

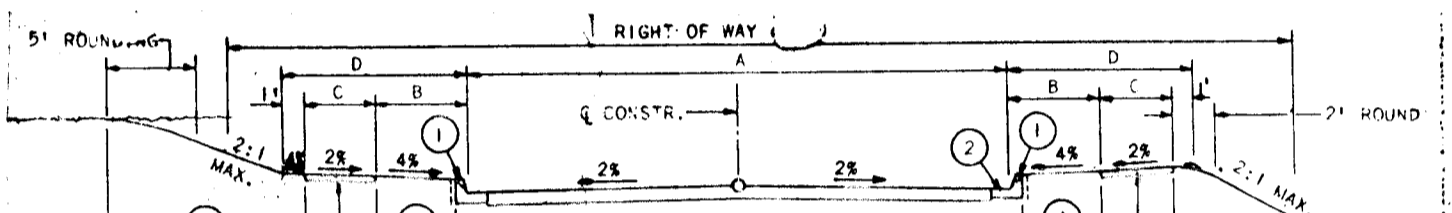
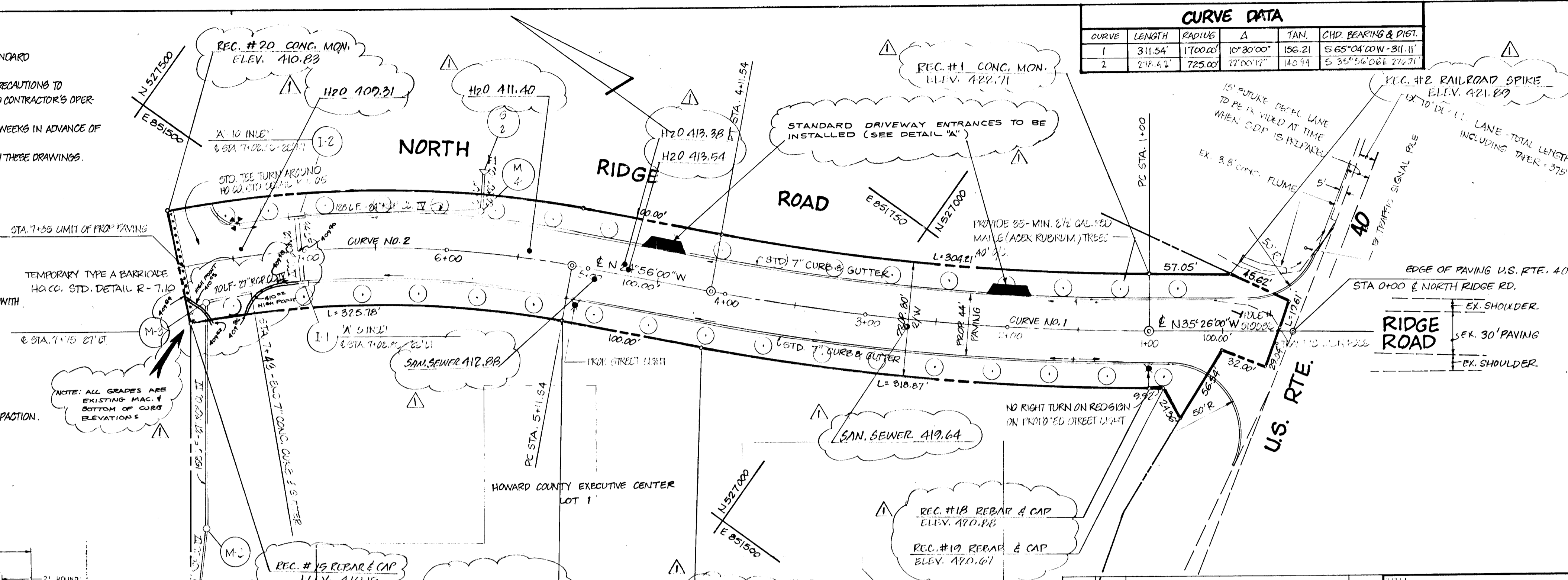
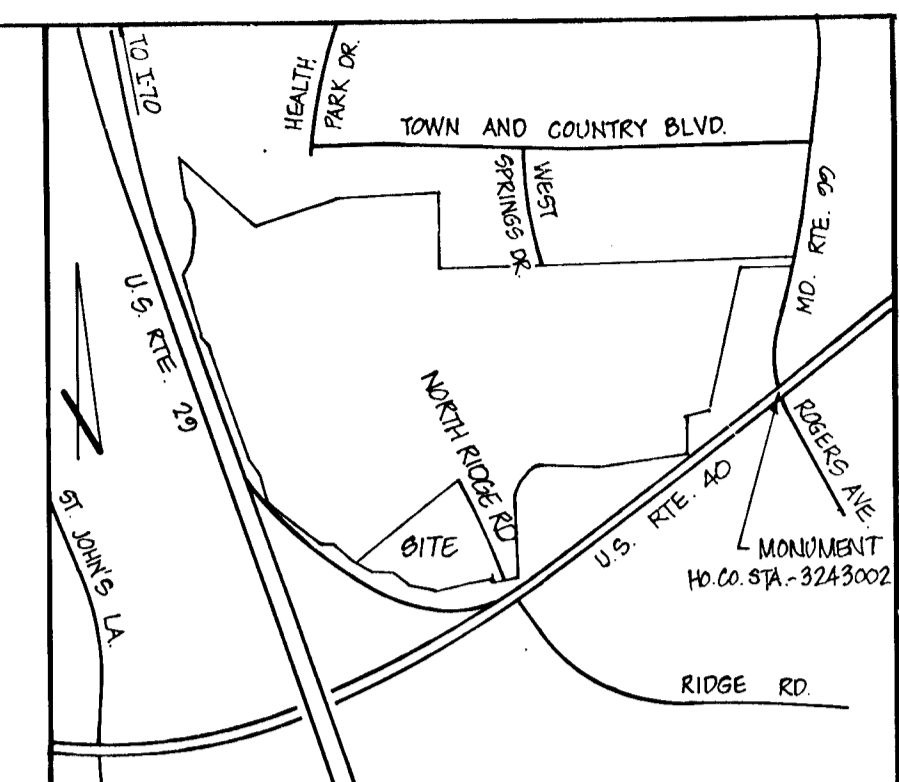
GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HO. CO. DESIGN MANUAL, VOL. IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
2. APPROXIMATE LOCATION OF EX. UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EX. UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
3. THE CONTRACTOR SHALL TEST PIT EX. UTILITIES WHERE DIRECTED BY THE ENGINEER A MINIMUM OF 2 WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS.
4. CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES AT LEAST 5 DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.

MISS. UTILITY	890-0100
BELL TELEPHONE SYSTEM	909-3640
LONG DISTANCE CABLE DIVISION	909-3899 OR 3854
BALTO. GAS & ELECTRIC COMPANY	690-8000 EXT. 001
HO. CO. BUREAU OF UTILITIES	090-2366
HO. CO. CONSTRUCTION INSPECTION SURVEY DIVISION	700-7272
5. ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HO. CO. STANDARDS.
6. ALL STREET CURBS RETURNING SHALL HAVE 95' RADIUS UNLESS OTHERWISE NOTED.
7. STORM DRAIN TRENCHES WITHIN ROAD RIGHT-OF-WAY SHALL BE BACKFILLED AND COMPLETED IN ACCORDANCE WITH HO. CO. DESIGN MANUAL, VOL. IV, I.E. STD. SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
8. INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES OF 1971 EDITION.
9. PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
10. DESIGNATED TRAFFIC SPEED IN ACCORDANCE WITH THE A.A.S.H.O.
11. ALL ELEVATIONS SHOWN ARE BASED ON U.G.C. AND G.S. MEAN SEA LEVEL DATUM 1929.
12. ALL FILL AREAS WITHIN ROADWAYS AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM 95% COMPACTION.
13. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
14. PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
15. SUBJECT PROPERTY ZONED P.O.R. PER 10-09-77 COMPREHENSIVE ZONING PLAN.
16. TOPD TAKEN FROM FIELD RUN SURVEY DATED JUNE, 1984, BY BOENDER ASSOCIATES, INC.
17. NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6' OF FINISHED GRADE.

CURVE DATA

CURVE	LENGTH	RADIUS	Δ	TAN.	CHD. BEARING & DIST.
1	311.54'	17000'	10°30'00"	156.21	S 65°04'00"W - 311.11'
2	278.45'	7250'	22°00'00"	140.94	S 35°56'06"E - 272.71'



1. PROFILE GRADE LINE (PGL), SEE DESIGN MANUAL.
2. 3" DIA. CONC. CURB & GUTTER.
3. 4" CONCRETE SIDEWALK AS REQUIRED BY SUB-DIVISION REGULATIONS.
4. INDICATES 2" TOPSPICIL, SEED AND MULCH.
5. GUARDRAIL WHERE REQUIRED BY THE DESIGN MANUAL.
6. EARTH CROSS SECTION, SLOPE MAY BE FLATTENED TO PROVIDE A SHOULDER AT OR NEAR THE CREST OF VERTICAL CURVES WHERE QUANTITY OF SHOULDER IS SMALL, AS APPROVED BY DPW.

