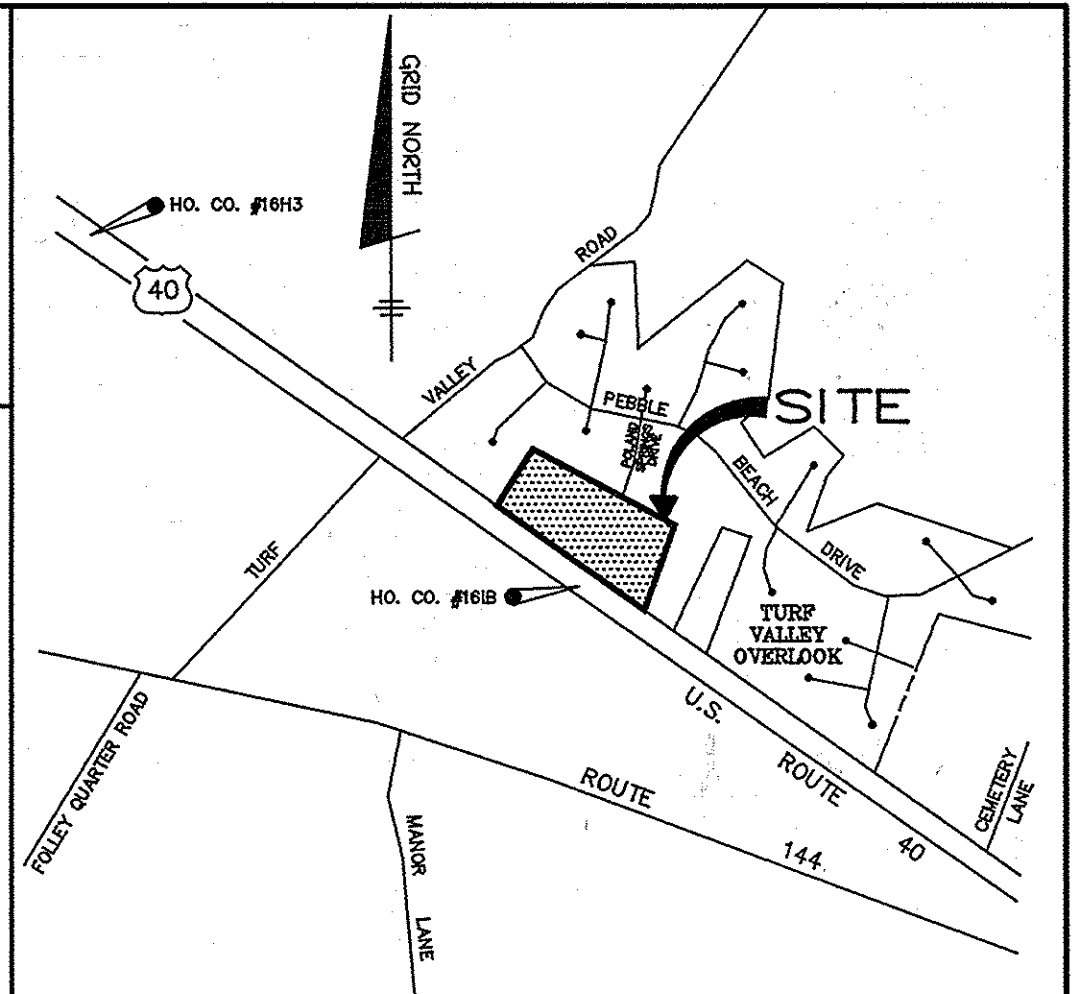


CENTERLINE CURVE DATA							
ROAD	STATION	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
POLAND SPRINGS DRIVE	6+57.63 to 8+73.15	125.00'	215.52'	145.80'	189.80'	S 71°59'11" W	98°47'07"

BENCH MARKS (NAD 83)
 HO. CO. #16H3 ELEV. 470.531 (NAD 83)
 CONC. MON. @ SURF. 9'-1" EBOUND RT. 40
 20'-4" W. OF C. CONC. CHANNEL EXTENDED
 0.3 MILES E. OF MARIOTTVILLE RD.
 N 180566.3308 M. E 408897.3336 M.
 HO. CO. #16B ELEV. 470.55 (BY TSA)
 CONCRETE MONUMENT
 N 179977.2510 M. E 407881.8916 M.

