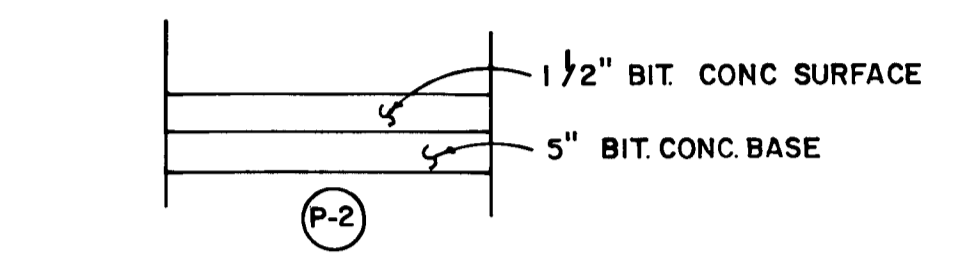
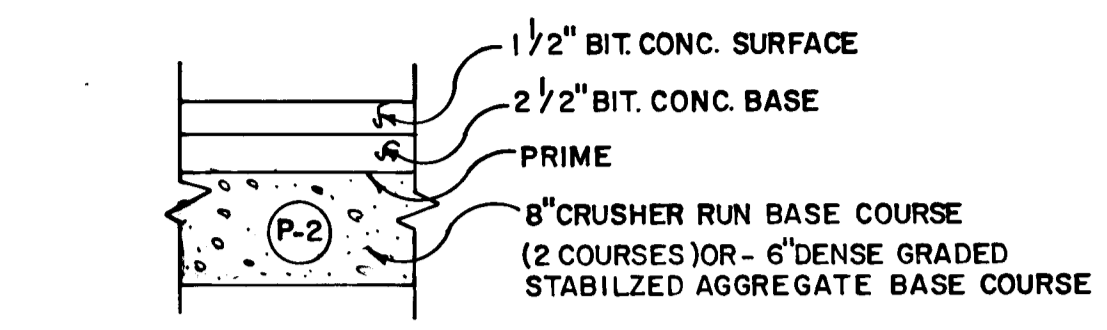
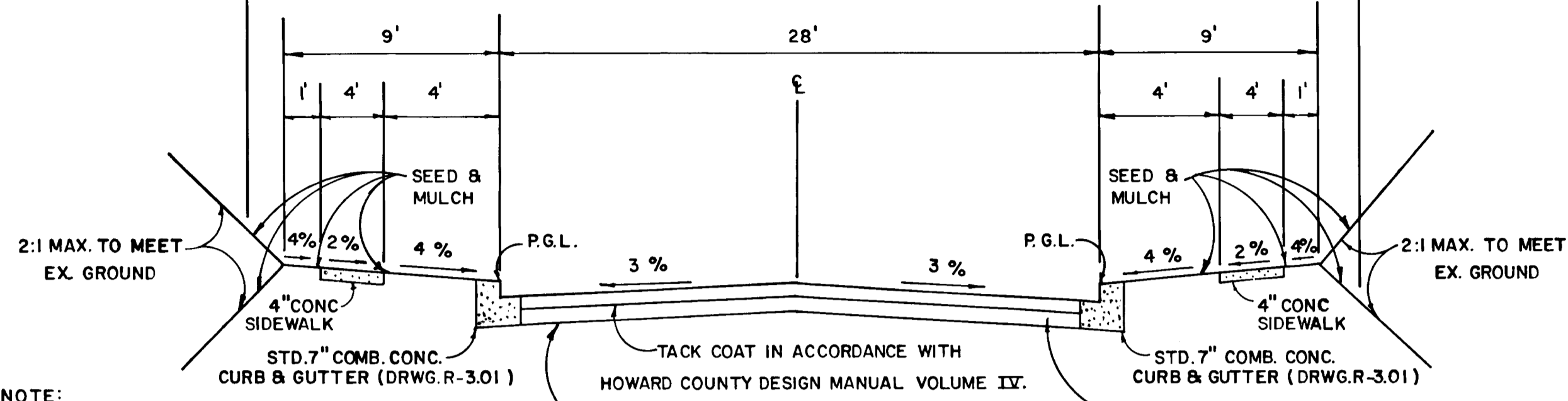
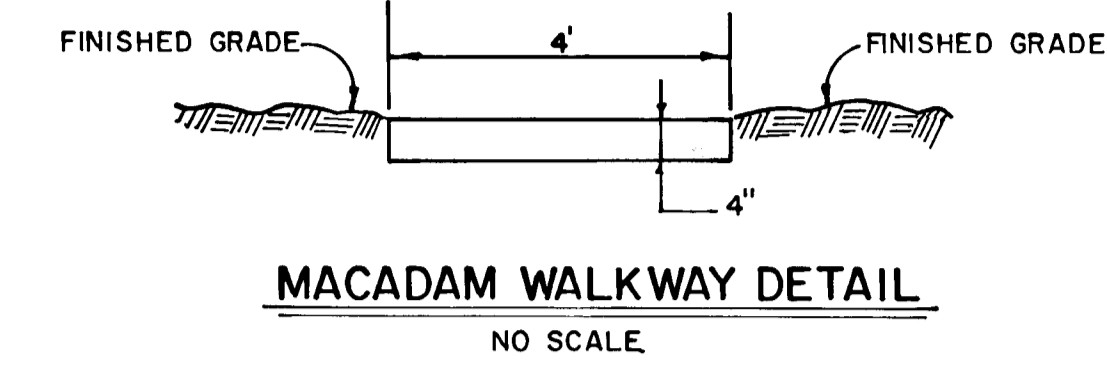


EMILY FOX COURT

TYPE OF ROADWAY: CUL-DE-SAC
ZONED R-20
STA. 0+00 TO STA. 4+89.46
DESIGN SPEED: 25 M.P.H.

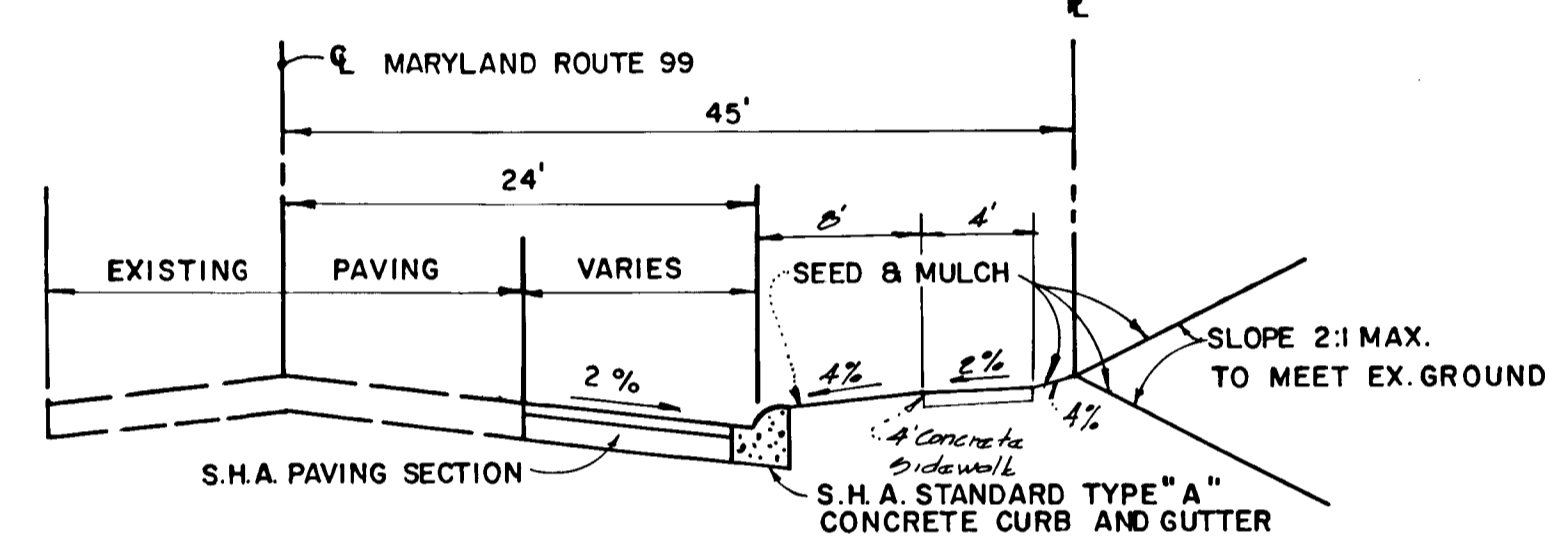
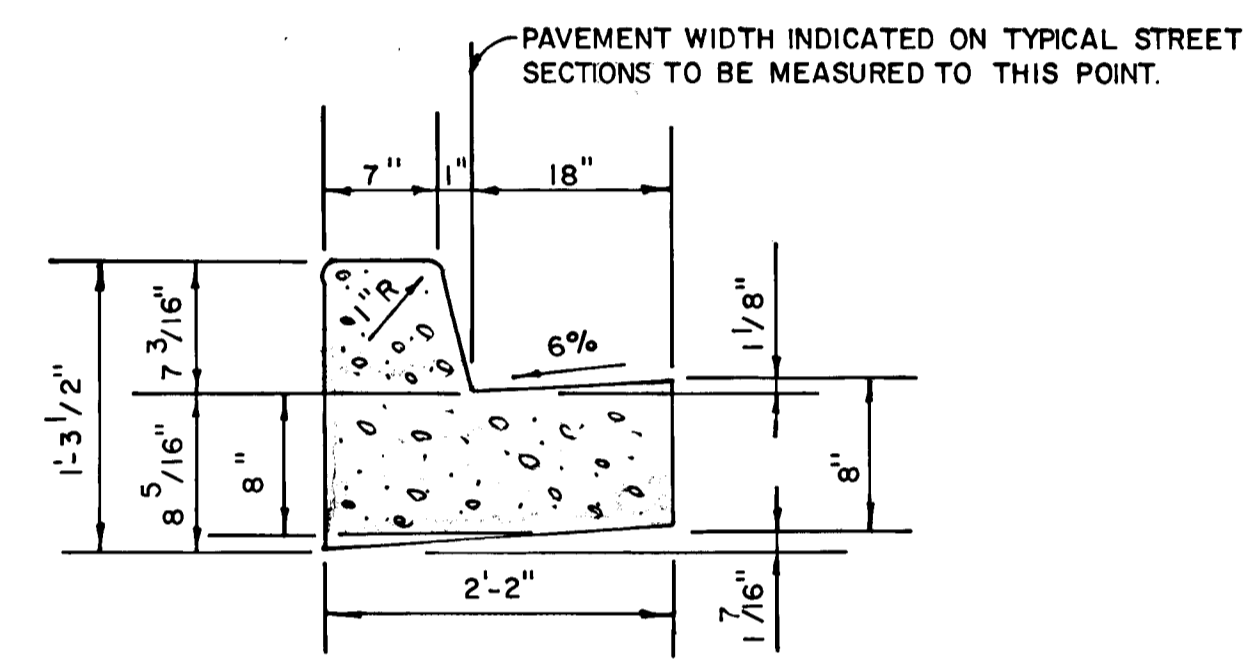


