

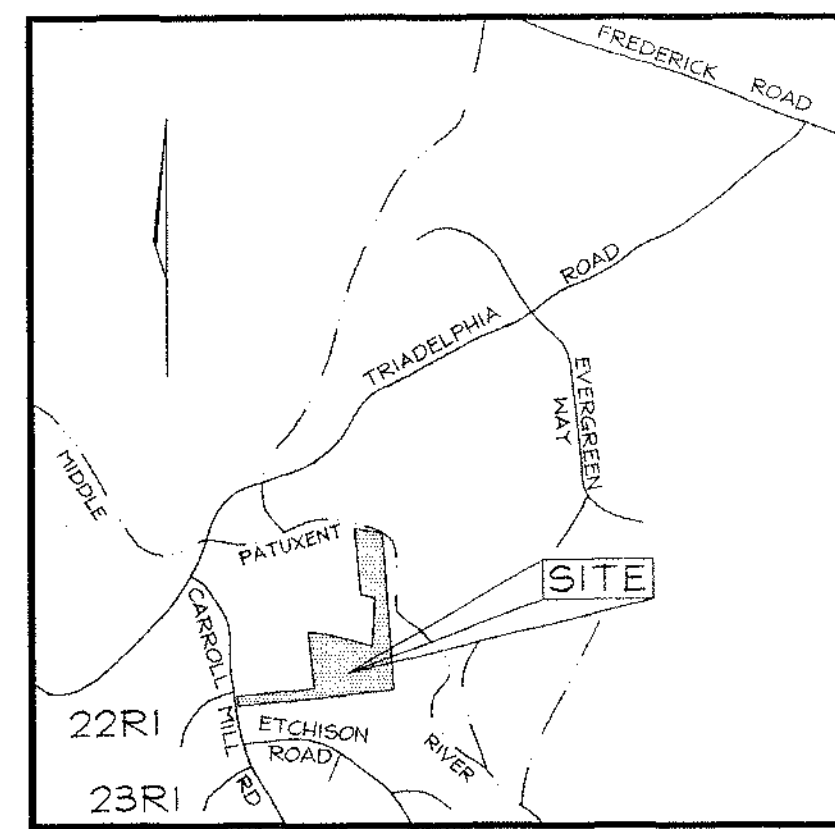
SHEET INDEX	
1	COVER SHEET
2	ROAD CONSTRUCTION PLAN
3	ROAD PROFILES
4	GRADING & SEDIMENT CONTROL AND LANDSCAPE PLAN
5	STORM DRAIN DRAINAGE AREA MAP AND SOILS MAP
6	SEDIMENT CONTROL AND STORMWATER MANAGEMENT NOTES AND DETAILS
7	STORM DRAIN AND STORMWATER MANAGEMENT PROFILES
8	FOREST CONSERVATION PLAN

EAGLE RIDGE LOTS 1 THRU 7 AND PRESERVATION PARCELS A & B FINAL ROAD CONSTRUCTION PLANS HOWARD COUNTY, MARYLAND

BENCHMARKS

Benchmark No. 1 : 22RI
N 584,643.362
E 1,330,331.235
Elev. : 404.511

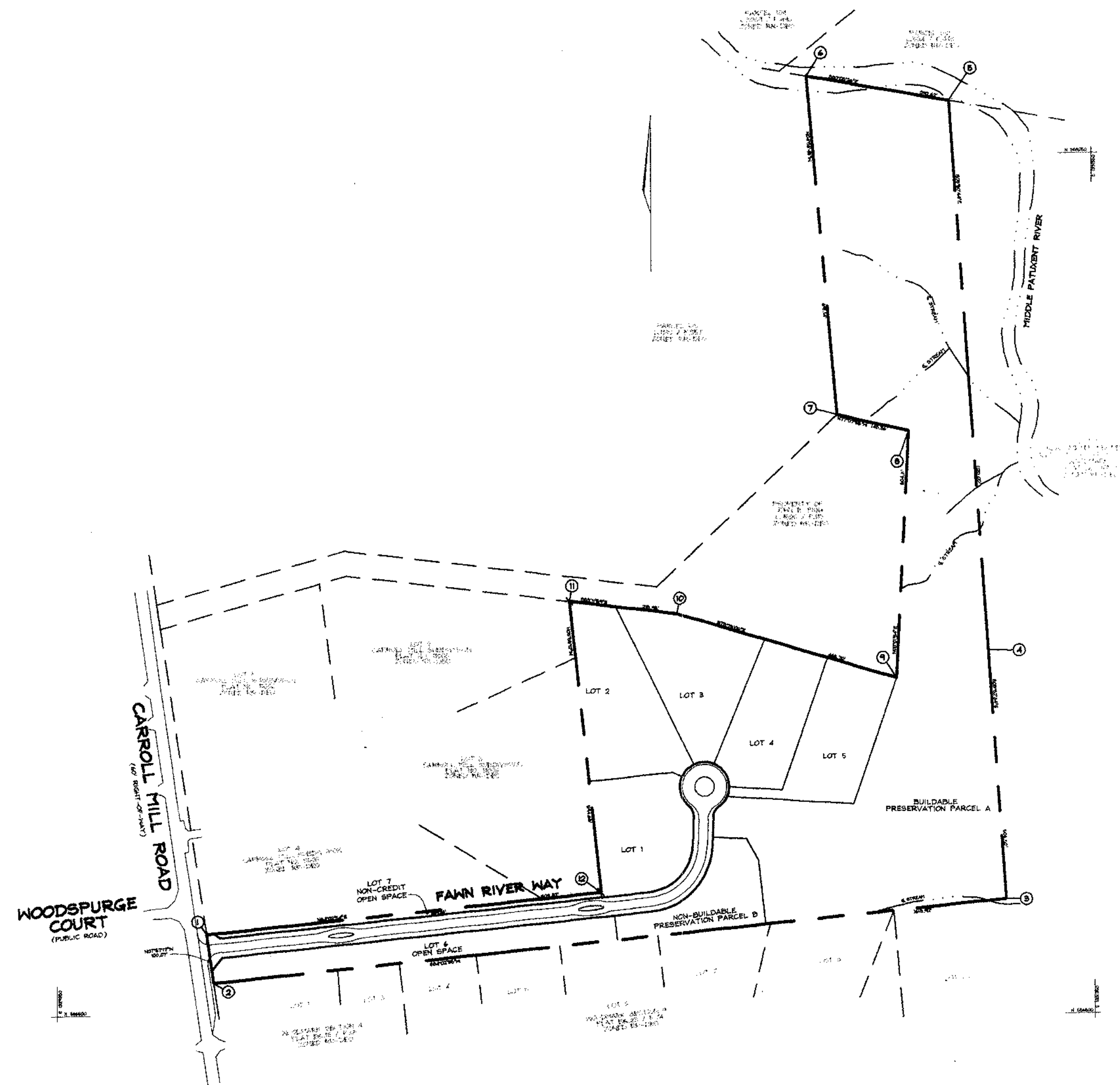
Benchmark No. 2 : 23RI
N 583,336.053
E 1,331,024.747
Elev. : 366.978



VICINITY MAP
SCALE: 1"=200'

GENERAL NOTES

- ALL ASPECTS OF THE PROJECT ARE IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- DEED REFERENCE: L.4528 / F.118
- DENSITY:
NUMBER OF ENTITIES PERMITTED BY RIGHT : 4(18.74AC./4.25=4)
NUMBER OF BUILDABLE ENTITIES PROPOSED: 6(5 CLUSTER LOTS PLUS 1 BUILDABLE PRESERVATION PARCEL)
NUMBER OF DEOS REQUIRED: 2(6 PROPOSED MINUS 4 BY-RIGHT=2)
SENDING PARCEL : BUGLER PROPERTY, TAX MAP 6 , PARCEL 92, BLOCK 15
- THE PROJECT BOUNDARY IS BASED ON A BOUNDARY SURVEY PERFORMED BY VOGEL & ASSOCIATES, INC. DATED NOVEMBER, 1998.
- THE TOPOGRAPHY SHOWN HEREON IS BASED ON HOWARD COUNTY AERIAL PHOTOGRAMETRIC MAP AND A FIELD RUN SURVEY PERFORMED BY VOGEL & ASSOCIATES, INC. DATED NOVEMBER, 1998.
- COORDINATE DATUM IS BASED ON THE MARYLAND COORDINATE SYSTEM (NAD 83) AS PROJECTED BY THE FOLLOWING HO.CO. GEODETIC CONTROL STATIONS: 22RI & 23RI
- WATER AND SEWER FOR THIS PROJECT WILL BE PRIVATE.
- STORMWATER MANAGEMENT (2 YR AND 10 YR) TO BE PROVIDED FOR THE PROPOSED ROAD ONLY. WATER QUALITY TO BE PROVIDED BY EXTENDED DETENTION.
- WETLANDS AND STREAMS SHOWN ON-SITE ARE BASED ON A FIELD INVESTIGATION PERFORMED BY WILDMAN ENVIRONMENTAL SERVICES DATED JANUARY, 1999.
- FLOODPLAIN SHOWN ON-SITE IS BASED ON HOWARD COUNTY FLOODPLAIN STUDY 32-37, MIDDLE PATUXENT RIVER.
- FOREST STAND DELINEATION PLAN PREPARED BY WILDMAN ENVIRONMENTAL SERVICES DATED JANUARY, 1999.
- AFO TRAFFIC STUDY PREPARED BY LEE CUNNINGHAM DATED DECEMBER, 1998 AND APPROVED UNDER S-99-13.
- THERE ARE NO STEEP SLOPES ON-SITE.
- A NOISE STUDY IS NOT REQUIRED FOR THIS SITE.
- ALL LANDSCAPING REQUIREMENTS AS SET FORTH IN THE LANDSCAPE MANUAL SHALL BE COMPLIED WITH. FINANCIAL SURETY FOR THE 1" PERIMETER TREES (\$14,800.00) WILL BE PART OF THE DEVELOPER'S AGREEMENT.
- THE FOREST CONSERVATION OBLIGATIONS INCURRED BY THIS SUBDIVISION HAVE BEEN MET BY THE CREATION OF 5.16 AC. OF FOREST CONSERVATION EASEMENT AND 0.83 AC. OF FEE-IN-LIEU (\$40,816.00) SURETY FOR THE SUBAC OF RETENTION IS 922,438.00. Total Forest Con. Surety = \$83,279.00
- STREET LIGHTING IS NOT REQUIRED FOR THIS SITE.
- SEDIMENT AND EROSION CONTROL WILL BE PROVIDED FOR THIS SITE.
- THIS PROPERTY IS NOT WITHIN THE METROPOLITAN DISTRICT.
- TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO BURIAL/CEMETERY LOCATIONS ON-SITE.
- PRIVATE SEWERAGE EASEMENTS OF 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL ARE SHOWN ON THIS PLAN (SEE LEGEND). IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT VARIANCES FOR ENCROACHMENTS INTO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED EASEMENT SHALL NOT BE NECESSARY.
- THE EASEMENT HOLDER FOR PRIVATELY OWNED PRESERVATION PARCELS A WILL BE A HOMEOWNERS ASSOCIATION AND HOWARD COUNTY. THE EASEMENT HOLDER FOR THE HOMEOWNERS ASSOCIATION OWNED PRESERVATION PARCEL B WILL BE HOWARD COUNTY.
- OPEN SPACE LOTS 6 & 7 ARE TO BE OWNED AND MAINTAINED BY HOMEOWNERS ASSOCIATION.
- STORMWATER MANAGEMENT SOIL BORINGS FOR THIS SITE ARE BASED ON A GEOTECHNICAL ANALYSIS PROVIDED BY HERBST, BENSON AND ASSOCIATES, DATED MAY, 1999.
- ALL WELLS TO BE DRILLED PRIOR TO RECORD PLAT SUBMITTAL.
- THIS PLAN IS SUBJECT TO WP-00-76, APPROVED MARCH 6, 2000 TO SECTION 16.19(e)(5), TO REDUCE THE TRUNCATION AT THE INTERSECTION OF FAWN RIVER WAY AND CARROLL HILL ROAD.
- Sheet Tree Surety = \$18,900.00 (65 @ \$300)



PLAN
SCALE: 1"=200'

SITE DATA

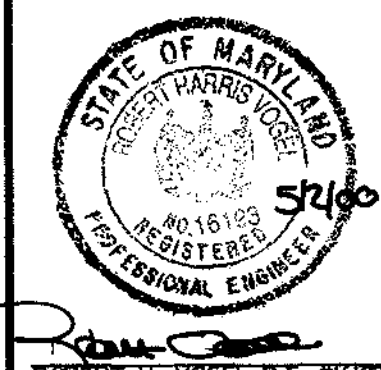
LOCATION: TAX MAP 22 & 23 BLOCK 6 & 1 PARCELS 553
3RD ELECTION DISTRICT
EXISTING ZONING: RR-DEO
GROSS AREA OF PROJECT: 18.74 AC.
AREA OF PROPOSED LOTS: 5.37 AC.
AREA OF PROPOSED PRESERVATION PARCEL A : 10.39 AC.
AREA OF PROPOSED NON-BUILDABLE PRESERVATION PARCEL B : 0.75 AC.
AREA OF PROPOSED ROAD: 1.25 AC.
AREA OF CREDITED OPEN SPACE : 0.937 AC.(5%)
AREA OF NON-CREDITED OPEN SPACE : 0.16 AC.
OPEN SPACE REQUIRED: 5% (0.937 AC.)
NUMBER OF LOTS/PARCELS PROPOSED: 5 + 2 PRESERVATION PARCELS

NO.	REVISION	DATE

TITLE SHEET EAGLE RIDGE

TAX MAP #22 & 23 BLOCK No. 6 PARCEL #553
3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
Reference No. : S-99-13, P-00-01

VOGEL & ASSOCIATES
ENGINEERS-SURVEYORS-PLANNERS
3691 Park Avenue, Suite 101 • Ellicott City, Maryland 21043
Tel 410.461.5828 Fax 410.465.3666



DESIGN BY: J.C.O.
DRAWN BY: J.C.O.
CHECKED BY: R.H.V.
DATE: DEC. 1999
SCALE: AS SHOWN
W.O. NO. 97-77

1 SHEET OF 8

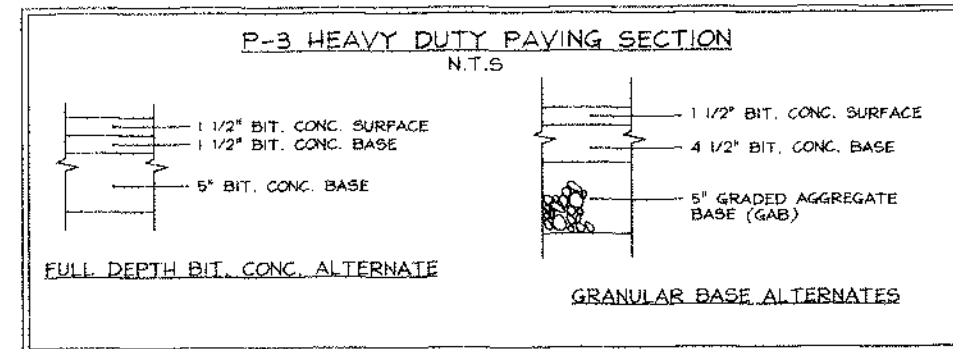
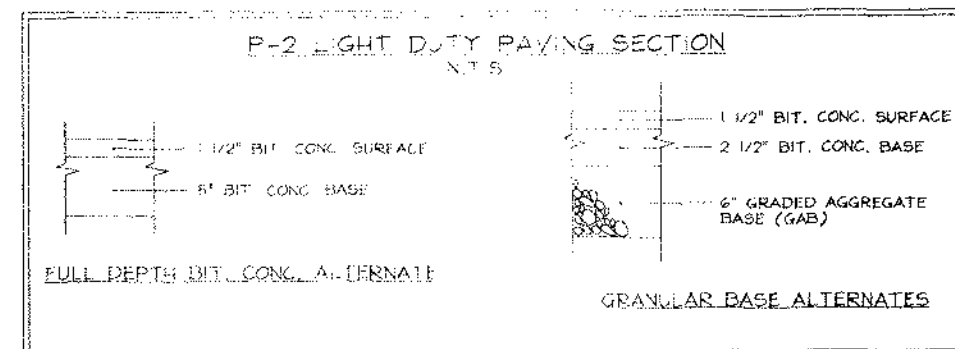
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Richard Blood
CHIEF, BUREAU OF HIGHWAYS DATE 5/30/00

