

These specifications are appropriate for ponds within the scope of the Standard Specification 378.

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 areas 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.

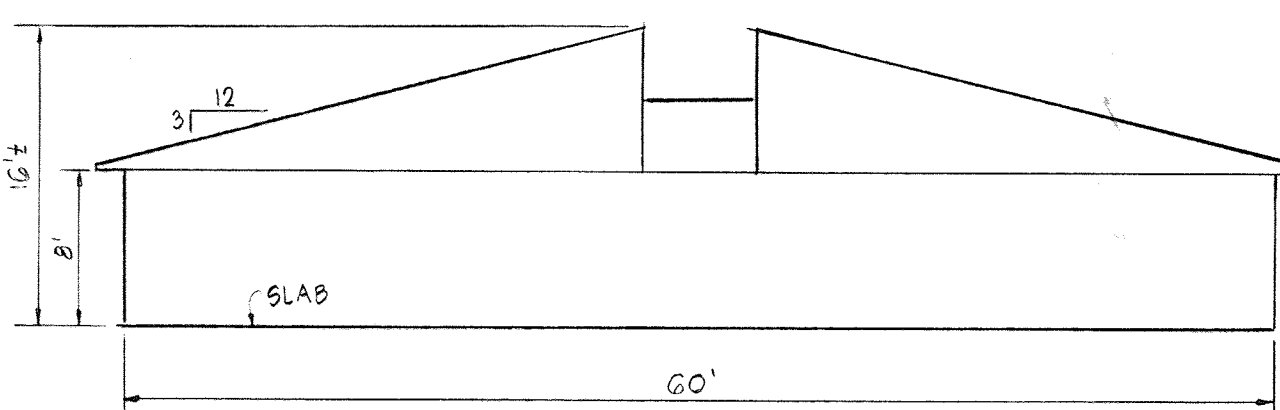
BATH HOUSE  
SEPTIC SYSTEM

- BATHHOUSE  
SLAB: G71.0  
INV. OUT: G74.2  
SEPTIC TANK  
EX. GR.: G19.0  
FIN. GR.: G76.3  
INV. IN: G74.1  
INV. OUT: G73.8  
DISTRIBUTION BOX  
EX. GR.: G76.0  
FIN. GR.: G76.0  
INV. IN: G72.0  
WELL  
EX. GR.: G81.0  
FIN. GR.: G80.5

III. STRUCTURAL BACKFILL

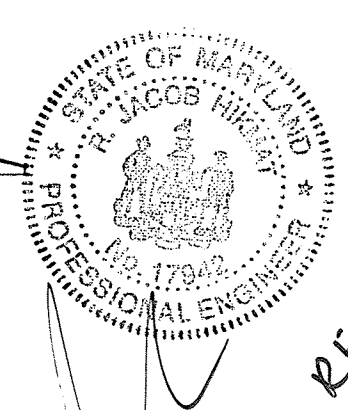
Backfill material shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other compaction equipment. The material needs to fill completely all 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.  
(FOR III PIPE CONDUITS - SEE SHEET 2 OF 3)

CALVARY EVANGELICAL LUTHERAN CHURCH  
10900/AGT  
LOT 1 - CONNECTICUT ASPEN, INC. PROPERTY  
PLAT 4795  
EX. ZONING: R



BUILDING ELEVATION

NOT TO SCALE



2/26/83 REV.

BY	REVISION	DATE
JCO	ADDITION OF 30'x36' ROOF OVER EX. CONC. SLAB ADJACENT TO CALVARY CHURCH	4-1-83
APPROVED FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT		
James W. Paulus	4-15-83	DATE
COUNTY HEALTH OFFICER		
APPROVED HOWARD COUNTY OFFICE OF PLANNING AND ZONING		
William M. Newman	4-15-83	DATE
PLANNING DIRECTOR, ACTING		
APPROVED FOR STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS		
John F. Newman	4-15-83	DATE
DIRECTOR		
APPROVED FOR SMALL POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS		
Robert J. Ziehm	4-15-83	DATE
CHIEF, BUREAU OF ENGINEERING		

IMPROVEMENTS TO EXISTING POOL AREA 2-26-83		
1.	WADING POOL REPLACEMENT	2-26-83
2.	NEW POOL STEPS	2-26-83
3.	EXISTING TENNIS COURTS	2-26-83
4.	NEW CONCRETE AREA	2-26-83

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.

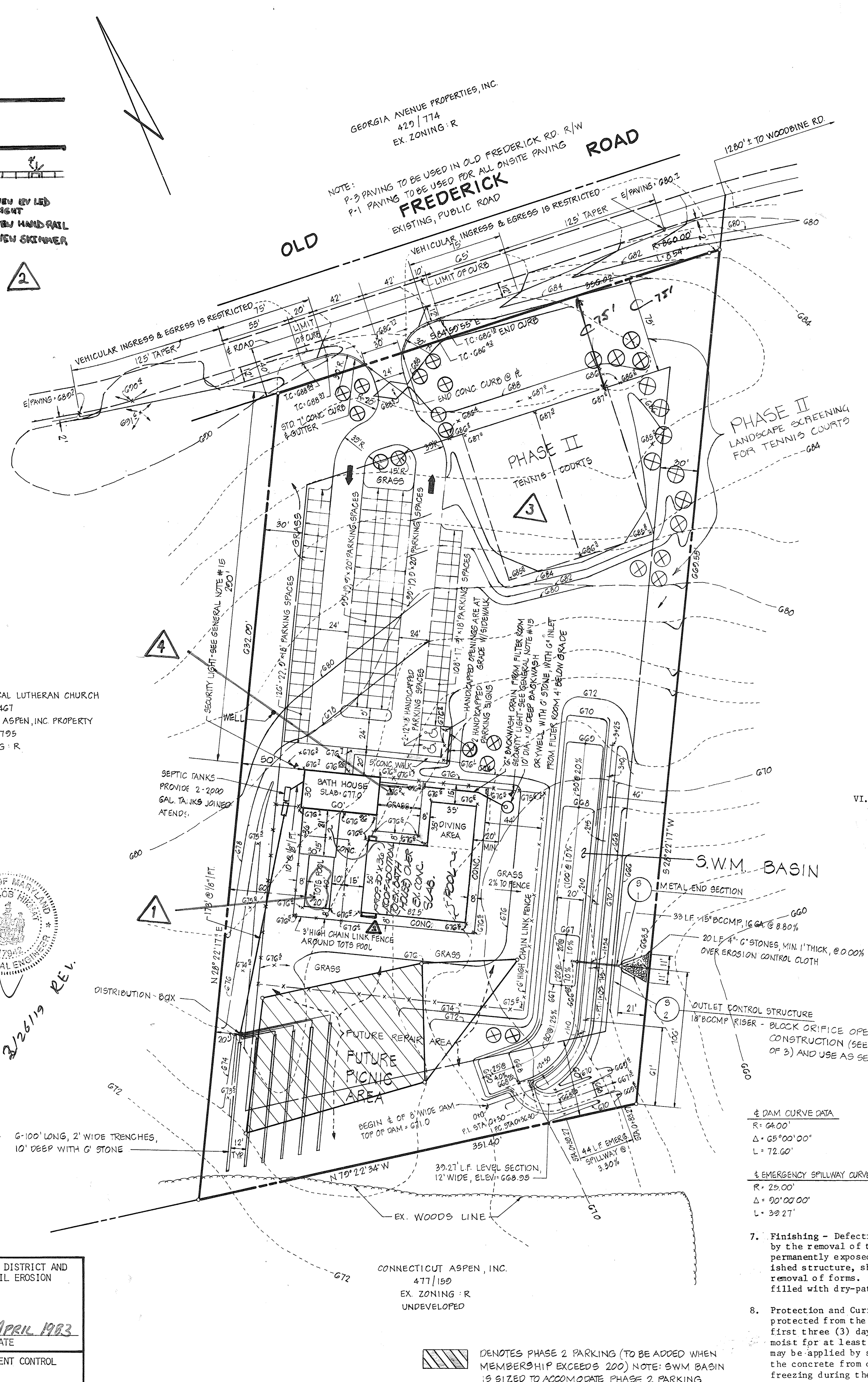
THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