ROAD CONSTRUCTION PLAN - NORTH RIDGE ROAD STA. 0+00 TO HOWARD COUNTY EXECUTIVE CENTER

2ND ELECTION DISTRICT TAX MAP 24 HOWARD COUNTY, MD.

DATE: JUNE, 1984 DESIGN BY: J.J.B. DRAWN BY: S.V.K. CHECKED BY: J.B.S.

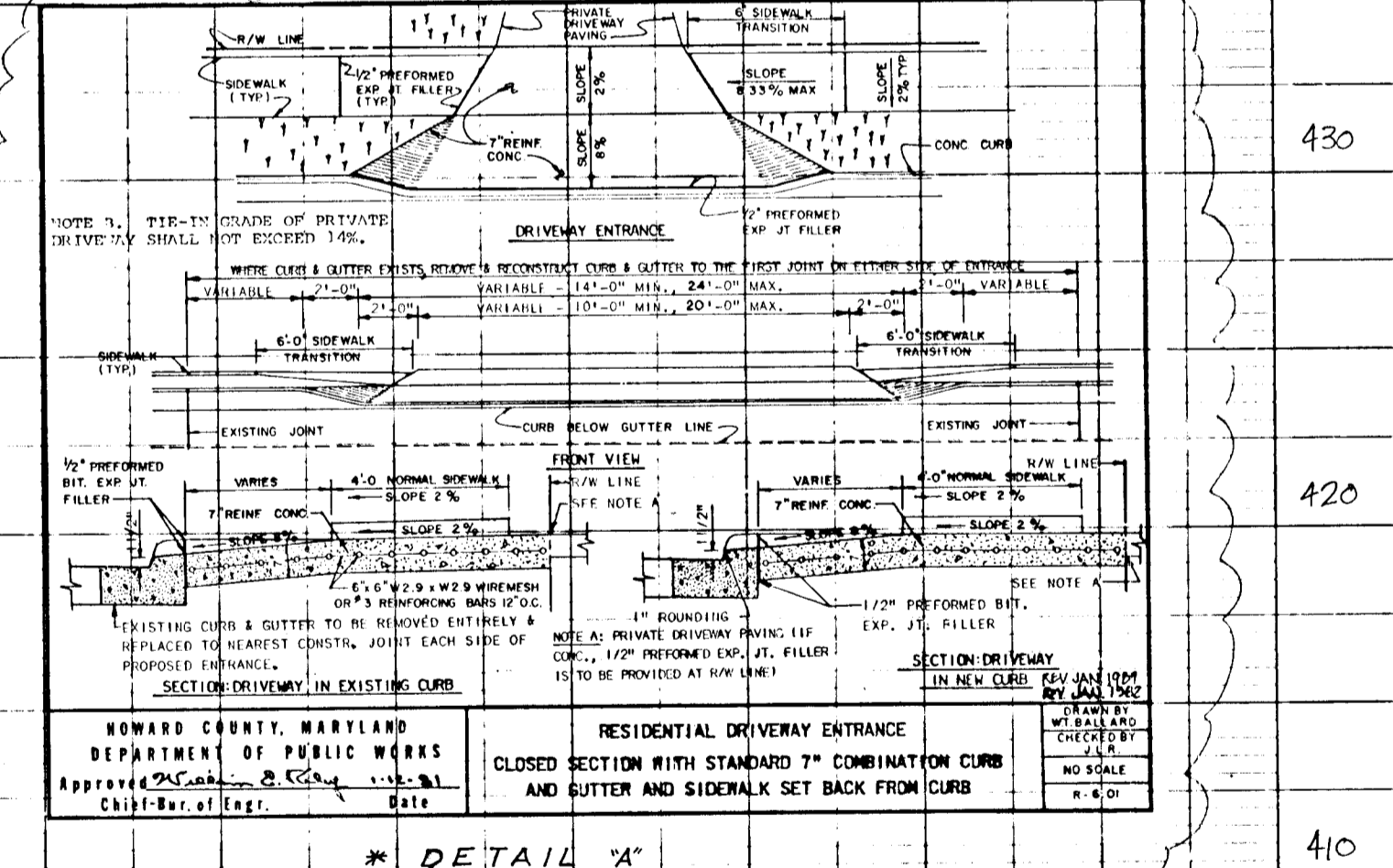
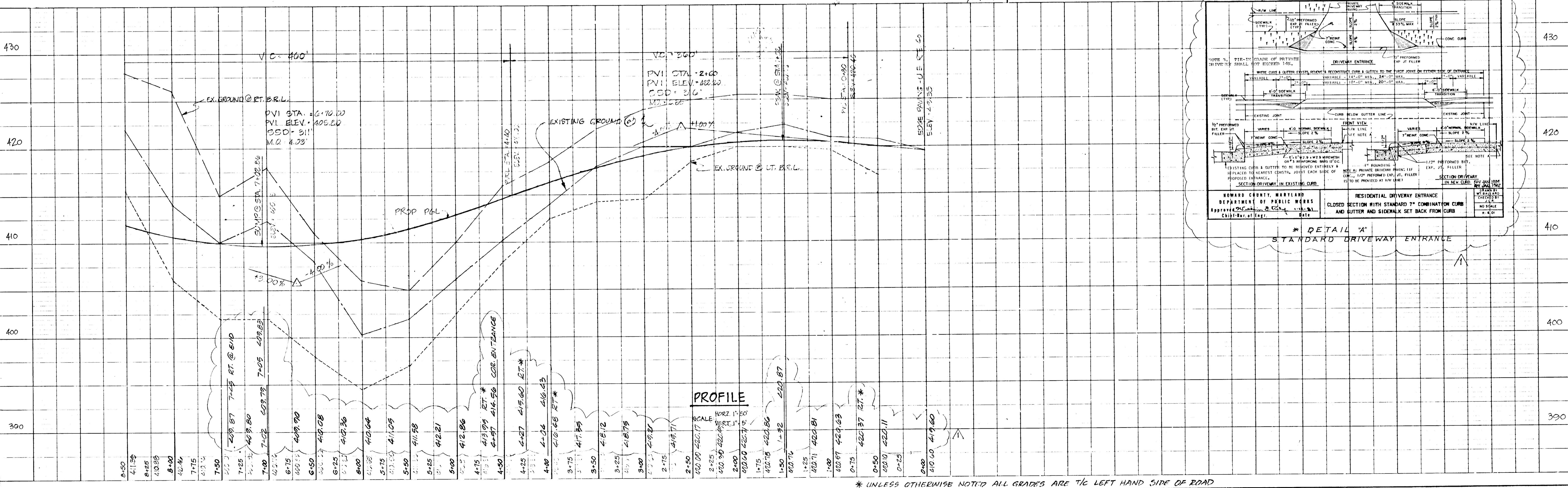
SCALE: AS SHOWN JOB NO.: 84086 DRAWING NO.: 1 OF 1

