

PAVING SECTIONS	
P-2	1 1/2" BIT. CONC. SURFACE 5" BIT. CONC. BASE
P-3	1 1/2" BIT. CONC. SURFACE 1 1/2" BIT. CONC. BASE 5" BIT. CONC. BASE

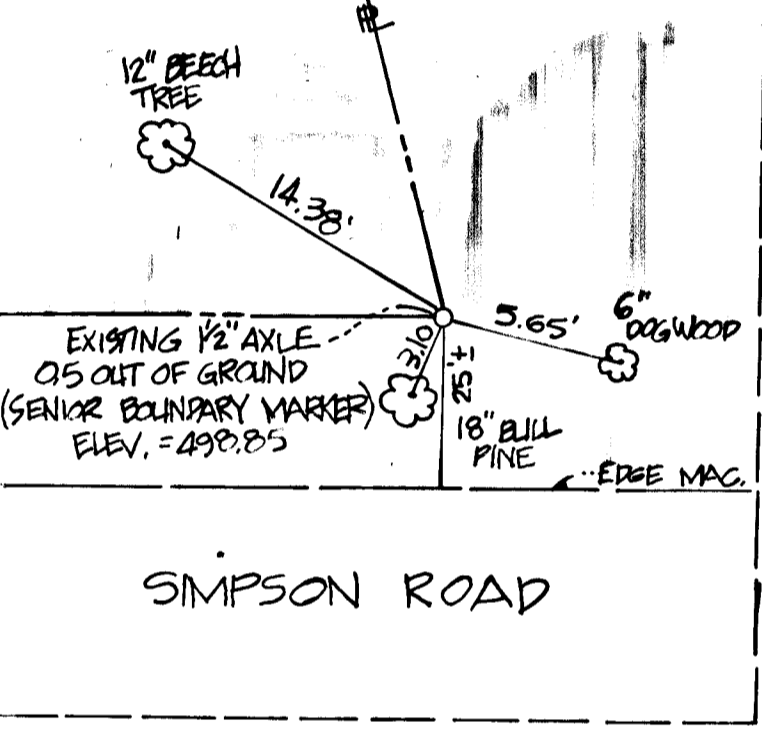
- GENERAL NOTES**
- All work shall be done in accordance with Howard County Standards.
 - Specifications and Details for Construction.
 - Storm drainage trenches within road rights-of-way shall be backfilled and compacted in accordance with the Howard County Road Code.
 - Any damage to public rights-of-way or paving will be corrected at the Contractor's expense.
 - Contractor shall notify the Howard County Inspection and Survey Division at least three days before starting work shown on these drawings.
 - All traffic control devices shall be installed in accordance with the Manual of Uniform Traffic Control Devices, 1984 Revised edition.
 - Location of existing utilities shall be verified by the contractor prior to starting any work shown on these drawings. Any damage to existing utilities shall be corrected at the Contractor's expense.
 - See sheet 2 of 5 for storm drain drainage area map.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

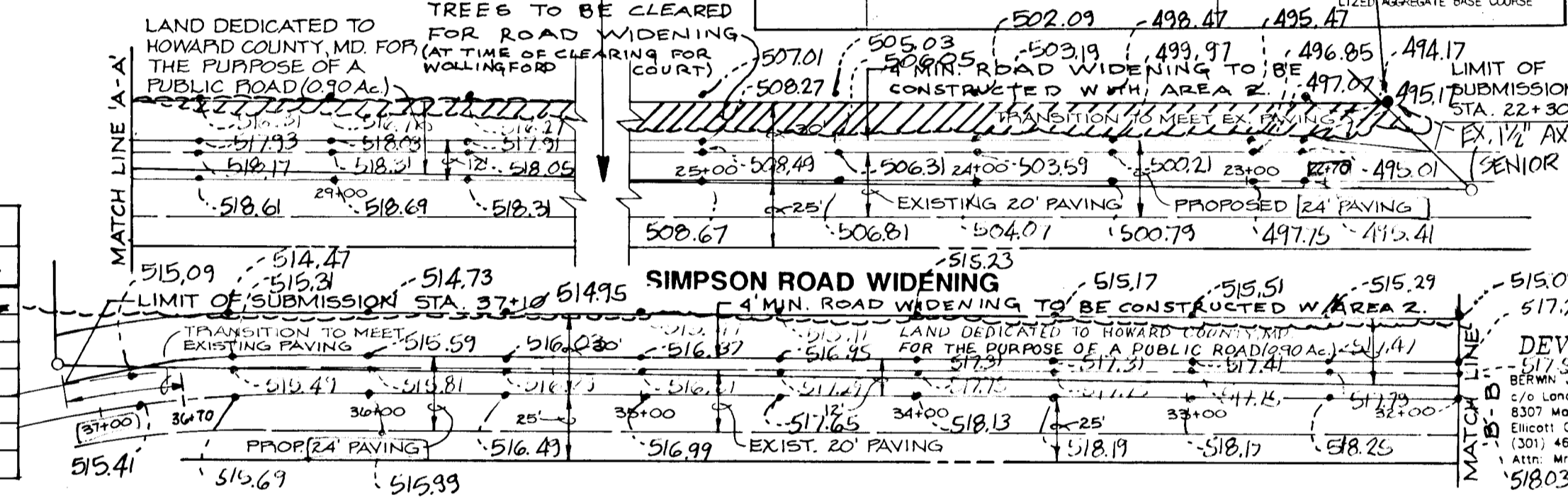
Small Japan 2/27/90
Spawille W. Weiland 2/16/90
William B. Reid 2-28-90

APPROVED: DEPARTMENT OF PLANNING & ZONING

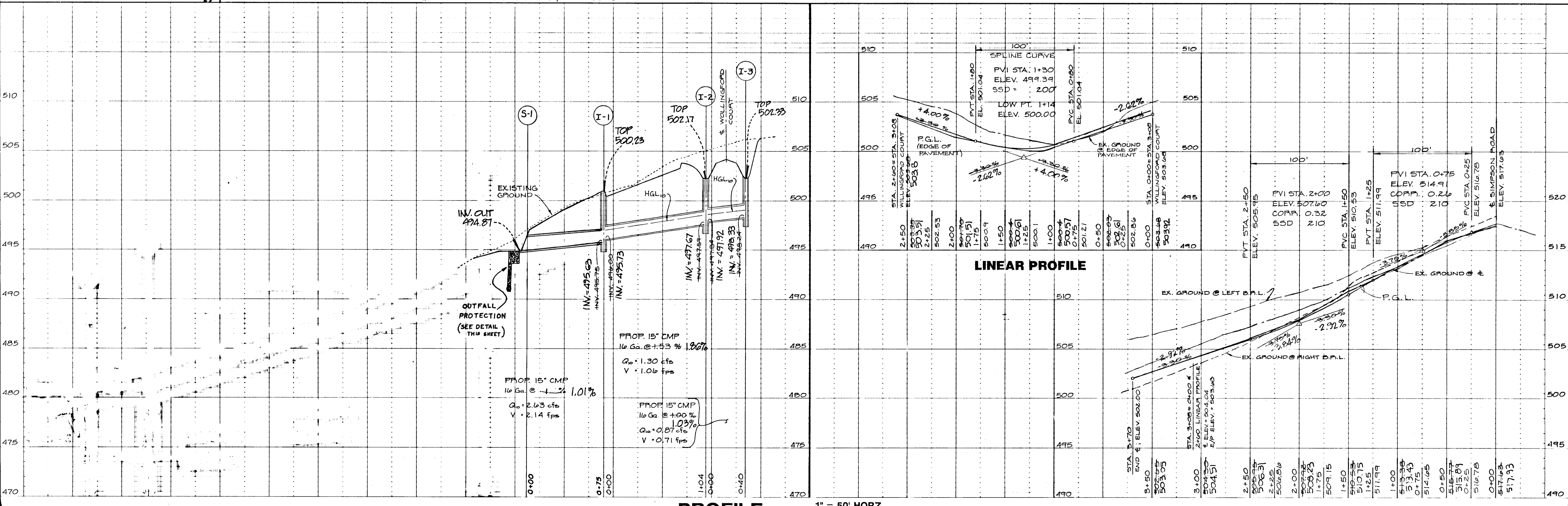
Mark J. McNeill 2/6/90



STRUCTURE SCHEDULE					
NUMBER	TYPE	INV. IN	INV. OUT	STD. NO.	LOCATION
I-1	SINGLE W/V	496.73	495.75	SD-4.37	STA. 1+14
I-2	YARD INLET	494.00	493.92	SD-4.14	STA. 1+04
I-3	YARD INLET	499.75	498.24	SD-4.14	STA. 1+04
S-1	METAL END	494.87	495.00	SD-5.61	STA. 1+04



CENTRIFUGAL CURVE DATA					
CURVE	RADIUS	LENGTH	TANGENT	DELTA	CHORD
1	200.00'	111.49'	57.23'	31°54'22"	106.47'