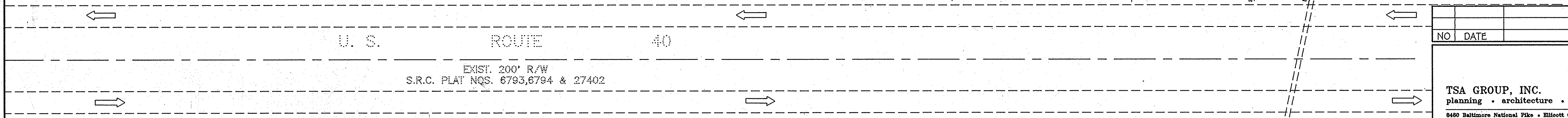
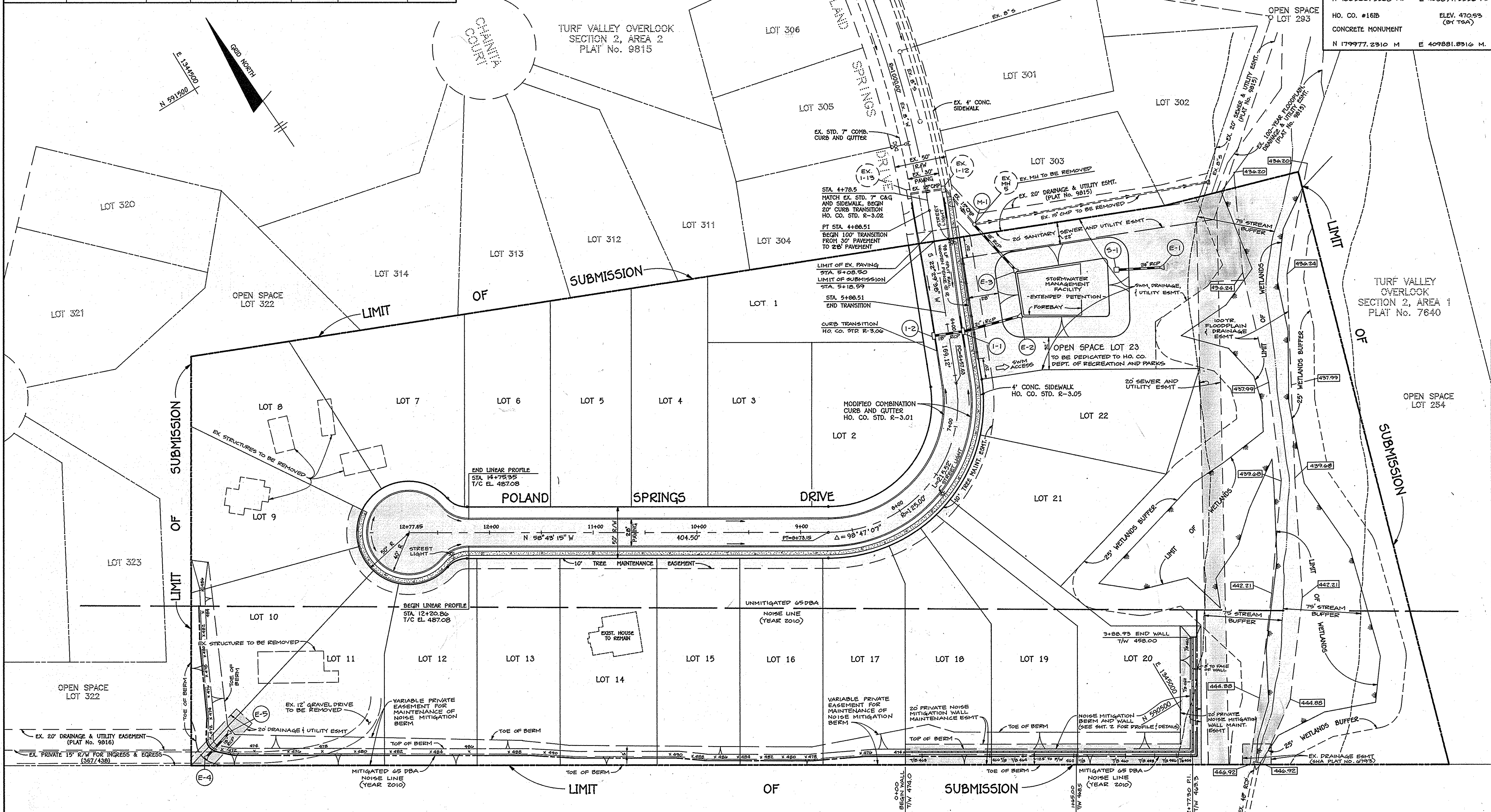


VICINITY MAP
SCALE 1" = 1200'

CENTERLINE CONTROL DATA (NAD 83 FEET)				
ROAD	STATION	NORTH	EAST	
POLAND SPRINGS DRIVE	P.T. 4+88.91	991281.8789	1345043.4977	
	LIMIT 5+18.99	991289.7809	1345081.9483	
	P.C. 6+57.63	990879.3201	1344978.7943	
	P.T. 8+73.15	990816.3121	1344798.3692	
	12+77.65	991026.3814	1344452.6587	

GENERAL NOTES

- All construction shall be in accordance with the latest standards and specifications of Howard County.
- The contractor shall notify the Department of Public Works/Bureau of Construction Inspection at (410) 792-7272 at least five (5) working days prior to the start of work.
- The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
- Project Background:
 Location: Tax Map 16 - Parcels 212 & 376
 Zoning: R-20
 Section 1, Area 1
 Total Tract Area: 12.70 Ac.
 Section Area: 12.70 Ac.
 Number of Proposed Lots: 23
 Date Preliminary Plan Approved: January 6, 1993
 DPZ Reference #: P-93-06
- Traffic control devices, markings, and signs shall be in accordance with the 1988 edition of the Manual on Uniform Traffic Control Devices (MUTCD). All street and regulatory signs shall be in place prior to the placement of any asphalt.
- Topography taken from field run survey by TSA Group, Inc. dated 8/92. Contour interval is 2 feet.
- Howard County monuments 16H3 and 16B1 used for horizontal and vertical datum (NAD 83).
- Light poles and fixtures for street lights shall be in accordance latest Howard County Design Manual, Volume III, Roads and Bridges.
- Water and Sewer for this subdivision is public. Drainage area is Little Patuxent. Contract No. 24-3226-D
- Stormwater Management for this subdivision is extended detention.
- Existing utilities were located by record drawings and field run survey by TSA Group, Inc. dated 8/92.
- Floodplain Study compiled by TSA Group, Inc., 7/92.
- Wetlands Delineation Study compiled by M.A. Dircks & Co., Inc. 7/92. Approved 1/6/93.
- Noise Study compiled by TSA Group, Inc., 12/92. Approved 1/6/93.
- Geotechnical Report compiled by Attec Assoc., Inc., 7/92. Approved 1/6/93.
- NO CLEARING, GRADING, OR CONSTRUCTION IS PERMITTED WITHIN WETLANDS AND STREAM BUFFERS OR FOREST CONSERVATION AREAS, EXCEPT AS ALLOWED BY WP-93-326. APPROVED ON 5/14/93 TO WAIVE SECTION 16.11C (4)(2) FOR THE DISTURBANCE ATTRIBUTABLE TO THE INSTALLATION OF THE NOISE BERM WALL.