Richard Blood 5/30/00
CHIEF, DIVISION OF LAND DEVELOPMENT JA DATE

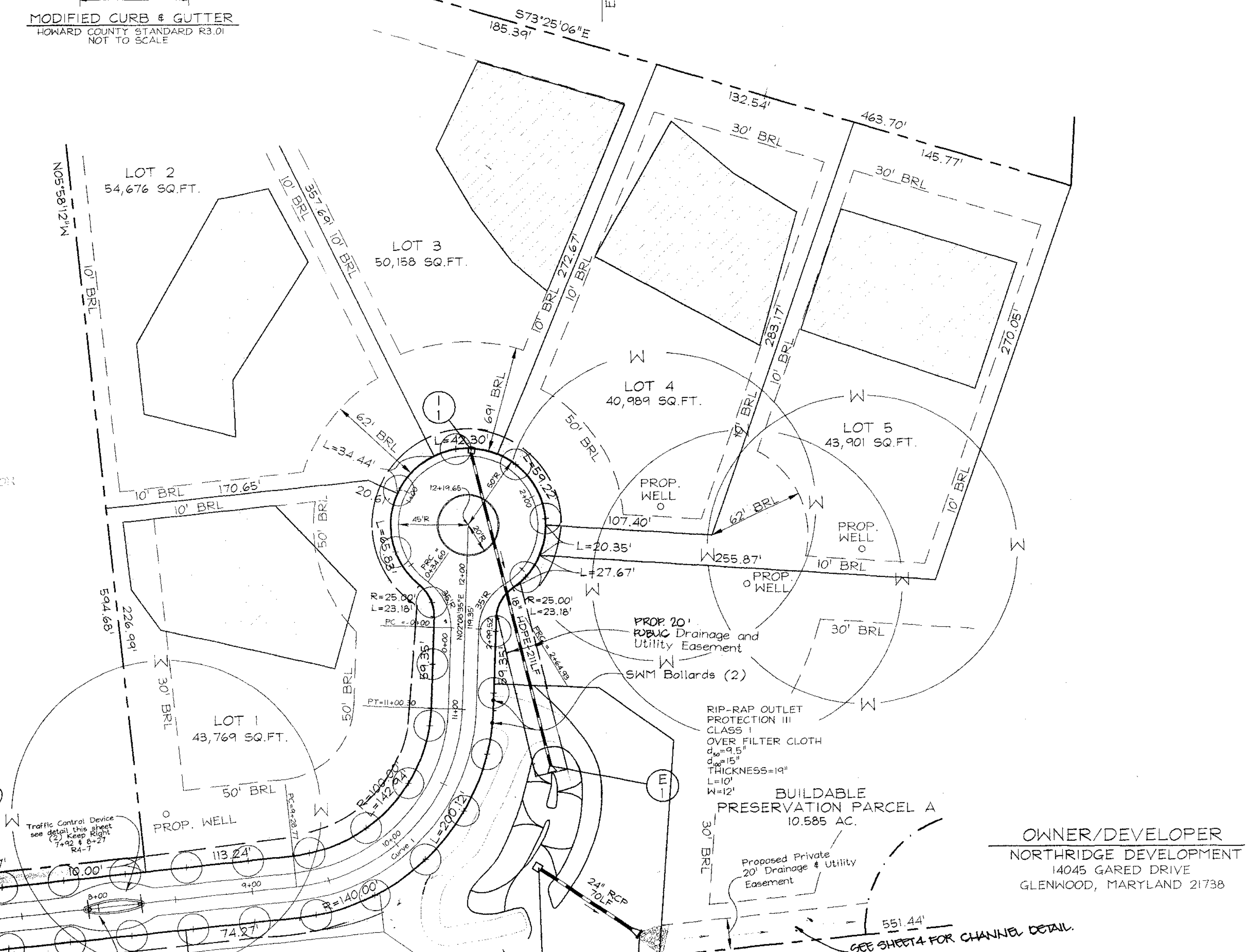
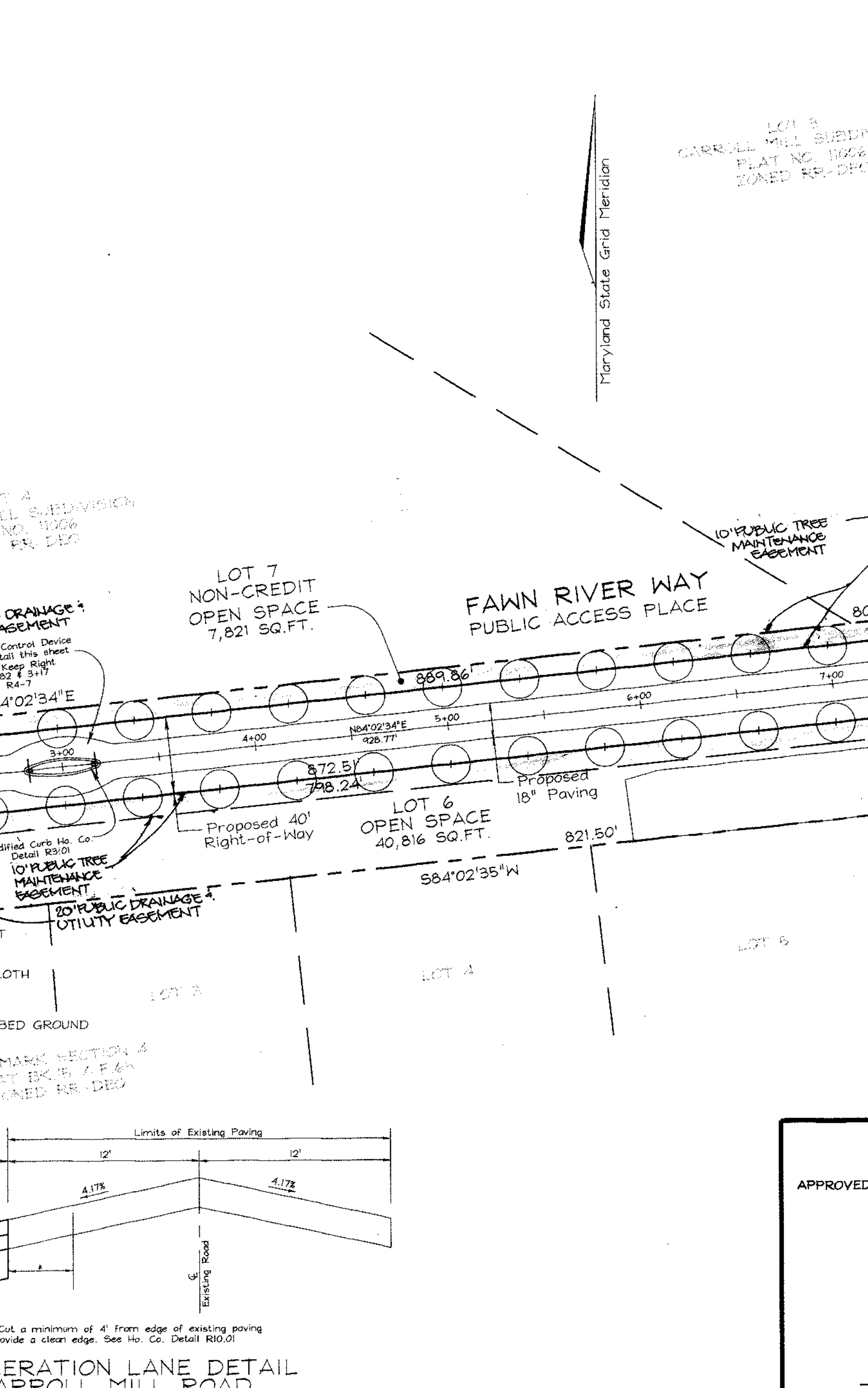
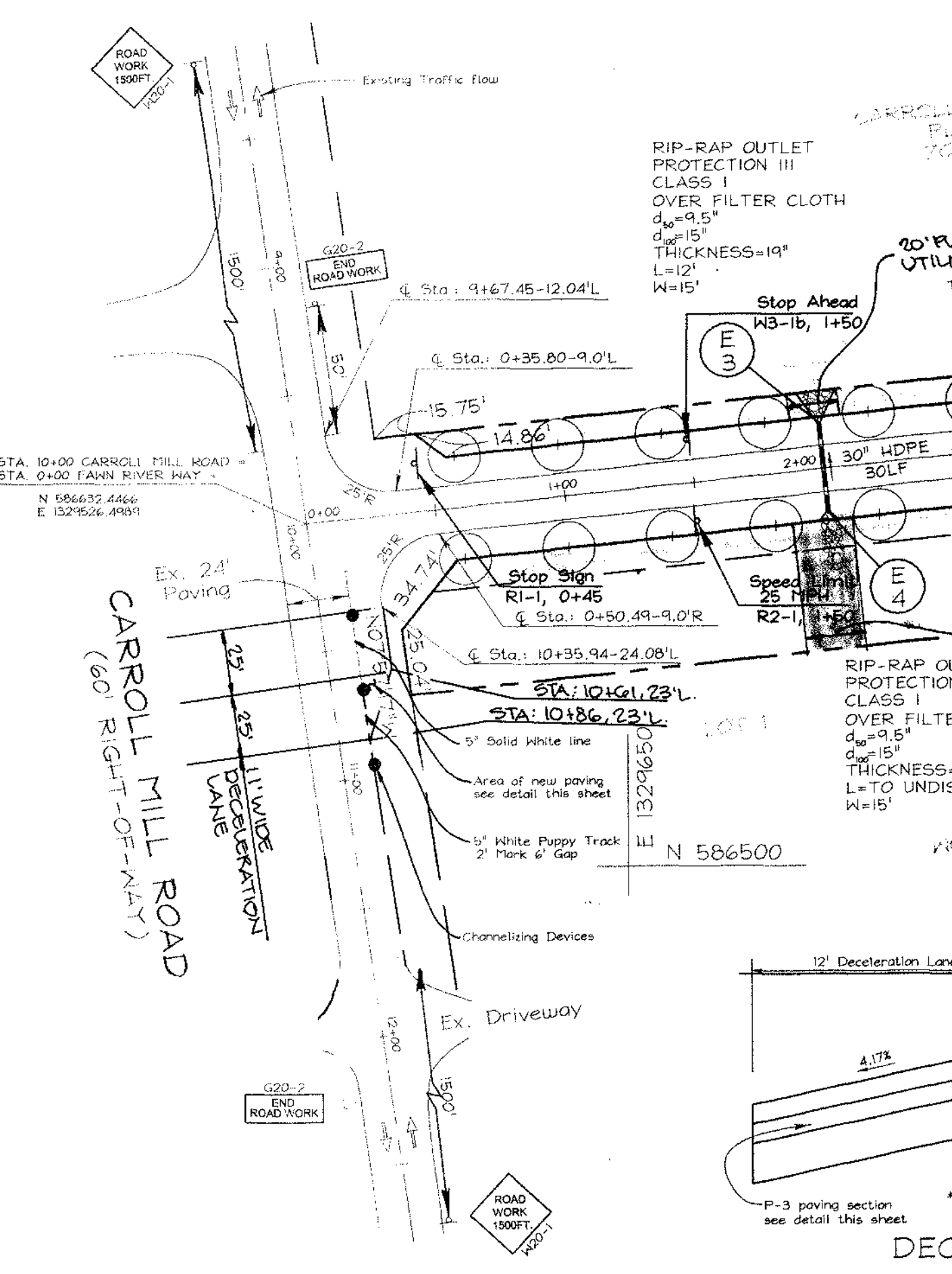
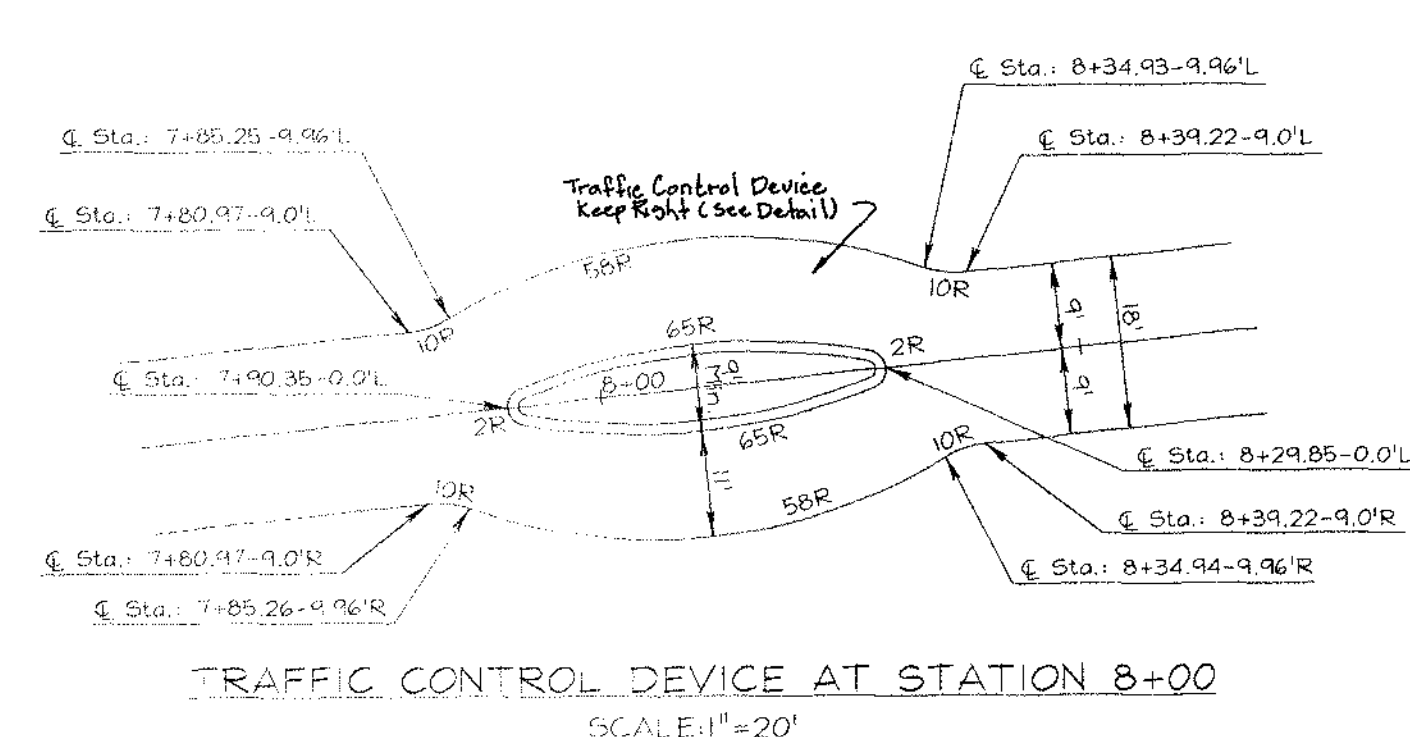
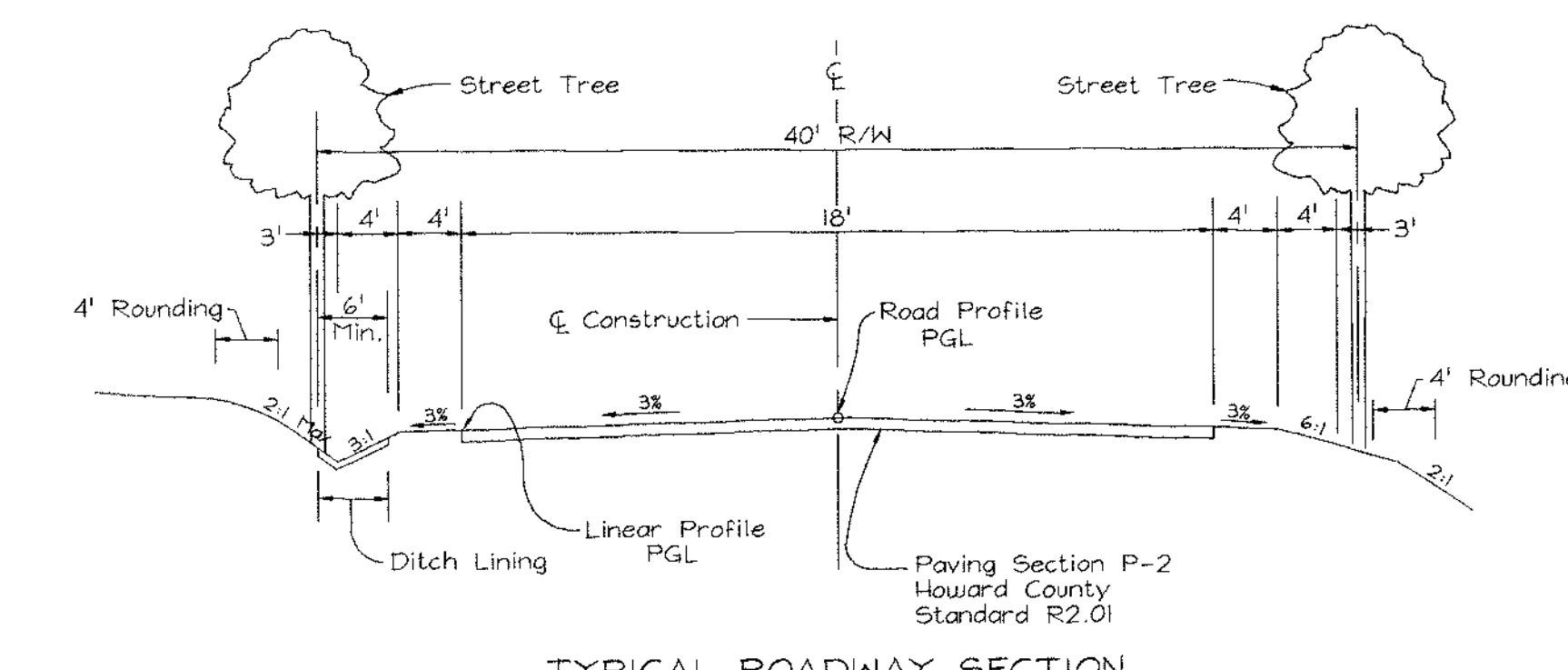
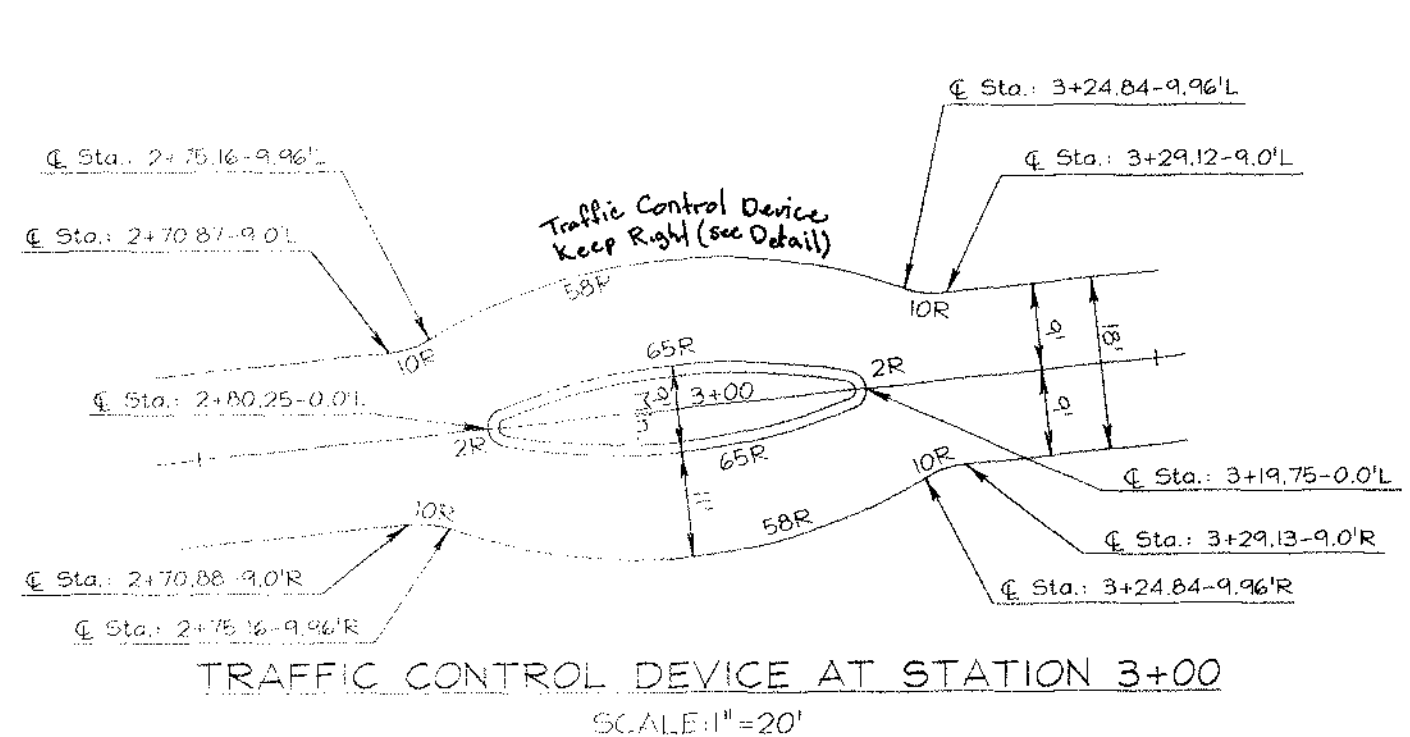
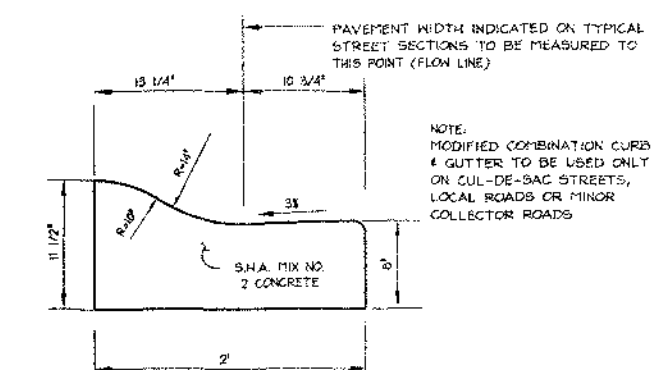
John P. ... 5/10/00
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



CURVE TABLE						
CURVE	LENGTH	RADIUS	TANGENT	CHORD	BEARING	DELTA
Curve 1	171.83	100.00	104.63	67.90	N89°30'12"	81°33'34"

MINIMUM LOT SIZE CHART			
Lot No.	Gross Area (SF)	Prop. Storm Area (SF)	Net Lot Area (SF)
1	25,35.57	233.25	2,728.32

STREET TREE CALCULATIONS			
Street Name	Linear Feet	Required Trees	Provided Trees
Fawn River Way	2,509/40	63	63



NO.	REVISION	DATE
1	REVISE DECELERATION LANE	9/27/00

ROAD PLAN AND TRAFFIC CONTROL PLAN EAGLE RIDGE
 TAX MAP #22 & 23 BLOCK No. 6 PARCEL #553
 3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 Reference No. : S-99-13, P-00-01

