

LEGEND	
Symbol	Description
--- (dashed line)	Existing Contour 2' Interval
--- (dashed line)	Existing Contour 10' Interval
--- (dashed line)	Proposed Contour 2' Interval
--- (dashed line)	Proposed Contour 10' Interval
+ 624	Spot Elevation
-SF-	Silt Fence
FF	First Floor Elevation
BE	Basement Elevation
⊙	Proposed Walkout
---	Earth Dike
-X-X-	Tree Protection
---	Existing Tree Line
L.O.D.	Limit Of Disturbance
Ⓜ	Existing Street Tree

STREET ADDRESS CHART	
No.	STREET ADDRESS
3810	TEN OAKS ROAD

SHEET INDEX	
SHEET NO.	DESCRIPTION
1 OF 3	PLAN VIEW
2 OF 3	PLAN VIEW
3 OF 3	NOTES AND DETAILS

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 15272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
410.461.2000

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT.
[Signature]
COUNTY HEALTH OFFICER
DATE: 7-10-98

ENGINEER'S CERTIFICATE
"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 and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."
[Signature]
Signature of Engineer (Print name below signature)
DATE: 6-22-98

DEVELOPER'S CERTIFICATE
"I/we certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."
[Signature]
Signature of Developer (Print name below signature)
DATE: 6-22-98

Reviewed for HOWARD SCD and meets Technical Requirements.
[Signature] 7/1/98
U.S.D.A. - Natural Resources Conservation Service
This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
[Signature] 7/1/98
Howard SCD

OWNER
MARYLAND GROUND COVER
10132 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042

APPROVED: DEPARTMENT OF PLANNING AND ZONING
[Signature] 7/1/98
Chief, Division of Land Development
[Signature] 7/2/98
Chief, Development Engineering Division
[Signature] 7/1/98

SUBDIVISION		SECTION/AREA	LOT NO.
MARYLAND GROUND COVERS			9A
PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE
1406/723	14	D-C	22
WATER CODE		ELEC. DIST.	CENSUS TR.
		3RD	6030
		SEWER CODE	

SITE DEVELOPMENT PLAN
PLAN VIEW
MARYLAND GROUND COVERS
LOTS 5-A, 45B
PARCEL 300 + 305B
TAX MAP No: 22 PARCEL:
3RD-ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: JANUARY, 1998
SHEET 1 OF 3

SCHEDULE A LANDSCAPE PERIMETER EDGE				
CATEGORY	ADJACENT TO PERIMETER PROP.			
LANDSCAPE TYPE	D ①	D ②	B ③	D ④
LINEAR FEET OF PERIMETER	1367.75	245.74	150.00	145
CREDIT FOR EXISTING VEGETATION	1367.75			
NUMBER OF PLANTS REQUIRED				
SHADE TREES		3	3	7
EVERGREEN TREES		0	4	14
SHRUBS		0	0	0
NUMBER OF PLANTS PROVIDED				
SHADE TREES		3	3	7
EVERGREEN TREES		0	4	14
OTHER TREES (2:1 SUBSTITUTION)		0	0	0
SHRUBS (10:1 SUBSTITUTION)		0	0	0
(DISCOUNT PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)				

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING	
NUMBER OF PARKING SPACES	16
NUMBER OF TREES REQUIRED	2
NUMBER OF TREES PROVIDED	2
SHADE TREES	2
OTHER TREES (2:1 SUBSTITUTION)	

- ### SEQUENCE OF CONSTRUCTION
- OBTAIN GRADING PERMIT
 - INITIAL EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON PLAN (2 DAY)
 - MASS GRADE SITE TO SUBGRADE (3 DAYS)
 - CONSTRUCT BUILDINGS, INSTALL PERC SYSTEM (70 DAYS)
 - INSTALL BASE COURSE PAVING (2 DAYS)
 - FINE GRADE AND INITIAL PERMANENT SEEDING (2 DAYS)
 - INSTALL FINISHED PAVING AND LANDSCAPING (3 DAY)
 - CONSTRUCT SHALLOW MARSH (2 DAYS)
 - REMOVE SEDIMENT & EROSION CONTROL MEASURES AS UPLAND AREAS ARE STABILIZED AND PERMITS ARE GRANTED BY EIS INSPECTOR (2 DAYS)

KEY	WATER QUALITY PLANTING	
	No.	
9L	18	
7A	7	
CO	7	
PV	18	
PC	7	

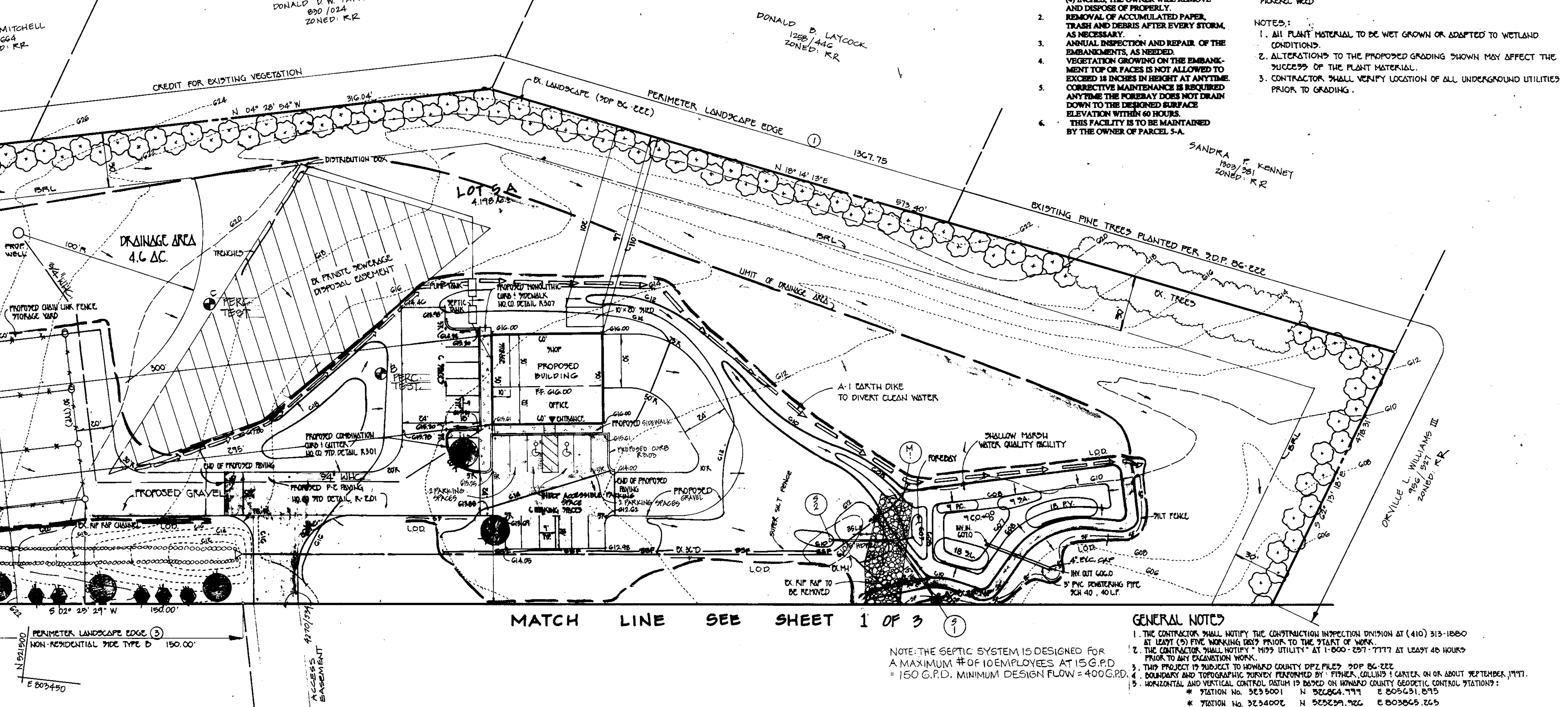
PRIMARY WETLAND VEGETATION

PLANT SPECIES	SIZE	REMARKS
TRIGLOCH LITIFOLIA (9L)	ROOTS	30' OC.
DUCK POTATO		
SCIRPUS AMERICANUS (9A)	ROOTS	30' OC.
COMMON THREE SQUARE		

SECONDARY WETLAND VEGETATION

PLANT SPECIES	SIZE	REMARKS
CEPHALOTHUS OCCIDENTALIS (CO)	ROOTS	
BUTTON BUSH		
POLYNDRUM VIRGINICA (PV)	ROOTS	30' OC.
ARROW-ARUM		
POTAMOGETON SPERMATOPHYTES (PC)	ROOTS	30' OC.
PICKEREL WEED		

COMMENTS: EXISTING PINE TREES PLANTED PER SDP 86-222



- ### OPERATION, MAINTENANCE AND INSPECTION FOR SHALLOW MARSH
- INSPECT FOREBAY AFTER EACH STORM, IF SEDIMENT BUILDUP EXCEEDS FOUR (4) INCHES, THE OWNER WILL REMOVE AND DISPOSE OF PROPERLY.
 - REMOVAL OF ACCUMULATED PAPER, TRASH AND DEBRIS AFTER EVERY STORM, AS NECESSARY.
 - ANNUAL INSPECTION AND REPAIR OF THE EMBANKMENTS, AS NEEDED.
 - VEGETATION GROWING ON THE EMBANKMENT TOP OR FACES IS NOT ALLOWED TO EXCEED 18 INCHES IN HEIGHT AT ANYTIME. CORRECTIVE MAINTENANCE IS REQUIRED ANYTIME THE FOREBAY DOES NOT DRAIN DOWN TO THE DESIGNED SURFACE ELEVATION WITHIN 60 HOURS.
 - THIS FACILITY IS TO BE MAINTAINED BY THE OWNER OF PARCEL 5-A.

- ### NOTES:
- ALL PLANT MATERIAL TO BE WET GROWN OR ADAPTED TO WETLAND CONDITIONS.
 - ALTERATIONS TO THE PROPOSED GRADING SHOWN MAY AFFECT THE SUCCESS OF THE PLANT MATERIAL.
 - CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO GRADING.

LEGEND

Symbol	Description
---	Existing Contour 2' Interval
---	Existing Contour 10' Interval
---	Proposed Contour 2' Interval
---	Proposed Contour 10' Interval
624	Spot Elevation
SF-SF	Silt Fence
FF	First Floor Elevation
BE	Basement Elevation
⊙	Proposed Walkout
-X-X-	Earth Dike
-X-X-	Tree Protection
---	Existing Tree Line
LOD	Limit of Disturbance
Ⓢ	Existing Street Tree

LANDSCAPE LEGEND

SYMBOL	NAME	REMARKS
Ⓢ	PINUS STROBUS - EASTERN WHITE PINE	6'-8' HT.
Ⓢ	QUERCUS TRIACANTHOS INERMIS SHADEMASTER THORNLESS HONEY LOCUST	2 1/2" - 3" CAL.

STRUCTURE SCHEDULE

STRUCTURE	INV. IN	INV. OUT	TOP ELEV.	REMARKS
S-1	606.93	606.93	608.43	
S-2	608.67	608.67	610.17	
M-1	608.30	607.30	612.00	HO. CO. STD. DETAILS 6-5-85

- ### GENERAL NOTES
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST (5) FIVE WORKING DAYS PRIOR TO THE START OF WORK.
 - THE CONTRACTOR SHALL NOTIFY "MPS UTILITY" AT 1-800-297-7177 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
 - THIS PROJECT IS SUBJECT TO HOWARD COUNTY DPZ FILE # SDP 86-222
 - BOUNDARY AND TOPOGRAPHIC SURVEY PERFORMED BY FISHER, COLLINS & CARTER, ON OR ABOUT SEPTEMBER, 1997.
 - HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON HOWARD COUNTY GEODETIC CONTROL STATIONS:
 - * STATION NO. 3235001 N 525264.777 E 805631.875
 - * STATION NO. 3234002 N 525259.922 E 805645.265
 - ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
 - CONTRACTOR WILL CHECK POWER HOUSE CONNECTION ELEVATION AT EASTERN LINE PRIOR TO CONSTRUCTION.
 - STORMWATER MANAGEMENT OBLIGATIONS ARE FULLY FILLED UNDER SDP 86-222
 - NOTE: THE SEPTIC SYSTEM IS DESIGNED FOR A MAXIMUM # OF 10 EMPLOYEES AT 15 G.P.D. = 150 G.P.D. MINIMUM DESIGN FLOW = 400 G.P.D.
 - THE LOCATION OF THESE HO. CO. CONTROL STATIONS WILL NOT FIT ON THE VICINITY MAP.