UNLESS OTHERWISE NOTED:
 1. ALL STORM DRAIN BEDDING SHALL BE CLASS C
 2. ALL STORM DRAIN PIPE SHALL BE CLASS 4 REINFORCED CONCRETE.
 * INCLUDES THE 0.3' ADDED TO P&L FOR TRANSITION FROM MODIFIED TO STANDARD CURB AND GUTTER HO. CO. STD. R-3.06.

SHEET INDEX	
No.	DESCRIPTION
1	ROAD PLAN
2	ROAD PROFILE AND DETAILS
3	DRAINAGE AREA MAP, STORM DRAIN PROFILES AND DETAILS
4	GRADING PLAN
5	SWM DETAILS
6	SEDIMENT CONTROL PLAN
7	SWM NOTES AND SEDIMENT CONTROL DETAILS
8	LANDSCAPE PLAN

STRUCTURE SCHEDULE						
No.	TYPE	LOCATION	INV. IN	INV. OUT	TOP ELEV.	HO. CO. STD.
1-1	A-10	452' LT. STA. 6+08.93 POLAND SPRINGS DR.	443.50	442.35	451.85	SD - 4.02
1-2	A-10	452' RT. STA. 6+08.93 POLAND SPRINGS DR.	444.85	443.70	451.85	SD - 4.02
E-1	24" CONCRETE END SECTION	N 590869.70 E 1345202.60	436.80	---	437.93	SD - 5.51
E-2	24" CONCRETE END SECTION	69.50' LT. STA. 6+08.93 POLAND SPRINGS DRIVE	436.80	---	437.93	SD - 5.51
E-3	18" CONCRETE END SECTION	69.50' RT. STA. 6+08.93 POLAND SPRINGS DRIVE	437.94	---	437.94	SD - 5.51
E-4	18" CONCRETE END SECTION	N 590942.84 E 1344173.63	437.94	---	437.94	SD - 5.51
E-5	18" CONCRETE END SECTION	N 590950.40 E 1344200.99	445.00	---	445.00	SD - 5.51
S-1	SWM CONTROL STRUCTURE	N 590887.14 E 1345107.64	437.00	---	443.75	---
M-1	MANHOLE	N 590997.93 E 1345073.65	445.50	443.00	451.00	Q - 5.12

STREET LIGHT LEGEND			
ROAD	E STATION	OFFSET	TYPE
POLAND SPRINGS DRIVE	5+20	16' LEFT	100 WATT HIGH PRESSURE SODIUM VAPOR
	7+60	16' LEFT	TRADITIONAL POST-TOP FIXTURES MOUNTED ON 1/2" BLACK FIBERGLASS POLES
	12+36	19' LEFT	TRADITIONAL POST-TOP FIXTURES MOUNTED ON 1/2" BLACK FIBERGLASS POLES

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 CHIEF, LAND DEVELOPMENT DIVISION
 APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

DATE: 8/17/93
 DATE: 7-30-93
 DATE: 8/19/93
 DATE: 8/20/93

NO.	DATE	REVISION

TSA GROUP, INC.
 planning • architecture • engineering
 8480 Baltimore National Pike • Ellicott City, Maryland 21043 • (410) 465-8105

OWNER/DEVELOPER:
 SDC GROUP, INC.
 P.O. BOX 417
 ELLICOTT CITY, MARYLAND 21043
 (410) 465-4244

PROJECT: COLLEGE FARM
 SECTION 1, AREA 1
 LOTS 1-23

LOCATION: TAX MAP 16 - PARCELS 212 & 376
 2nd ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE: ROAD PLAN
 S-89-5 P-93-06 WP-93-96
 DATE: MARCH 29, 1993 PROJECT NO. 0485
 JUNE 25, 1993

