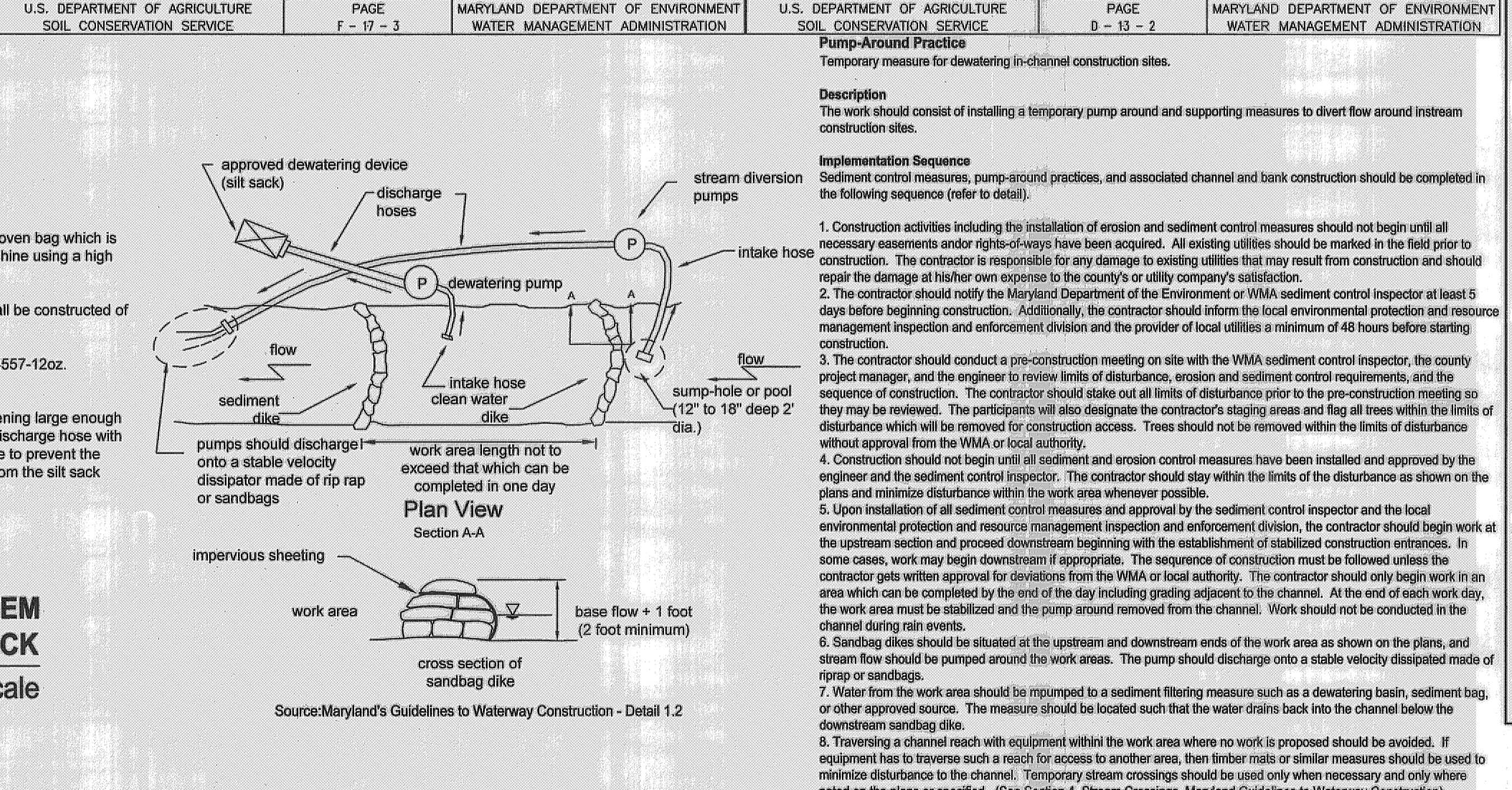
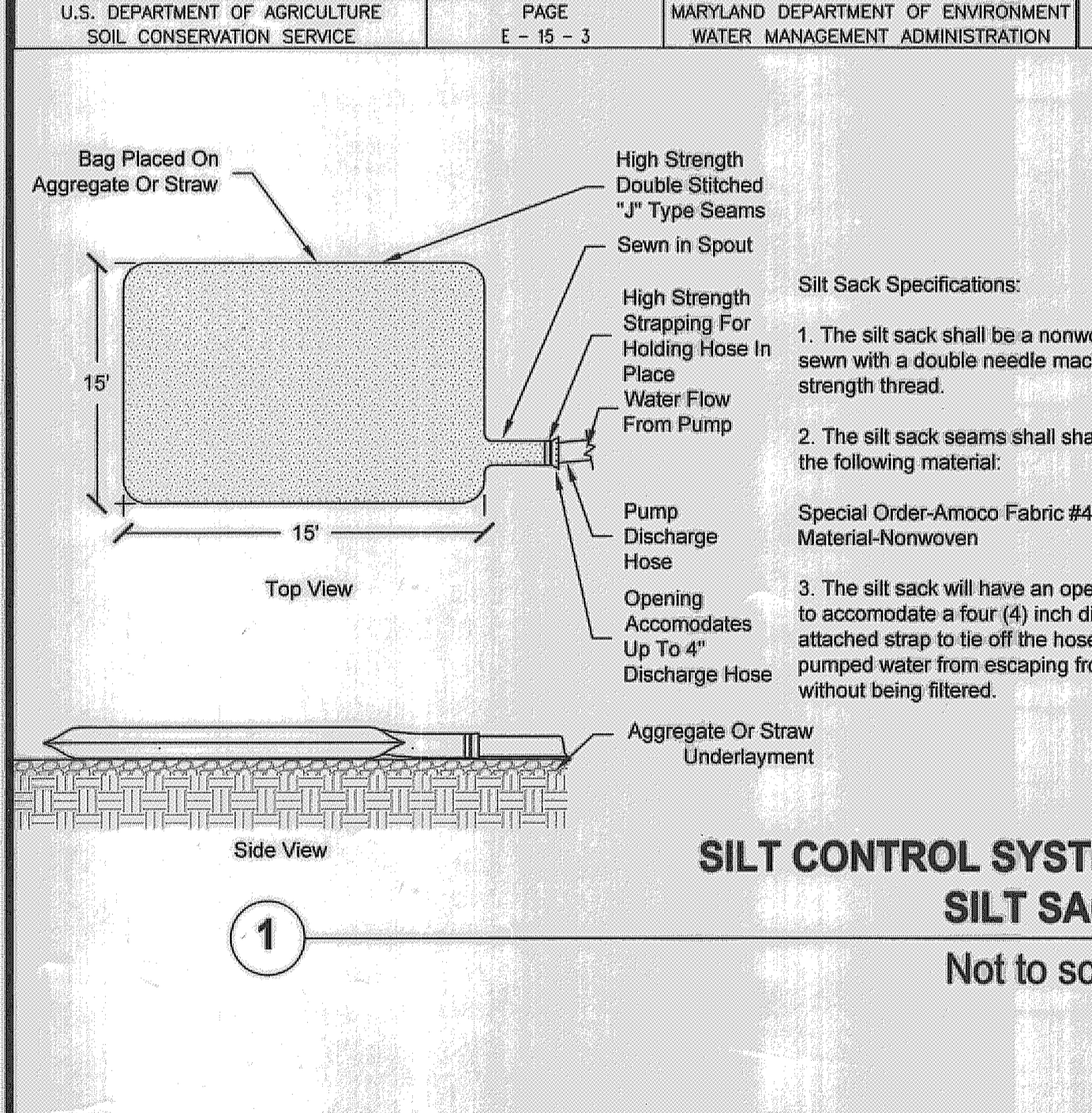
**Purpose:**  
To provide a suitable soil medium for vegetation growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

