

SVM	TYPE	SIZE	QUANT	REMARKS
1	Acer Rubrum	2 1/2" - 3" CAL.	50	B & B Heavy Heads

STREET TREE NOTES:

- Contractor shall verify location of underground utilities prior to digging.
- Final location of trees may be adjusted slightly to accommodate field conditions.
- The location, type and number of trees shown on this plan are the minimum required and are used for bond purposes only. The final location and variety of trees may vary to accommodate field conditions and builders' landscape program. Bond release is contingent upon Section 16.131 of the Howard Co. Subdivision and Land Development Regulations, as approved by the Office of Planning and Zoning.
- Wire Mesh on root ball to be removed prior to back-filling.

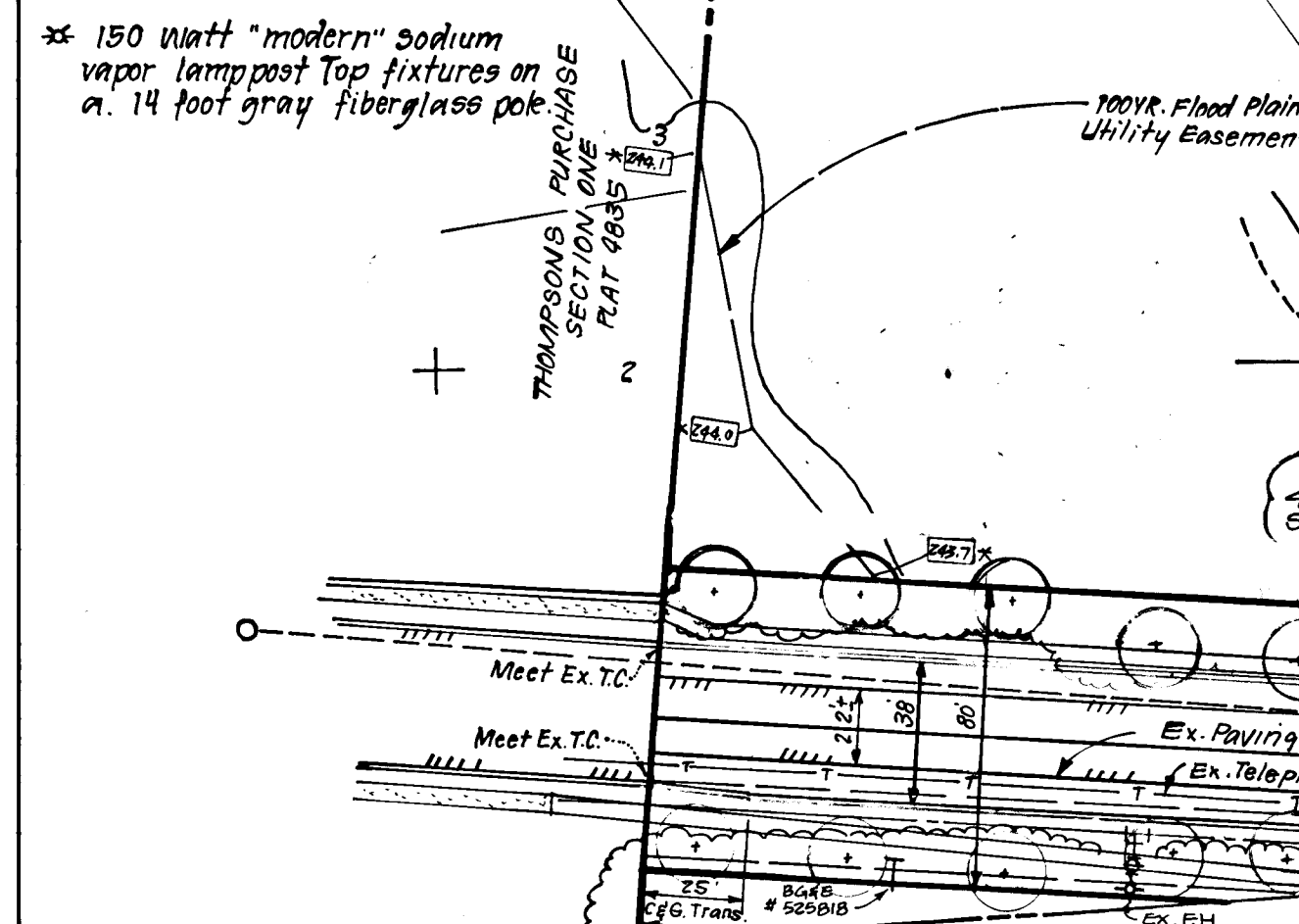
CURB & GUTTER LEGEND:

- Std. 7" C & G
- Rev. 7" C & G
- Std. 6" C & G
- Rev. 6" C & G
- Mod. C & G
- Rev. Mod. C & G

VICINITY MAP
SCALE: 1"=2000'

STREET LIGHT LEGEND

- 150 Watt Sodium Vapor Lamp Pendant mounted fixtures on a 25 ft. galvanized steel pole.
- 150 Watt "modern" sodium vapor lamp post top fixtures on a 14 foot gray fiberglass pole.



CENTERLINE CURVE DATA

STREET NAME & STATIONS	RADIUS	Δ	ARC	TAN	CHORD & BEARING
PRIVATE COURT 'A' 0+00 TO 0+25	180.00'	25°00'00"	78.54'	33.31'	77.92' N79°00'00"E
MAYFIELD AVE 10+00 TO 10+10	1010.00'	04°33'34"	151.33'	76.04'	151.95' S88°26'36"E

MAYFIELD MANOR SECTION ONE PLAT 4737

PLAN
SCALE: 1"=50'

BOARD OF HOWARD COUNTY COMMISSION 303/457

3 Rev. Guardrail & Sidewalk per As. Build 7.8.93
2 Relocated guardrail 10.5.93
1 Add Dewatering Device 7.1.93

NOTE: Guardrail to be located 6' behind sidewalk.

STREET LIGHT LEGEND:

- 250 Watt Mercury Vapor Lamp Pendant Mounted Fixture on 30' galv. steel pole.
- 175 Watt Mercury Vapor Lamp Post Top Fixture on 14' Grey Fiberglass Pole.

Note: Street lights to be placed 2'-10" behind curb in accordance with Ho. Co. Design Manual Vol. III.

Reviewed for: Howard Co. S.C.D.
Name: John A. ...
Signature: [Signature] Date: 3/28/89
U.S. Soil Conservation Service
This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.
[Signature] 3/28/89
Approved Date

DEVELOPER'S/BUILDER'S CERTIFICATE

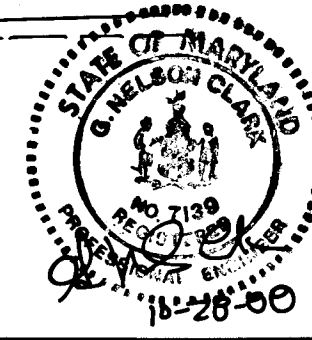
I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources Approved Training 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] 10.27.88
Signature of Developer/Builder Date

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] 10.28.88
G. Nelson Clark Date



GENERAL NOTES

- All storm drain and paving shall be in accordance with the latest edition and specifications of Howard County and MDSHA.
- Types of storm drainage refer to Std. Details of Ho. Co. and MDSHA.
- Trench compaction for storm drains within road or street right of way limits shall be in accordance with "Ho. Co. Design Manual", Vol. III, S 2.01.
- Information concerning underground utilities was obtained from available records, but the contractor must determine the exact location and elevation of mains by digging test pits, by hand, at all utility crossings well in advance of construction.
- All utility companies shall be notified 24 hrs in advance of construction.
- All traffic services, parking and signing to be done in accordance with the "Manual of Uniform Traffic Control Devices", 1984 Revised Edition.
- Sag or Crest Vertical Curves were designed in accordance with "Ho. Co. Design Manual", Vol. III.
- Provide Concrete Sidewalk Ramps Ho. Co. Std. Type A where shown in plan.
- Design Speed: See detail Sht 3. Zoning: RSC.
- The contractor or developer shall contact the construction inspection (Barvey Division 24 hrs. in advance of commencement of work. Ph. 792-7272.
- WP-98-31 dated 11-28-95 Approved the request to Waive Section 16.134 a,b(1) for Meadowridge Road only. Denied the request to Waive Section 16.134 a,b(1) for Sidewalk on Mayfield Avenue and section 16.136 for 3 street trees on Mayfield Avenue.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

[Signature] 4/12/89
Chief, Land Development Division Date

[Signature] 5/5/89
Chief, Bureau of Highways Date

[Signature] 5/18/89
Chief, Bureau of Engineering Date

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING.

[Signature] 5/18/89
Chief, Division of Community Planning & Land Development Date

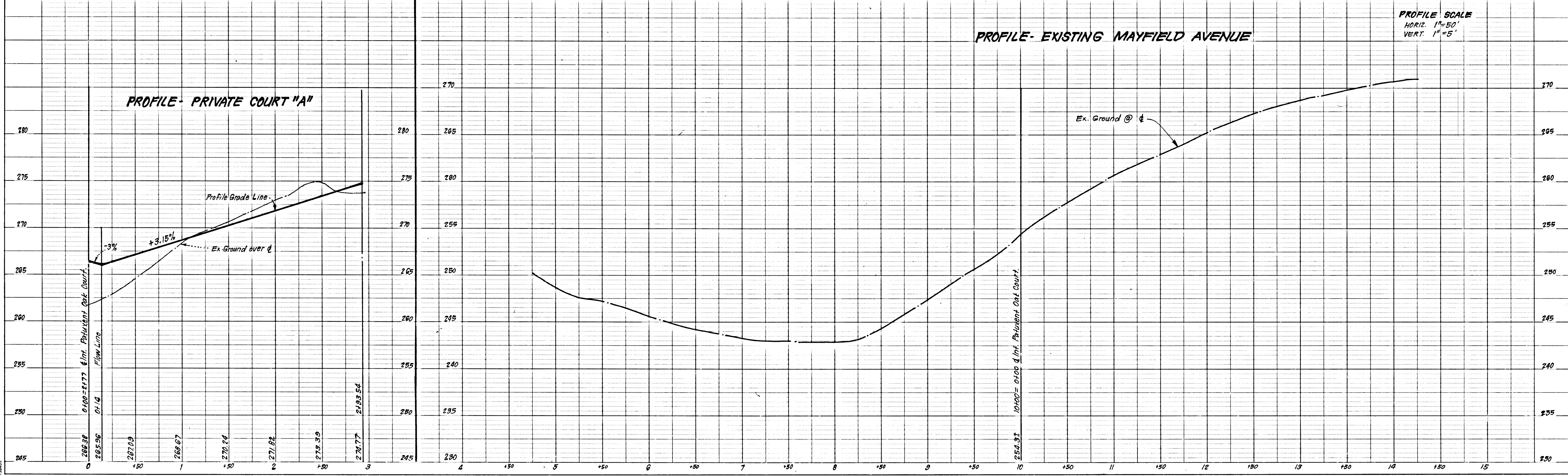
CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA, MD. 21045 • (301) 381-7500 - BALTO • (301) 621-8100 - WASH

DESIGNED	OT	SCALE	As Shown
DRAWN	K/W	DRAWING	10F7
CHECKED	D.T.	JOB NO.	87-163
DATE	10-20-88	FILE NO.	87-163-D

ROAD CONSTRUCTION PLANS
MAYFIELD AVENUE AND PRIVATE COURT "A"
MEADOWLAND

1ST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

FOR: DIVERSIFIED LAND CORP.
8015 DORSEY RUN RD. # B
COLUMBIA MD. 21044



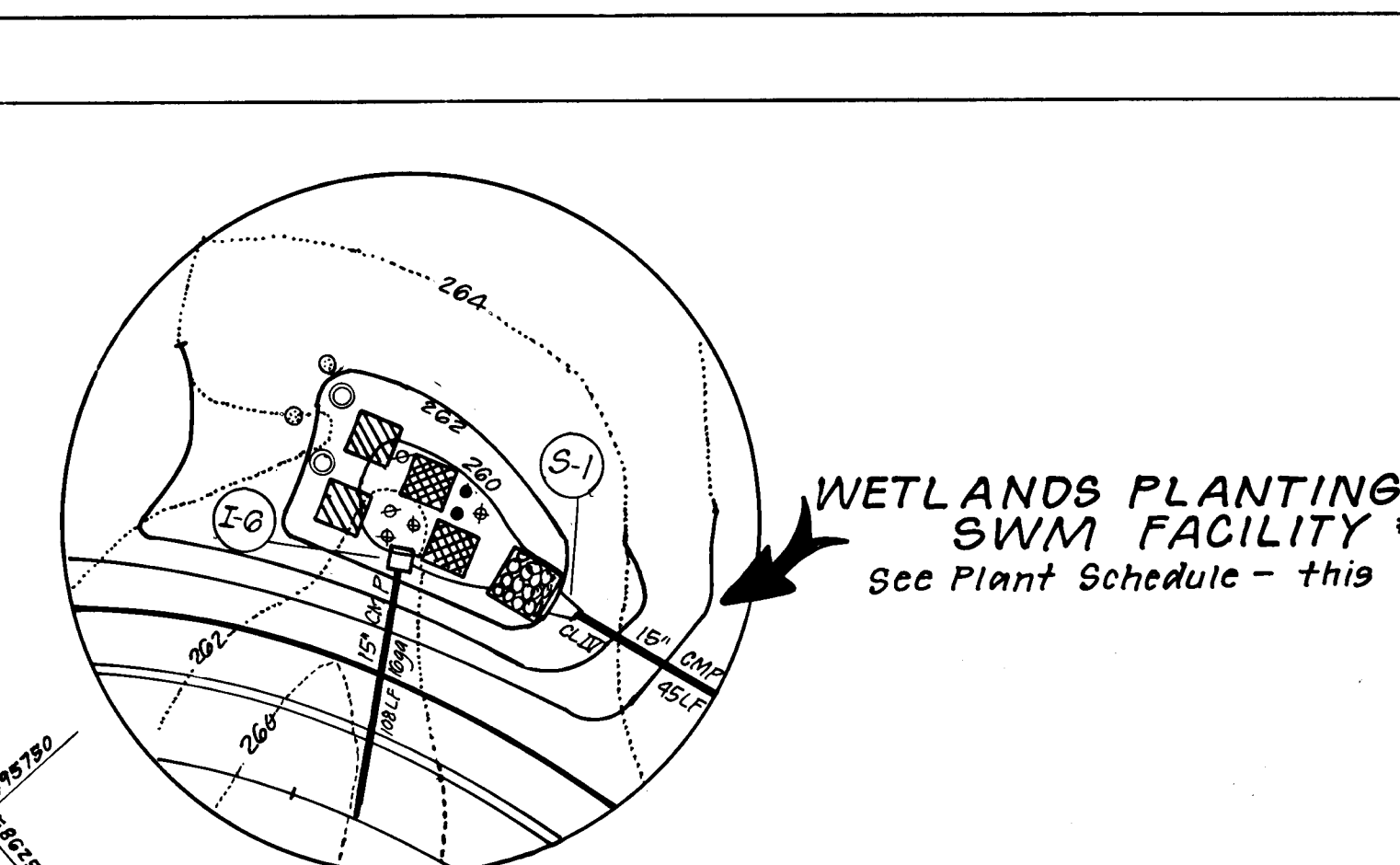
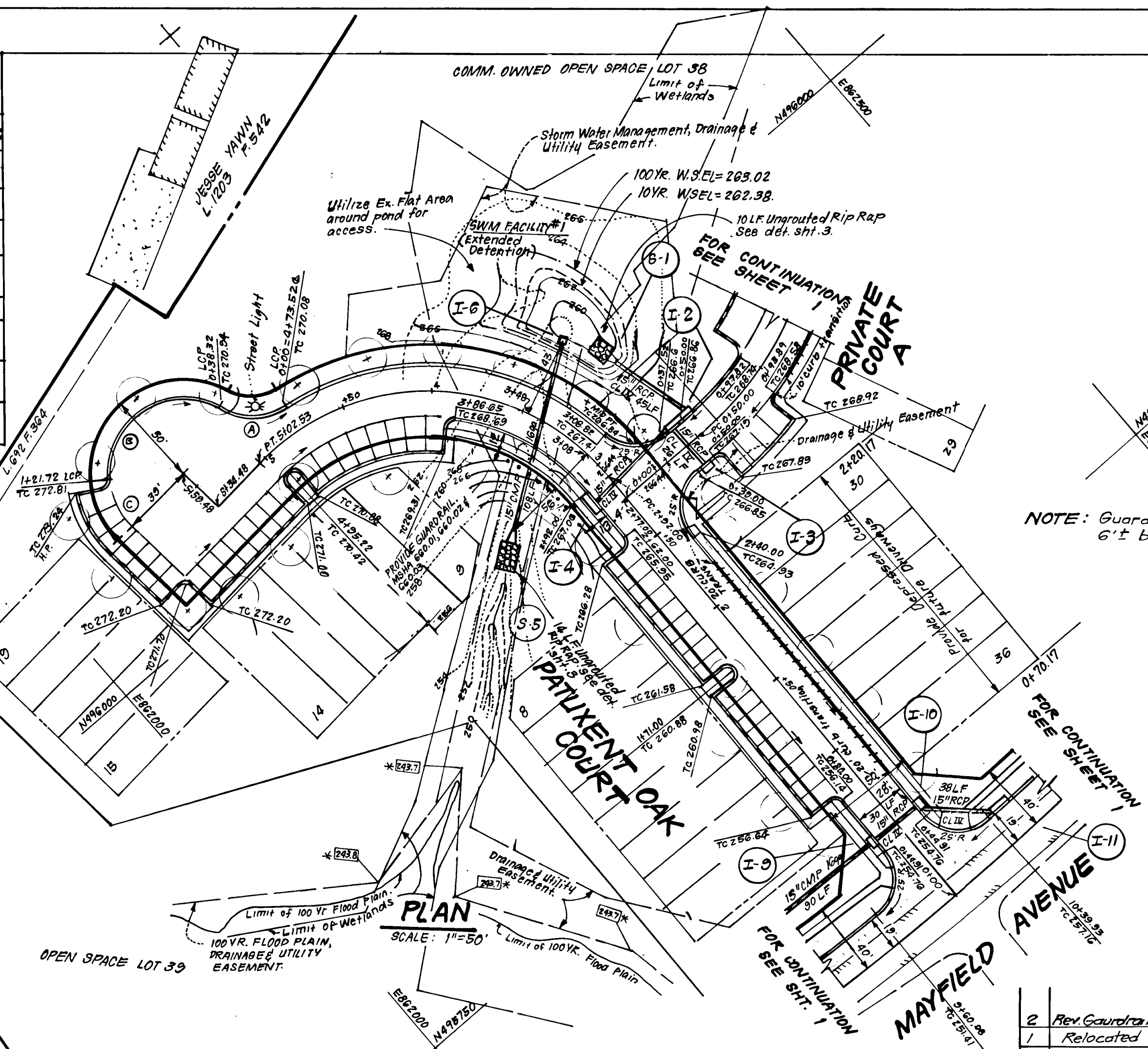
PROFILE SCALE
HORIZ. 1"=50'
VERT. 1"=5'