STRUCTURE SCHEDULE						
STRUCTURE	TYPE	INVERT IN	INVERT OUT	TOP ELEV.	STATION	REMARKS
I-1	A-B INLET	-	461.50	466.10	LP 1+17.00	DRWG. SD 401
M-1	MANHOLE	460.44	460.19	464.00	-	DRWG. G 309
S-1	METAL END SECTION	-	443.67	444.92	-	DRWG. SD 203
M-2	MANHOLE	447.11	444.15	450.50	-	DRWG. G. 305
I-1	-	-	461.51	466.12	-	-
M-1	-	460.46	460.01	464.11	-	-
S-1	-	-	443.67	444.92	-	-
M-2	-	446.82	443.78	457.41	-	-

NOTE:
ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL-VOLUME IV STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.

TYPICAL ROADWAY SECTION
NO SCALE

S.H.A. SECTION SHALL BE 3" (NOMINAL) BITUMINOUS CONCRETE SURFACE IN 2-1/2" LAYERS UTILIZING A SN MIXTURE PLUS 5" (NOMINAL) BITUMINOUS CONCRETE BASE (OR 5" SAND ASPHALT BASE) ON ONE OF THE FOLLOWING:
4" CR-6, OR
4" DENSE GRADED AGGREGATE BASE, OR
6" GRAVEL



APPROVED
DEPARTMENT OF PUBLIC WORKS
[Signature] 7/13/88
CHIEF, LAND DEVELOPMENT DIVISION
DATE

[Signature] 7/13/88
CHIEF, BUREAU OF HIGHWAYS
DATE

[Signature] 7-11-88
DATE

APPROVED
OFFICE OF PLANNING AND ZONING
[Signature] 7/13/88
COMMUNITY PLANNING
AND LAND DEVELOPMENT
DATE

FOXWOOD
LOTS 1-17
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

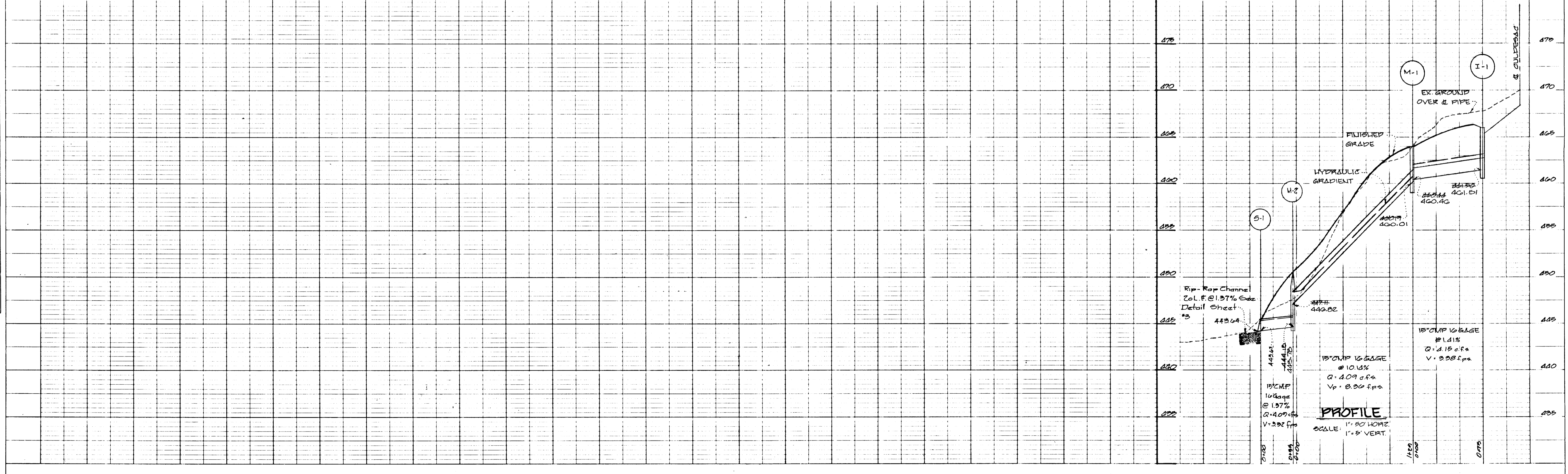
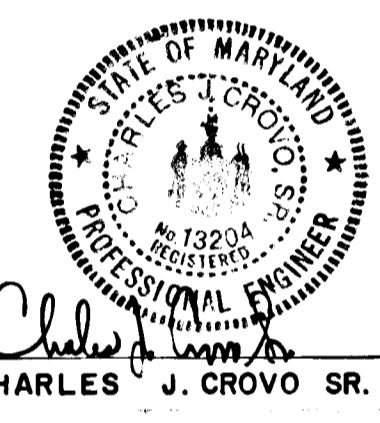
ROAD SECTION, DETAILS AND STORM DRAIN PROFILES