boender associates
2865 ELLICOTT MILLS DRIVE
ELLICOTT CITY, MARYLAND 21043

engineers
surveyors
planners

APPROVED: DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF ENGINEERING

APPROVED OFFICE OF PLANNING AND ZONING
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION



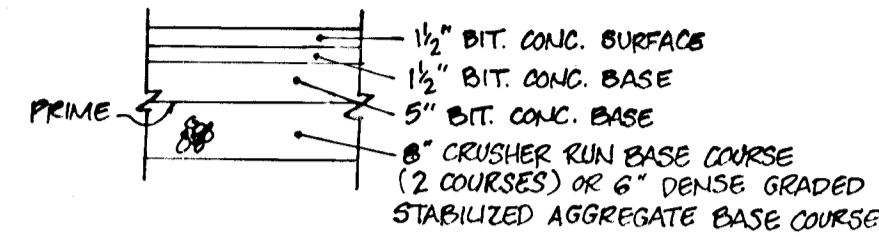
* UNLESS OTHERWISE NOTED ALL GRADES ARE 1/8" LEFT HAND SIDE OF ROAD

SEDIMENT CONTROL NOTES

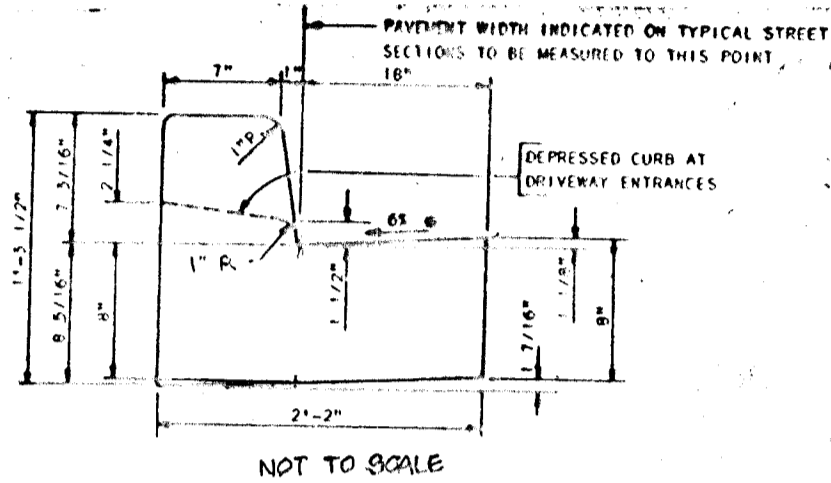
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH "STANDARDS" AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS," PREPARED BY THE U.S.D.A. SOIL CONSERVATION SERVICE.
- APPLY FOR GRADING PERMIT.
- NOTIFY THE BUREAU OF LICENSE INSPECTIONS AND PERMITS 24 HRS. PRIOR TO GRADING OPERATIONS.
- CONSTRUCTION SHALL ADHERE TO THE CONSTRUCTION SEQUENCE.
- CUT AND FILL SLOPES SHALL BE 3:1 MAXIMUM.
- ELEVATIONS MARKED THUS (X) SHALL BE FINISHED GRADE.
- ANY EXCESS MATERIAL SHALL BE STOCKPILED IN A CLEARED LOCATION ON SITE WHICH IS PROTECTED BY SEDIMENT CONTROL STRUCTURE(S). MAXIMUM FILL SLOPE SHALL BE 3:1. STOCKPILED MATERIAL SHALL BE STABILIZED ACCORDING TO SEEDING SPECIFICATIONS BELOW.
- SEDIMENT CONTROL STRUCTURES SHALL BE REMOVED ONLY WITH PERMISSION OF THE BUREAU OF LICENSE, INSPECTIONS AND PERMITS.
- STABILIZATION MEASURES:
 - TEMPORARY STABILIZATION:
 - APPLY: 2000 LBS./AC. OR 46 LBS. OF PULVERIZED DOLOMITIC LIMESTONE. 500 LBS./AC. OR 11.5 LBS./1000 SQ. FT. OF 10-10-10 FERTILIZER. PLANT WITH RYEGRASS AT 40 LBS./AC. MULCH ALL DISTURBED AREAS IMMEDIATELY AFTER GRADING.
 - PERMANENT STABILIZATION:
 - APPLY: 2000 LBS./AC. OF PULVERIZED DOLOMITIC LIMESTONE. 500 LBS./AC. OF 10-10-10 FERTILIZER.
 - SEED: 85 LBS./AC. OF KENTUCKY 31 TALL FESCUE. 40 LBS./AC. OF KENTUCKY BLUE GRASS. 25 LBS./AC. OF ANNUAL RYEGRASS.
- NOTE: SEEDING MAY BE DONE BETWEEN MARCH 1 - MAY 1, OR AUG. 1 - OCT. 1 ONLY. MULCH ALL DISTURBED AREAS IMMEDIATELY AFTER GRADING. 2 TONS/AC. OF UNWEATHERED WHEATSTRAW. TIE MULCH DOWN WITH 480 GAL./AC. OF LIQUID ASPHALT.

SITE ANALYSIS

AREA OF SITE: 0.2 AC.
 AREA PAVED: 0.0 AC.
 AREA REVEGETATED: 0.3 AC.
 AREA DISTURBED: 0.1 AC.
 AREA UNDISTURBED: 0.1 AC.



PAVING SECTION P-5
 NOT TO SCALE
 FOR SPECS., SEE HO. CO. STD. DETAIL R-2.02



STD. 7" CURB & GUTTER
 FOR SPECS., SEE HO. CO. STD. DETAIL R-301

CONSTRUCTION SEQUENCE

- OBTAIN BUILDING PERMIT.
- NOTIFY THE HOWARD COUNTY BUREAU OF LICENSES, INSPECTIONS AND PERMITS AND CONSTRUCTION INSPECTION BUREAU DIVISION 24 HOURS PRIOR TO GRADING OPERATIONS.
- INSTALL TEMPORARY SEDIMENT CONTROL MEASURES, SEE E.D. & GF.
- GRADE POND, INSTALL DEMATERING DEVICE AND BLOCK ORIFICE. SWM POND TO BE USED AS SEDIMENT BASIN DURING CONSTRUCTION (F-85-57).
- ROUGH GRADE. STABILIZE WITH TEMPORARY STABILIZATION.
- INSTALL UTILITIES. STABILIZE ROAD WITH BASE COURSE.
- FINE ROAD.
- FINE GRADE.
- APPLY PERMANENT STABILIZATION.
- CLEAN STORM DRAIN OF SEDIMENT.
- DEWATER SEDIMENT BASIN WITH APPROVAL OF SEDIMENT INSPECTOR. RETURN BASIN TO DESIGNED SHAPE.
- REMOVE TEMPORARY STABILIZATION MEASURES WITH APPROVAL OF HO. CO. BUREAU OF LICENSE, INSPECTIONS AND PERMITS.

SEDIMENT CONTROL NOTES (CONT.)

- FOLLOWING INITIAL SOIL DISTURBANCES OR REINTURBANCES, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
 - SEVEN CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, Dikes, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1.
 - FOURTEEN DAYS AS TO ALL OTHER DISTURBED OR GRADED AREA ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HO. CO. DESIGN MANUAL, TERM EXCHANGE.

STRUCTURE SCHEDULE									
NO.	TYPE	INV. IN	INV. OUT	TOP ELEV.	REMARKS	INV. IN	INV. OUT	TOP ELEV.	
1	SWIM POND	402.48	402.52	402.51	110' x 20' x 4' SWIM POND WITH 1' x 1' x 1' BLOCK ORIFICE	402.48	402.52	402.51	
2	SWIM POND	402.48	402.52	402.51	110' x 20' x 4' SWIM POND WITH 1' x 1' x 1' BLOCK ORIFICE	402.48	402.52	402.51	
3	SWIM POND	402.48	402.52	402.51	110' x 20' x 4' SWIM POND WITH 1' x 1' x 1' BLOCK ORIFICE	402.48	402.52	402.51	
4	SWIM POND	402.48	402.52	402.51	110' x 20' x 4' SWIM POND WITH 1' x 1' x 1' BLOCK ORIFICE	402.48	402.52	402.51	
5	SWIM POND	402.48	402.52	402.51	110' x 20' x 4' SWIM POND WITH 1' x 1' x 1' BLOCK ORIFICE	402.48	402.52	402.51	
6	SWIM POND	402.48	402.52	402.51	110' x 20' x 4' SWIM POND WITH 1' x 1' x 1' BLOCK ORIFICE	402.48	402.52	402.51	
7	SWIM POND	402.48	402.52	402.51	110' x 20' x 4' SWIM POND WITH 1' x 1' x 1' BLOCK ORIFICE	402.48	402.52	402.51	
8	SWIM POND	402.48	402.52	402.51	110' x 20' x 4' SWIM POND WITH 1' x 1' x 1' BLOCK ORIFICE	402.48	402.52	402.51	
9	SWIM POND	402.48	402.52	402.51	110' x 20' x 4' SWIM POND WITH 1' x 1' x 1' BLOCK ORIFICE	402.48	402.52	402.51	
10	SWIM POND	402.48	402.52	402.51	110' x 20' x 4' SWIM POND WITH 1' x 1' x 1' BLOCK ORIFICE	402.48	402.52	402.51	

I 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 THIRTY DAYS OF COMPLETION.

Richard S. Mangione 10/4/84
 SIGNATURE OF DEVELOPER DATE

I 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 COUNTY 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 THIRTY DAYS OF COMPLETION.

Richard S. Mangione 10/4/85
 SIGNATURE OF ENGINEER DATE

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

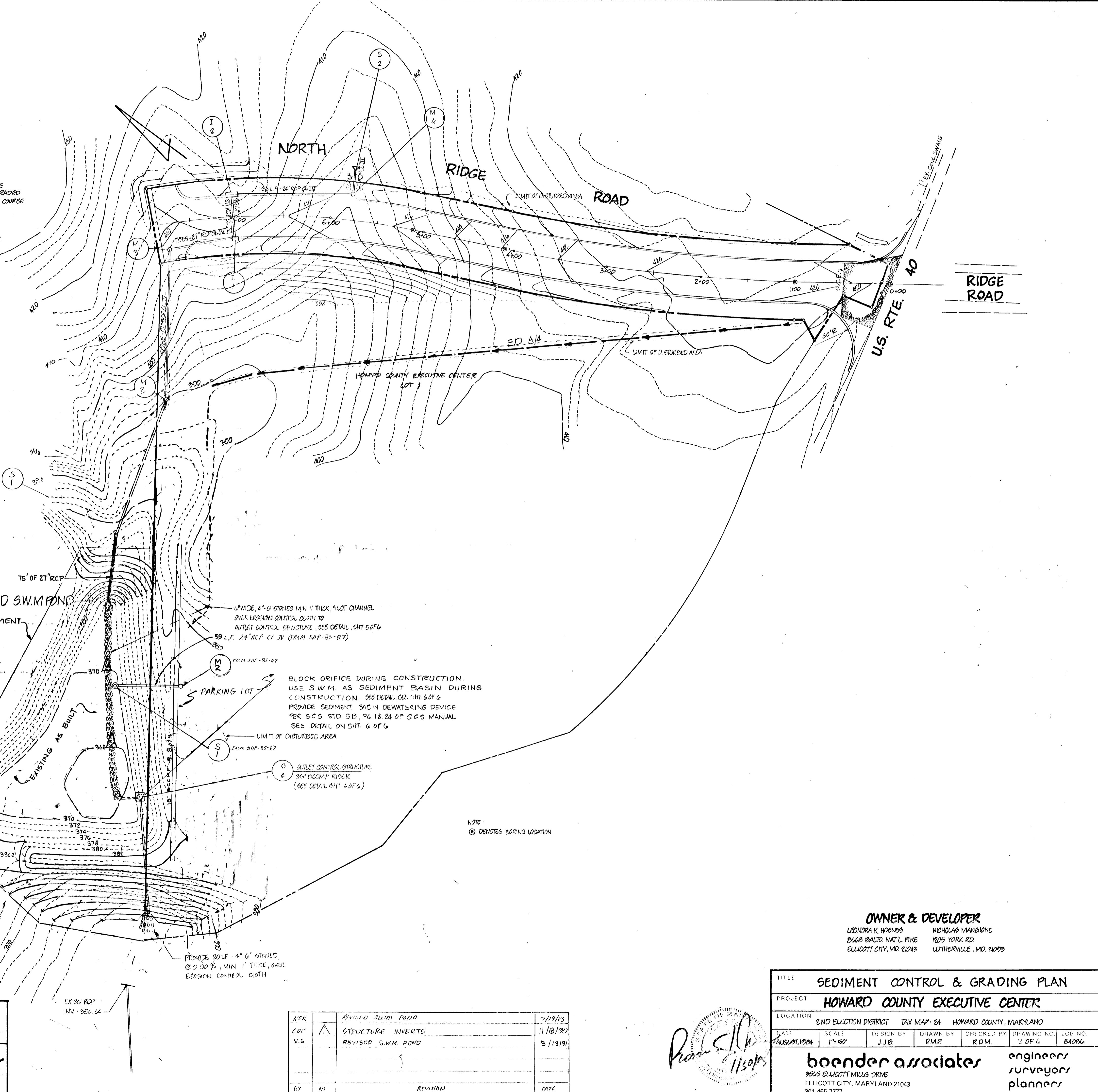
Richard S. Mangione 2-4-85
 HOWARD SOIL CONSERVATION DISTRICT DATE

