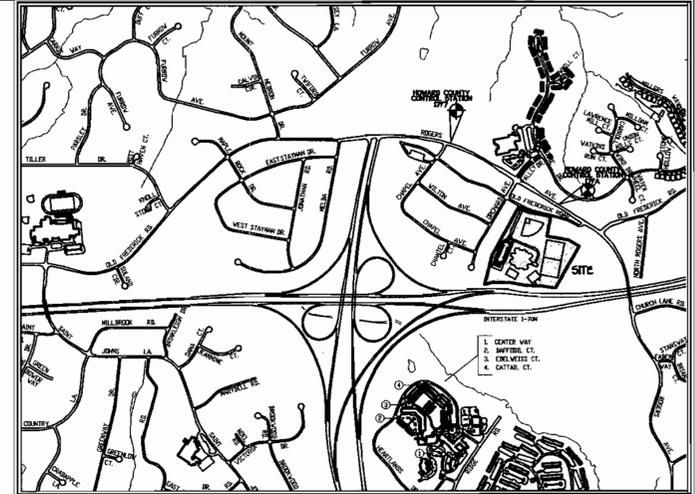


SHEET INDEX	
SHEET NUMBER	DESCRIPTION
1	TITLE SHEET
2	SITE DEVELOPMENT PLAN
3	SEDIMENT AND EROSION CONTROL PLAN
4	SEDIMENT AND EROSION CONTROL NOTES AND DETAILS
5	ROOF DRAIN PROFILES AND GWH DETAILS
6	DRAINAGE AREAS AND SOILS MAP

SITE DEVELOPMENT PLAN PATAPSCO MIDDLE SCHOOL

SITE ANALYSIS DATA

- General Site Data:
 - Present Zoning: R-20
 - Proposed use of site or structure: Institutional (Public School)
 - Public water and sewer to be utilized.
- Area Tabulations:
 - Total project area: 21.639 Ac.
 - Area of this plan submission: 1.71 Ac. is the limit of submission and grading disturbance for the construction of the middle school addition
 - Amended Impervious Coverage:
 - Building: 87,067 sq. ft. or 9% of gross site area
 - Paved areas (parking, and walkways): 1.39 Ac.
 - No additional parking is required.
 - The building addition is replacing the existing portable classroom.
 - There will be no additional staff required for the building addition.



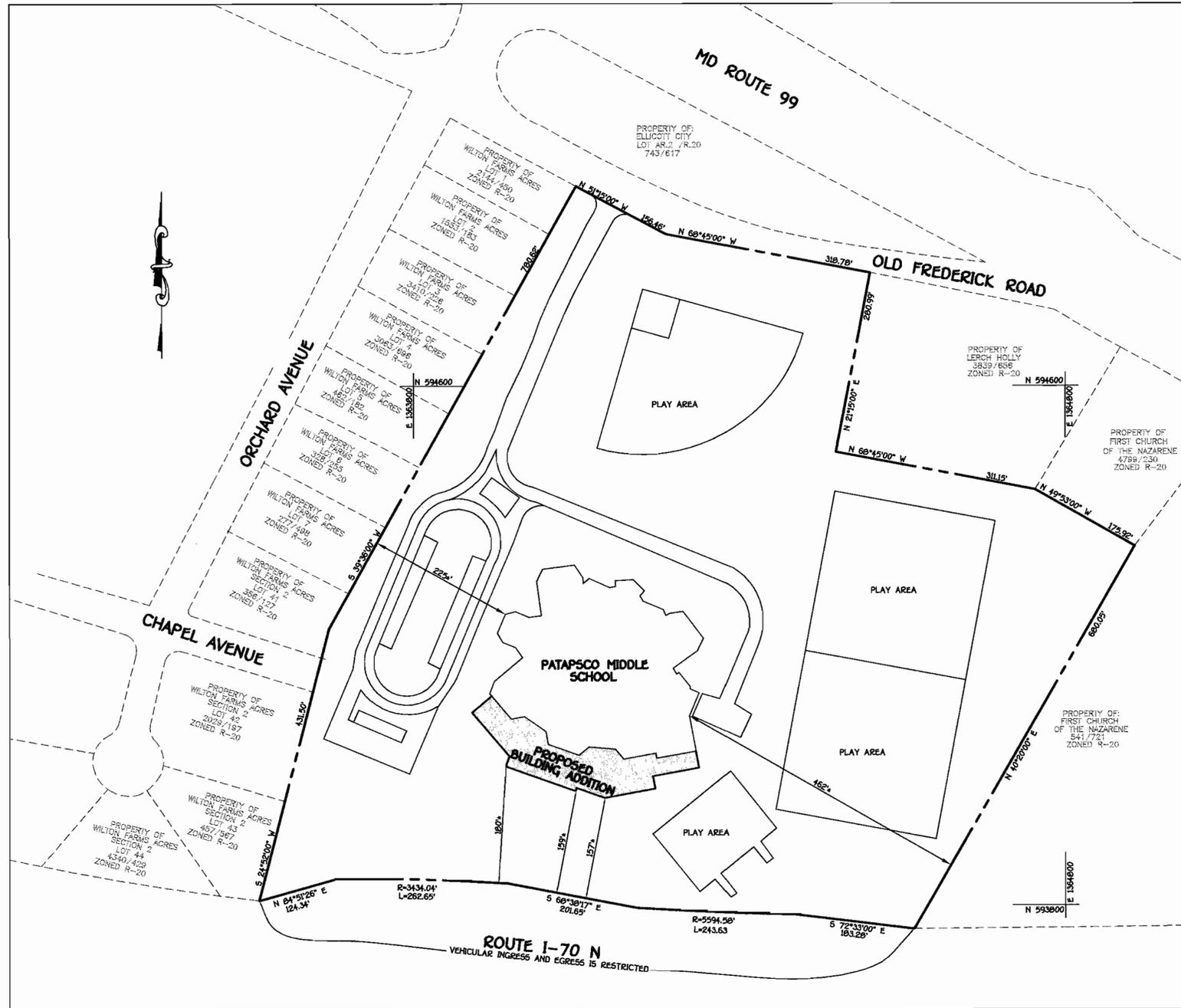
VICINITY MAP

SCALE: 1" = 200'

General Notes

- All construction shall be accordance with the latest standards and specifications of Howard County plus MSHA standards and specifications if applicable.
- The contractor shall notify the Bureau of Engineering/Construction Inspection Division at 410-313-1880 at least five working days prior to start of work.
- The contractor shall notify Miss Utility at 1-800-257-7777 at least 48 hours prior to any digging and excavation work.
- Project Background:
 - Location: Tax Map 17, Grid 9, Parcel 336
 - Zoning: This project is zoned R-20 per the 10/18/93 comprehensive zoning plan.
 - Election District: Second
 - Site Area: 21.639 Ac.
 - Previous File No. SDP-75-20, WP-91-174, WP-95-93, WP-00-117, WP-01-130
- Existing topography and features were derived from field survey by Fisher, Collins and Carter Inc. February, 2002.
- Coordinates are based on NAD 83 Maryland Coordinates System as projected by Howard County Geodetic Control Stations.

177A	N 59494.352	1777	N 595829.636
	E 1364626.779	E	1363088.368
	ELEV. 477.52		ELEV. 470.19
- Public water and sewer is to be utilized for this project. The existing Water Contract is 70-W and the Sewer Contract is 282-W & S.
- Stormwater management for this site is being provided by a Bio-Retention Type BMP Facility. This facility will be privately owned and maintained by the Howard County Board of Education.
- All on-site storm drains under this site development plan are private.
- The existing utilities shown hereon were derived from available public records. The contractor must dig test pits by hand at all utility crossings and connection points to verify the exact location.
- All proposed ramps shall be in accordance with current A.D.A. standards. Maximum sidewalk cross slope shall be two percent. Provide a (5'x5') five foot by five foot level landing (max. slope 2%) at the top and bottom of all ramps and building entrances and exits.
- All driveways and parking are owned and maintained by the Howard County Public School System.
- Any damage to County and or State owned right-of-way to be corrected at the contractor's expense.
- Trench bedding for storm drains structures shall be in accordance with Howard County Standard G2.01 Class C bedding unless otherwise noted.
- There are no known grave sites or cemeteries on this site.
- Other topics related to this site:
 - Soils Analysis prepared by: Penniman and Browne Inc.
 - The water meter will be installed inside the building. The building shall be equipped with an automatic fire prevention sprinkler system.
 - There are no wetlands within the limits of disturbance. Per A signed and sealed wetlands certification prepared by Fisher Collins and Carter dated April 22, 2002.
 - A building addition to the existing school was done under SDP 75-20. Forest Conservation was not a regulation during this time. The limit of disturbance under this site development plan is within the original limits of grading when the school was constructed, therefore forest conservation is exempt.
- No landscaping is required for this construction.