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 15275 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21117
 (410) 461-1222

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS,
 HOWARD COUNTY HEALTH DEPARTMENT.

John B. Patten
 COUNTY HEALTH OFFICER
 DATE: 7-10-98

ENGINEER'S CERTIFICATE

"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 and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

John R. Patten
 Signature of Engineer (Print name below signature)
 DATE: 7-11-98

Reviewed for HOWARD SCD and meets Technical Requirements.

John R. Patten
 U.S.D.A. Natural Resources Conservation Service
 DATE: 7/11/98

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

John R. Patten
 HOWARD SCD
 DATE: 7/11/98

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Richard Blood
 Chief, Division of Land Development
 DATE: 7/11/98

John R. Patten
 Chief, Engineering Division
 DATE: 7/11/98

John R. Patten
 Director
 DATE: 7/11/98

**SITE DEVELOPMENT PLAN
 PLAN VIEW**

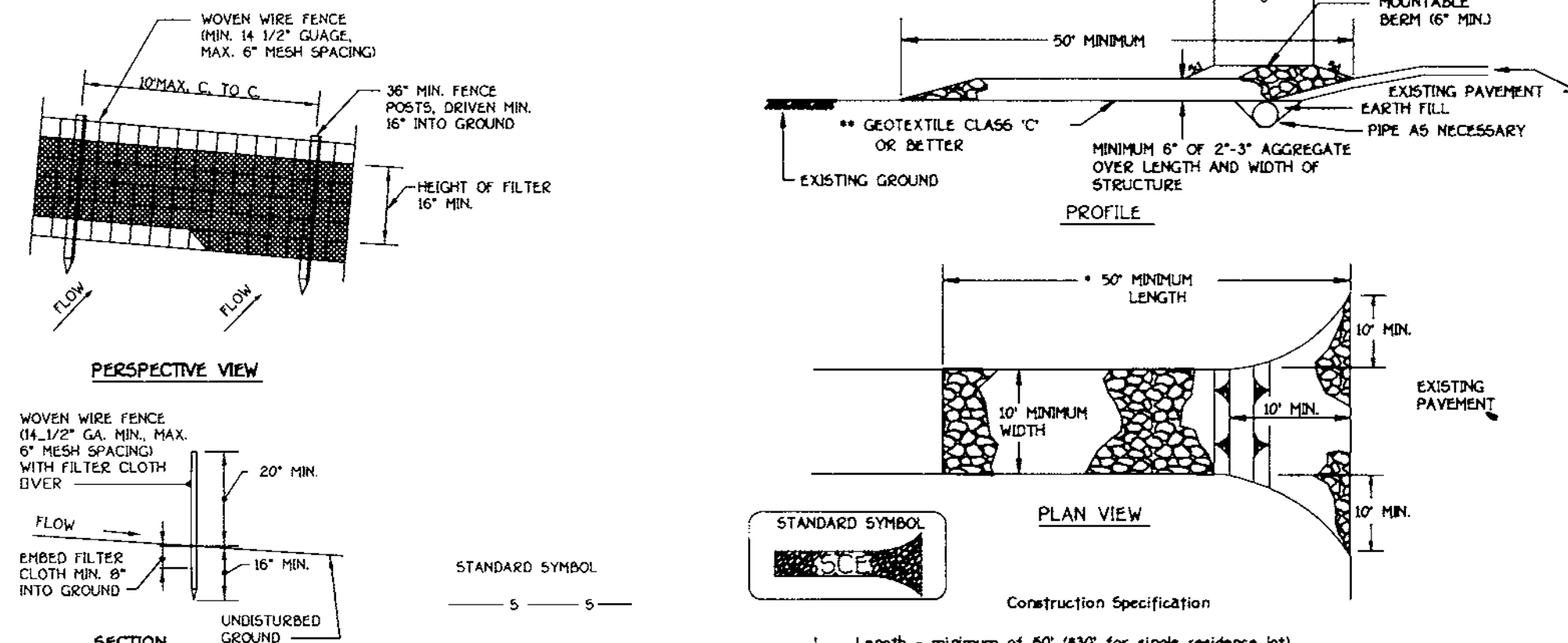
MARYLAND GROUND COVERS
 LOTS 5-A, 5-B
 PARCEL 370 + 375

TAX MAP No: 22 PARCEL:
 3rd ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: JANUARY, 1998
 SHEET 2 OF 3

OWNER

MARYLAND GROUND COVER
 1032 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 (410) 461-1222

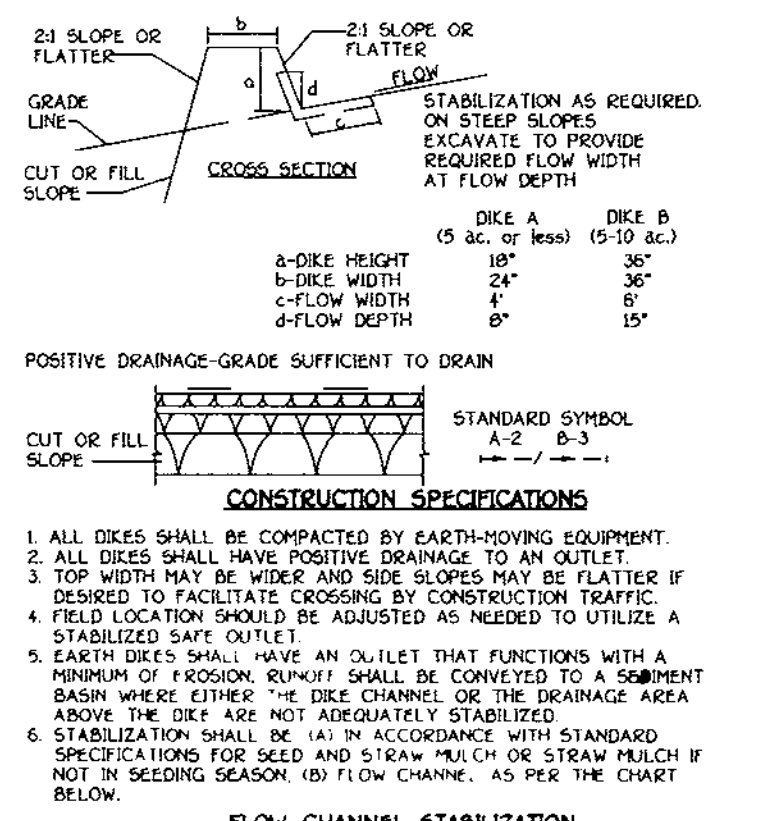
SUBDIVISION	MARYLAND GROUND COVERS		SECTION/AREA	LOT NO.							
PLAT NO.	1486/725	BLOCK NO.	14	ZONE	D-2	TAX/ZONE	22	ELEC. DIST.	3 RD	CENSUS TR.	6030
WATER CODE		SEWER CODE									



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILT FENCE
NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

- ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
- ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
- TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
- FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED BANK OUTLET.
- EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF FLOOD VOLUME THAT IS CONVEYED TO A SEPARATE BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED.
- STABILIZATION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF NOT IN SEEDING SEASON. (SEE FLAT CHANNEL AND CHART BELOW).

FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	3-3.02	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3-1.02B	SEED AND STRAW MULCH	SEED USING AUTE, OR EXCELSDOR, 50L 2" STONE
3	5-1-02C	SEED WITH AUTE, OR 50L 2" STONE	LINED RIP-RAP 4'-8"
4	0-1-20C	LINED RIP-RAP 4'-8"	ENGINEERING DESIGN

EARTH DIKE
NOT TO SCALE

SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND INSURANCE CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1895).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THEREOF.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 31 DAYS CALENDAR DAYS FOR ALL PRECIPITATION SEDIMENT CONTROL STRUCTURES, DIKES, DRAIN PIPES AND ALL SLOPES STEEPER THAN 3:1 BY 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR 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 BY THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 30), TEMPORARY SEEDING (SEC. 30), AND MULCHING (SEC. 32). 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 PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:
 - TOTAL AREA OF SITE: 41.0 ACRES
 - AREA DISTURBED: 1.29 ACRES
 - AREA TO BE ROOFED OR PAVED: 0.92 ACRES
 - AREA TO BE VEGETATIVELY STABILIZED: 0.71 ACRES
 - TOTAL CUT: 1220 CUBIC YARDS
 - TOTAL FILL: 1200 CUBIC YARDS
- 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 DEEPEX NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERMITTED 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 FEET DEPTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

TEMPORARY SEEDING NOTES

REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

PERMANENT SEEDING NOTES

DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE

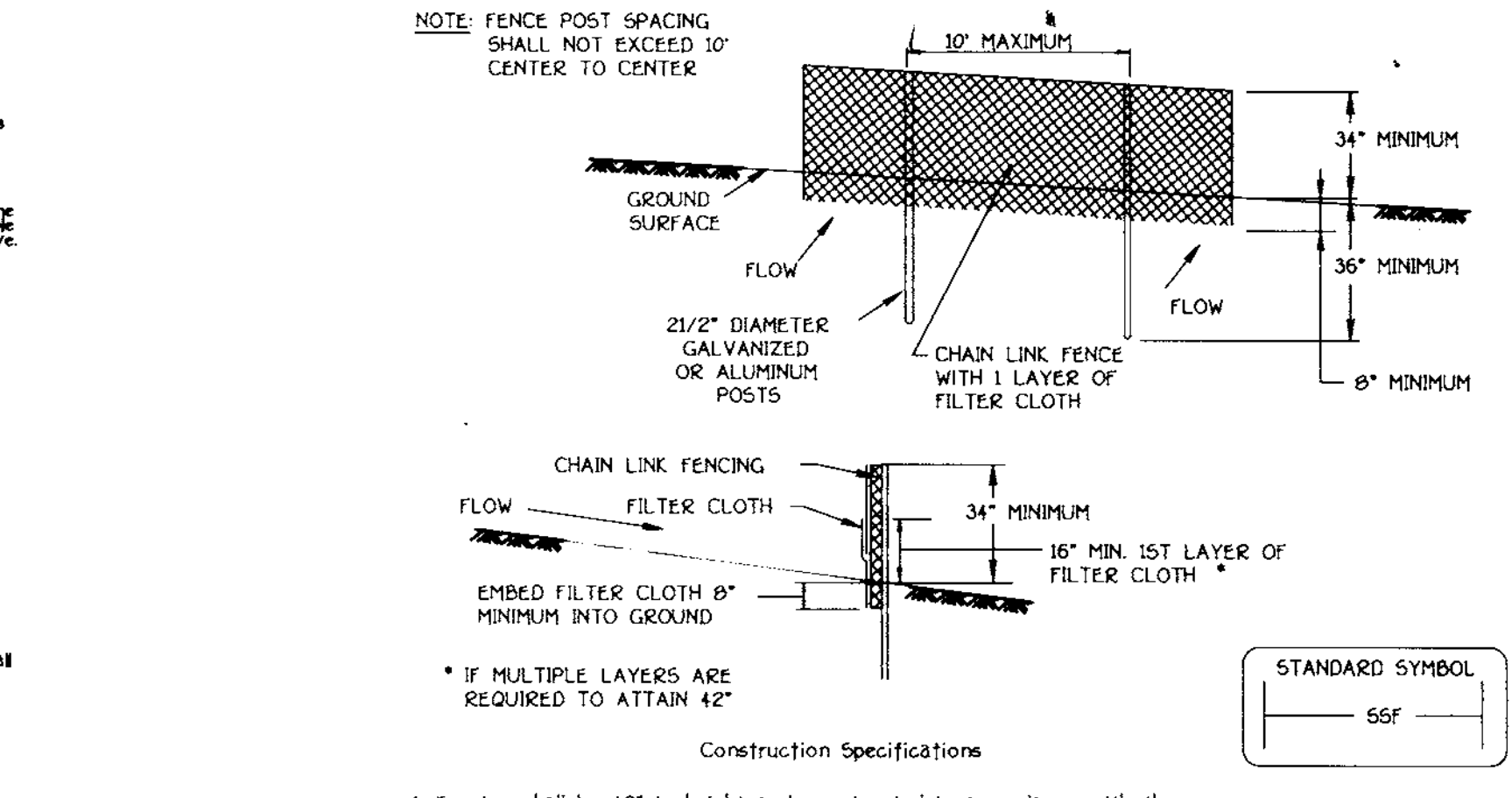
- Length - minimum of 50' (+30' for single residence lot).
- Width - 10' minimum, should be flared at the existing road to provide a turning radius.
- Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. **The plan approval authority may not require single 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 entrance shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mounded 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 SCE is located at a high spot and has no drainage to cover 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.