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.

Richard S. Mangione 2-4-85
 U.S. SOIL CONSERVATION SERVICE DATE

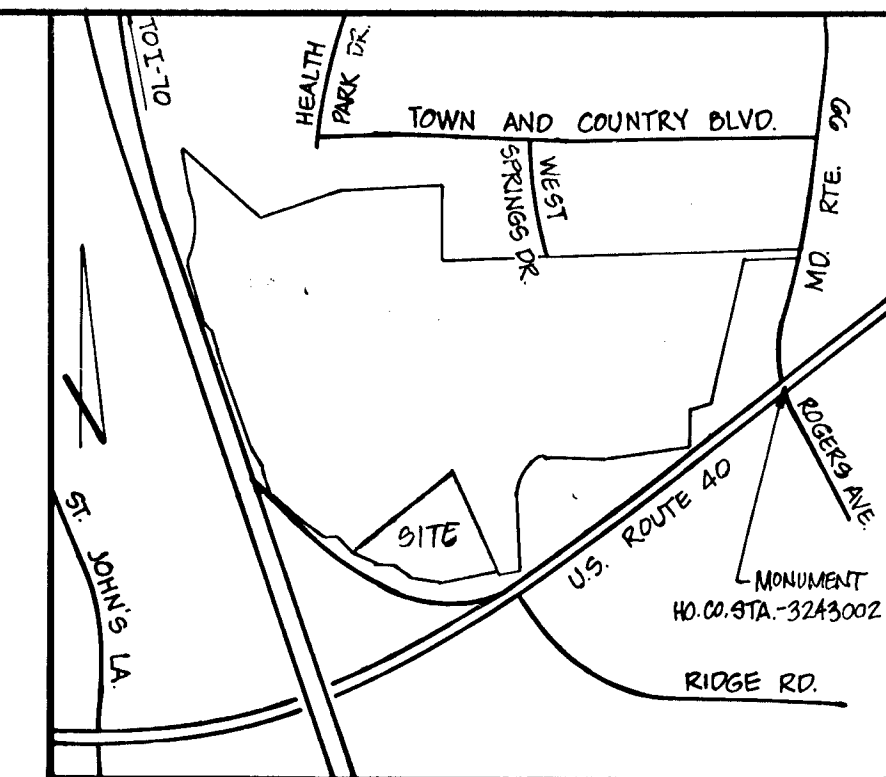
APPROVED DEPARTMENT OF PUBLIC WORKS
Richard S. Mangione 2-6-85
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED OFFICE OF PLANNING AND ZONING
Richard S. Mangione 2-5-85
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE



TITLE		SEDIMENT CONTROL & GRADING PLAN			
PROJECT		HOWARD COUNTY EXECUTIVE CENTER			
LOCATION		2ND ELECTION DISTRICT TAX MAP 24 HOWARD COUNTY, MARYLAND			
DATE	SCALE	DESIGN BY	DRAWN BY	CHECKED BY	DRAWING NO.
AUGUST, 1984	1" = 50'	J.J.B.	D.M.P.	R.D.M.	2 OF 6
JOB NO.		6A086			
engineers		surveyors			
planners		boender associates			
301-465-7777		9505 ELLICOTT MILLS DRIVE ELLICOTT CITY, MARYLAND 21043			

F-85-57



VICINITY MAP
SCALE: 1"=1200'

GENERAL NOTES

- TAX MAP: 24 PART OF PARCEL: 840447
- EX. ZONING: P.O.R.
- DEED REFERENCE: 394/119
- PROPOSED SITE USE: OFFICE
- TOTAL AREA OF SITE: 9.4 AC
- TOTAL NUMBER OF LOTS: 1
- TOTAL AREA OF LOTS: 6.0[±]
- TOTAL AREA OF ROAD DEDICATION: 3.40 AC
- TOTAL AREA OF FLOODPLAIN: 0 AC
- TOTAL AREA OF OPEN SPACE: 0 AC
- ROGERS AVENUE, U.S. ROUTE 40 AND U.S. ROUTE 29 ARE EXISTING PUBLIC ROADS.
- PUBLIC WATER AND PUBLIC SEWERAGE ARE TO BE UTILIZED.
- BOUNDARY SHOWN HEREON IS BASED ON PROPERTY PLAT PREPARED BY RUDOLPH B. JESCHKE, DATED OCT. 10, 1966.
- TOPOGRAPHY SHOWN HEREON IS BASED ON HOWARD COUNTY AERIAL TOPOGRAPHIC MAPS 129-42, 129-43, 129-44, AND 129-45.

BEARING & DISTANCE DATA

NO.	BEARING	DISTANCE
1	N17°00'10"W	118.62'
2	N11°37'21"W	333.82'
3	N05°29'38"E	211.19'
4	N15°10'01"W	93.19'
5	N18°40'08"W	99.22'
6	S15°33'16"E	121.98, 26'
7	N29°52'27"W	101.04'
8	N15°51'56"W	200.73'
9	N16°24'59"W	91.62'
10	N24°43'14"W	160.83'
11	N2°52'51"W	54.18'
12	N18°36'50"W	150.75'
13	N26°09'49"W	160.72'
14	N21°15'59"W	81.42'
15	N21°11'44"W	128.43'
16	S 64° 1' 20" E	258.11'
17	N14°12'14"W	89.77'
18	N52°41'19"W	98.16'
19	N85°52'13"W	107.70'
20	N42°16'05"W	107.70'
21	N64°04'09"W	200.00'
22	N87°20'08"W	101.28'
23	N14°02'10"W	141.17'
24	S 64.1 20' E	219.95'
25	S 14.16 10' W	103.92'
26	S 82.11 34' W	132.98'
27	N14°31'34"W	37.00'
28	S 17°22'56"W	79.04'
29	S 111.5 22' E	19.61'
30	S 104°49'40"E	754.79'
31	S 83°14'20"W	429.77'
32	S 32°44'10"W	42.63'
33	S 6°27'20"W	200.00'
34	S 27°47'40"E	216.20'

DRAINAGE AREA TO POND
EXISTING: 15.8 AC. (AREAS A, C, D, E)
PROPOSED DRAINAGE: 19.4 AC. (AREAS A, B, C, D, E)

DRAINAGE AREA

NO.	AREA
A	3.9 AC.
B	3.6 AC.
C	9.3 AC.
D	0.8 AC.
E	1.8 AC.

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Nicholas Mangione 10/4/84
SIGNATURE OF DEVELOPER DATE

I 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 COUNTY 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 THIRTY DAYS OF COMPLETION.