LOCATION MAP
Scale: 1" = 100'



ENGINEER'S CERTIFICATE

I hereby certify that this Plan for Erosion and Sediment Control Represents A Practical And Workable Plan Based On My Personal Knowledge Of The Site Condition And That It Was Prepared In Accordance With The Requirements Of The Howard Soil Conservation District.

James M. Myers
Signature Of Engineer
10/17/02 Date

Reviewed For Howard County Soil Conservation District And Meets Technical Requirements.

John R. Robinson
Signature
10/11/02 Date
U.S.D. - Natural Resources Conservation Service

DEVELOPER'S CERTIFICATE

"I/We Certify That All Development And Construction Will Be Done According To This Plan Of Development And Plan For Erosion And Sediment Control And That All Responsible Personnel Involved In The Construction Project Will Have A Certificate Of Attendance At A Department Of Natural Resources 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 Or Their Authorized Agents, As Are Deemed Necessary."

Wm. B.
Signature Of Developer
10-7-02 Date

Approved: This Development Is Approved For Erosion And Sediment Control By The Howard Soil Conservation District.

John R. Robinson
Signature
10/11/02 Date
Dist. Howard Soil Conservation Dist.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

April Smith
Director - Department of Planning and Zoning
10/17/02 Date

Cindy Hamilton
Chief, Division of Land Development
10/16/02 Date

John Robinson
Chief, Development Engineering Division
10/15/02 Date

PREPARED FOR
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Maryland Route 108
Ellicott City, Maryland 21042
Attention Cathleen Young

RUBELING & ASSOCIATES
401 Jefferson Ave.
Towson Maryland 21286-5308
410-337-2886

Address Chart

Parcel Number	Street Address
548	8085 OLD FREDERICK ROAD

PROJECT	SECTION/AREA	PARCEL
PATAPSCO MIDDLE SCHOOL	N/A	548
DEED REF.	BLOCK NO.	ZONE
484/495	18	R-20
TAX/ZONE	ELEC. DIST.	CENSUS TR.
17	SECOND	602100
WATER CODE	SEWER CODE	
H02	1454850	

TITLE SHEET

PATAPSCO MIDDLE SCHOOL BUILDING ADDITION

TAX MAP No: 17 PARCEL No: 548
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: SEPTEMBER 3, 2002
"BID AND CONSTRUCTION 24 JUNE 2002"
SHEET 1 OF 6

SP-06-11

E 1363900
N 1397385

INTERSTATE I-70 N
VEHICULAR INGRESS AND EGRESS IS RESTRICTED

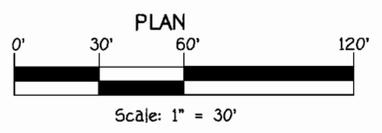
NOTE: UPON COMPLETION OF WORK THE CONTRACTOR SHALL REMOVE THE CH TRAILER, TEMPORARY GRAVEL AREA, AND REGRADE AREA TO ITS ORIGINAL CONDITION, STABILIZE WITH SEED AND MULCH.

PATAPSCO MIDDLE SCHOOL
F.F.E. 473.50/471.85
▲ DENOTES BUILDING INGRESS/EGRESS POINTS

PROPOSED BIO-RETENTION FACILITY
TO BE PRIVATELY MAINTAINED BY THE HOWARD COUNTY BOARD OF EDUCATION. THIS IS A TYPE 'A' HAZARD CLASSIFICATION

NOTE:
PROPOSED BMP FACILITY BIO-RETENTION FACILITY TO PROVIDE Rev. & WQ. TO BE PRIVATELY OWNED AND MAINTAINED BY HOWARD COUNTY BOARD OF EDUCATION. TYPE 'A' HAZARD CLASSIFICATION.

■ DENOTES EXISTING WALK TO BE REMOVED
■ DENOTES PROPOSED WALK SEE DETAIL ON SHEET 4 OF 6
■ DENOTES PROPOSED BUILDING ADDITION



SWM SUMMARY TABLE

The following is a summary of the Revol, WQvol, and CPv Requirements:

TYPE OF REQUIREMENT	VOLUME REQUIRED	VOLUME PROVIDED AND NOTES
Revol (Recharge Vol. for Entire Site) AREA OF 1.47 ACRES	0.137 acres or 0.0115 acre-feet	0.0140 ac-ft. w/in THE BIO-RETENTION CELL
WQvol		
Study Point #1	1932 cu.ft.	1932 cu.ft. IN THE BIO-RETENTION CELL
CPvol		
Study Point #1	N/A	Less Than 2.0 c.f.a.

Note: Both Qp (Overbank Flood Protection or 10-year storm) and Qf (Extreme Flood Volume or 100-year storm) are not required for this site since this watershed area is not classified as one of the sensitive watershed areas for Howard County.
Note: The Above Rev. and WQ Requirements will be Provided within the Proposed BMP Facility Shown on these Plans. The Facility is a Bio-Retention Facility with a Type 'A' Hazard Classification.



FISHER, COLLINS & CARTER, INC.
CONS. ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10772 DALYWOOD NATIONAL PIKE
ELLCOTT CITY, MARYLAND 21042
410-461-2995

ENGINEER'S CERTIFICATE
I hereby certify that this Plan for Erosion and Sediment Control Represents a Practical and Workable Plan Based on My Personal Knowledge of the Site Condition and that it was prepared in accordance with the Requirements of the Howard Soil Conservation District.

Signature of Engineer: *James M. Myers* Date: 10/11/02
Reviewed For Howard County Soil Conservation District and Meets Technical Requirements: *John R. Robertson* Date: 10/11/02
U.S.D.A. Natural Resources Conservation Service

DEVELOPER'S CERTIFICATE
"I/we certify that All Development and Construction will be Done According to this Plan of Development and Plan for Erosion and Sediment Control and that All Responsible Personnel Involved in the Construction Project will Have a Certificate of Attendance at a Department of Natural Resources 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 or Their Authorized Agents, as are Deemed Necessary."

Signature of Developer: *Wm. R. ...* Date: 10-2-02
Approved: This Development is Approved for Erosion and Sediment Control by The Howard Soil Conservation District. *John R. Robertson* Date: 10/11/02
District: Howard Soil Conservation Dist.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Signature: *Carol ...* Date: 10/17/02
Signature: *Conita ...* Date: 10/16/02
Signature: *William ...* Date: 10/15/02

PREPARED FOR:
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Maryland Route 108
Ellicott City, Maryland 21042
Attention: Cathleen Young

RUBELING & ASSOCIATES
401 Jefferson Ave.
Towson Maryland 21286-5308
410-337-2886

Address Chart

Parcel Number	Street Address
548	2885 OLD FREDERICK ROAD

PROJECT	SECTION/AREA	PARCEL
PATAPSCO MIDDLE SCHOOL	N/A	548
DEED REF.	BLOCK NO.	ZONE
484/495	18	R-20
WATER CODE	TAX/ZONE	ELEC. DIST.
H02	17	SECOND
	SEWER CODE	CENSUS TR.
	154850	602100