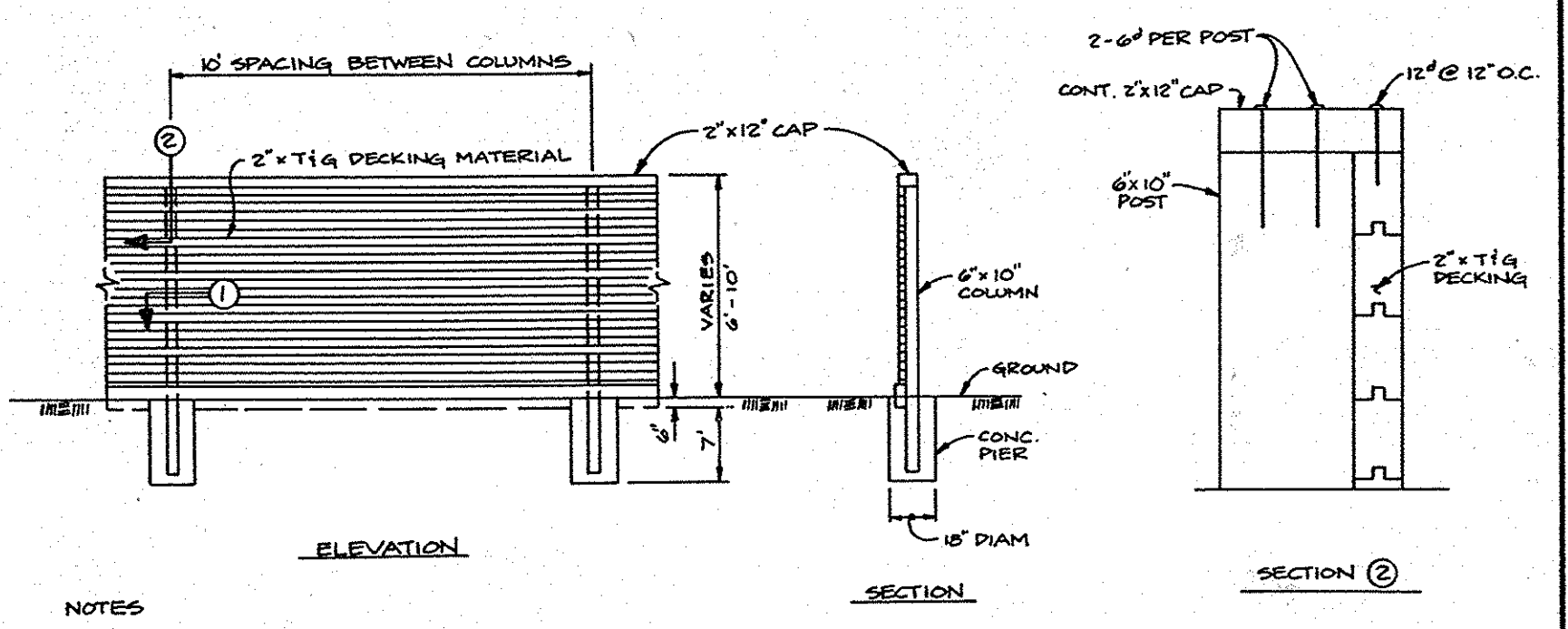
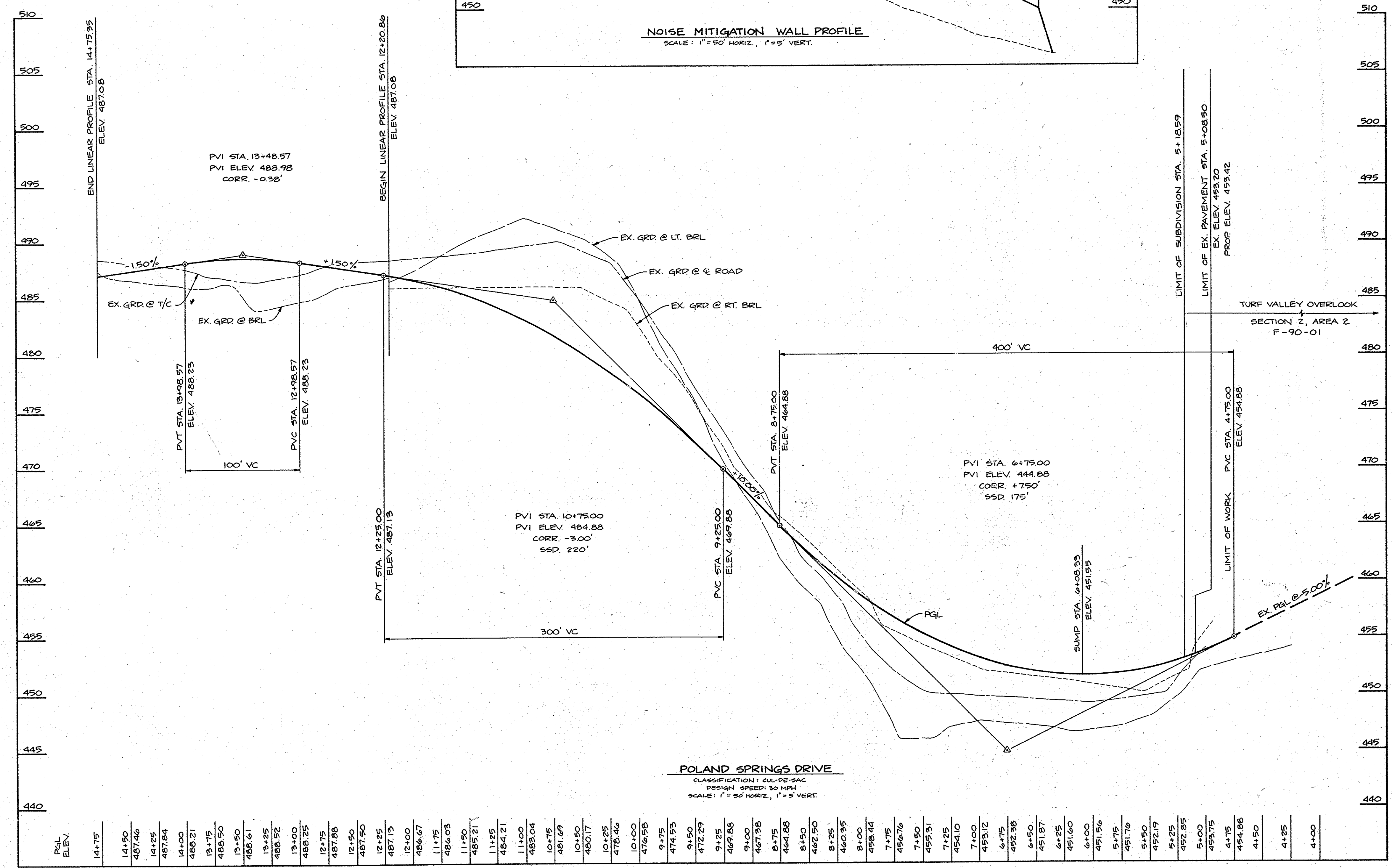
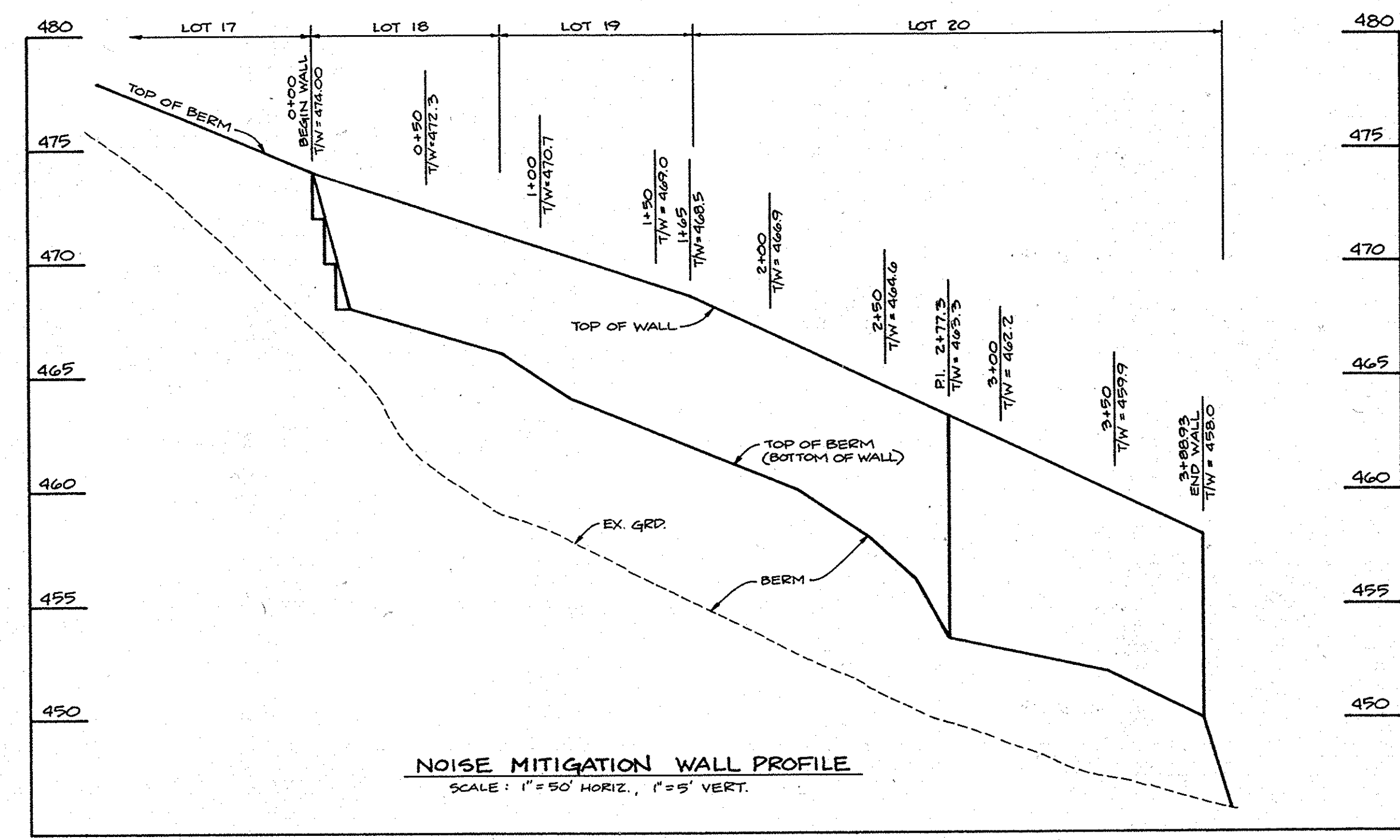