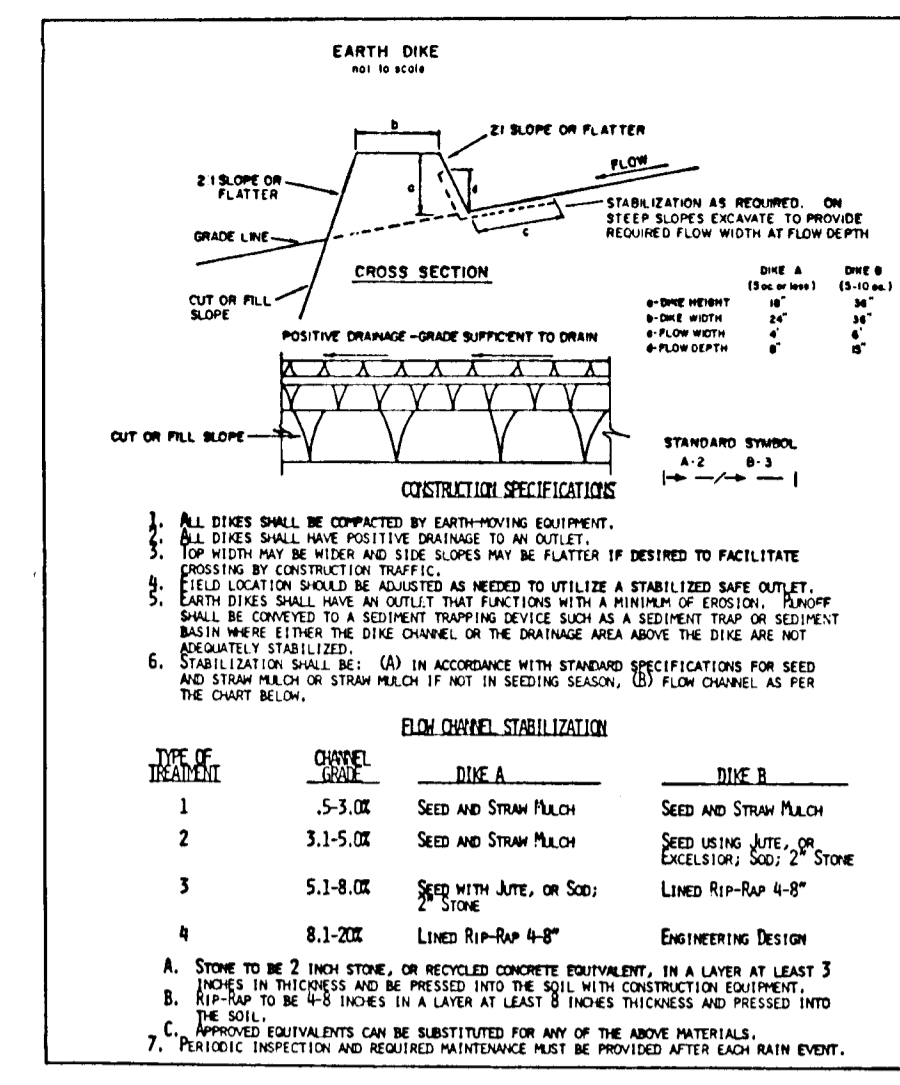
1380

PROJECT: 89027-00
 DATE: 9/89
 DRAWING: 12/22/89
 REVISIONS: AS SHOWN

REMOVED SWM, REISED STORM DRAIN
 PREP BY HOWARD COUNTY COMMENTS
 12/22/89
 1/12/89
 0

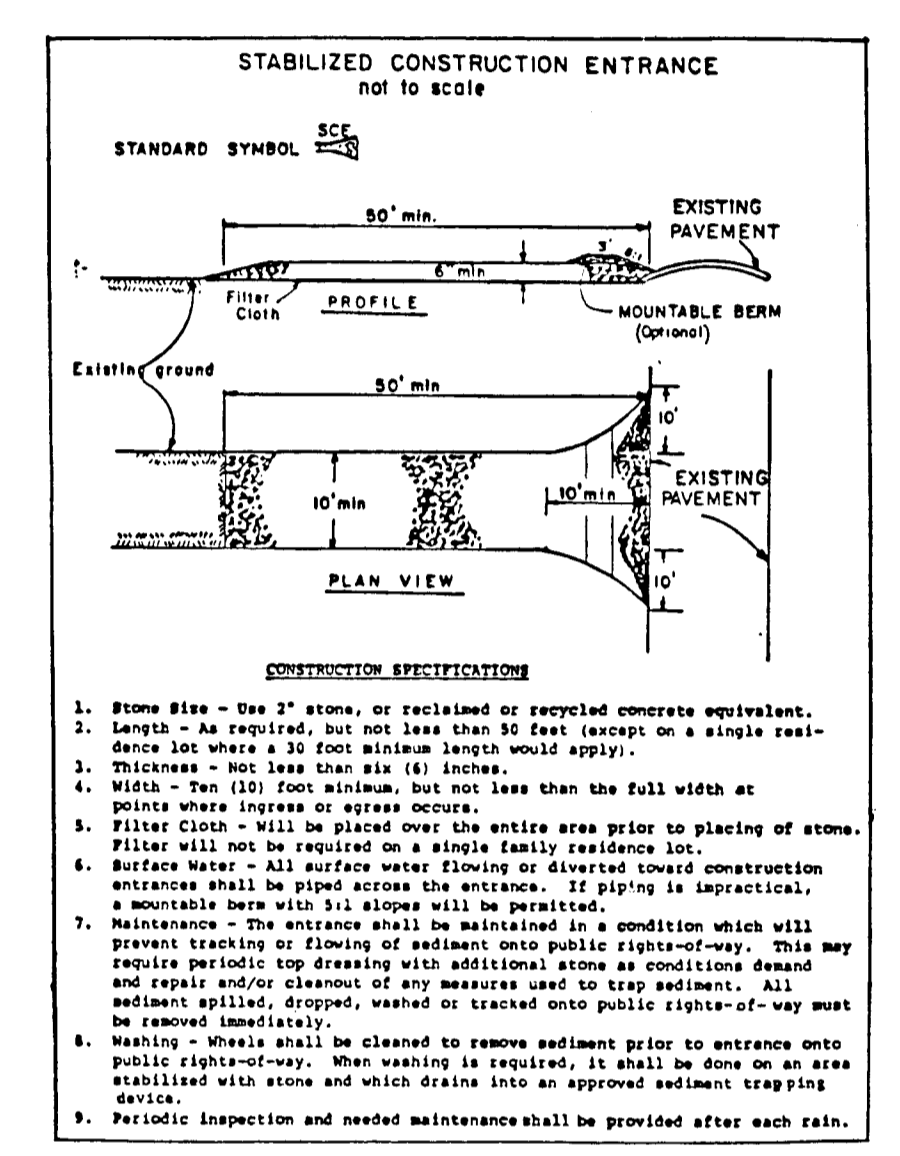
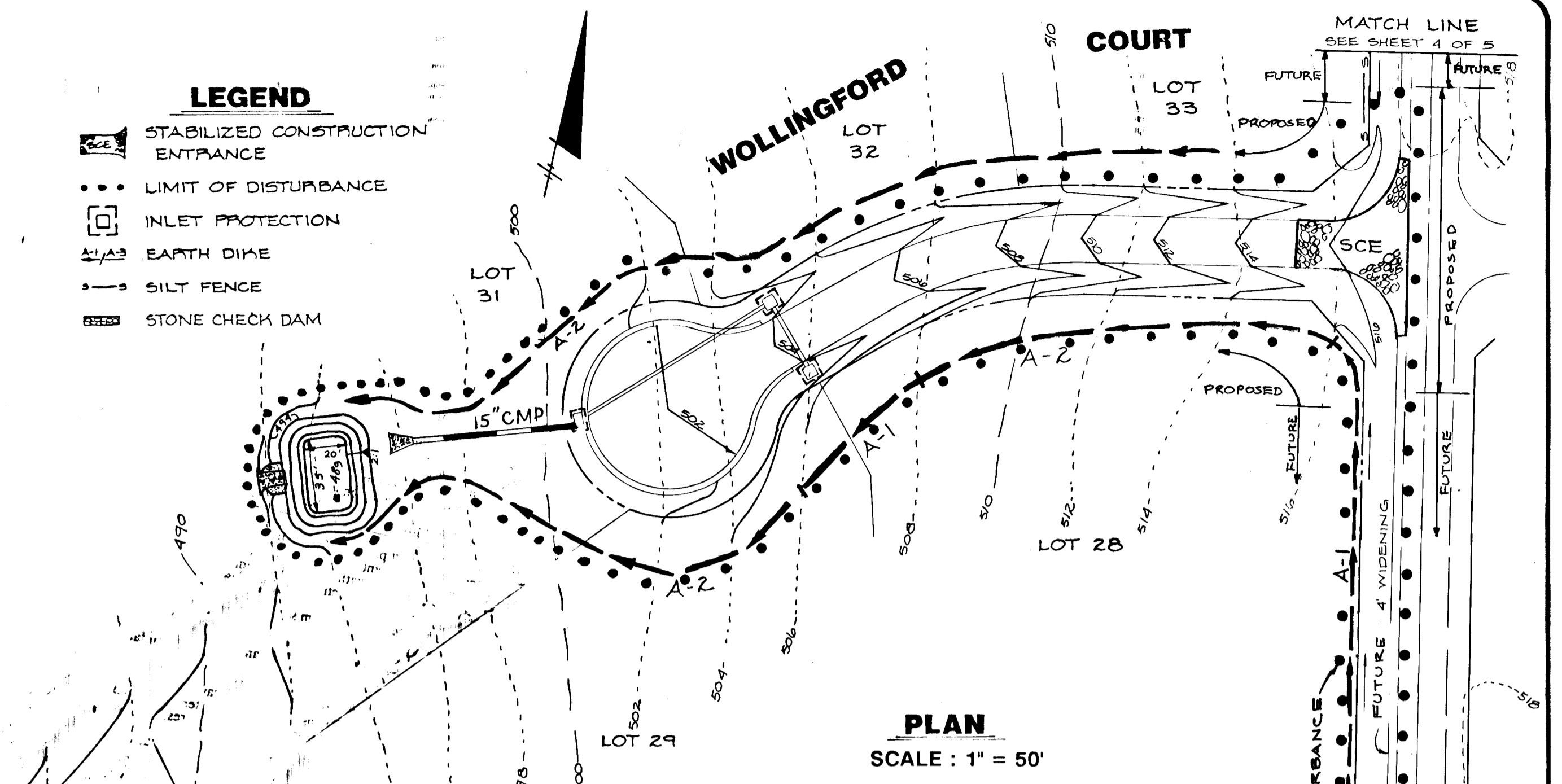
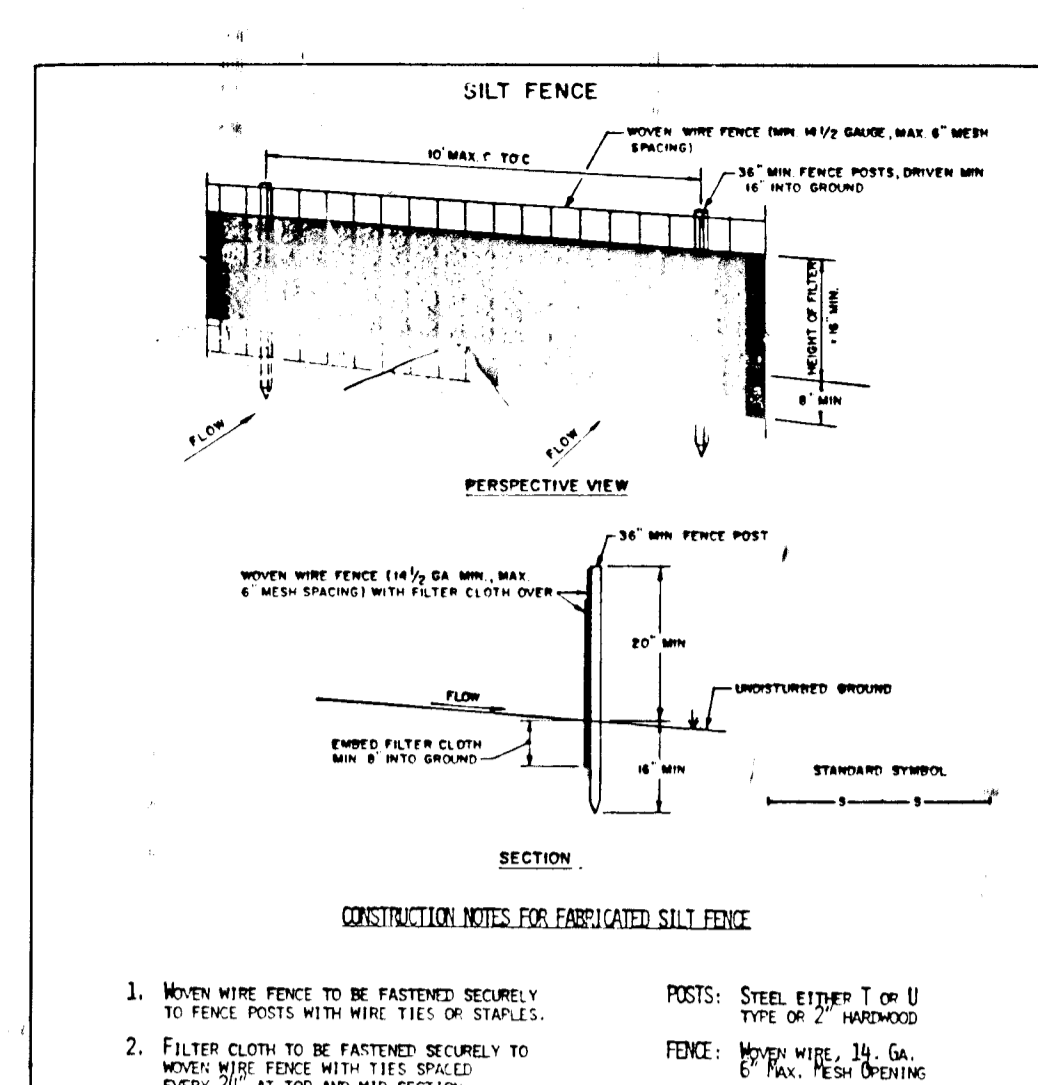
ASHLEIGH GREENE SUBDIVISION
 SECTION TWO AREA I
 ELECTION DISTRICT No. 5
 ROADS AND STORM DRAINS

MILDENBERG, OCHI & ASSOCIATES, INC.
 ENGINEERS & ARCHITECTS
 3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
 (301) 461-0078



SEDIMENT CONTROL NOTES

- A minimum of 24 hours notice must be given to the Howard County Office of Inspections and Permits prior to the start of any construction.
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control.
- Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter dikes and all slopes greater than 3:1, b) 14 calendar days or to all other disturbed or graded areas on the project site.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control for Permanent Seeding (Sec. 51) and Sed. (Sec. 54), Temporary Seeding (Sec. 50) and Mulching (Sec. 52). Temporary stabilization with mulch shall 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 permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- Site Analysis:
 Total Area of Site: 21.42 Ac.
 Area to be Disturbed: 1.0 Ac.
 Area to be graded or paved: 0.39 Ac.
 Area to be vegetatively stabilized: 0.61 Ac.
 Total Comp. Fil.: 8728 cu yd
 Off-Site Waste/Borrow Area Location: N/A
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance. Additional sediment controls must be provided, if deemed necessary by the Howard County DPW Sediment Control Inspector.



TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redistributed where a short-term vegetation is desired.