SITE DEVELOPMENT PLAN

PATAPSCO MIDDLE SCHOOL BUILDING ADDITION

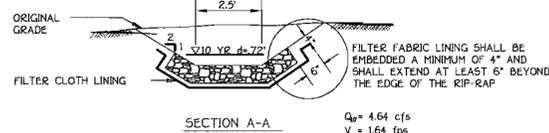
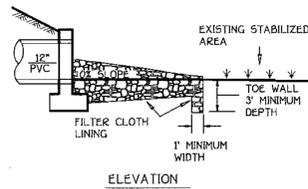
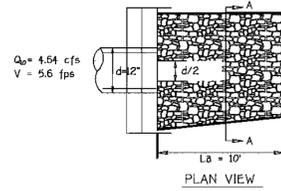
TAX MAP No.: 17 PARCEL No.: 548
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: SEPTEMBER 26, 2002
"BID AND CONSTRUCTION 24 JUNE 2002"
SHEET 2 OF 6

SDP 02-114

STRUCTURE NO.	TOP ELEVATION	INV. IN	INV. OUT	NORTH	EAST	TYPE	REMARKS
C.O. 1	470.5	464.68	464.68	593968.97	1364065.71	DOWN SPOUT DRAIN	4" PVC CLEANOUT PIPE
C.O. 2	470.8	466.11	465.94	594004.06	1363986.01	DOWN SPOUT DRAIN	4" PVC CLEANOUT PIPE
C.O. 3	470.4	466.77	466.77	594030.80	1363925.29	DOWN SPOUT DRAIN	4" PVC CLEANOUT PIPE
C.O. 4	470.0	467.10	467.10	594055.50	1363903.12	DOWN SPOUT DRAIN	4" PVC CLEANOUT PIPE
C.O. 5	470.2	467.30	467.30	594075.17	1363906.70	DOWN SPOUT DRAIN	4" PVC CLEANOUT PIPE
C.O. 6	468.5	464.93	464.93	593981.95	1364184.46	DOWN SPOUT DRAIN	4" PVC CLEANOUT PIPE
C.O. 7	467.8	465.50	465.50	594011.83	1364232.50	DOWN SPOUT DRAIN	4" PVC CLEANOUT PIPE
M-1	459.30	452.75	452.50	593876.97	1364092.74	STD MANHOLE	G 5.01 OR G 5.12
M-2	467.75	462.75	462.52	593900.49	1364111.21	DIVERSION STD MANHOLE	G 5.01 OR G 5.12 (MODIFIED)
M-3	471.80	464.12	463.29	593973.08	1364103.27	STD MANHOLE	G 5.01 OR G 5.12
S-1	452.60	---	451.60	593870.13	1363939.13	H.D.P.E. END SECTION	12" A.D.S. FLARED END SECTION

SIZE	TYPE	CLASS	LENGTH (FT.)
4"	PVC	SCH 40	35'
6"	PVC	SCH 40	446'
8"	PVC	SCH 40	123'
12"	PVC	---	248'

ROCK OUTLET PROTECTION III



NOTE: FILTER CLOTH SHALL BE GEOTEXTILE CLASS C

Construction Specifications

- The subgrade for the filter, rip-rap, or gabion shall be prepared to the required lines and grades. Any fill required in the subgrade shall be compacted to a density of approximately that of the surrounding undisturbed material.
- The rock or gravel shall conform to the specified grading limits when installed respectively in the rip-rap or filter.
- Geotextile shall be protected from punching, cutting, or tearing. Any damage other than an occasional small hole shall be repaired by placing another piece of geotextile over the damaged part or by completely replacing the geotextile. All overlaps whether for repairs or for joining two pieces of geotextile shall be a minimum of one foot.
- Stone for the rip-rap or gabion outlets may be placed by equipment. They shall be constructed to the full course thickness in one operation and in such a manner as to avoid displacement of underlying materials. The stone for rip-rap or gabion outlets shall be delivered and placed in a manner that will ensure that it is reasonably homogeneous with the smaller stones and spalls filling the voids between the larger stones. Rip-rap shall be placed in a manner to prevent damage to the filter blanket or geotextile. Hand placement will be required to the extent necessary to prevent damage to the permanent works.
- The stone shall be placed so that it blends in with the existing ground. If the stone is placed too high then the flow will be forced out of the channel and scour adjacent to the stone will occur.

OPERATION AND MAINTENANCE SCHEDULE FOR BIO-RETENTION AREA (PRIVATE)

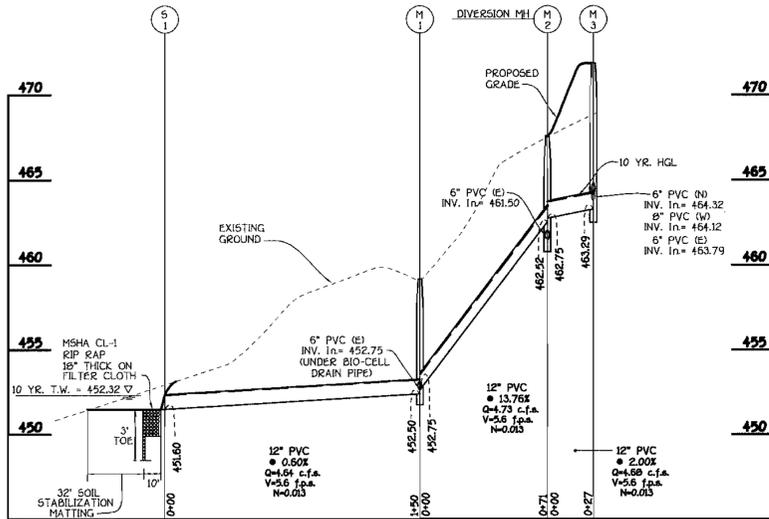
- ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER AND SOIL LAYER IS REQUIRED. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING.
- SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION CONSIDER BEYOND TREATMENT. TREATMENT OF ALL DISEASED TREES AND SHRUBS AND REPLACEMENT OF ALL DEFICIENT STAKES AND WIRES.
- MULCH SHALL BE INSPECTED EACH SPRING. REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY 2 TO 3 YEARS.
- SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.



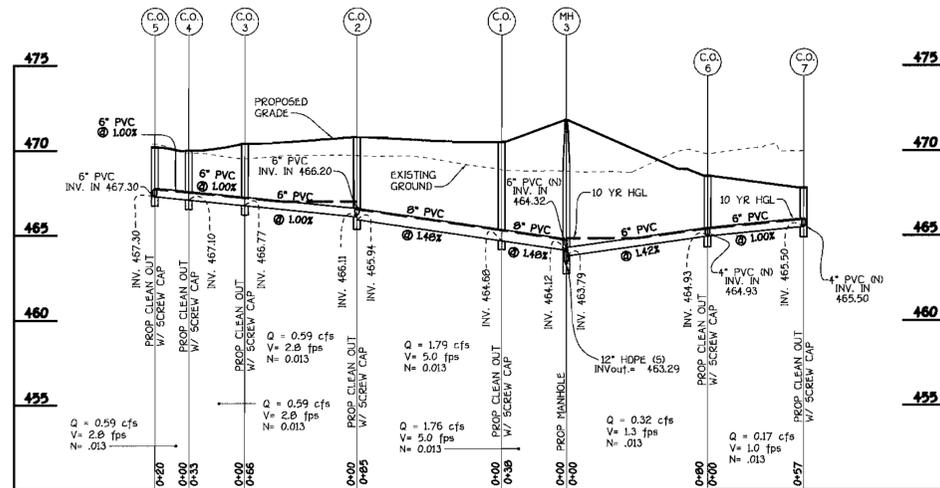
BIO-RETENTION CELL NO. 1

SCALE: HORIZ. 1" = 30'