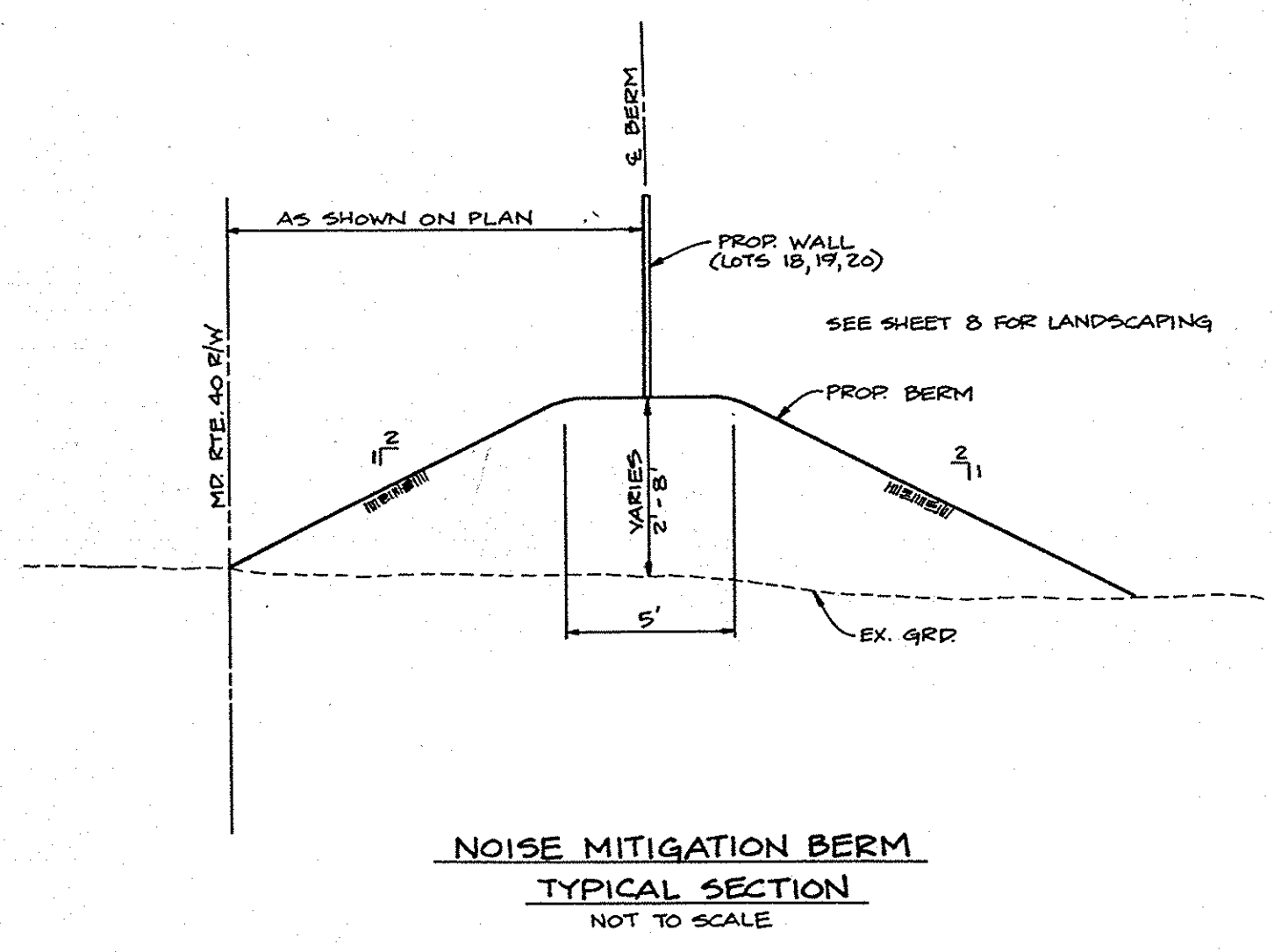
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DES: JME/DRK DRN: DRK/DBT