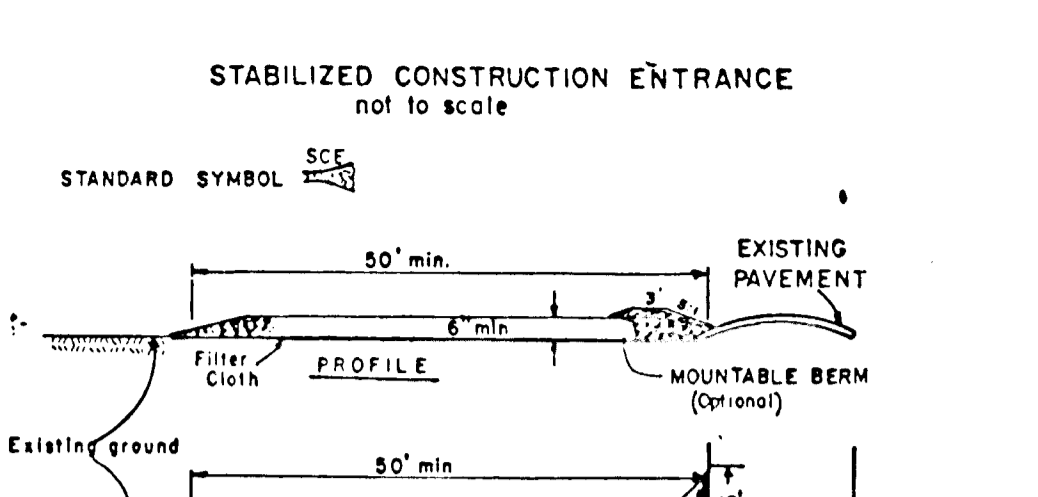
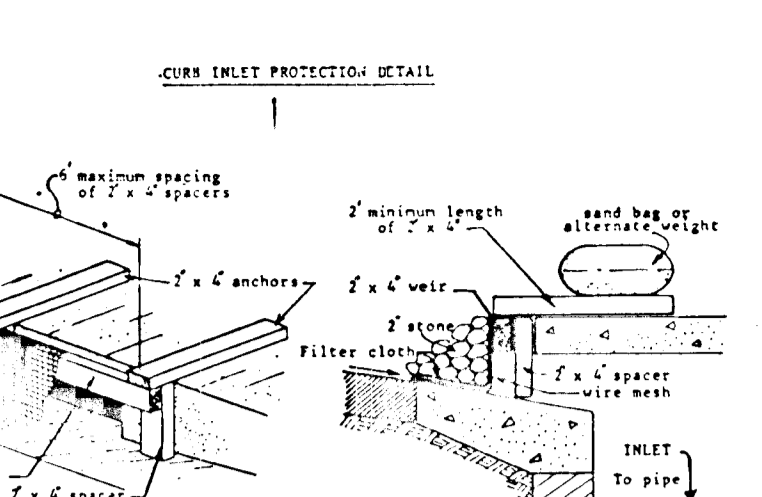
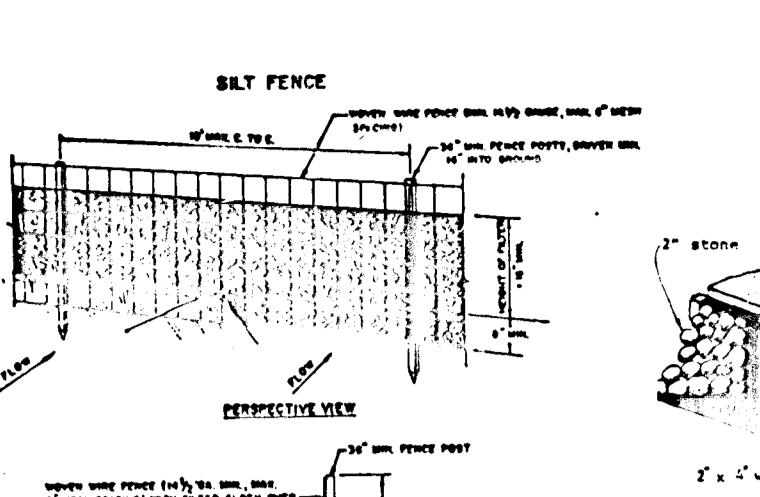
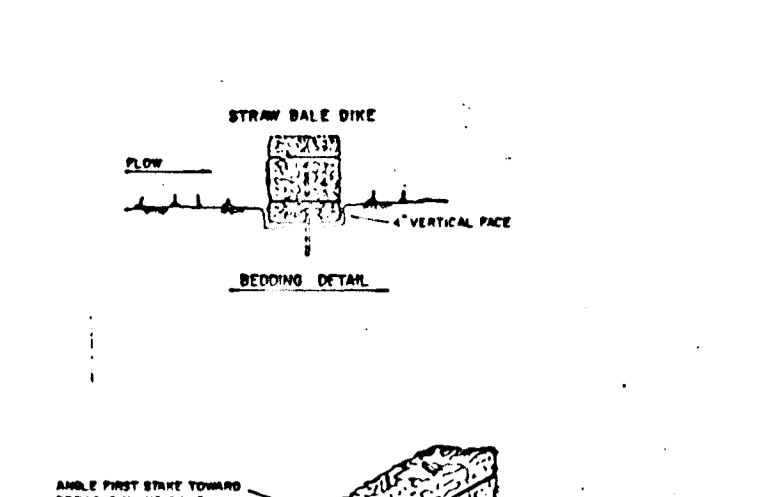
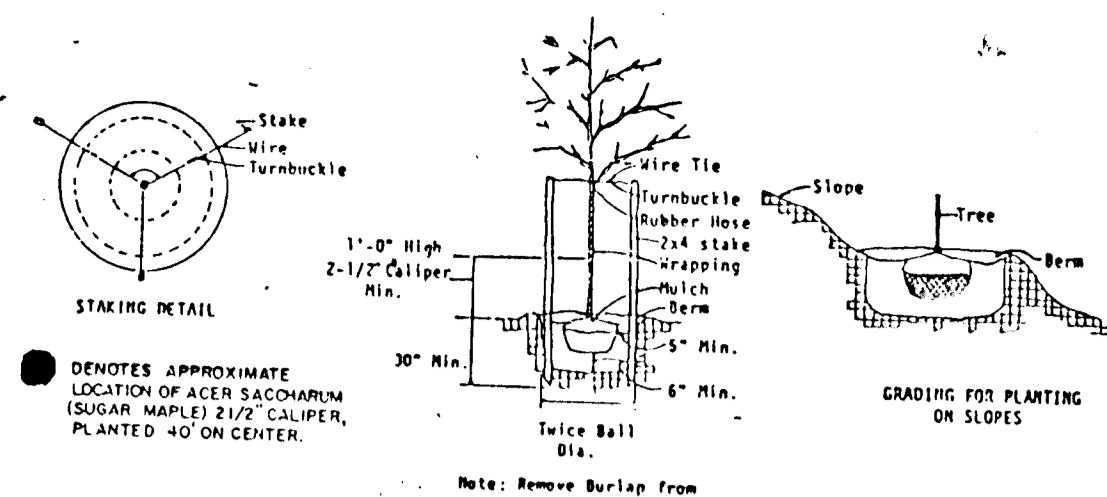
OWNER AND DEVELOPER
MR. CLYDE SMITH, JR. SMITH, ROBERTS AND ASSOC.
10047 OLD FREDERICK ROAD P.O. BOX 15
ELLCOTT CITY, MD. 21043 ELLCOTT CITY, MD. 21043

SCALE AS SHOWN DATE MAR. 25, 1988 DWG. NO. 2 OF 5
DES. A.M. VITUCCI DRN. C. BAUER CIV. C. CROVO SR.

FISHER, COLLINS AND CARTER, INC.
CIVIL ENGINEERS AND LAND SURVEYORS
8388 COURT AVE. ELLCOTT CITY, MARYLAND 21043

[Signature] 4/13/88
CHARLES J. CROVO SR. DATE





PERMANENT SEEDING NOTES:
 APPLY TO GRADED OR CLEARED AREAS TO BE DISTURBED BY EROSION, DISKING OR OTHER MEANS. TO BE USED IN CONJUNCTION WITH THIS PLAN AND PERMITS.
 1. PERMANENT SEEDING SHALL BE COMPLETED WITHIN 30 CALENDAR DAYS OF THE DATE OF THE PERMITS.
 2. SEEDING SHALL BE DONE AT A RATE OF 100 LBS. PER ACRE OF DISTURBED AREA.
 3. SEEDING SHALL BE DONE AT A RATE OF 100 LBS. PER ACRE OF DISTURBED AREA.
 4. SEEDING SHALL BE DONE AT A RATE OF 100 LBS. PER ACRE OF DISTURBED AREA.
 5. SEEDING SHALL BE DONE AT A RATE OF 100 LBS. PER ACRE OF DISTURBED AREA.

ENGINEER'S CERTIFICATE
 I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 SIGNATURE: *Charles J. Crovo Jr.* DATE: 4/13/88
 TITLE: REGISTERED PROFESSIONAL ENGINEER

NOTE: CONTRACTOR SHALL VERIFY LOCATION OF UNDERGROUND UTILITIES PRIOR TO DIGGING. FINAL LOCATIONS OF TREES MAY BE ADJUSTED SLIGHTLY TO ACCOMMODATE FIELD CONDITIONS. PLANTING PROCEDURES SHALL COMPLY WITH "LANDSCAPE SPECIFICATIONS FOR BALTIMORE-WASHINGTON METROPOLITAN AREAS" - SUBSTITUTIONS TO THE ABOVE SPECIES MAY BE PERMITTED, PROVIDED THAT THE PLANTING IS IN ACCORDANCE WITH THE STREET TREE AND LANDSCAPE REQUIREMENTS AS SPECIFIED IN SECTION 16.131 OF THE HOWARD COUNTY SUBDIVISION REGULATIONS.

CONSTRUCTION SPECIFICATIONS
 1. BALE SHALL BE PLACED AT THE TOP OF A SLOPE OR ON THE CURB AND IN A ROW WITH 200 TO 300 FEET BETWEEN THE ADJACENT BALES.
 2. LOW WIRE SHALL BE PLACED IN THE SOIL A MINIMUM OF 60 INCHES, AND PLACED SO THE BALES ARE VERTICAL.
 3. BALE SHALL BE SECURELY ANCHORED IN PLACE BY STRAPING THE STRAPES OR BEARS OVER THE TOP OF THE BALE. THE FIRST STRAP SHALL BE PLACED AT THE TOP OF THE BALE. STRAPS SHALL BE SPACED 12 INCHES ON CENTER.
 4. INSPECTION SHALL BE PERFORMED AND REPAIRS MADE AS NECESSARY.
 5. BALE SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR PURPOSE AS NOT TO BLOCK OFF PUBLIC HIGHWAYS OR DRIVEWAYS.

CONSTRUCTION NOTES FOR EMPANICATED SILT FENCE
 1. Where wire fence is to be fastened vertically to fence posts with wire ties or staples, the wire shall be placed in the hole of the post and secured with a staple.
 2. Place a length of approved filter cloth (40-85 micron) over the wire mesh and securely attach to the 2" x 4" waler.
 3. Securely nail the 2" x 4" waler to 6" long vertical spacers to be located between the waler and inlet face (over 4" waler).
 4. Place the assembly against the inlet throat and wall (minimum 2' length of 2" x 4" waler to the top of the waler at spacer locations). These 2" x 4" walers shall extend across the inlet top and be held in place by sandbags or alternate weight.
 5. The assembly shall be placed so that the waler and spacers are a minimum 1" beyond both ends of the throat opening.
 6. Form the wire mesh and filter cloth to the concrete gutter and against the face of curb on both sides of the inlet. Place clean 2" stone over the wire mesh and filter fabric in such a manner as to prevent water from entering the inlet under or around the filter cloth.
 7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.
 8. Ensure that stone flow does not bypass inlet by installing temporary earth or asphalt dikes directing flow into inlet.