Howard J. Dennis 1/30/85
SIGNATURE OF ENGINEER DATE

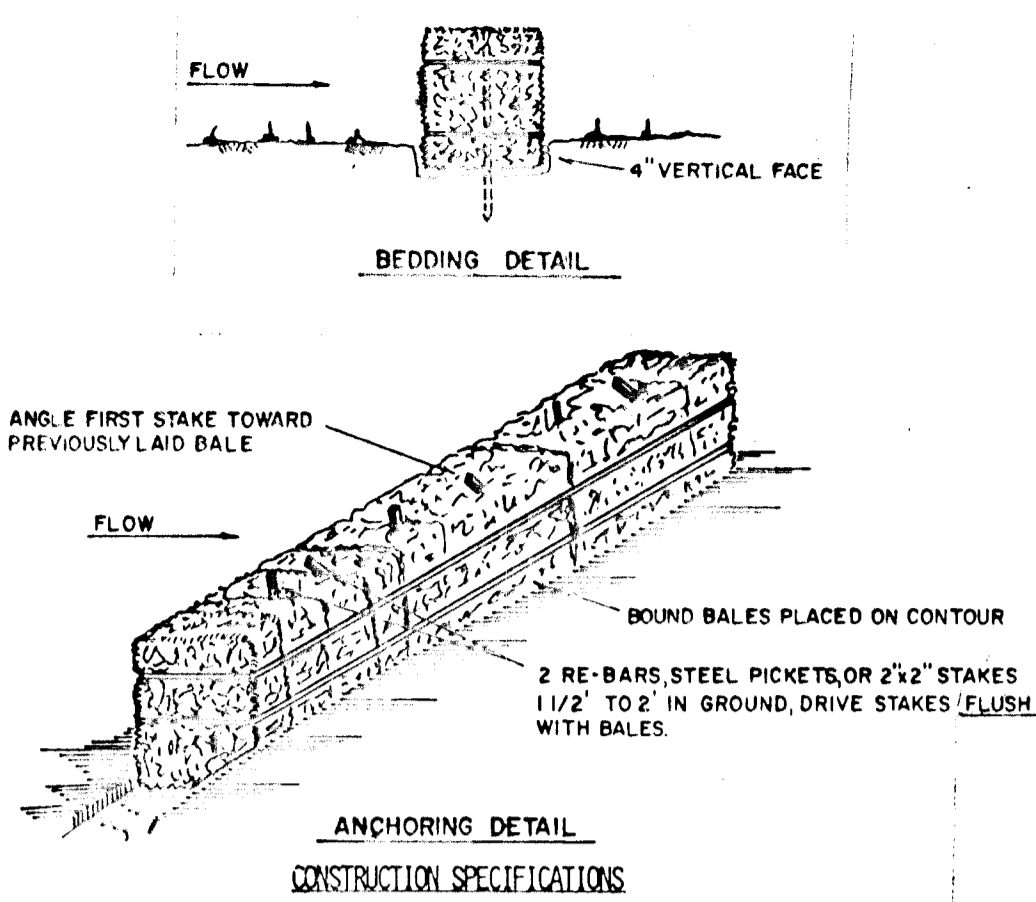
APPROVED DEPARTMENT OF PUBLIC WORKS
William S. Ray 2-6-85
CHIEF BUREAU OF ENGINEERING DATE

APPROVED OFFICE OF PLANNING AND ZONING
John J. Dennis 2-5-85
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

NOTE: SEDIMENT CONTROL WILL BE PROVIDED @ FINAL PLAN SUBMISSION.
Proctor & Mann 1/30/85

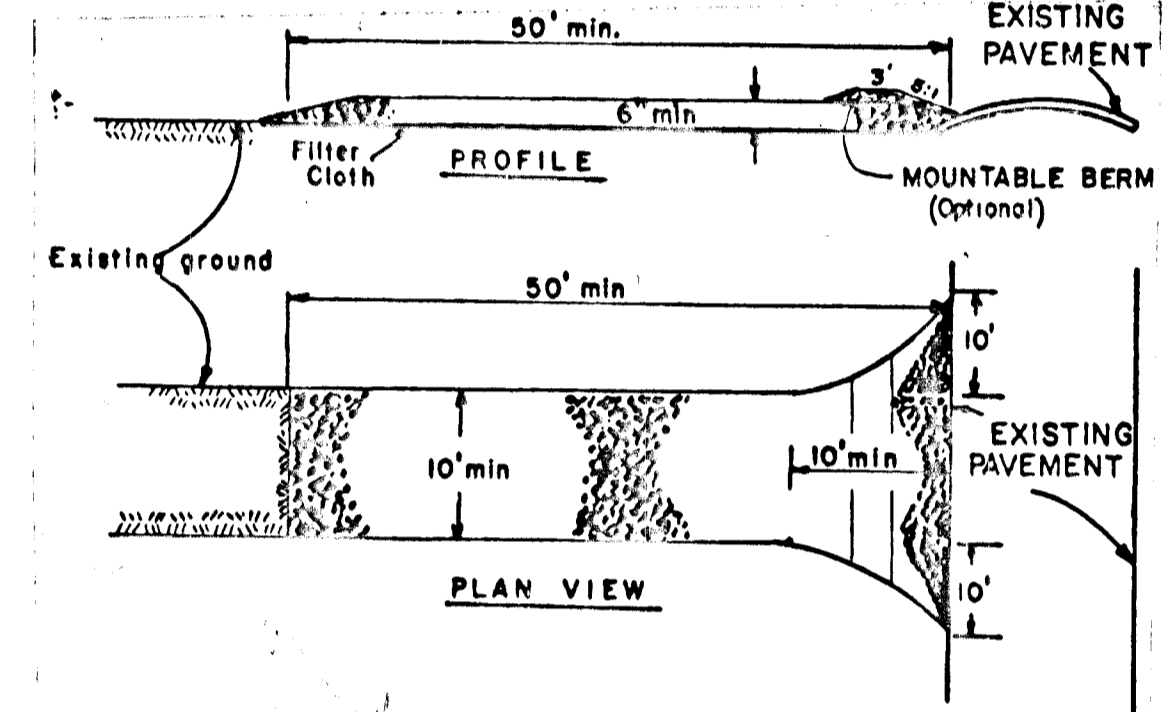
OWNER: LEONORA K. HOBBS, 394/119, 8608 BALTIMORE PIKE, ELLICOTT CITY, MD 21043
DEVELOPER: NICHOLAS MANGIONE, 1225 PARK RD., LUTHERVILLE, MD 21098

TITLE	DRAINAGE AREA MAP				
PROJECT	HOWARD COUNTY EXECUTIVE CENTER - SECT. I				
LOCATION	2ND ELECTION DISTRICT TAX MAP 24 PARCEL 848 HOWARD COUNTY, MD.				
DATE	SCALE	DESIGN BY	DRAWN BY	CHECKED BY	DRAWING NO. JOB NO.
JUNE, 1984	1"=100'	JJB	JJB/SJK	9/1/84	308 G 84086
boender associates 3506 ELLICOTT MILLS DRIVE ELLICOTT CITY, MARYLAND 21043 301-465-7777					engineers surveyors planners



- BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ADJUTING THE ADJACENT BALES.
- EACH BALE SHALL BE ERECTED IN THE SOIL A MINIMUM OF (4) INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
- BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
- INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPED STORM FLOW OR DRAINAGE.

STRAW BALE DIKE - S.B.D.
NOT TO SCALE



- CONSTRUCTION SPECIFICATIONS**
- Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
 - Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
 - Thickness - Not less than six (6) inches.
 - Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
 - Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
 - Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 3:1 slopes will be permitted.
 - Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
 - Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
 - Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE - S.C.E. - NOT TO SCALE

I 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 THIRTY DAYS OF COMPLETION.

Signature of Developer: *Nicholas Mangione* DATE: 10/4/84

I 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 COUNTY 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 THIRTY DAYS OF COMPLETION.

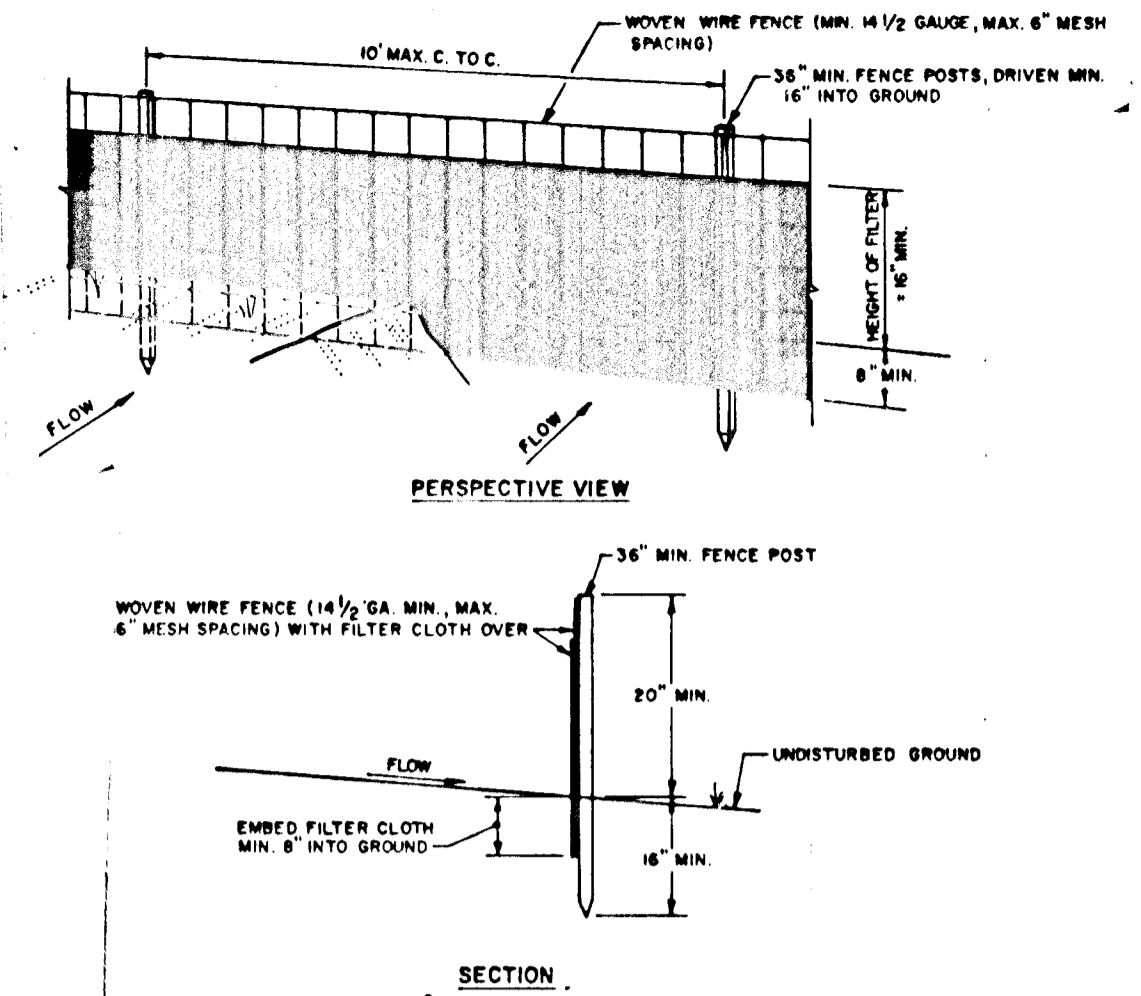
Signature of Engineer: *Romania J. Pomeroy* DATE: 11/30/85