1668

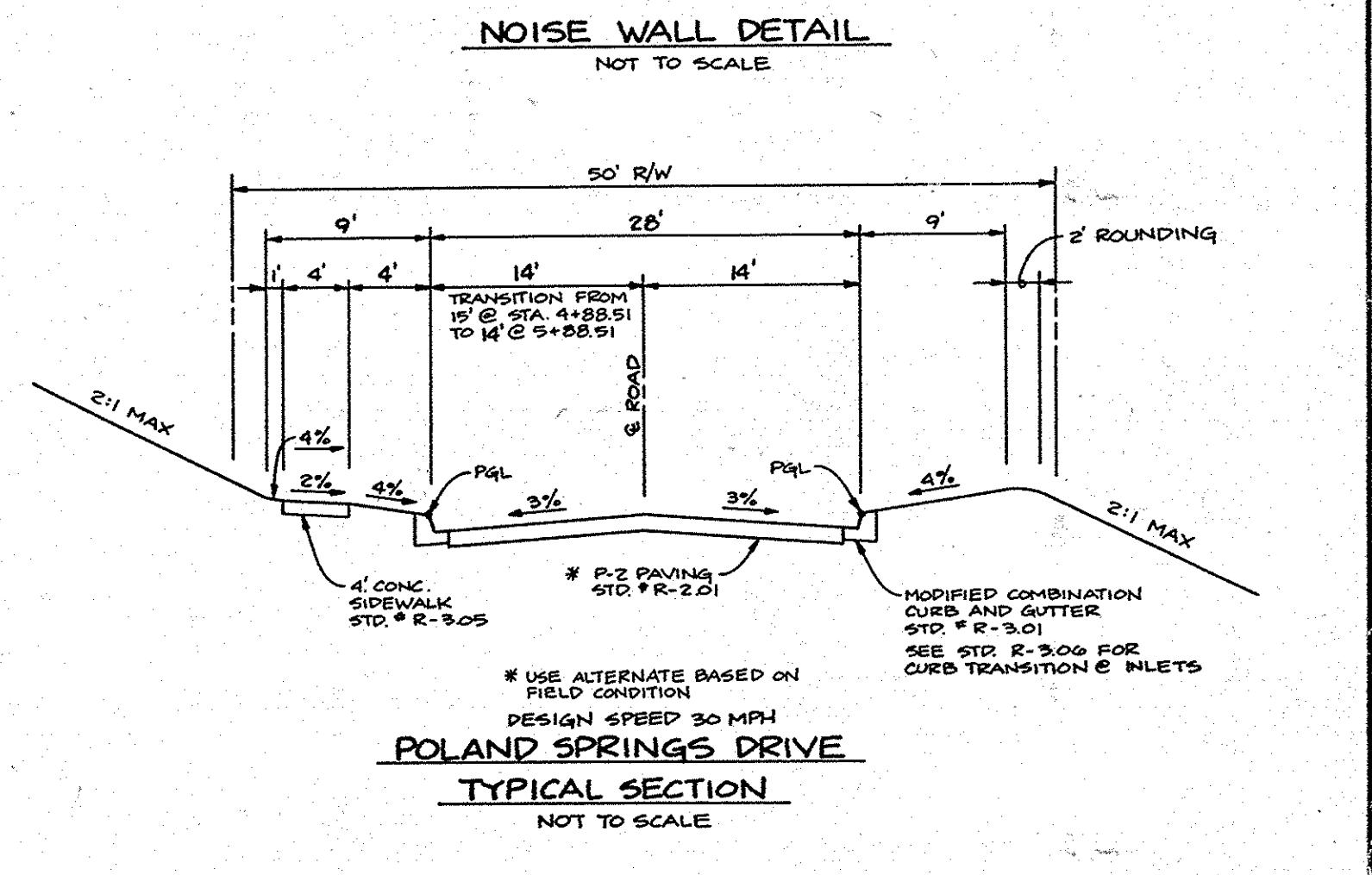
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 8/17/93 DATE
 CHIEF, LAND DEVELOPMENT DIVISION
 7-30-93 DATE
 CHIEF, BUREAU OF HIGHWAYS
 8/19/93 DATE
 CHIEF, BUREAU OF ENGINEERING M.K.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 8/20/93 DATE
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT



NOTES

- Siding
 - 2 x wood decking material shall be utilized to span horizontally between posts. Design criteria is based on an allowable bending stress of 1600 lbs. per sq. in. and a 33 1/3% increase in stress for wind loads is considered appropriate. Decking shall be MC15.
 - Above grade shall be treated with wood preservative.
- Posts
 - Wood post shall be utilized at the spacing indicated on the schedule. Design criteria is based upon allowable bending stress of 1600 lbs. per sq. in. with a 33 1/3% increase for wind loadings.
 - Posts embedded in concrete shall be treated with a wood preservative in the area of embedment and 12" above grade.
- Concrete
 - Concrete in the piers shall have a 28 day compressive strength of 2500 lbs. per sq. in.
 - Concrete shall be placed in drilled piers utilizing the earth as the forms.