SEED SPECIFICATIONS

- All seed must meet the requirements of the Maryland State Seed Law. All seed shall be subject to 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 on the job.
- Note: Seed that will be made available to the contractor to verify type and rate of seed used.
- Inoculum - The inoculum for treating legume seed in the seed mixture shall be a pure culture of rhizobium bacteria that is adapted to the species of legume to be sown. Use four times the recommended rate when the inoculum is directed on seed. Use four times the recommended rate when the inoculum is directed on soil. Do not use inoculum if it can weaken bacteria and make the inoculum less effective until used.

Methods of Seeding

- Apply seed uniformly with hydroseeder (seeds include seed and fertilizer), broadcast or drop seeder, or a cultipacker seeder.
 - If fertilizer is being applied at the time of seeding, the application rate amounts will not exceed the following: Nitrogen maximum of 100 lbs. per acre total of soluble nitrogen from all applications; Phosphorus maximum of 120 lbs. per acre total of soluble phosphorus.
 - Lime - Use only ground agricultural limestone, 0.5 to 1.0 ton per acre may be applied by broadcast or with a spreader to provide good seed to soil contact.
 - Do not use urea or hydrated lime when hydroseeding.
 - Seed and fertilizer shall be mixed on site and seeding shall be done immediately and without interruption.
- Dry Seeding - This includes use of conventional drop or broadcast spreaders.
 - Seed spreader dry shall be incorporated into the subsoil at the sites prescribed on the Temporary or Permanent Seeding Summaries or Tables 255 or 26. The seeded area 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.
 - Roll or Cultipacker Seeding - Mechanized seeders that apply and cover seed with soil.
 - Cultipacker seeders are required to bury the seed in such a fashion as 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.
- Mulch Specifications (in order of preference):
 - Straw shall consist of threshed wheat, rice or oat straw, reasonable bright in color, and shall be moist, made, clean, decayed, or excessively dusty and shall be free of noxious weed seeds as specified in the Maryland Seed Law.
 - Wood Cellulose Fiber Mulch (WCFF)
 - WCFF shall consist of specially prepared wood cellulose processed into a uniform fibrous physical state.
 - WCFF shall be dried green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread mulch.
 - WCFF material 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 soil to form a homogeneous slurry. The mulch material shall form a biotite-size ground cover, on application, having moisture absorption and absorbability and shall cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings. WCFF material shall contain no elements or compounds at concentrations that will be phytotoxic.
 - WCFF must conform to the following physical requirements: fiber length to approximately 10 mm, diameter approximately 1 mm, gel time of 4.0 to 6.5, ash to be used, 1.5% maximum and water holding capacity of 40% minimum.
 - Note: Only sterile straw mulch should be used in areas where one species of grass is desired.
 - 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 depth of 2" to 3". 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, it shall be used in accordance with the following methods (based on preference, depending upon size of area and erosion hazards):
 - A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of 12" to 18" inches. This practice is most effective on large areas. The mulch anchoring tool shall be used in a grid pattern. If used on sloping areas, this practice should be used on the contour, if possible.
 - Wood cellulose fiber mulch shall be applied at a rate of 1.500 lbs. per acre. The mulch shall be applied to a depth of 2" to 3". The mulch shall be mixed with water and the mixture shall contain a maximum of 50 lbs. of wood cellulose fiber per 100 gallons of water.
 - Securing Straw Mulch (Mulch Anchoring) - Mulch anchoring shall be performed immediately following mulch application to mixing with soil and water. This may be done by one of the following methods (based on preference, depending upon size of area and erosion hazards):
 - A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of 12" to 18" inches. This practice is most effective on large areas. The mulch anchoring tool shall be used in a grid pattern. If used on sloping areas, this practice should be used on the contour, if possible.
 - Wood cellulose fiber mulch shall be applied at a rate of 1.500 lbs. per acre. The mulch shall be mixed with water and the mixture shall contain a maximum of 50 lbs. 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 crest of dikes. The remainder of the dikes should be applied uniformly after binder application. Synthetic binders such as acrylic, URE (Auro-Tack), DCA-70 Petro-Terr, Terra-Tac, Terra-Tac Ad, or other approved equal may be used at rates recommended by the manufacturer to anchor mulch.
 - Lightweight plastic mulch shall be applied 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.



Construction Specifications

- Fencing shall be 42" in height and constructed in accordance 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 posts.
- Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.
- Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
- Filter cloth shall be embedded a minimum of 8" into the ground.
- When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
- Maintenance shall be performed as needed and silt buildup removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height.
- Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:
 - Tensile Strength: 50 lbs/in (min) Test: MSMT 509
 - Tensile Modulus: 20 lbs/in (min) Test: MSMT 509
 - Flow Rate: 0.3 gal/ft²/min (max) Test: MSMT 322
 - Filtering Efficiency: 75% (min) Test: MSMT 322

Design Criteria

Slope	Slope Steepness	Slope Length (maximum)	Silt Fence Length (maximum)
0 - 10%	0 - 10:1	Unlimited	Unlimited
10 - 20%	10:1 - 5:1	200 feet	1,500 feet
20 - 33%	5:1 - 3:1	100 feet	1,000 feet
33 - 50%	3:1 - 2:1	100 feet	500 feet
50% +	2:1 +	50 feet	250 feet

STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
1000 14th St., Suite 200, Annapolis, MD 21403-1400

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
Jessie B. Zeman
COUNTY HEALTH OFFICER
7-10-98
DATE

ENGINEER'S CERTIFICATE
"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 and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."
Jayesh Panchoi
Signature of Engineer (Print name below signature)
DATE

DEVELOPER'S CERTIFICATE
"We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."
John R. Kehl
Signature of Developer (Print name below signature)
DATE