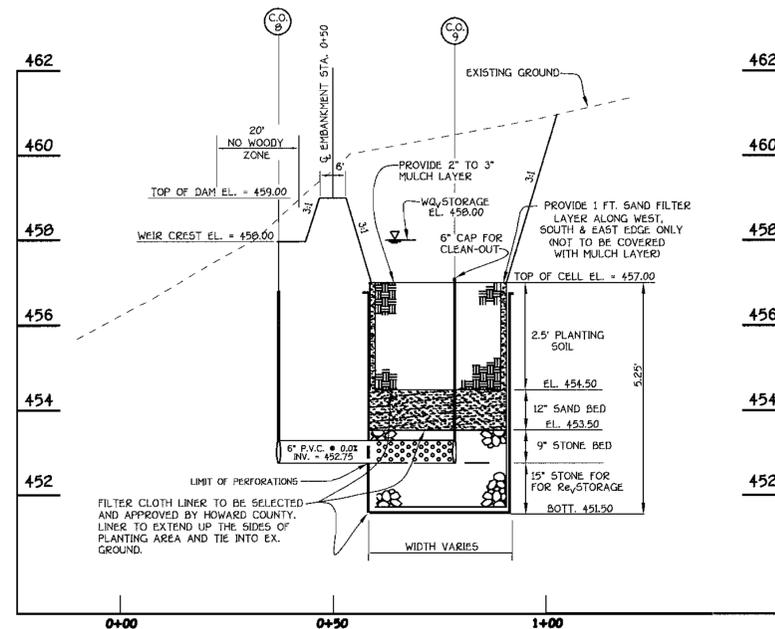
QUANTITY	NAME	MAXIMUM SPACING (FT.)
TREE SPECIES		
2	RED MAPLE	12
2	WHITE ASH	12
2	SYCAMORE	12
SHRUB SPECIES		
6	WITCH HAZEL	12
6	RED OSLER DOGWOOD	12
6	WINTER BERRY	12
MIXED PERENNIALS AND GRASSES		
N/A	CARDINAL FLOWER TALL CONE FLOWER BROOMSEDGE SWITCH GRASS	N/A



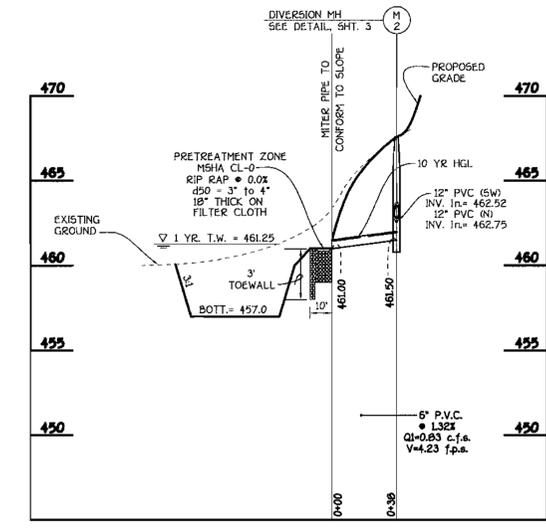
PROFILE
SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'



PROFILE
SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'



CROSS-SECTION 'A-A' @ BIO-RETENTION CELL
SCALE: HORIZ. 1" = 20'
VERT. 1" = 2'



PROFILE
SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'

ENGINEER'S CERTIFICATE

I hereby certify that this Plan for Erosion and Sediment Control Represents A Practical And Workable Plan Based On My Personal Knowledge Of The Site Condition And That It Was Prepared In Accordance With The Requirements Of The Howard Soil Conservation District.

[Signature]
Signature Of Engineer
10/17/02
Date

Reviewed For Howard County Soil Conservation District And Meets Technical Requirements.
[Signature]
10/11/02
Date

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERS CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10775 BALTIMORE NATIONAL, #202
ELICOTT CITY, MARYLAND 21042
410-481-2000

DEVELOPER'S CERTIFICATE

I/We Certify That All Development And Construction Will Be Done According To This Plan Of Development And Plan For Erosion And Sediment Control And That All Responsible Personnel Involved In The Construction Project Will Have A Certificate Of Attendance At A Department Of Natural Resources 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 Or Their Authorized Agents, As Are Deemed Necessary.

[Signature]
Signature Of Developer
10-7-02
Date

Approved: This Development Is Approved For Erosion And Sediment Control By The Howard Soil Conservation District.
[Signature]
10/11/02
Date

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature]
Director - Department of Planning and Zoning
10/17/02
Date

[Signature]
Chief, Division of Land Development
10/16/02
Date

[Signature]
Chief, Department Engineering Division
10/15/02
Date

PREPARED FOR
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Maryland Route 108
Elicott City, Maryland 21042
Attention Cathleen Young

RUBELING & ASSOCIATES
401 Jefferson Ave.
Towson Maryland 21286-5308
410-337-2886

Address Chart

Parcel Number	Street Address
548	8885 OLD FREDERICK ROAD

PROJECT: PATAPSCO MIDDLE SCHOOL
SECTION/AREA: N/A
PARCEL: 548

DEED REF.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
484/495	10	R-20	17	SECOND	602100

WATER CODE: H02
SEWER CODE: 1454850

ROOF DRAIN PROFILES AND SWM DETAILS

PATAPSCO MIDDLE SCHOOL BUILDING ADDITION

TAX MAP No.: 17
SECOND ELECTION DISTRICT

PARCEL No.: 548
HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN
DATE: SEPTEMBER 25, 2002

"BID AND CONSTRUCTION 24 JUNE 2002"
SHEET 5 OF 6

SIP: 02-114

200 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION DEFINITION

Using vegetation as cover for barren soil to protect it from forces that cause erosion.

PURPOSE:
Vegetative stabilization specifications are used to promote the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to erode and allows infiltration of rainfall, thereby reducing sediment loads and run-off to downstream areas, and improving wildlife habitat and visual resources.

CONDITIONS WHERE PRACTICE APPLIES:
This practice shall be used on denuded areas as specified on the plans and may be used on highly erodible or critically eroding areas. This specification is divided into temporary seeding, to quickly establish vegetative cover for short duration (up to one year), and permanent seeding, for long term vegetative cover. Excavated Areas for Temporary Seeding are Temporary Soil Stockpiles, cleared areas being left between construction phases, earth dikes, etc. and for Permanent Seeding are lawns, dms, cut and fill slopes and other areas of final grade. Former stockpiles and staging areas, etc.

EFFECTS ON WATER QUALITY AND QUANTITY:
Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and rates of runoff, infiltration, evaporation, transpiration, percolation, and groundwater recharge. Vegetation, over time, will increase organic matter content and improve the capacity of the soil and subsequent plant growth. Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plants will also help protect groundwater supplies by assimilating those substances present within the root zone. Sediment control devices must remain in place during grading, seeded preparation, seeding, mulching, and vegetative establishment to prevent large quantities of sediment and associated chemicals and nutrients from washing into surface waters.

SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS

A. Site Preparation

- Install erosion and sediment control structures (either temporary or permanent) such as diversions, grade stabilization structures, berms, waterways, or sediment control basins.
- Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding.
- Schedule required soil tests to determine soil amendment composition and application rates for sites having disturbed areas over 5 acres.

B. Soil Amendment (see Specifications)

- Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas over 5 acres. Soil analysis may be performed by the University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.
- Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Fertilizers may be substituted with prior approval from the appropriate approval authority. Fertilizers shall all be delivered to the site fully labeled according to the applicable state fertilizer laws and shall bear the name, trade name or trademark and warranty of the producer.
- Lime materials shall be ground limestone (hydrated or burnt lime may be substituted) which contains at least 50% total oxides (calcium oxide plus magnesium oxide). Limestone shall be ground to such fineness that at least 50% will pass through a #100 mesh sieve and 90% will pass through a #20 mesh sieve.
- Apply lime and fertilizer into the top 3"-5" of soil by disk or other suitable means.