U.S. SOIL CONSERVATION SERVICE  
DATE: 15 APRIL 1983

HOWARD SOIL CONSERVATION DISTRICT  
DATE: 15 APRIL 1983

6'-100' LONG, 2' WIDE TRENCHES,  
10' DEEP WITH 6" STONE

REV. 3-15-83 ADDED ACCUR. & DETAIL LINES SHOWN PHASE 2 PARKING - J.J.B.



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.

- 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.
- 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.
- 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.

- 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.
- 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.

(CONTINUED - SEE NOTES 7, 8 AND 9 BELOW)

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.

APPROVED  
DIVISION OF LAND DEVELOPMENT &  
ZONING ADMINISTRATION  
HOWARD COUNTY, MARYLAND  
DATE 3-4-83

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.

Virginia Parrish, Secretary, West Howard SWIM Club, Inc. 3/14/83

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.

James P. Yeager, P.E. 1/19/83

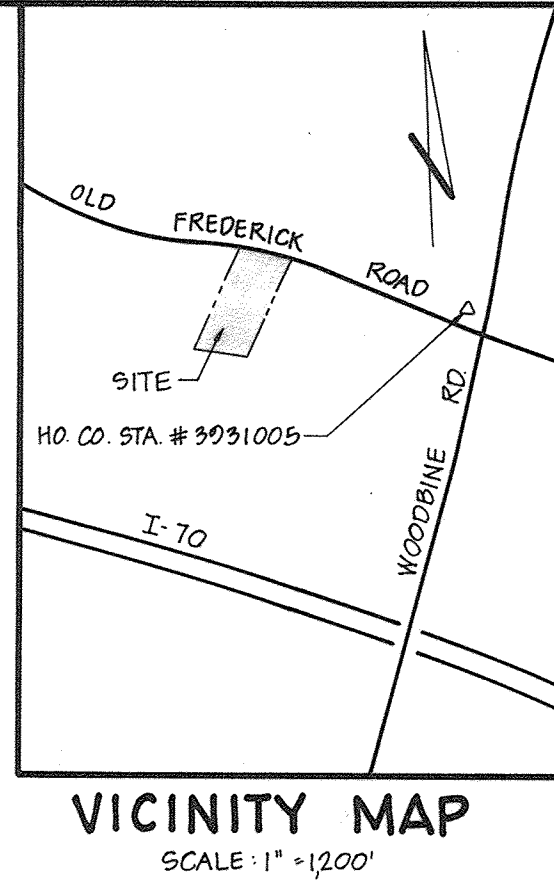
ARCHITECT

MICHAEL E. BOLINGER, AIA  
800 N. CHARLES ST.  
BALTIMORE, MD. 21201  
752-1730

OWNER & DEVELOPER

WEST HOWARD SWIM CLUB, INC.  
% ROBERT PARRISH, PRESIDENT  
16690 UNION CHAPEL RD  
WOODBINE, MD. 21197

TITLE SITE DEVELOPMENT PLAN					
PROJECT LOT 2 - CONNECTICUT-ASPEN, INC. PROP.					
LOCATION 4TH ELECTION DISTRICT		TAX MAP 7		HOWARD COUNTY, MD.	
DATE JAN, 1983	SCALE 1" = 50'	DESIGN BY J.J.B.	DRAWN BY J.J.B.	CHECKED BY L.L.Y.	DRAWING NO. 1 OF 3
boender associates			engineers surveyors planners		
3525 COURTHOUSE SQUARE - SUITE A ELLCOTT CITY, MARYLAND 21043 301-465-7777					



GENERAL NOTES

- TAX MAP: 7 PART OF PARCEL: 84
- PLAT REFERENCE: 5383
- EX. ZONING: RE - DEO
- SITE USE: PRIVATE RECREATIONAL FACILITY - SWIM CLUB
- TOTAL AREA OF SITE: 5,000 AC.
- LOT COVERAGE - STRUCTURES: 8,445 SQ. FT. OR 3.9%
- OPEN SPACE PROVIDED: 37 AC.
- PRIVATE WATER AND PRIVATE SEWERAGE ARE TO BE UTILIZED
- HORIZONTAL AND VERTICAL DATUM BASED ON HOWARD COUNTY CONTROL STATIONS 3931004 AND 3931005
- OLD FREDERICK ROAD IS AN EXISTING PUBLIC ROAD. PROPOSED PARKING AND DRIVEWAYS ARE TO BE PRIVATE.
- ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOL. IV.
- TOPO SHOWN HEREON WAS FIELD RUN BY BOENDER ASSOCIATES.
- SUBJECT TO BA CASE NO. 82-37E, S.A. CASE NO. 87-50E
- PARKING TABULATIONS:  
REQ'D: 79 SPACES (SEE BA CASE NO. 82-37E DECISION AND ORDER AND EXHIBIT NO. 2)  
PROVIDED: 79 SPACES
- SECURITY LIGHTS WILL BE 100 WATT, SODIUM VAPOR TYPE, MOUNTED ON 15' HIGH POLES. LIGHT TO BE DIRECTED/REFLECTED DOWNWARD AND AWAY FROM PUBLIC R/W AND SURROUNDING PROPERTIES. TWO LIGHTS TO BE PROVIDED. FOR ADDITIONAL DATA, CONSULT WITH THE ARCHITECT LISTED BELOW.





**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 DOLOMIC 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 DOLOMIC 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.  
**MULCH:** 2 TONS/AC. OF UNWEATHERED WHEATSTRAW. TIE MULCH DOWN WITH 400 GAL./AC. OF LIQUID ASPHALT.