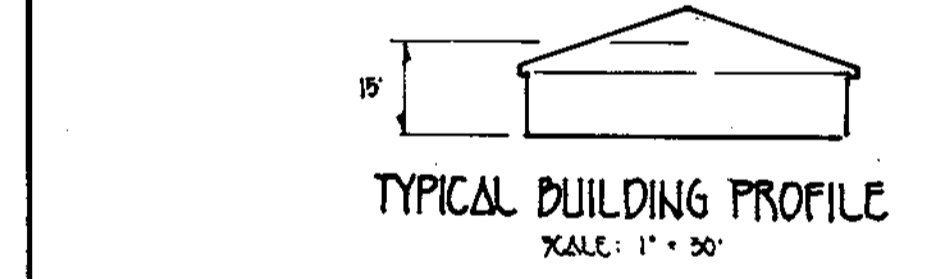
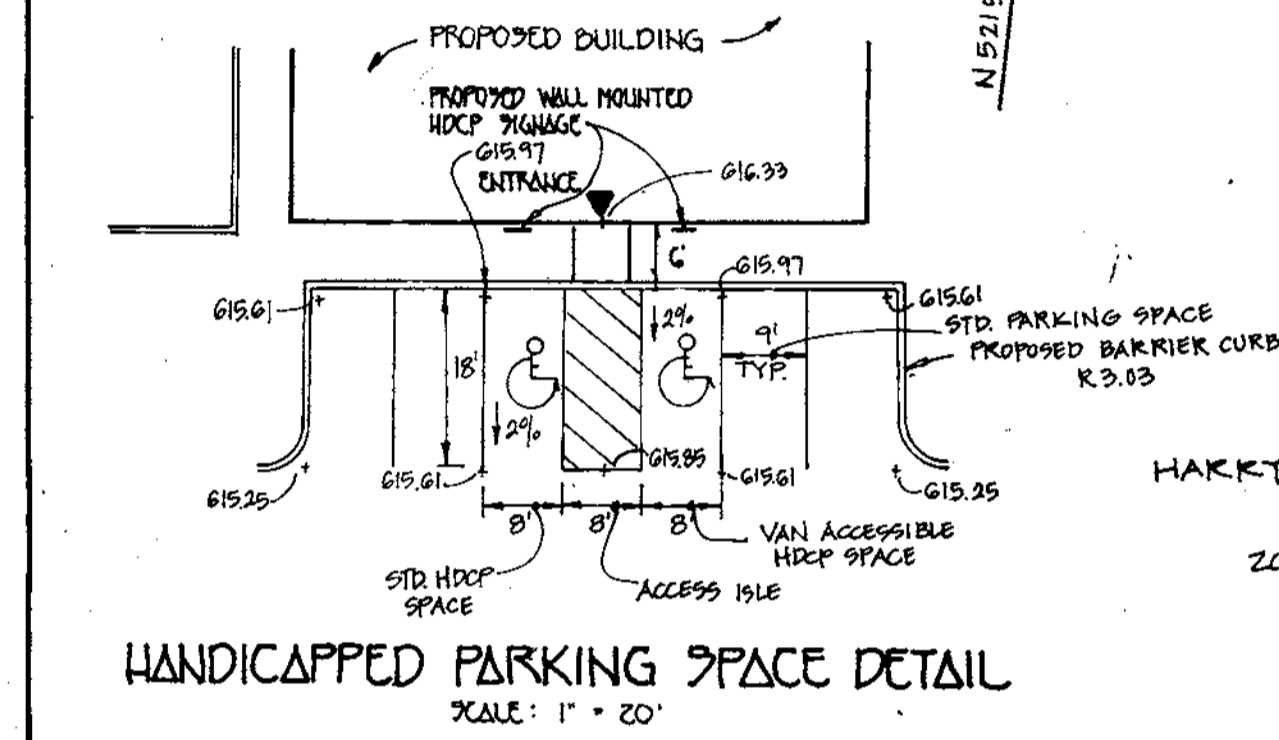
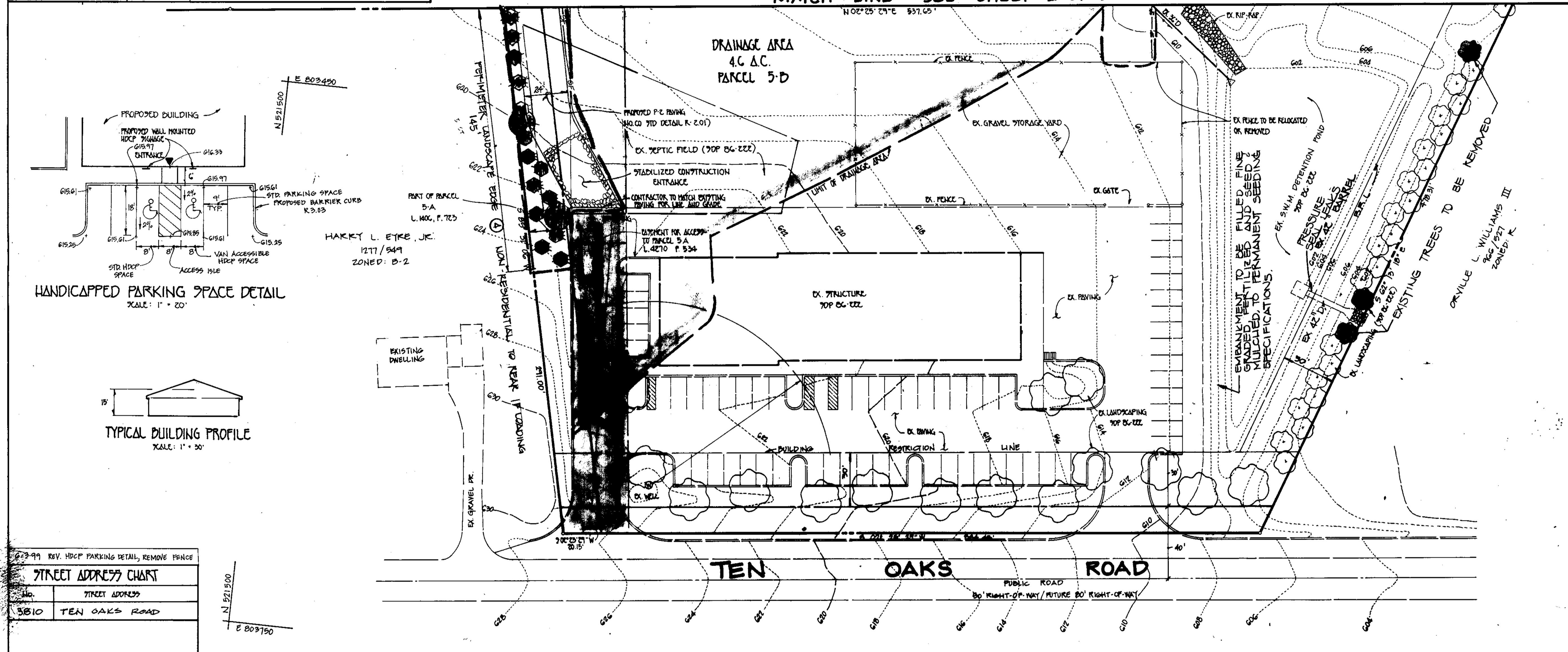
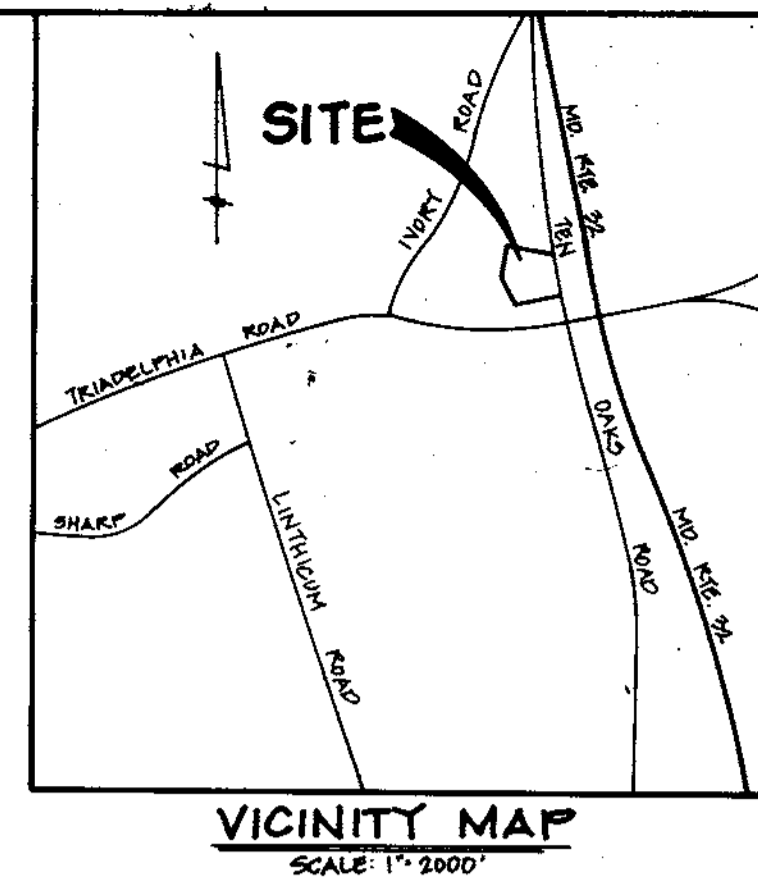
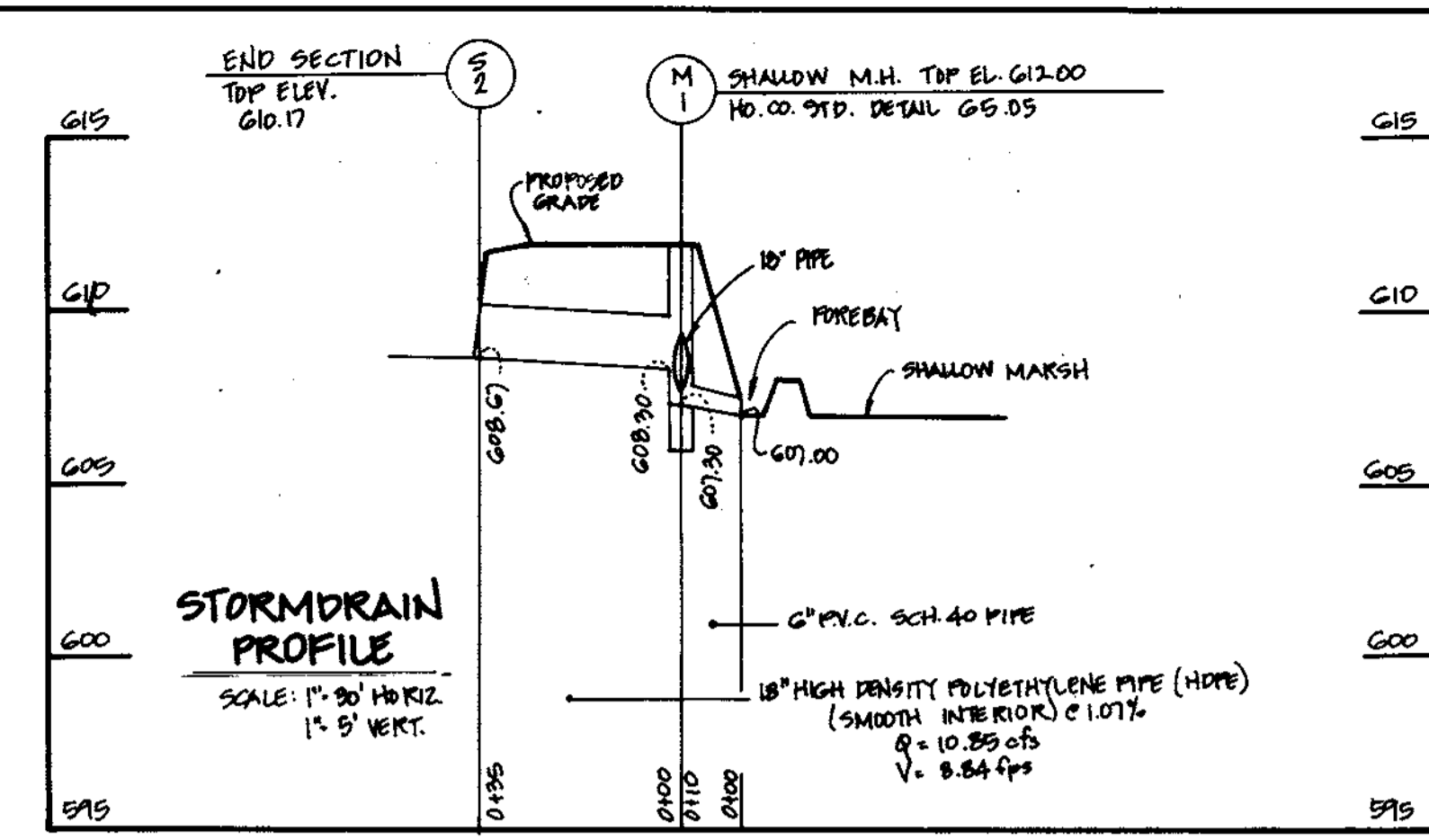
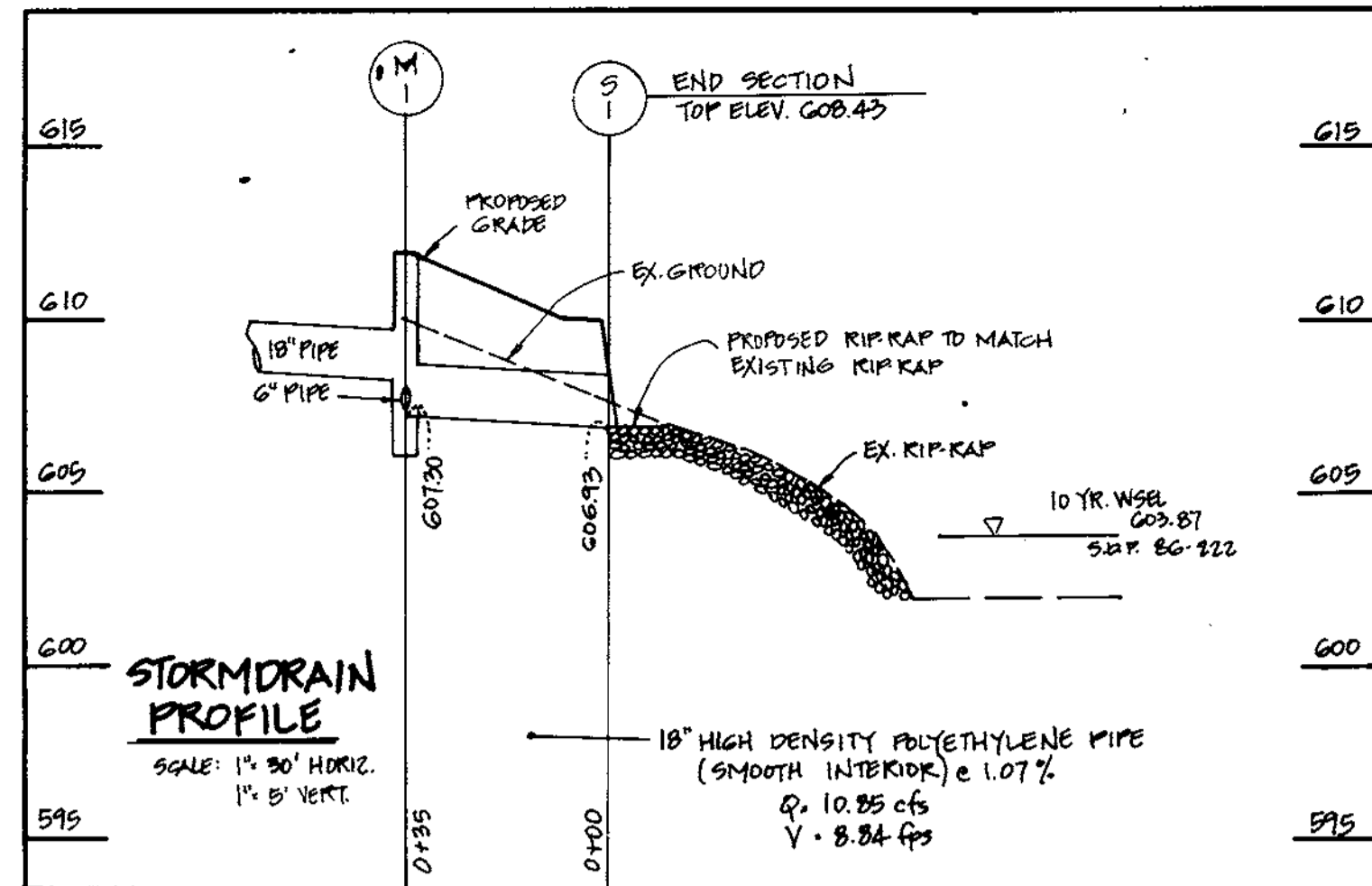
Reviewed for HOWARD COUNTY and meets Technical Requirements.
Cheryl Simmons
S.D.A. - Natural Resources Conservation Service
7/11/98
DATE
John R. Kehl
Howard SCD
7/11/98
DATE