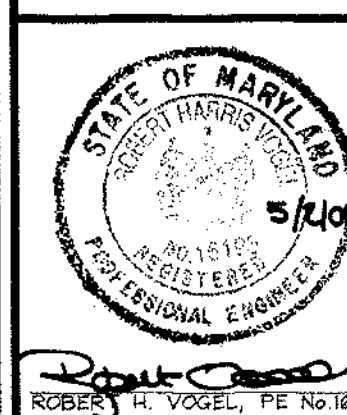
VOGEL & ASSOCIATES
 ENGINEERS/SURVEYORS/PLANNERS
 3691 Park Avenue, Suite 101 • Elkocott City, Maryland 21043
 Tel 410.461.5828 Fax 410.465.3866

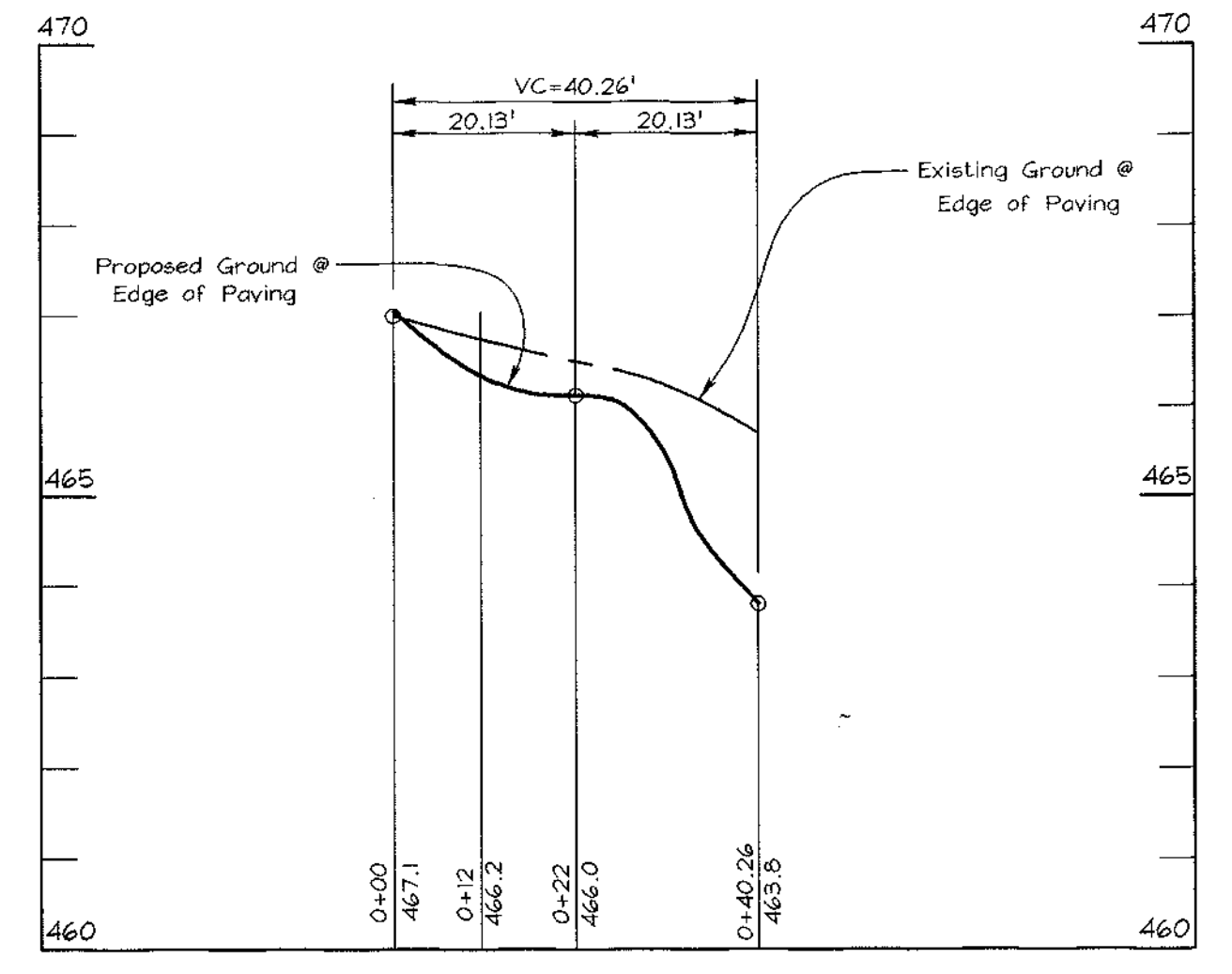
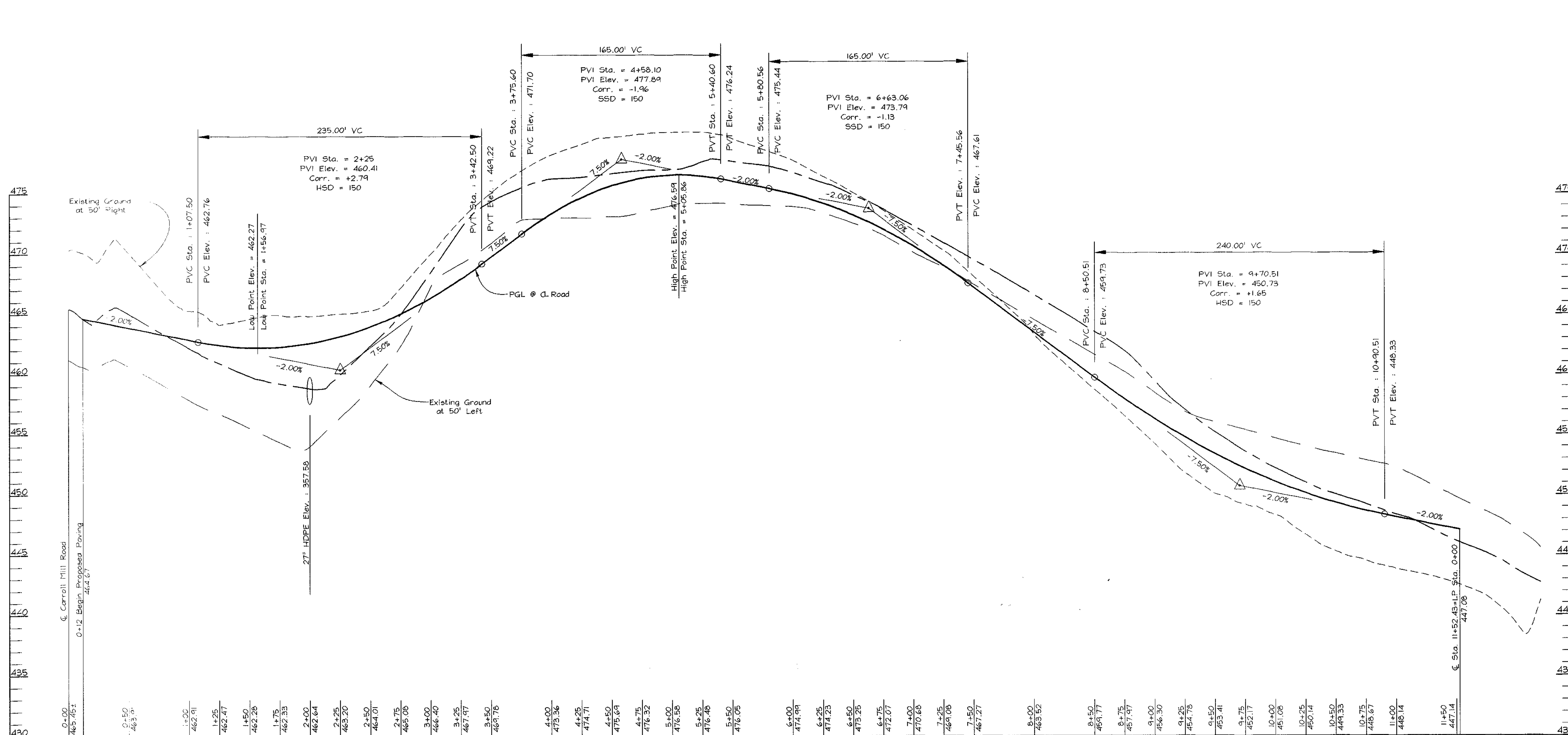
DESIGN BY: PS
 DRAWN BY: PS
 CHECKED BY: JCO
 DATE: May 1, 2000
 SCALE: 1"=50'
 W.O. NO.: 98-063

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
 APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

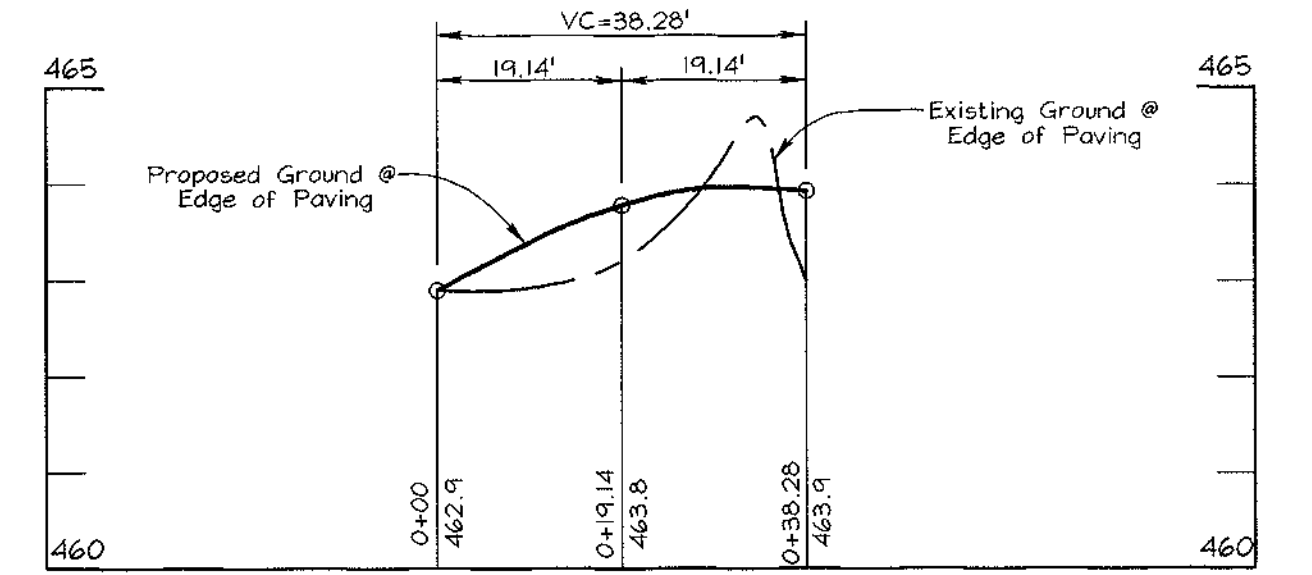
Richard Bloual 5/30/00
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

5/10/00
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

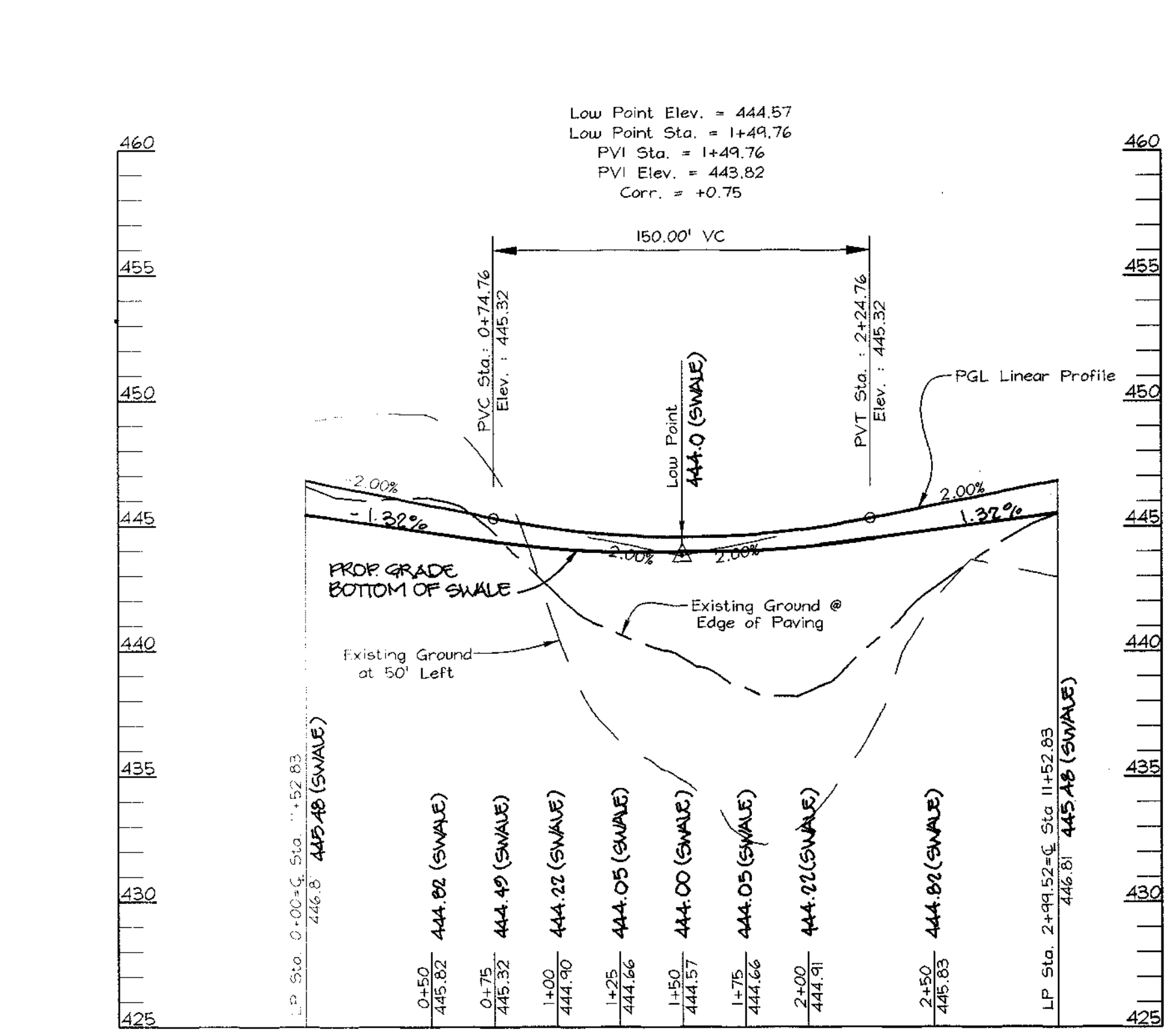




ENTRANCE FILLET PROFILE
SCALE: HORIZONTAL = 1"=20'
VERTICAL = 1"=2'

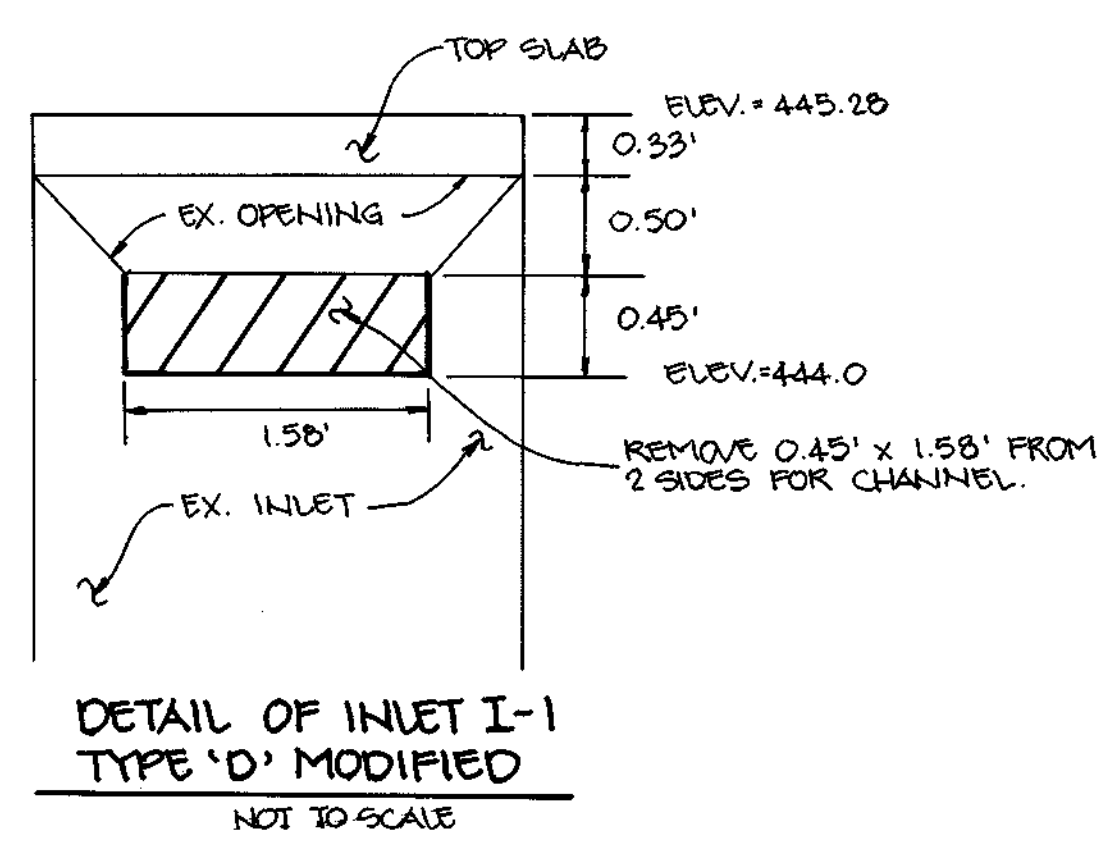


EXIT FILLET PROFILE
SCALE: HORIZONTAL = 1"=20'
VERTICAL = 1"=2'



LINEAR PROFILE
FAWN RIVER WAY
PUBLIC ACCESS PLACE
SCALE: HORIZONTAL = 1"=50'
VERTICAL = 1"=5'

ROAD PROFILE
FAWN RIVER WAY
PUBLIC ACCESS PLACE
DESIGN SPEED-25MPH
SCALE: HORIZONTAL = 1"=50'
VERTICAL = 1"=5'



OWNER/DEVELOPER
NORTHTRIDGE DEVELOPMENT
14045 GARED DRIVE
GLENWOOD, MARYLAND 21738

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Richard Blaz...
CHIEF, BUREAU OF HIGHWAYS

Richard Blaz...
CHIEF, DEVELOPMENT ENGINEERING DIVISION

NO.	REVISION	DATE
2	REVISE GRADOS IN CUL-DE-SAC, MODIFY INLET OPENING	3/20/01

ROAD PROFILES
EAGLE RIDGE
TAX MAP #22 # 23 PARCEL #553
3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
Reference No. : 5-99-13, P-00-01

VOGEL & ASSOCIATES
ENGINEERS/SURVEYORS/PLANNERS
3691 Park Avenue, Suite 101 • Ellicott City, Maryland 21043
Tel 410.461.5828 Fax 410.463.3995

DESIGN BY: PS
DRAWN BY: PS
CHECKED BY: JCO
DATE: May 1, 2000
SCALE: As Shown
W.O. NO.: 98-063
3 SHEET OF 8

SCHEDULE D - STORMWATER MANAGEMENT AREA LANDSCAPING		
LINEAR FEET OF PERIMETER	622 LF POND 200 LF RIP-RAP CHANNEL	
CREDIT FOR EXISTING VEGETATION (NO, YES AND LINEAR FEET)	NO	NO
CREDIT FOR OTHER LANDSCAPING (NO, YES AND %)	N/A	N/A
NUMBER OF TREES REQUIRED SHADE TREES 1:50 EVERGREEN TREES 1:40	12 15	6 5
NUMBER OF TREES PROVIDED SHADE TREES EVERGREEN TREES OTHER TREES (2:1 SUBSTITUTION)	12 15 15	110*

SCHEDULE A PERIMETER LANDSCAPE EDGE					
CATEGORY	ADJACENT TO ROADWAYS		ADJACENT TO PERIMETER PROPERTIES		
	1	2	3	4	5
Perimeter/Frontage Designation					
Linear Feet of Roadway Frontage/Perimeter	595'	685'	549'	825'	780'
Credit for Existing Vegetation (Yes, No, Linear Feet Describe below if needed)	115	115	115	115	NO
Credit for Wall, Fence or Berm (Yes, No, Linear Feet Describe below if needed)	No	No	No	No	No
Number of Plants Required	140	110	110	110	130
Number of Plants Provided	140	110	110	110	130

NOTES:
 THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPE TREES HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$14,500.00 (Shade = 38 x \$300 = \$11,400.00 + Evergreen = 21 x \$150 = \$3,150.00). THE SURETY FOR THE 63 STREET TREES ALONG THE PUBLIC RIGHT-OF-WAY OF FAWN RIVER WAY ARE TO BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT (63 x \$200 = \$12,600.00).