**CONSTRUCTION SEQUENCE**

- OBTAIN GRADING PERMIT.
- NOTIFY THE HOWARD COUNTY BUREAU OF LICENSE, INSPECTIONS AND PERMITS AND THE CONSTRUCTION INSPECTION/SURVEYS DIVISION 24 HOURS PRIOR TO BEGINNING GRADING OPERATIONS.
- INSTALL TEMPORARY SEDIMENT CONTROL MEASURES (S.C.E., D.D., S.F. AND TRAP NO. 2).
- CONSTRUCT S.W.M. BASIN, BLOCK ORIFICE (SEE DETAIL, THIS SHEET) AND USE FOR TRAP NO. 1.
- ROUGH GRADE SITE. INSTALL SEPTIC SYSTEM. APPLY TEMPORARY STABILIZATION. APPLY BASE COURSE FOR AREAS TO BE PAVED.
- CONSTRUCT BATH HOUSE, POOLS AND UTILITIES. MAINTAIN ALL SEDIMENT CONTROL MEASURES.
- PLACE FENCE AND FINE GRADE AND PAVE. APPLY PERMANENT STABILIZATION MEASURES.
- RESTORE S.W.M. BASIN TO ORIGINAL SIZE BY:
  - PUMP STANDING WATER, IF ANY, THRU PRINCIPAL SPILLWAY.
  - SHAPE BASIN TO ORIGINAL SIZE BY REMOVING EXCESS SEDIMENT AND STABILIZE POND AREA.
  - EXCESS SEDIMENT TO BE REMOVED FROM SITE AND DEPOSITED ON A SITE WITH EXISTING AND APPROVED EROSION CONTROL MEASURES.
- REMOVE BLOCKING AT S-2 AND OTHER TEMPORARY SEDIMENT CONTROL MEASURES (S.C.E., S.F., D.D. AND SEDIMENT TRAP NO. 2) WITH APPROVAL OF THE HOWARD COUNTY BUREAU OF LICENSE, INSPECTIONS AND PERMITS.

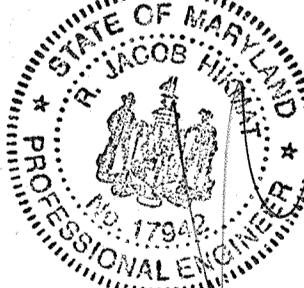
**IV. PIPE CONDUITS**

**A. Corrugated Metal Pipe**

- 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.
- 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.

- 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.

(FOR IN CONCRETE AND WITH STABILIZATION - SEE SHEET 1 OF 3)



2/26/83  
 2/26/83

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

*James J. Goeger* 4-15-83  
 COUNTY HEALTH OFFICER DATE

APPROVED HOWARD COUNTY OFFICE OF PLANNING AND ZONING

*William B. Hart* 4-15-83  
 PLANNING DIRECTOR, ACTING DATE

APPROVED FOR STORM DRAINAGE SYSTEMS AND PUBLIC ROADS  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*Walter F. Neumeier* 4-15-83  
 DIRECTOR DATE

*Robert W. Zick* 4-15-83  
 CHIEF, BUREAU OF ENGINEERING DATE

**IMPROVEMENTS TO EXISTING POOL AREA 2-26-2019**

1. WADING POOL REPLACEMENTS	2-26-19
2. NEW POOL STEPS	2-26-19
3. EXISTING TENNIS COURTS	2-26-19
4. NEW CONCRETE AREA	2-26-19

**SEDIMENT TRAP SCHEDULE**

TRAP	D.A.	STORAGE REQ'D	STORAGE PROVIDED	BOTTOM SIZE	BOTTOM ELEV.	SPILLWAY ELEV.	C.O. ELEV.
1**	4.9AC	7,740CF	9,583CF	-	466.62	468.05	467.8
2*	0.6AC	1,080CF	1,130CF	15' x 25'	470.0	472.0	471.0

\* SEE S.C.S. MANUAL, PG. 22.07 FOR DETAIL & CONSTRUCTION SPECS.  
 \*\* SEE S.W.M. COMPS

**SITE ANALYSIS**

AREA OF SITE: 5.0 AC  
 AREA PAVED: 1.3 AC  
 AREA DISTURBED: 3.8 AC  
 AREA UNDISTURBED: 1.2 AC  
 AREA REVEGETATED: 2.5 AC

CALVARY EVANGELICAL LUTHERAN CHURCH  
 10900/AG7  
 LOT 1 - CONNECTICUT ASPEN, INC PROPERTY  
 PLAT 4795  
 EX ZONING R.

**SEDIMENT TRAP NO. 2**

D.D.

D.D.

S.F.

S.F.

S.F.

S.F.

S.F.

S.F.

S.F.

S.F.

S.F.

GEORGIA AVENUE PROPERTIES, INC.  
 429/774  
 EX ZONING R

FREDERICK ROAD  
 EXISTING, PUBLIC ROAD

OLD

ROAD

S.F.

S.F.

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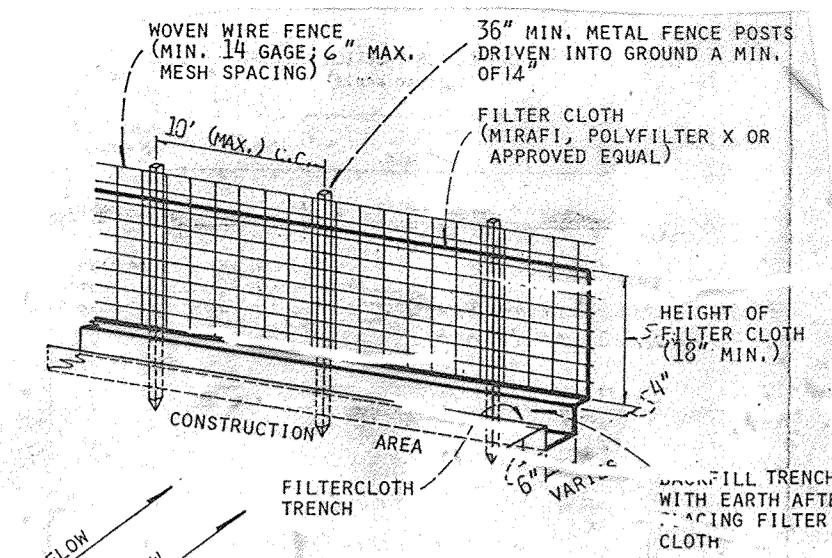
S.F.

S.F.

S.F.

CONNECTICUT ASPEN, INC.  
 477/150  
 EX ZONING R  
 UNDEVELOPED

REV. 3-15-83 ADDED ACCEL. & DECEL. LANES - J.J.B.



- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS BY USE OF WIRE TIES.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE BY USE OF WIRE TIES SPACED EVERY 24" X 24"

**SILT FENCE - S.F.**  
 NOT TO SCALE

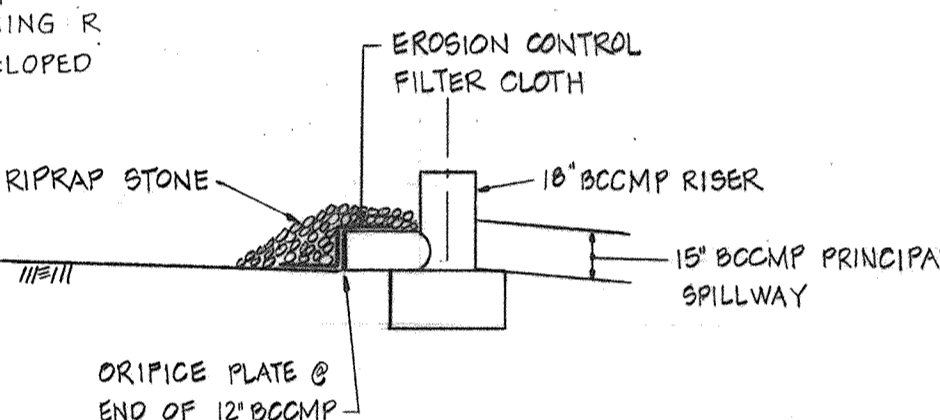
**VICINITY MAP**  
 SCALE 1" = 1200'