APPROVED - DEPARTMENT OF PLANNING AND ZONING
Richard Blood
Chief, Division of Land Development
7/11/98
DATE
John R. Kehl
Chief, Development Engineering Division
7/11/98
DATE

SITE DEVELOPMENT PLAN NOTES AND DETAILS
MARYLAND GROUND COVERS
LOTS 5-A, 4-S-B
PARCEL 300, 1-333
TAX MAP No. 22 PARCEL:
3RD ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: JANUARY 1998
SHEET 3 OF 3

OWNER
MARYLAND GROUND COVER
10130 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND
410, 463 1522

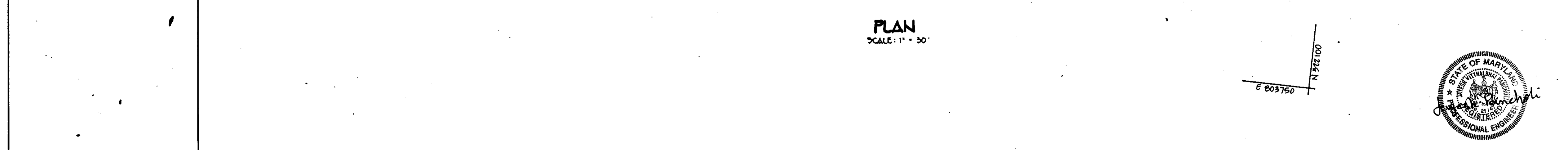
PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
1406 / 723	4	B-C	22	3 RD	2030



6-29-99 REV. HDOP PARKING DETAIL, REMOVE FENCE

STREET ADDRESS CHART	
No.	STREET ADDRESS
3810	TEN OAKS ROAD

LEGEND	
Symbol	Description
---	Existing Contour 2' Interval
---	Existing Contour 10' Interval
---	Proposed Contour 2' Interval
---	Proposed Contour 10' Interval
+ 62.4	Spot Elevation
-SF-SF-	Silt Fence
FF	First Floor Elevation
BE	Basement Elevation
⊙	Proposed Walkout
---	Earth Dike
-X-X-	Tree Protection
---	Existing Tree Line
L.O.D.	Limit Of Disturbance
⊙	Existing Street Tree



FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CONTINENTAL SQUARE OFFICE PARK - SUITE 200 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21114
 410-461-3555

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS,
 HOWARD COUNTY HEALTH DEPARTMENT.

[Signature]
 COUNTY HEALTH OFFICER

7-10-98
 DATE

ENGINEER'S CERTIFICATE

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 and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

[Signature] 6-22-98
 Signature of Engineer (Print name below signature) Date

DEVELOPER'S CERTIFICATE

I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.

[Signature] 6-22-98
 Signature of Developer (Print name below signature) Date

Reviewed for HOWARD SCD and meets Technical Requirements.

[Signature] 7/1/98
 U.S.D.A. Natural Resources Conservation Service Date

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

[Signature] 7/1/98
 Howard SCD Date

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 7/1/98
 Chief, Division of Land Development Date

[Signature] 7/2/98
 Chief, Development Engineering Division Date

[Signature] 6/10/98
 Director Date

SITE DEVELOPMENT PLAN
PLAN VIEW

MARYLAND GROUND COVERS
 LOTS 3-A, 15B
 PARCEL 350 & 352B

TAX MAP NO: 22 PARCEL:
 350-ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: JANUARY, 1998

SHEET 1 OF 3

SCHEDULE A LANDSCAPE PERIMETER EDGE				
CATEGORY	ADJACENT TO PERIMETER PROP			
LANDSCAPE TYPE	D ①	B ②	B ③	D ④
LINEAR FEET OF PERIMETER	1367.75	245.94	150.00	145
CREDIT FOR EXISTING VEGETATION	1367.75			
NUMBER OF PLANTS REQUIRED				
SHADE TREES		5	3	7
EVERGREEN TREES		0	4	14
SHRUBS		0	0	0
NUMBER OF PLANTS PROVIDED		5	3	7
SHADE TREES		0	4	14
EVERGREEN TREES		0	0	0
OTHER TREES (2:1 SUBSTITUTION)		0	0	0
SHRUBS (10:1 SUBSTITUTION)		0	0	0
(REPLACE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)				

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING	
NUMBER OF PARKING SPACES	16
NUMBER OF TREES REQUIRED	2
NUMBER OF TREES PROVIDED	
SHADE TREES	2
OTHER TREES (2:1 SUBSTITUTION)	

THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.204 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DEVELOPER AGREEMENT (36 TREES) (\$36,000.00).

COMMENTS: EXISTING PINE TREES PLANTED PER SDP 86-222.

- ### SEQUENCE OF CONSTRUCTION
1. OBTAIN GRADING PERMIT
 2. INITIAL EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON PLAN (2 DAY)
 3. MASS GRADE SITE TO SUBGRADE (3 DAYS)
 4. CONSTRUCT BUILDING, INSTALL SEPTIC SYSTEM (90 DAYS)
 5. INSTALL BASE COURSE PAVING (2 DAYS)
 6. FINE GRADE AND INITIAL PERMANENT SEEDING (2 DAYS)
 7. INSTALL FINISHED PAVING AND LANDSCAPING (3 DAY)
 8. CONSTRUCT SHALLOW MARSH (2 DAYS)
 9. REMOVE SEDIMENT & EROSION CONTROL MEASURES AS UPLAND AREAS ARE STABILIZED AND PERMITS/REGS ARE GRANTED BY EIS INSPECTOR (2 DAYS)

KEY	WATER QUALITY PLANTING	
	No.	
PL	1B	
PA	7	
CO	7	
PV	1B	
PC	7	

PRIMARY WETLAND VEGETATION

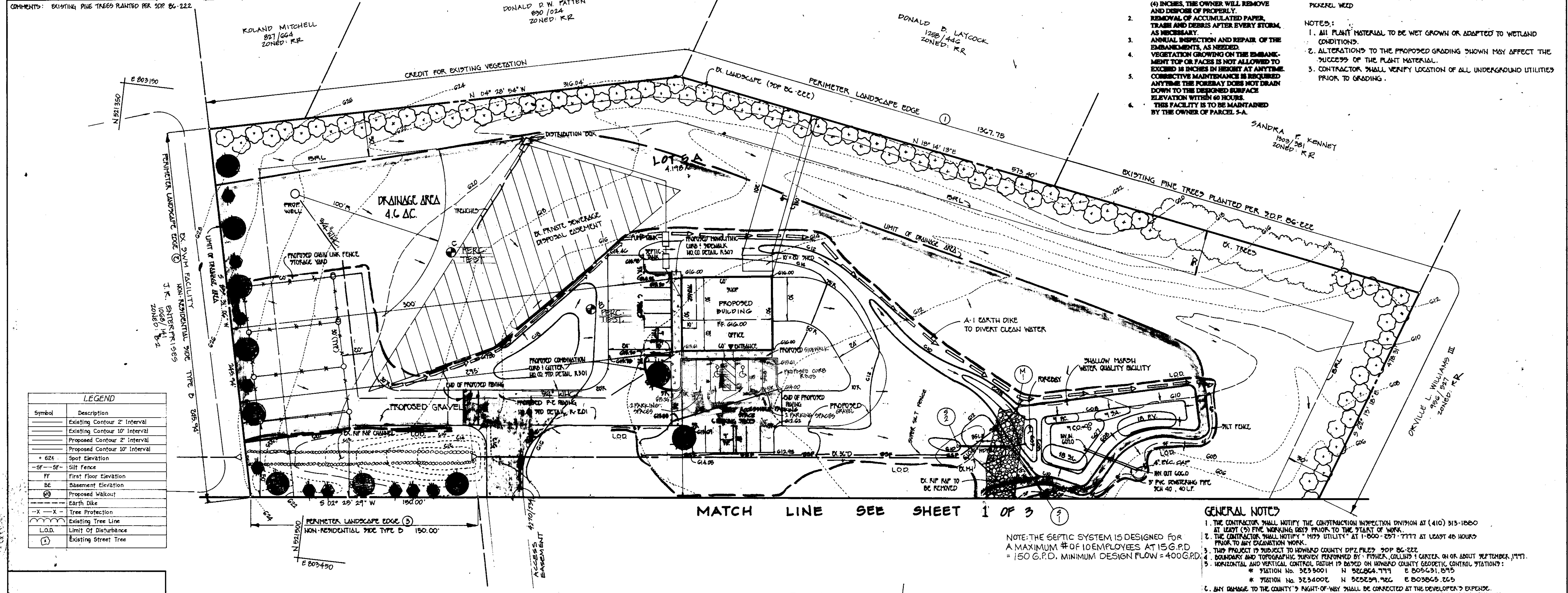
PLANT SPECIES	SIZE	REMARKS
MAGNIFERA LATIFOLIA (9L)	FOOTY	3'-0"
BUCK POTATO		
SORBUS AMERICANA (PA)	FOOTY	3'-0"
COMMON THREE SQUARE		

SECONDARY WETLAND VEGETATION

PLANT SPECIES	SIZE	REMARKS
CERATANTHUS OCCIDENTALIS (CO)	FOOTY	
BUTTON BUSH		
PELLONIA VIRGINICA (PV)	FOOTY	3'-0"
ARJUN-ARJUN		
PANTOCALIA CORONATA (PC)	FOOTY	3'-0"
PICKEREL WOOD		

- ### OPERATION, MAINTENANCE AND INSPECTION FOR SHALLOW MARSH
1. INSPECT FOREBAY AFTER EACH STORM. IF SEDIMENT BUILDUP EXCEEDS FOUR (4) INCHES, THE OWNER WILL REMOVE AND DISPOSE OF PROPERLY.
 2. REMOVAL OF ACCUMULATED PAPER, TRASH AND DEBRIS AFTER EVERY STORM, AS NECESSARY.
 3. ANNUAL INSPECTION AND REPAIR OF THE EMBANKMENTS, AS NEEDED.
 4. VEGETATION GROWING ON THE EMBANKMENT TOP OR FACES IS NOT ALLOWED TO EXCEED 18 INCHES IN HEIGHT AT ANY TIME. CORRECTIVE MAINTENANCE IS REQUIRED ANYTIME THE FOREBAY DOES NOT DRAIN DOWN TO THE DESIGNED SURFACE ELEVATION WITHIN 60 HOURS.
 5. THIS FACILITY IS TO BE MAINTAINED BY THE OWNER OF PARCEL 5-A.

- ### NOTES:
1. ALL PLANT MATERIAL TO BE WET GROWN OR ADAPTED TO WETLAND CONDITIONS.
 2. ALTERATIONS TO THE PROPOSED GRADING SHOWN MAY AFFECT THE SUCCESS OF THE PLANT MATERIAL.
 3. CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO GRADING.