**Condition where practice applies:**

- This practice is limited to areas having 2:1 or flatter slopes where:
  - The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth
  - 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.
  - The original soil to be vegetated contains material toxic to plant growth.
  - The soil is so acidic that treatment with limestone is not feasible.
- For the purpose of these Standard 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 Specification

- Topsoil salvaged from the existing site may be used provided that it meets the standard as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the soil survey published by USDA-SCS in cooperation with Maryland Agricultural Experimentation Station.
- Topsoil Specifications - Soil to be used as topsoil must meet the following:
  - Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, and loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1" in diameter.
  - Topsoil must be free of plants or plant parts such as Bermuda grass, quackgrass, Johnson grass, nutsedge, poison ivy, thistle, or other as specified.
  - Where 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 tillage operation as described in the following procedures.
- For site having disturbed areas under 5 acres:



THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

USDA - NATURAL RESOURCES CONSERVATION SERVICE DATE 3/9/06

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT DATE 3/9/06

2

**PUMP-AROUND PRACTICE**  
Not to scale

Source: Maryland's Guidelines to Waterway Construction - Detail 1.2

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE I-15-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

HOWARD COUNTY DPW - ENVIRONMENTAL SERVICES  
6751 COLUMBIA GATEWAY DRIVE, SUITE 514  
COLUMBIA, MD 21046  
PHONE: (410) 313-6415  
ATTN: RICHARD POWELL

HOWARD COUNTY, MD  
PARCEL 106  
ELECTION DISTRICT # 4  
MAP 14

**Danmark Drive/Burntwoods Road Basin**  
**Choi Property Trench Retrofit**  
Sediment Control Notes and Details

DATE:	02/06				
DESIGNED:	JMF/TCS				
DRAFTED:	HT				
CHECKED:	TCS				
BASE DATA:	J.A. RICE	NO.			
REVISIONS		BY		DATE	

SCALE AS SHOWN  
SHEET 4  
OF 6 SHEETS  
JOB NO. 34-513

**CPI Associates**  
Charles P. Johnson & Associates, Inc.  
PLANNERS - ENGINEERS - LANDSCAPE ARCHITECTS - SURVEYORS  
1751 ELTON ROAD SUITE 300 SILVER SPRING, MARYLAND 20903  
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FREDERICK, MD FAIRFAX, VA

2-21-06

Feb-21, 2006 - 3:00pm User: lba  
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