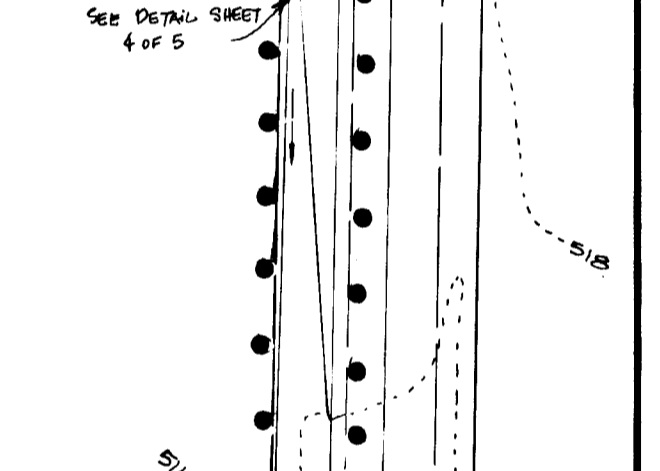
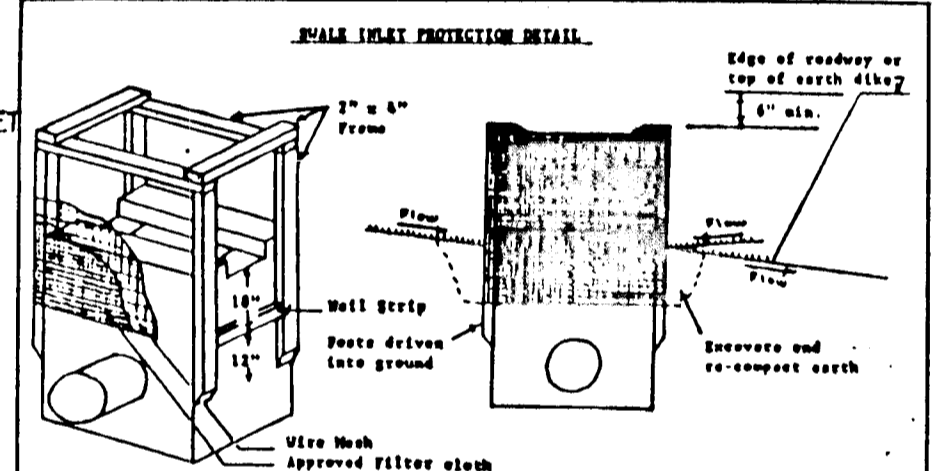
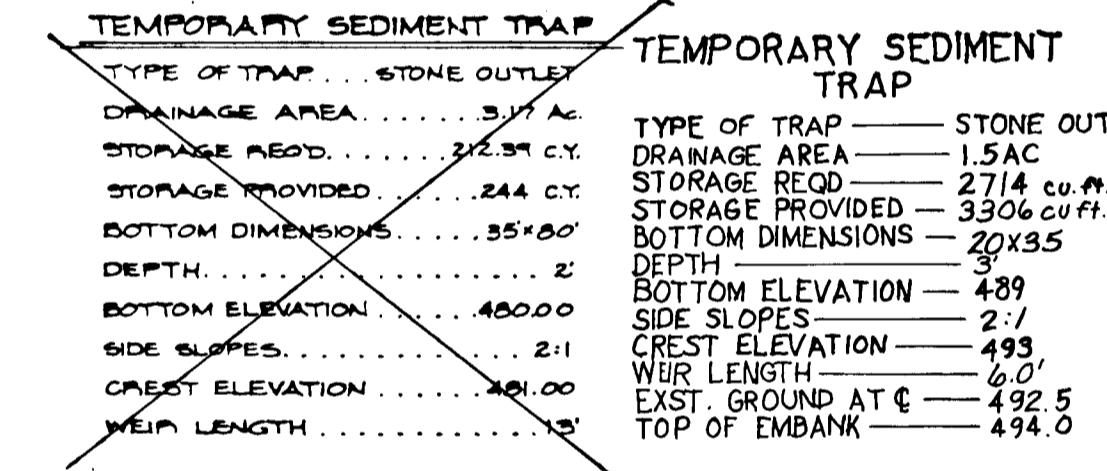
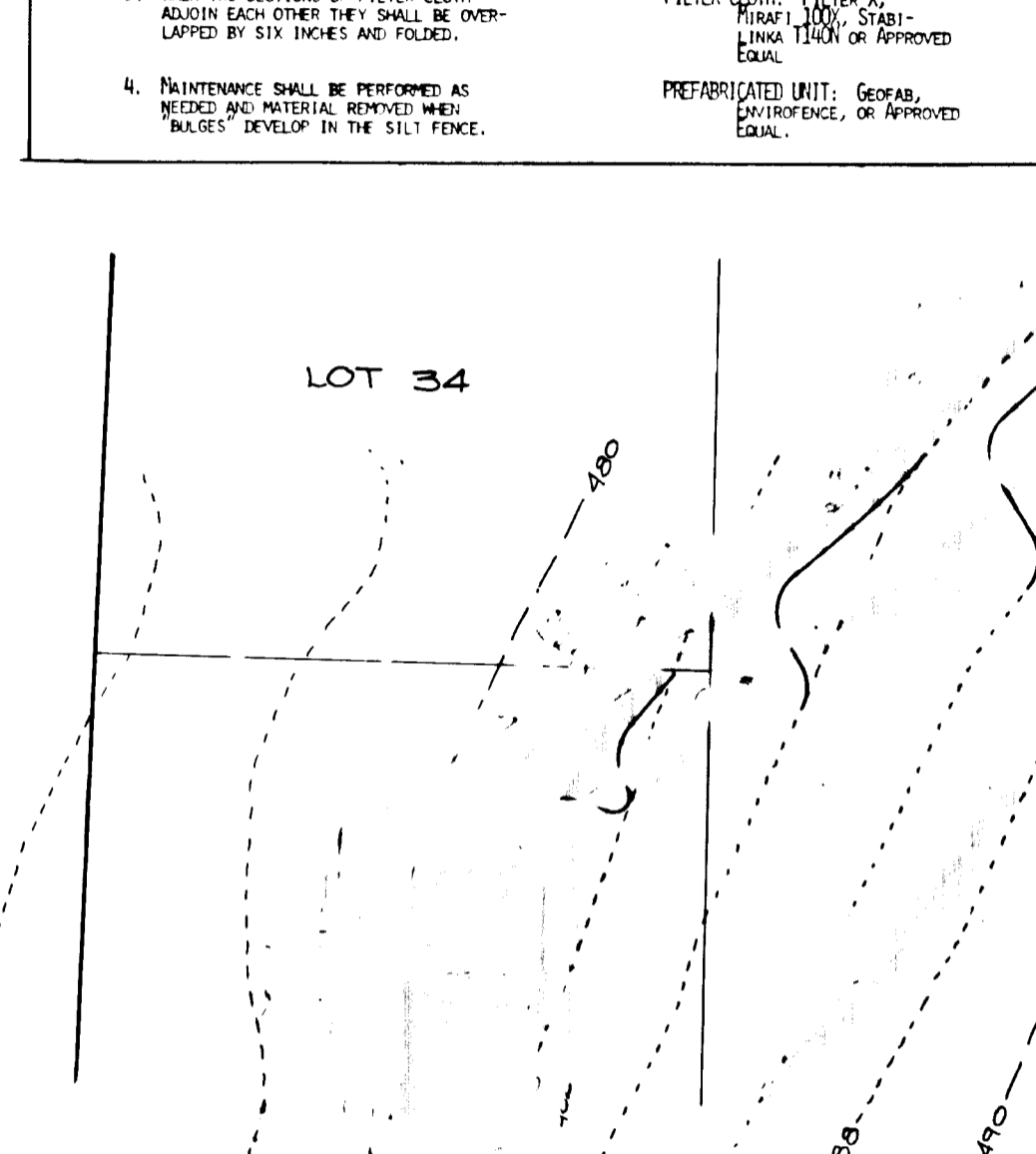
Seeding Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding. (If not previously loosened)

Soil Amendments: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sf).

Seeding: For period March 1 through April 30 and from August 15 through November 15, seed with 2-1/2 bushel per acre of annual ryegrass (3.2 lbs/1000 sf). For the period May 1 through August 14, seed with 3 lbs per acre of Weeping Lovegrass (0.07 lbs/1000 sf). For the period November 16 through 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 sod.

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

Refer to the 1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control for rate and methods not covered.



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

John M. Mochi 12-26-89
 SOIL CONSERVATION SERVICE DATE

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

Robert M. Mochi 12-26-89
 HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Frank W. Chelmsford 2/27/90
 CHIEF, LAND DEVELOPMENT DIVISION DATE

Francis W. Chelmsford 2/16/90
 CHIEF, BUREAU OF HIGHWAYS DATE

William S. Reay 2-28-90
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Frank J. L'Amore 2/6/90
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetation cover is needed.

Seeding Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding. (If not previously loosened)

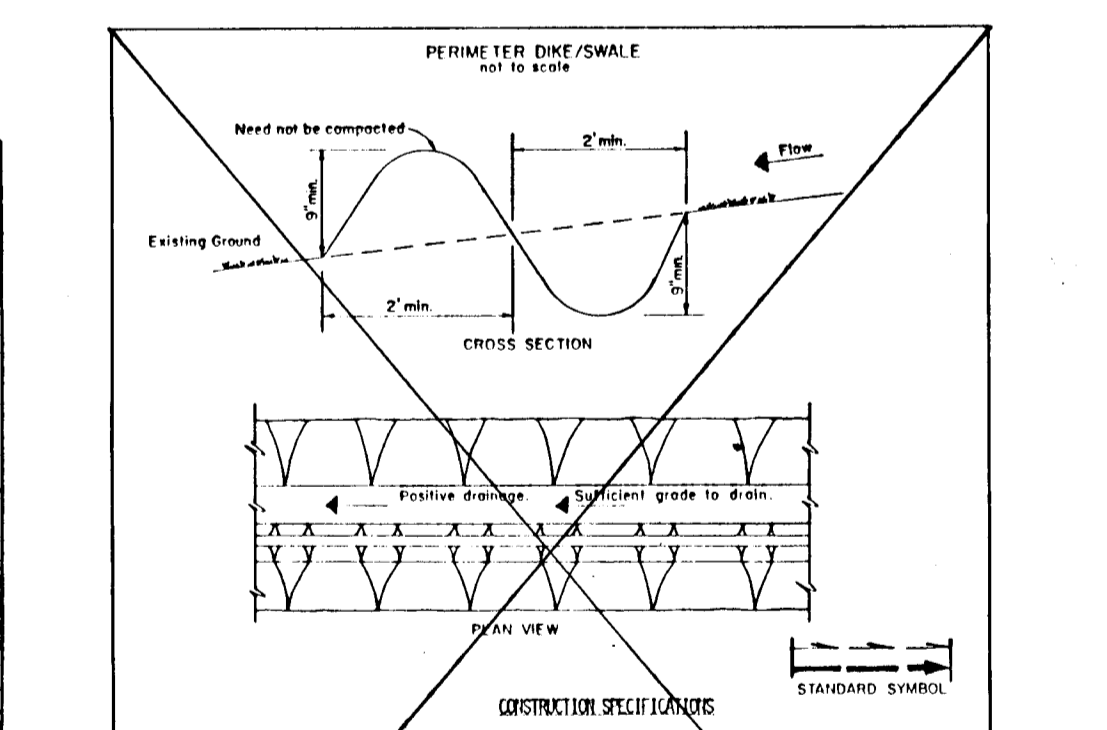
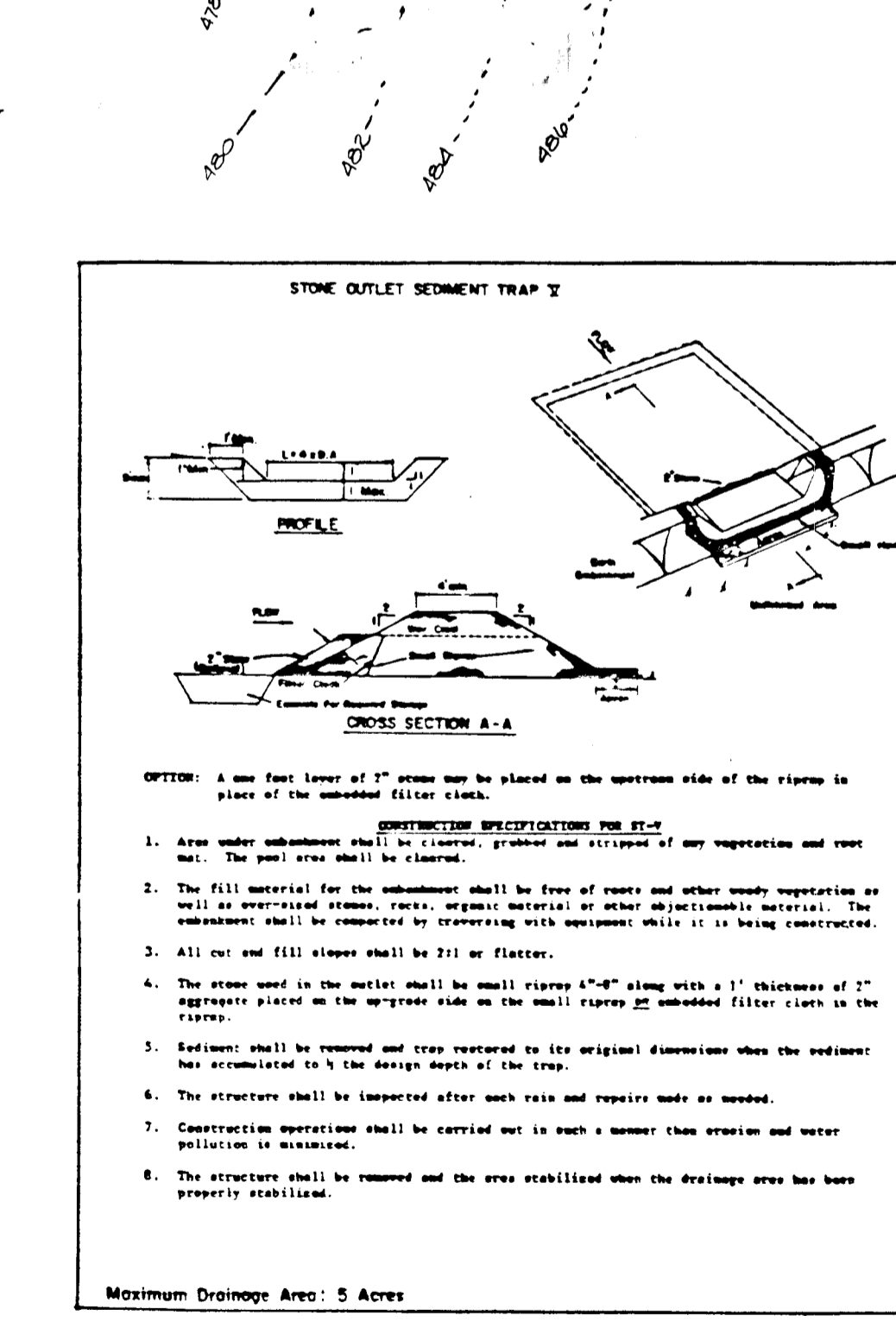
Soil Amendments: In lieu of soil test recommendations, use on the following schedules:

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

Seeding: For the periods March 1 through April 30 and August 1 through October 15, seed with 60 lbs per acre (1.4 lbs/1000 sf) of Kentucky 31 Tall Fescue. For the period May 1 through July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (0.05 lbs/1000 sf) of Weeping Lovegrass. During the period of October 16 through February 28, protect site by Option 1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option 2) use sod. Option 3) seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

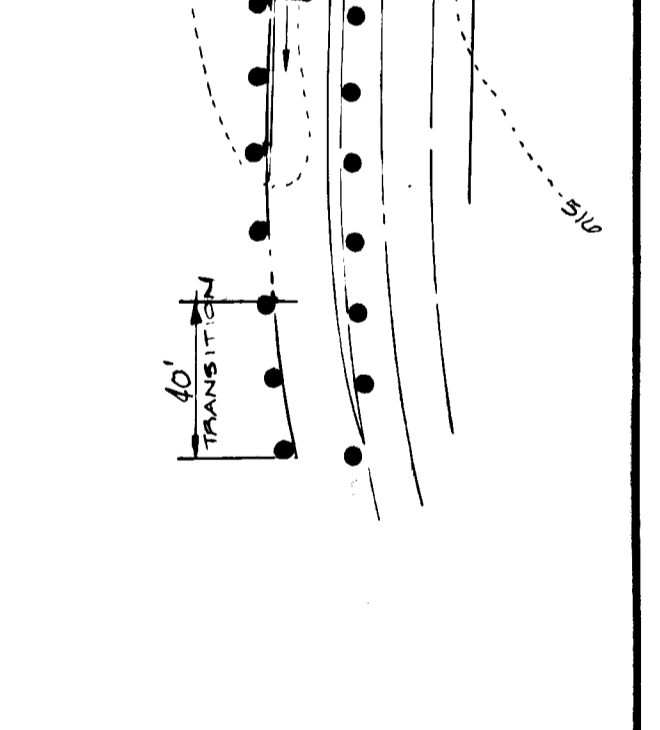
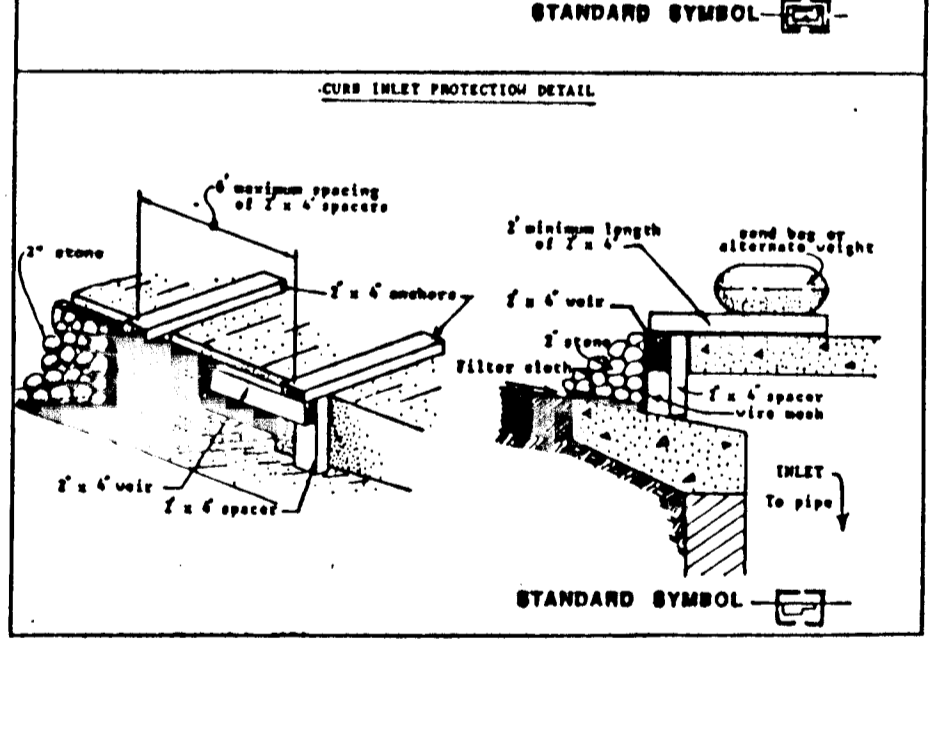
Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sf) of unrolled small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sf) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348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

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



SEQUENCE OF CONSTRUCTION

- Obtain grading permit.
- Construct stabilized construction entrance as shown on plan.
- Excavate temporary sediment trap to required dimensions as shown on plan. Use excavated material to construct earth dikes. Stabilize with temporary seeding mixture and straw mulch. Construct silt fences.
- Grade roads, construct paving, and stabilize shoulders, ditch areas and side slopes with permanent seed and mulch. Stabilized construction entrance may be removed with approval of Sediment Control Inspector to facilitate paving activities. As grading progresses on Simpson Road, construct storm check dikes.
- All sediment shall be removed from sediment traps when cleanout elevations have been reached.
- Inspect all sediment control devices daily and after each rainfall. Repair as necessary.
- Upon completion of construction operations, stabilize all Disturbed Areas with Permanent Seeding Mixture and Straw Mulch.
- Stabilize all disturbed areas with permanent seeding mixture and straw mulch.
- After permission has been given by the Sediment Control Inspector, remove all sediment control features.
- All disturbed areas due to removal of sediment control measures shall be graded and stabilized with permanent seeding mixture.



ENGINEER'S CERTIFICATE

I CERTIFY 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 MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

Robert M. Mochi, P.E. 12-22-89
 Date

DEVELOPER'S CERTIFICATE

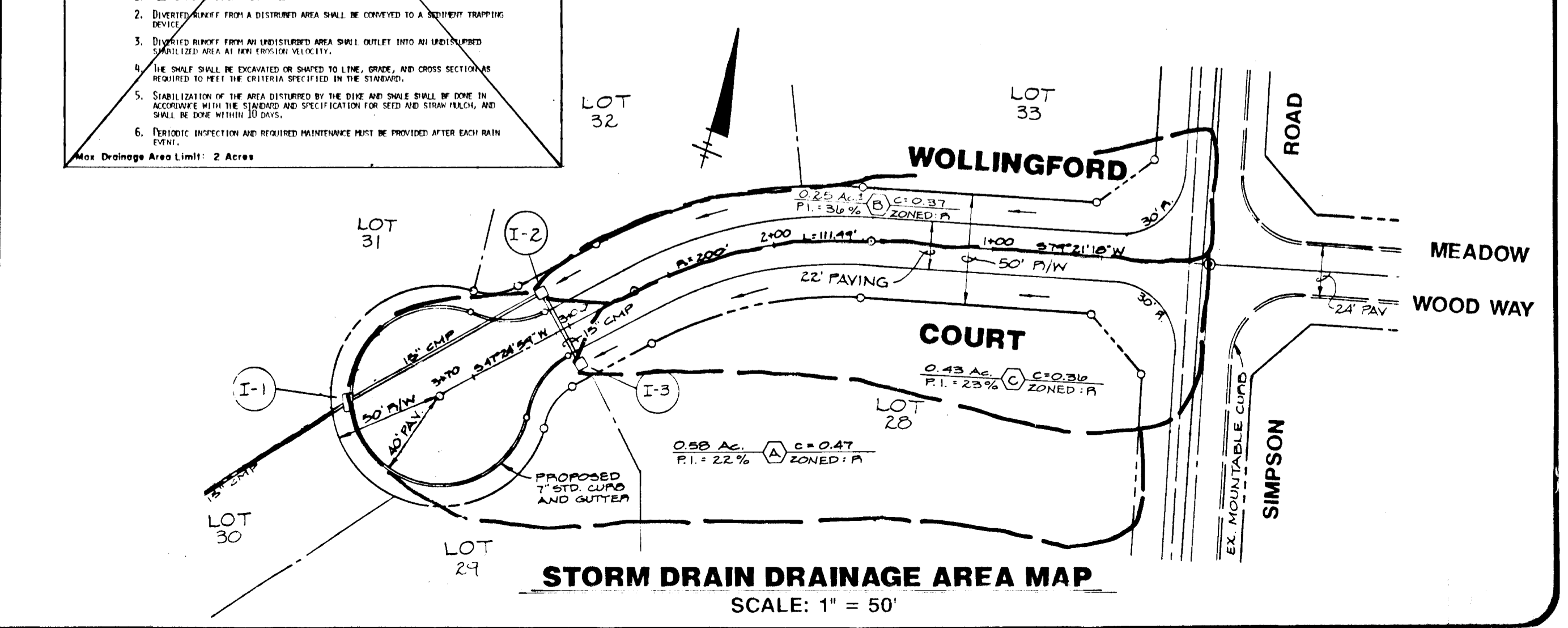
I HEREBY CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

Robert M. Mochi 12/21/89
 Signature of Developer Date

DEVELOPER
 BERWIN JOINT VENTURE
 c/o Land Design & Development, Inc.
 6301 Ivy Lane, Suite 235
 Elliott City, Maryland 21043
 (301) 461-4600
 Attn: Mr. John Reuver

ENGINEER
 Mildenberg, Mochi & Associates, Inc.
 3300 North Ridge Road, Suite 235
 Elliott City, Maryland 21043
 (301) 461-0078
 ATTN: Mr. Robert M. Mochi, P.E.