LEGEND

Symbol	Description
(Dashed line)	Existing Contour 2' Interval
(Solid line)	Existing Contour 10' Interval
(Dotted line)	Proposed Contour 2' Interval
(Dashed line)	Proposed Contour 10' Interval
(Number)	Spot Elevation
(Line with 'SF')	Silt Fence
(Line with 'FF')	First Floor Elevation
(Line with 'BE')	Basement Elevation
(Dashed line with 'P')	Proposed Walkout
(Line with 'E')	Earth Dike
(Line with 'X')	Tree Protection
(Line with 'L.O.D.')	Existing Tree Line
(Line with 'L.O.D.')	Limit of Disturbance
(Circle with 'S')	Existing Street Tree

MATCH LINE SEE SHEET 1 OF 3

- ### GENERAL NOTES
1. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION AT (410) 313-1000 AT LEAST (5) FIVE WORKING DAYS PRIOR TO THE START OF WORK.
 2. THE CONTRACTOR SHALL NOTIFY "M32 UTILITY" AT 1-800-257-7177 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
 3. THIS PROJECT IS SUBJECT TO HOWARD COUNTY DPZ FILE # 90P 86-222.
 4. BOUNDARY AND TOPOGRAPHIC SURVEY PERFORMED BY FISHER, COLLINS & CARTER, INC. ON OR ABOUT SEPTEMBER, 1997.
 5. HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON HOWARD COUNTY GEODETIC CONTROL STATIONS:
 - * STATION No. 3233001 N 825624.777 E 805631.875
 - * STATION No. 3234002 N 825639.922 E 805636.265
 6. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
 7. CONTRACTOR WILL CHECK POWER HOUSE CONNECTION ELEVATION AT EASTERN LINE PRIOR TO CONSTRUCTION.
 8. STORMWATER MANAGEMENT OBLIGATIONS ARE FULFILLED UNDER SDP 86-222.
 9. SITE ANALYSIS DATA:
 - A. TOTAL PROJECT AREA: 4.145 AC
 - B. AREA OF PLANNED IMPROVEMENT: 1.63 AC
 - C. LIMIT OF DISTURBANCE AREA: 1.63 AC
 - D. PRESENT ZONING: D-2
 - E. PROPOSED USE FOR SITE AND STRUCTURES: RETAIL/COMMERCIAL
 - F. PARKING REQUIREMENTS:
 - 1. PARKING REQUIRED: 50 SPACES / 1000 SF
 - 3000 SF / 1000 SF = 3.0 = 15 SPACES
 - 2. PARKING PROVIDED: 16 SPACES
 - 14 STANDARD 7' x 15' SPACES
 - 2 HOCP SPACES (1 HOCP SPACE WAS ACCESSIBLE)
 - * THE LOCATION OF THE SE HO.CO. CONTROL STATIONS WILL NOT FIT ON THE VICINITY MAP.

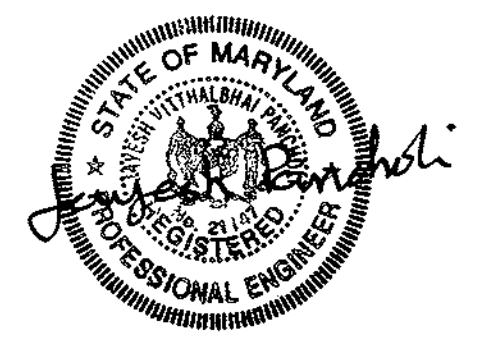
PLAN
SCALE: 1" = 30'

LANDSCAPE LEGEND

SYMBOL	NAME	REMARKS
(Circle with 'P')	PINUS STROBUS - EASTERN WHITE PINE	6'-8" HT.
(Circle with 'S')	QUERUS TRIACANTHOS INERMIS	2 1/2" - 3" CAL.
(Circle with 'M')	SHADEMASTER	
(Circle with 'H')	SHADEMASTER THORNLESS	
(Circle with 'L')	HONEY LOCUST	

STRUCTURE SCHEDULE

STRUCTURE	INN. IN	INN. OUT	TOP ELEV.	REMARKS
S-1	606.93	606.93	608.43	
S-2	608.67	608.67	610.17	
M-1	608.30	607.30	612.00	HO.CO. STD. DETAILS 6-5.05



FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10776 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21117
1001 86 - 2095

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT.

John B. Patten 7-10-98
COUNTY HEALTH OFFICER DATE

ENGINEER'S CERTIFICATE

"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 and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

John R. Patten 6-22-98
Signature of Engineer (Print name below signature) Date

DEVELOPER'S CERTIFICATE

"I/we certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."

Andy C. [Signature] 6-22-98
Signature of Developer (Print name below signature) Date

Reviewed for HOWARD SCD and meets Technical Requirements.

Clayton Simmons 7/1/98
U.S.D.A. Natural Resources Conservation Service Date

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

John R. Patten 7/1/98
HOWARD SCD Date

OWNER
MARYLAND GROUND COVERS
10132 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 462-1322

APPROVED DEPARTMENT OF PLANNING AND ZONING

Richard Blood 7/17/98
Chief, Division of Land Development TC Date

John R. Patten 7/2/98
Chief, Development Engineering Division Date

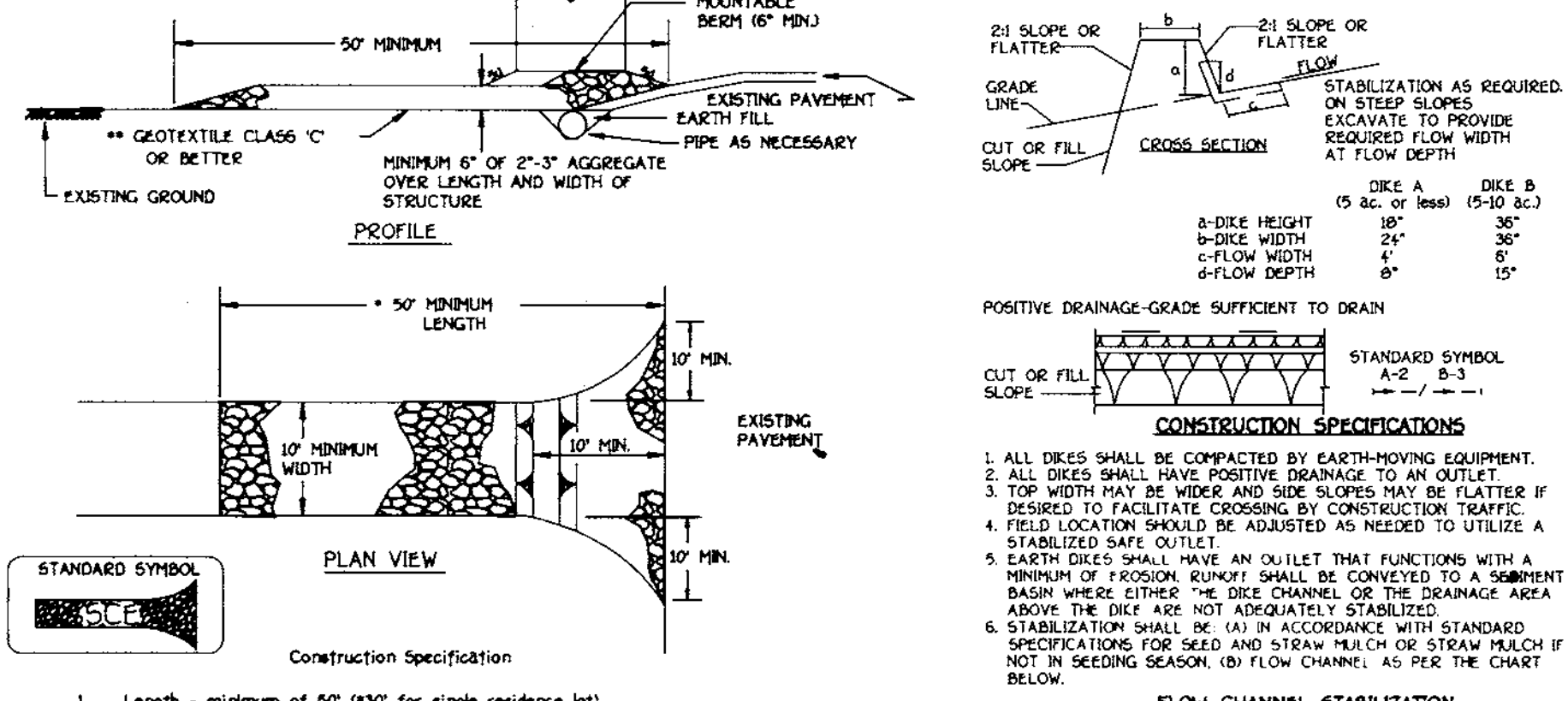
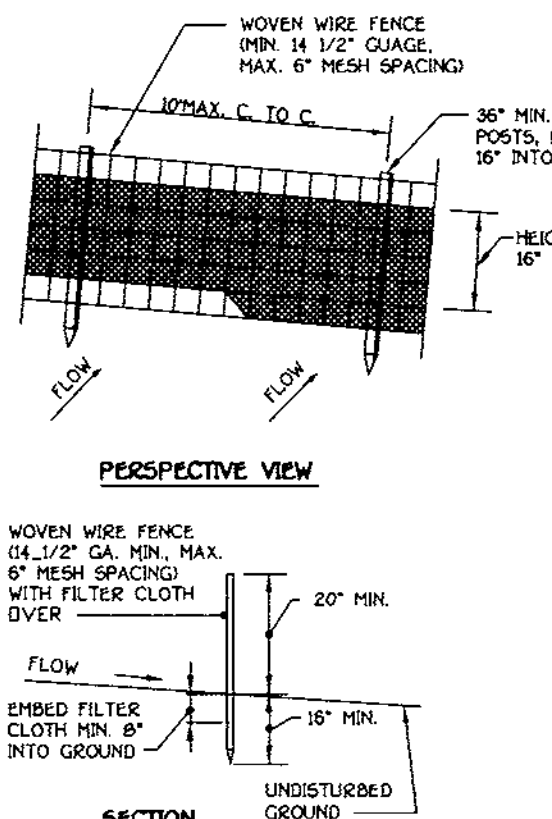
John R. Patten 7/12/98
Director Date

SUBDIVISION	SECTION/AREA	LOT NO.
MARYLAND GROUND COVERS		5A
PLAT NO. 1486/783	BLOCK NO. 14	ZONE D-2
TAX/ZONE	ELEC. DIST.	CENSUS TR.
2E	3RD	G030
WATER CODE	SEWER CODE	

SITE DEVELOPMENT PLAN PLAN VIEW

MARYLAND GROUND COVERS
LOTS 5-A, 5-B
PARCEL 570 & 578

TAX MAP No: 22 PARCEL:
3rd ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: JANUARY, 1998
SHEET 2 OF 3



- CONSTRUCTION SPECIFICATIONS**
- Length - minimum of 50' (#30' for single residence lot).
 - Width - 10' minimum, should be fitted 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 51 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 construction entrance.

DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE

CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BUIGES" DEVELOP IN THE SILT FENCE.

POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD

FENCE: WOVEN WIRE, 14 GA. 6" MAX. MESH SPACING

FILTER CLOTH: FILTER X, MIRAFT 100X, STABILINKA T4 ON OR APPROVED EQUAL.

PREFABRICATED UNIT: GEOTAF, ENVIROFENCE, OR APPROVED EQUAL.

SILT FENCE
NOT TO SCALE

SEEDING PREPARATION

LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

SOIL AMENDMENTS

APPLY TWO TONS PER ACRE DOLOMITIC LIMESTONE (82 LBS./1000 S.Q.F.T.) AND 600 LBS. PER ACRE 0-20-20 FERTILIZER (24 LBS./1000 S.Q.F.T.) BEFORE SEEDING HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 36-0-0 UREAFORM FERTILIZER (19 LBS./1000 S.Q.F.T.) AND 500 LBS. PER ACRE 015 LBS./1000 S.Q.F.T. OF 10-20-20 FERTILIZER.