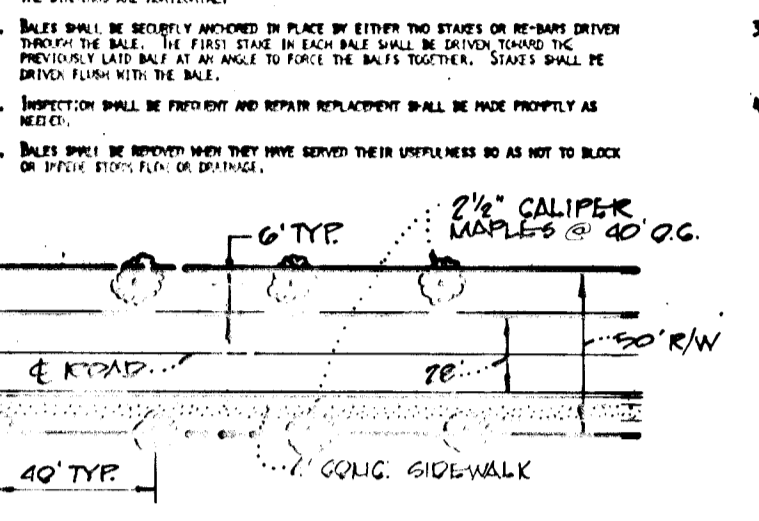
CONSTRUCTION SPECIFICATIONS
 1. Stone Size - Use 2" stone, or recycled or recycled concrete equivalent
 2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
 3. Thickness - Not less than six (6) inches.
 4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
 5. 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.
 6. 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.
 7. 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 cleanup of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
 8. Washing - Wheelie 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.
 9. Periodic inspection and needed maintenance shall be provided after each rain.

TEMPORARY SEEDING NOTES:
 APPLY TO GRADED OR CLEARED AREAS TO BE DISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.
 1. SEEDING SHALL BE COMPLETED WITHIN 30 CALENDAR DAYS OF THE DATE OF THE PERMITS.
 2. SEEDING SHALL BE DONE AT A RATE OF 100 LBS. PER ACRE OF DISTURBED AREA.
 3. SEEDING SHALL BE DONE AT A RATE OF 100 LBS. PER ACRE OF DISTURBED AREA.
 4. SEEDING SHALL BE DONE AT A RATE OF 100 LBS. PER ACRE OF DISTURBED AREA.
 5. SEEDING SHALL BE DONE AT A RATE OF 100 LBS. PER ACRE OF DISTURBED AREA.

DEVELOPER'S CERTIFICATE
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.
 SIGNATURE: *W. Ballou* DATE: 6-21-88
 TITLE: DEVELOPER

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 SIGNATURE: *J. O'Connell* DATE: 6/24/88
 TITLE: U.S. SOIL CONSERVATION DISTRICT

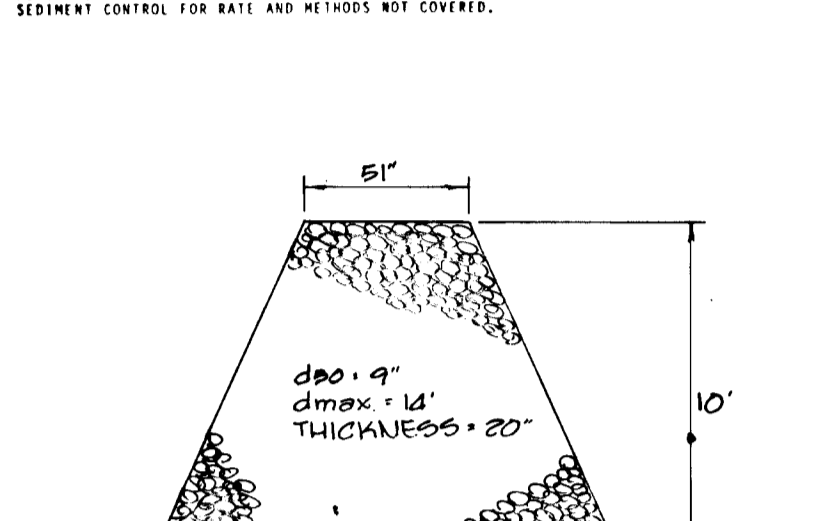
SEDIMENT CONTROL NOTES:
 1. A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTIONS AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION (SEC. 282.17).
 2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
 3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: (A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1; (B) 14 DAYS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
 4. ALL SEDIMENT TRAPS/BASINS MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
 5. 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 SEEDINGS (SEC. 513.500 (SEC. 54)), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING RATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
 6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
 7. SITE ANALYSIS:
 TOTAL AREA OF SITE: 13,087 ACRES
 AREA TO BE ROOFED OR PAVED: 8,000 ACRES
 AREA TO BE VEGETATIVELY STABILIZED: 5,000 ACRES
 TOTAL CUT: 3,000 CU. YDS.
 TOTAL FILL: 3,000 CU. YDS.
 OFFSITE WASTE/BORROW AREA LOCATION: AS SHOWN ON THE PERMITS.
 8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY OR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
 9. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
 10. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING, OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.



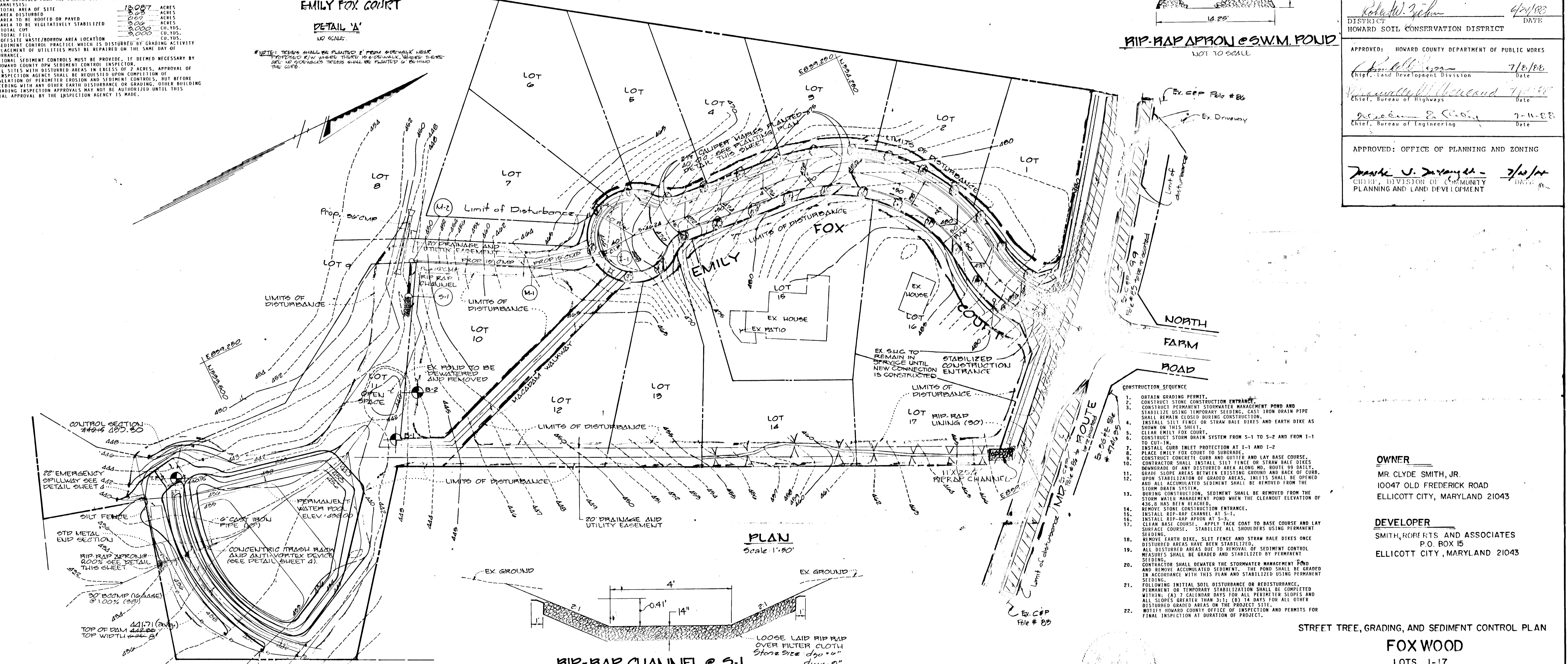
EMILY FOX COURT
 DETAIL 'A'
 NO SCALE

CONSTRUCTION SPECIFICATIONS
 1. Stone Size - Use 2" stone, or recycled or recycled concrete equivalent
 2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
 3. Thickness - Not less than six (6) inches.
 4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
 5. 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.
 6. 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.
 7. 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 cleanup of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
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TEMPORARY SEEDING NOTES:
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 1. SEEDING SHALL BE COMPLETED WITHIN 30 CALENDAR DAYS OF THE DATE OF THE PERMITS.
 2. SEEDING SHALL BE DONE AT A RATE OF 100 LBS. PER ACRE OF DISTURBED AREA.
 3. SEEDING SHALL BE DONE AT A RATE OF 100 LBS. PER ACRE OF DISTURBED AREA.
 4. SEEDING SHALL BE DONE AT A RATE OF 100 LBS. PER ACRE OF DISTURBED AREA.
 5. SEEDING SHALL BE DONE AT A RATE OF 100 LBS. PER ACRE OF DISTURBED AREA.



REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 SIGNATURE: *J. O'Connell* DATE: 6/24/88
 TITLE: U.S. SOIL CONSERVATION DISTRICT



FISHER, COLLINS AND CARTER, INC.
 CONSULTING ENGINEERS AND LAND SURVEYORS
 8388 COURT AVENUE
 ELLICOTT CITY, MARYLAND 21043
 TELEPHONE (301) 461-2855

CONSTRUCTION SEQUENCE
 1. OBTAIN GRADING PERMIT.
 2. CONSTRUCT PERMANENT STORMWATER MANAGEMENT POND AND STABILIZE USING TEMPORARY SEEDING. CAST IRON DRAIN PIPE SHALL REMAIN CLOSED DURING CONSTRUCTION.
 3. INSTALL SILT FENCE OR STRAW BALE DIKES AND EARTH DIKE AS SHOWN ON THIS SHEET.
 4. CLEAR EMILY FOX COURT.
 5. CONSTRUCT STORM DRAIN SYSTEM FROM S-1 TO S-2 AND FROM I-1 TO CUT-IN.
 6. PLACE EMILY FOX COURT TO SUBGRADE.
 7. CONTRACTOR SHALL INSTALL SILT FENCE AND LAY BASE COURSE. CONTRACTOR SHALL INSTALL SILT FENCE AND LAY BASE COURSE. CONTRACTOR SHALL INSTALL SILT FENCE AND LAY BASE COURSE.
 8. DOWNGRADE OF ANY DISTURBED AREA ALONG MD. ROUTE 29 DAILY. GRADE SLOPE AREAS BETWEEN EXISTING GROUND AND BACK OF CURB.
 9. UPON STABILIZATION OF GRADED AREAS, INLETS SHALL BE OPENED AND ALL ACCUMULATED SEDIMENT SHALL BE REMOVED FROM THE STORM DRAIN SYSTEM.
 10. DURING CONSTRUCTION, SEDIMENT SHALL BE REMOVED FROM THE STORM WATER MANAGEMENT POND WHEN THE CLEANOUT ELEVATION OF 436.8 HAS BEEN REACHED.
 11. REMOVE STONE CONSTRUCTION ENTRANCE.
 12. INSTALL RIP-RAP CHANNEL AT S-1.
 13. INSTALL RIP-RAP CHANNEL AT S-1.
 14. CLEAN BASE COURSE. APPLY TACK COAT TO BASE COURSE AND LAY SURFACE COURSE. STABILIZE ALL SHOULDERS USING PERMANENT SEEDING.
 15. REMOVE EARTH DIKE, SILT FENCE AND STRAW BALE DIKES ONCE DISTURBED AREAS HAVE BEEN STABILIZED.
 16. ALL DISTURBED AREAS DUE TO REMOVAL OF SEDIMENT CONTROL MEASURES SHALL BE GRADED AND STABILIZED BY PERMANENT SEEDING.
 17. CONTRACTOR SHALL DRAIN THE STORMWATER MANAGEMENT POND AND REMOVE ACCUMULATED SEDIMENT. THE POND SHALL BE GRADED IN ACCORDANCE WITH THIS PLAN AND STABILIZED USING PERMANENT SEEDING.
 18. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: (A) 7 CALENDAR DAYS FOR ALL PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1; (B) 14 DAYS FOR ALL OTHER DISTURBED AREAS ON THE PROJECT SITE.
 19. NOTIFY HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS FOR FINAL INSPECTION AT DURATION OF PROJECT.

OWNER
 MR. CLYDE SMITH, JR.
 10047 OLD FREDERICK ROAD
 ELLICOTT CITY, MARYLAND 21043

DEVELOPER
 SMITH, ROBERTS AND ASSOCIATES
 P.O. BOX 15
 ELLICOTT CITY, MARYLAND 21043

REVISOR: M. J. 7/18/80
 MODIFY SWALE ALONG THE BACK OF LOTS 14 & 17

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 SIGNATURE: *W. Ballou* DATE: 7/8/88
 TITLE: Chief, Land Development Division

APPROVED: OFFICE OF PLANNING AND ZONING
 SIGNATURE: *Frank J. Dwyer* DATE: 7/10/88
 TITLE: CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

POND SPECIFICATIONS

I. SITE PREPARATION

Areas under the embankment and structural works shall be cleared, grubbed and the topsoil stripped to remove all trees, vegetation, roots or other objectionable material. To facilitate clean out and restoration, it is recommended that the permanent pool area be cleared of all brush and trees.

II. EARTH FILL

Material

The fill material shall be taken from approved designated borrow area or areas. It shall be free from 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 at least 10 percent above the design elevation (including freeboard) unless otherwise shown on the plans. All fill material shall be CL or ML, as approved by Soils Engineer.

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.

Core Trench

Where specified, a core 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 4-feet. The depth shall be at least 4-feet or as shown on the plans. The side slopes of the trench shall be 1:1 or flatter. The backfill material for the core trench shall be the most impervious material available and shall be compacted with equipment or rollers to assure maximum density and minimum permeability. Compact to 95 of AASHTO T-99 density. Materials shall be CL or ML as approved by Soils Engineer.

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 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 4-feet to any part of a structure. Under no circumstances shall the contractor drive equipment over any part of a structure or pipe unless there is a compacted fill of 2-feet or greater over the structure or pipe.

IV. PIPE CONDUITS

A. CORRUGATED METAL PIPE

- Materials - Metal Pipe - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-196 or M-211, with watertight coupling bands.
- Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the control structure shall be mortared all around. 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.
- 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.
- 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.

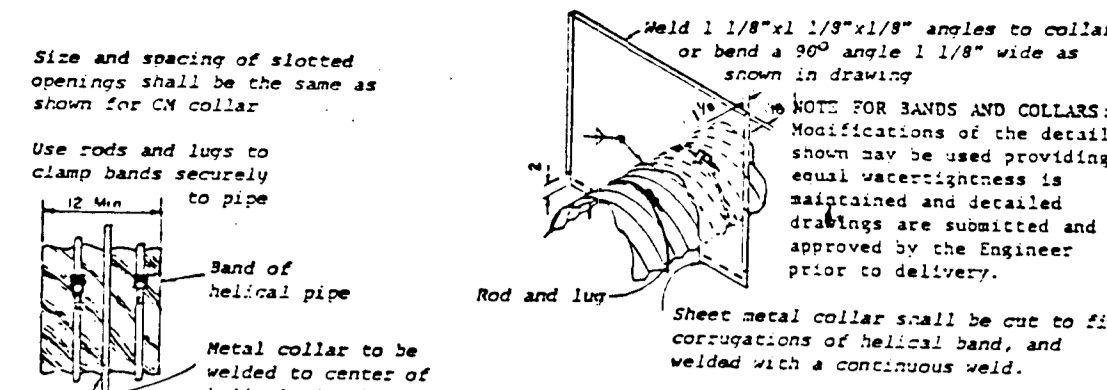
V. CONCRETE

Concrete shall meet minimum requirements set forth in Maryland State Highway Administration Specifications for Materials, Highways, Bridges, and Incidental Structures, Article 20.07 (Portland Cement Concrete Mixtures), Mix No. 3.

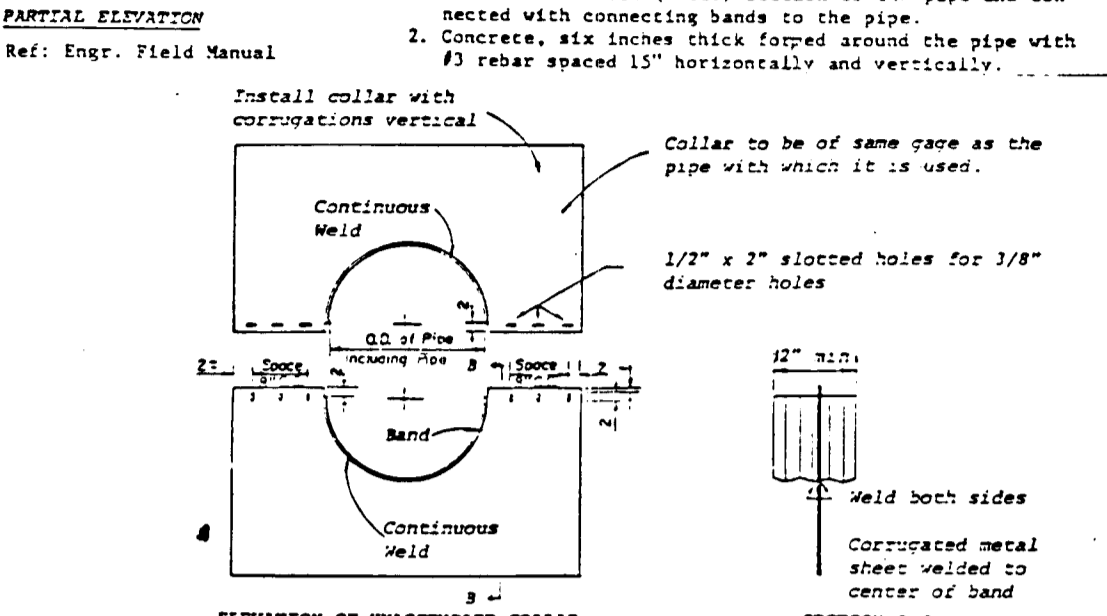
VI. STABILIZATION

All borrow areas shall be graded to provide proper drainage and left in a slightly condition. All exposed surfaces of the embankment, spillway and borrow areas shall be stabilized by permanent seeding and applying straw mulch in accordance with "Standards and Specifications for Soil Erosion and Sediment Control in Urbanizing Areas" immediately after finish grading.