C. Seeded Preparation

- Temporary Seeding
 - Seeded preparation shall consist of loosening soil to a depth of 3" to 5" by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened it should not be rolled or dozed smooth, but left in the rougher condition. Sloped areas greater than 3:1 should be tracked leaving the surface in an irregular condition with ridges running parallel to the contour of the slope.
 - Apply fertilizer and lime as prescribed on the plans.
 - In corporate lime and fertilizer into the top 3"-5" of soil by disk or other suitable means.
- Permanent Seeding
 - Minimum soil conditions required for permanent vegetative establishment. Soil shall be between 5:1 and 7:1.
 - Soluble salts shall be less than 500 parts per million (ppm).
 - The soil shall contain less than 40% clay, but enough fine grained material (over silt size) to provide the soil with sufficient water holding capacity to maintain a moderate amount of moisture. An exception is if loess or silt loess is to be planted, then a sandy silt (3:05 silt plus clay) would be acceptable.
 - Soil must contain 1.5% minimum organic matter by weight.
 - Soil must contain sufficient pore space to permit adequate root penetration.
 - If these soil conditions cannot be met by soils on site, adding topsoil is required in accordance with Section 21 Standard and Specification for Topsoil.
- Areas previously graded in conformance with the drawings shall be maintained in a true and even grade, free of ruts or otherwise loosened to a depth of 3"-5" permit drainage of the topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from sliding down a slope.
- Apply soil amendments as per soil test or as included on the plans.
- For soil amendments into the top 3"-5" of topsoil by disk or other suitable means. Lawn areas should be raked to smooth the surface, remove large objects like stones and branches, and ready the area for seed and application. Where site conditions will not permit normal seeded preparation, loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface. Steep slopes (steeper than 3:1) should be tracked by a dozer leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 1"-3" of soil should be loose and friable. Seeded loosening may not be necessary on newly disturbed areas.

D. Seed Specifications

- All seed must meet the requirements of the Maryland State Seed Law. All seed shall be subject to re-testing by a recognized seed laboratory. All seed used shall have been tested within the 6 months immediately preceding the date of sowing such material.
- Notes: Seed lots shall be made available to the inspector to verify time and rates of seed used.
- Incubant - The incubant for treating legume seed in the seed mixtures shall be a pure culture of nitrogen-fixing bacteria for the species and the incubant shall not be older than the date indicated on the container. Add fresh incubant as directed on package. Use four times the recommended rate of application. Incubant that is less than 100% effective at 75-80° F. can weaken bacteria and make the incubant less effective.

E. Methods of Seeding

- Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer), broadcast or drop seeded, or a cultipacker seeder.
- If fertilizer is being applied at the time of seeding, the application rates amounts will not exceed the following: Nitrogen maximum of 100 lbs. per acre total of soluble nitrogen (P2O5 (phosphorus) 200 lbs/acre; K2O (potassium) 200 lbs/acre).
- Line - use only grade agricultural limestone, 40 to 3 tons per acre may be applied by hydroseeding. Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use hydrated lime when hydroseeding.
- Seed and fertilizer shall be mixed on site and seeding shall be done immediately and without interruption.

F. Dry Seeding

- Seed spread dry shall be incorporated into the subsoil at the rates prescribed on the Temporary Seeding Summary and Seeding Specifications. The seeded areas shall then be rolled with a weighted roller to provide good seed to soil contact.
- Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.
- Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil. Cultipacker seeders are required to bury the seed to a depth of 1/2" to 1" to provide at least 1/4" inch of soil covering. Seeded must be firm after planting.
- Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.

G. Mulch Specifications (in order of preference)

- Straw shall consist of thorough threshed wheat, rye or oat straw, reasonable bright in color, and shall be clean, free of mud, decayed, or excessively dusty and shall be free of noxious weed seeds as specified in the Maryland Seed Law.
- Wood Cellulose Fiber Mulch (WCFM)
 - WCFM shall consist of specially prepared wood cellulose processed into a uniform fibrous physical state.
 - WCFM shall be dyed green or contain a green dye in the package that will provide appropriate visual inspection of the WCFM and soil slurry.
 - WCFM, including dye, shall contain no germination or growth inhibiting factors.
 - WCFM materials shall be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material shall form a blotter-like ground cover, on application, having moisture absorption and percolation properties and shall cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.
 - WCFM material shall contain no elements or compounds of concentration levels that will be phytotoxic.
 - WCFM must conform to the following physical requirements: fiber length to approximately 1/8" (minimum) to 1/4" (maximum); pH range of 4.0 to 8.5, ash content of 1.0% maximum and water holding capacity of 90% minimum.
- Mulching Seeded Areas - Mulch shall be applied to all seeded areas immediately after seeding.
- If grading is completed outside of the seeding season, mulch shall be applied as prescribed in this section and maintained until the seeding season returns and seeding can be performed in accordance with these specifications.
- When straw mulch is used, it shall be spread over all seeded areas at the rate of 2 tons/acre. Mulch shall be applied to a uniform loose depth of between 1" and 2". Mulch applied shall achieve a uniform distribution and depth so that the soil surface is not exposed. If a mulch anchoring tool is to be used, the rate should be increased to 2.5 tons/acre.
- Wood cellulose fiber used as a mulch shall be applied at a net dry weight of 1,500 lbs. per acre. The wood cellulose fiber shall be mixed with water, and the mixture shall contain a maximum of 50 lbs. of wood cellulose fiber per 100 gallons of water.

H. Securing Straw Mulch (Mud Anchoring): Mulch anchoring shall be performed immediately following mulch application to minimize loss by wind or water. This shall be done by one of the following methods listed by preference, depending upon size of area and erosion hazard:

- A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil. This practice shall be used on the contour if possible.
- Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net dry weight of 500 lbs. per acre. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
- Application of liquid binders should be heavier at the edges where wind catches mulch, such as in valleys and crevices of banks. The remainder of the mulch should be applied in a binder application. Synthetic binders - such as Acrylic DLR (Agra-Tack), DCA-70 Retroseal, Terra Tax II, Terra Tack AR or other approved equal may be used at rates recommended by the manufacturer.
- Lightweight plastic netting may be stapled over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4' to 15' feet wide and 300 to 3,000 feet long.

Incremental Stabilization - Cut Slopes

- All cut slopes shall be dressed, prepared, seeded and mulched as the work progresses. Slopes shall be excavated and stabilized in eight increments not to exceed 15'.
- Construction sequence (Refer to Figure 3 below):
 - Excavate and stabilize all temporary swales, side ditches, or berms that will be used to convey runoff from the excavation.
 - Perform Phase 2 excavation, dress, and stabilize.
 - Perform Phase 3 excavation, dress and stabilize. Overseed Phase 1 areas as necessary.
 - Perform final phase excavation, dress and stabilize. Overseed previously seeded areas as necessary.

Note: Once excavation has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil of required grade and permanent seed and mulch. Any interruption in the operation of completing the operation out of the seeding season will necessitate the application of temporary stabilization.

Incremental Stabilization of Embankments - Fill Slopes

- Embankments shall be constructed in lifts as prescribed on the plans.
- Slopes shall be stabilized immediately when the vertical height of the multiple lifts reaches 15' or when the grading operation ceases as prescribed in the plans.
- At the end of each lift, temporary berms and pipe slope drains should be constructed along the top edge of the embankment to intercept surface runoff and convey it down the slope in a non-erosive manner to the sediment trapping area.
- Construction sequence (Refer to Figure 4 below):
 - Excavate and stabilize all temporary swales, side ditches, or berms that will be used to divert runoff around the fill. Construct slope fill on low side of fill as shown in Figure 5, unless other methods shown on the plans address this area.
 - Place Phase 1 embankment, dress and stabilize.
 - Place Phase 2 embankment, dress and stabilize.
 - Place final phase embankment, dress and stabilize. Overseed previously seeded areas as necessary.

Note: Once the placement of fill has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruption in the operation or completing the operation out of the seeding season will necessitate the application of temporary stabilization.

NOTE: THESE SEEDING SPECIFICATIONS ARE THE MINIMUM REQUIRED FOR SEDIMENT CONTROL. REFER TO PROJECT SPECIFICATIONS FOR SEEDING REQUIREMENTS FOR OTHER AREAS OF THE SITE.