"AS-BUILT" CERTIFICATION
 I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS APPROVED PLANS AND SPECIFICATIONS.

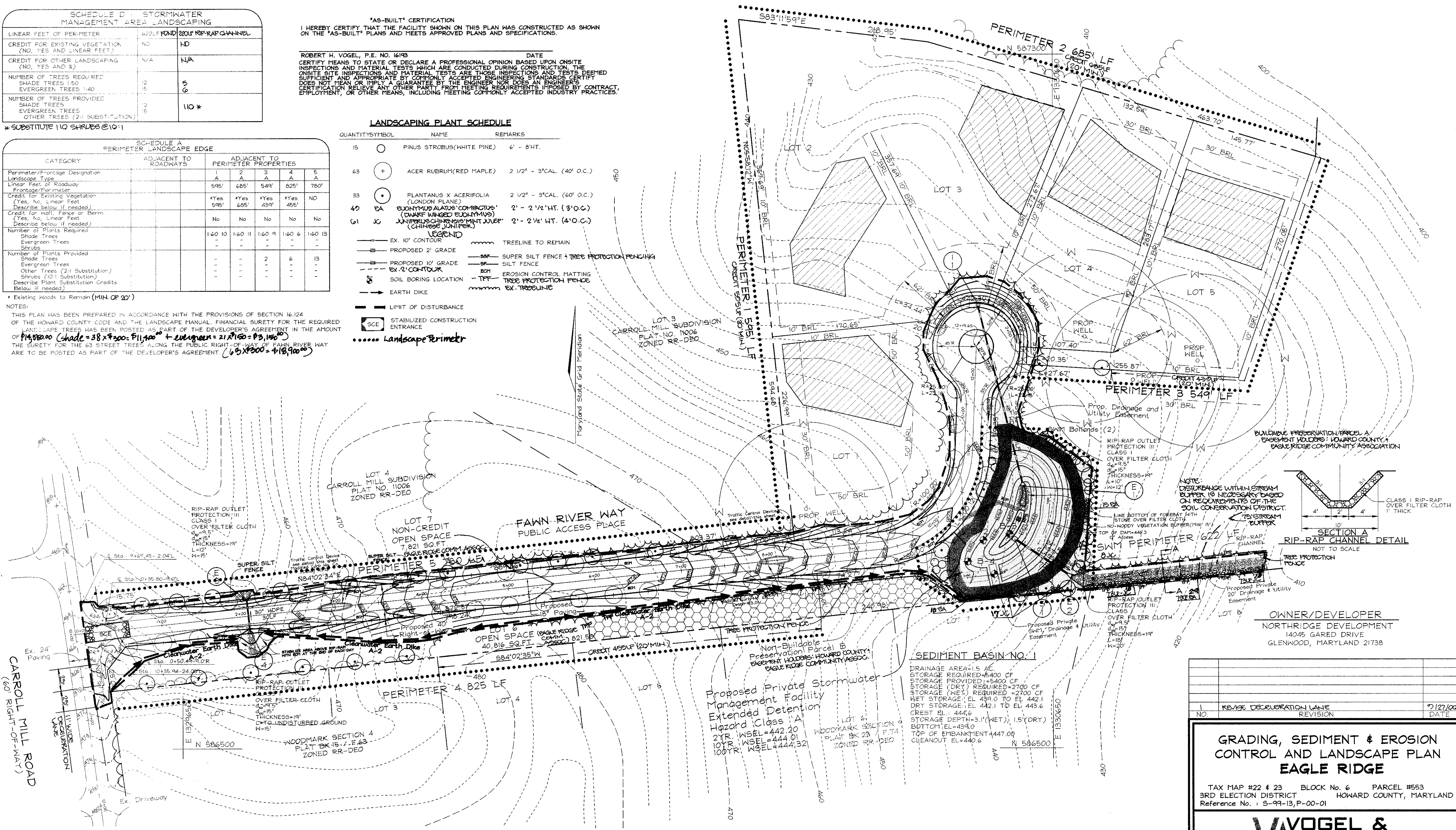
ROBERT H. VOGEL, P.E. NO. 16198 DATE
 CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION BASED UPON ON-SITE INSPECTIONS AND MATERIAL TESTS WHICH ARE CONDUCTED DURING CONSTRUCTION. THE ON-SITE INSPECTIONS AND MATERIAL TESTS ARE THOSE INSPECTIONS AND TESTS DEEMED SUFFICIENT AND APPROPRIATE BY COMMONLY ACCEPTED ENGINEERING STANDARDS. CERTIFICATION DOES NOT MEAN OR IMPLY A GUARANTEE BY THE ENGINEER NOR DOES AN ENGINEER'S CERTIFICATION RELIEVE ANY OTHER PARTY FROM MEETING REQUIREMENTS IMPOSED BY CONTRACT, EMPLOYMENT, OR OTHER MEANS, INCLUDING MEETING COMMONLY ACCEPTED INDUSTRY PRACTICES.

LANDSCAPING PLANT SCHEDULE

QUANTITY	SYMBOL	NAME	REMARKS
15	○	PINUS STROBUS (WHITE PINE)	6' - 8' HT.
63	+	ACER RUBRUM (RED MAPLE)	2 1/2" - 3" CAL. (40' O.C.)
33	●	PLANTANUS X ACERIFOLIA (LONDON PLANE)	2 1/2" - 3" CAL. (60' O.C.)
40	BA	EUCONYMUS ALATUS 'COMPACTUS' (DWARF WINGED EUCONYMUS)	2' - 2 1/2' HT. (3' O.C.)
61	JO	JUNIPERUS CHINGENSIS 'MINT JUVEN' (CHINESE JUNIPER)	2' - 2 1/2' HT. (4' O.C.)

- LEGEND
- EX. 10' CONTOUR
 - PROPOSED 2' GRADE
 - PROPOSED 10' GRADE
 - EX. 2' CONTOUR
 - SOIL BORING LOCATION
 - EARTH DIKE
 - LIMIT OF DISTURBANCE
 - STABILIZED CONSTRUCTION ENTRANCE
 - EX. TREE LINE
 - SUPER SILT FENCE
 - SILT FENCE
 - EROSION CONTROL MATTING
 - TREE PROTECTION FENCE
 - EX. TREE LINE

..... Landscape Perimeter



NO.	REVISION	DATE
1	REVISE DECELERATION LANE	7/27/00

GRADING, SEDIMENT & EROSION CONTROL AND LANDSCAPE PLAN
EAGLE RIDGE
 TAX MAP #22 & 23 BLOCK No. 6 PARCEL #553
 3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 Reference No. : S-99-13, P-00-01

VVOGEL & ASSOCIATES
 ENGINEERS/SURVEYORS/PLANNERS
 3891 Park Avenue, Suite 101 • Ellicott City, Maryland 21043
 Tel: 410.461.9828 Fax: 410.465.3966

DESIGN BY: PS
 DRAIN BY: PS
 CHECKED BY: JCO
 DATE: April 28, 2000
 SCALE: 1"=50'
 H.O. NO.: 98-063

4 SHEET OF 8

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.
 [Signature] 5/1/00
 USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