OLD FREDERICK ROAD  
 WOODBINE RD  
 I-70  
 HO CO STA # 9031005

**STABILIZED CONSTRUCTION ENTRANCE**

**S.C.E.**

SEE S.C.S. MANUAL, PG. A-116.01 FOR SPECS.  
 NOT TO SCALE

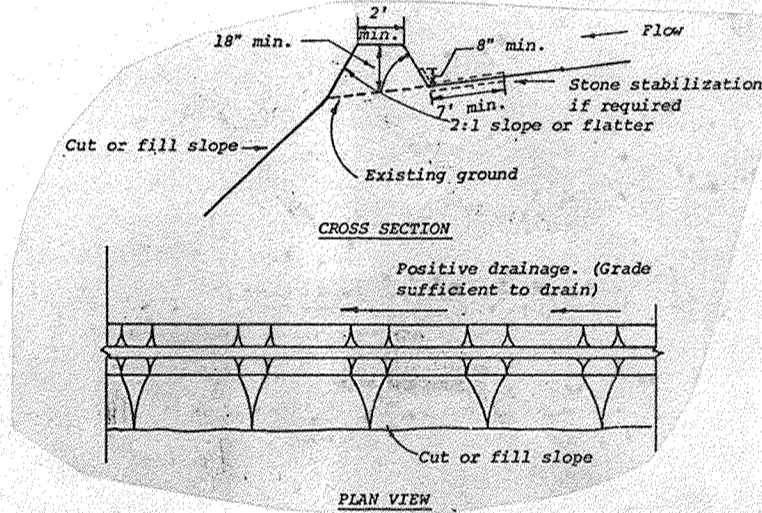


**BLOCKING DETAIL AT S-2**

NOT TO SCALE

**STONE OUTLET SEDIMENT TRAP**

SEE S.C.S. MANUAL, PG. A-20.01 FOR SPECS.  
 NOT TO SCALE



**DIVERSION DIKE - D.D.**

SEE S.C.S. MANUAL, PG. A-10.01 FOR SPECS.  
 NOT TO SCALE

APPROVED  
 DIVISION OF LAND DEVELOPMENT &  
 ZONING ADMINISTRATION  
 HOWARD COUNTY, MARYLAND  
 DATE 3-4-83  
*M. J. F. D.*

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.

*Virginia Parrish* 3/14/83  
 VIRGINIA A. PARRISH - SECRETARY, WEST HOWARD SWIM CLUB, INC. 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.

*Jerry J. Goeger* RE 1/26/83  
 ENGINEER DATE

OWNER & DEVELOPER  
 WEST HOWARD SWIM CLUB, INC.  
 % ROBERT PARRISH, PRESIDENT  
 15800 UNION CHAPEL RD.  
 WOODBINE, MD. 21797

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* 15 APRIL 1983  
 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 W. Zick* 15 APRIL 1983  
 HOWARD SOIL CONSERVATION DISTRICT DATE

**TITLE DRAINAGE AREA MAP & SEDIMENT CONTROL PLAN**

PROJECT LOT 2 - CONNECTICUT-ASPEN, INC. PROP.

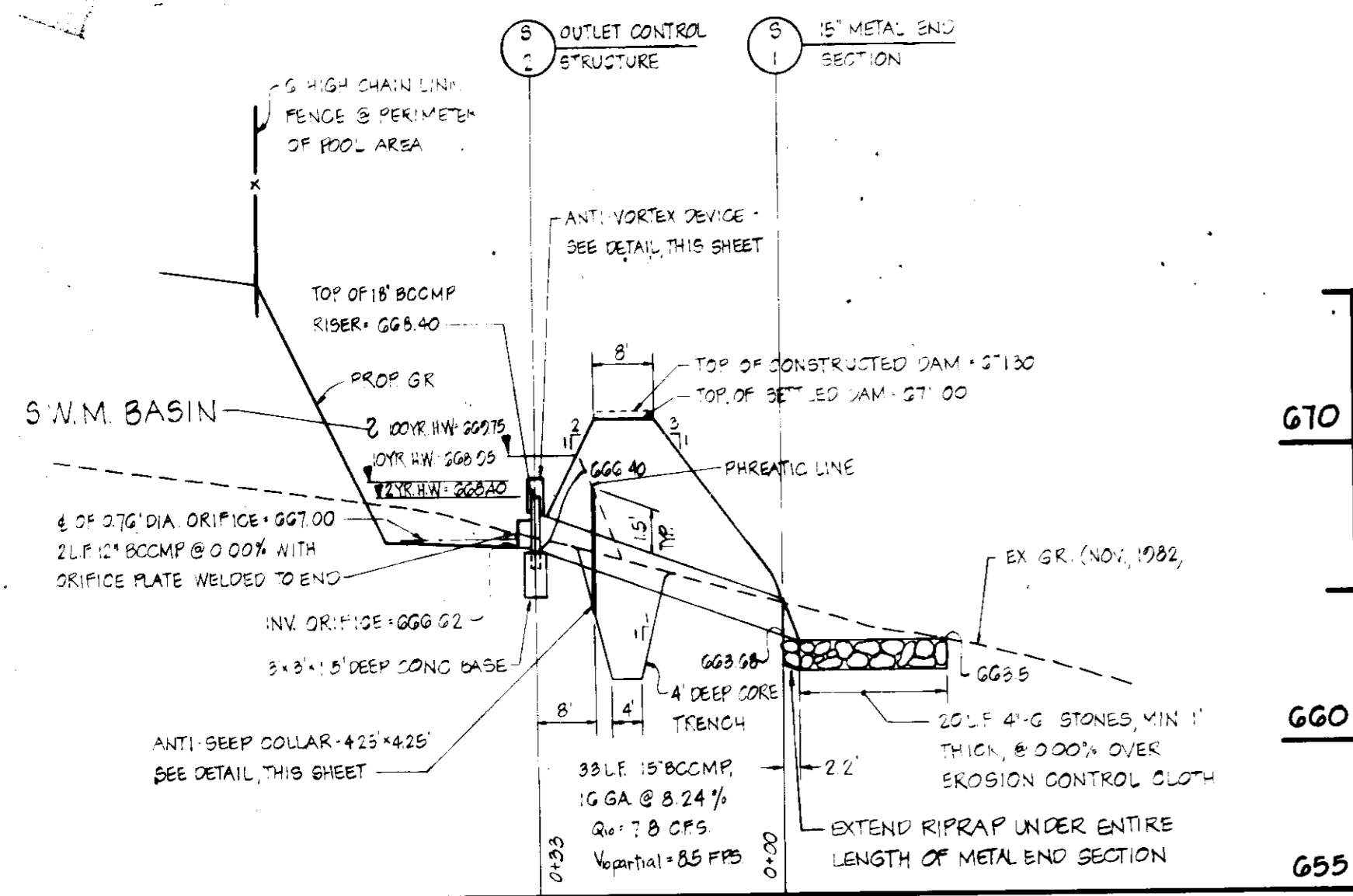
LOCATION 4TH ELECTION DISTRICT TAX MAP 7 HOWARD COUNTY, MD