Fertilizer:	10-10-10	@ 11.5 lbs./1000 sq.ft.
Seed:	Crownvetch inoculated	@ 0.5 lb./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.



Size and spacing of slotted openings shall be the same as shown for on collar.
Use rods and lugs to clamp bands securely to pipe.
Weld 1/8" x 1/2" x 1/8" angles to collar or band a 90° angle 1/8" wide as shown in drawing.
NOTES FOR BANDS AND COLLARS: Modifications of the details shown may be used providing equal watertightness is maintained and detailed drawings are submitted and approved by the Engineer prior to delivery.
Sheet metal collar shall be one to five corrugations of helical band, and welded with a continuous weld.
ISOMETRIC VIEW

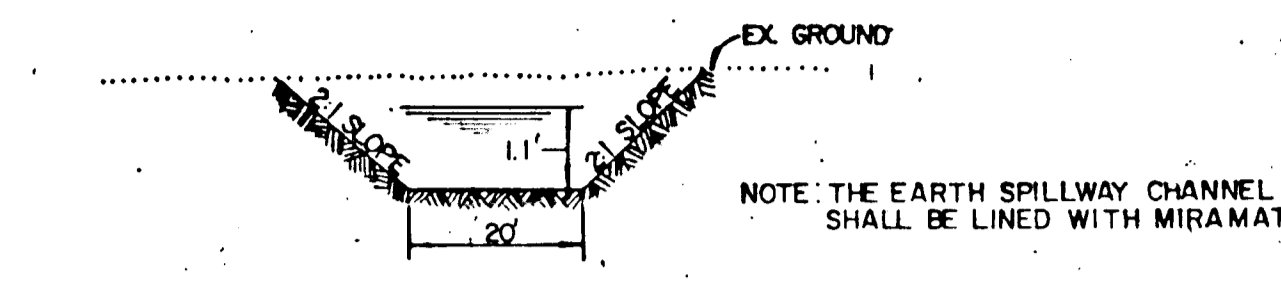


DETAILS OF HELICAL PIPE ANTI-SEEP COLLAR
NOTE: Two other types of anti-seep collars are:
1. Corrugated metal, similar to upper detail, except shop welded to a short (4 ft.) section of the pipe and connected with connecting bands to the pipe.
2. Concrete, six inches thick formed around the pipe with #3 rebar spaced 12" horizontally and vertically.

CORRUGATED METAL ANTI-SEEP COLLAR DETAILS

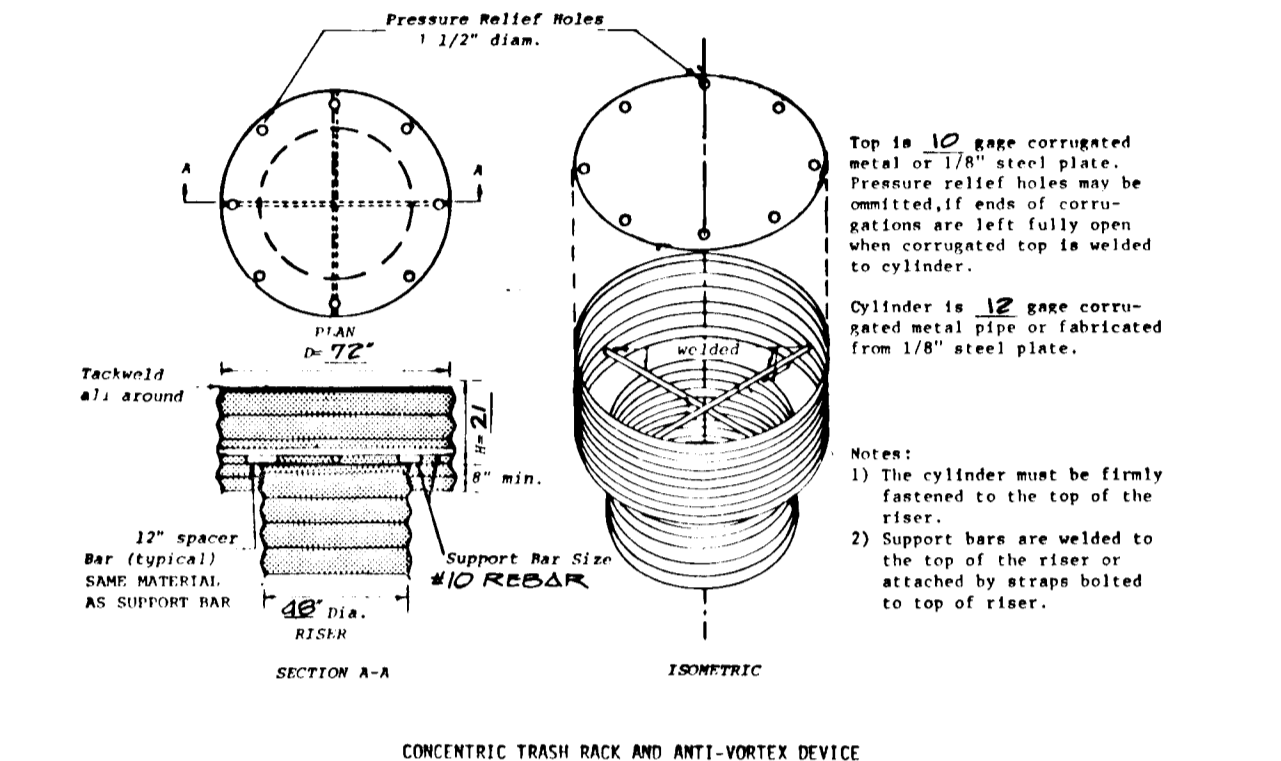
NO SCALE

EMERGENCY SPILLWAY DETAILS



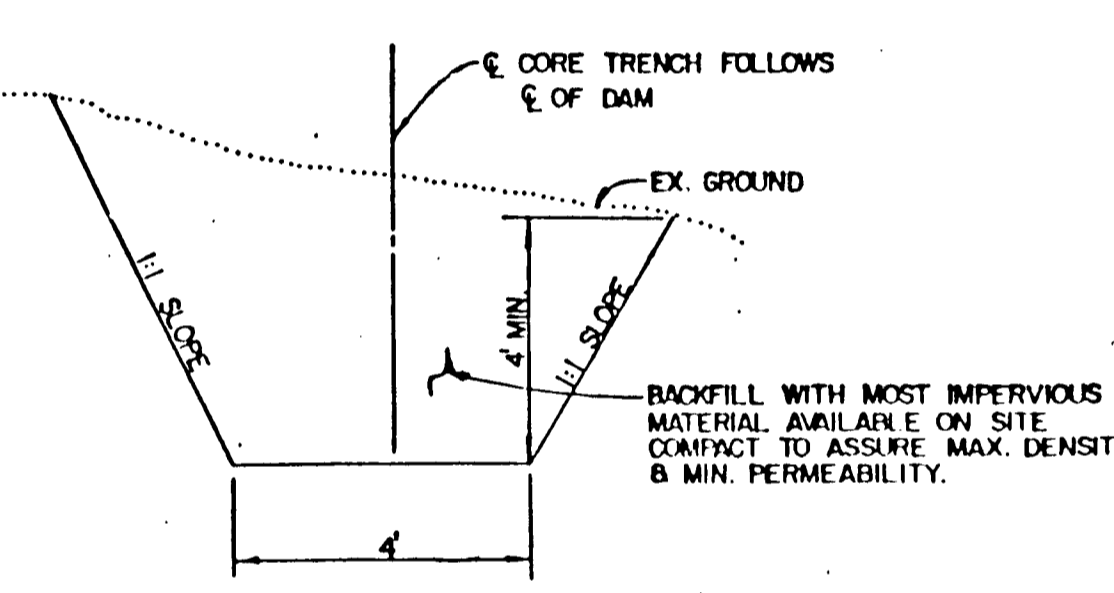
CROSS SECTION OF EARTH SPILLWAY AT CONTROL SECTION