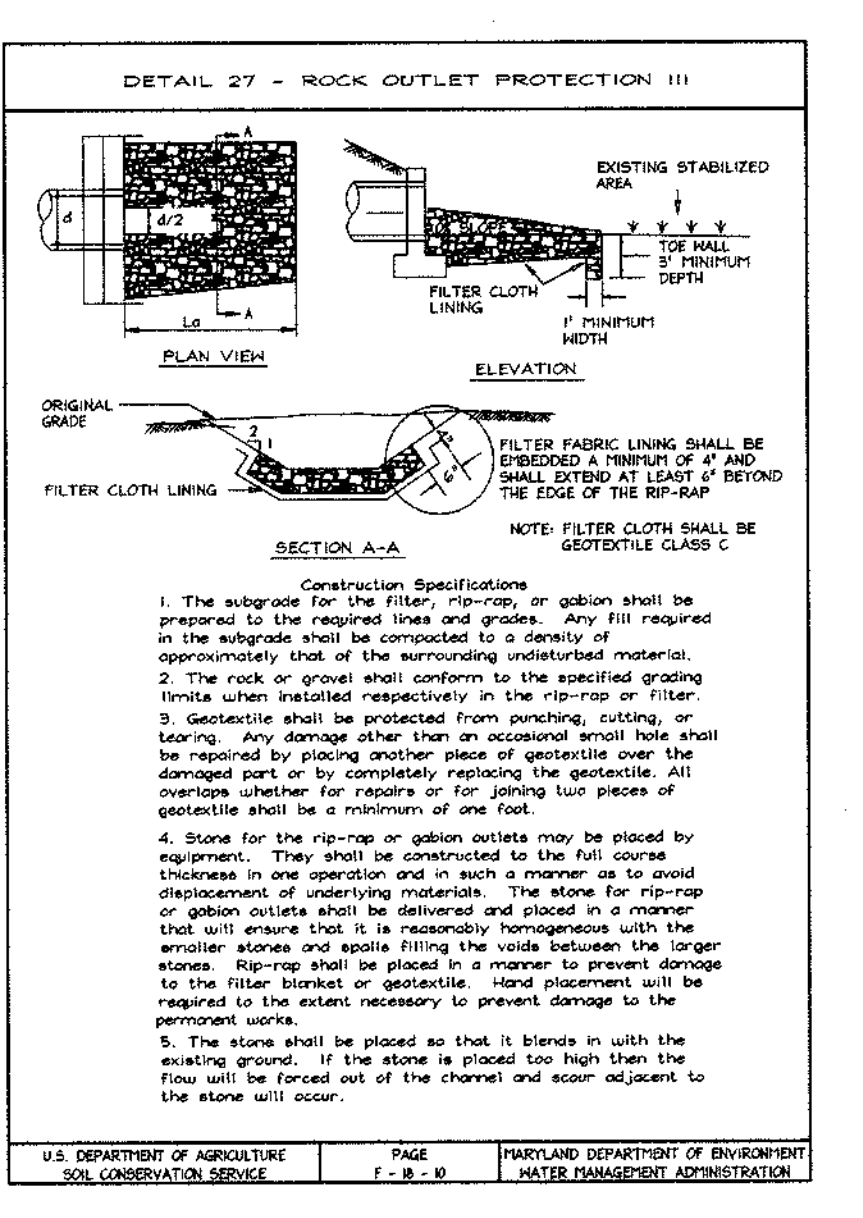
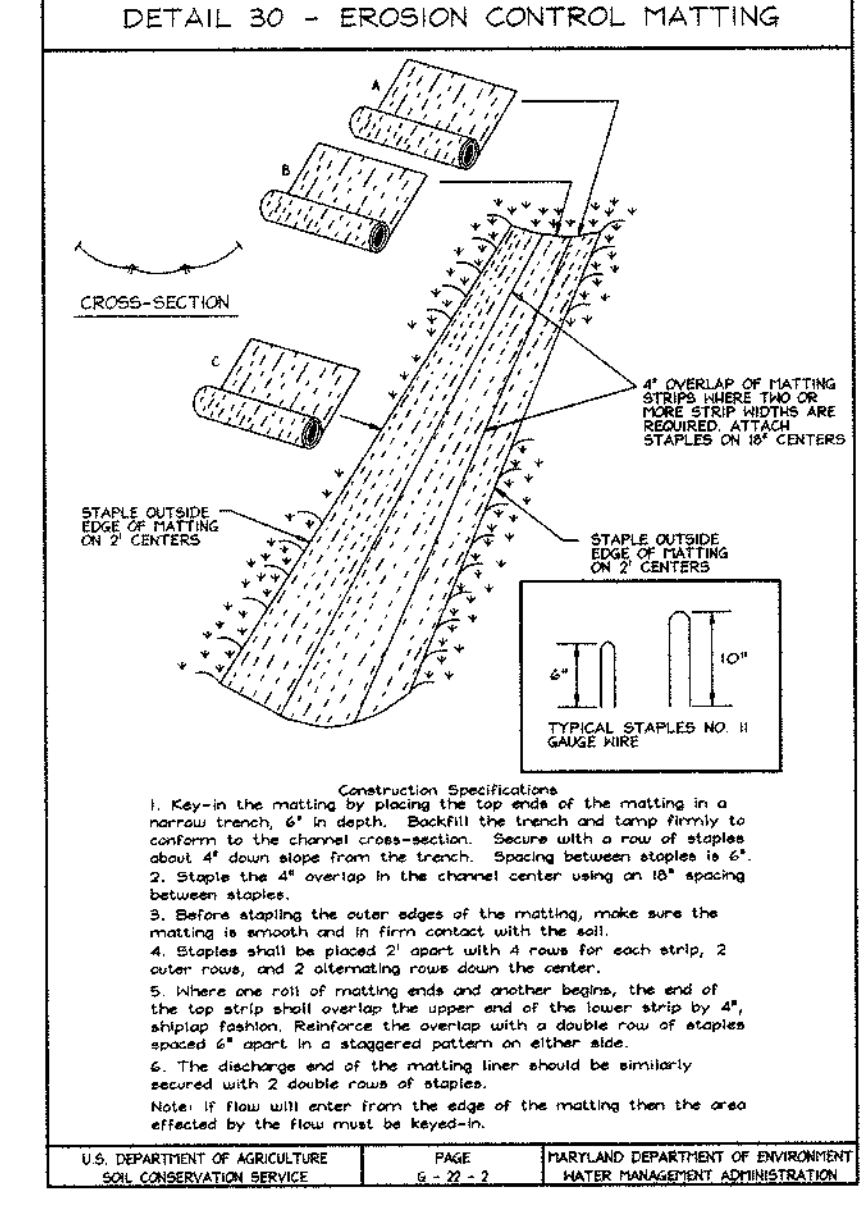
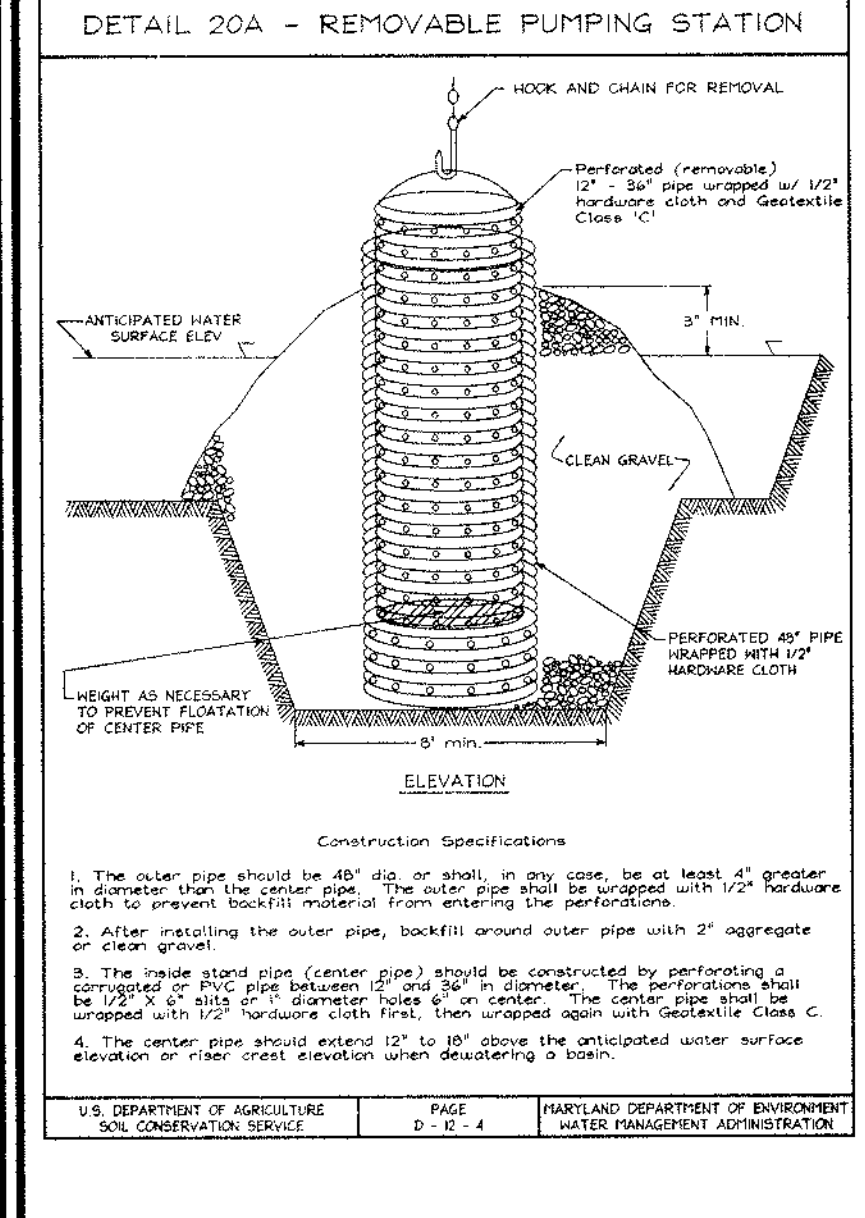
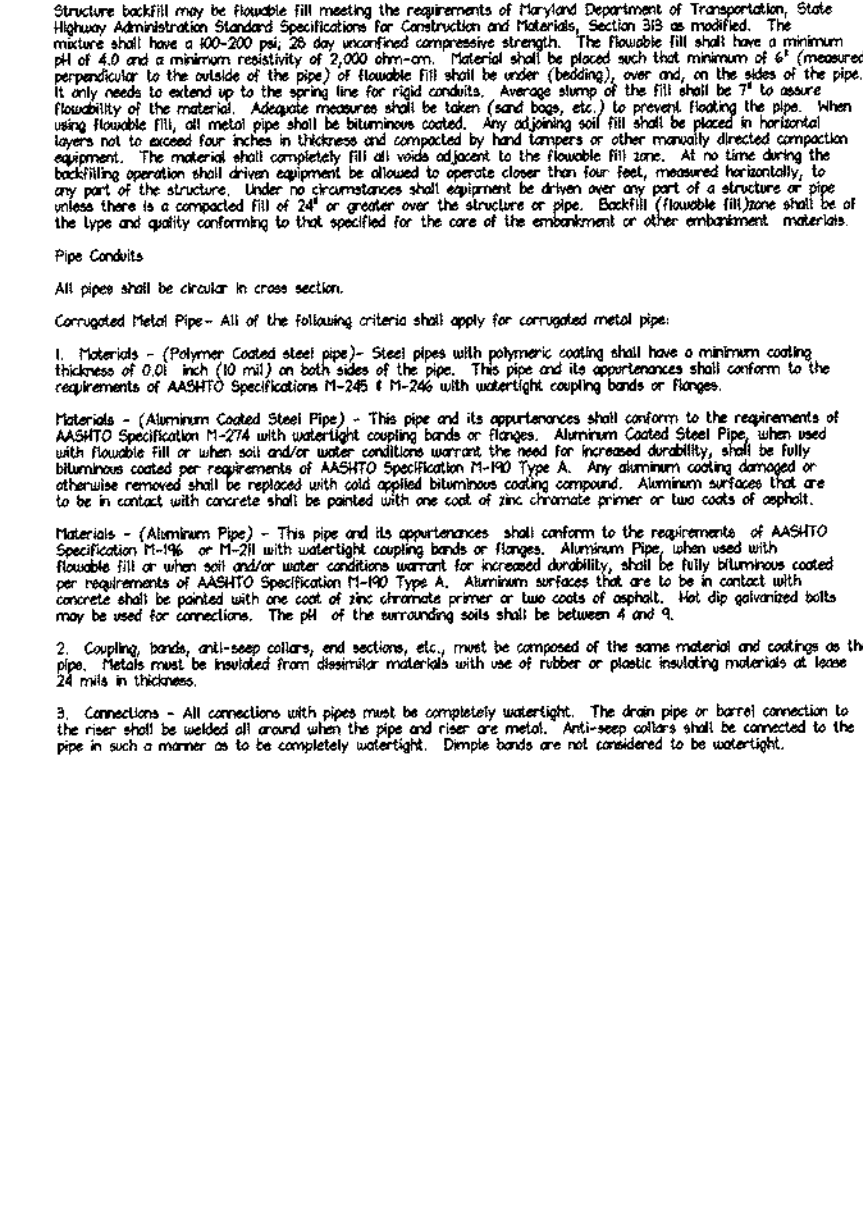
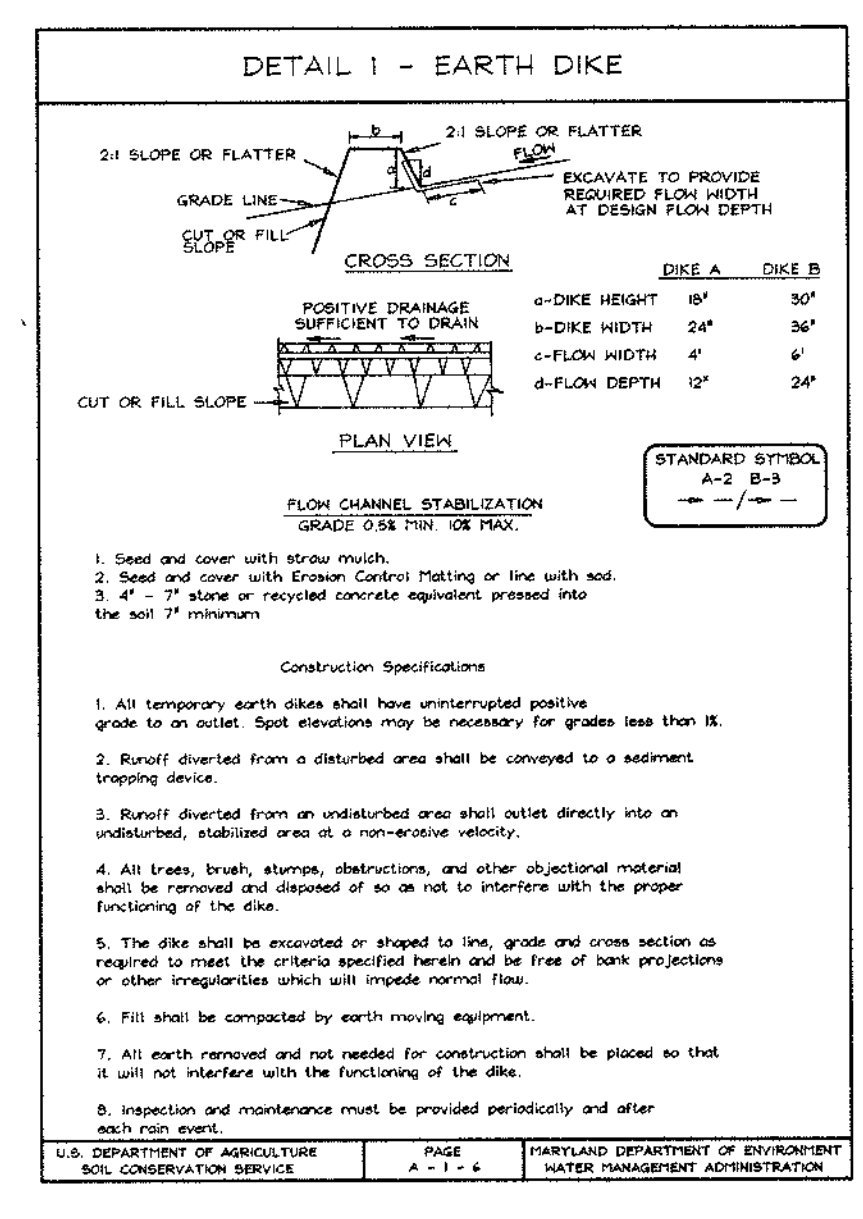
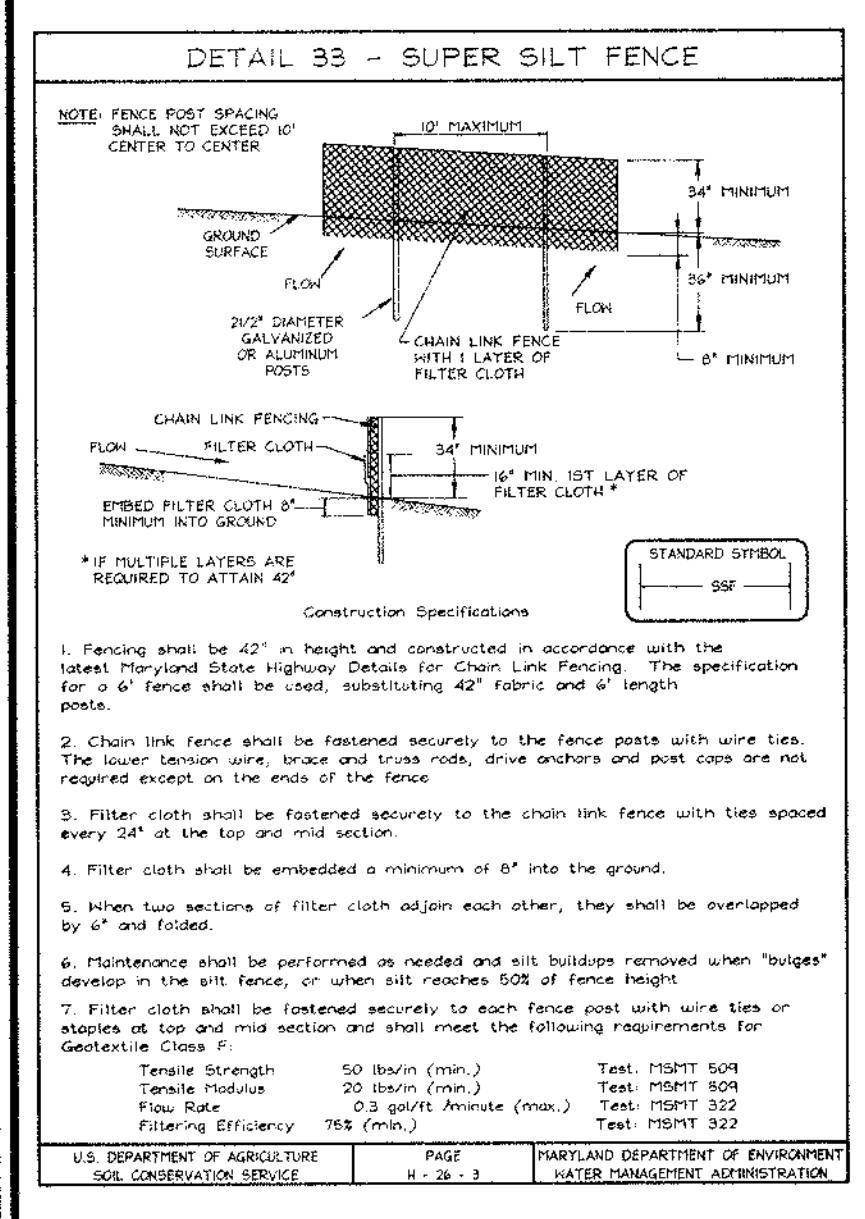
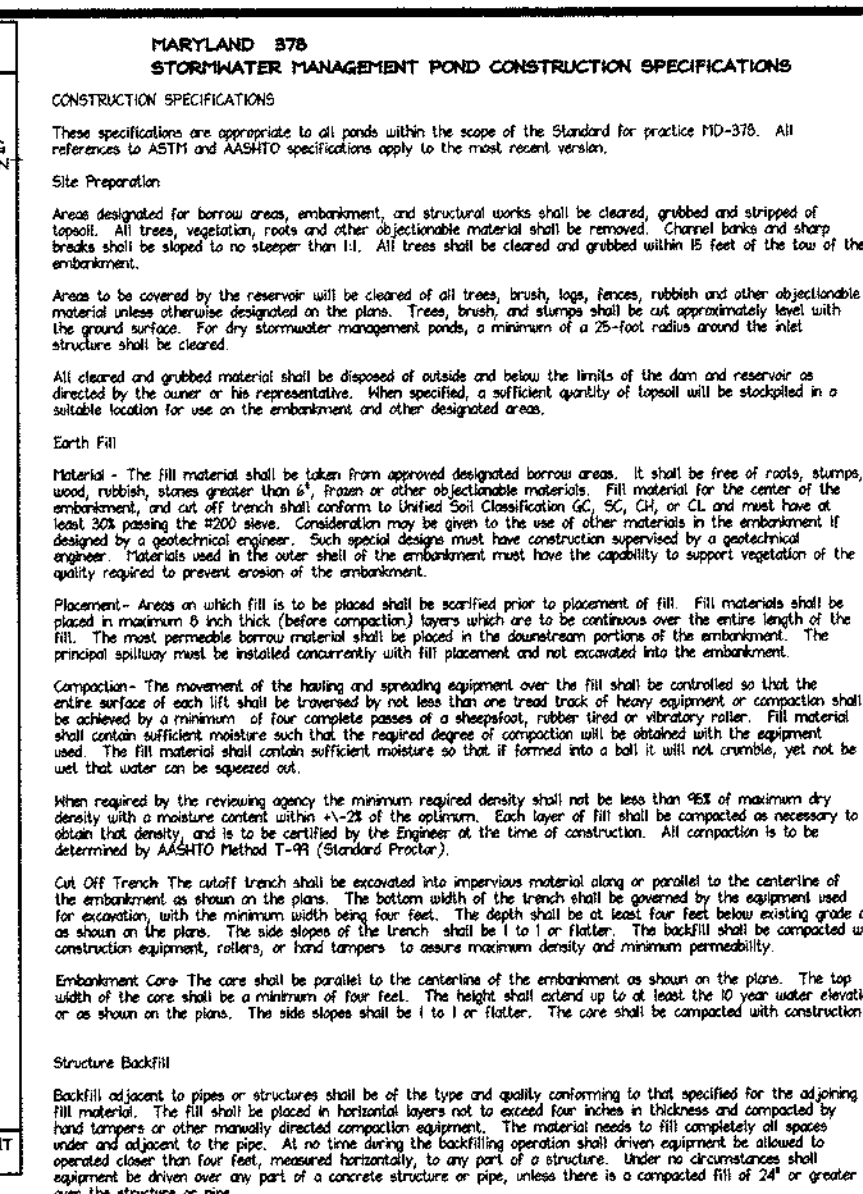
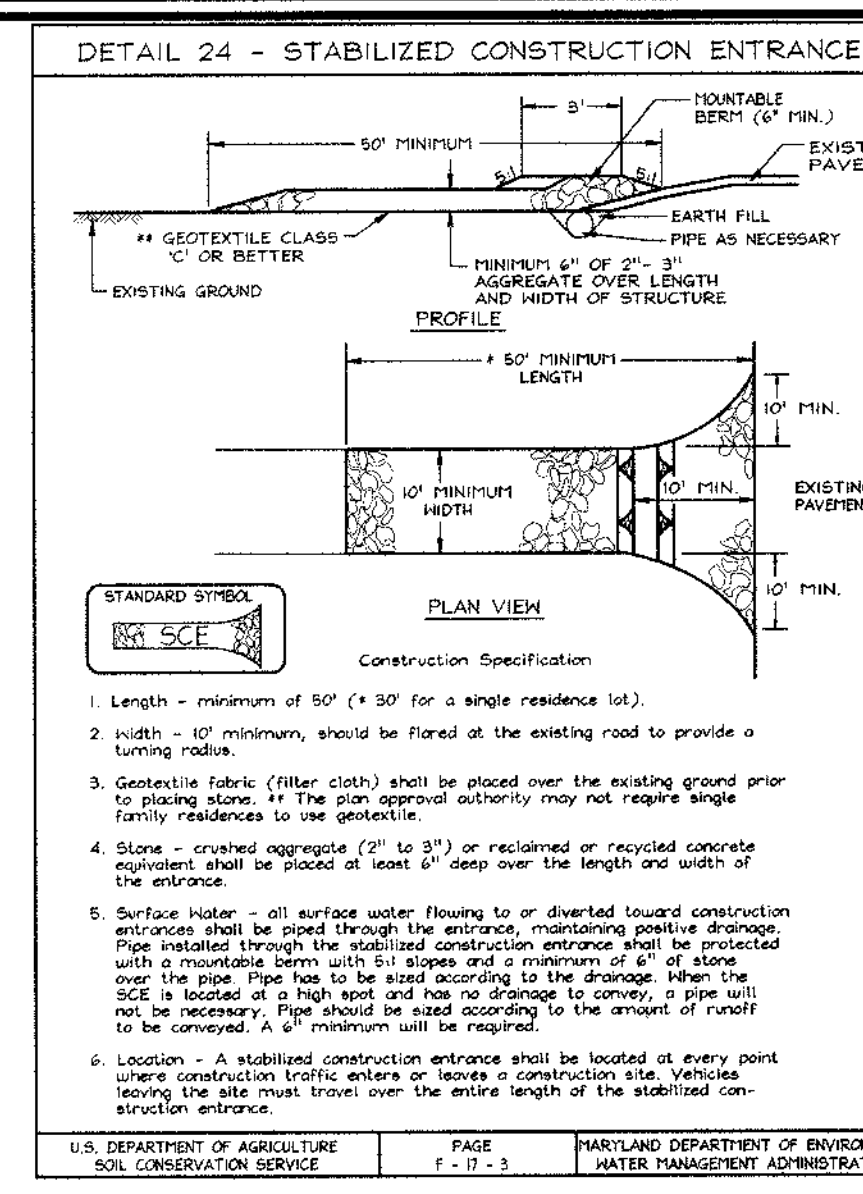
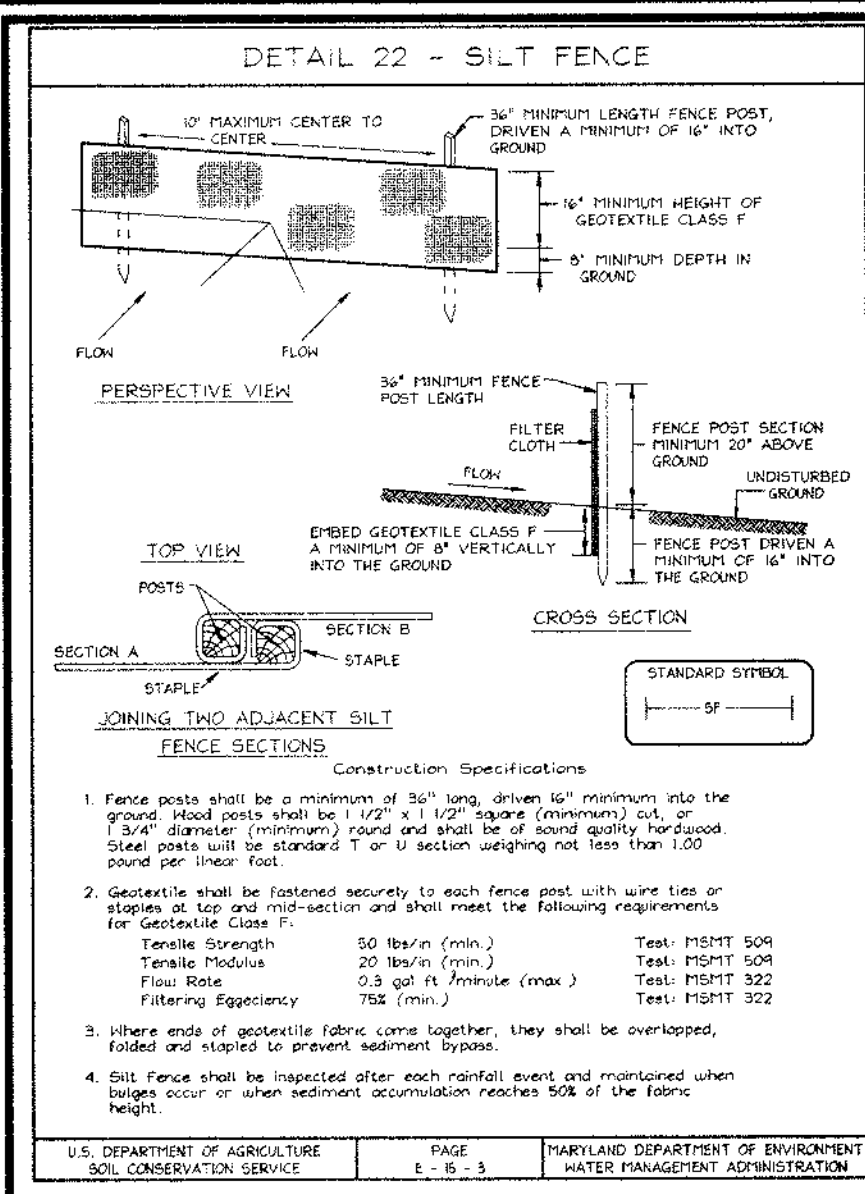
THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 [Signature] 5/1/00
 HOWARD SOIL CONSERVATION DISTRICT DATE

ENGINEER'S CERTIFICATE
 I HEREBY CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.
 [Signature] 5/1/00
 SIGNATURE OF ENGINEER DATE
 ROBERT H. VOGEL

DEVELOPER'S CERTIFICATE
 I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.
 [Signature] 5-1-00
 SIGNATURE OF DEVELOPER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
 [Signature] 5/1/00
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 [Signature] 5/30/00
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



MARYLAND 978 STORMWATER MANAGEMENT POND CONSTRUCTION SPECIFICATIONS

CONSTRUCTION SPECIFICATIONS

These specifications are appropriate to ponds within the scope of the Standard for Practice PD-305. All references to ASTM and MS&DT specifications apply to the most recent issue.

Site Preparation

Clear and grub material shall be disposed of outside and below the limits of the dam and reservoir as directed by the owner or his representative. When spreading, the quality of material shall be controlled in a suitable location for use on the embankment and other designated areas.

Earth Fill

All cleared and grubbed material shall be disposed of outside and below the limits of the dam and reservoir as directed by the owner or his representative. When spreading, the quality of material shall be controlled in a suitable location for use on the embankment and other designated areas.

Construction

The movement of the having and spreading equipment over the fill shall be controlled so that the entire surface of each fill shall be covered by one layer of heavy aggregate or compacted soil. The material shall be placed in a minimum of four compacted passes of a depth of 4" to 6" per pass. The material shall be placed in a minimum of four compacted passes of a depth of 4" to 6" per pass. The material shall be placed in a minimum of four compacted passes of a depth of 4" to 6" per pass.

When required by the reviewing agency the minimum required depth shall not be less than 18" and may be increased to a maximum of 24" for the entire length of the embankment. All compaction to be done by the contractor.

Drainage Structures

Drainage structures shall be of the type and quality conforming to that specified for the design of the structure. The design shall be approved by the reviewing agency. The design shall be approved by the reviewing agency. The design shall be approved by the reviewing agency.

U.S. DEPARTMENT OF AGRICULTURE PAGE 1 OF 1 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

PERMANENT SEEDING NOTES

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

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

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

- Preferred-Apply 2 tons per acre dolomitic limestone (42 lb/1000 sq ft.) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft.) before seeding. Harrow or disc and firm three inches of soil. At the time of seeding, apply 400 lbs per acre 30-0-0 urea-form fertilizer (4 lbs/1000 sq ft.)
- Acceptable-Apply 2 tons per acre dolomitic limestone (42 lb/1000 sq ft.) and apply 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft.) before seeding. Harrow or disc into upper three inches of soil.