OWNER
 Winchester Homes, Incorporated
 6301 Ivy Lane, Suite 235
 Greenbelt, Maryland 20770
 (301) 220-1117



DATE: 1/9/90
 PROJECT: 89027
 PREPARED BY: DPW
 SCALE: AS SHOWN
 APPROVED BY: JDM/AMK

REMOVED SWAMP STORM DRAIN 1/18/89
 RECYCLED SWAMP STORM DRAIN 12/22/89
 SUBMITTED TO HOWARD COUNTY 1/12/90
 SUBMITTED TO HOWARD COUNTY 1/12/90

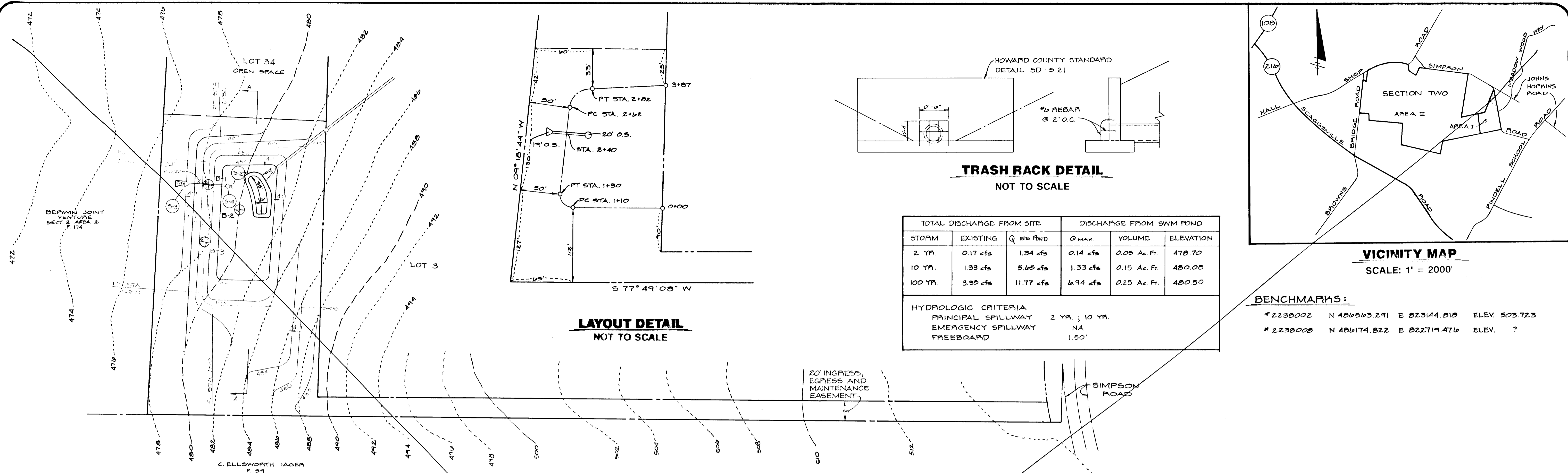
ASHLEIGH GREENE SUBDIVISION
 SECTION TWO AREA 1
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

GRADING AND SEDIMENT CONTROL

MILDENBERG, MOCHI & ASSOCIATES, INC.
 ENGINEERS - PLANNERS
 3300 North Ridge Road, Suite 235, Elliott City, Maryland 21043-3350
 (301) 461-0078

2 of 5

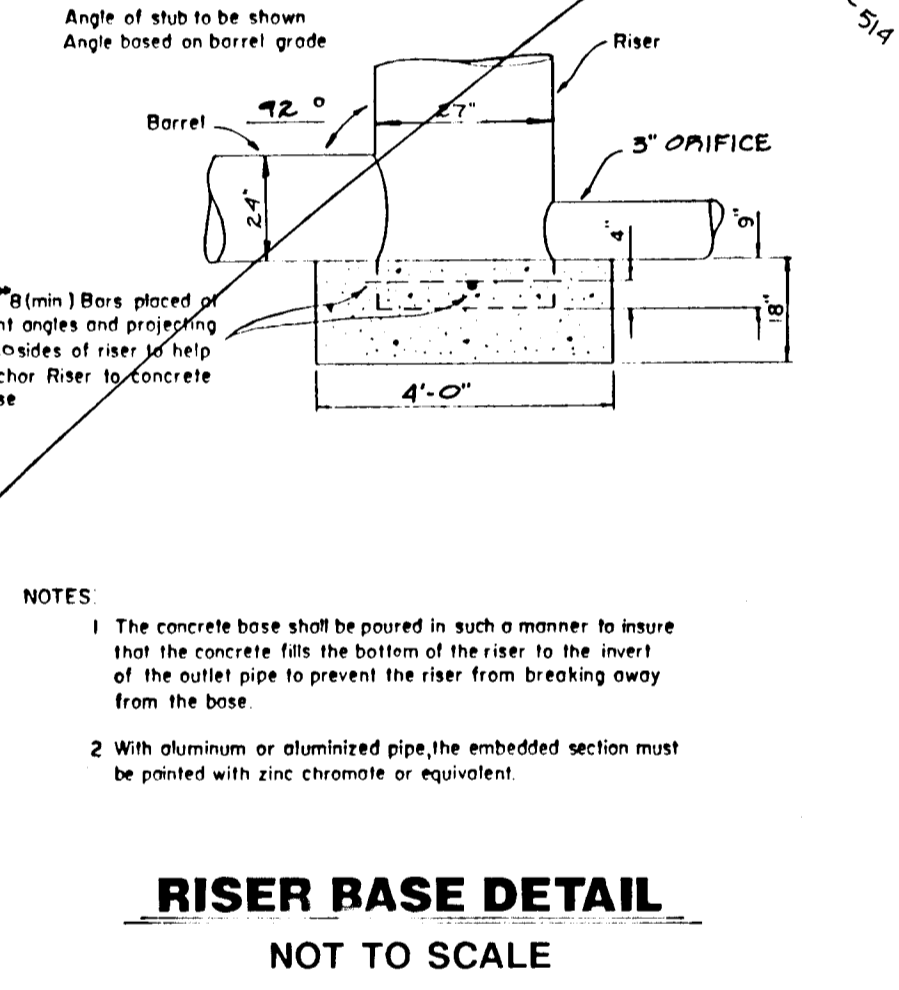
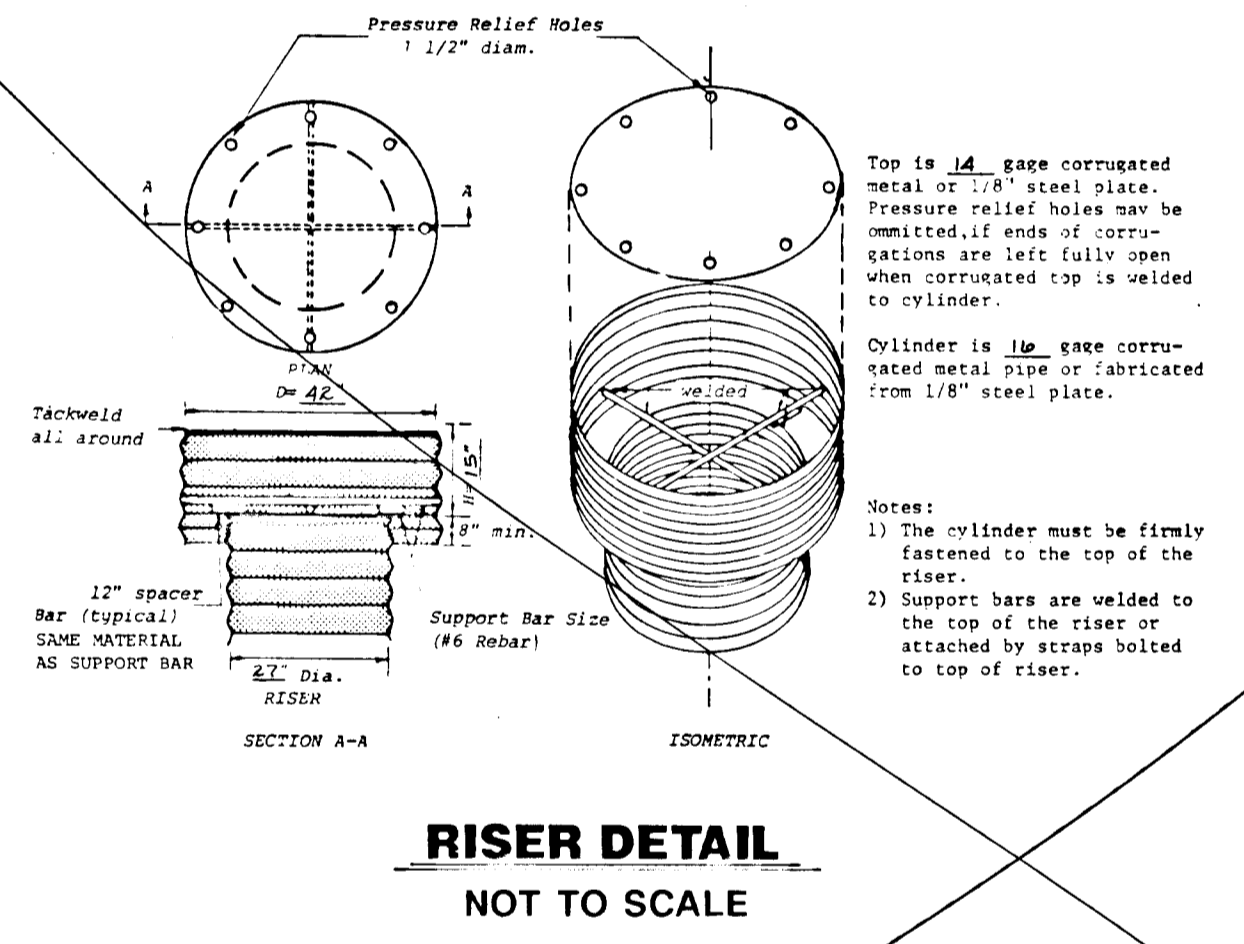
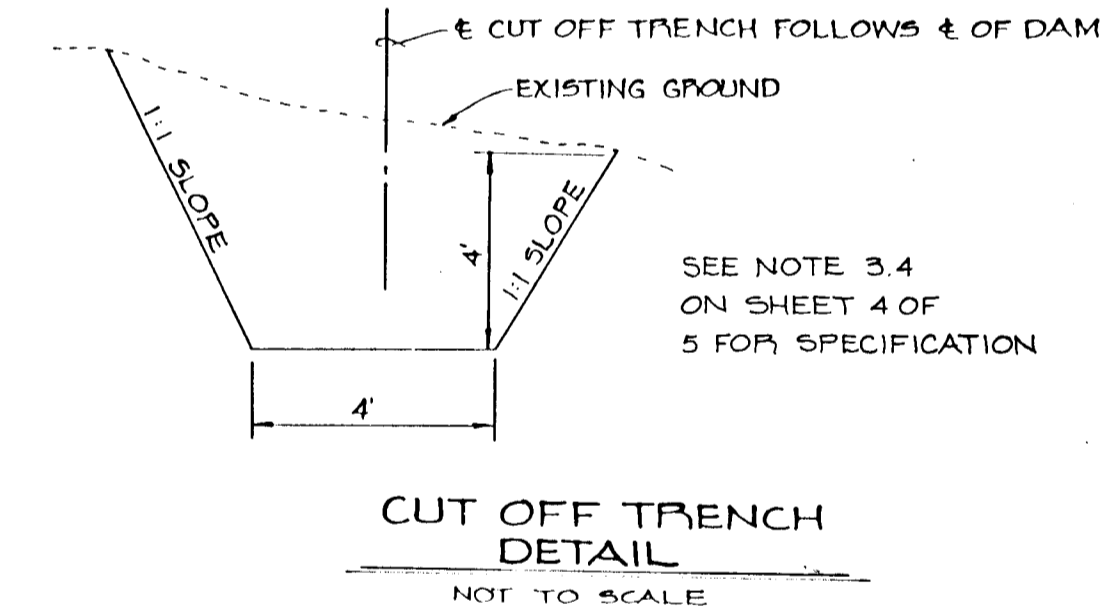
1380