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

Signature: *Robert W. Ziehm* DATE: 2/4/85
HOWARD SOIL CONSERVATION DISTRICT

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.

Signature: *J. Helm* DATE: 2/4/85
U.S. SOIL CONSERVATION SERVICE

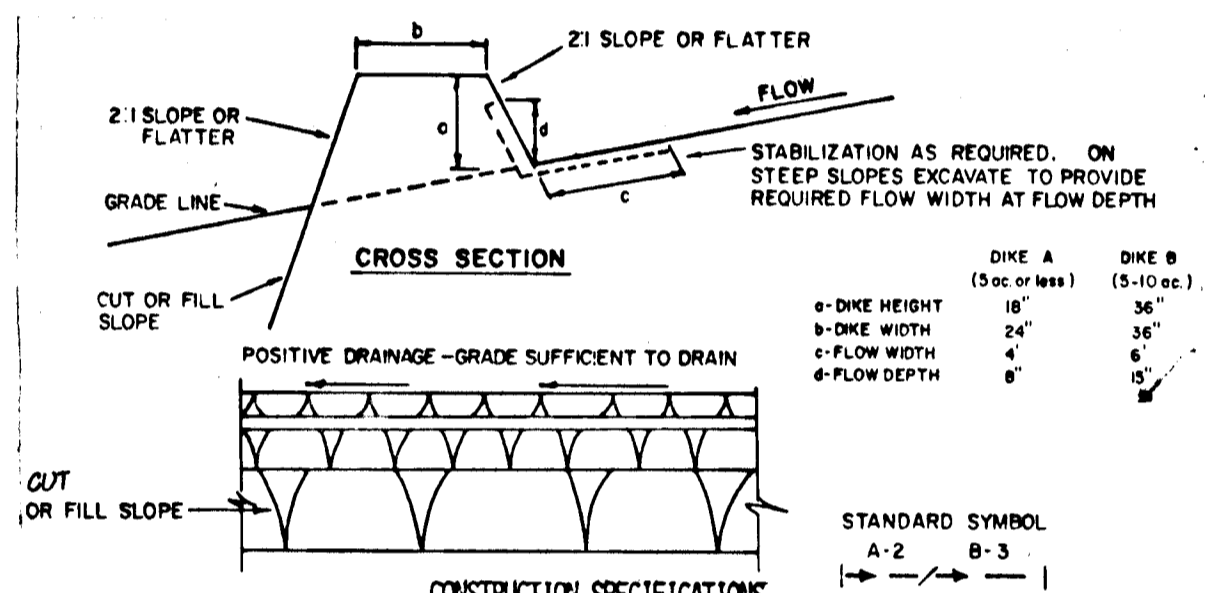


CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

- 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.

POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD
FENCE: WOVEN WIRE, 14" GA. 6" MAX. MESH OPENING
FILTER CLOTH: FILTER X, MURPHY 100% STABIL-LINK 1140N OR APPROVED EQUAL
PREFABRICATED UNIT: GEOFAB, DYNAFENCE, OR APPROVED EQUAL

SILT FENCE - S.F.
NOT TO SCALE



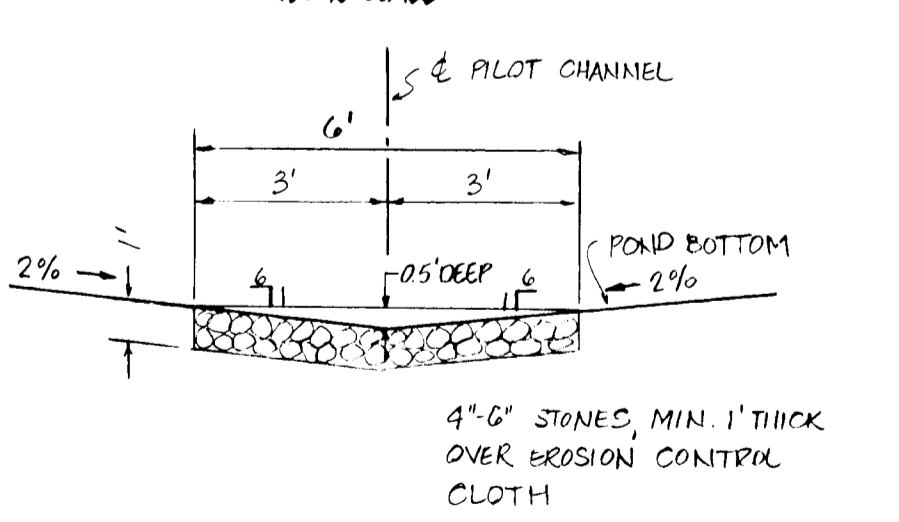
- ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
- ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
- TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
- FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE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

FLOW CHANNEL STABILIZATION

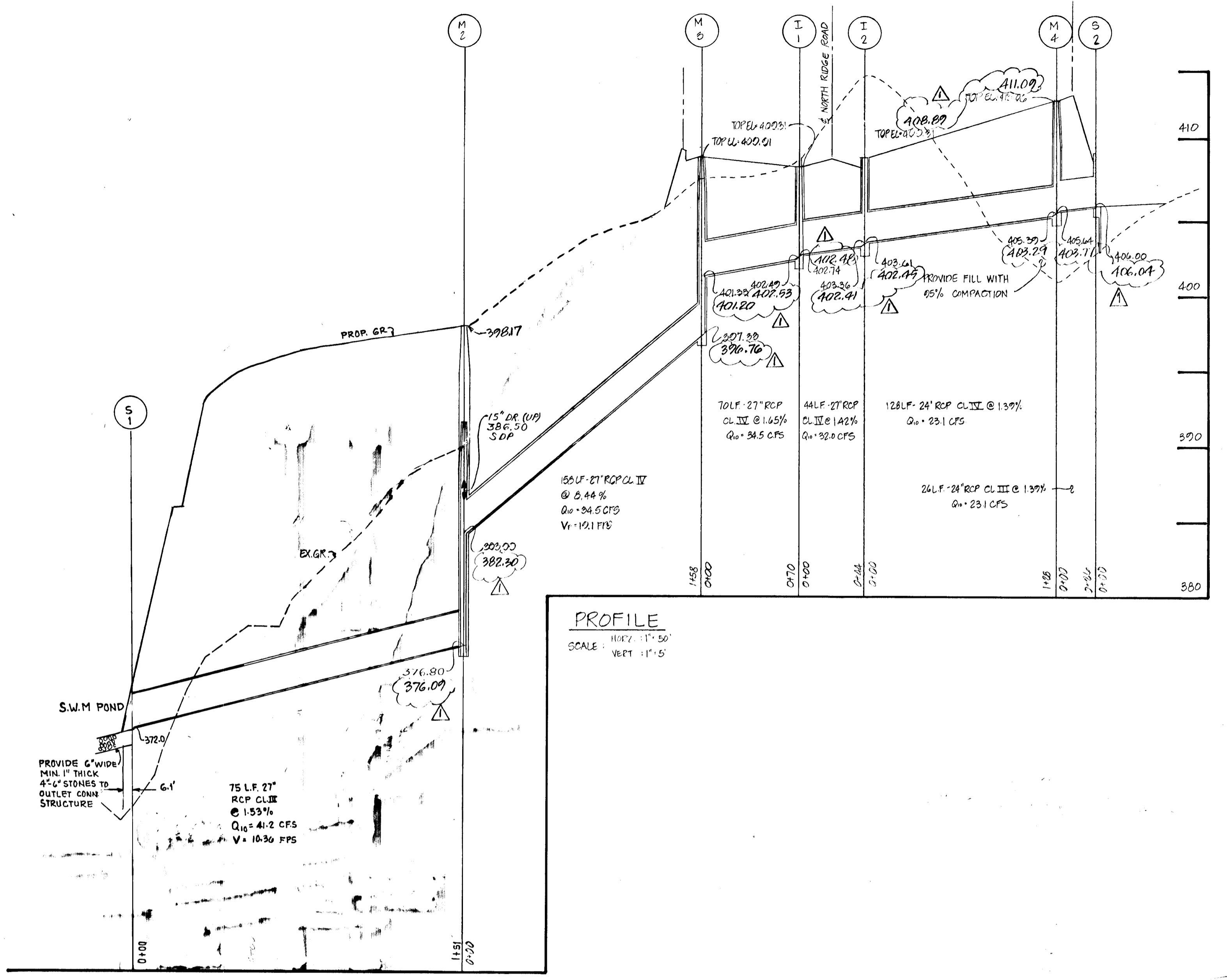
TYPE OF TREATMENT	CHANNEL SLOPE	DIKE A	DIKE B
1	5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0%	SEED AND STRAW MULCH	SEED USING JUTE, OR EXCELSIOR; SOD; 2" STONE
3	5.1-8.0%	SEED WITH JUTE, OR SOD; 2" STONE	LINED RIP-RAP 4-8"
4	8.1-20%	LINED RIP-RAP 4-8"	ENGINEERING DESIGN