SEEDING: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (1.4 lbs/1000 sq ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (.05 lbs/1000 sq ft.) of weeping lovegrass. During the period of October 16 thru February 28, protect site by Option (1) 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use seed Option (3) Seed with 60 lb/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 216 gallons per acre (5 gal/1000 sq ft.) of emulsified asphalt on flat areas. On slopes 6 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft.) for anchoring.

MAINTENANCE: Inspect all seeded areas and make needed repairs, replacements and reseedings.

TEMPORARY SEEDING NOTES

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

SOIL AMENDMENTS: Apply 600 lbs. per acre 10-10-10 fertilizer (14 lbs/1000 sq ft.).

SEEDING: For the periods March 1 thru April 30, and August 15 thru November 15, seed with 1/2 bushel per acre of annual ryegrass (1.5 lbs/1000 sq ft.). For the period May 1 thru August 31, seed with 3 lbs. per acre of weeping lovegrass (.07 lbs/1000 sq ft.). For the period November 1 thru February 28, protect site by applying 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring, or use seed.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 216 gallons per acre (5 gal/1000 sq ft.) of emulsified asphalt on flat areas. On slopes 6 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft.) for anchoring.

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

U.S. DEPARTMENT OF AGRICULTURE PAGE 1 OF 1 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL

Definition

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

Purpose

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

Conditions Where Practice Applies

- This practice is limited to areas having 2:1 or flatter slopes where:
 - The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
 - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
 - The original soil to be vegetated contains material toxic to plant growth.
 - The soil is so acidic that treatment with limestone is not feasible.
- For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

Construction and Material Specifications

- Topsoil Application
 - When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Side and Sediment Traps and Basins.
 - Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" - 8" higher in elevation.
 - Topsoil shall be uniformly distributed in a 4" - 8" layer and lightly compacted to a minimum thickness of 4" resulting from topsoiling or other operations that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.
 - Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seeded preparation.

U.S. DEPARTMENT OF AGRICULTURE PAGE 1 OF 1 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

SEQUENCE OF CONSTRUCTION

1. Obtain grading permit.	
2. Notify Howard County Bureau Of Inspections and Permits (410-313-1800) at least 24 hours before starting any work.	
3. Install Tree Protection Fencing.	3 day
4. All vegetation and structural practices are to be installed according to the provisions of this plan and one to be in conformance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.	1 day
5. Install 27 RCP culvert and stabilize immediately.	3 days
6. With culvert in place stabilize and with sediment control inspectors approval install sediment control devices (silt fence, super silt fence, earth dikes & sediment basins).	3 days
7. With sediment control inspectors approval clear and grub remaining site and rough grade area for road construction.	2 weeks
8. Construct road paving and install street trees.	1 week
9. With road paving complete and with sediment control inspectors approval, construct sediment basin to final stormwater management.	1 week
10. With sediment basin complete and with sediment control inspectors approval, remove user blocking and remove temp. deausting pipe and install 180 stand pipe with perforations.	4 days
11. Install perimeter landscaping.	3 days
12. During grading and after each rainfall, the contractor shall inspect and provide the necessary maintenance on the sediment and erosion control measures shown hereon.	
13. Upon stabilization of all disturbed areas and with the approval of the sediment control inspector, remove all sediment control devices.	

OWNER/DEVELOPER
NORTHDRIVE DEVELOPMENT
14045 GARED DRIVE
GLENWOOD, MARYLAND 21738

SEDIMENT AND EROSION CONTROL DETAILS EAGLE RIDGE

TAX MAP #22 # 23 BLOCK No. 6 PARCEL #553
3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
Reference No. : S-99-13, P-00-01

VOGEL & ASSOCIATES
ENGINEERS/SURVEYORS/PLANNERS
3901 Park Avenue, Suite 101 • Ellicott City Maryland 21043
Tel 410.461.5828 Fax 410.465.3996

DESIGN BY: PS
DRAWN BY: PS
CHECKED BY: JCO
DATE: April 28, 2000
SCALE: As Shown
W.O. NO.: 98-063

5 SHEET OF 8

NOTES

- SEE LANDSCAPE SPECIFICATION GUIDELINES FOR BALTICORE-WASHINGTON METROPOLITAN DISTRICT FOR ALL MATERIALS, PRODUCT AND PROCEDURE SPECIFICATIONS.
- SEE "LANDSCAPE GUIDELINES" FOR SUPPORTING TREES LARGER THAN 2-1/2" CALIPER.
- PLACE UPRIGHT STAKES PARALLEL TO WALKS & BUILDINGS.
- KEEP MULCH 1" FROM TRUNK.

LEADER MUST REMAIN INTACT
PRUNE APPROXIMATELY 30% OF CROWN - SEE LANDSCAPE DO NOT PRUNE EVERGREEN TREES.

2 STRANDS OF GALVANIZED WIRE TWISTED FOR SUPPORT
UPRIGHT STAKES - SET IN GROUND TO FIRM BEARING
CUT BURLAP & ROPE FROM TOP OF BALL
3" DEPTH MULCH
2" EARTH SAUCER
FINISH GRADE
1/8" DEPTH OF BALL
PLANTING MIX - SEE PLANTING NOTES
LOOSENE SUBSOIL

TREE PLANTING AND STAKING
DECIDUOUS AND EVERGREEN TREES UP TO 2-1/2" CALIPER

U.S. DEPARTMENT OF AGRICULTURE PAGE 1 OF 1 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

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

Cheryl Sim / 6/5 5/14/00
USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

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

Robert H. Vogel / 5/16/00
HOWARD SOIL CONSERVATION DISTRICT DATE

ENGINEERS CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

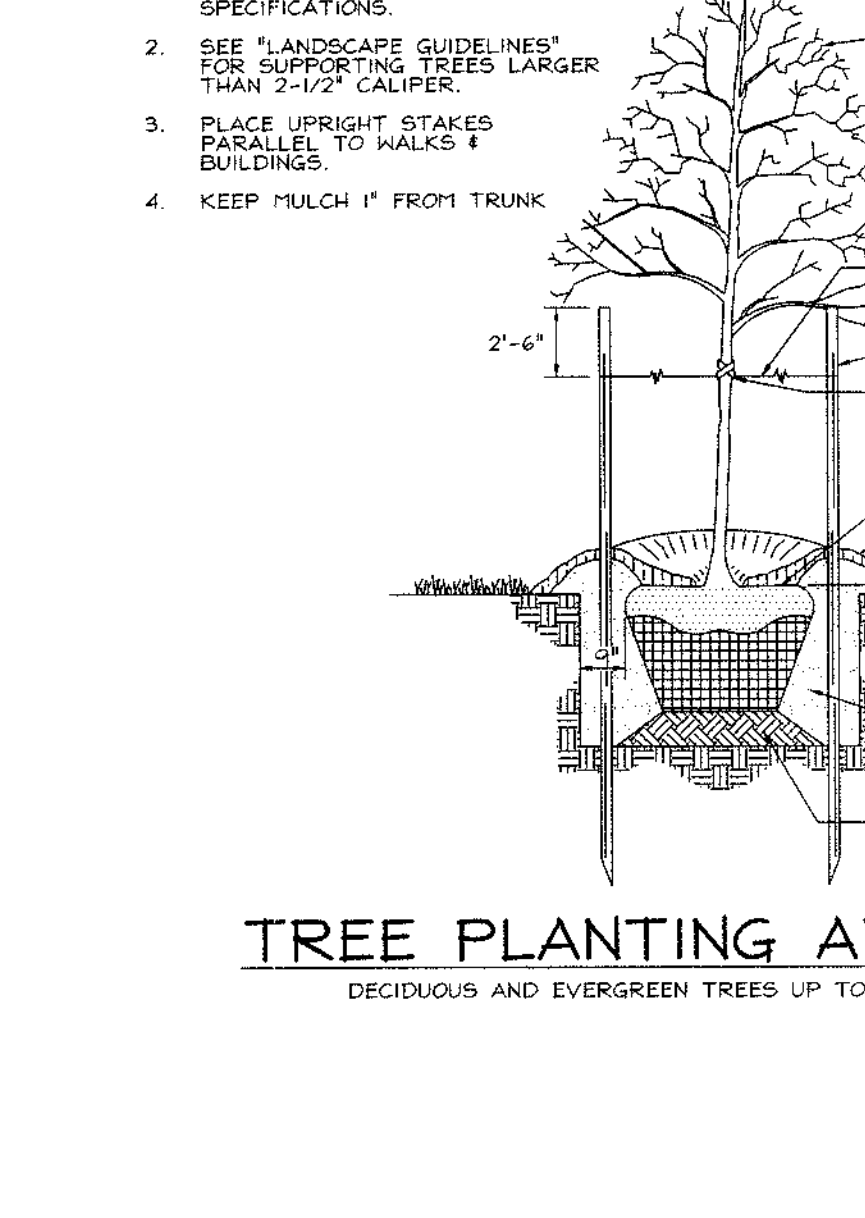
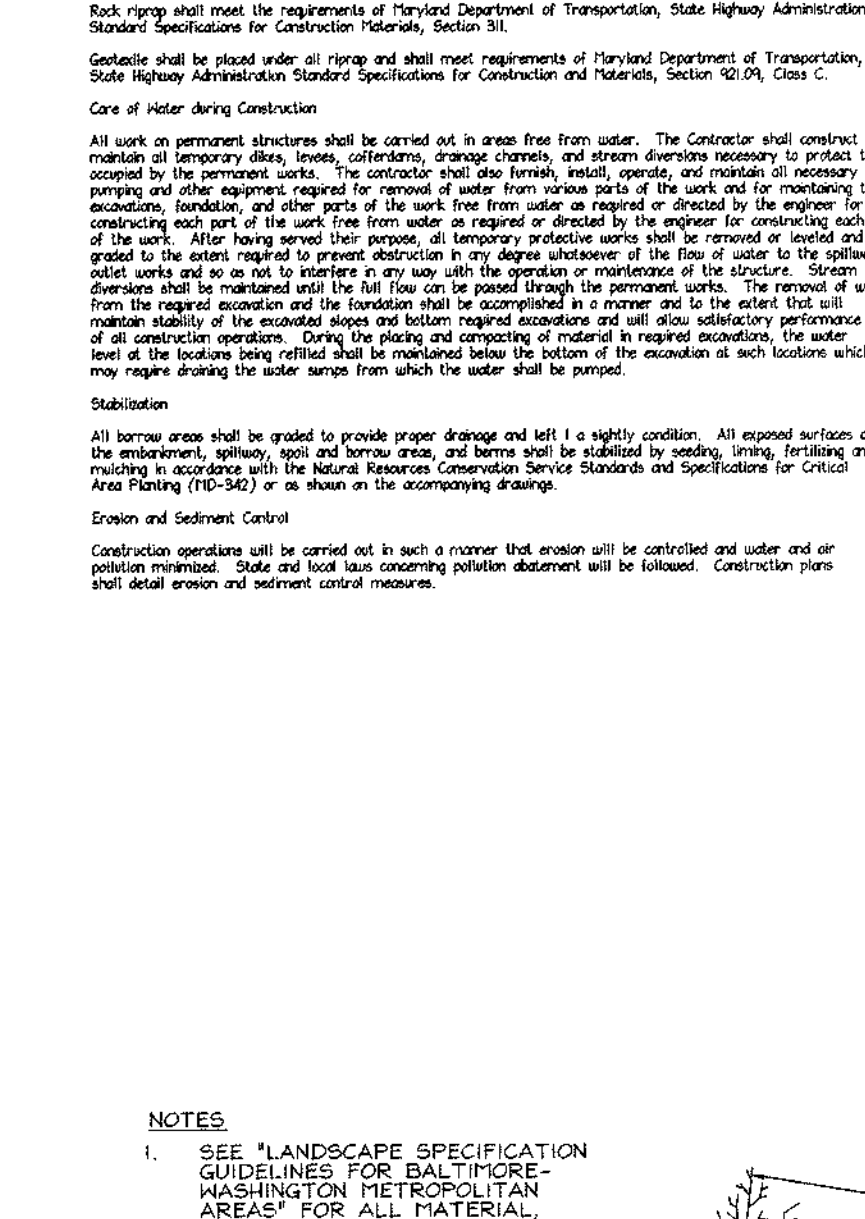
Robert H. Vogel / 5/16/00
SIGNATURE OF ENGINEER DATE
ROBERT H. VOGEL

DEVELOPER'S CERTIFICATE

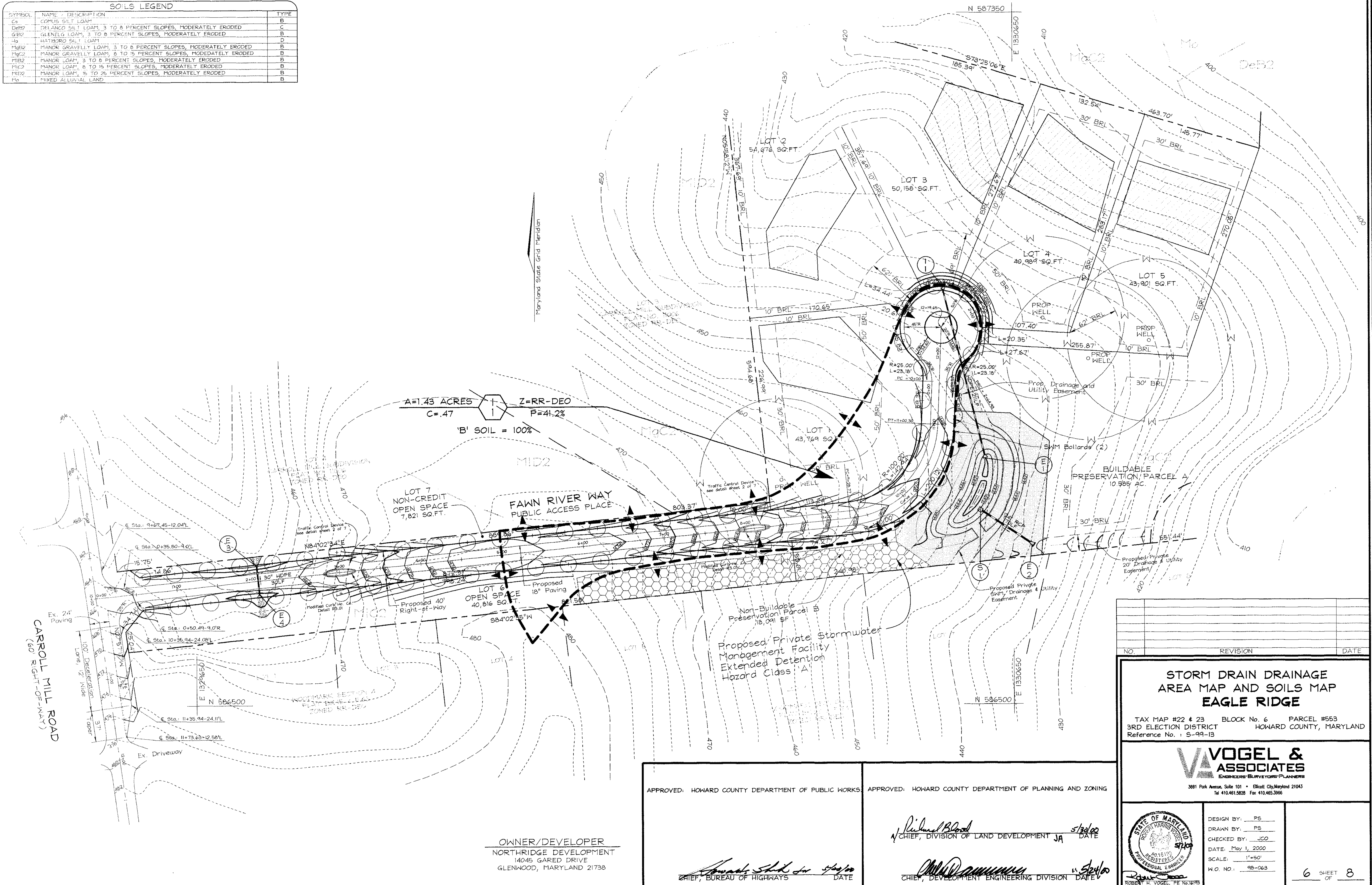
I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE TO THESE STANDARDS AND SPECIFICATIONS. PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR CONSTRUCTION OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
Richard Blount / 5/16/00
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Richard Blount / 5/16/00
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



SOILS LEGEND		
SYMBOL	NAME / DESCRIPTION	TYPE
Co	COMUS SILT LOAM	B
DeB7	DPLANCO SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	C
GIR7	GLENCO LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
Hd	HATHORO SILT LOAM	D
MdE2	MANOR GRAVELLY LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
MdE2	MANOR GRAVELLY LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED	B
MdE2	MANOR LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED	B
MdE2	MANOR LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED	B
MdE2	MANOR LOAM, 15 TO 25 PERCENT SLOPES, MODERATELY ERODED	B
MdE2	MIXED ALLUVIAL LAND	B



A=1.43 ACRES
C=.47
Z=RR-DEO
P=41.2%
'B' SOIL = 100%

LOT 7
NON-CREDIT
OPEN SPACE
7,821 SQ.FT.

LOT 6
OPEN SPACE
40,816 SQ.FT.

Proposed Private Stormwater
Management Facility
Extended Detention
Hazard Class 'A'

BUILDABLE
PRESERVATION PARCEL A
10,985 AC.