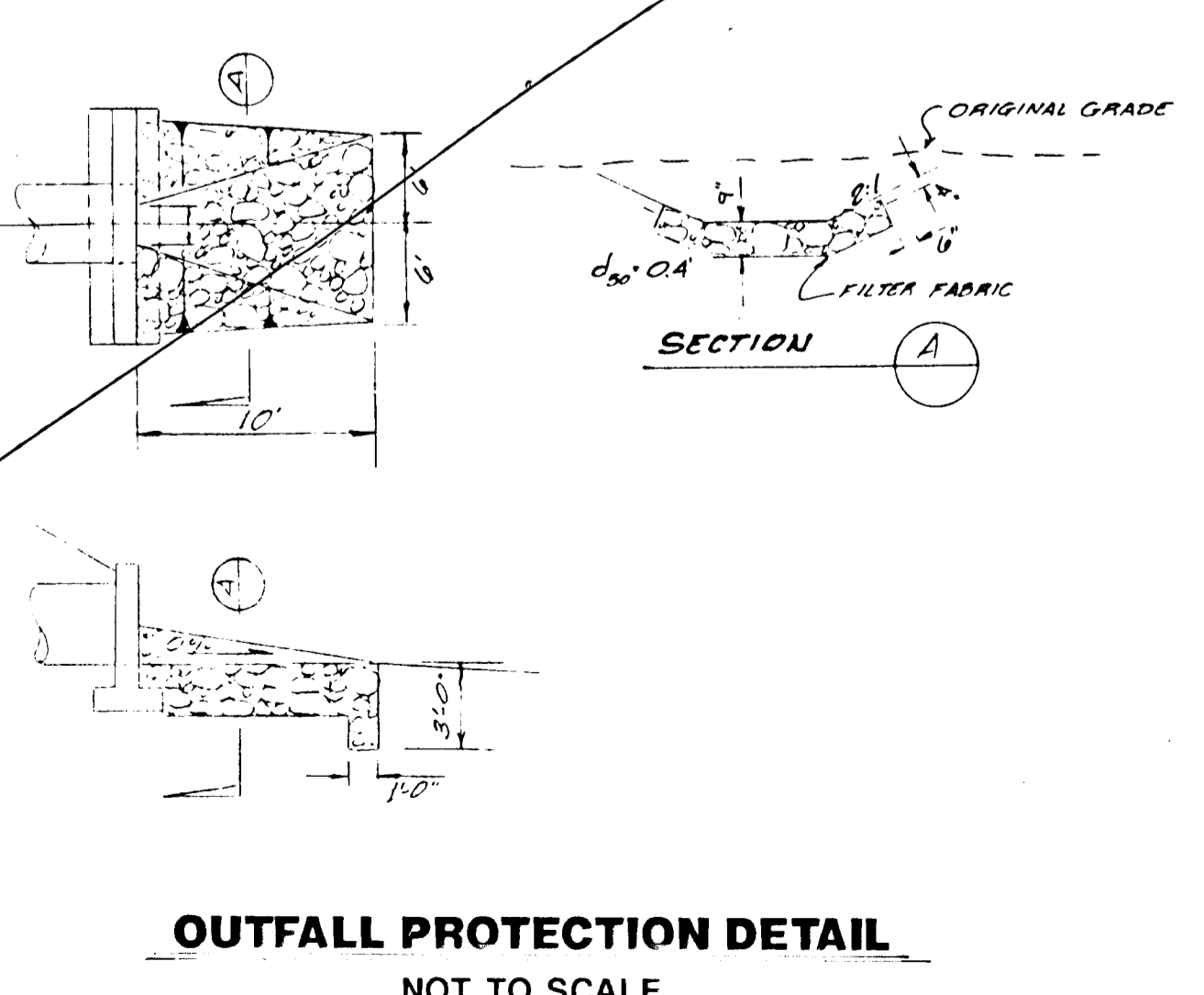
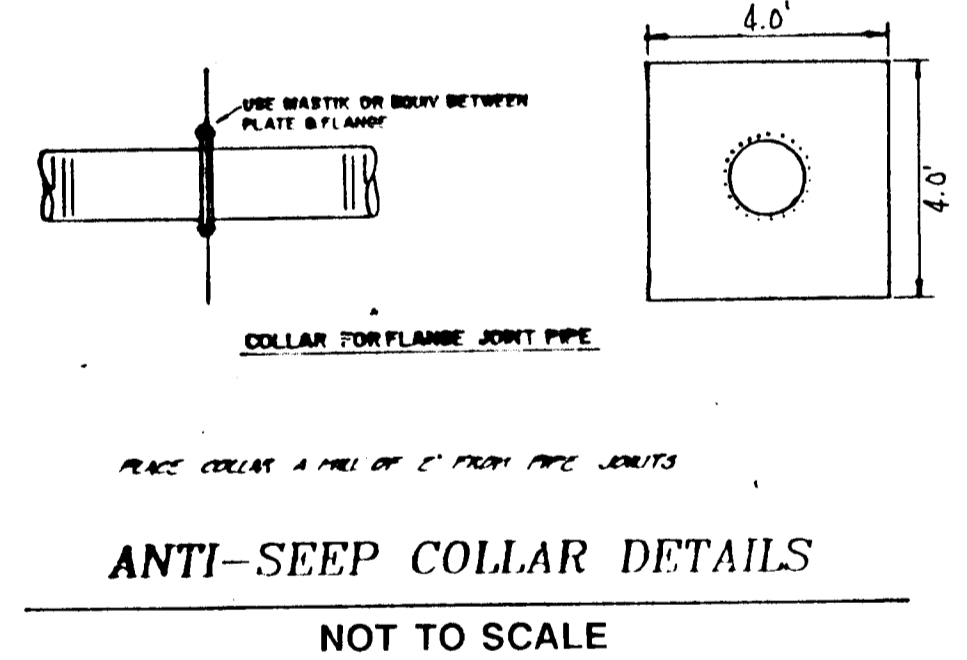
TOTAL DISCHARGE FROM SITE			DISCHARGE FROM SWM POND		
STORM	EXISTING	Q INTO POND	Q _{MAX}	VOLUME	ELEVATION
2 YR.	0.17 cfs	1.34 cfs	0.14 cfs	0.05 Ac. Fr.	478.70
10 YR.	1.33 cfs	5.45 cfs	1.33 cfs	0.15 Ac. Fr.	480.00
100 YR.	3.35 cfs	11.77 cfs	6.94 cfs	0.25 Ac. Fr.	480.50

HYDROLOGIC CRITERIA
 PRINCIPAL SPILLWAY: 2 YR.; 10 YR.
 EMERGENCY SPILLWAY: NA
 FREEBOARD: 1.50'

BENCHMARKS:
 # 2238002 N 48°50'3.29" E 023144.018 ELEV. 503.723
 # 2238008 N 48°17'4.822" E 022719.476 ELEV. ?



HAZARD CLASSIFICATION
 THE HAZARD CLASSIFICATION FOR THIS POND SHALL BE 'A' FOR THE REASONS AS FOLLOWS:
 A) THE POND OUTFALLS ONTO AREA 2 OF ASHLEIGH GREENE
 B) A STREAM, FLOODPLAIN & WETLANDS COVER THE LAND JUST BEYOND THE SWM POND



DEPTH	B-1	B-2	B-3
1.0	TOPSOIL	TOPSOIL	TOPSOIL
3.5	YELLOWISH BROWN MOIST SANDY SILT, TRACE CLAY AND MICA	YELLOWISH BROWN MOIST SANDY SILT, TRACE CLAY AND MICA	YELLOWISH BROWN MOIST SANDY SILT, TRACE CLAY & MICA
8.0	REDDISH BROWN WITH GRAY LAYERS MICACEOUS SLIGHTLY MOIST SILTY FINE SAND, TRACE CLAY	REDDISH BROWN WITH GRAY LAYERS MICACEOUS SILTY FINE SAND, TRACE CLAY	YELLOWISH BROWN MICACEOUS SILTY FINE SAND
14.5	REDDISH YELLOW WITH GRAY LAYERS MICACEOUS SLIGHTLY MOIST SILTY FINE SAND	REDDISH YELLOW WITH GRAY LAYERS MICACEOUS SLIGHTLY MOIST SILTY FINE SAND	LIGHT BROWN MICACEOUS FINE SAND, TRACE MICA

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

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Robert W. Zuehlmann 12-26-89
 APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Frank S. McLaughlin 1/6/90

ENGINEER'S CERTIFICATE
 I CERTIFY 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 MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

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

ASHLEIGH GREENE SUBDIVISION SECTION TWO AREA I 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

STORMWATER MANAGEMENT PLAN & DETAILS

LOT 28-34

DATE: SEPT. 1989
 PROJECT: 89027
 DRAWN BY: DPA
 CHECKED BY: DPA
 SCALE: AS SHOWN
 APPROVAL: AS SHOWN
 REVISIONS: 1. REMOVED SWM, REVISED SWM DRAIN 1/28/89
 2. REV. PER HOWARD COUNTY COMMENTS (10/8/89)
 3. SUBMISSION TO HOWARD COUNTY 12/21/89
 4. REVISION 1/6/90

3 of 5

STORMWATER MANAGEMENT CONSTRUCTION SPECIFICATIONS

1. GENERAL

Unless otherwise noted, all materials and construction shall conform to these plans and specifications, and to the following:

"Standard Specifications and Details for Construction" of the Howard County, Maryland, Department of Public Works, 1986 and as amended.

"Standard Specifications for Construction and Materials" of the Maryland State Highway Administration, 1982 and as amended.

"Standards and Specifications for Ponds" of the Soil Conservation Service of Maryland, (4-3/8), July 1981 and as amended.

2. SITE PREPARATION

Areas designated as borrow areas, embankment and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and sharp breaks shall be sloped to no steeper than 1:1.

Areas to be covered by the pond or reservoir will be cleared of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on these plans. Trees, brush and stumps shall be cut approximately level with the ground surface.

All cleared and grubbed material shall be disposed of outside and below the limits of the dam or reservoir as directed by the Developer or his representative. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated areas.

3. EARTHWORK AND EARTH FILL

3.1 Material

The earth fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, oversized stones, frozen or other objectionable material. The embankment shall be constructed to an elevation which provides for anticipated settlement to the design elevation. The fill height all along the length of the embankment shall be increased ten (10) percent above the design elevation (including freeboard) unless otherwise shown on the plans. All fill material shall meet the requirements of the Unified Soil Classifications CL or ML unless otherwise noted.

3.2 Placement

Areas on which earth fill is to be placed shall be scarified prior to placement of fill. All materials shall be placed in eight (8) inches maximum thickness (before compaction) layers which are to be continuous over the entire length of the fill. The most porous borrow material shall be placed in the downstream portions of the embankment.

3.3 Compaction

The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed a minimum of four (4) complete passes of a sheepsfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture so that it can be formed into a ball without crumbling. If water can be squeezed out of the ball, it is too wet to compact properly. Each layer of fill shall be compacted as necessary to obtain ninety-five (95) percent of AASHTO T-99 and is to be certified by the Geotechnical Engineer.

3.4 Cutoff Trench

Where specified, a Cutoff Trench shall be excavated along or parallel to the centerline of the embankment as shown on these plans. The bottom width of the Trench shall be as shown on the drawings, with the minimum width being four (4) feet. The depth shall be as shown on the plans and shall be at least four (4) feet below existing grade. The side slopes of the trench shall be 1:1 or flatter. The backfill material for the Cutoff Trench shall be compacted with equipment or rollers to assure maximum density and minimum permeability. Compact as outlined above to ninety-five (95) percent of AASHTO T-99 density. All Cutoff Trench backfill material shall meet the requirements of Unified Soil Classification ML, CL, CL, MH or CH.

3.5 Structural Backfill

Backfill material to be placed adjacent to structures shall be of the type and quality conforming to that specified for the adjoining fill material. The backfill shall be placed in horizontal layers not to exceed four (4) inches in thickness and compacted by hand tampers or other compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four (4) feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe unless there is compacted fill of twenty-four (24) inches or greater over the structure/pipe.

4. PIPE CONDUITS

4.1 Corrugated Metal Pipe

Materials - This pipe and its appurtenances shall be galvanized and fully bituminous coated and shall conform to all of the requirements of AASHTO Specification M-190 Type A with watertight coupling bands. Any bituminous coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound.

Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around. Watertight coupling bands shall be used on all joints. Anti-seep collars shall be connected to the pipe in such a manner as to be completely watertight. Dimple bands are not considered watertight.

Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unsuitable soil is encountered, all such material shall be removed and replaced with suitable earth to provide adequate support.

Laying pipe - The pipe shall be placed with inside circumferential laps pointing downstream and with the longitudinal laps at the sides.

4.2 Reinforced Concrete Pipe

Materials - Reinforced concrete pipe conduits shall have a rubber gasket joint and shall equal or exceed ASTM Specifications C-361. An approved equivalent is AWWA Specification C-301.

Bedding - All reinforced concrete pipe conduits shall be laid in a concrete bedding for their entire length. This bedding shall consist of high slump concrete placed under the pipe and the sides of the pipe at least ten (10) percent of its outside diameter with a minimum thickness of three (3) inches or as shown on the drawings.

Laying Pipe - Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are sealed for the entire line, the bedding shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and grade of the pipe.