DATE JAN. 1983 SCALE 1" = 30' DESIGN BY J.J.B. DRAWN BY J.J.B. CHECKED BY L.L.Y. DRAWING NO. 2 OF 3 JOB NO. 82193

boender associates  
 3925 COURTHOUSE SQUARE SUITE A  
 ELLICOTT CITY, MARYLAND 21043  
 301-465-7777

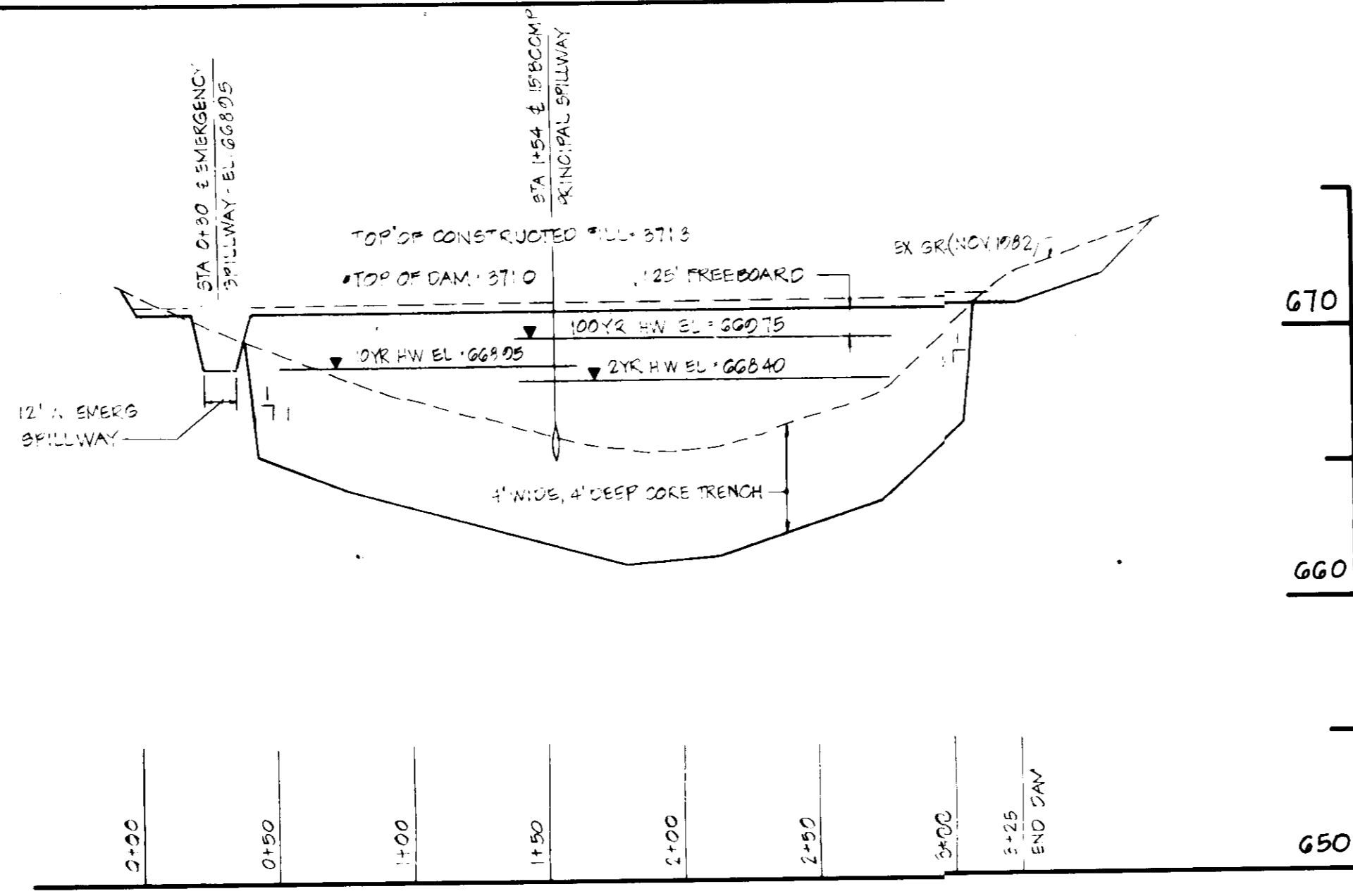
engineers  
 surveyors  
 planners





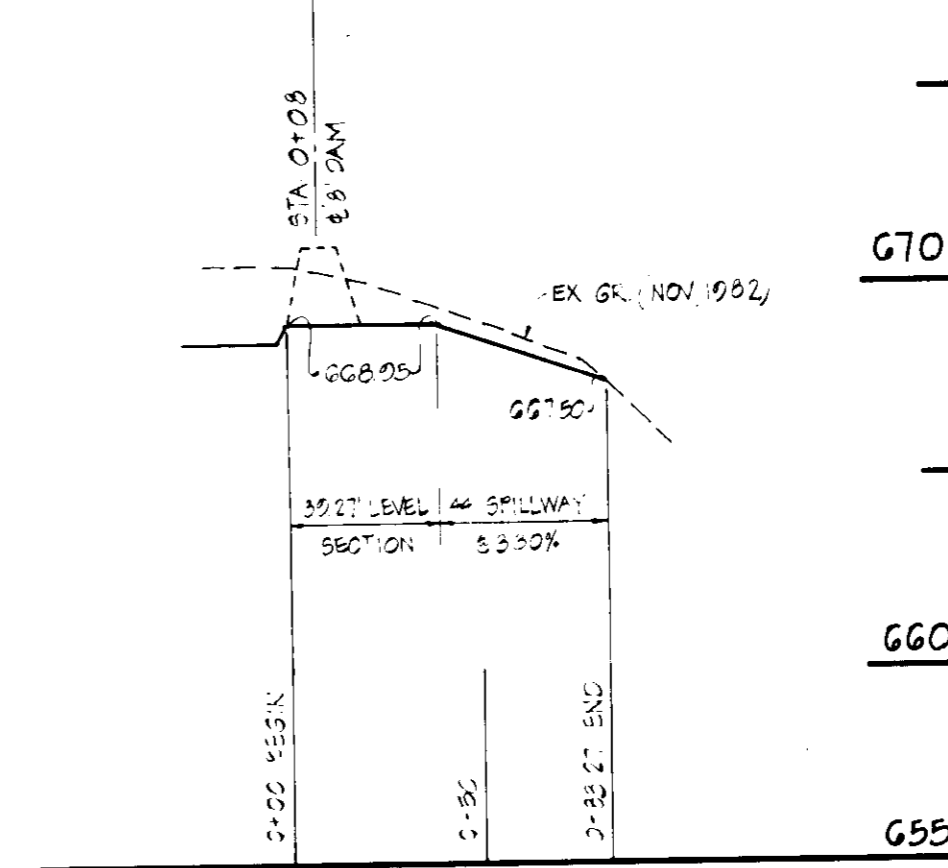
**PROFILE - PRINCIPAL SPILLWAY**

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



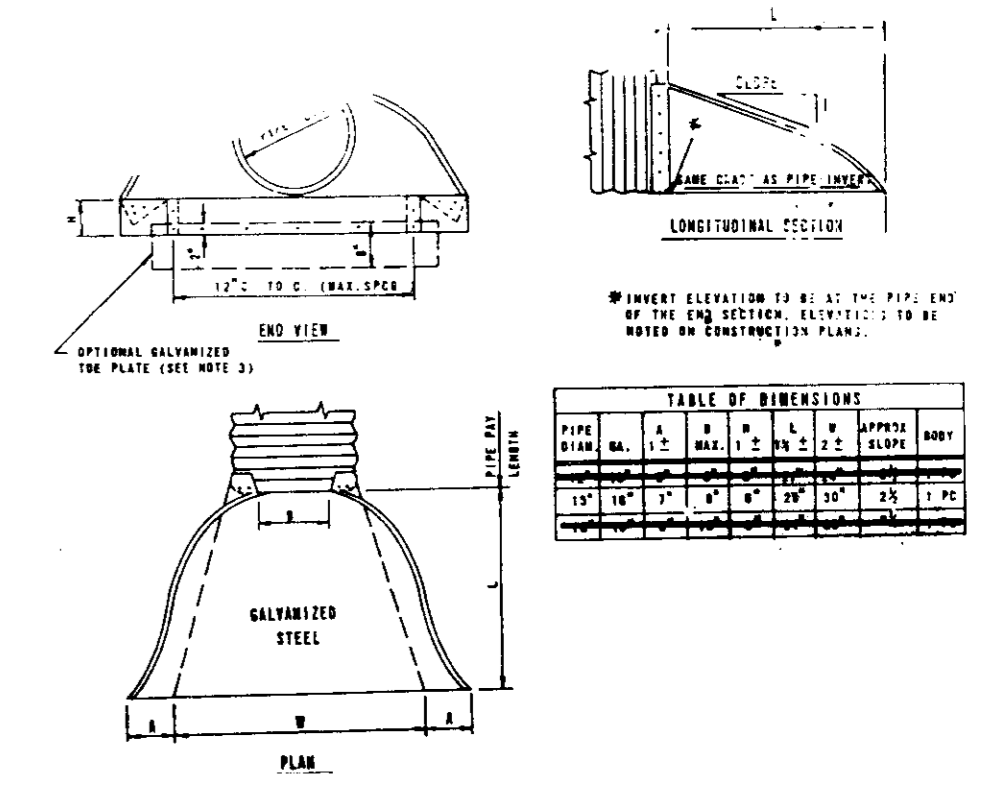
**PROFILE - TOP OF DAM**

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



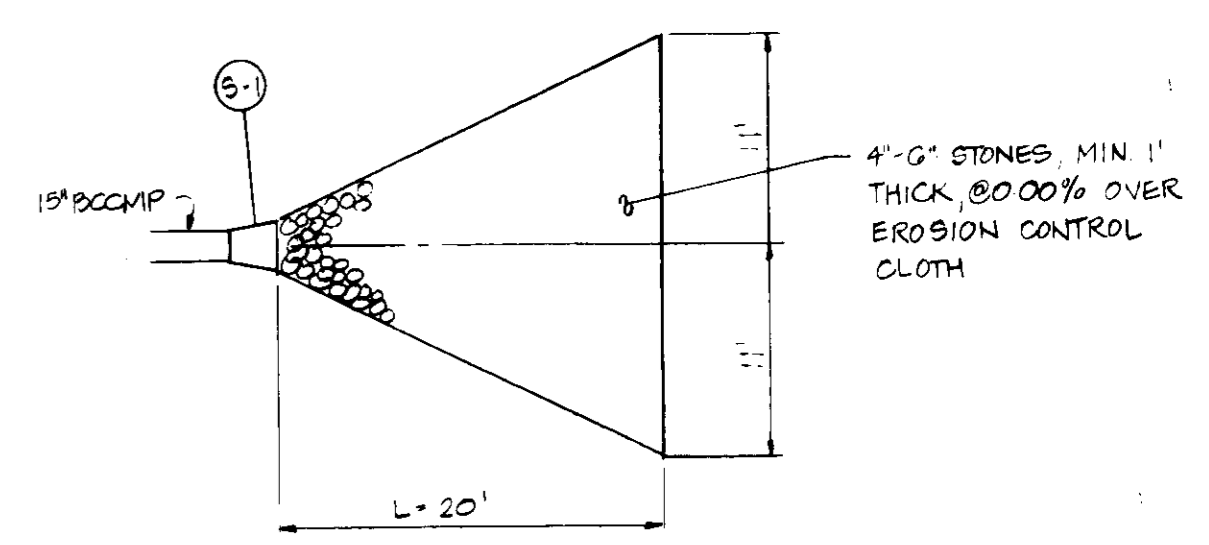