- 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.
 - RIP-RAP TO BE 4-8 INCHES IN A LAYER AT LEAST 8 INCHES THICKNESS AND PRESSED INTO THE SOIL.
 - APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.
7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

EARTH DIKE - E.D.
NOT TO SCALE



NOT TO SCALE



APPROVED DEPARTMENT OF PUBLIC WORKS

Signature: *Warren E. Ridge* DATE: 2-6-85
CHIEF, BUREAU OF ENGINEERING

Signature: *John A. ...* DATE: 11/13/90
APPROVED OFFICE OF PLANNING AND ZONING

Signature: *John ...* DATE: 2-5-85
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

REVISION	DATE
REVISED PROFILE	7/18/85
PROFILE	11/13/90
PROFILE	3/14/90

Signature: *Romania J. Pomeroy* DATE: 1/30/85

OWNER & DEVELOPER
LEONORA K. HOENES NICHOLAS MANGIONE
BLA BLA NAT'L PINE 1005 YORK ROAD
ELICOTT CITY, MD 21043 LUTHERVILLE, MD 21093

TITLE						
SEDIMENT CONTROL DETAILS						
PROJECT HOWARD COUNTY EXECUTIVE CENTER - SECT. 1						
LOCATION 2ND ELECTION DISTRICT TAX MAP: 24 HOWARD COUNTY, MARYLAND						
DATE	SCALE	DESIGN BY	DRAWN BY	CHECKED BY	DRAWING NO.	JOB NO.
AUGUST, 1984	AS SHOWN	JJB	DMP	JAB	5 07 6	84026
boender associates engineers/surveyors/planners						
3565 - A COURT SQUARE ELLICOTT CITY, MARYLAND 21043 301-465-7777						

I. SITE PREPARATION

Areas under the borrow areas, embankment, and structural works shall be cleared, grubbed and the topsoil stripped to remove all trees, vegetation, roots or other objectionable material. Channel banks and sharp breaks shall be sloped to no steeper than 1:1.

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

All cleared and grubbed material shall be disposed of outside the limits of the dam and reservoir as directed by the owner 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.

II. EARTH FILL

Material

The fill material shall be taken from approved designated borrow area or areas. It shall be free of roots, stumps, wood, rubbish, over-size stones, frozen or other objectionable materials. 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 above the design elevation (including freeboard) as shown on the plans.

Placement

Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in 8-inch 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.

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 by not less than one tread track of the equipment or compaction shall be achieved by a minimum of four complete passes of a sheepfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction can be obtained with the equipment used.

Cutoff Trench

Where specified, a cutoff trench shall be excavated along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation, with the minimum width being four feet. The depth shall be at least four feet or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill material for the cutoff trench shall be the most impervious material available and shall be compacted with equipment or rollers to assure maximum density and minimum permeability.

III. STRUCTURAL BACKFILL

Backfill material shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four 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 feet, measured horizontally, to any part of a structure. Under no circumstances shall the contractor drive equipment over any part of a concrete structure or pipe unless there is a compacted fill of twenty-four inches or greater over the structure or pipe.

IV. PIPE CONDUITS

A. Corrugated Metal Pipe

1. Materials - (Steel Pipe) - This pipe and its appurtenances shall be galvanized and fully bituminous coated and shall conform to 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.

Materials - (Aluminum Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-196 or M-211 with watertight coupling bands. Coupling bands, anti-seep collars, end sections, etc. must be composed of the same material as the pipe. Metals must be insulated from dissimilar materials with use of rubber or plastic insulating materials at least 24 mils in thickness. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer. Hot dip galvanized bolts may be used for connections. The pH of the surrounding soils shall be less than 9 and greater than 4.

Helically corrugated pipe in addition to the requirements above shall have either continuously welded seams or have lock seams which are caulked, during fabrication, with a neoprene bead.

2. Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal. Watertight coupling bands shall be used at all joints. Anti-seep collars shall be connected to the pipe in such a manner as to be completely watertight.

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

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

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

B. Reinforced Concrete Pipe

1. Materials - Reinforced concrete pipe shall have a rubber gasket joint and shall equal or exceed ASTM Specification C-361. Approved equivalents are AWA Specification C-300, 301, and 302.

2. 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 up the sides of the pipe at least 10% of its diameter with a minimum thickness of 3", or as shown on the drawings.

3. 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.

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

C. For pipes of other materials, specific specifications shall be shown on the drawings.

V. CONCRETE

1. Materials

- Cement - Normal Portland cement shall conform to the latest ASTM Specification C-150.
- Water - The water used in concrete shall be clean, free from oil, acid, alkali, scales, organic matter or other objectionable substances.
- Sand - The sand used in concrete shall be clean, hard, strong and durable, and shall be well graded with 100 percent passing a one-quarter inch sieve. Limestone sand shall not be used.
- Coarse Aggregate - The coarse aggregate shall be clean, hard, strong and durable, and free from clay or dirt. It shall be well graded with a maximum size of one and one-half (1-1/2) inches.
- Reinforcing Steel - The reinforcing steel shall be deformed bars of intermediate grade billet steel or rail steel conforming to ASTM Specification A-615.

2. Design Mix - The concrete shall be mixed in the following proportions, measured by weight. The water-cement ratio shall be 5-1/2 to 6 U. S. gallons of water per 94 pound bag of cement. The proportion of materials for the trial mix shall be 1:2:3-1/2. The combination of aggregates may be adjusted to produce a plastic and workable mix that will not produce harshness in placing or honeycombing in the structure.

3. Mixing - The concrete ingredients shall be mixed in batch mixers until the mixture is homogeneous and of uniform consistency. The mixing of each batch shall continue for not less than one and one-half minutes after all the ingredients, except the full amount of water, are in the mixer. The minimum mixing time is predicted on proper control of the speed of rotation of the mixer and of the introduction of the materials, including water, into the mixer. Water shall be added prior to, during, and following the mixer-charging operations. Excessive overmixing requiring the addition of water to preserve the required concrete consistency shall not be permitted. Truck mixing will be allowed provided that the use of this method shall cause no violation of any applicable provisions of the specifications given here.

4. Forms - The forms shall have sufficient strength and rigidity to hold the concrete and to withstand the necessary pressure, tamping, and vibration without deflection from the prescribed lines. They shall be mortar-tight and constructed so that they can be removed without hammering or prying against the concrete.

The inside of forms shall be oiled with a non-staining mineral oil or thoroughly wetted before concrete is placed. Forms may be removed 24 hours after the placement of concrete. All wire ties and other devices used shall be recessed from the surface of the concrete.

5. Reinforcing Steel - All reinforcing material shall be free of dirt, rust, scale, oil, paint or any other coatings. The steel shall be accurately placed and securely tied and blocked into position so that no movement of the steel will occur during placement of concrete.

6. Consolidating - Concrete shall be consolidated with internal type mechanical vibrators. Vibration shall be supplemented by spading and hand tamping as necessary to insure smooth and dense concrete along form surfaces, in corners, and around embedded items.