FOR STORM WATER MANAGEMENT FACILITY			
PLANT SCHEDULE			
KEY	PLANT NAME	SIZE	REMARKS
Primary Wetland Vegetation			
⊗	SAGITTARIA LATIFOLIA	2 sites of 270	Clumps of 3
⊗	DUCK POTATO	2 sites of 270	Clumps of 3
⊗	SCIRPUS AMERICANUS	2 sites of 270	Clumps of 3
⊗	COMMON TREE SQUARE	2 sites of 270	Clumps of 3
Secondary Wetland Vegetation			
⊙	HIBISCUS MOSCHEUTOS	2 Yr Plant	10 Clumps of 5
⊙	ROSE MALLOW	1 Yr Herb	10 Clumps of 5
⊙	PELTANDRA VIRGINICA	1 Yr Herb	10 Clumps of 5
⊙	ARROW ALUM	1 Yr Herb	10 Clumps of 5
⊙	SAURURUS CERNUS	Rhizome	10 Clumps of 5
⊙	LIZARDS TAIL	Rhizome	10 Clumps of 5

GENERAL NOTES

- Min. 1" Depth of Hydra-Soil to be placed on floor of basin
- Comparable substitutions of plant material may be permitted with approval by landscape architect.

THOMPSON'S PURCHASE SECTION ONE PART 2825



CENTERLINE CURVE DATA					
STREET NAME & STATIONS	RADIUS	Δ	ARC	TAN	CHORD & BEARING
PC 2192.00 TO PT. 5102.53	125.00'	36°30'00"	210.53'	140.05'	186.51' N46°45'00"W
QUIDE. SAC CURVE A	38.00'	67°59'33"	38.32'	21.20'	36.54' N51°12'26"W
CIL. DE. SAC CURVE B	39.00'	127°31'10"	83.40'	71.12'	68.39' N18°58'19"W
CIL. DE. SAC CURVE C	39.00'	41°46'02"	28.43'	14.88'	27.80' S15°53'01"W

Reviewed for: AWAC S.C.D.
 Name: John P. Clark
 Title: Chief, Division of Community Planning & Land Development
 Signature: [Signature]
 Date: 5/1/89
 U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

[Signature] 5/28/89
 Approved Date

DEVELOPER'S/BUILDER'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 Dept. 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] 10-28-88
 Date

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] 10-28-88
 Signature of Engineer
 Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[Signature] 4/19/89
 Chief, Land Development Division Date

[Signature] 5/5/89
 Chief, Bureau of Highways Date

[Signature] 5-8-89
 Chief, Bureau of Engineering Date

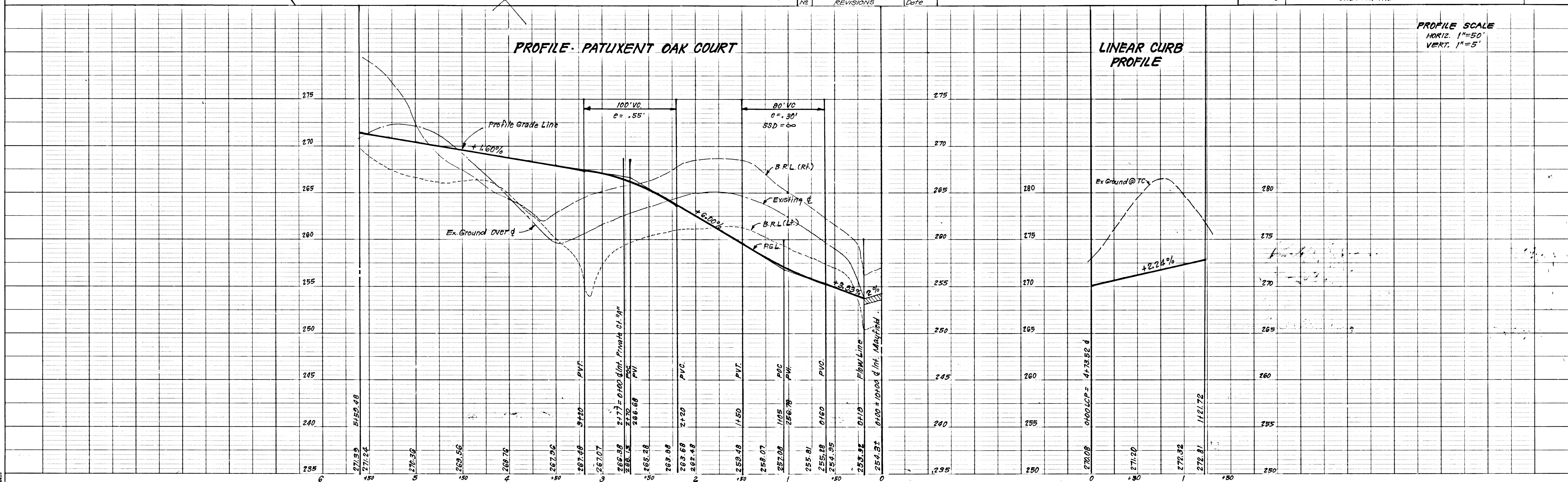
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

[Signature] 5/1/89
 Chief, Division of Community Planning & Land Development Date

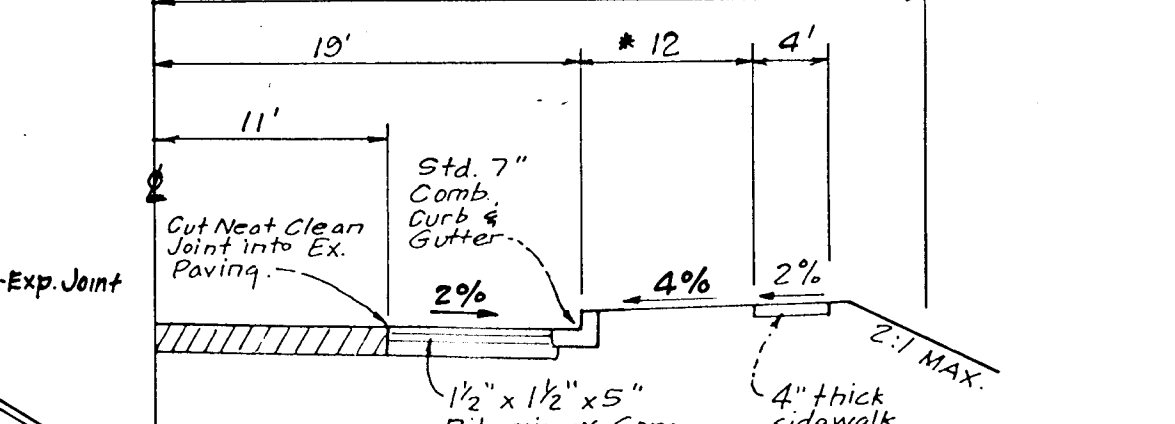
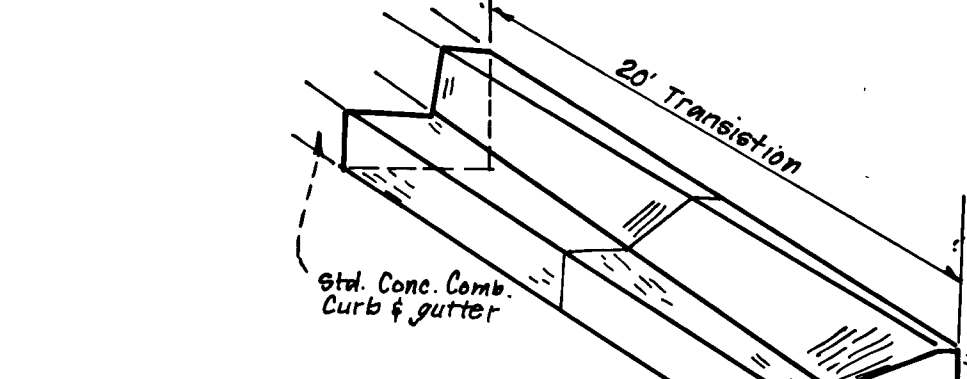
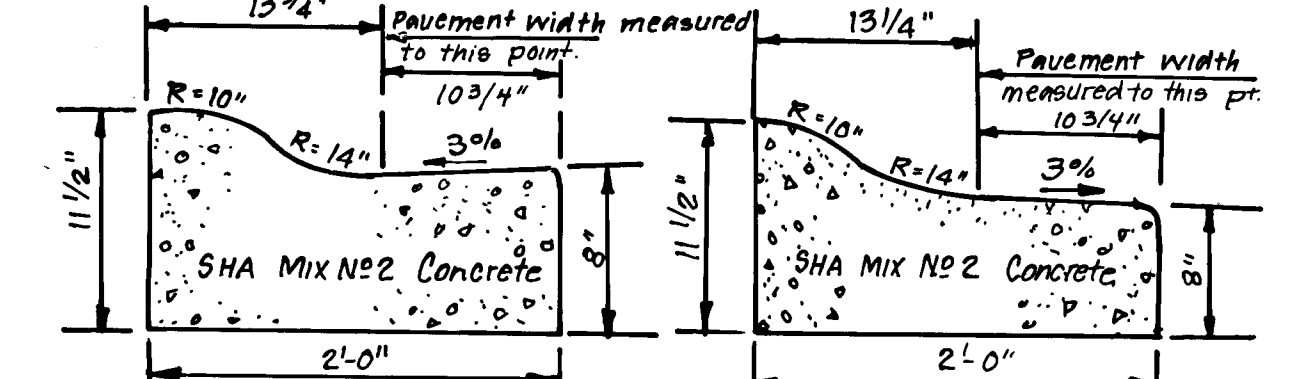
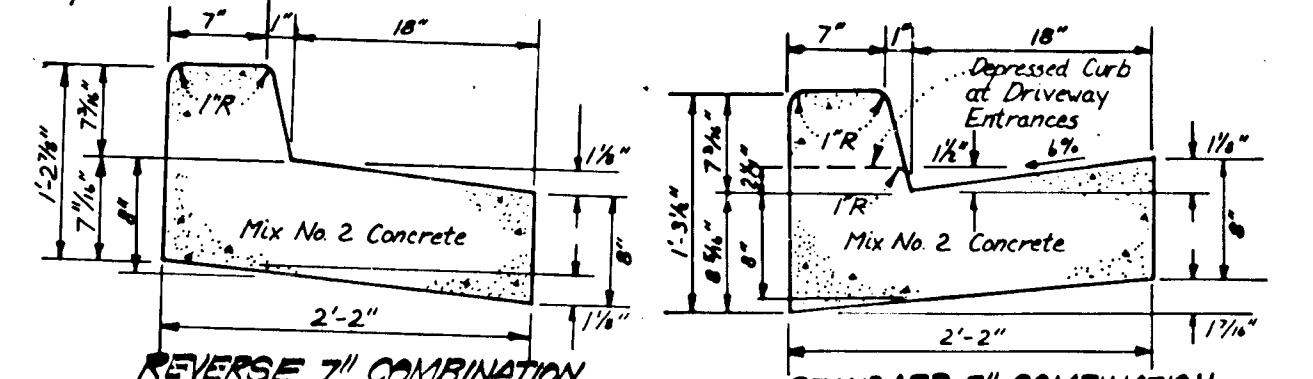
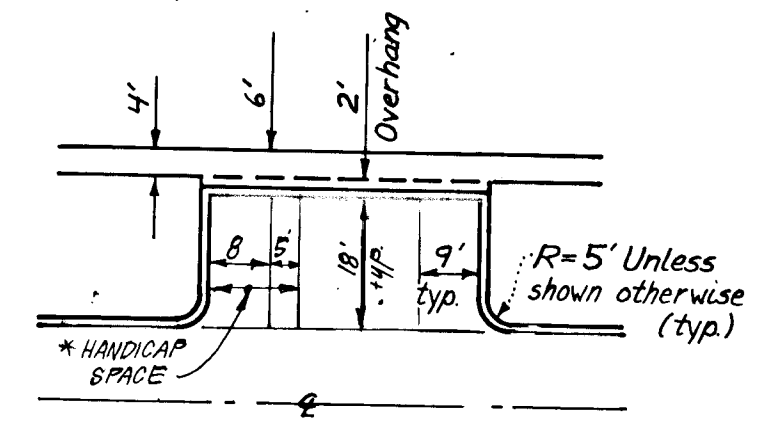
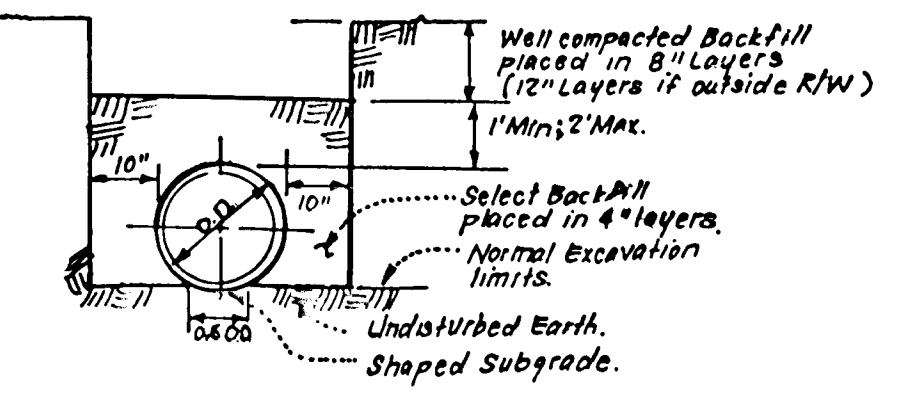
CLARK • FINECROCK & SACKETT, INC.
 ENGINEERS • PLANNERS • SURVEYORS

7135 MINSTREL WAY • COLUMBIA, MD. 21045 • (301) 381-7500 - BALTO • (301) 621-8100 - WASH

DESIGNED	D.T.	ROAD CONSTRUCTION PLANS	SCALE
DRAWN	KIW	PATUXENT OAK COURT	As Shown
CHECKED	D.T.	MEADOWLAND	DRAWING
DATE	10-20-88	1ST ELECTION DISTRICT	2 OF 7
		HOWARD COUNTY, MARYLAND	JOB NO.
		FOR: DIVERSIFIED LAND CORP.	87-163
		8015 Dorsey Run Rd. #B	FILE NO.
		Columbia, Md. 21044	87-163-D



- Notes:
 1. For c.o. of pipe see manufacturer's specs. or field measure circumference of pipe and divide by 3.14.
 2. Within road R/W, trench compaction density shall be 95% as determined A.S.H.T.O. T-190-A.
 3. For conditions requiring solid sheeting or trench shields "X" shall not exceed 30"



TRENCH COMPACTION DETAIL
NO SCALE

TYPICAL PARKING
NO SCALE

REVERSE 7" COMBINATION CURB & GUTTER
NO SCALE

STANDARD 7" COMBINATION CURB & GUTTER
NO SCALE

MODIFIED COMBINATION CURB & GUTTER
NO SCALE

REVERSE MODIFIED COMBINATION CURB & GUTTER
NO SCALE

TYPICAL PAVING SECTION - MAYFIELD AVE.
STA.
NO SCALE

* This dimension varies on sidewalk west of bridge. See plan sheet # 1.