SEEDING

FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 17 BUSHEL PER ACRE OF ANNUAL RYE (32 LBS./ACRE) OF WEEDING LOVEGRASS (27 LBS./1000 S.Q.F.T.) FOR THE PERIOD NOVEMBER 15 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOU.

MULCHING

APPLY 1 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 S.Q.F.T.) OF UNMILLED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER SEEDING USING 200 GALLONS PER ACRE (5 GALLONS/1000 S.Q.F.T.) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES 8 FEET OR HIGHER, USE 340 GALLONS PER ACRE (8 GALLONS/1000 S.Q.F.T.) FOR ANCHORING.

REFER TO THE 1980 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

TEMPORARY SEEDING NOTES

SEEDING

APPLY 1 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 S.Q.F.T.) OF UNMILLED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER SEEDING USING 200 GALLONS PER ACRE (5 GALLONS/1000 S.Q.F.T.) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES 8 FEET OR HIGHER, USE 340 GALLONS PER ACRE (8 GALLONS/1000 S.Q.F.T.) FOR ANCHORING.

PERMANENT SEEDING NOTES

SEEDING

APPLY 1 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 S.Q.F.T.) OF UNMILLED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER SEEDING USING 200 GALLONS PER ACRE (5 GALLONS/1000 S.Q.F.T.) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES 8 FEET OR HIGHER, USE 340 GALLONS PER ACRE (8 GALLONS/1000 S.Q.F.T.) FOR ANCHORING.

SEDIMENT CONTROL NOTES

EARTH DIKE
NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

- ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
- ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
- TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
- FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
- EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF FRICTION. RUFF SHALL BE CONVEYED TO A SUBMERGED BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE IS NOT ADEQUATELY STABILIZED.
- STABILIZATION SHALL BE (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF NOT IN SECOND SEASON, OR (B) AS PER THE CHART BELOW.

FLOW CHANNEL STABILIZATION

TYPE OF CHANNEL	CHANNEL GRADE	DISE A	DISE B
1	5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
3	5.1-8.0%	SEED WITH MULCH OR SOU.	LINED RSP-RAP 4" - 8" STONE
4	8.1-20%	LINED RSP-RAP 4" - 8" STONE	LINED RSP-RAP 4" - 8" STONE

A. STONE TO BE 2 INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3 INCHES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH CONSTRUCTION EQUIPMENT.
B. RSP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 6 INCHES THICKNESS AND PRESSED INTO THE SOIL.
C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.

7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

PERMANENT SEEDING NOTES

SEEDING

APPLY 1 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 S.Q.F.T.) OF UNMILLED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER SEEDING USING 200 GALLONS PER ACRE (5 GALLONS/1000 S.Q.F.T.) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES 8 FEET OR HIGHER, USE 340 GALLONS PER ACRE (8 GALLONS/1000 S.Q.F.T.) FOR ANCHORING.

DEFINITION

Using vegetation as cover for barren soil to protect it from forces that cause erosion. 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 infiltration of rainfall, thereby reducing sediment loads and runoff to downstream areas, and improving wildlife habitat and visual resources.

CONDITIONS WHERE PRACTICE APPLIES

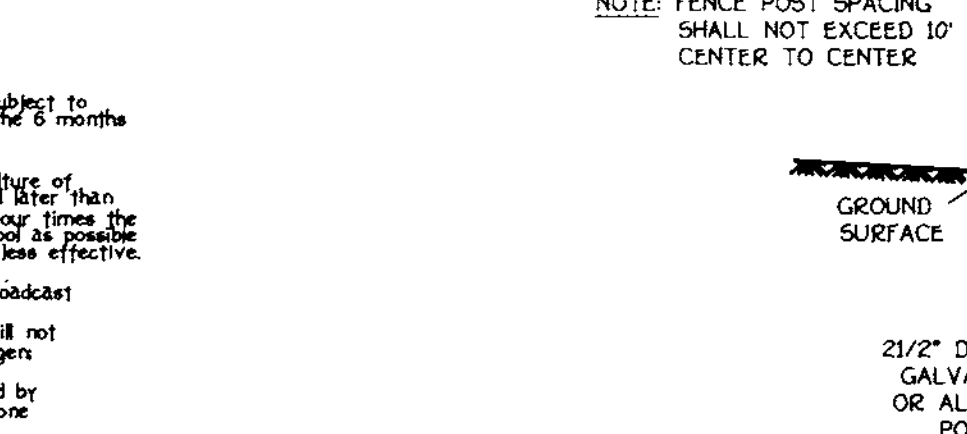
This practice shall be used on denuded areas as specified on the plans and may be used on highly erodible or critically eroding areas. This specification is divided into Temporary Seeding, to quickly establish vegetative cover for short duration (0 up to one year), and Permanent Seeding, for long term vegetative cover. Examples of applicable areas are: Temporary Seeding areas include ditches, cut and fill slopes and other areas at final grade, former stockpiles and staging areas, etc. Permanent Seeding areas include denuded areas, 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 water holding 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 deterring 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.

- 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 Amendments (Fertilizer and Lime 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 analysis.
 - Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Mature may be substituted for fertilizer 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 oxide calcium oxide plus magnesium oxide. Limestone shall be ground to such fineness that at least 50% will pass through a #100 mesh sieve and 90-100% will pass through a #20 mesh sieve.
 - Incorporate lime and fertilizer into the top 3-5" of soil by diking 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 ripper mounted on construction equipment. After the soil is loosened it should not be rolled or dragged smooth, but left in the roughened 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 opposite line and fertilizer into the top 3-5" of soil by diking or other suitable means.
 - Permanent Seeding
 - Permanent soil conditions required for permanent vegetative establishment:
 - Soil pH shall be between 5.0 and 7.0.
 - Soil shall contain less than 200 parts per million (ppm) of available phosphorus.
 - The soil shall contain less than 40% clay, but enough fine grained material (0.075 mm) to provide the capacity to hold a moderate amount of moisture. An exception is if loess or other naturally occurring soil is to be planted, then a sandy soil (0.075 mm) plus clay would be acceptable.
 - Soil shall contain 1.5% minimum organic matter by weight.
 - Soil must contain sufficient pore space to permit adequate root penetration.
 - If these conditions cannot be met by soils on site, adding topsoil is required. In accordance with Section 21 Standards and Specification for Topsoil.
 - Areas previously graded in conformance with the drawings shall be maintained in a true and even grade, then scarified or otherwise loosened to a depth of 3-5" to permit bonding of the topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from sliding down a slope.
 - Apply amendments as per soil test or as included on the plans.
 - Mix soil amendments into the top 3-5" of topsoil by diking or other suitable means. Lawn areas should be seeded smooth. The surface, remove loose objects like stones and branches, and reduce the area for seed and application, where site conditions will not permit normal seeded preparation, loosen surface soil by diking with a heavy chain or other equipment to roughen the surface. Step 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 1-2" of soil should be loose and friable. Seeded loosening may not be necessary on newly disturbed areas.

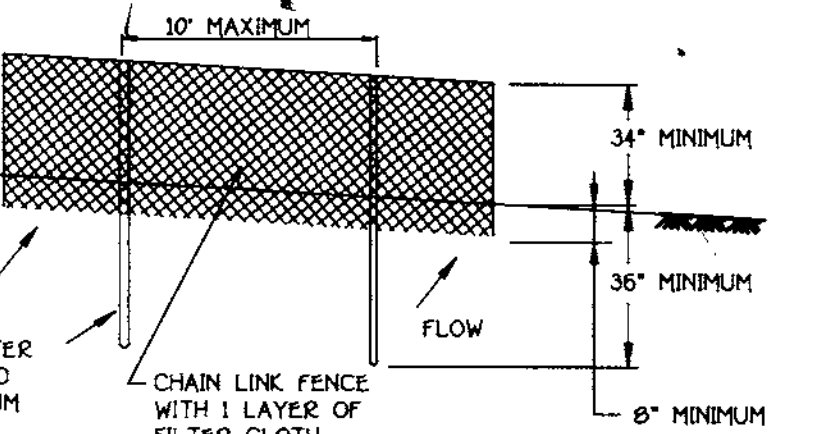
STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION



CONSTRUCTION SPECIFICATIONS

- Fencing shall be 42" in height and constructed in accordance 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 posts.
- Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.
- Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
- Filter cloth shall be embedded a minimum of 6" into the ground.
- When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
- Maintenance shall be performed as needed and silt buildups removed when "buiques" develop in the silt fence, or when silt reaches 50% of fence height.
- Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lb/in (min)	Test: MSMT 509
Tensile Modulus	20 lb/in (min)	Test: MSMT 509
Flow Rate	0.3 gal/ft ² /min (max.)	Test: MSMT 322
Filtering Efficiency	75% (min)	Test: MSMT 322



CONSTRUCTION SPECIFICATIONS

- Fencing shall be 42" in height and constructed in accordance 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 posts.
- Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.
- Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
- Filter cloth shall be embedded a minimum of 6" into the ground.
- When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
- Maintenance shall be performed as needed and silt buildups removed when "buiques" develop in the silt fence, or when silt reaches 50% of fence height.
- Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lb/in (min)	Test: MSMT 509
Tensile Modulus	20 lb/in (min)	Test: MSMT 509
Flow Rate	0.3 gal/ft ² /min (max.)	Test: MSMT 322
Filtering Efficiency	75% (min)	Test: MSMT 322

SUPER SILT FENCE

Design Criteria

Slope Steepness	Slope Length (maximum)	Silt Fence Length (maximum)
0 - 10%	0 - 101	Unlimited
10 - 20%	101 - 51	200 feet
20 - 33%	51 - 31	100 feet
33 - 50%	31 - 21	100 feet
50% +	21 +	50 feet

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10722 BALTIMORE NATIONAL PIKE
ELLCOTT CITY, MARYLAND 21042
410-481-2999

E.C.C.

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

Jayman Bzdlum
COUNTY HEALTH OFFICER
DATE: 7-10-98

ENGINEER'S CERTIFICATE

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 and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Joseph Ranscher
Signature of Engineer (Print name below signature)
DATE

DEVELOPER'S CERTIFICATE

I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.

Andy C. [Signature]
Signature of Developer (Print name below signature)
DATE: 6-22-98

Reviewed for HOWARD COUNTY and meets Technical Requirements.

Cheryl Simmons 7/1/98
U.S.D.A.-Natural Resources Conservation Service
Date

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

John K. Johnston 7/1/98
Howard SCD
Date

OWNER

MARYLAND GROUND COVER
10132 BALTIMORE NATIONAL PIKE
ELLCOTT CITY, MARYLAND
(410) 465 1322

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Richard Blood 7/1/98
Chief, Division of Land Development
Date

John K. Johnston 7/6/98
Chief, Development Engineering Division
Date

John K. Johnston 7/1/98
Date

SUBDIVISION: MARYLAND GROUND COVERS
SECTION/AREA: 5A
LOT NO.: 300, 308

PLAT NO.: 1406/723
BLOCK NO.: 14
ZONE: B-2
TAX/ZONE: 22
ELEC. DIST.: 3RD
CENSUS TR.: 6030

WATER CODE: _____ SEWER CODE: _____

SITE DEVELOPMENT PLAN NOTES AND DETAILS

MARYLAND GROUND COVERS

LOTS 5-A, 4-5-B
PARCEL 300, 308

TAX MAP No. 22 PARCEL:
3RD ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: JANUARY 1998
SHEET 3 OF 3

CATEGORY	SCHEDULE A LANDSCAPE PERIMETER EDGE			
	D ①	D ②	D ③	D ④
LANDSCAPE TYPE	1367.75	245.94	150.00	145
LINEAR FEET OF PERIMETER	1367.75			
CREDIT FOR EXISTING VEGETATION				
NUMBER OF PLANTS REQUIRED				
SHADE TREES	—	3	2	7
EVERGREEN TREES	—	0	4	14
SHRUBS	—	0	0	0
NUMBER OF PLANTS PROVIDED				
SHADE TREES	—	5	3	7
EVERGREEN TREES	—	0	4	14
OTHER TREES (2:1 SUBSTITUTION)	—	0	0	0
SHRUBS (10:1 SUBSTITUTION)	—	0	0	0
(REPLACE PLANT SUBSTITUTION CREDITS BEGUN IF NEEDED)				

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING	
NUMBER OF PARKING SPACES	16
NUMBER OF TREES REQUIRED	2
NUMBER OF TREES PROVIDED	2
SHADE TREES	—
OTHER TREES (2:1 SUBSTITUTION)	—

THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.704 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DEVELOPER AGREEMENT (36 TREES) (\$36,000).