CARROLL MILL ROAD
(60' RIGHT-OF-WAY)

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

OWNER/DEVELOPER
NORTHDRIDGE DEVELOPMENT
14045 GARED DRIVE
GLENWOOD, MARYLAND 21738

Chief, Bureau of Highways
DATE

Richard Blood
Chief, Division of Land Development
DATE 5/30/00

Chief, Development Engineering Division
DATE 5/24/00

NO.	REVISION	DATE

**STORM DRAIN DRAINAGE
AREA MAP AND SOILS MAP
EAGLE RIDGE**

TAX MAP #22 & 23 BLOCK No. 6 PARCEL #553
3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
Reference No. : S-99-13

**VOGEL &
ASSOCIATES**
ENGINEERS • SURVEYORS • PLANNERS

3691 Park Avenue, Suite 101 • Ellicott City, Maryland 21043
Tel 410.461.5828 Fax 410.465.3966

DESIGN BY: PS
DRAWN BY: PS
CHECKED BY: JCO
DATE: May 1, 2000
SCALE: 1"=50'
W.O. NO.: 98-063

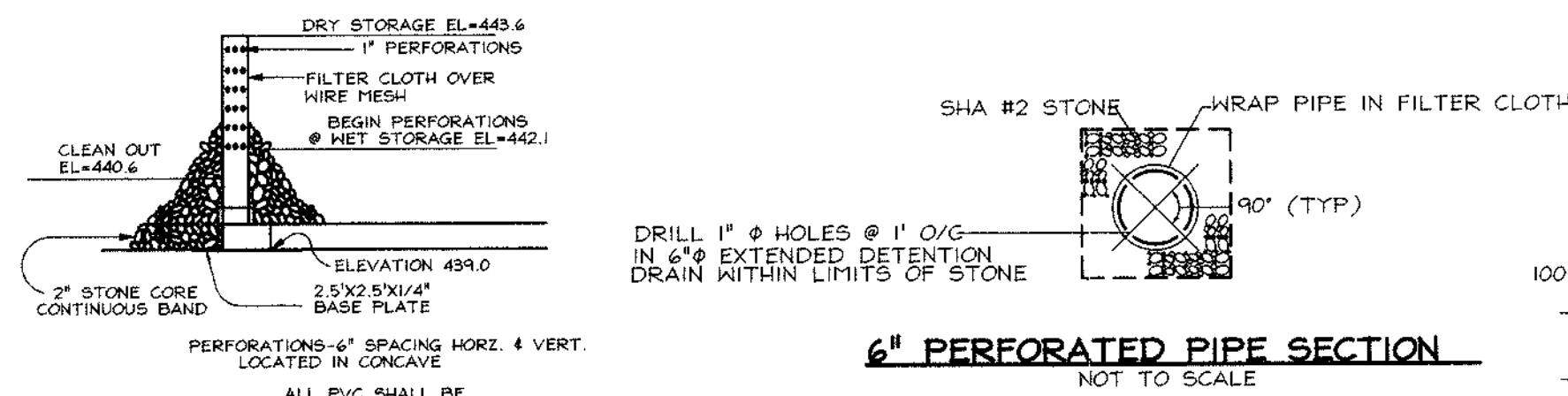
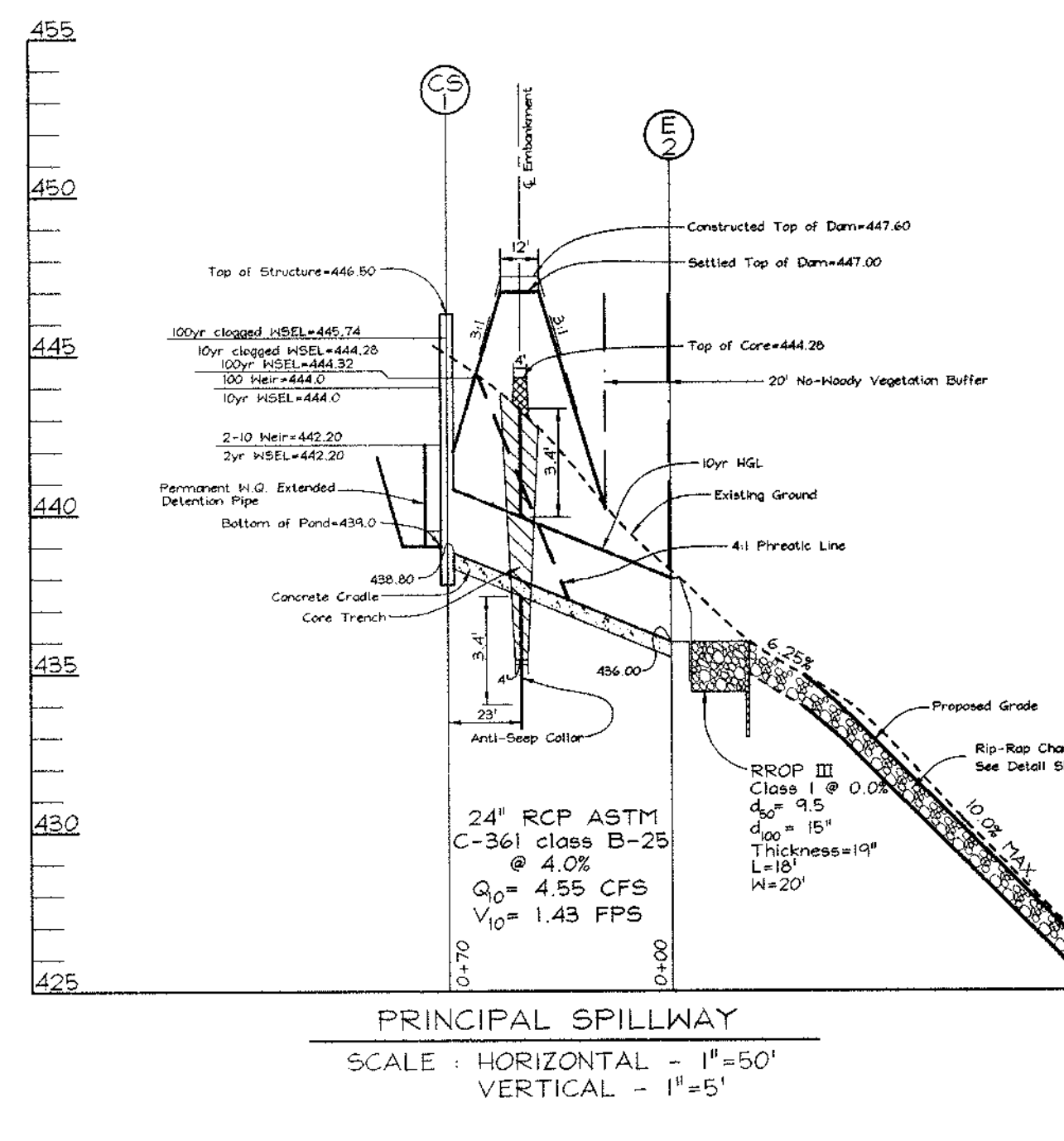
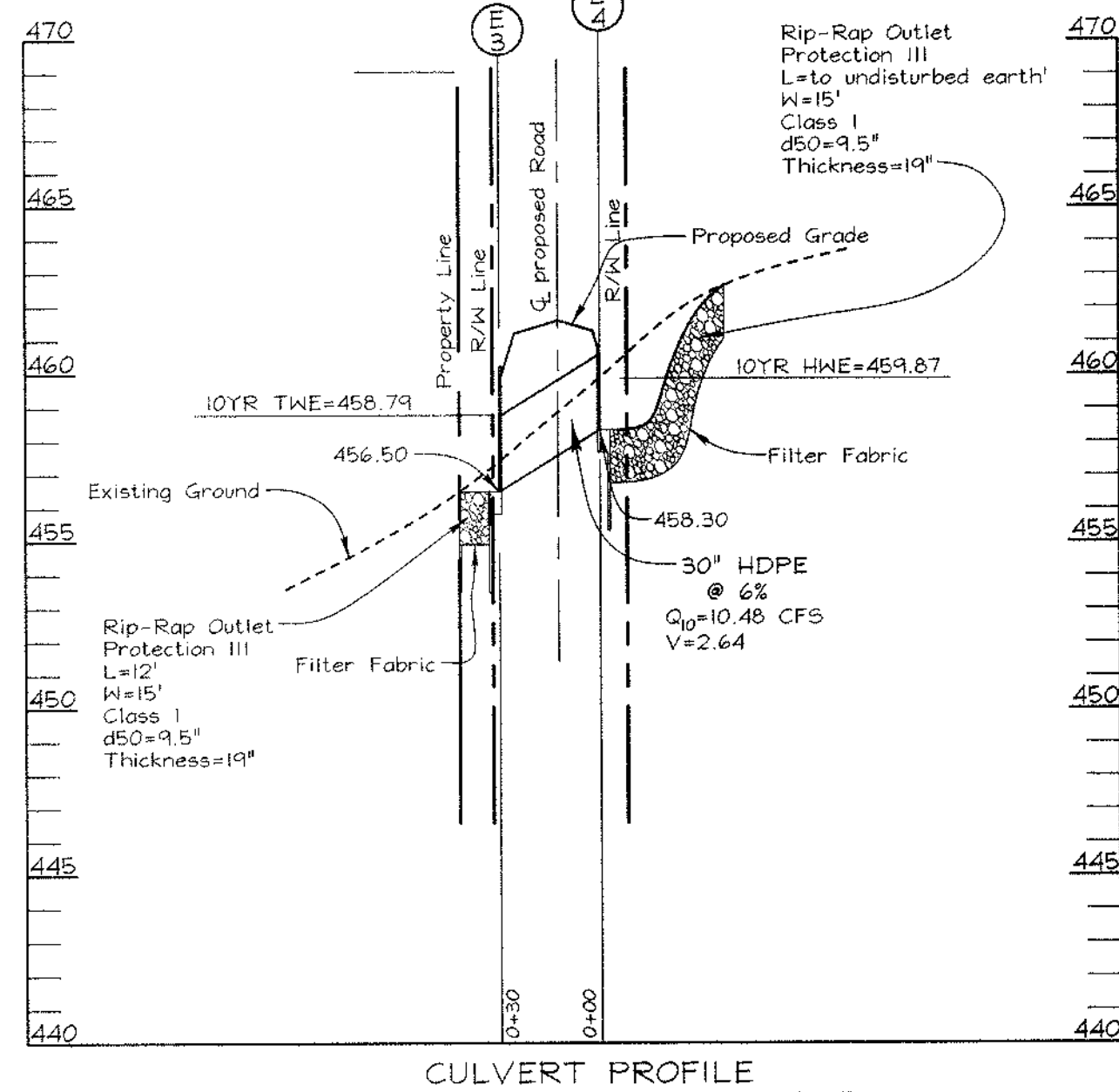
STATE OF MARYLAND
REGISTERED PROFESSIONAL ENGINEER
ROBERT H. VOGEL, PE No. 16193

6 SHEET OF 8

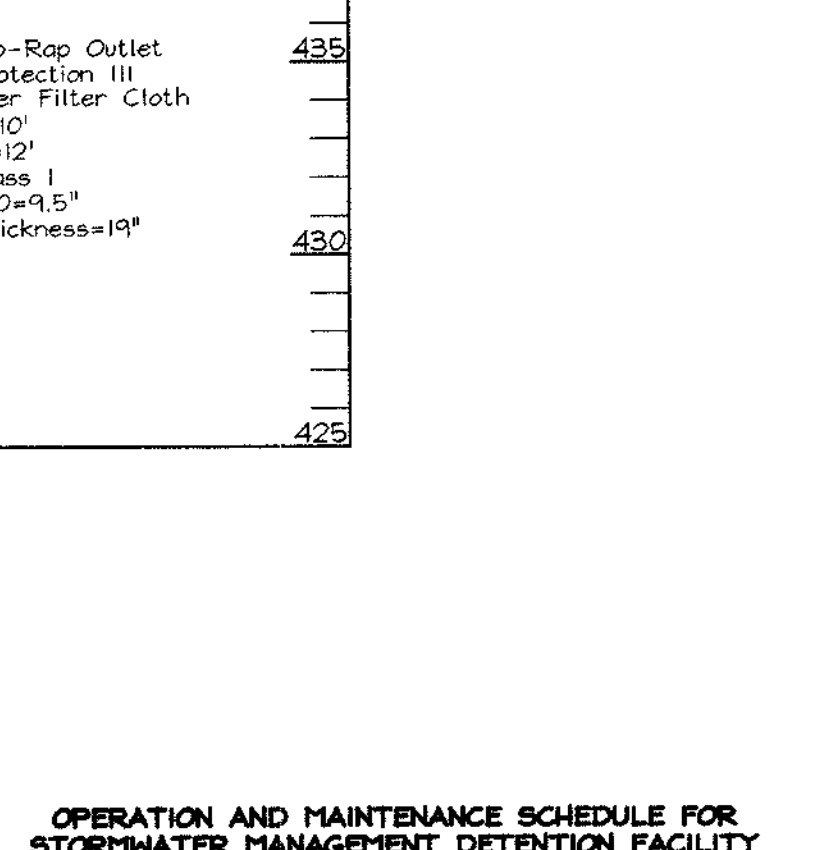
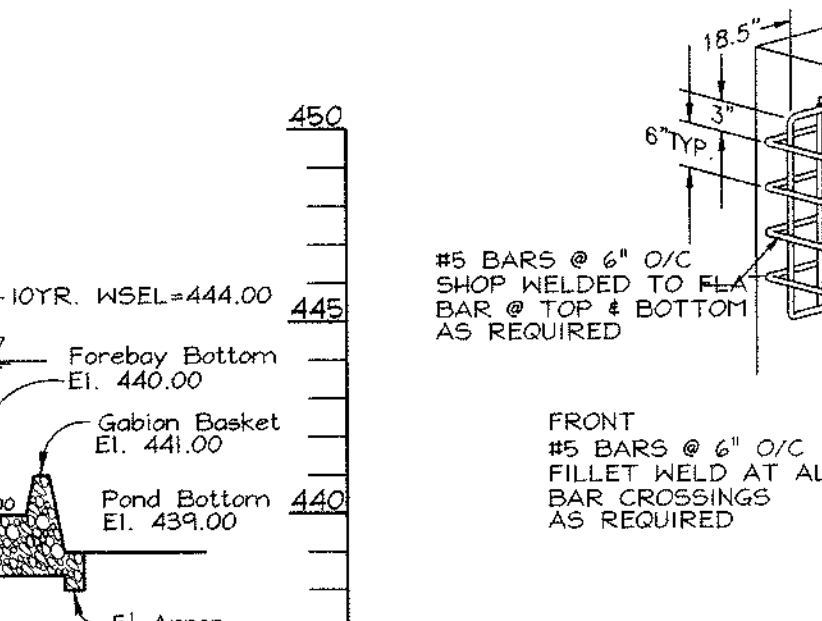
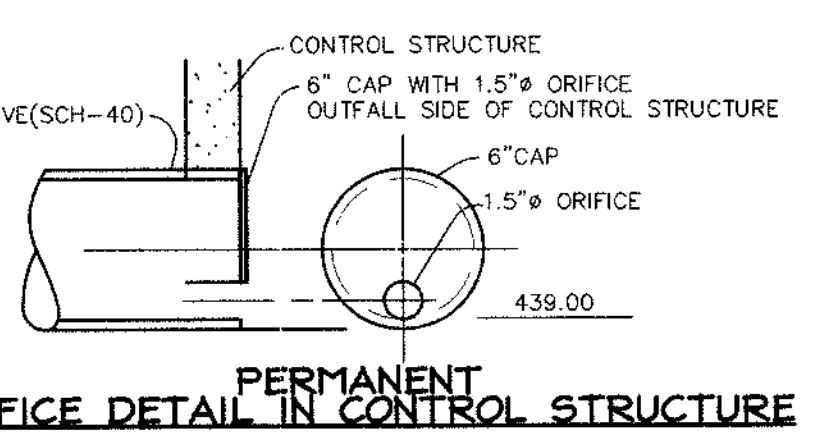
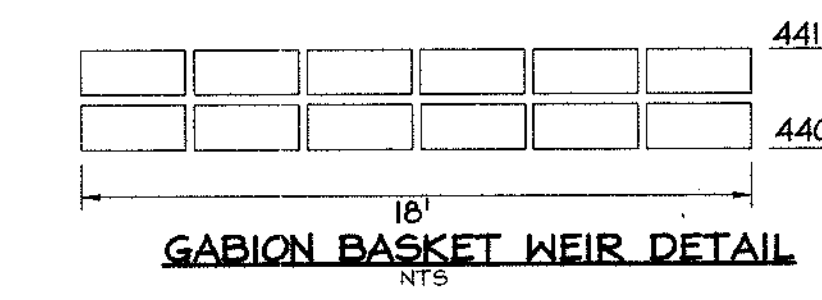
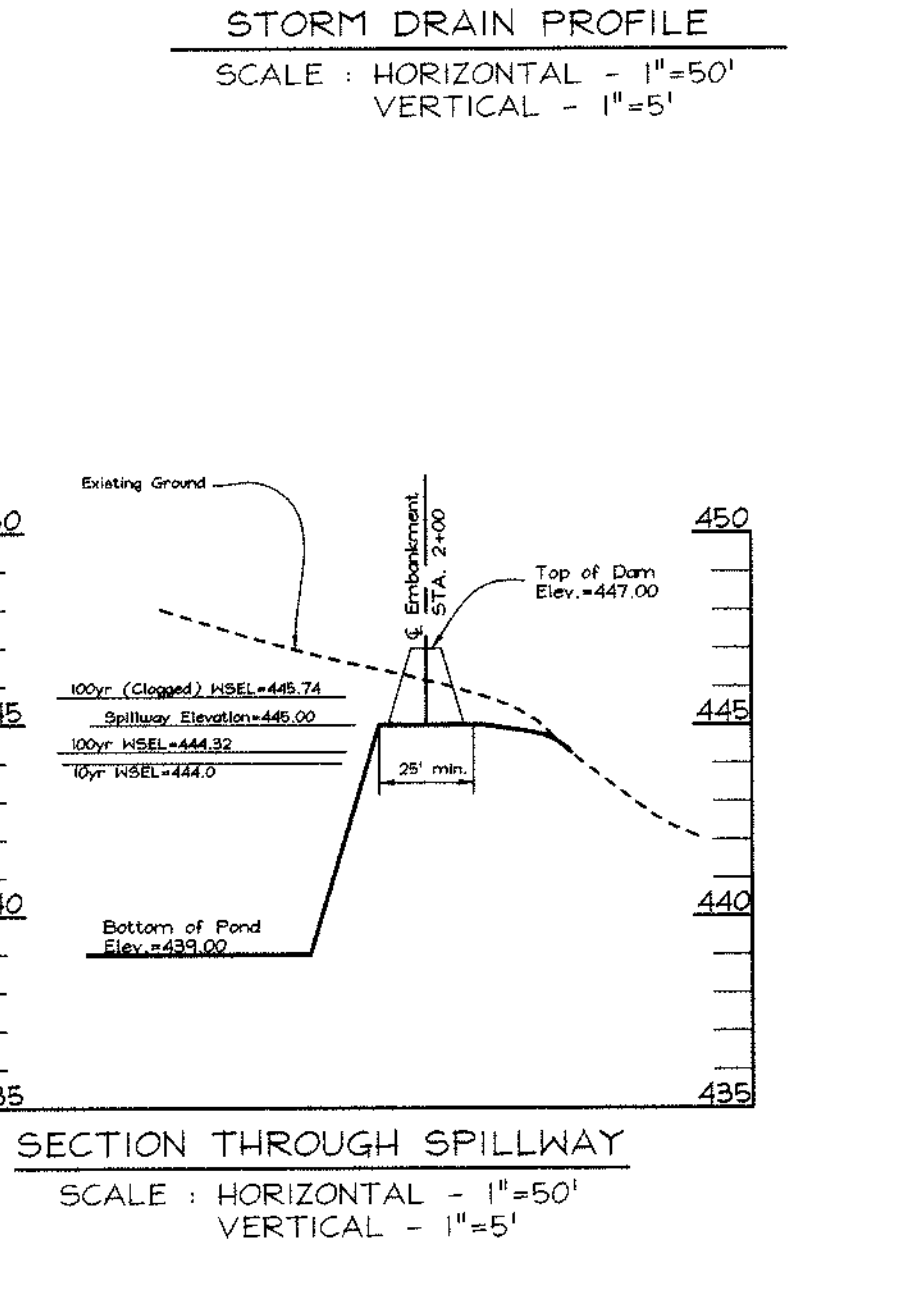
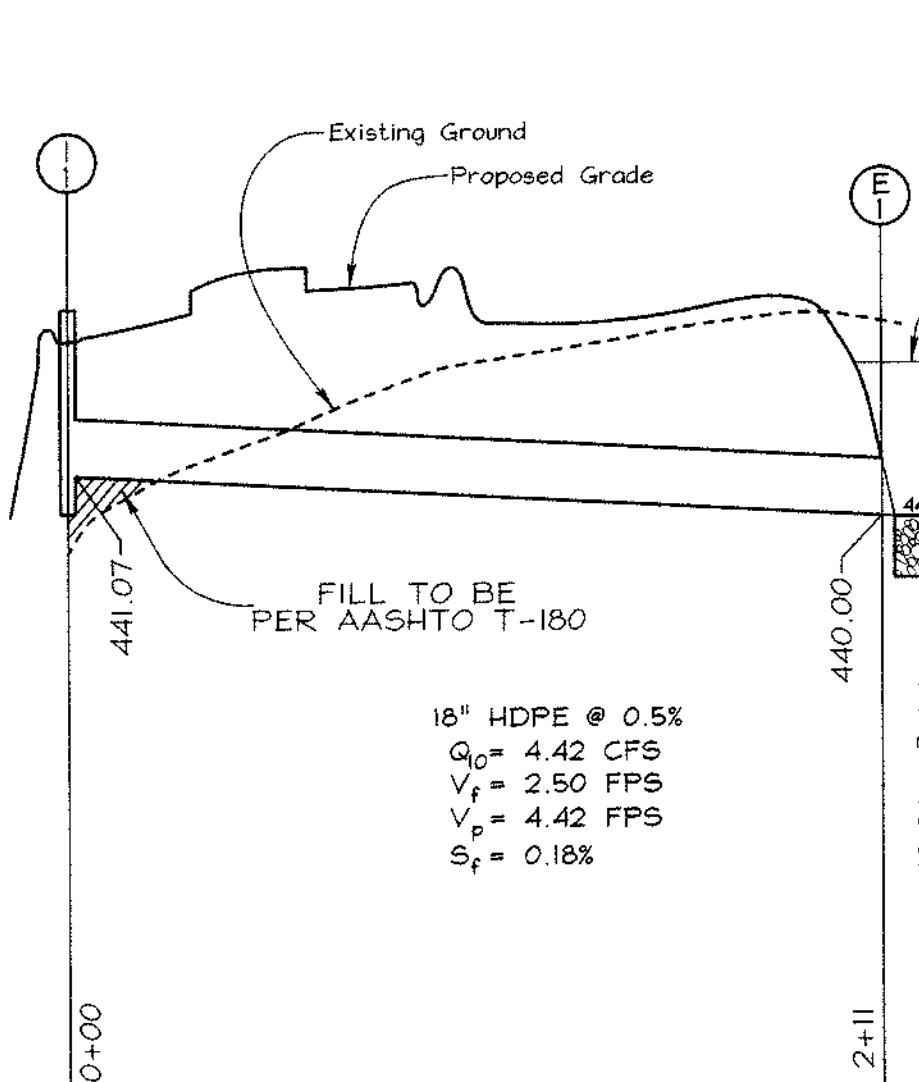
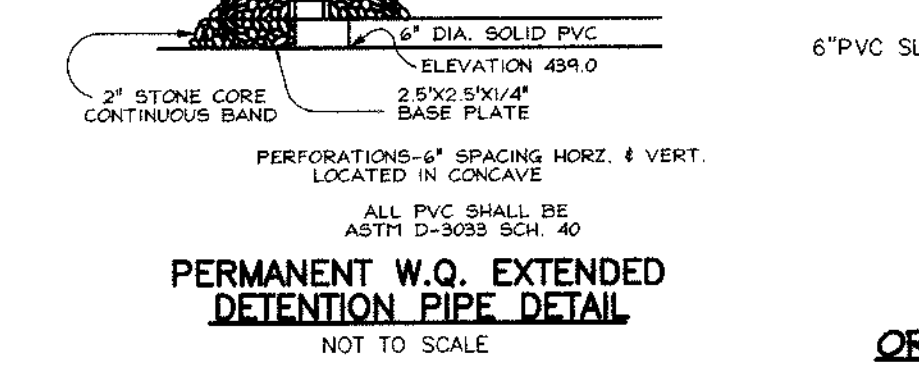
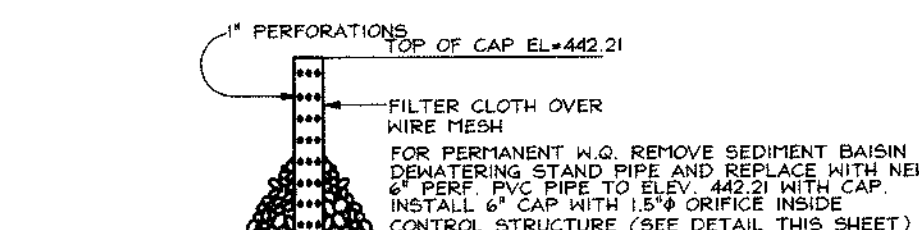
PIPE SUMMARY		
SIZE	TYPE	LENGTH
27"	HDPE	30 LF
24"	RCCP ASTM C-361, CLASS B-25	70 LF
18"	HDPE	211 LF