Bituminous Conc Surface	1 1/2"
Bituminous Conc Base	4 1/2"
Prime	
6" Crusher Run Base (Placed in 1 Course)	6"
or	
4" Dense Graded Stabilized Aggregate Base Course	4 1/2"

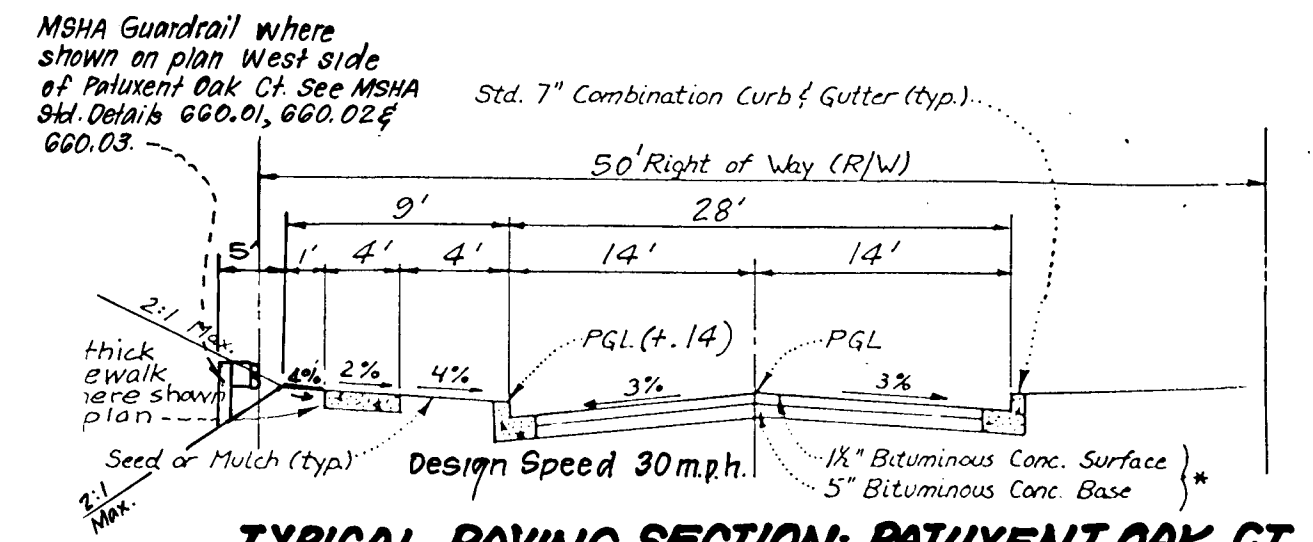
Bituminous Conc Surface	1"
Bituminous Conc Base	2"
Prime	
5" Crusher Run Base (Placed in 2 Courses)	5"
or	
4" Dense Graded Stabilized Aggregate Base Course	4"

Bituminous Conc Surface	1 1/2"
Bituminous Conc Base	2 1/2"
Prime	
8" Crusher Run Base (Placed in 2 Courses)	8"
or	
4" Dense Graded Stabilized Aggregate Base Course	6"

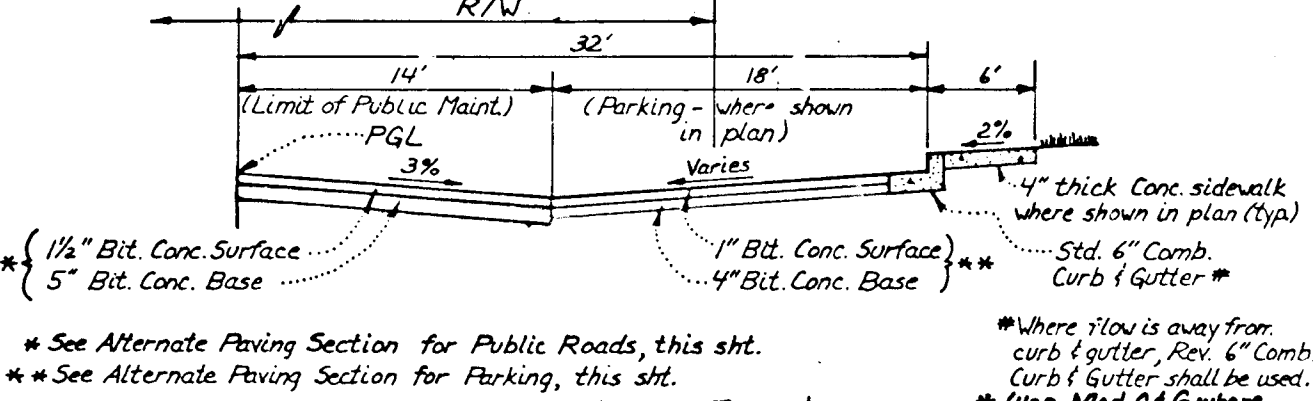
ALTERNATE PAVING SECTION FOR MAJOR & MINOR COLLECTOR (SECTION P-3)
NO SCALE

ALTERNATE PAVING SECTION PRIVATE DRIVE & PARKING AREA (SECTION P-1)
NO SCALE

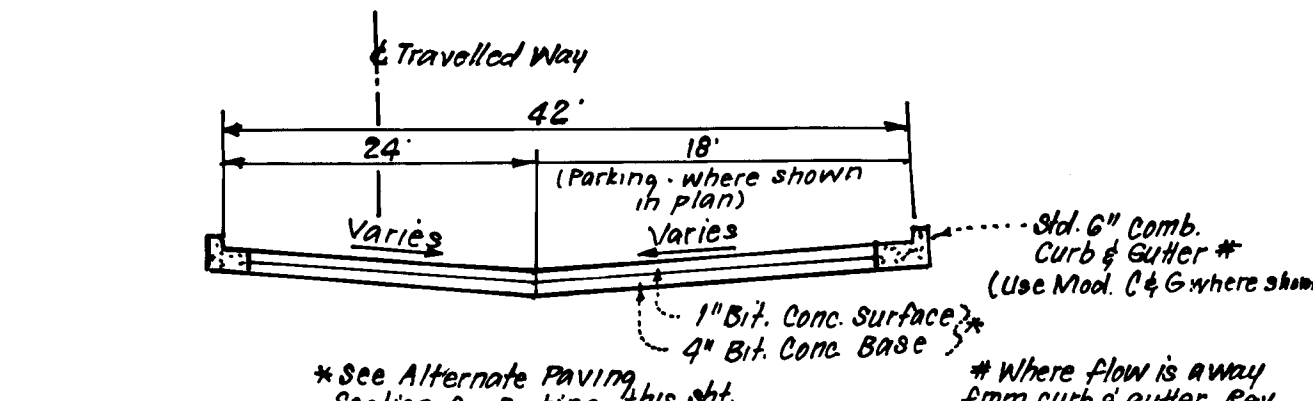
ALTERNATE PAVING SECTION FOR PUBLIC ROADS (SECTION P-2)
NO SCALE



TYPICAL PAVING SECTION - PATUXENT OAK CT.
STA. 0+19 TO 5+59.48.
NO SCALE



TYPICAL HALF SECTION PARKING ADJACENT TO PATUXENT OAK CT.
NO SCALE

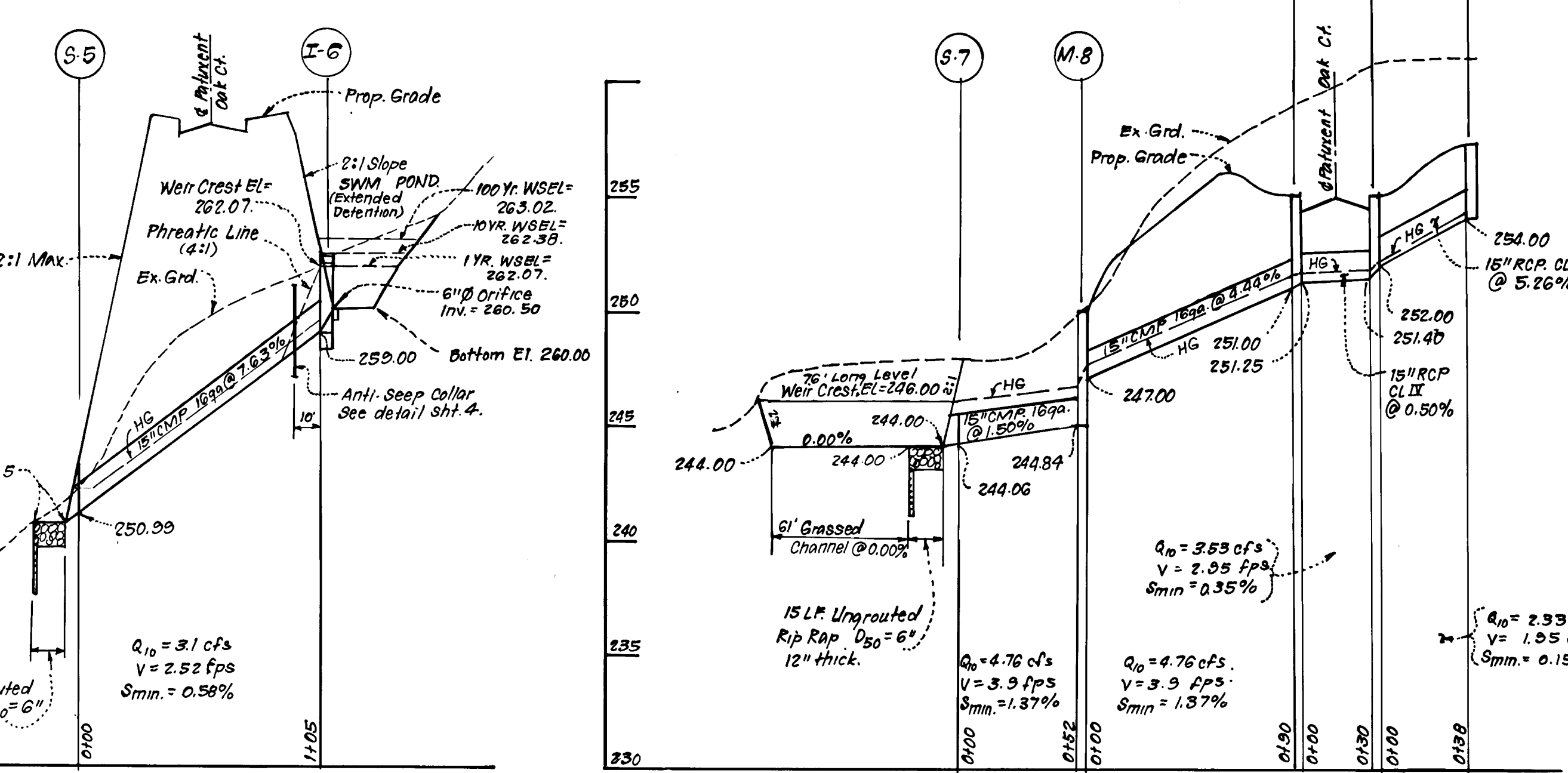
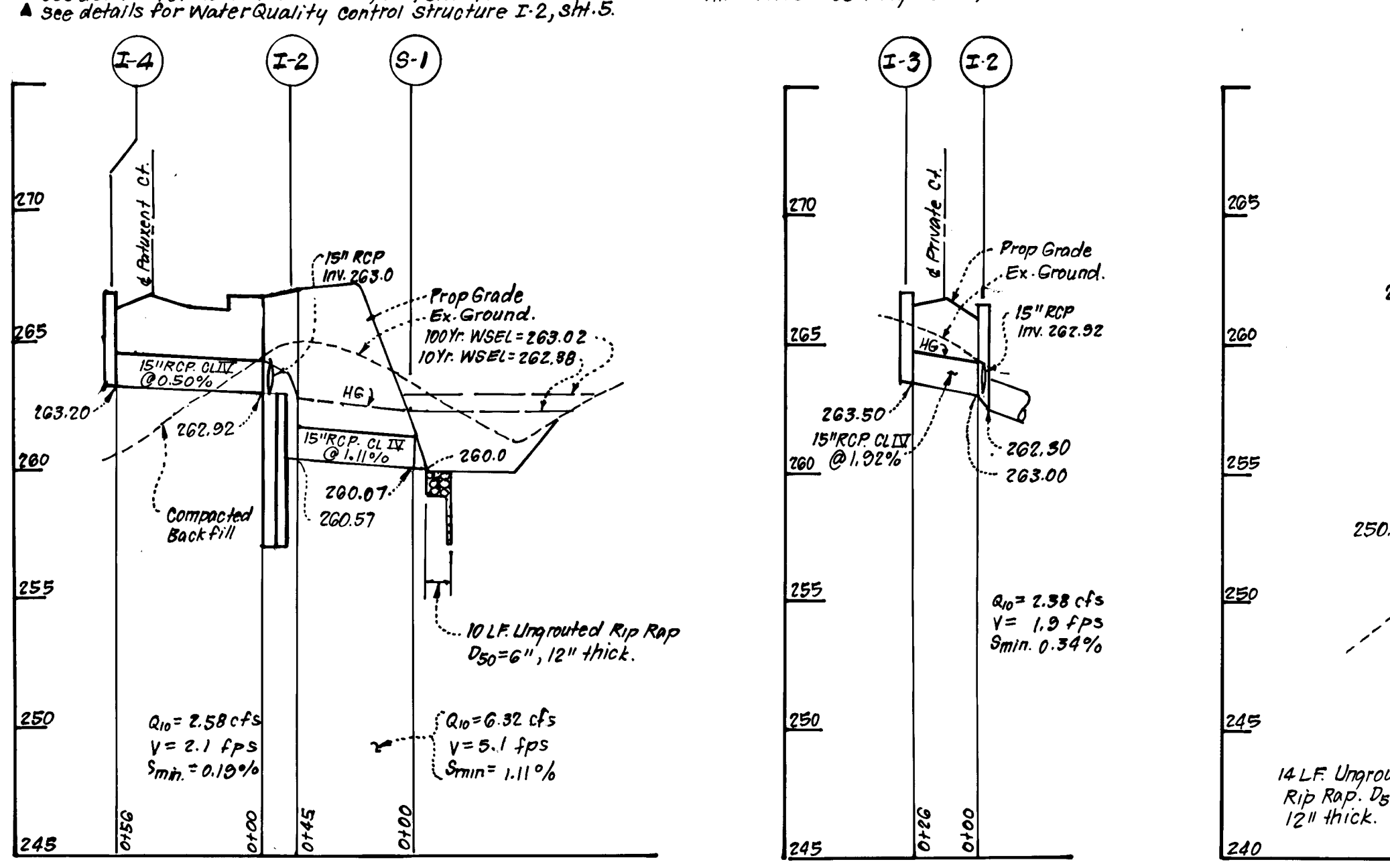