LEGEND

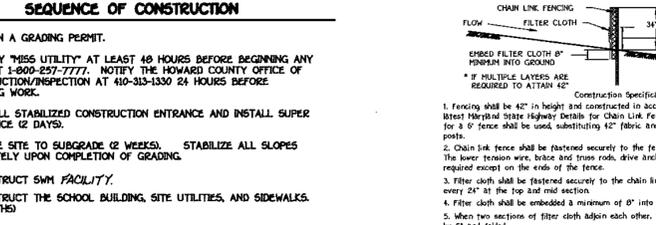
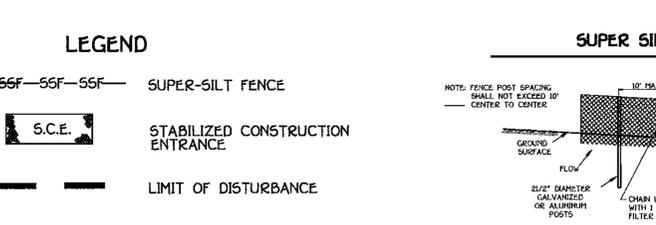
SSS SUPER-SILT FENCE

S.C.E. STABILIZED CONSTRUCTION ENTRANCE

LIMIT OF DISTURBANCE

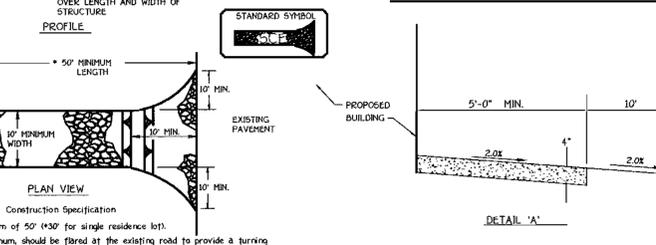
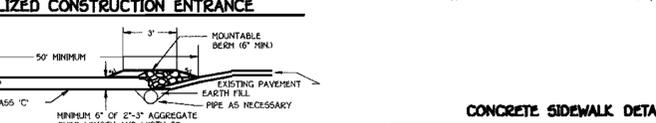
SEQUENCE OF CONSTRUCTION

1. OBTAIN A GRADING PERMIT.
2. NOTIFY "MISS UTILITY" AT LEAST 48 HOURS BEFORE BEGINNING ANY WORK AT 1-800-257-7777. NOTIFY THE HOWARD COUNTY OFFICE OF CONSTRUCTION/INSPECTION AT 410-313-1330 24 HOURS BEFORE STARTING WORK.
3. INSTALL STABILIZED CONSTRUCTION ENTRANCE AND INSTALL SUPER SILT FENCE 62 DAYS.
4. GRADE SITE TO SUBGRADE (2 WEEKS). STABILIZE ALL SLOPES IMMEDIATELY UPON COMPLETION OF GRADING.
5. CONSTRUCT SWM FACILITY.
6. CONSTRUCT THE SCHOOL BUILDING, SITE UTILITIES, AND SIDEWALKS (12 MONTHS).
7. THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON ALL SEDIMENT AND EROSION CONTROL STRUCTURES SHOW HEREON.
8. STABILIZE ALL DISTURBED AREAS AND OBTAIN PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR TO PROCEED.
9. WHEN ALL CONTRIBUTING AREAS TO THE SEDIMENT CONTROL DEVICES HAVE BEEN STABILIZED AND WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, THE DEVICES MAY BE REMOVED AND/OR BACKFILLED AND THE REMAINING AREAS BROUGHT TO FINAL DESIGN GRADE. STABILIZE ALL REMAINING AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES.
10. NOTIFY HOWARD COUNTY OFFICE OF INSPECTIONS AND PERMITS FOR FINAL INSPECTION OF THE COMPLETED PROJECT.



DESIGN CRITERIA

Slope	Slope (degrees)	Slope Length (Minimum)	Silt Fence Length (Minimum)
0 - 3%	0 - 10	Unlimited	Unlimited
3 - 5%	10 - 15	200 feet	200 feet
5 - 8%	15 - 24	100 feet	100 feet
8 - 12%	24 - 31	50 feet	50 feet
12 - 20%	31 - 41	25 feet	25 feet



- CONSTRUCTION SPECIFICATION**
- Length - minimum of 50' (40' for single release left).
 - Width - 10" minimum, should be flared at the existing road to provide a turning radius.
 - 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 reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
 - Surface Water - 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 berm 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 S.C.E. 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 construction entrance.

ENGINEER'S CERTIFICATE

I hereby certify that this Plan for Erosion and Sediment Control Represents A Practical And Workable Plan Based On My Personal Knowledge Of The Site Condition And That It Was Prepared In Accordance With The Requirements Of The Howard Soil Conservation District.

John M. Mayers
Signature of Engineer
10/1/02
Date

Reviewed for Howard County Soil Conservation District And Meets Technical Requirements.
10/1/02
Date

U.S.D. - Natural Resources Conservation Service

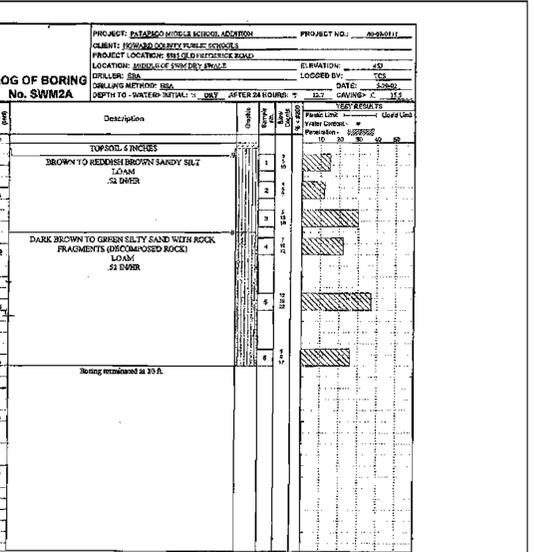
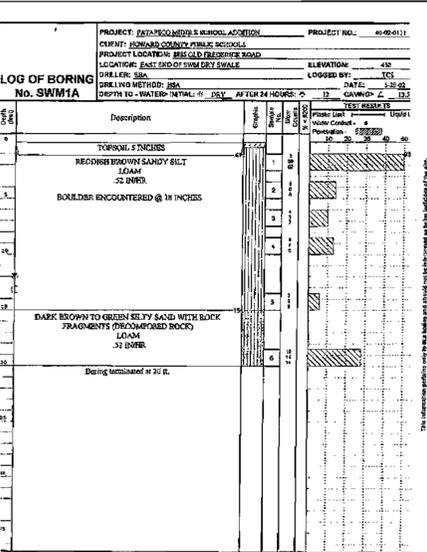
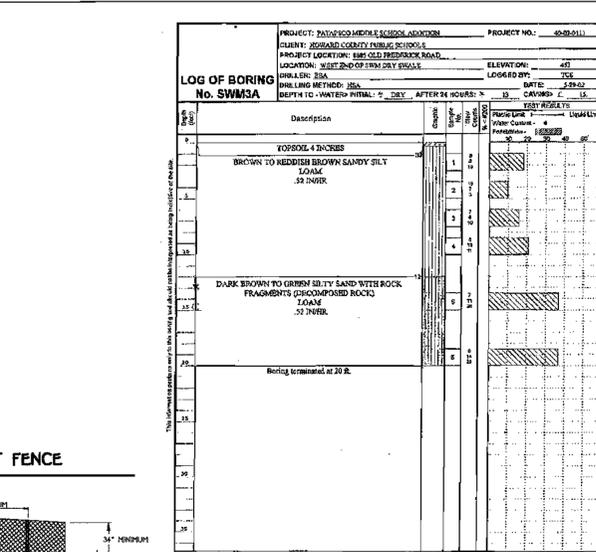
DEVELOPER'S CERTIFICATE

I/We Certify That All Development And Construction Will Be Done According To This Plan Of Development And Plan For Erosion And Sediment Control And That All Responsible Personnel Involved In The Construction Project Will Have A Certificate Of Attendance At A Department Of Natural Resources 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 Or Their Authorized Agents, As Deemed Necessary.