NO SCALE



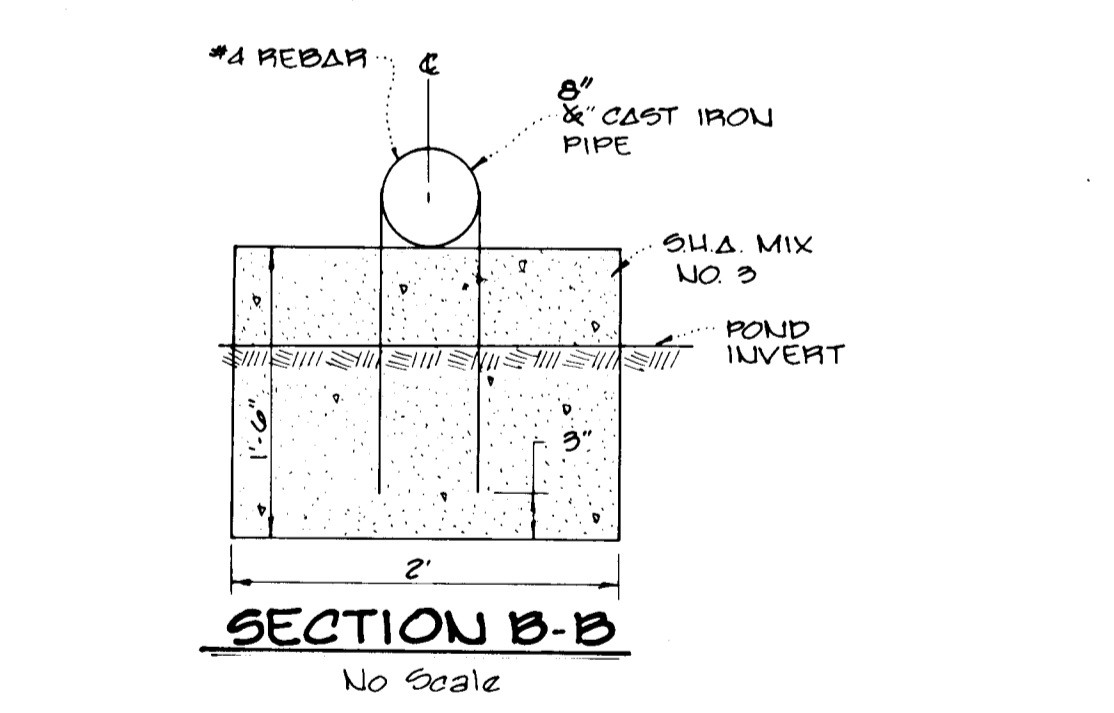
CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE

(not to scale)