TYPICAL PAVING SECTION - PRIVATE COURT 'A'
NO SCALE

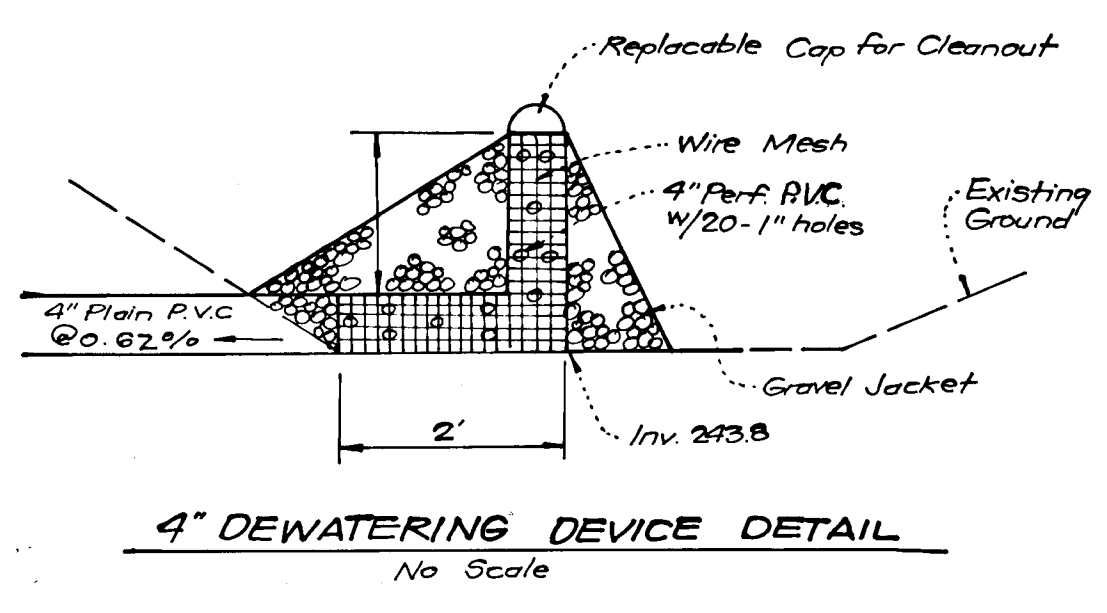
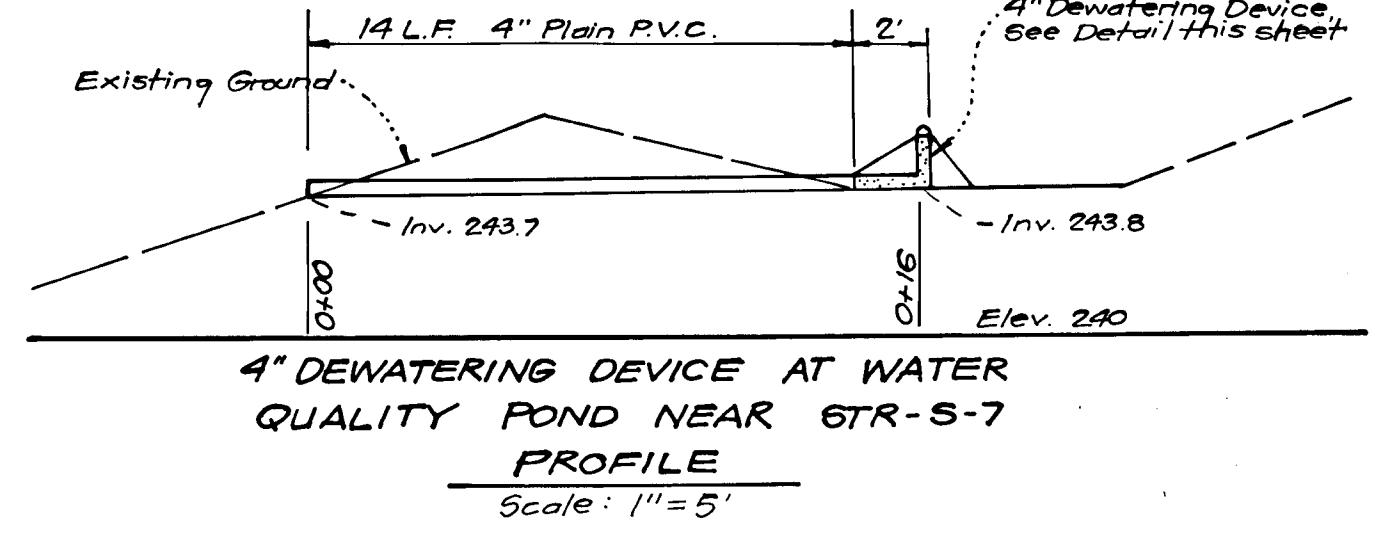
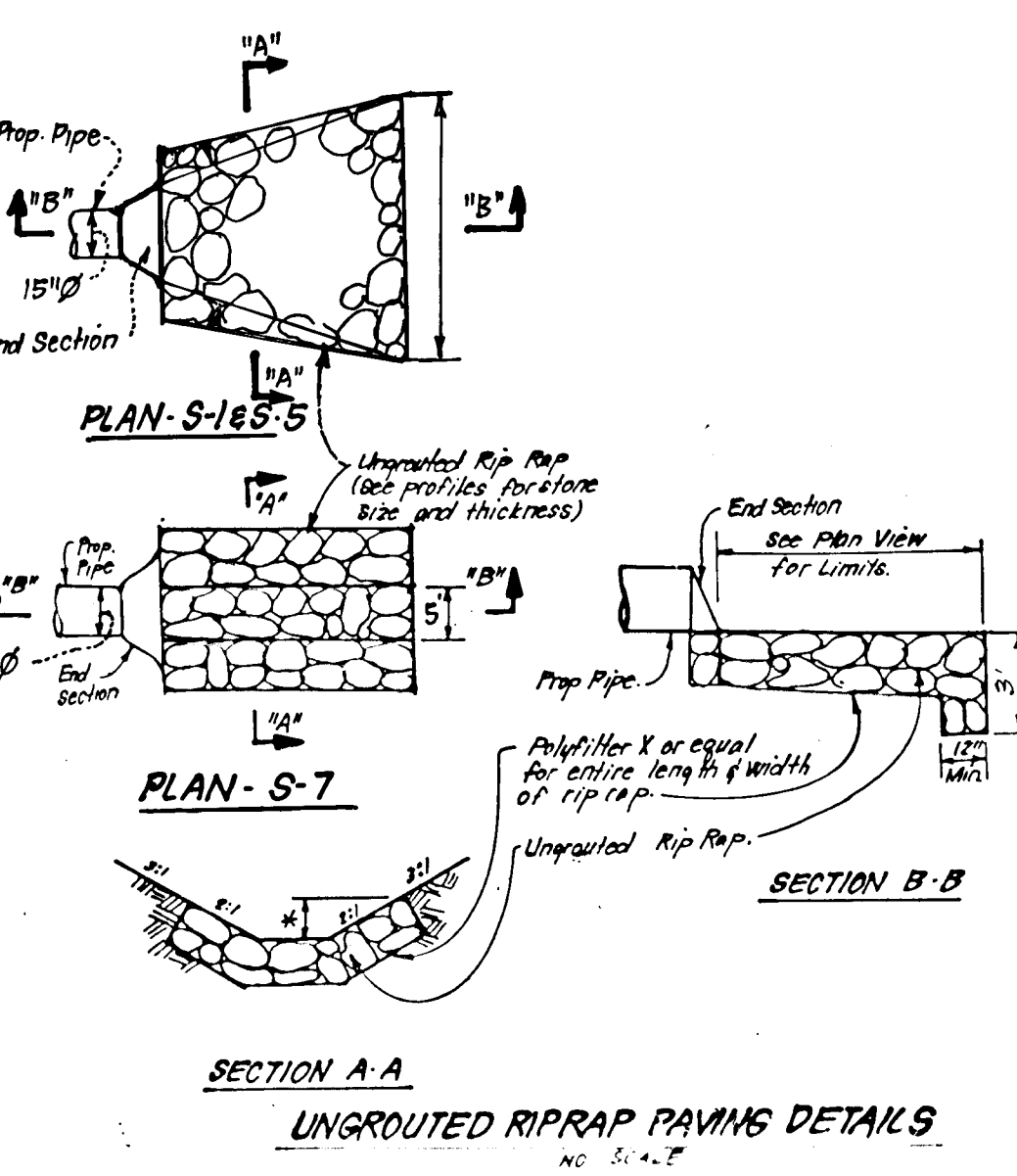
STRUCTURE SCHEDULE									
NO.	TYPE	INV. IN	INV. OUT	TOP ELEVATION		REMARKS	LOCATION		
				UPPER	LOWER				
S-1	Concrete End Section	15" Ø	260.07	260.00	261.51	Ho Co Sid. SD 5.51	15" Ø	0+143.35 Private Ct. 024L	
I-2	Special - See det. sht. 5	262.92/263.00	260.57	267.17	266.59	See Special Det. Sht. 5	Ø 14.335	Private Ct. 12 L1	
I-3	A-5 Inlet w/ Deflectors		263.50	267.12	266.34		SD 4.01	0+144.84 Private Ct. 12 R1	
I-4	A-10 Inlet		263.20	267.00	266.05		SD 4.02	0+148.34 Patux. Oak Ct. 14 L1	
S-5	Metal End Section	15" Ø	250.09	250.50	252.44		SD 5.61	15" Ø	See Plan
I-6	Modified Precast D-Inlet		259.00	262.32	264.37		SD 4.37		SWIM Pond #1
S-7	Metal End Section	18" Ø	244.06	244.00	245.52		SD 5.61	15" Ø	See Plan
M-8	Shallow Brick Manhole		247.00	244.84	250.00		G 8.05		See Plan
I-9	A-5 Inlet w/ Deflectors		251.25	251.40	255.00		SD 4.01	Ø 14.335	Pat. Oak Ct. 14 L1
I-10	A-5 Inlet w/ Deflectors		252.00	251.40	255.22		SD 4.01	Ø 14.335	Pat. Oak Ct. 14 R1
I-11	A-10 Inlet		254.00	257.85	257.24		SD 4.02	Ø 14.335	Pat. Oak Ct. 14 R1

PIPE SCHEDULE		
SIZE	TYPE	LENGTH
15"	RCP CLIX	195 LF
15"	CMP 18ga.	247 LF

* Use 2% x 1/2" Corrugations.



STORM DRAIN PROFILES
SCALES: HORIZ. 1"=50'
VERT. 1"=5'



Reviewed for Howard County
 U.S. Soil Conservation Service
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
 Signature: [Signature]
 Date: 3/20/89

DEVELOPER'S/BUILDER'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 Dept. 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 of Developer/Builder: [Signature]
 Date: 10-27-88

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 of Engineer: [Signature]
 Date: 10-28-88

2	Rev. Guard rail location typical section Patuxent Oak Ct.	10-5-83
1	Add dewatering device profile and detail	7-1-83
REVISIONS		
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS		
[Signature]		10/15/89
[Signature]		5/5/89
[Signature]		5/8/89
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING		
[Signature]		5/10/89
CLARK • FINEROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS 7135 MISTREIL WAY • COLUMBIA MD 21045 • (301) 381-7400 • BALTO. • (301) 624-8100 • WASH.		
DESIGNED	D.T.	SCALE AS SHOWN
DRAWN	KIW	DRAWING 3 OF 7
CHECKED	D.T.	JOB NO 87163
DATE	10-20-88	FILE NO 87163-D

STORM WATER MANAGEMENT NOTES

I. SITE PREPARATION

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

Areas to be covered by the pond or reservoir will be cleared of all trees, brush, logs, fence, 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 and below 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, oversize 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 sheepsfoot, 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.

Where a minimum required density is specified, each layer of fill shall be compacted as necessary to obtain that density and is to be certified by the Engineer.

Cutoff Trench

Where specified, a cutoff trench shall be excavated along or parallel to the centerline of the embankment as shown on the drawings. The bottom width of the trench shall be as shown on the drawings, 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.

V. CONCRETE

1. Materials

- a. Cement - Normal Portland cement shall conform to the latest ASTM Specification C-150.
- b. Water - The water used in concrete shall be clean, free from oil, acid, alkali, scales, organic matter or other objectionable substances.
- c. 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.
- d. 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.
- e. 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 the 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-packed mortar.

8. Protection and Curing - Exposed surfaces of concrete shall be protected from the direct rays of the sun for at least 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.