**PROFILE - EMERGENCY SPILLWAY**

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



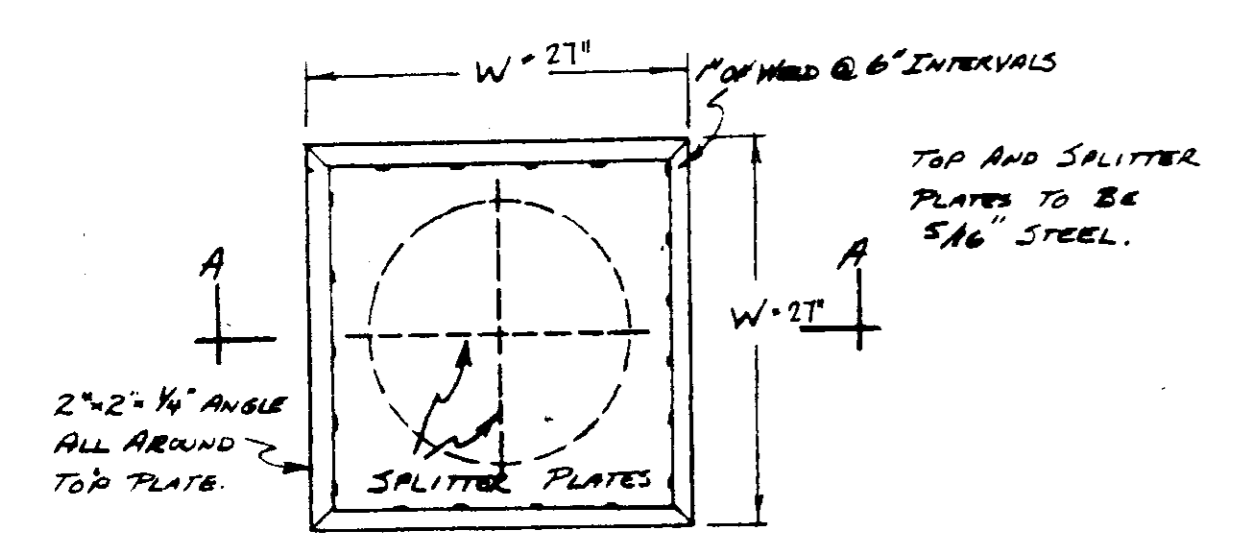
**STD. METAL END SECTION**

NOT TO SCALE



**RIPRAP DETAIL AT S-1**

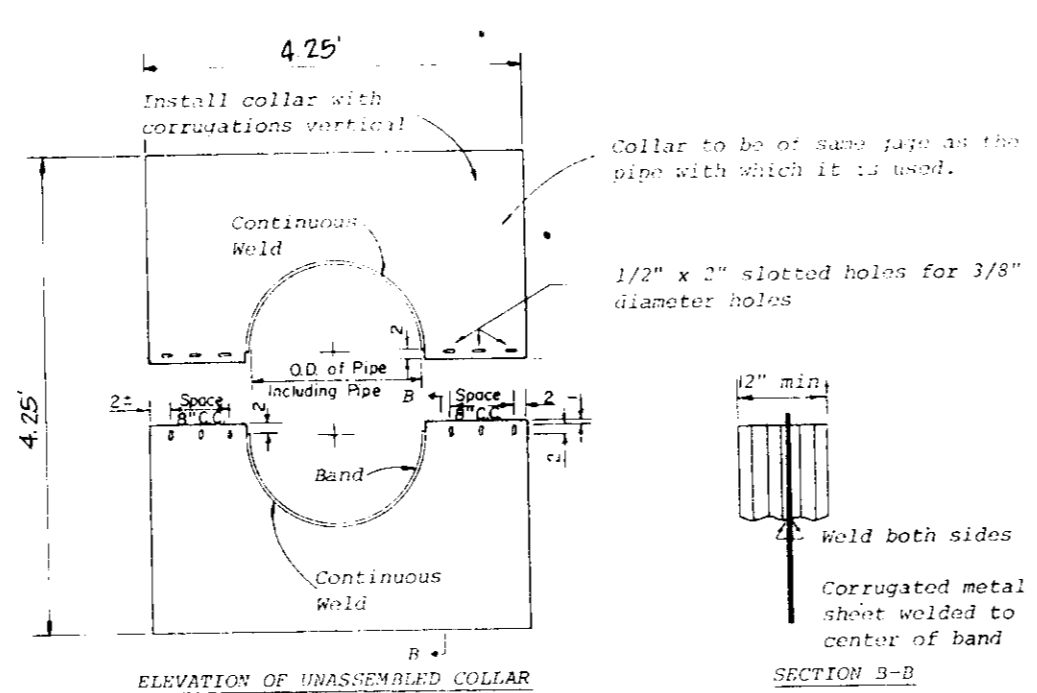
NOT TO SCALE



**PLAN VIEW OF TRASH GUARD - ANTI VORTEX DEVICE**

- NOTES:**
1. PAINT AREA USING 2 COATS RED LEAD AND 2 COATS ALUMINUM.
  2. FASTEN ASSY TO RISER USING ANGLES BOLTED TO SPLITTER PLATES AND VERTICAL RISER PIPE.
  3. SET TOP OF ASSY. LEVEL WHEN INSTALLING ON RISER.

SIZE:  
RISER DIA (D) = 18"  
TOP PLATE (W) = 21"  
SPLITTER HEIGHT (H) = 12"