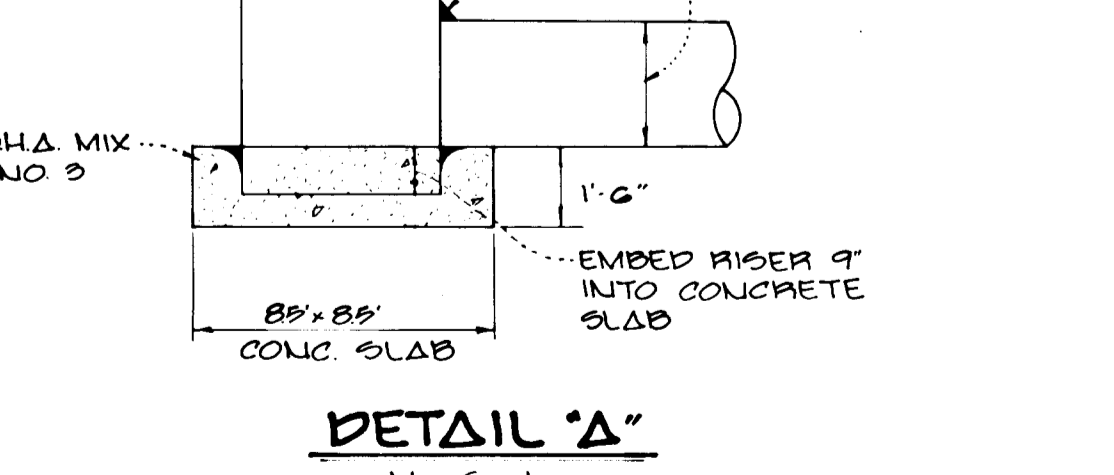
CORE TRENCH DETAIL

NO SCALE



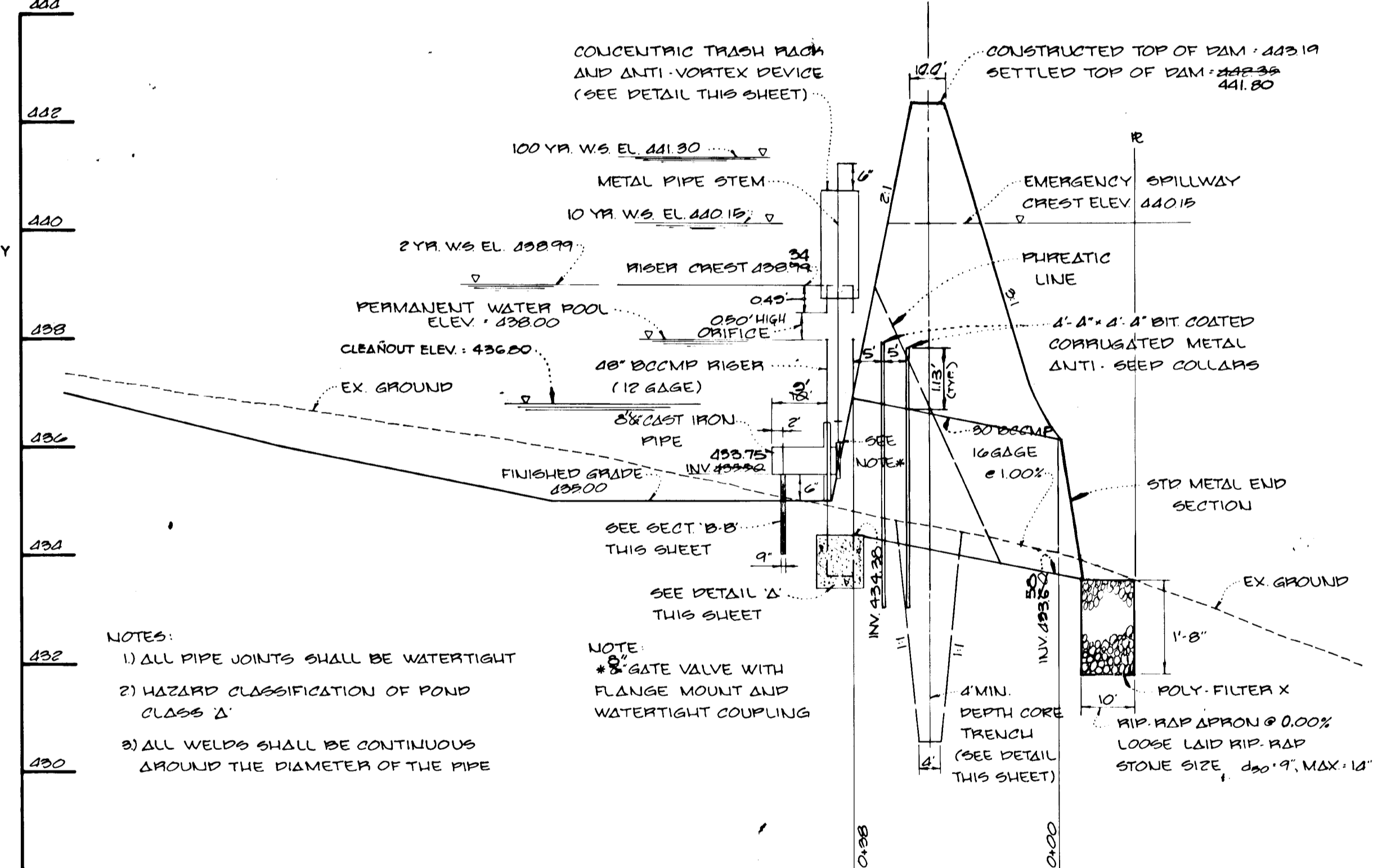
SECTION B-B

No Scale



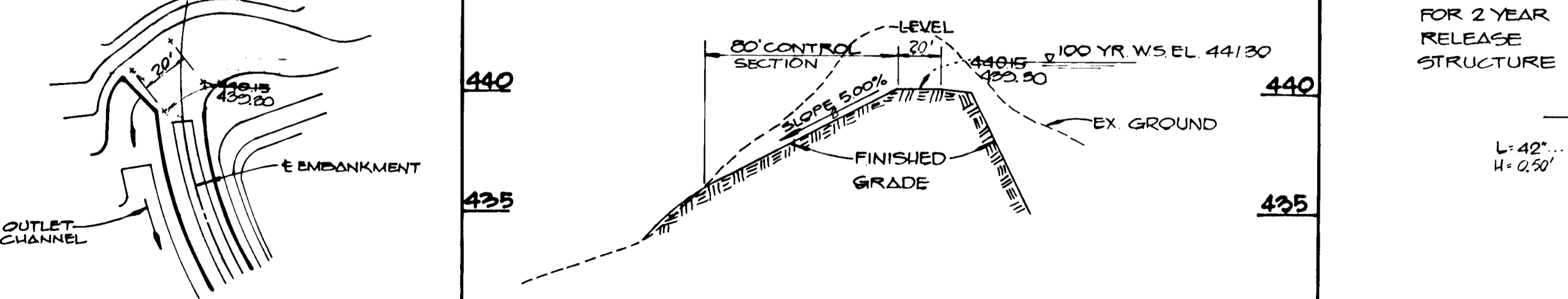
DETAIL A

No Scale



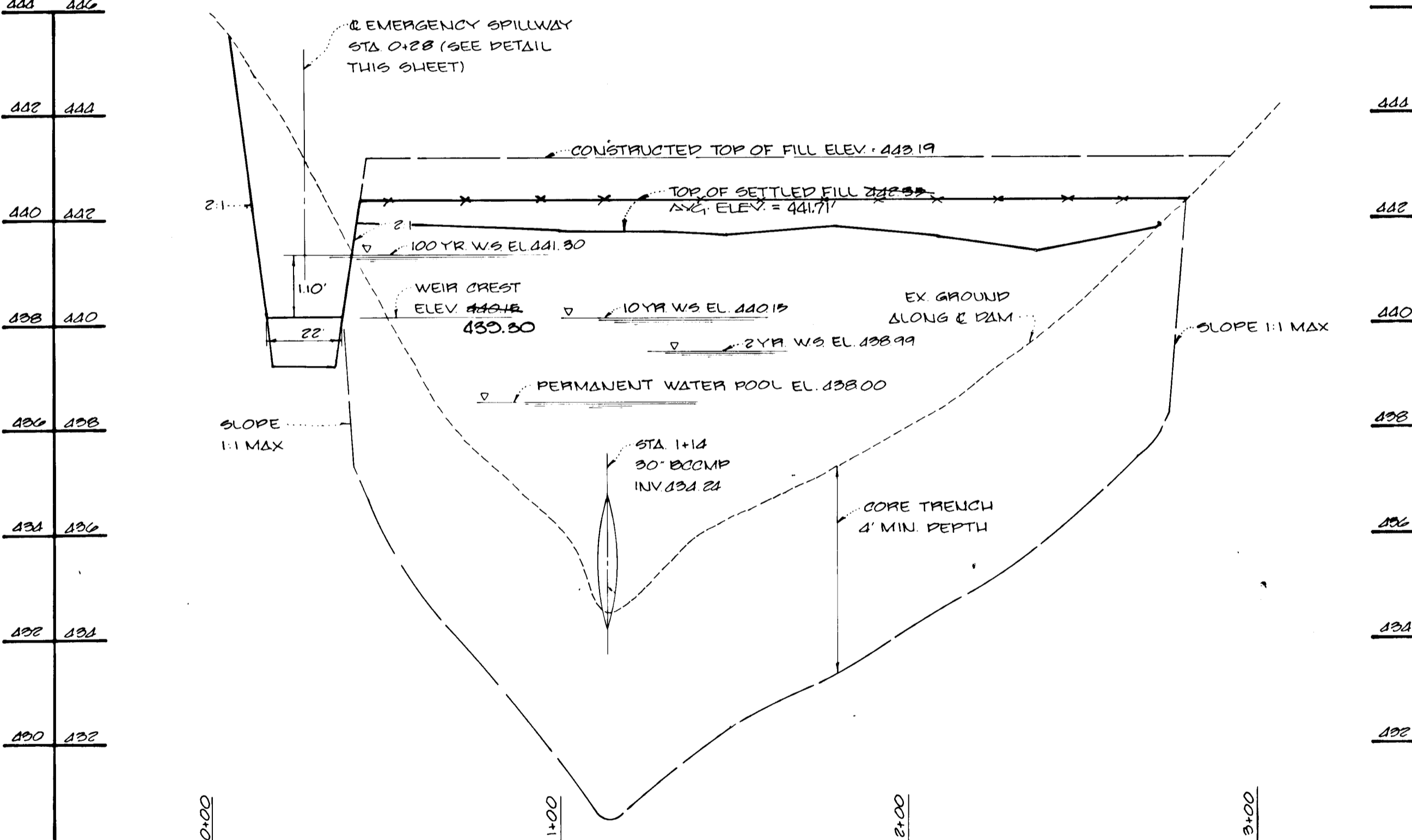
PROFILE ALONG & EARTH SPILLWAY

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



PLAN OF EARTH SPILLWAY

SCALE: 1" = 50'



PROFILE ALONG & DAM

Scale: 1" = 30' Horiz. 1" = 2' Vert.



2 YEAR & 10 YEAR RELEASE STRUCTURE DETAIL

NO SCALE

STORM WATER MANAGEMENT POND CERTIFICATION AND APPROVAL

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."

Charles J. Crovo 6-24-88
SIGNATURE OF DEVELOPER DATE

ENGINEER'S CERTIFICATE

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

Charles J. Crovo 4/13/88
SIGNATURE OF ENGINEER 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.

Thomas H. H. H. 6/24/88
U.S. 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 J. Zedler 6/24/88
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: OFFICE OF PLANNING AND ZONING
Paul J. D. Taylor 7/10/88
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Paul J. D. Taylor 7/8/88
CHIEF, LAND DEVELOPMENT DIVISION DATE

Thomas H. H. H. 7/10/88
CHIEF, BUREAU OF HIGHWAYS DATE

Charles J. Crovo 7-11-88
CHIEF, BUREAU OF ENGINEERING DATE

FISHER, COLLINS AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8388 COURT AVENUE
ELLCOTT CITY, MARYLAND 21043
TELEPHONE (301) 461-2855

OWNER
MR. CLYDE SMITH, JR.
10047 OLD FREDERICK ROAD
ELLCOTT CITY, MARYLAND 21043

DEVELOPER
SMITH, ROBERTS AND ASSOCIATES
P.O. BOX 15
ELLCOTT CITY, MARYLAND 21043

STORM WATER MANAGEMENT NOTES AND DETAILS

FOXWOOD
LOTS 1-17
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN MARCH 25, 1988

SHEET 4 OF 5

Charles J. Crovo 4/13/88
CHARLES J. CROVO SR DATE



DRAINAGE AREA MAP
Scale: 1"=100'

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERS & LAND SURVEYORS
8388 COURT AVENUE
ELLCOTT CITY, MARYLAND 21043

Charles J. Groves Sr.
CHARLES J. GROVES SR. DATE 4/13/88

APPROVED DEPARTMENT OF PUBLIC WORKS
Ronald Egan 7/18/88
CHIEF, LAND DEVELOPMENT DIVISION DATE

APPROVED DEPARTMENT OF PUBLIC WORKS
William W. Woodard 7/18/88
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED DEPARTMENT OF PUBLIC WORKS
W. C. ... 7-17-88
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED OFFICE OF PLANNING AND ZONING
James J. ... 7/18/88
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

TABLE 1
TEST PIT DATA

Test Pit No.	Depth (Ft.) From	To	Soil Description and Remarks
TP-1	0.0	1.0	Topssoil (Loam)
	1.0	4.5	Brown and gray very moist mottled SILT & CLAY, some of sand, trace rock frags (ML) (Silt Loam)
	4.5	7.5	Gray, wet of SAND, and silt, trace rock frags (Decomposed Rock) (SM) (Sandy Loam)
	7.5	9.7	Tan-brown wet of SAND, little silt, trace rock frags (Decomposed Rock) (SM) (Sand)
	9.7	14.0	Gray wet of SAND, little silt, little rock frags (Decomposed Rock) (SM) (Loamy Sand) (Ground water seepage @ 2.0')
TP-2	0.0	1.0	Topssoil (Loam)
	1.0	3.0	Brown moist clayey SILT, some of sand, trace rock frags (ML) (Silt Loam)
	3.0	7.9	Gray-brown moist to wet of SAND, and rock frags, little silt (Decomposed Rock) (SM) (Sand) (Ground water seepage @ 7.8')

TABLE 1
TEST PIT DATA

Boring No.	Depth (Ft) From	To	Soil Description & Remarks
B-1	0	0.7	Topssoil
	0.7	2.5	Brown moist of SAND, trace silt, mica and rock frags (SP)
	2.5	5.5	Orange and gray mottled moist SILT & CLAY, and of sand (CL)
	5.5	9.8	Gray wet of SAND, little silt, trace rock frags (SM) (Water seepage @ 8.0'. One day after completion: water @ 4.2', caved @ 7.5')
B-2	0	0.5	Topssoil
	0.5	1.5	Brown moist of SAND, trace silt, mica and rock frags (SP)
	1.5	3.5	Orange-gray mottled moist SILT & CLAY, and of sand (CL)
	3.5	9.5	Gray wet of SAND, little silt, little rock frags (SM) (Water seepage @ 9.5'. One day after completion: water @ 5.8', caved @ 8.3')

OWNER
MR. CLYDE SMITH JR.
10047 OLD FREDERICK ROAD
ELLCOTT CITY, MARYLAND 21043

DEVELOPER
SMITH, ROBERTS AND ASSOCIATES
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ELLCOTT CITY, MARYLAND 21043

DRAINAGE AREA MAP
FOXWOOD
LOTS 1-17
SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN MARCH 25, 1988
SHEET 5 OF 5