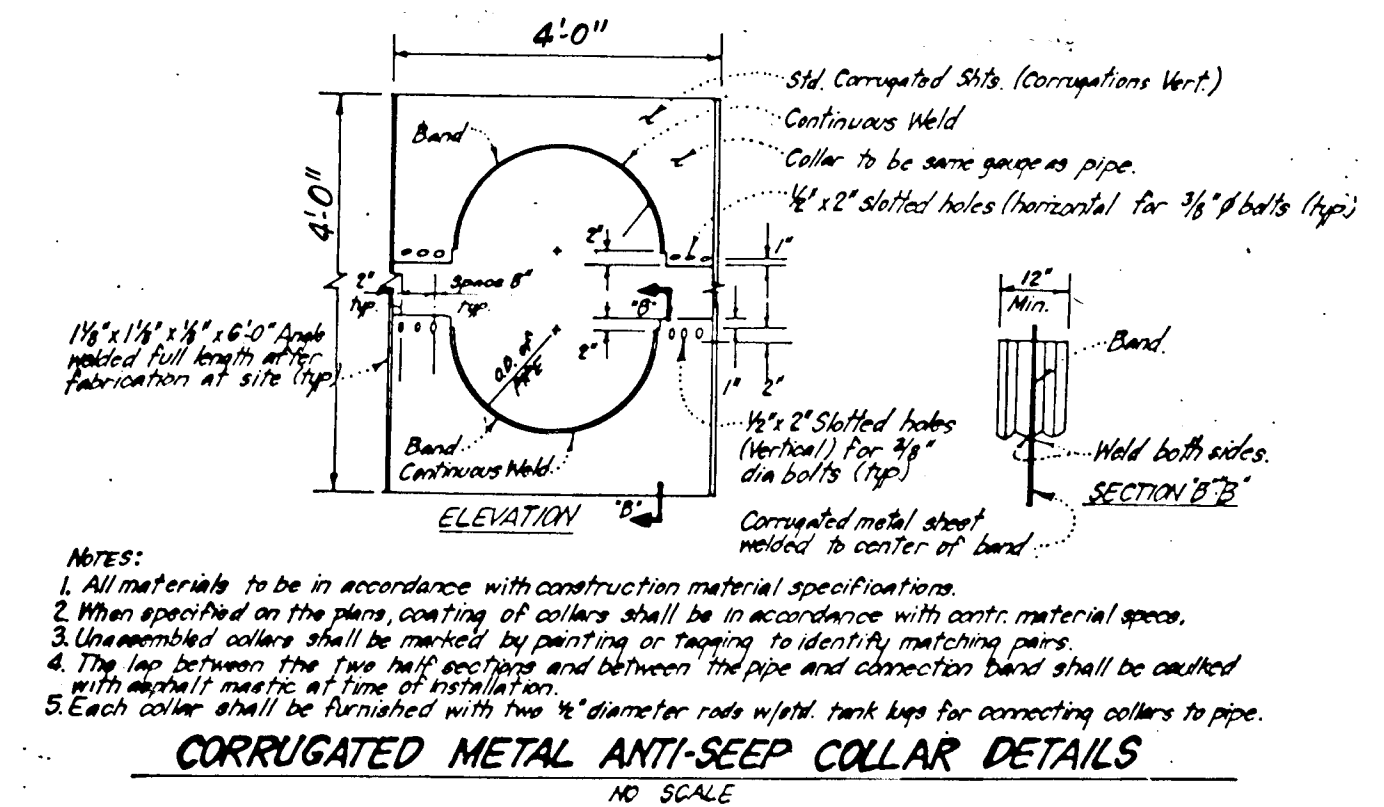
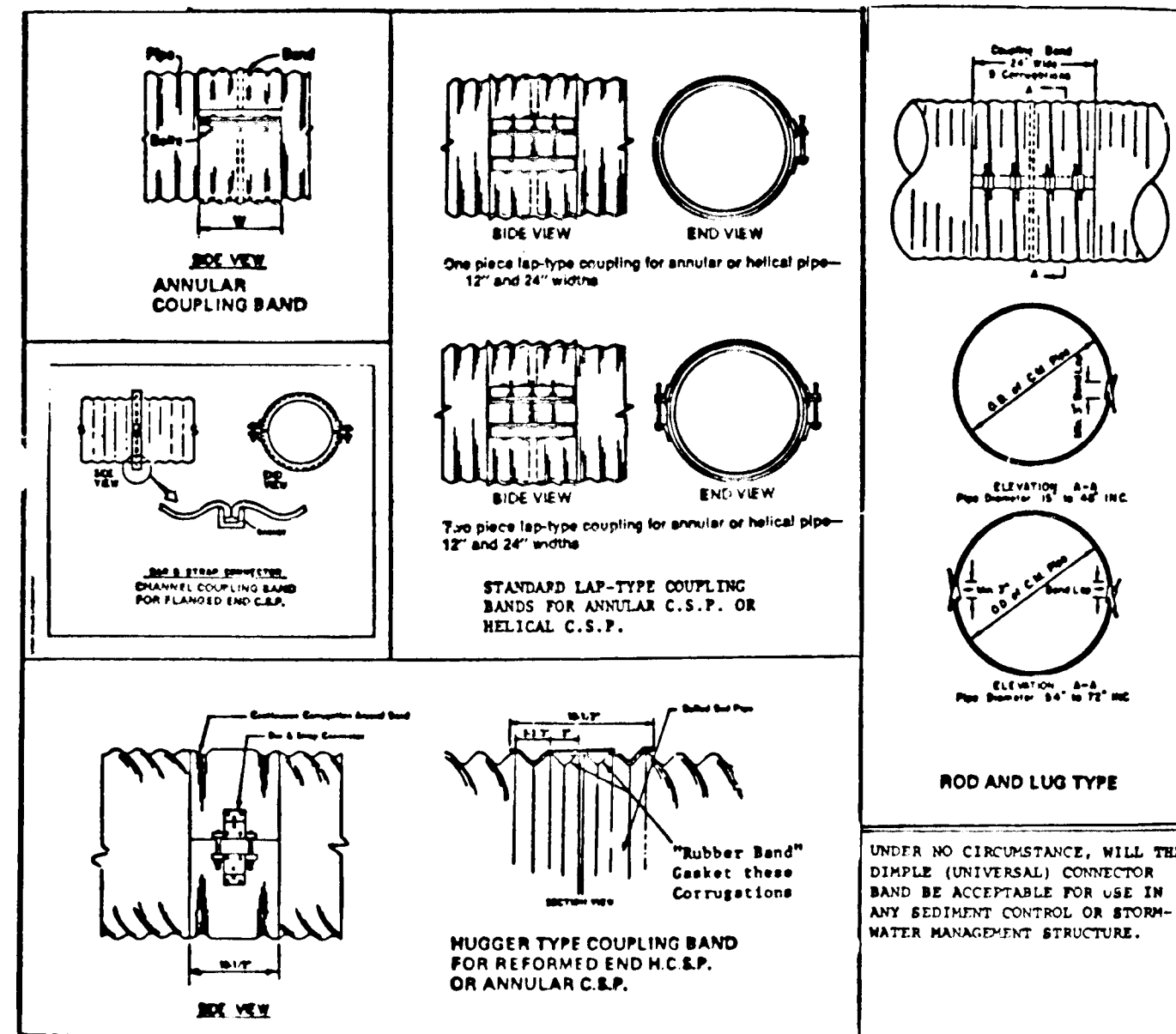
9. Placing Temperature - Concrete may not be placed at temperatures below 37° F with the temperature falling, or 36° with the temperature rising.

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

VII. EROSION AND SEDIMENT CONTROL

Construction operations will be carried out in such a manner that erosion will be controlled and water and air pollution minimized. State and local laws concerning pollution abatement will be followed. Construction plans shall detail erosion and sediment control measures to be employed during the construction process.



NOTES:

- All materials to be in accordance with construction material specifications.
- When specified on the plans, coating of collars shall be in accordance with contractor's material specs.
- Unassembled collars shall be marked by painting or taping to identify matching pairs.
- The gap between the two half sections and between the pipe and connection band shall be caulked with mastic at time of installation.
- Each collar shall be furnished with two 1/2" diameter rods with tank lugs for connecting collars to pipe.

CORRUGATED METAL ANTI-SLEEP COLLAR DETAILS
NO SCALE

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 tamper 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 equipment be driven 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. LAYING PIPE

All pipes shall be circular in cross section.

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 ASTM Specification M-192 Type A with watertight coupling bands. Any bituminous coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound.

Steel pipes with polymeric coatings shall have a minimum coating thickness of 0.01 inch (10 mil) on both sides of the pipe. The following coatings are commercially available: Nexon, Plast-O-Crete, Black-Rad, and Beth-Fu-Loy. Coated corrugated steel pipe shall meet the requirements of ASTM Specification M-245 and M-246.

Materials - (Aluminized Steel Pipe) - This pipe and its appurtenances shall conform to the requirements of ASTM Specification M-274-791 with watertight coupling bands or flanges.

Materials - (Aluminum Pipe) - This pipe and its appurtenances shall conform to the requirements of ASTM Specification M-196 or M-211 with watertight coupling bands or flanges. Coupling bands, anti-sleep 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.

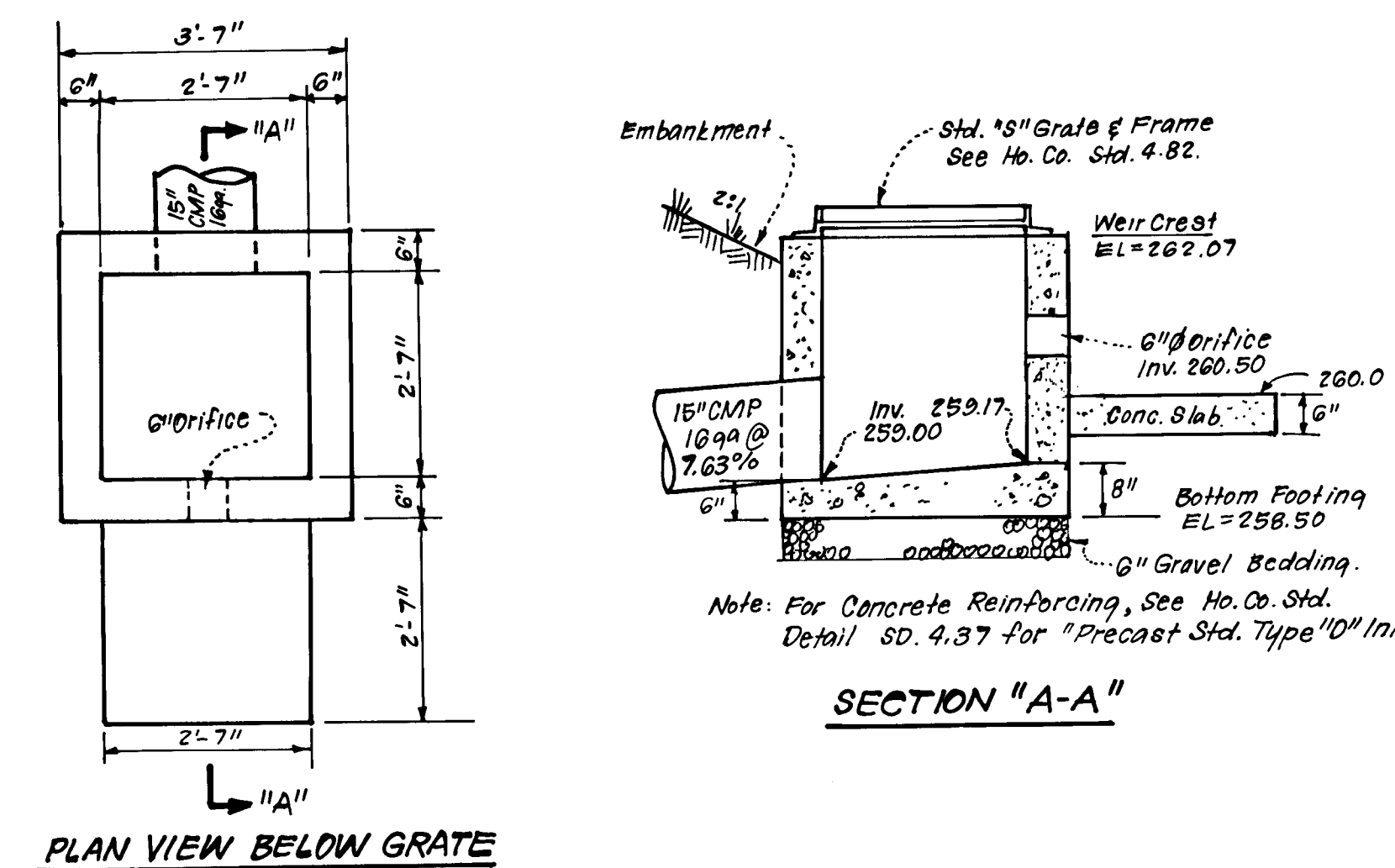
2. Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal. Watertight coupling bands or flanges shall be used at all joints. Anti-sleep collars shall be connected to the pipe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

5. Backfilling shall conform to structural backfill as shown above.

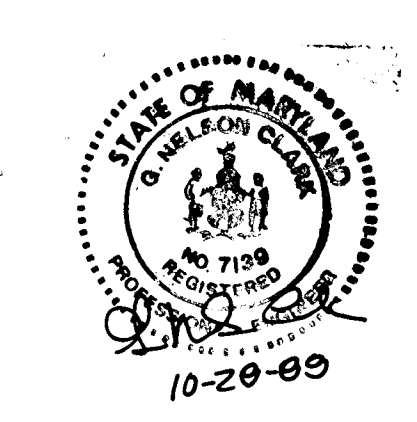
6. Other details (anti-sleep collars, valves, etc.) shall be as shown on the drawings.



DETAIL CONTROL STRUCTURE - I-G
1" = 1/2"

Reviewed for Howard S.C.D.
Name
Signature
Date 3/29/89
U.S. Soil Conservation Service
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Signature of Approver
Date 3/28/89

DEVELOPER'S/BUILDER'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 Dept. 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 of Developer/Builder
Date 10-22-88



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 of Engineer
Date 10-28-88

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Chief, Land Development Division 4/13/89
 Chief, Bureau of Highways 5/5/89
 Chief, Bureau of Engineering 5/18/89
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 Chief, Division of Community Planning & Land Development 5/1/89

CLARK • FINEFROCK & SACKETT, INC.
 ENGINEERS • PLANNERS • SURVEYORS
 2150 ANNEVILLE WAY • COLUMBIA, MD. 21046 • (301) 741-7400 • (301) 741-1010 • (301) 741-1000 • WASH.

DESIGNED: ROAD CONSTRUCTION PLANS
 D.T.
 DRAWN: STORM WATER MANAGEMENT DETAILS
 K.I.W.
 CHECKED: MEADOWLAND
 D.T.
 DATE: 10-20-88

SCALE: AS SHOWN
 DRAWING: 4 OF 7
 JOB NO: 87-163
 FILE NO: 87-163-D

1ST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 FOR: DIVERSIFIED LAND CORP.
 8015 Dorsey Run Rd. # B
 Columbia Md. 21044

F-89-84

DESIGN AND GENERAL NOTES

1. Use poured-in place concrete for the entire structure.
2. Refer to Maryland State Highway Administration for materials and methods of construction.
3. Wall thickness shall be as follows:
Minimum 8 inches thick for the first 8'-0" of depth, 12 inch thick walls between 8'-0" and 12'-0" of depth and 16 inch thick walls for depth greater than 12'-0". Depth to be measured from top of top slab to crown of outgoing pipe.
4. $f'c = 3,500$ psi at 28 days.
5. All reinforcing steel to be ASTM A615, GR.60.
6. For details concerning throat openings, refer to MCDOT Standard No. 55.

Throat Length	No. of Pipe Supports
5'	0

pipe supports to be spaced at 5'-0" O.C.