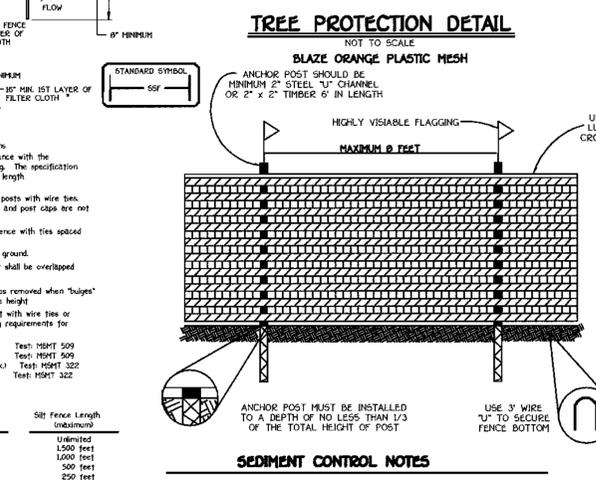
John R. Robertson
Signature of Developer
10-7-02
Date

Approved: This Development Is Approved For Erosion And Sediment Control By The Howard Soil Conservation District.
10/1/02
Date

Dist. Howard Soil Conservation Dist.

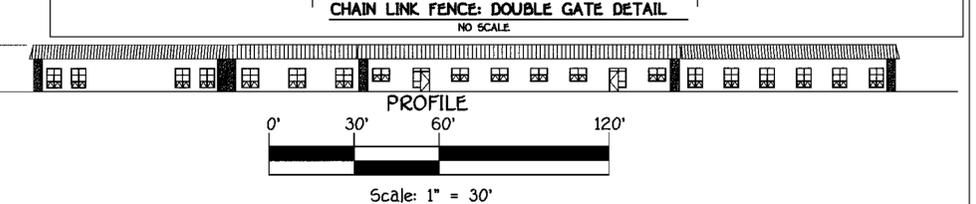
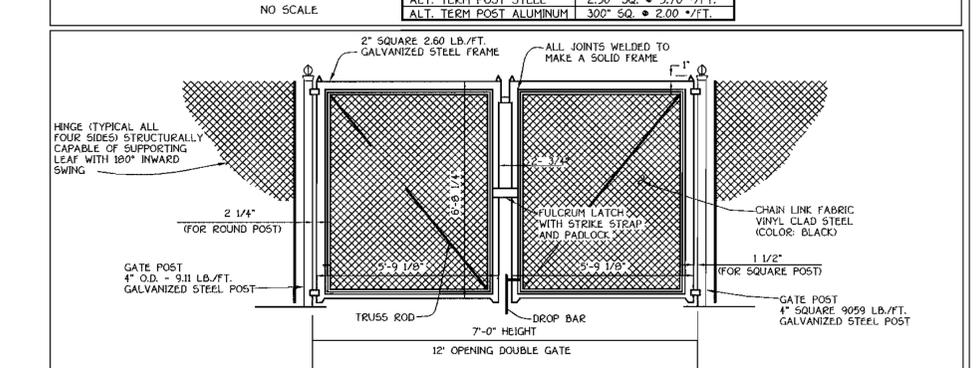
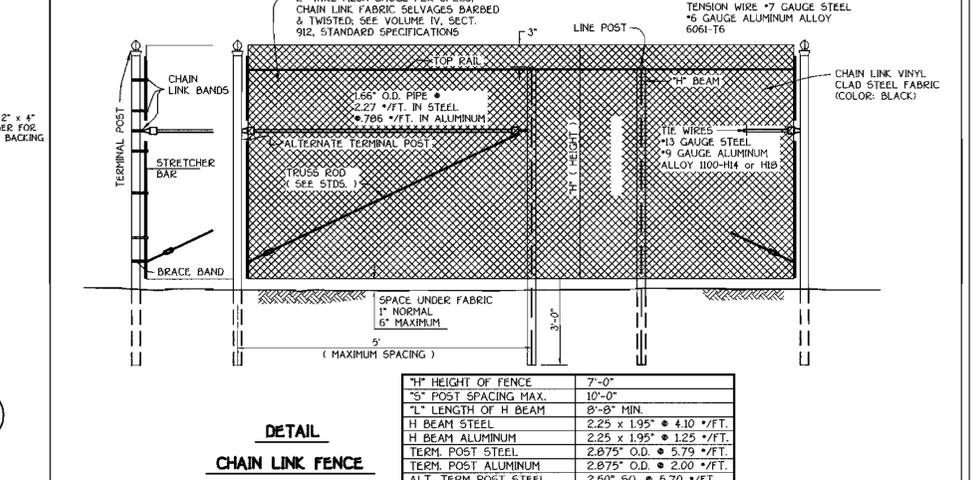


NOTE: THE SOIL BORING LOGS ARE FOR "INFORMATION ONLY"



- SEDIMENT CONTROL NOTES**
1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (03-18-95).
 2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND REVISIONS THERE TO.
 3. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 7 (SEVEN) CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1. DO 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
 4. APPROVED TEMPORARY SEEDING SHALL BE PERFORMED AND THE PERCENTAGE OF SEEDING SHALL BE STABILIZED WITHIN THE TIME SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 50), 500 GEC. 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.
 5. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
 7. SITE ANALYSIS:

TOTAL AREA OF SITE	21.6 ACRES
AREA DISTURBED	1.7 ACRES
AREA TO BE ROOFED OR PAVED	0.5 ACRES
AREA TO BE VEGETATIVELY STABILIZED	1.2 ACRES
TOTAL CUT	500 CU.YDS.
TOTAL FILL	500 CU.YDS.
OFFSITE WASTE/BORROW AREA LOCATION	0.0 CU.YDS.
 8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
 9. ADDITIONAL SEDIMENT CONTROL MEASURES MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
 10. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE CONSTRUCTION ACTIVITY AND GRADING INSPECTION COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING, OTHER THAN GRADING OF GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
 11. APPROVAL OF THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE OF BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.



APPROVED: DEPARTMENT OF PLANNING AND ZONING

John R. Robertson
Signature of Developer
10/7/02
Date

PREPARED FOR HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Maryland Route 109
Ellicott City, Maryland 21042
Attention Cathleen Young

RUBELING & ASSOCIATES
401 Jefferson Ave.
Towson Maryland 21286-5308
410-337-2886

Address Chart

Parcel Number	Street Address
548	8885 OLD FREDERICK ROAD

PROJECT	SECTION/AREA	PARCEL
PATAPSCO MIDDLE SCHOOL	N/A	548

DEED REF.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
484/495	10	R-20	17	SECOND	602100