NO	DATE	REVISION

TSA GROUP, INC.
 planning • architecture • engineering
 8400 Baltimore National Pike • Ellicott City, Maryland 21043 • (410) 465-6106

OWNER/DEVELOPER: SDC GROUP, INC.
 P.O. BOX 417
 ELLICOTT CITY, MARYLAND 21043
 (410) 465-4244

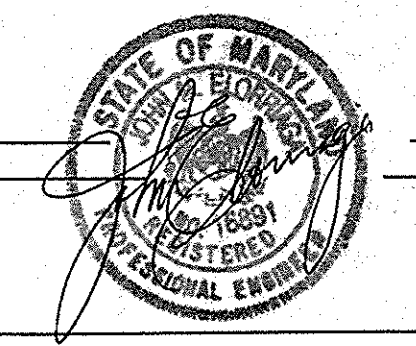
PROJECT: COLLEGE FARM
 SECTION 1, AREA 1
 LOTS 1-23

LOCATION: TAX MAP 16 - PARCELS 212 & 376
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

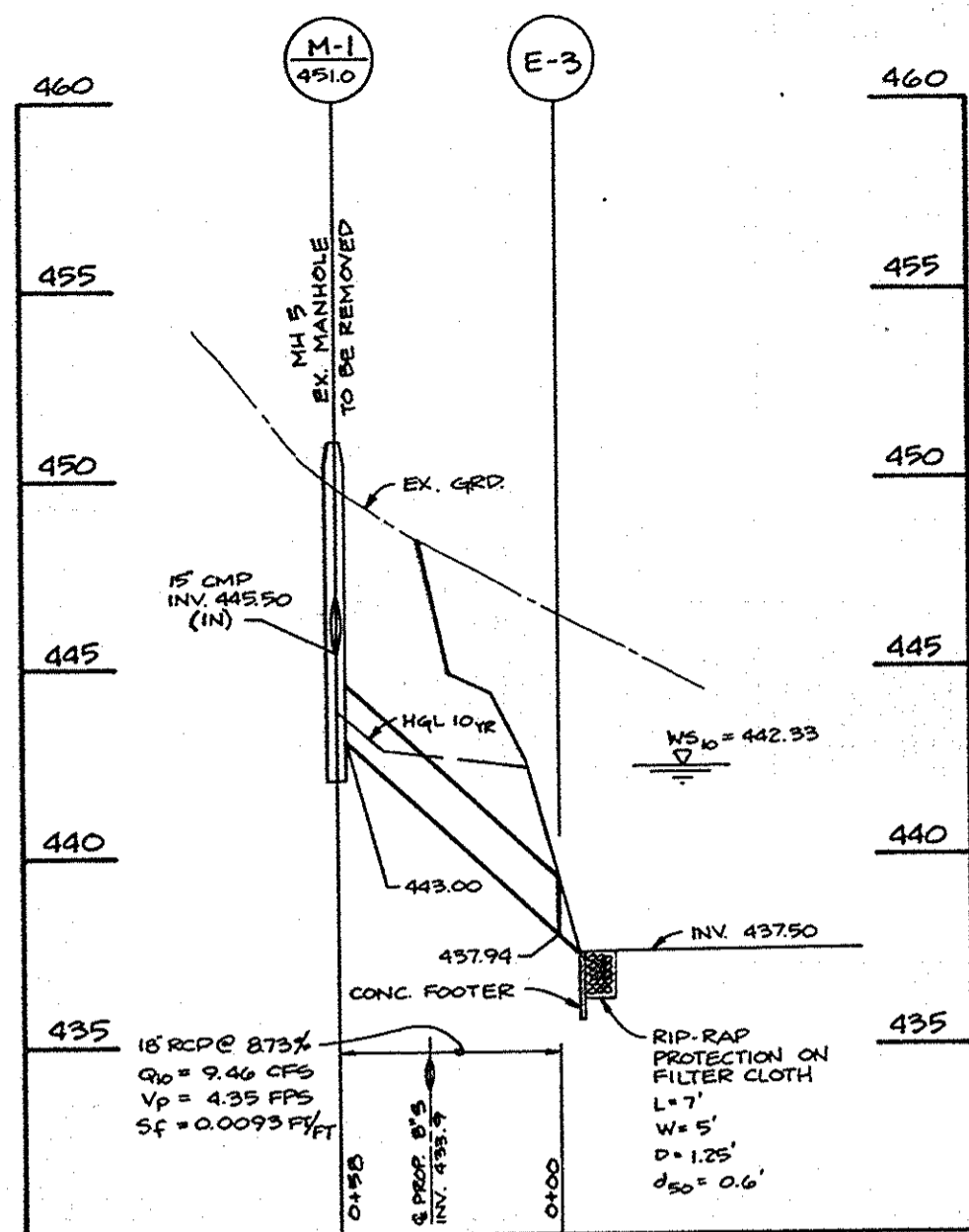
TITLE: ROAD PROFILE AND DETAILS
 5-89-5 P-93-06 WF-93-96