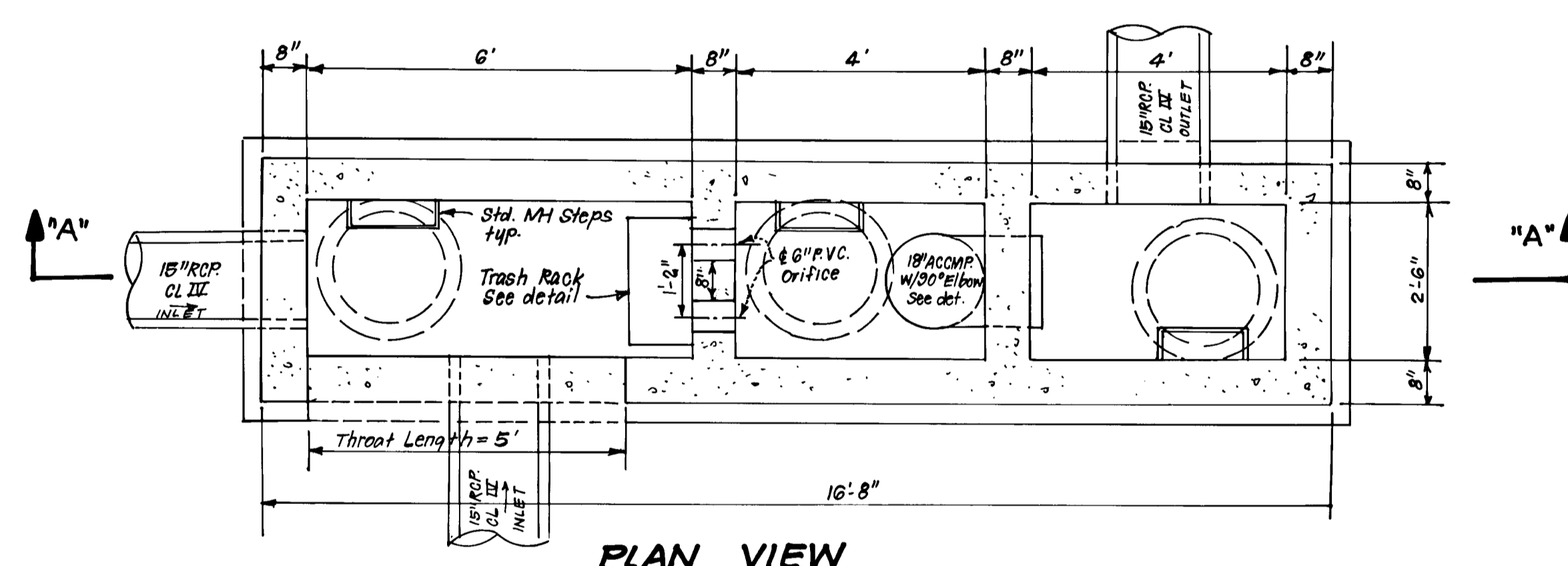
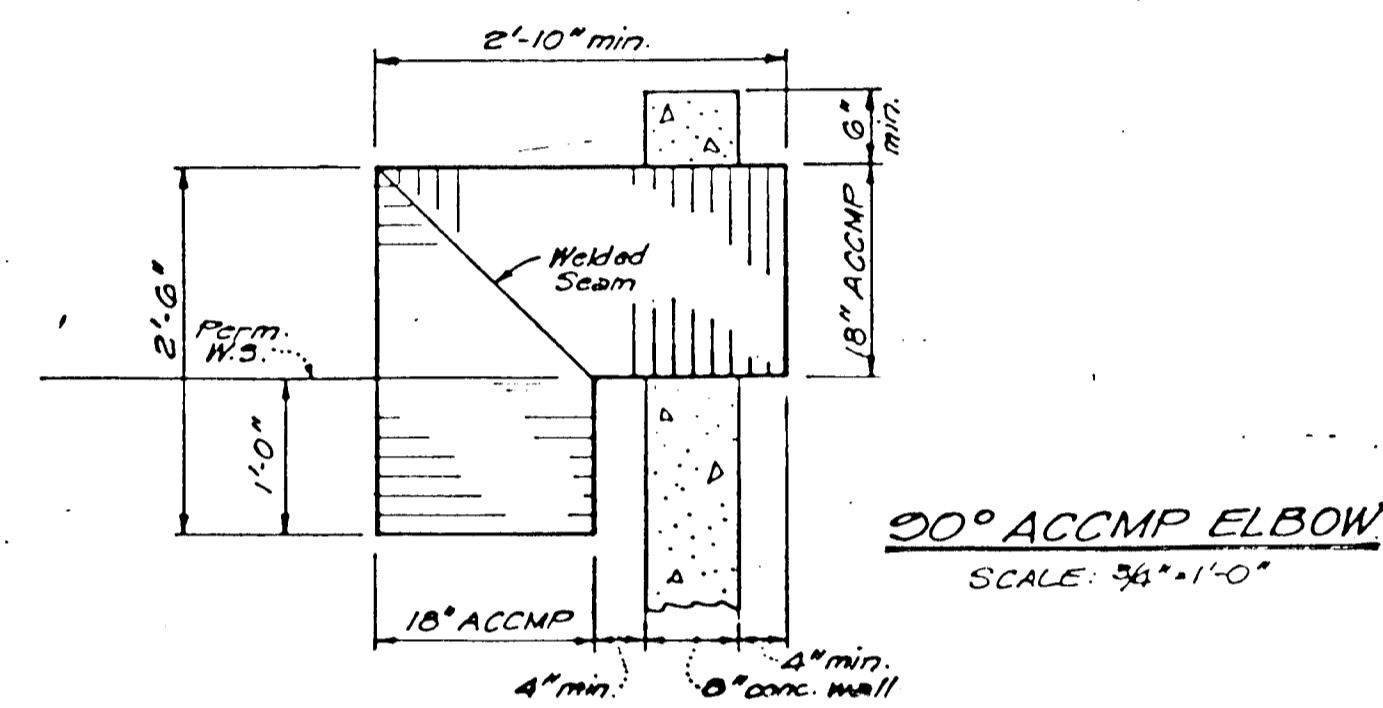
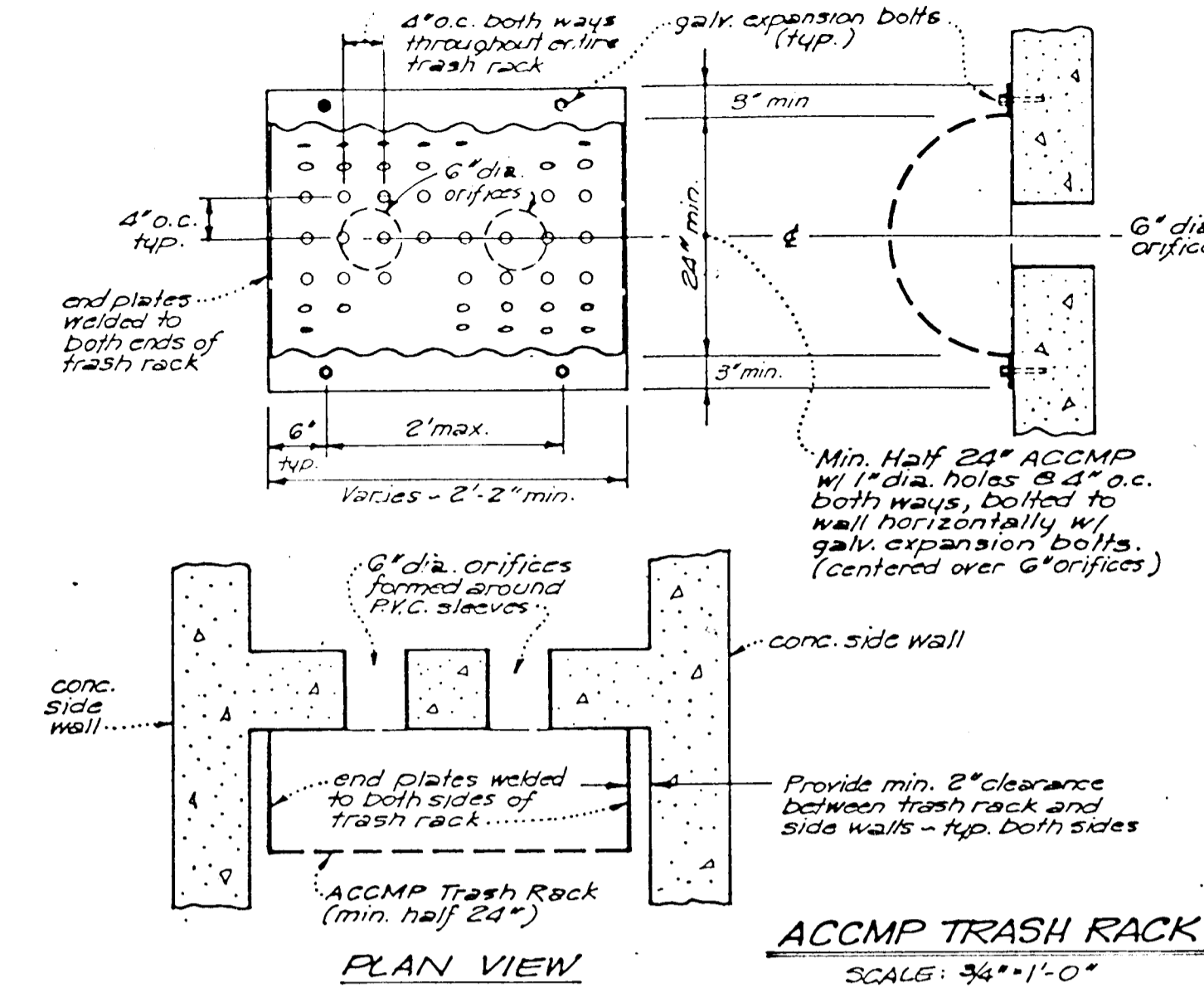
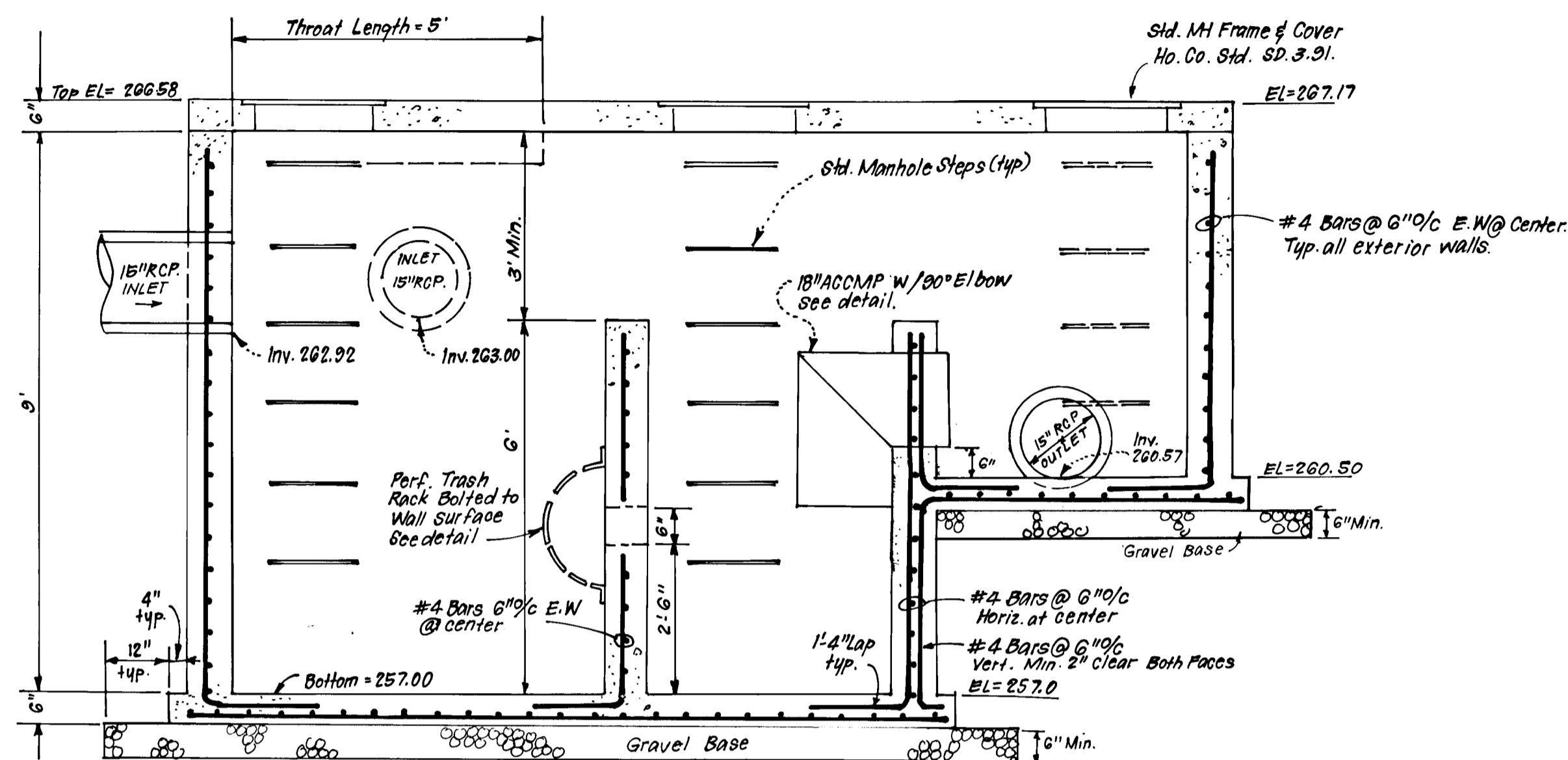
7. For details not noted in this standard, refer to MCDOT Standard No. 55.
8. The top 4 inches of walls may be brick masonry for leveling, if required. Brick masonry shall comply with the latest SHA Specification.
9. When grate opening is used; refer to the appropriate SHA Standard for details. Details shall be shown on the plans.
10. When inside width of structure is greater than 4'-0", reinforcing shall be revised as needed.
11. When structure is subject to traffic loading, reinforcing shall be designed for the appropriate traffic loads. Design loads shall be indicated on the plan.
12. All inlets and incoming pipes shall be checked for possible backwater or tailwater problems.

CONSTRUCTION NOTES

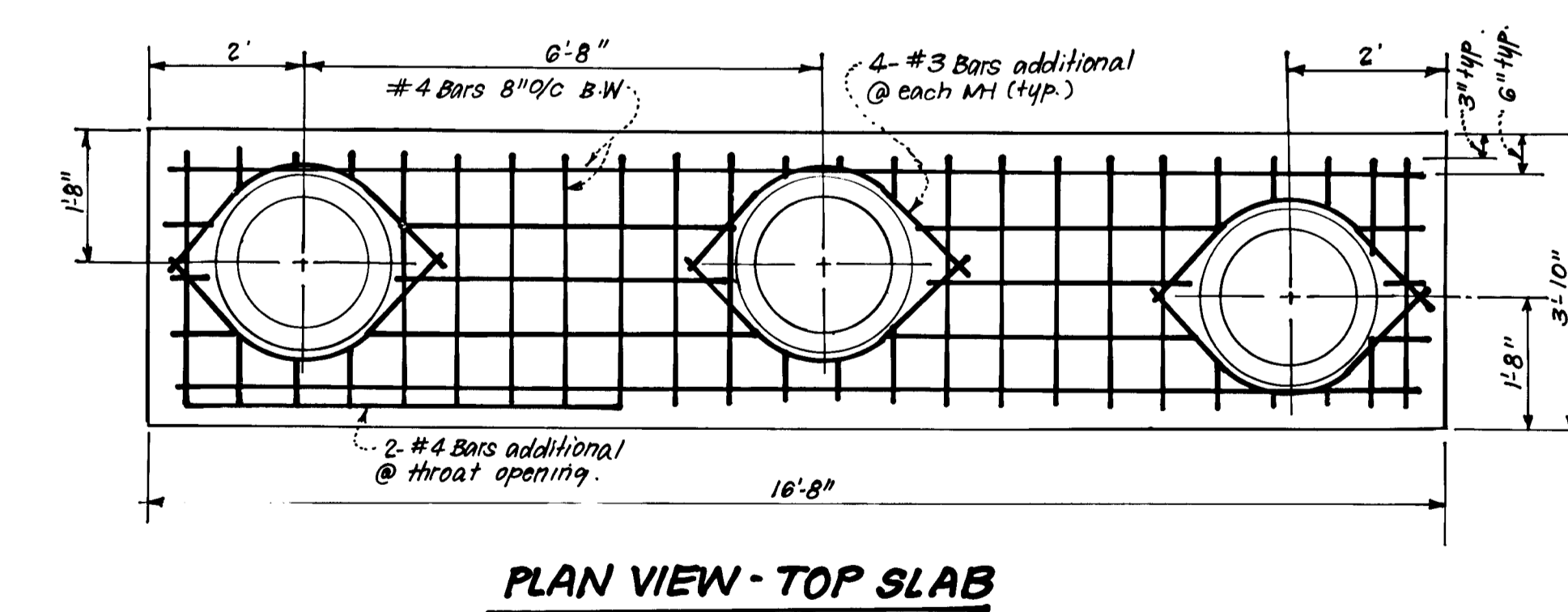
1. Silt and debris shall not be allowed to enter the structures until contributing drainage areas have been permanently stabilized.
2. All openings to structures shall be protected with the appropriate sediment control measures during construction.

MAINTENANCE NOTES (WATER QUALITY STRUCTURE WASTE)

1. Water Quality Structures will require periodic cleaning. Owners of these facilities will have to clean them as needed or on a frequency that the County determines is appropriate. Owners of Water Quality Structures will be notified by the County of the Frequency of maintenance.
2. Maintenance of these facilities will consist of cleaning out the Separator and disposal of the waste and the repair of the facility as needed. Periodic inspections of these facilities will be made by the County Stormwater Management group.
3. The disposal of the liquid and solid matter should be as follows:
 - A. All liquid material in the Separator inlet shall be pumped into a suitable tank truck and disposed of at an approved Sanitary District discharge manhole or be taken to an approved sewage treatment plant for discharge.
 - B. The solid material shall be landfilled in an approved Sanitary Landfill.
4. The inlet pipes, trash racks, grates, and structural parts shall be repaired as needed.



STR. NO.	D.A. ACRES	VOL. REQ'D. CU. FT.	VOL. PROV'D. CU. FT.	REMARKS
I-2	2.2	150	150	10'x6'x25' w/5' throat opening.