4.3 Backfilling and Other Details

Backfilling shall conform to Structural Backfill as shown above. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

5. STRUCTURES

Concrete structures shall meet minimum requirements set forth in the Maryland State Highway Administration "Standards and Specifications for Construction and Materials," 1982, as amended, including:

5.1 Concrete

Section 918 (Portland Cement Concrete Mixtures), Mix No. 3

5.2 Reinforcement

Section 610 (Reinforcement for Concrete Structures)
Section 911 (Reinforcing Steel, Wire Rope and Wire Fabric)

In addition, reinforcing steel shall meet ASTM Specification A615, Grade 60. Steel angles, anchor bars and appurtenances shall be ASTM A36.

6. STABILIZATION

All borrow areas shall be graded to provide proper drainage and left in a slightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized in accordance with the specifications shown hereon and with the 1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control" as amended, immediately after final grading. All 2:1 slopes shall be sodded. Unless otherwise noted, all other disturbed areas shall be stabilized with permanent seeding.

Fertilizer: 10-10-10 @ 11.5 lbs./1000 sq. ft.
Seed: Crownvetch inoculated @ 0.5 lbs./1000 sq. ft.
"KY-31" Tall Fescue @ 1.5 lbs./1000 sq. ft.
Mulch: Straw @ 80 lbs./1000 sq. ft.
Asphalt Tie Down: Slopes @ 8 gal./1000 sq. ft.
Flat areas @ 5 gal./1000 sq. ft.

7. EROSION AND SEDIMENT CONTROL

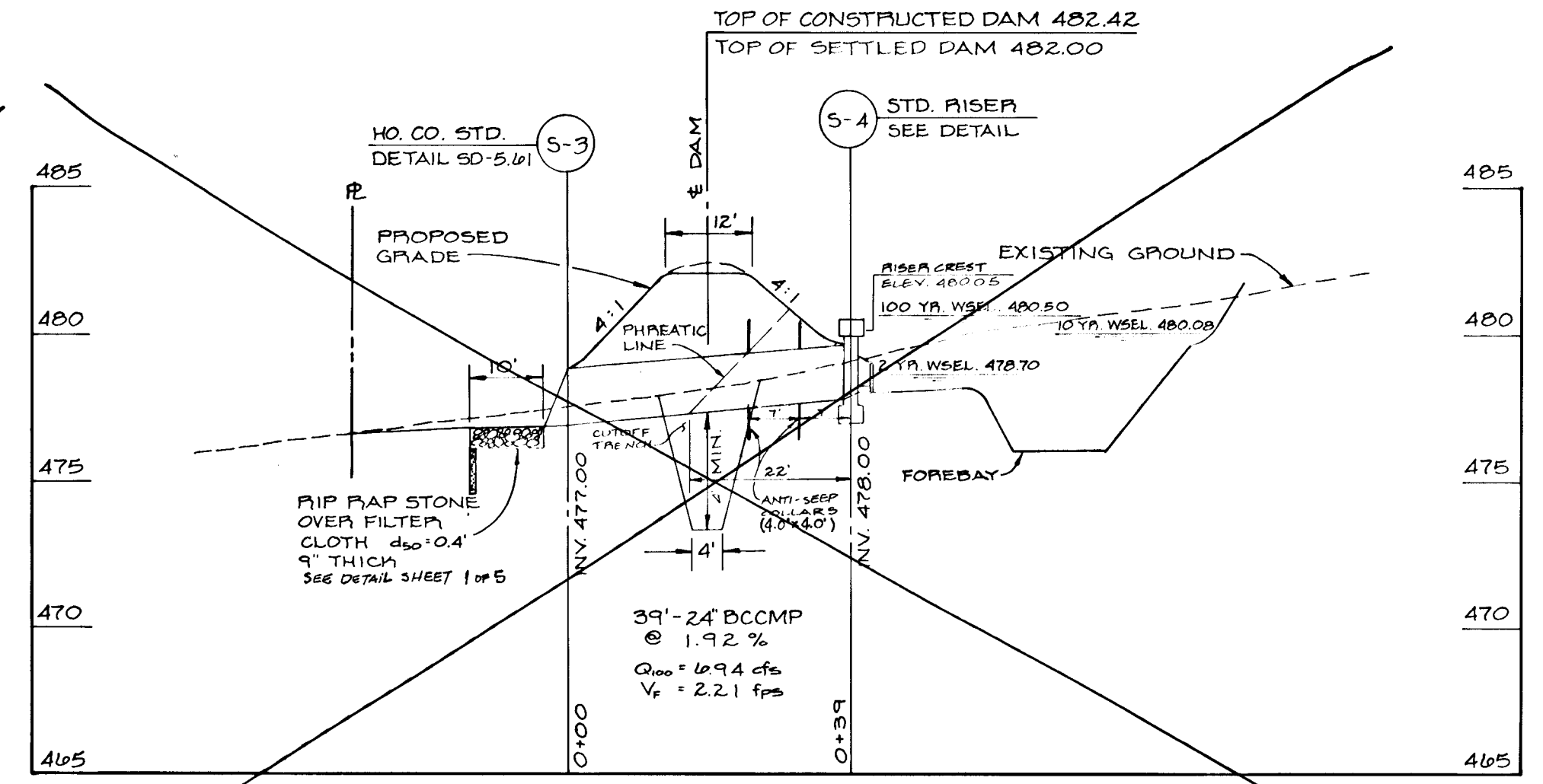
Construction operations will be carried out in such a manner that erosion will be controlled and water and air pollution minimized, as shown on these plans and as set forth in the 1983 Standards and Specifications for Soil Erosion and Sediment Control" of the Soil Conservation Service of Maryland, Howard County Soil Conservation District, as amended.

8. FILTER FABRIC

Where specified, MIRAFI 1405 or equivalent shall be used.

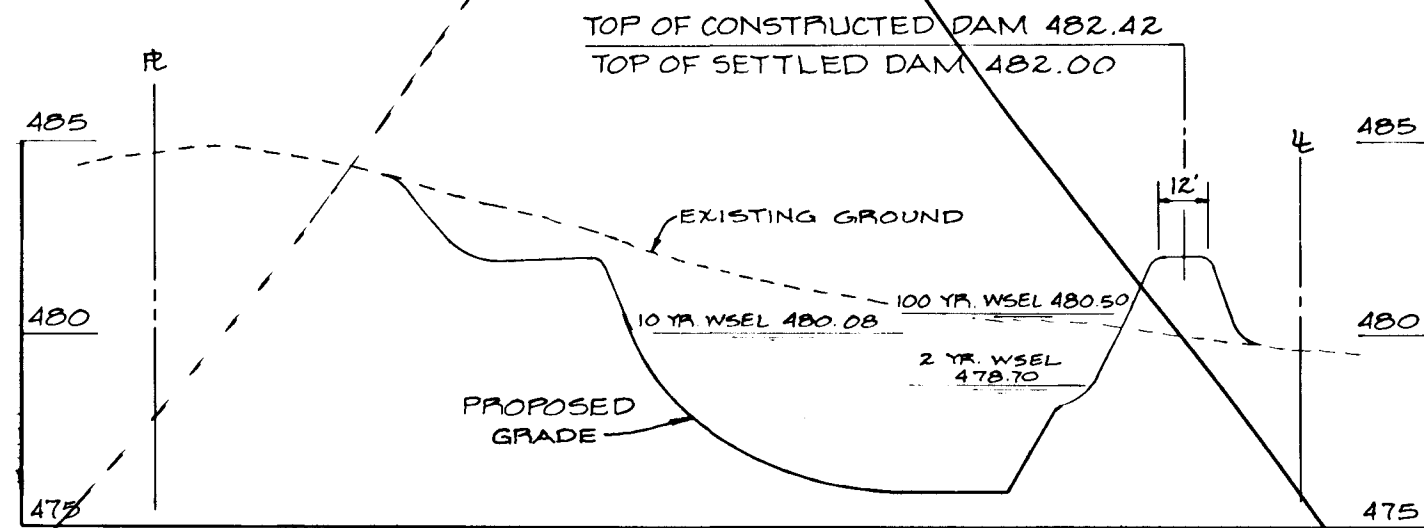
9. GABIONS

Gabions shall be class IV. Basket wire shall be PVC coated.



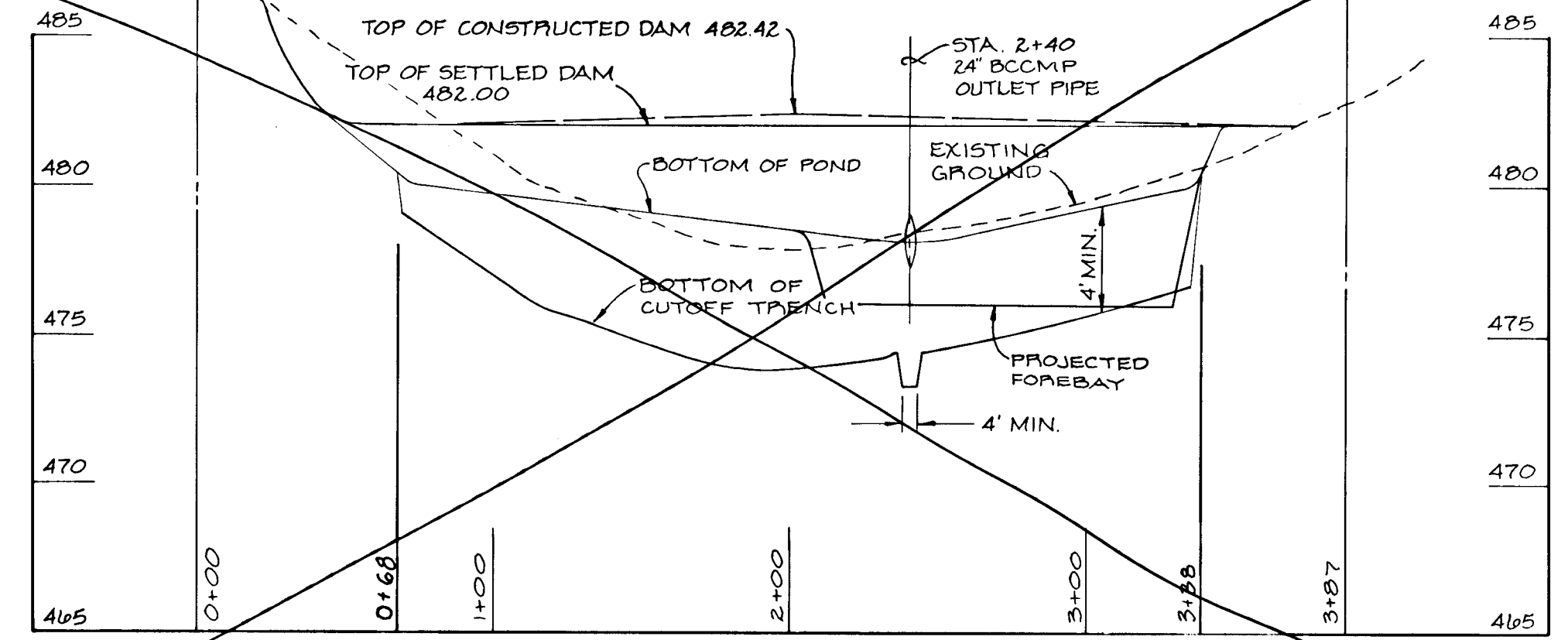
PROFILE - PRINCIPAL SPILLWAY

SCALE: 1" = 20' HORIZ.
1" = 5' VERT.