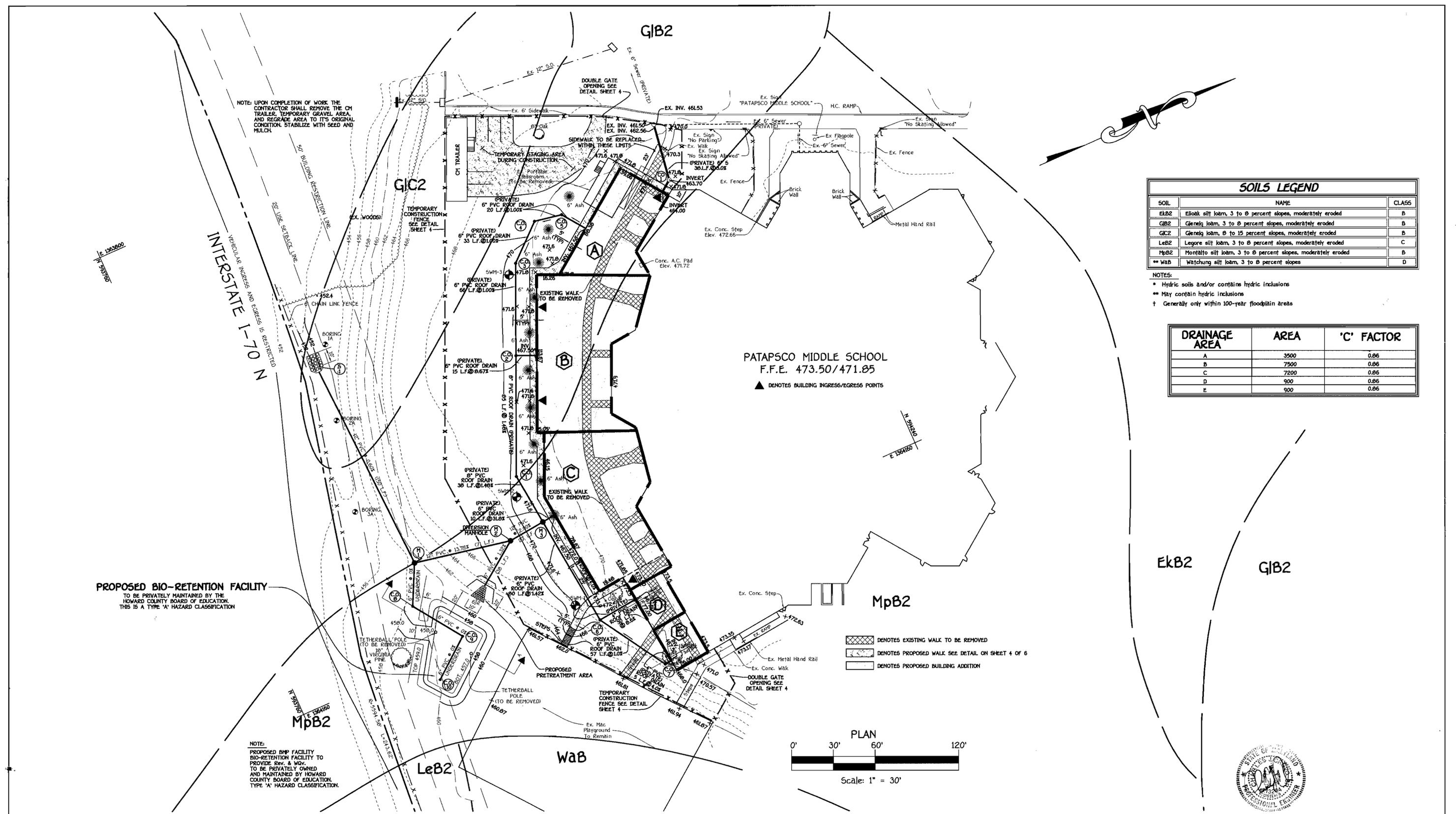
WATER CODE: H02 SEWER CODE: 1454850

SEDIMENT AND EROSION CONTROL NOTES AND DETAILS

PATAPSCO MIDDLE SCHOOL BUILDING ADDITION

TAX MAP No. 17 PARCEL No. 548
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: SEPTEMBER 3, 2002
"BID AND CONSTRUCTION 24 JUNE 2002"
SHEET 4 OF 6

SDP 08.114



SOILS LEGEND		
SOIL	NAME	CLASS
EkB2	Elk oak silt loam, 3 to 8 percent slopes, moderately eroded	B
GJB2	Glenelg loam, 3 to 8 percent slopes, moderately eroded	B
GIC2	Glenelg loam, 8 to 15 percent slopes, moderately eroded	B
LeB2	Legore silt loam, 3 to 8 percent slopes, moderately eroded	C
MpB2	Montalto silt loam, 3 to 8 percent slopes, moderately eroded	B
WaB	Watchung silt loam, 3 to 8 percent slopes	D

NOTES:
 * Hydric soils and/or contains hydric inclusions
 ** May contain hydric inclusions
 † Generally only within 100-year floodplain areas

DRAINAGE AREA	AREA	'C' FACTOR
A	3500	0.86
B	7500	0.86
C	7200	0.86
D	900	0.86
E	900	0.86

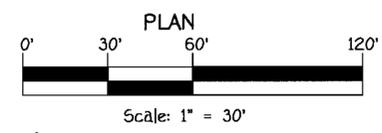
NOTE: UPON COMPLETION OF WORK THE CONTRACTOR SHALL REMOVE THE CM TRAILER, TEMPORARY GRAVEL AREA, AND REGRADE AREA TO ITS ORIGINAL CONDITION. STABILIZE WITH SEED AND MULCH.

PROPOSED BIO-RETENTION FACILITY TO BE PRIVATELY MAINTAINED BY THE HOWARD COUNTY BOARD OF EDUCATION. THIS IS A TYPE 'A' HAZARD CLASSIFICATION

NOTE: PROPOSED BMP FACILITY BIO-RETENTION FACILITY TO PROVIDE REV. & WQV. TO BE PRIVATELY OWNED AND MAINTAINED BY HOWARD COUNTY BOARD OF EDUCATION. TYPE 'A' HAZARD CLASSIFICATION.

PATAPSCO MIDDLE SCHOOL
 F.F.E. 473.50/471.85
 ▲ DENOTES BUILDING INGRESS/EGRESS POINTS

DENOTES EXISTING WALK TO BE REMOVED
 DENOTES PROPOSED WALK SEE DETAIL ON SHEET 4 OF 6
 DENOTES PROPOSED BUILDING ADDITION



	<p>ENGINEER'S CERTIFICATE</p> <p>I hereby certify that this Plan for Erosion and Sediment Control Represents a Practical and Workable Plan Based on My Personal Knowledge of the Site Condition and that it was prepared in accordance with the Requirements of the Howard Soil Conservation District.</p> <p><i>[Signature]</i> Signature of Engineer 10/16/02 Date</p>	<p>DEVELOPER'S CERTIFICATE</p> <p>"I/we certify that all Development and Construction will be Done according to this Plan for Erosion and Sediment Control and that all Responsible Personnel Involved in the Construction Project will have a Certificate of Attendance at a Department of Natural Resources 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 or their Authorized Agents, as are deemed Necessary."</p> <p><i>[Signature]</i> Signature of Developer 10-7-02 Date</p>	<p>APPROVED: DEPARTMENT OF PLANNING AND ZONING</p> <p><i>[Signature]</i> Director - Department of Planning and Zoning 10/17/02 Date</p> <p><i>[Signature]</i> Chief, Division of Land Development 10/16/02 Date</p> <p><i>[Signature]</i> Chief, Department of Engineering Division 10/16/02 Date</p>	<p>PREPARED FOR HOWARD COUNTY PUBLIC SCHOOL SYSTEM 10910 Maryland Route 108 Ellicott City, Maryland 21042 Attention Cathleen Young</p> <p>RUBELING & ASSOCIATES 401 Jefferson Ave. Towson Maryland 21286-5308 410-337-2086</p>	<p>Address Chart</p> <table border="1"> <tr> <th>Parcel Number</th> <th>Street Address</th> </tr> <tr> <td>548</td> <td>8085 OLD FREDERICK ROAD</td> </tr> </table>	Parcel Number	Street Address	548	8085 OLD FREDERICK ROAD	<p>DRAINAGE AREAS AND SOILS MAP</p> <p>PATAPSCO MIDDLE SCHOOL BUILDING ADDITION</p> <p>TAX MAP No: 17 PARCEL No: 548 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: AS SHOWN DATE: SEPTEMBER 26, 2002 "BID AND CONSTRUCTION 24 JUNE 2002" SHEET 6 OF 6</p>				
	Parcel Number	Street Address												
548	8085 OLD FREDERICK ROAD													
<p>Reviewed For Howard County Soil Conservation District and Meets Technical Requirements.</p> <p><i>[Signature]</i> 10/16/02 Date</p> <p>U.S.D. - Natural Resources Conservation Service</p>	<p>Approved: This Development is Approved for Erosion and Sediment Control by the Howard Soil Conservation District.</p> <p><i>[Signature]</i> District Howard Soil Conservation Dist. 10/16/02 Date</p>	<p>PROJECT: PATAPSCO MIDDLE SCHOOL SECTION/AREA: N/A PARCEL: 548</p> <table border="1"> <tr> <th>DEED REF.</th> <th>BLOCK NO.</th> <th>ZONE</th> <th>TAX/ZONE</th> <th>ELEC. DIST.</th> <th>CENSUS TR.</th> </tr> <tr> <td>484/495</td> <td>18</td> <td>R-20</td> <td>17</td> <td>SECOND</td> <td>602100</td> </tr> </table> <p>WATER CODE: H02 SEWER CODE: 1454850</p>	DEED REF.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.	484/495	18	R-20	17	SECOND	602100
DEED REF.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.									
484/495	18	R-20	17	SECOND	602100									

SP02.117