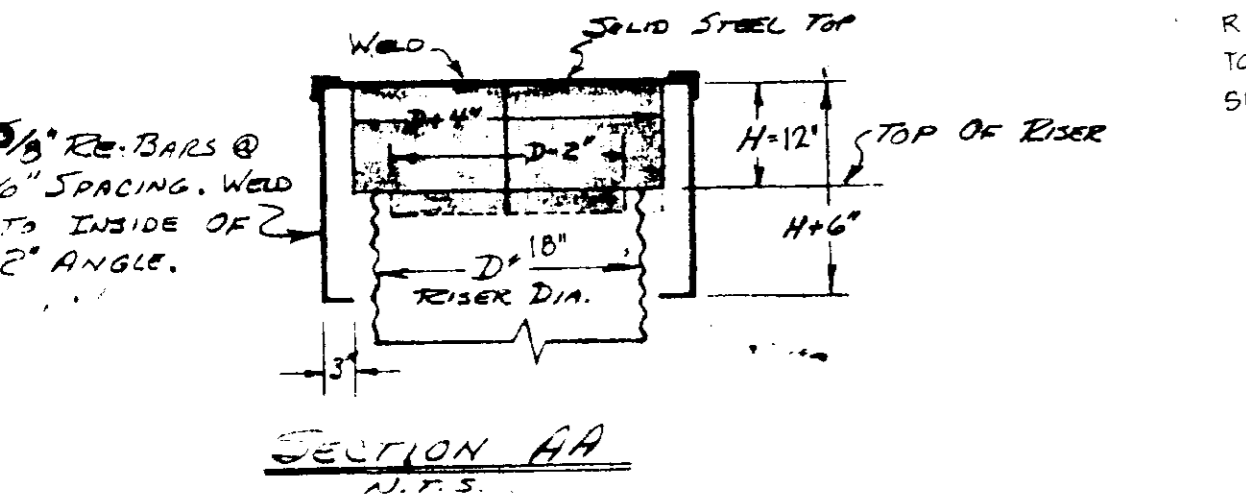
**ANTI-SEEP COLLAR DETAIL**

NOT TO SCALE  
SEE SCS MANUAL, PG A-10-25



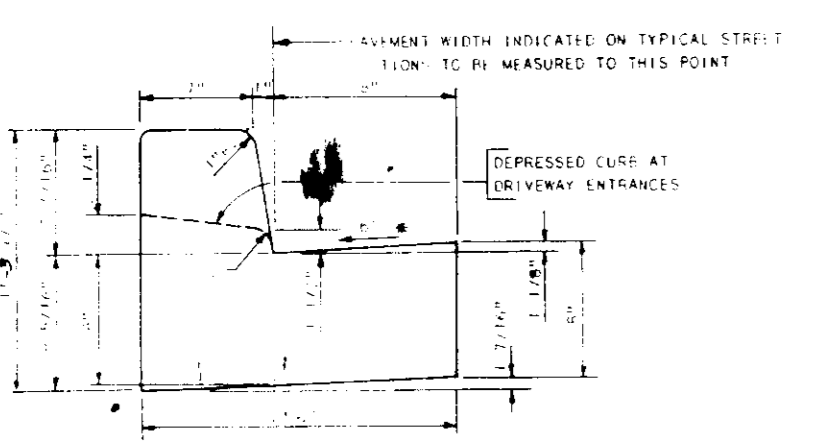
**HANDICAPPED SIGN DETAIL**

NOT TO SCALE  
SIGN TO BE PLACED AT A HEIGHT OF 8' ABOVE GRADE



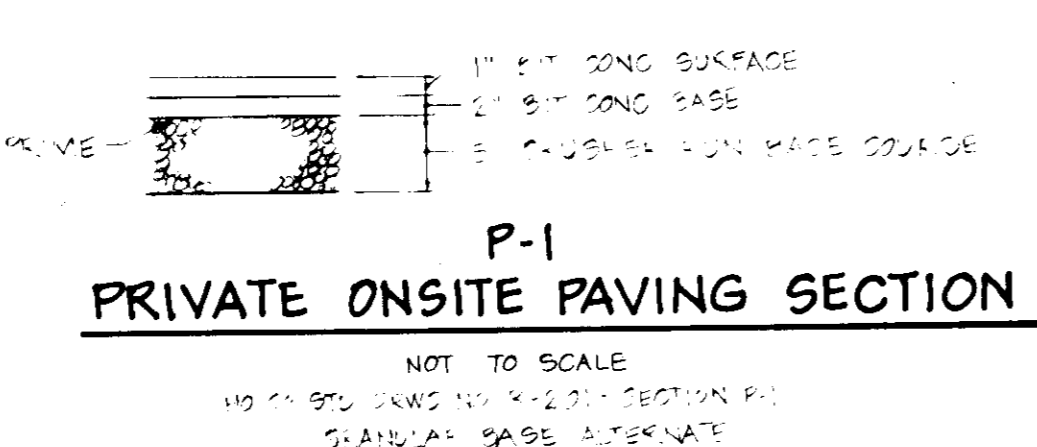
**TRASH RACK & ANTI-VORTEX DEVICE DETAIL**

NOT TO SCALE



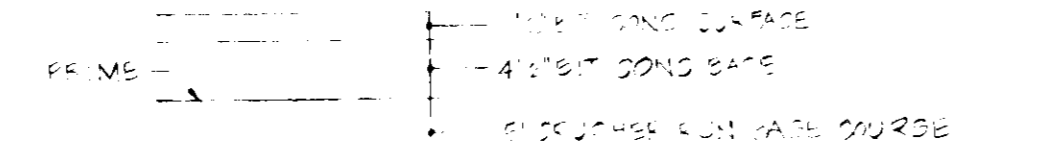
**STD. 7" CONC. CURB & GUTTER**

HO CO STD DRAWG R-301 - NOT TO SCALE



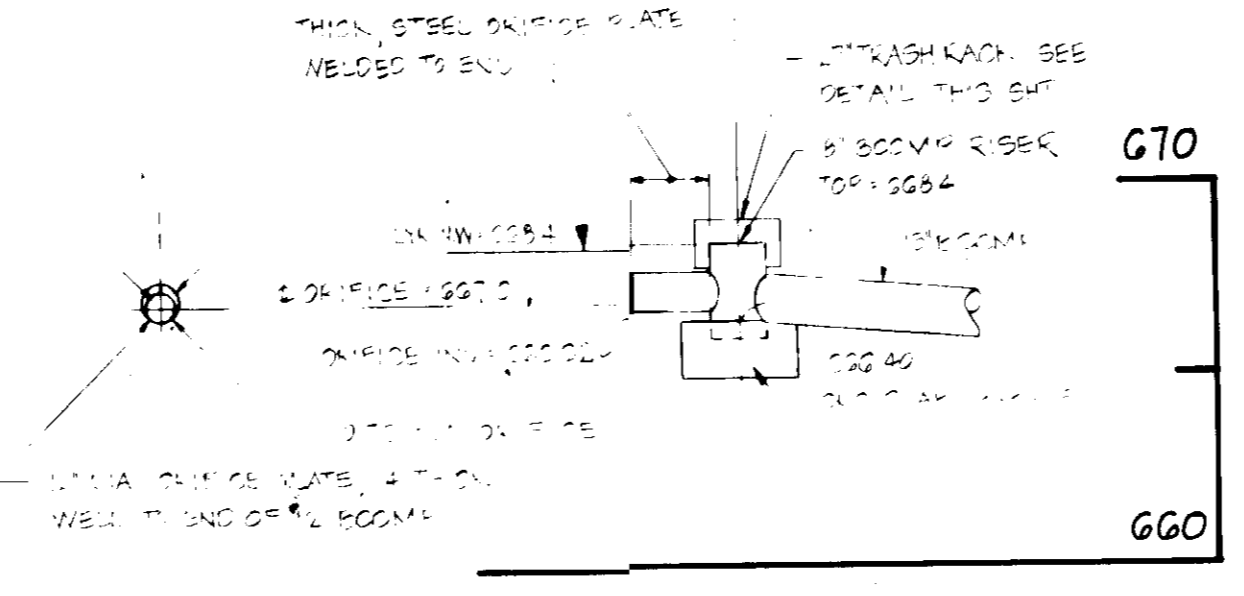
**P-1 PRIVATE ONSITE PAVING SECTION**

NOT TO SCALE  
HO CO STD DRAWG NO R-201 - SECTION P-1  
GRANULAR BASE ALTERNATE



**P-3 PAVING SECTION WITHIN PUBLIC R/W**

NOT TO SCALE  
HO CO STD DRAWG NO R-201 - SECTION P-3  
OLD FREDERICK RD - MAJOR COLLECTOR - ZONING R



**OUTLET CONTROL STRUCTURE DETAIL - S2**

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

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

*Joseph M. Boyd* 4-15-83  
COUNTY HEALTH OFFICER DATE

APPROVED HOWARD COUNTY OFFICE OF PLANNING AND ZONING

*William J. Hartel* 4-15-83  
PLANNING DIRECTOR, ACTING DATE

*Active Louis F. Dine* 4-15-83  
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

APPROVED FOR STORM DRAINAGE SYSTEMS AND PUBLIC ROADS  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*John P. Miller* 4-15-83  