DETAIL- WATER QUALITY STRUCTURE I-2
SCALE: 1/2" = 1'-0"

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Donald J. Sisson 4/12/89
Chief, Land Development Division Date

James E. Sisson 5/1/89
Chief, Bureau of Highways Date

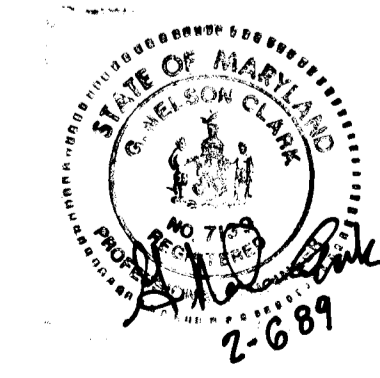
William E. Remy 5/18/89
Chief, Bureau of Engineering Date

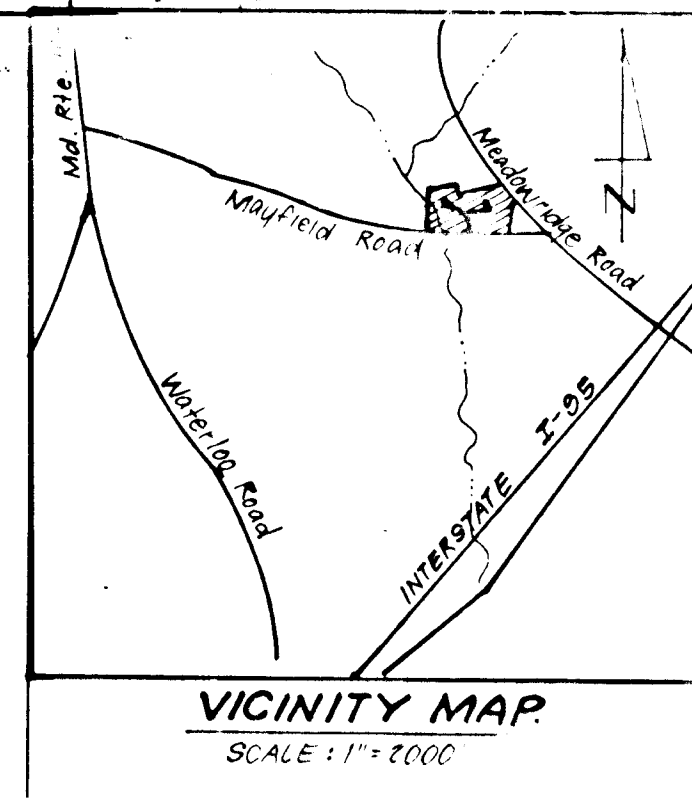
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

James W. S. Langley 5/1/89
Chief, Division of Community Planning & Land Development Date

CLARK • FINEROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINISTREL WAY • COLUMBIA, MD 21045 • (301) 381-7500 • BALTO • (301) 621-8100 • WASH

DESIGNED	ROAD CONSTRUCTION PLANS	SCALE
D.T.	WATER QUALITY DETAILS	AS SHOWN
DRAWN	MEADOWLAND	DRAWING
KIW		5 of 7
CHECKED		JOB NO.
D.T.	1ST ELECTION DISTRICT	87163
DATE	HOWARD COUNTY, MARYLAND	FILE NO.
10-20-88	FOR: DIVERSIFIED LAND CORP. 8015 Dorsey Run Rd. #B Columbia Md. 21044	87163-D





TRAP #3 SOST (ST-1)
 D.A. = 1.25 Acres
 Storage Required = 2250 cf
 Storage Provided = 2295 cf
 Weir Crest Elev. = 253.0
 Clean Out Elev. = 250.5
 Bottom Elev. = 249.0
 Depth = 3'
 Bottom Dimensions = 11' x 30'
 Side Slopes = 2:1
 Weir Length = 5'

SEDIMENT BASIN NO 1 (S.W.M. Pond #1)
 ULTIMATELY
 D.A. = 5.3 Acres
 Storage Required = 9540 cf
 Storage Provided = 9540 cf
 Weir Crest Elev. = 262.3
 Clean Out Elev. = 262.0
 Bottom Elev. = 260.0
 Depth = 4.3'
 Bottom Dimensions - See Plan
 2:1 Side Slopes (Max.)

TRAP #2 SOST (ST-2)
 D.A. = 2.08 Acres
 Storage Required = 3744 cf
 Storage Provided = 3840 cf
 Weir Crest Elev. = 247.0
 Clean Out Elev. = 245.0
 Bottom Elev. = 244.0
 Depth = 2'
 Bottom Dimensions = 76' x 20'
 Side Slopes = 2:1
 Weir Length = 9'
 Top Embankment = 248.0

- LEGEND:**
- 1. Contour Interval 2 Ft.
 - 2. Existing Contour - - - - -
 - 3. Proposed Contour - - - - -
 - 4. Earth Dike - - - - -
 - 5. Straw Bale Dike or Silt Fence - - - - -
 - 6. 100 Yr. Flood Plain Elevation - - - - -
 - 7. Inlet Protection - - - - -

DEVELOPER'S/BUILDER'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 Dept. 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 of Developer/Builder: _____ Date: 10-27-88

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Chief, Land Development Division: _____ Date: 4/12/89
 Chief, Bureau of Highways: _____ Date: 5/15/89
 Chief, Bureau of Engineering: _____ Date: 5/18/89
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 Chief, Division of Community Planning & Land Development: _____ Date: 5/19/89

CLARK • FINEFROCK & SACKETT, INC.
 ENGINEERS • PLANNERS • SURVEYORS
 7135 MINISTRE L WAY • COLUMBIA MD 21044 • (301) 381-7500 - BALTO • (301) 621-8100 - WASH
 DESIGNED BY: D.T.
 DRAWN BY: K.I.W.
 CHECKED BY: D.T.
 DATE: 10-20-88
**ROAD CONSTRUCTION PLANS
 SEDIMENT & EROSION CONTROL PLAN
 AND DRAINAGE AREA MAP
 MEADOWLAND**
 SCALE: 1" = 50'
 DRAWING: 6 OF 7
 JOB NO: 87163
 FOR: 1ST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 DIVERSIFIED LAND CORP.
 8015 Dorsey Run Rd. #B
 Columbia, Md. 21044
 FILE NO: 87163-D

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.
 G. Nelson Clark
 10-28-88

No	REVISIONS	Date
1	Delete Sidewalk along Meadowridge Rd.	7-8-88

Reviewed for... Howard Co. S.C.D.
 and meets Technical Requirements
 Signature: _____ Date: 3-27-89
 U.S. Soil Conservation Service
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 Approved: _____ Date: 3/29/89

MAYFIELD MANOR SECTION ONE PLAT 4737

BOARD OF HOWARD COUNTY COMM. 5031 457

Howard Co. Maintenance Building

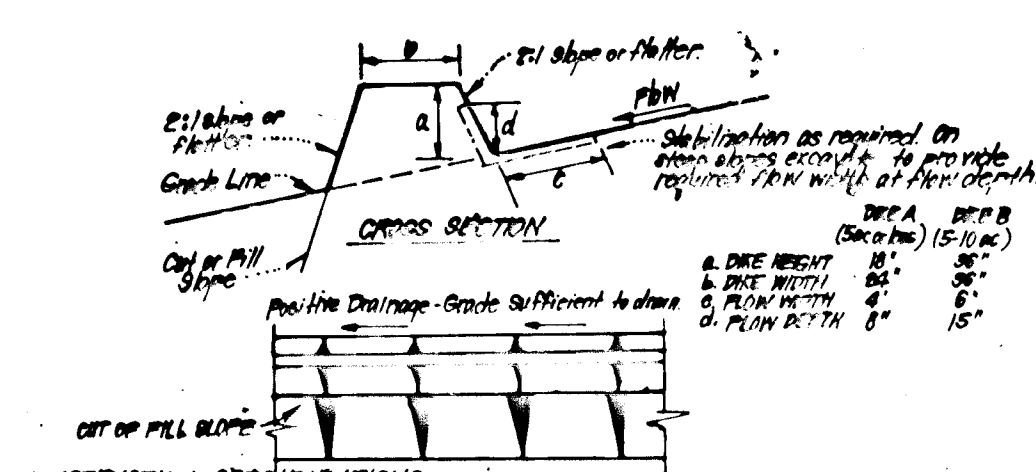
ST STEVENS METHODIST CHURCH 0072 10456

ENGINEER'S CERTIFICATE



11/11/88

F 89-84



CONSTRUCTION SPECIFICATIONS:

- All dikes shall be constructed by earth-moving equipment.
- All dikes shall have positive drainage to an outlet.
- Dike width may be wider and side slopes may be flatter if desired to facilitate opening by construction traffic.
- Diets shall have an outlet that functions with a minimum of erosion. Runoff shall be directed to a permanent retaining device such as a sediment trap or sediment basin where either the dike channel or the drainage area above the dike are not satisfactorily stabilized.
- Diets shall be: (A) In accordance with standard specifications for sand and straw mulch or straw mulch if not in seeding season, (B) flow channel as per dike design.

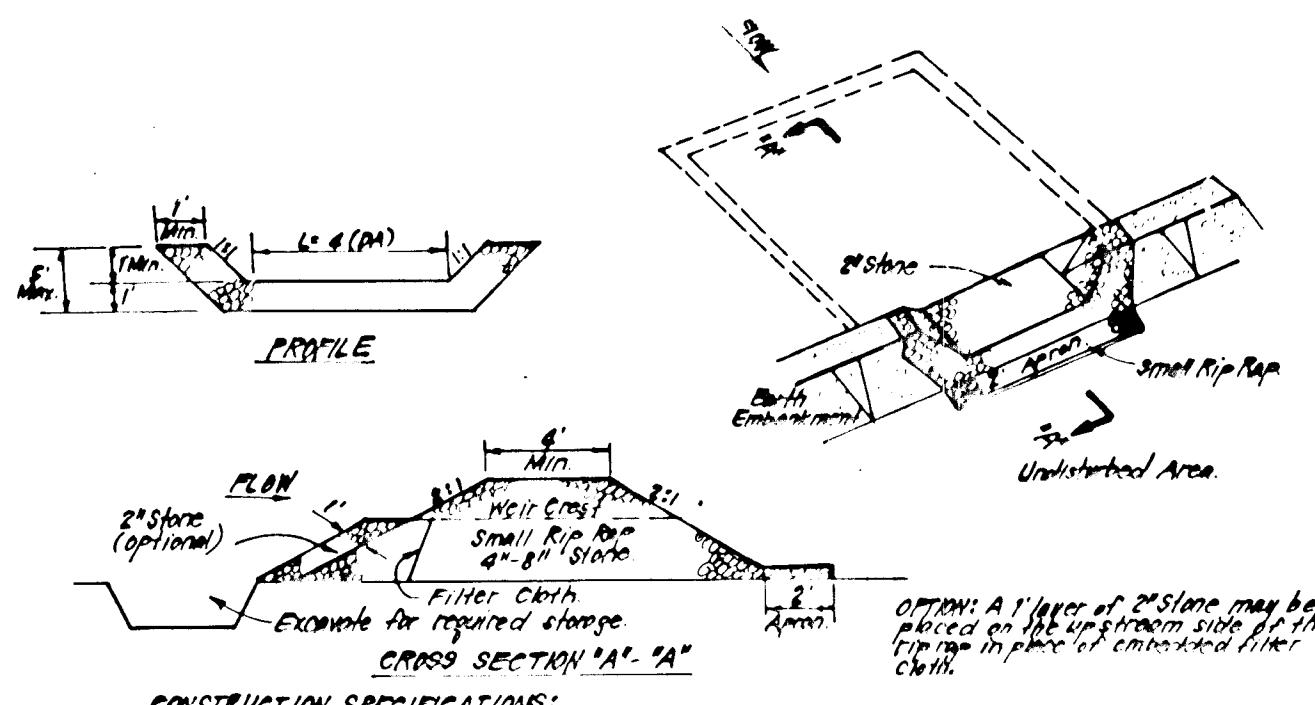
TYPE OF DISTURBANCE	CHANNEL	DIKE A	DIKE B
1	0.5 - 3.0%	Soil Straw Mulch	Sand or Straw Mulch
2	3.1 - 5.0%	Soil Straw Mulch	Soil Straw Mulch or Excavated Soil
3	5.1 - 8.0%	Sand Straw or Soil Straw	Excavated Soil or Straw
4	8.1 - 20.0%	Soil Straw or Soil Straw	Excavated Soil or Straw

A dike to be 2' high, or recycled concrete equivalent, in a layer of at least 3" thick and be pressed into soil with construction equipment.

Approved equivalents can be substituted for any of the above materials.

7. Retainage inspection and required maintenance must be provided after each rain.

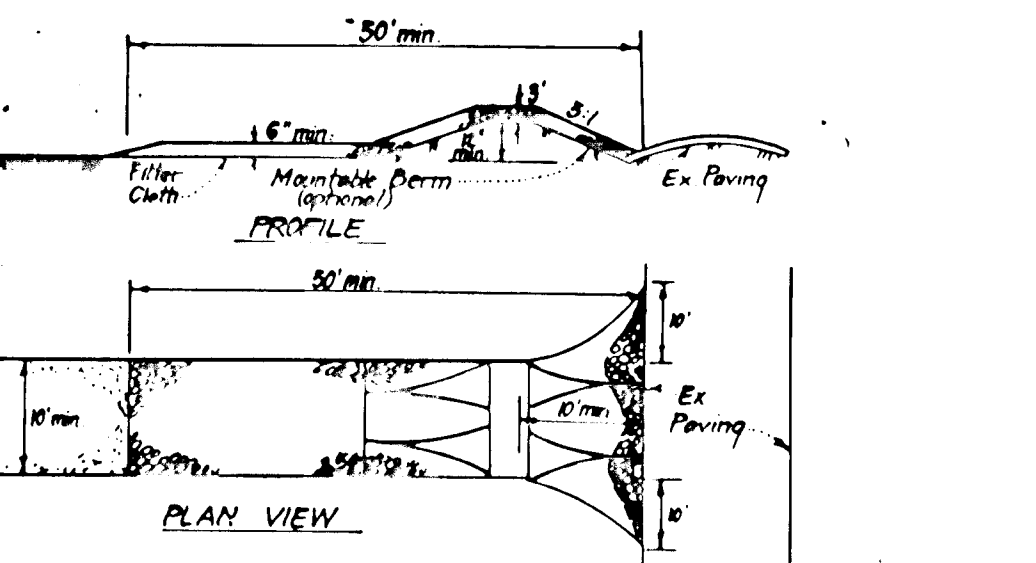
EARTH DIKE DETAIL (E.D.)
NO SCALE



CONSTRUCTION SPECIFICATIONS:

- Area under enhancement shall be cleared, grubbed and stripped of any vegetation and root mat. The top soil shall be replaced.
- The fill material for the enhancement shall be free of rocks and other objects, as well as any other debris, such as stumps, roots or other debris. The enhancement shall be constructed by excavating with a minimum of 12" of depth.
- As cut and fill slopes shall be 2:1 or flatter.
- The slope used in the outlet shall be small rip rap at 2:1 slope with 1" thickness of appropriate placed on the up-slope side of the small rip rap of enhanced filter cloth in the center.
- Small rip rap shall be placed on top of the rip rap in its original dimensions when the sediment has accumulated to 1/2 the depth of the trap.
- The structure shall be done so that it can be removed and replaced as needed.
- Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
- The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

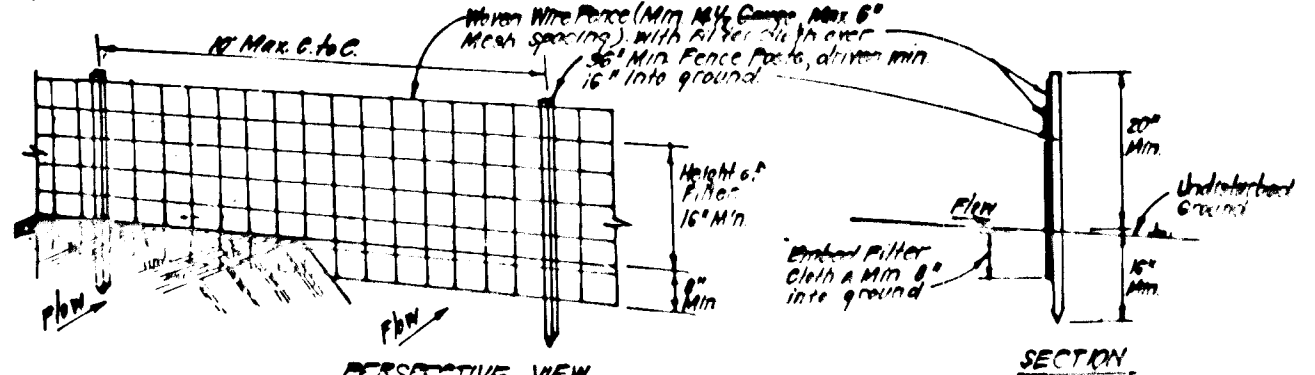
STONE OUTLET SEDIMENT TRAP (S.O.S.T.)
NO SCALE



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 simple residence lot where a 30 foot minimum length would apply).
- Thickness - Not less than six (6) inches.
- Width - Ten (10) feet 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 simple family residence lot.
- Surface Water - All surface water flowing or directed toward construction entrance shall be directed across the entrance. If piping is impractical, a removable berm with 5:1 slopes will be permitted.
- Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment into public right of way. This may require periodic pile clearing with additional stone as needed. Annual and/or quarterly pile clearing or any more are used to trap sediment. All sediment accumulated within or tracked onto public right of way must be removed immediately.
- Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public right of way. When washing is required, it shall be done on an area distributed with stone and which does not have an approved sediment trapping device.
- Periodic inspection and needed maintenance shall be provided after each rain.