COMMENTS: EXISTING PINE TREES PLANTED PER ZOP 86-222

SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT
- INITIAL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON PLAN (2 DAY)
- MAY GRADE SITE TO SUBGRADE (3 DAY)
- CONSTRUCT BUILDING, INSTALL SEPTIC SYSTEM (90 DAYS)
- INSTALL BASE COURSE PAVING (2 DAY)
- FINE GRADE AND INITIAL PERMANENT SEEDING (2 DAYS)
- INSTALL FINISHED PAVING AND LANDSCAPING (3 DAY)
- CONSTRUCT SHALLOW MARSH (2 DAYS)
- REMOVE EROSION AND SEDIMENT CONTROL MEASURES AS UPLAND AREAS ARE STABILIZED AND PERMIT IS GRANTED BY EIS INSPECTOR (2 DAYS)

KEY	WATER QUALITY PLANTING
9L	1B
9A	9
CO	9
PV	1B
PC	9

PRIMARY WETLAND VEGETATION

PLANT SPECIES	SIZE	REMARKS
ZAGITTARIA LATIFOLIA (9L)	ROOTS	30' OC.
RUCCA PERIWA		
SCIRPUS AMERICANUS (9A)	ROOTS	30' OC.
COMMON THREE SQUARE		

SECONDARY WETLAND VEGETATION

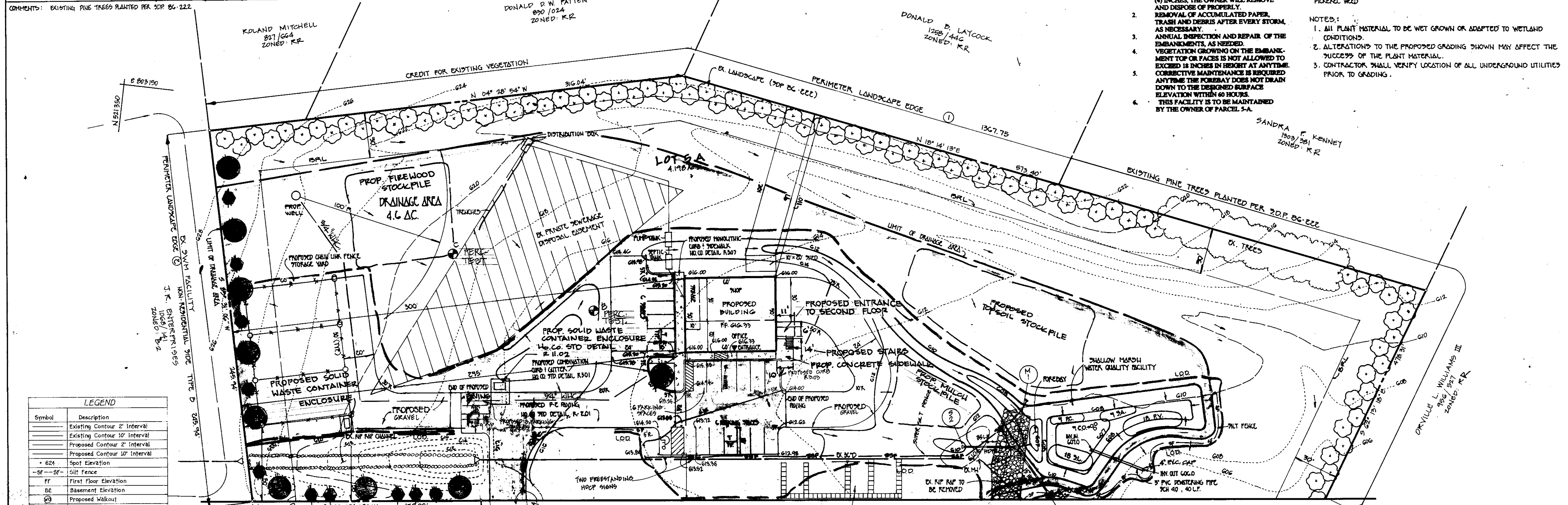
PLANT SPECIES	SIZE	REMARKS
CERANTHUS OCCIDENTALIS (CO)	ROOTS	
BUTTON BUSH		
POLEMONIA VIRGINICA (PV)	ROOTS	30' OC.
ARROW-ARUM		
PANTHERA GORDONIS (PC)	ROOTS	30' OC.
PICKEREL WEED		

OPERATION, MAINTENANCE AND INSPECTION FOR SHALLOW MARSH

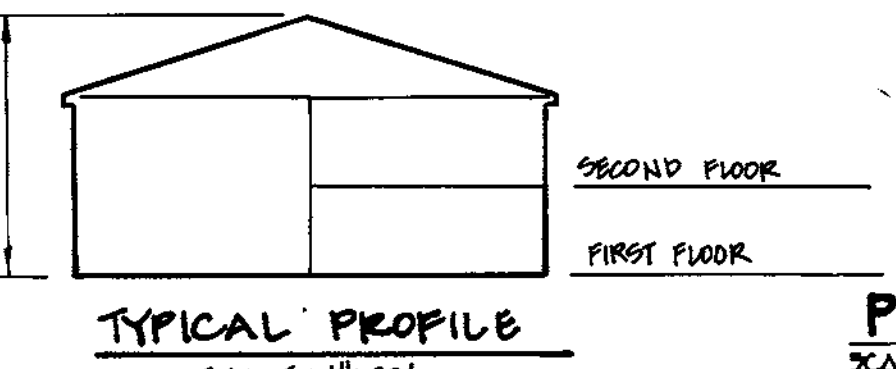
- INSPECT FOREBAY AFTER EACH STORM. IF SEDIMENT BUILDUP EXCEEDS FOUR (4) INCHES, THE OWNER WILL REMOVE AND DISPOSE OF PROPERLY. REMOVAL OF ACCUMULATED PAPER, TRASH AND DEBRIS AFTER EVERY STORM, AS NECESSARY.
- ANNUAL INSPECTION AND REPAIR OF THE EMBANKMENTS, AS NEEDED.
- VEGETATION GROWING ON THE EMBANKMENT TOP OR FACES IS NOT ALLOWED TO EXCEED 18 INCHES IN HEIGHT AT ANYTIME. CORRECTIVE MAINTENANCE IS REQUIRED ANYTIME THE FOREBAY DOES NOT DRAIN DOWN TO THE DESIGNED SURFACE ELEVATION WITHIN 60 HOURS.
- THIS FACILITY IS TO BE MAINTAINED BY THE OWNER OF PARCEL 5-A.

NOTES:

- ALL PLANT MATERIAL TO BE WET GROWN OR ADAPTED TO WETLAND CONDITIONS.
- ALTERATIONS TO THE PROPOSED GRADING SHOWN MAY AFFECT THE SUCCESS OF THE PLANT MATERIAL.
- CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO GRADING.



Symbol	Description
---	Existing Contour 2' Interval
---	Existing Contour 10' Interval
---	Proposed Contour 2' Interval
---	Proposed Contour 10' Interval
624	Spot Elevation
Sf	Silt Fence
FF	First Floor Elevation
BE	Basement Elevation
W	Proposed Walkout
E	Earth Dike
X-X	Tree Protection
---	Existing Tree Line
L.O.D.	Limit of Disturbance
⊙	Existing Street Tree



SYMBOL	NAME	REMARKS
⊙	PINDUS STROBUS - EASTERN WHITE PINE	6'-8" HT.
⊙	AEDISIA TRIACANTHOS INERMIS	2 1/2" - 3" CAL.
⊙	SHADEMASTER	
⊙	SHADEMASTER THORNLESS	
⊙	HONEY LOCUST	

STRUCTURE	INV. IN	INV. OUT	TOP ELEV.	REMARKS
S-1	606.93	606.93	608.43	
S-2	608.67	608.67	610.17	
M-1	608.30	607.30	612.00	Hd. Co. STR. DETAILS 6-5.05

NOTE: THE SEPTIC SYSTEM IS DESIGNED FOR A MAXIMUM # OF 10 EMPLOYEES AT 15 G.P.D. = 150 G.P.D. MINIMUM DESIGN FLOW = 4000 G.P.D.

DATE	REVISION
12-9-99	REV. HOCP PARKING, REMOVE EARTH DIKE, ADD TYP. PROFILE AND STORAGE BINS
01-09-01	ADD STOCKPILE FOR FIRE WOOD, MULCH AND TOPSOIL, ADD DUMPSTER AND ENTRANCE TO SECOND FLOOR.

GENERAL NOTES

- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST (5) FIVE WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MPPS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- THIS PROJECT IS SUBJECT TO HOWARD COUNTY DPZ FILE # 90P 86-222.
- BOUNDARY AND TOPOGRAPHIC SURVEY PERFORMED BY: FIFHER, COLLINS & CARTER, ON OR ABOUT SEPTEMBER, 1997.
- HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON HOWARD COUNTY GEODETIC CONTROL STATION:
 - * STATION No. 3234001 N 525229.722 E 805865.815
 - * STATION No. 3234002 N 525229.722 E 805865.815
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- CONTRACTOR WILL CHECK POWER HOUSE CONNECTION ELEVATION AT EASEMENT LINE PRIOR TO CONSTRUCTION.
- STORMWATER MANAGEMENT OBLIGATIONS ARE FULFILLED UNDER ZOP 86-222.
- THE LOCATION OF THESE HO. CO. CONTROL STATIONS WILL NOT FIT ON THE VICINITY MAP.

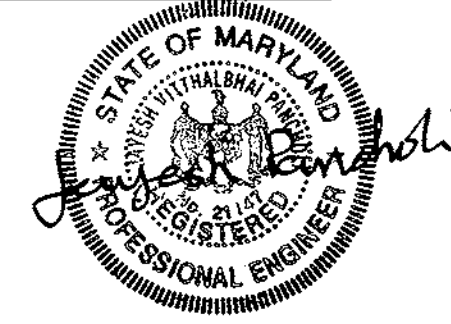
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 1272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21114
410 461-2555

APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT.
John B. Patten
COUNTY HEALTH OFFICER
DATE: 7-10-98

ENGINEER'S CERTIFICATE
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 and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
Joseph Bonchale
Signature of Engineer (Print name below signature) DATE: 6-22-98

DEVELOPER'S CERTIFICATE
I/We certify that all development and construction will be done according to this plan and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.
John B. Patten
Signature of Developer (Print name below signature) DATE: 6-22-98

Approved for HOWARD SCD and meets Technical Requirements.
John B. Patten
U.S.D.A. Natural Resources Conservation Service
Date: 7/1/98
This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
John B. Patten
Date: 7/1/98



APPROVED DEPARTMENT OF PLANNING AND ZONING
Richard Blood
Chief, Division of Land Development
Date: 7/1/98
John B. Patten
Chief, Development Engineering Division
Date: 7/1/98
John B. Patten
Director

SITE DEVELOPMENT PLAN
PLAN VIEW
MARYLAND GROUND COVERS
LOTS 5-A, 5-B
PARCEL 550 & 555
TAX MAP NO. 22 PARCEL:
3rd ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: JANUARY, 1998
SHEET 2 OF 3