DIRECTOR DATE

*Michael S. ...* 4-15-83  
CHIEF, BUREAU OF ENGINEERING 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. Helm* 15 APRIL 1983  
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.

*R. Zehm* 15 APRIL 1983  
HOWARD SOIL CONSERVATION DISTRICT 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.

*Virginia Parrish Secy.* 3/14/83  
VIRGINIA PARRISH - SECRETARY WEST HOWARD SWIM CLUB, INC. 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.

*James L. Yeager PE.* 11/26/83  
ENGINEER DATE

APPROVED  
DIVISION OF LAND DEVELOPMENT &  
ZONING ADMINISTRATION  
HOWARD COUNTY, MARYLAND  
DATE 3-4-83  
170

OWNER & DEVELOPER  
WEST HOWARD SWIM CLUB, INC  
% ROBERT PARRISH, PRESIDENT  
15800 UNION CHAPEL RD  
WOODBINE, MD 21797

*William J. Hartel*  
3-31-83

TITLE	S.W.M. PROFILES & MISCELLANEOUS DETAILS		
PROJECT	LOT 2 - CONNECTICUT-ASPEN, INC. PROP.		
LOCATION	4TH ELECTION DISTRICT	TAX MAP 7	HOWARD COUNTY, MD
DATE	JAN. 1983	SCALE AS SHOWN	CHECKED BY L.L.Y.
		DRAWN BY J.J.B.	DRAWING NO. 82103
boender associates		engineers surveyors planners	
3625 COUNTRYHOUSE SQUARE, SUITE A ELICOTT CITY, MARYLAND 21043 301.465.7777		SDP-83-89	

REV 3-15-83 ONSITE PAVING SECT. TO P-1, CHANGED TRASH RACK, EXTENDED RIPRAP UNDER S-1 - JJB  
AND SCS SIGN BLOCKS/ALL SIGNS