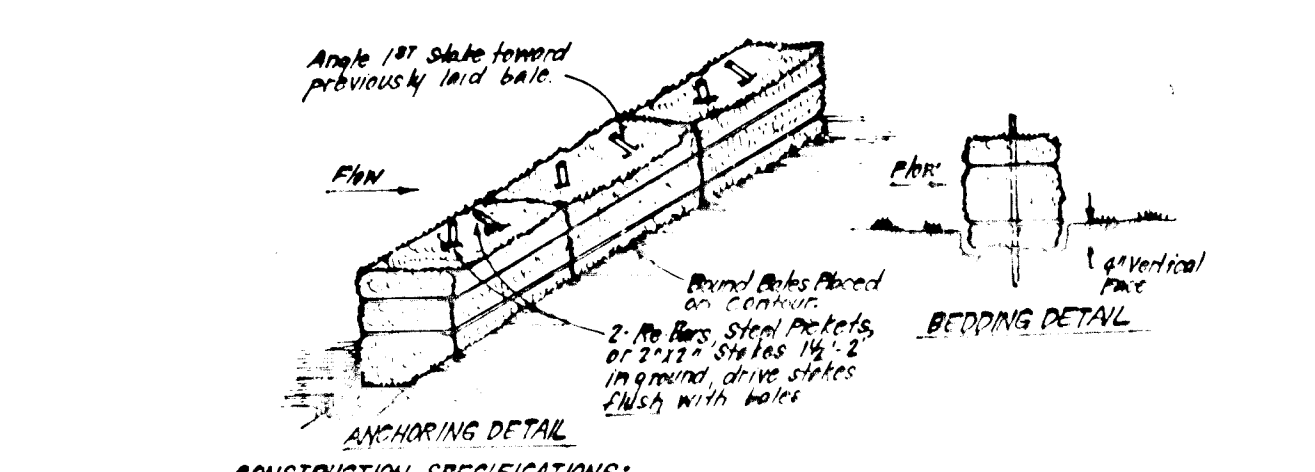
STABILIZED CONSTRUCTION ENTRANCE (SCE)
NO SCALE



CONSTRUCTION SPECIFICATIONS:

- Wires shall be to be fastened securely to fence posts.
- Filter cloth to be fastened securely to wires with wire ties every six (6) feet and mid section.
- When sections of filter cloth align each other they shall be overlapped by 6" minimum.
- Maintenance shall be performed as needed and material removed when "blowback" develops in silt fence.

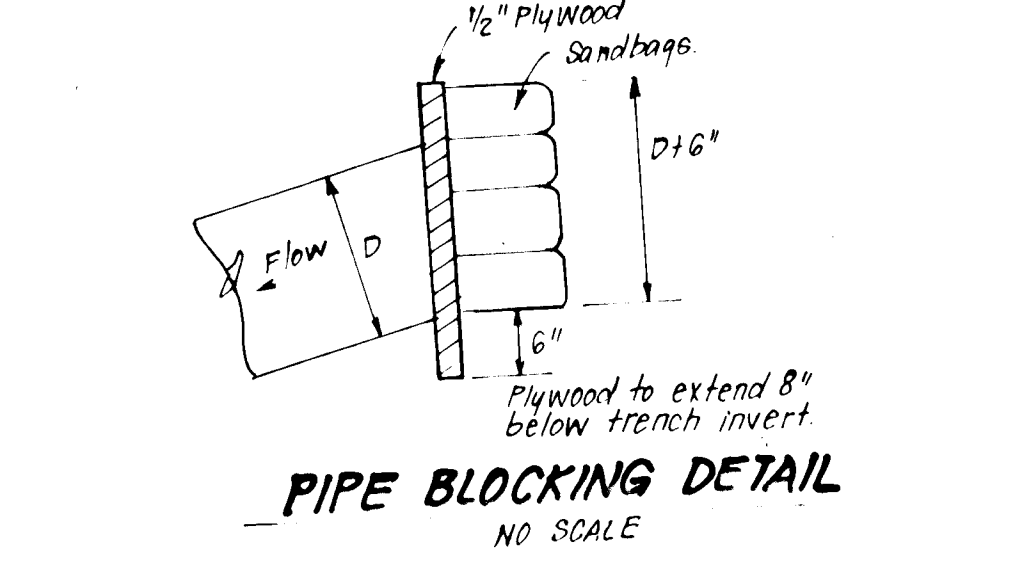
SILT FENCE DETAIL (S)
NO SCALE



CONSTRUCTION SPECIFICATIONS:

- Bales shall be placed at the top of a slope or on the contour and in a row with ends facing outward, the adjacent bales.
- Each bale shall be embedded in the soil a min of 4" and placed so the bindings are horizontal.
- Bales shall be securely anchored in place by either 2 stakes or rebar driven thru the bale. The 1st 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 reached their usefulness so as not to block or impede storm flow or drainage.

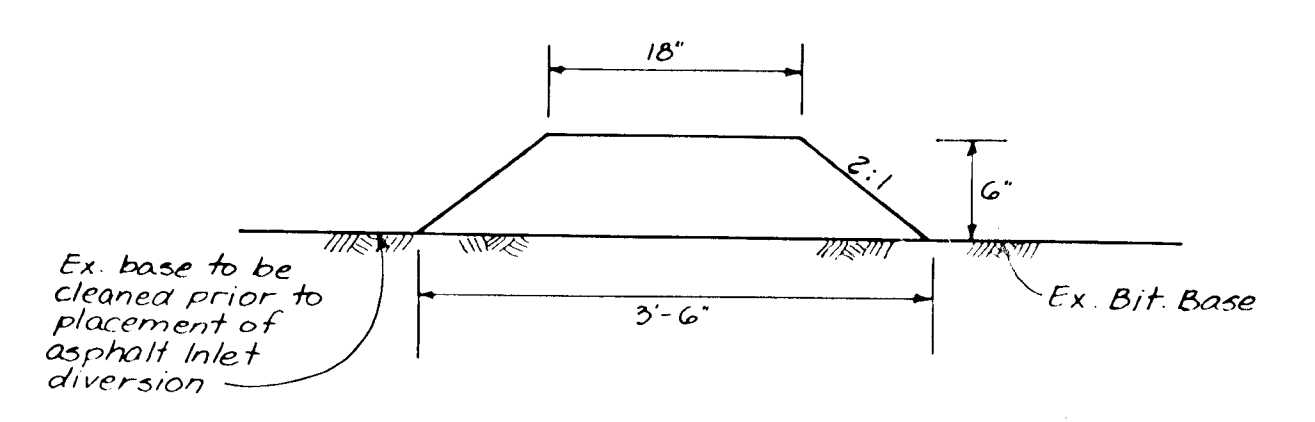
STRAIN BALE DIKE DETAIL (SBD)
NO SCALE



CONSTRUCTION SPECIFICATIONS:

- Use 2" Plywood to extend 8" below trench invert.
- Use 6" Sandbags.

PIPE BLOCKING DETAIL
NO SCALE



CONSTRUCTION SPECIFICATIONS:

- Ex. base to be cleaned prior to placement of asphalt inlet diversion.

ASPHALT INLET DIVERSION DETAIL
NO SCALE

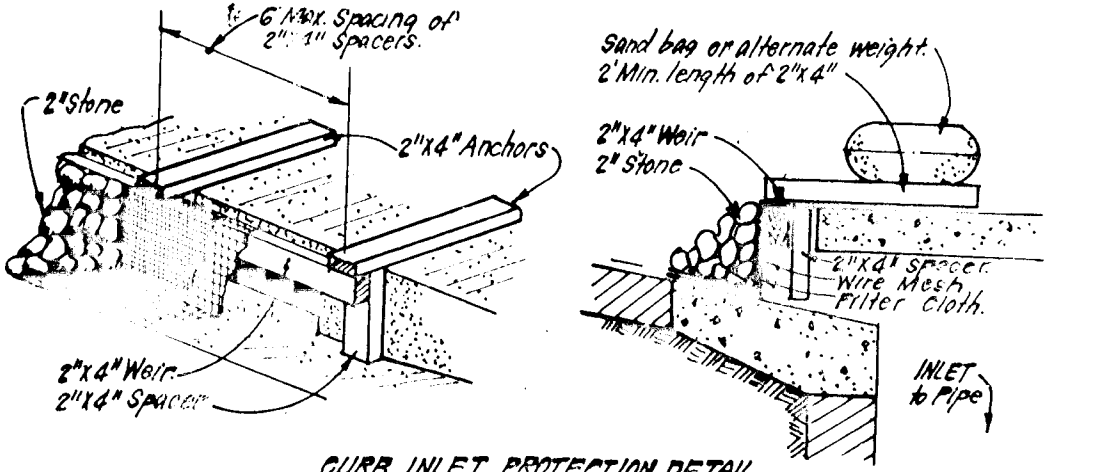
SEDMENT CONTROL NOTES

- A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (902-26377)
- All vegetation and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
- All sediment traps/basins shown 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.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding (Sec. 51) and (Sec. 52), temporary seeding (Sec. 50) and mulching (Sec. 53). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.

Site Analysis:

Total Area of Site	10.25 Acres
Area Disturbed	5.0 Acres
Area to be roofed or paved	0.85 Acres
Area to be vegetatively stabilized	4.35 Acres
Total Cut	16,960 Cu. yds
Total Fill	10,710 Cu. yds
Offsite waste/borrow area location	

- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
- On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be required 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 withheld until this initial approval by the inspection agency is made.
- If houses are to be constructed on an "As-Built" basis, at random, Single Lot Sediment Control as shown below shall be implemented.
- All pipes to be blocked at the end of each day (see detail below).
- The total amount of straw bale dikes shall equal 800 L.F.



CONSTRUCTION SPECIFICATIONS:

- Materials:
 - A wooden frame is to be constructed of 2x4 construction grade lumber.
 - Wire mesh must be of sufficient strength to support filter fabric and stone for curb inlets, with water fully impounded against it.
 - Filter cloth must be of a type approved for this purpose, resistant to water and removal of sediment.
 - Stone is to be 2" in size and clean since three would clog the cloth.
- Procedure:
 - Excavate a trench 18" deep and 18" wide below curb elevation. Place ends of inlet. Assemble the portion of the frame using steel pipe. Top of frame (wire) must be below edge of roadway adjacent to inlet.
 - Stretch wire mesh tightly over frame and tension securely. Ends must meet at post. Frame to be below inlet notch elev. Filter securely to frame. Ends must meet at post, be overlapped and secured with flattened down.
 - Backfill around inlet to compacting a 4" layer of earth is even with ditch elevation on ends and top elevation on sides.
 - If the inlet is not in a low point, construct a compound earth dike in the ditch line below the top of the earth dike to be at least 6" higher than the top of frame (wire).
 - The structure must be inspected frequently and filter fabric replaced when damaged.
- Procedure: CURB INLET PROTECTION
 - Attach a continuous piece of wire mesh (begin with throat length plus 4") to the 2x4 wire (measuring throat length plus 2") as shown on end drawing. The wire mesh over the wire mesh shall (40 mesh) of the same diameter as the wire mesh over the wire mesh. The cloth must extend from top to bottom of the inlet and the mesh in place by sandbags or alternate weight.
 - Securely nail the 2x4 wire to 2" long vertical stakes to be located between the wire mesh and the 2x4 frame.
 - Place the assembly against the inlet frame and nail (min 2" lengths of 2x4" to the top of the wire at spaced locations. These 2x4" anchors shall extend across the inlet and be held in place by sandbags or alternate weight.
 - The assembly shall be secured to the curb by a min 1" beyond each side of throat opening.
 - From 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" chips over the wire mesh and filter fabric in such a manner as to prevent water from entering the inlet under or through the filter cloth.
 - The top layer of protection must be inspected frequently and the filter cloth and stone replaced when damaged with declined.
 - Assure that storm flow does not bypass inlet by installing temporary earth or asphalt dikes directing flow to inlet.

INLET PROTECTION DETAIL (I.P.D.)
NO SCALE

PERMANENT SEEDING NOTES

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

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

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

- Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 400 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Narrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq ft).
- Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Narrow or disc into upper three inches of soil.

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

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

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

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redistributed where a short-term vegetative cover is needed.

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

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

Seeding - For periods March 1 thru April 30 and from August 15 thru November 15, seed with 25 bushel per acre of annual rye (3.2 lbs/1000 sq ft). For the period May 1 thru August 14, seed with 3 lbs per acre of creeping lovegrass (.07 lbs/1000 sq ft). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use seed.

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

Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

CONSTRUCTION SEQUENCE

- Obtain necessary permits. 7 Days
- Install stabilized construction entrance, traps 2 & 3, earth dikes and silt fence as shown on plan. Construct S.W.M. control structure I-6 and install 15" CMP barrel. Construct a temporary brick riser extension to control structure I-6 from top of concrete (EL. 262.07) to EL. 264.3 and brick shut 6" orifice. Grade embankment for road to min. EL. 265.3 to create sediment basin No. 1. 21 Days
- Rough grade and temporarily stabilize. 45 Days
- Install water, sewer and utilities. 40 Days
- Install storm drainage pipes and structures. Outfalls at S-1 and S-7 will be to Sediment Basin No. 1 at Inv. 260.00 and to trap #2 at Inv. 244.00 respectively. Block I-11. Provide Inlet Protection at I-4, I-3 and I-2. 30 Days
- Install curb and gutter and road shoulders. Place temporary asphalt berms at I-10 and I-9 to divert runoff from roads into storm drains. Construct sidewalks. 50 Days
- Fine grade and permanently stabilize. 30 Days
- Upon completion of all work and permanent stabilization of contributory areas and with the approval of the sediment control inspector, remove sediment and erosion controls. Convert Sediment Basin No. 1 to a stormwater management facility by the following: 14 Days
 - Pump out impounded water.
 - Remove sediment and grade according to approved plan.
 - Permanently stabilize.
 - Remove temporary brick extension to I-6 and unblock 6" orifice. Install "S" grate and frame.

Upon removal of Trap No. 7, grade grass ditch at outfall S-7 according to dimensions and depth shown on plan. Permanently stabilize & install ungrouted rip-rap.

DEVELOPER'S/BUILDER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan of development and site for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. 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 of Developer/Builder: *[Signature]* Date: 10-27-88

Reviewed for: *[Signature]* Name: *[Name]* Date: 10-27-88

Signature of Engineer: *[Signature]* Date: 10-27-88

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 of Engineer: *[Signature]* Date: 10-28-88

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[Signature] Chief, Land Development Division Date: 4/19/89

[Signature] Chief, Bureau of Highways Date: 10/16/89

[Signature] Chief, Bureau of Engineering Date: 5/18/89

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

[Signature] Chief, Division of Community Planning & Land Development Date: 5/18/89

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS

DESIGNED	D.T.	ROAD CONSTRUCTION PLANS	SCALE	AS SHOWN
DRAWN	K.I.W.	SEDIMENT & EROSION CONTROL DETAILS	DRAWING	7 OF 7
CHECKED	D.T.	MEADOWLAND	JOB NO.	87163
DATE	10-20-88	1ST ELECTION DISTRICT	FILE NO.	87163-D
		HOWARD COUNTY, MARYLAND		
		FOR: DIVERSIFIED LAND CORP		
		8015 DORSEY RUN RD		
		COLUMBIA, MD 21046		

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