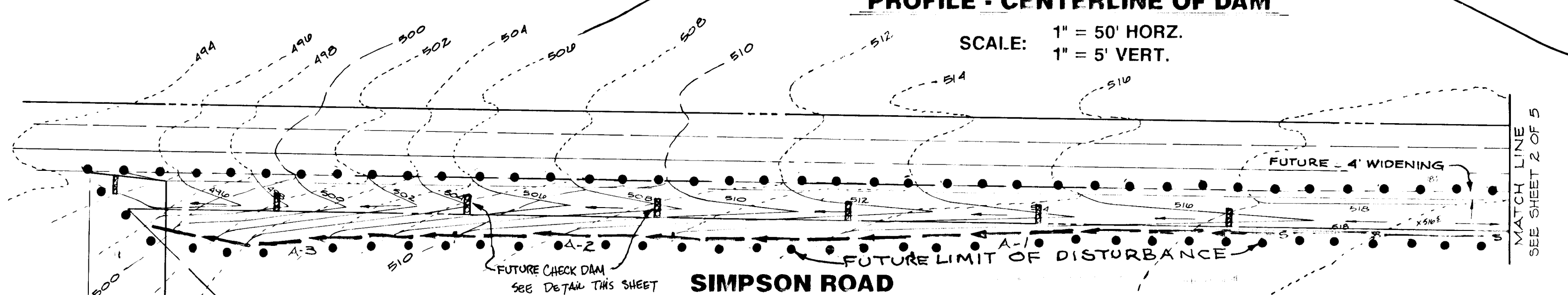
SECTION 'A-A' THRU POND

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



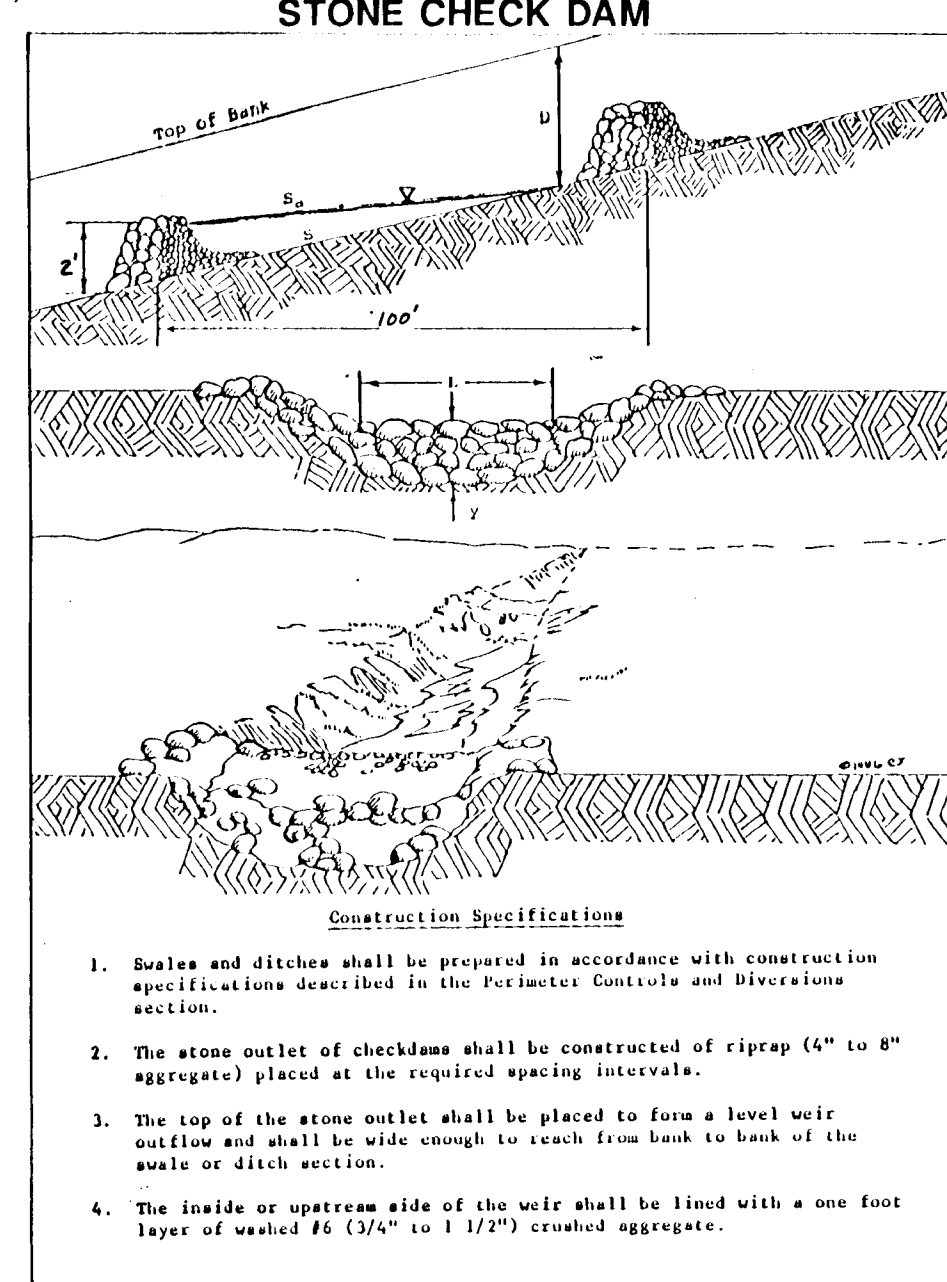
PROFILE - CENTERLINE OF DAM

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



PLAN

SCALE: 1" = 50'



Construction Specifications

1. Berms and ditches shall be prepared in accordance with construction specifications described in the Project Controls and Drawings sections.
2. The stone outlet of checkdams shall be constructed of riprap (4" to 8" aggregate) placed at the required spacing intervals.
3. The top of the stone outlet shall be placed to form a level weir outlet and shall be wide enough to reach from bank to bank of the outlet or ditch section.
4. The inside or upstream side of the weir shall be lined with a one foot layer of washed #5 (1/4" to 1 1/2") rounded aggregate.

DEVELOPER


BEFMAN VENTURE
c/o Land Design & Development, Inc.
8307 Main Street
Ellicott City, Maryland 21043
(301) 461-4600
ATTN: Mr. John Reuser

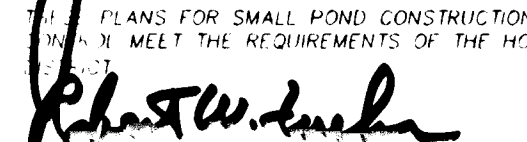
ENGINEER

Mildenberg, Mochi & Associates, Inc.
3300 North Ridge Road, Suite 714
Ellicott City, Maryland 21043
(301) 461-4600
ATTN: Mr. Robert M. Mochi, P.E.

OWNER

Winchester Homes, Incorporated
6301 Ivy Lane, Suite 714
Greenbelt, Maryland 20770
(301) 220-1117

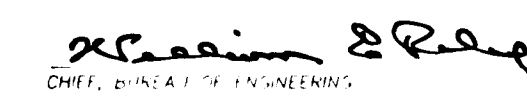
THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT TO MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION AND EROSION AND SEDIMENT CONTROL.
 12-26-89
 DATE

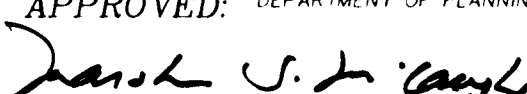
THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 12/26/89
 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

 2/27/90
 DATE


 2/16/90
 DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 2-22-90
 DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 2/2/90
 DATE


ENGINEER'S CERTIFICATE

I CERTIFY 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 MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

 12-22-89
 DATE

DEVELOPER'S CERTIFICATE

I HEREBY CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

 12/16/89
 DATE



LOTS 25-34
 ASHLEIGH GREENE SUBDIVISION
 SECTION TWO
 TAX MAP 41
 AREA ONE
 PARCEL 174
 ELECTION DISTRICT No. 5
 HOWARD COUNTY, MARYLAND
 STORMWATER MANAGEMENT NOTES & PROFILES

MILDENBERG, MOCHI & ASSOCIATES, INC.
 ENGINEERS & ARCHITECTS
 3300 North Ridge Road, Suite 714, Ellicott City, Maryland 21043-3350
 (301) 461-4600
 (301) 675-5788

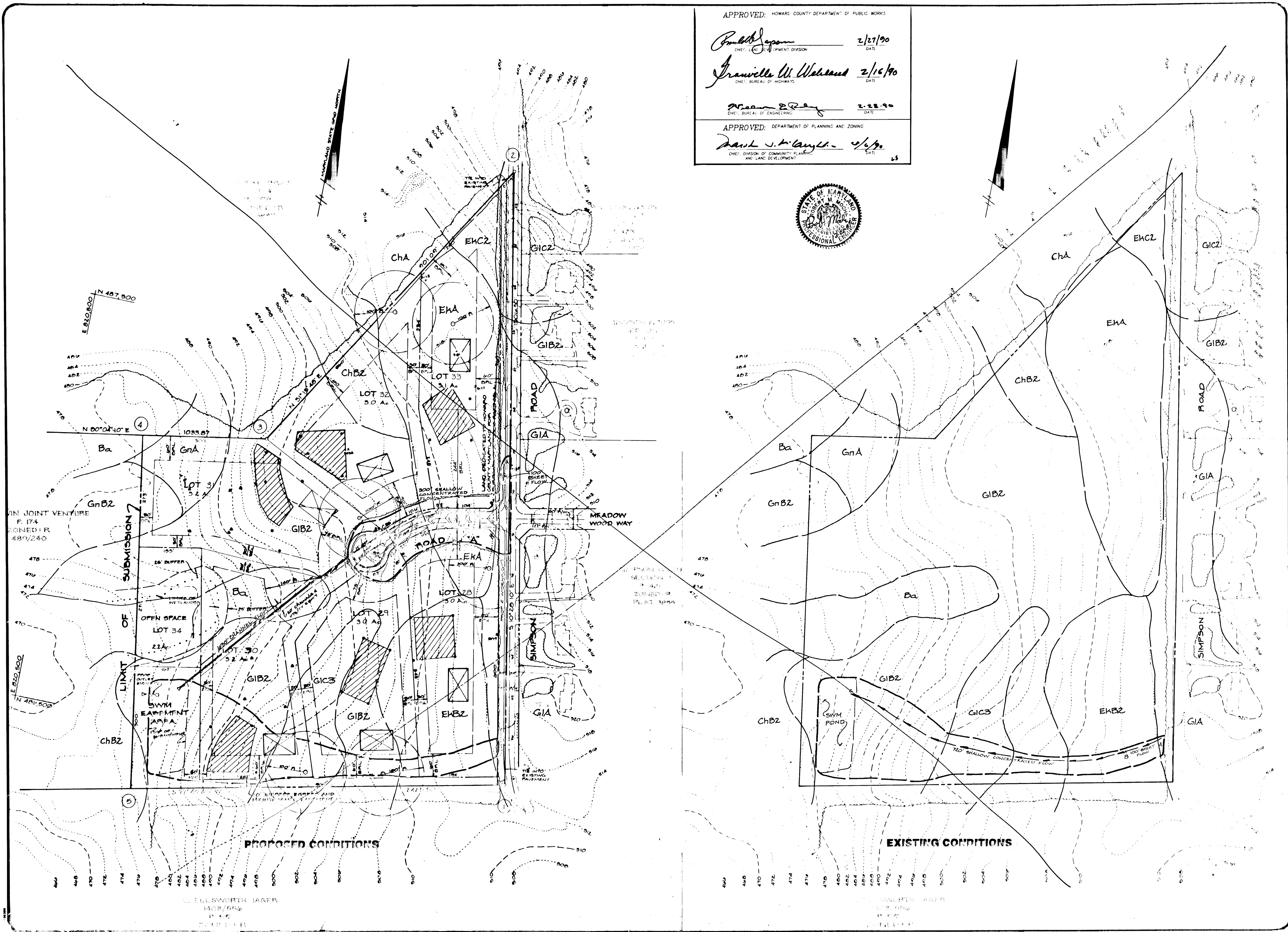
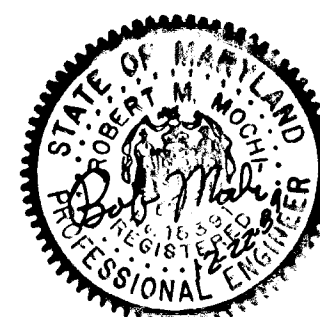
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Donald J. Mason
CHIEF, LAND DEVELOPMENT DIVISION 2/27/90 DATE

Franklin W. Weiland
CHIEF, BUREAU OF HIGHWAYS 2/16/90 DATE

William E. Reilly
CHIEF, BUREAU OF ENGINEERING 2-22-90 DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
David J. Langley
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT 2/19/90 DATE



9/89	DPA	JBY/AVV
9/89	DPA	JBY/AVV
9/89	DPA	JBY/AVV

2 REVISED SWM REVISED STORM DRAIN 12/18/89 9/19/89
REV PER HOWARD COUNTY COMMENTS (12/18/89, 12/22/89)
1 SWM SUBMISSION TO HOWARD COUNTY

ASHLEIGH GREENE SUBDIVISION
SECTION TWO AREA 1
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
DRAINAGE AREA MAP

MILDENBERG, ROCH & ASSOCIATES, INC.
1300 North Ridge Road, Suite 225, Gaithersburg, Maryland 20878-3350
Tel: 301-948-1515