STRUCTURE SCHEDULE						
NO.	TYPE	LOCATION	TOP ELEV.	INV. IN	INV. OUT	REMARKS
I-1	TYPE 'D' INLET	N587,011.54 E1,330,564.47	444.57	-	441.07	SD 4.39
E-1	18" END SECTION	N586,806.61 E1,330,614.70	441.50	-	440.00	ADS-N 12
E-2	24" END SECTION	N586,697.28 E1,330,671.54	438.00	-	436.00	SD 5.52
E-3	27" END SECTION	N586,671.11 E1,329,723.55	458.75	-	456.50	SD 5.21
E-4	27" END SECTION	N586,636.30 E1,329,727.18	460.55	-	458.30	SD 5.21
S-1	CONCRETE CONTROL STRUCTURE	N586,740.97 E1,330,606.02	446.30	-	438.80	See Detail

*-TOP ELEVATIONS TO TYPE 'D' INLET IS TO THE THROAT OPENINGS



SEDIMENT BASIN DOWATERING DEVICE I WITH 6\"/>



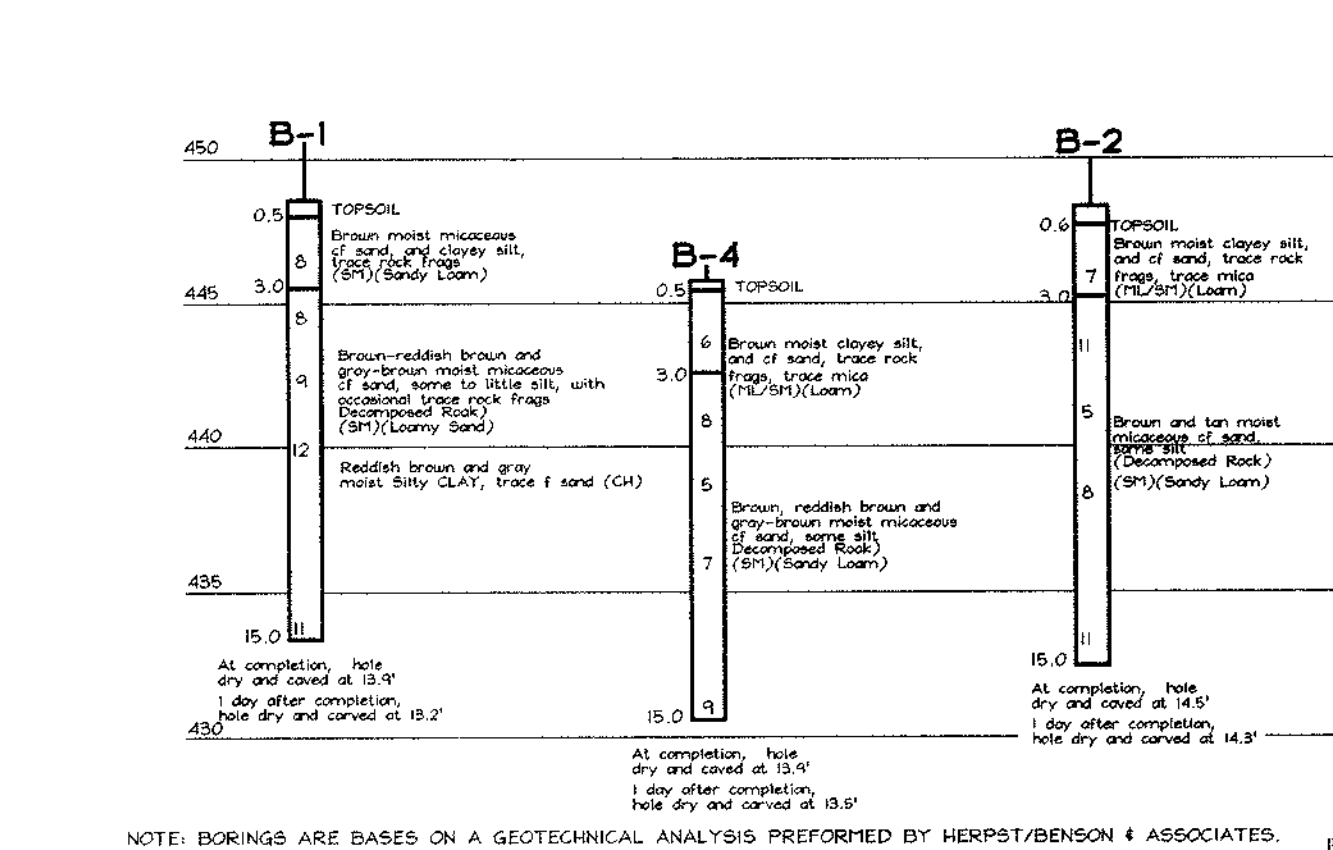
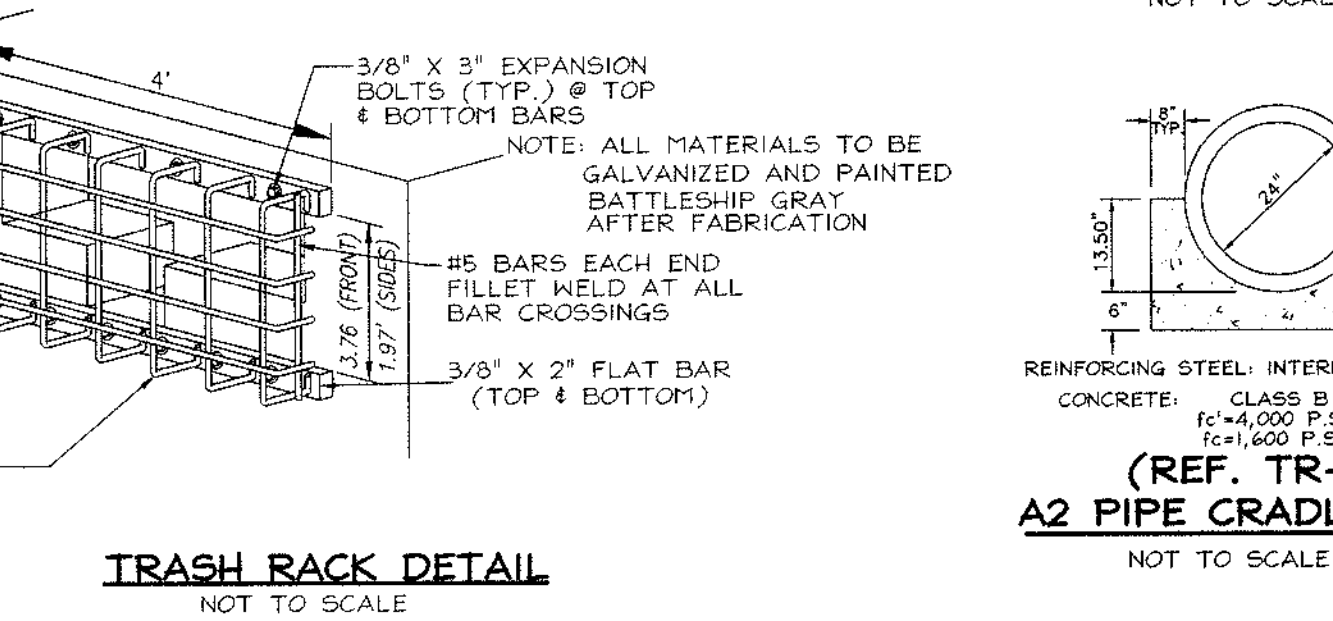
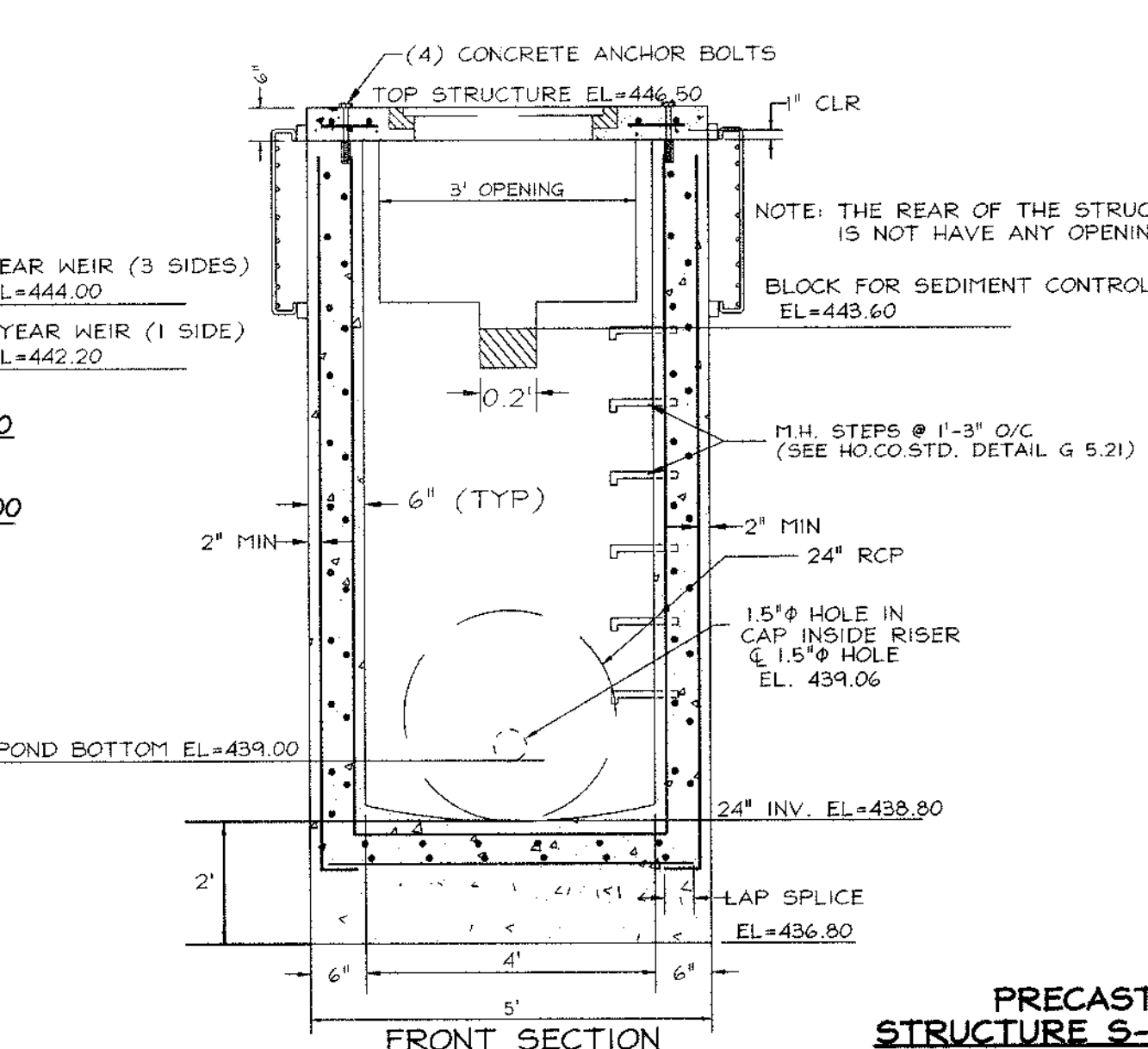
OPERATION AND MAINTENANCE SCHEDULE FOR STORMWATER MANAGEMENT DETENTION FACILITY

STORMWATER MANAGEMENT FACILITY
ROUTINE MAINTENANCE
1. FACILITY SHALL BE INSPECTED ANNUALLY AND AFTER MAJOR STORMS.
2. DIRECTIONS SHOULD BE PERFORMED DURING WET WEATHER TO DETERMINE IF FUNCTIONING PROPERLY.
3. TOP AND SIDE SLOPES OF THE EMBANKMENT SHALL BE FLOWED A MINIMUM OF TWO (2) TIMES A YEAR, ONCE IN JUNE AND ONCE IN SEPTEMBER.
4. VISIBLE SIGNS OF EROSION IN THE POND AS WELL AS RIPRAP OUTLET AREAS SHALL BE REPAIRED AS SOON AS IT IS NOTICED.
NON-ROUTINE MAINTENANCE
1. STRUCTURAL COMPONENTS OF THE POND SUCH AS THE DAM, THE RISER, AND THE PIPES SHALL BE REPAIRED UPON DETECTION OF ANY DAMAGE. THE COMPONENTS SHOULD BE INSPECTED DURING ROUTINE MAINTENANCE OPERATIONS.
2. SEDIMENT SHOULD BE REMOVED WHEN ITS ACCUMULATION SIGNIFICANTLY REDUCES THE DESIGN STORAGE, INTERFERES WITH THE FUNCTION OF THE RISER, WHEN DEEMED NECESSARY FOR AESTHETIC REASONS, OR WHEN DEEMED NECESSARY BY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

POND SUMMARY

	2 YEAR	10 YEAR	100 YEAR
FLOW INTO POND	2.30 C.F.S.	4.99 C.F.S.	8.12 C.F.S.
FLOW OUT OF POND	0.43 C.F.S.	1.66 C.F.S.	7.78 C.F.S.
W.S. ELEVATION	442.20	444.01	444.32
STORAGE VOLUME	0.07 AC FT	0.14 AC FT	0.16 AC FT

OPERATION, MAINTENANCE AND INSPECTION
INSPECTION OF THE POND(S) SHOWN HEREON SHALL BE PERFORMED AT LEAST ANNUALLY, IN ACCORDANCE WITH THE CHECKLIST AND REQUIREMENTS CONTAINED WITHIN (SDA), SCS STANDARDS AND SPECIFICATIONS FOR PONDS (HD-376). THE POND OWNER(S) AND ANY AGENCIES, SUCCESSORS OR ASSIGNS SHALL BE RESPONSIBLE FOR THE SAFETY OF THE POND AND THE CONTINUED OPERATION, SURVEILLANCE, INSPECTION AND MAINTENANCE THEREOF. THE POND OWNER(S) SHALL PROMPTLY NOTIFY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS OF ANY UNUSUAL OBSERVATIONS THAT MAY BE INDICATORS OF DISTRESS SUCH AS EXCESSIVE SEEPAGE, TURBID SEEPAGE, SLIDING OR SLUMPING.



OWNER/DEVELOPER
NORTHDRIDGE DEVELOPMENT
14045 GARY DRIVE
GLENWOOD, MARYLAND 21738

***AS-BUILT* CERTIFICATION**
I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE *AS-BUILT* PLANS AND MEETS APPROVED PLANS AND SPECIFICATIONS.

ROBERT H. VOGEL, P.E. NO. 16198 DATE 5/12/00
CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION BASED UPON ON-SITE INSPECTIONS AND MATERIAL TESTS WHICH ARE CONDUCTED DURING CONSTRUCTION. THE ON-SITE INSPECTIONS AND MATERIAL TESTS ARE THOSE INSPECTIONS AND TESTS DEEMED SUFFICIENT AND APPROPRIATE BY THE ENGINEER. THE ENGINEER DOES NOT WARRANT, GUARANTEE, OR PROVIDE ANY OTHER FORM OF PROFESSIONAL LIABILITY INSURANCE TO ANY OTHER PARTY FROM THE REQUIREMENTS IMPOSED BY CONTRACT, EMPLOYMENT, OR OTHER MEANS, INCLUDING MEETING COMMONLY ACCEPTED INDUSTRY PRACTICES.

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

Cheryl Sims / GS 5/14/00
USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

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

Robert H. Vogel 5/11/00
HOWARD SOIL CONSERVATION DISTRICT DATE

ENGINEERS CERTIFICATE
I HEREBY CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN *AS-BUILT* PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

Robert H. Vogel 5/14/00
SIGNATURE OF ENGINEER DATE
ROBERT H. VOGEL

DEVELOPER'S CERTIFICATE
I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN *AS-BUILT* PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

James S. Sullivan 5-11-00
SIGNATURE OF DEVELOPER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

James S. Sullivan 5-11-00
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Richard Blouel 5/12/00
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

John Pannunzi 5/14/00
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

STORMWATER MANAGEMENT DETAILS & NOTES
EAGLE RIDGE

TAX MAP #22 & 23 BLOCK No. 6 PARCEL #553
3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
Reference No. : S-99-13, P-00-01

VOGEL & ASSOCIATES
ENGINEERS/SURVEYORS/PLANNERS
3691 Park Avenue, Suite 101 • Ellicott City, Maryland 21043
Tel 410.461.5828 Fax 410.465.3965

DESIGN BY: JCO
DRAWN BY: JCO/PS
CHECKED BY: RHV
DATE: April 28, 2000
SCALE: As Shown
W.O. NO.: 98-063

7 SHEET OF 8