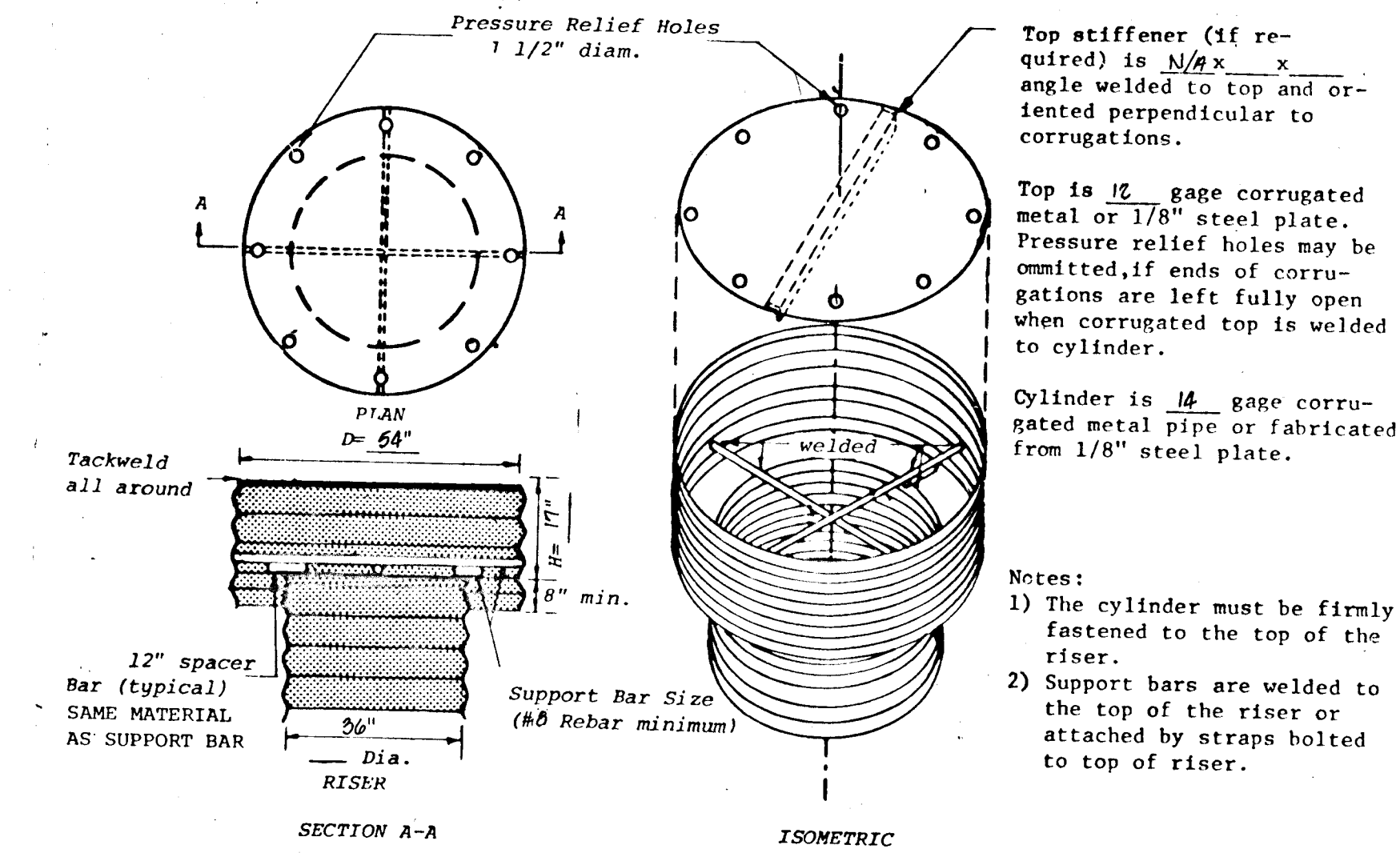
7. Finishing - Defective concrete, honeycombed areas, voids left by the removal of tie rods, ridges on all concrete surfaces permanently exposed to view or exposed to water on the finished structure, shall be repaired immediately after the removal of forms. All voids shall be reamed and completely filled with dry-patching mortar.

8. Protection and Curing - Exposed surfaces of concrete shall be protected from the direct rays of the sun for at least the first three (3) days. All concrete shall be kept continuously moist for at least ten (10) days after being placed. Moisture may be applied by spraying or sprinkling as necessary to prevent the concrete from drying. Concrete shall not be exposed to freezing during the curing period. Curing compounds may also be used.

9. Placing Temperature - Concrete may not be placed at temperatures below 37° F with the temperature falling, or 34° with the temperature rising.

VI. 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 by seeding, fertilizing and mulching (if required) in accordance with the vegetative treatment specifications shown on or accompanying the drawings.



TRASH RACK DETAIL
NOT TO SCALE

APPROVED: OFFICE OF PLANNING AND ZONING
Arthur Louis Feltm 2-5-85
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE AND STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
W. J. ... 2-6-85
CHIEF, BUREAU OF ENGINEERING DATE

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

Robert Ziehn 2/4/85
HOWARD SOIL CONSERVATION DISTRICT DATE

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.

J. Helms 2/4/85
U.S. SOIL CONSERVATION SERVICE DATE

I 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 THIRTY DAYS OF COMPLETION.

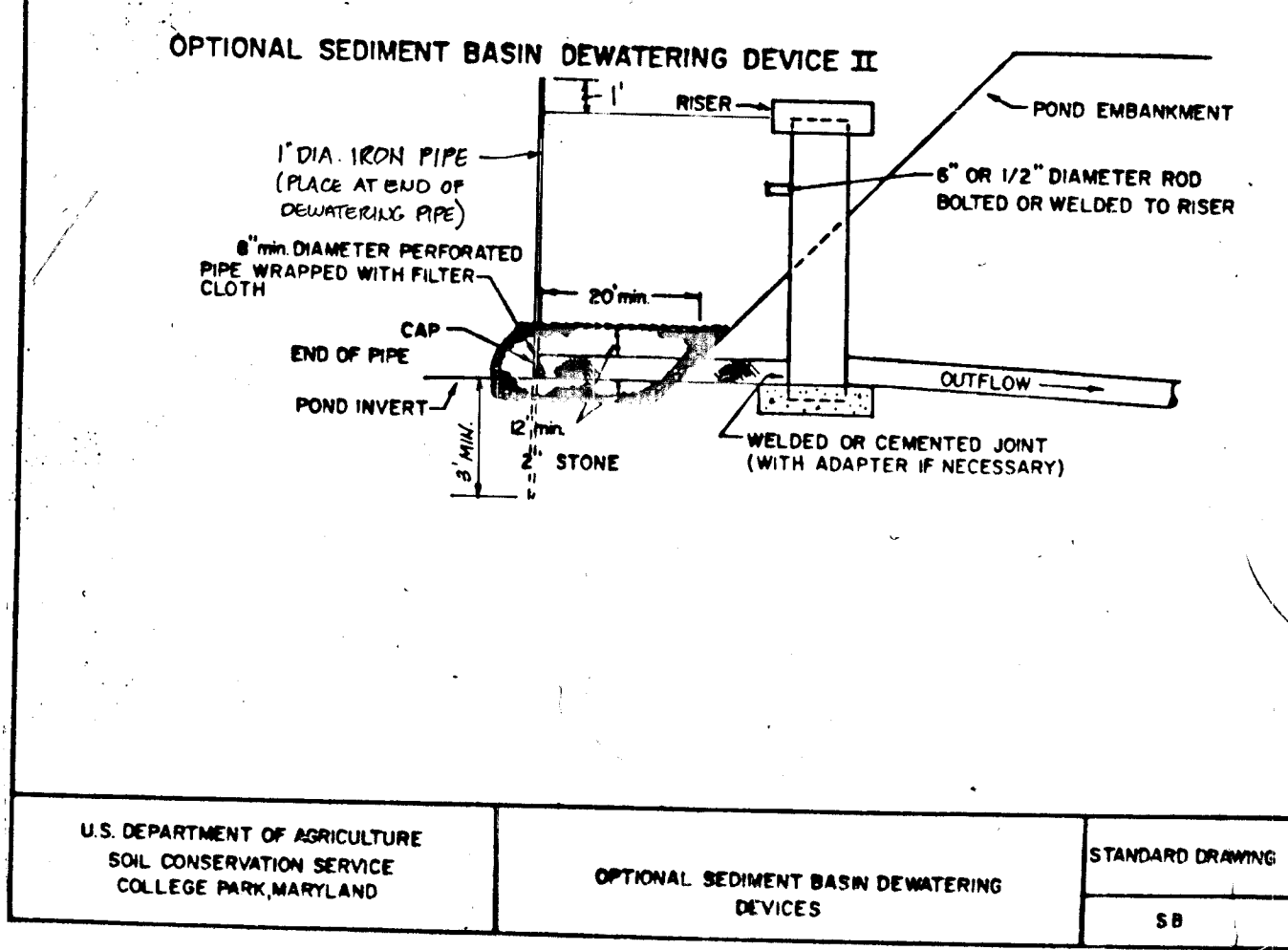
Richard A. Mangione 10/4/84
SIGNATURE OF DEVELOPER DATE

I 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 COUNTY 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 THIRTY DAYS OF COMPLETION.

Thomas S. ... 1/26/85
SIGNATURE OF ENGINEER DATE

OWNER & DEVELOPER
LEONORA K. HOENES NICHOLAS MANGIONE
6605 BACON NAT. PIKE 1206 YORK ROAD
ELLICOTT CITY, MD 21043 LUTHERVILLE, MD. 21093

TITLE: S.W.M. POND CONSTRUCTION SPECS.
PROJECT: HOWARD COUNTY EXECUTIVE CENTER
LOCATION: 2ND ELECTION DISTRICT TAX MAP 24 HOWARD COUNTY, MARYLAND
DATE: SEPT, 1984 SCALE: AS SHOWN DESIGN BY: JJI DRAWN BY: DATE: CHECKED BY: DRAWING NO.: JOB NO.:
boender associates engineers/surveyors/planners
ELLICOTT CITY, MARYLAND 21043 301-465-7777



OPTIONAL SEDIMENT BASIN DEWATERING DEVICES
U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND
STANDARD DRAWING 58
SEE S.C.S. MANUAL, PG. 824

Thomas S. ... 1/30/85