DATE: MARCH 29, 1993 PROJECT NO. 0485
 JUNE 25, 1993

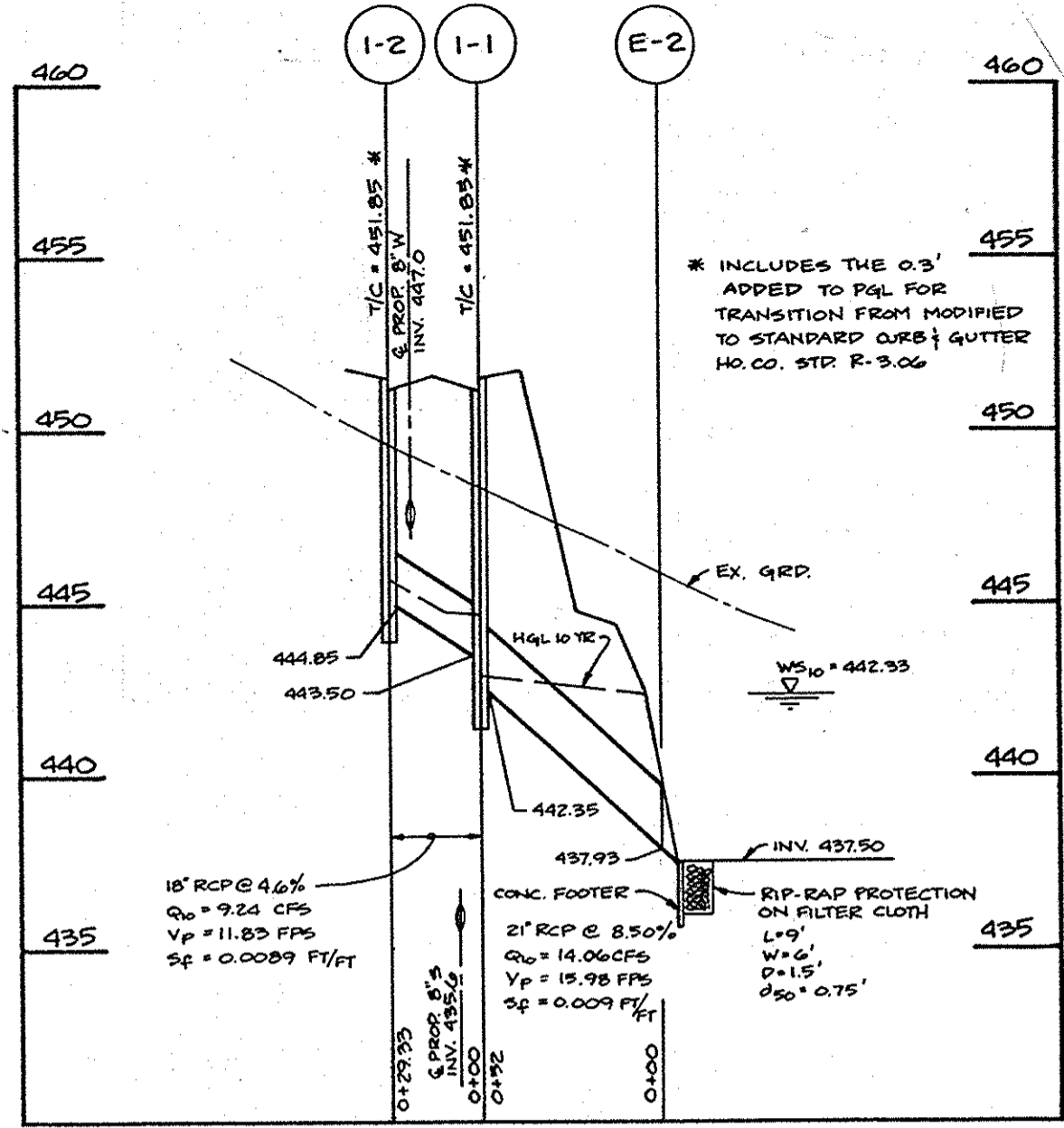
DES: JME DRN: DBT SCALE: AS SHOWN DRAWING 2 OF 2



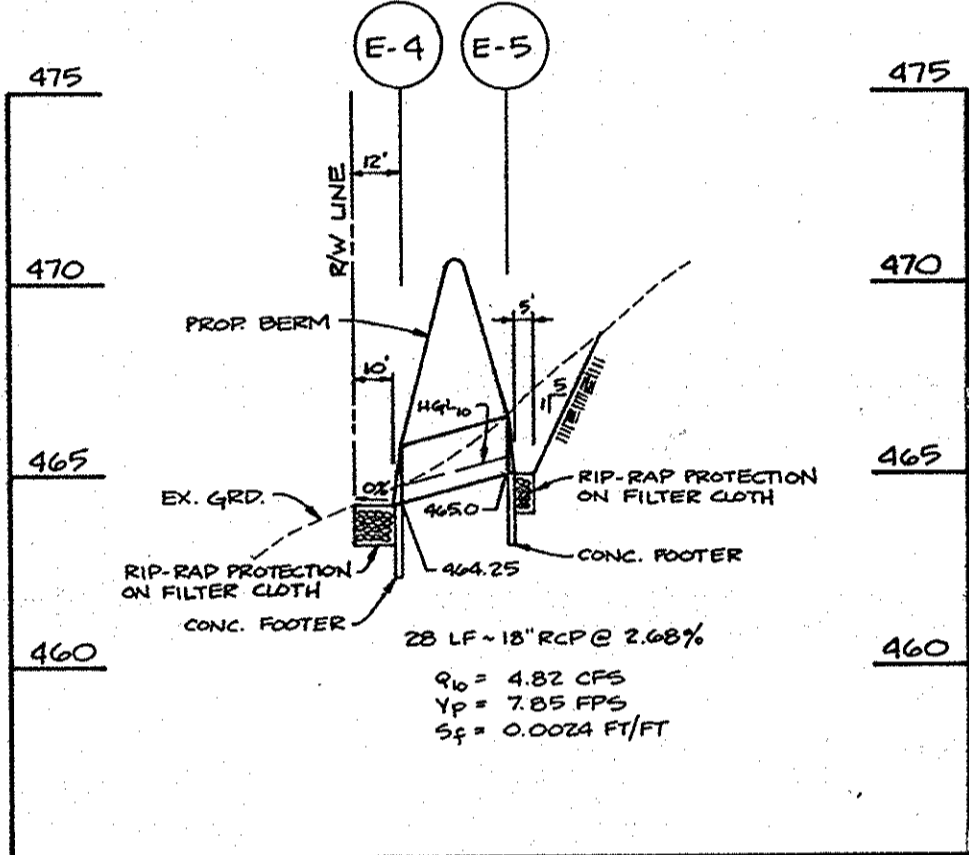
1668



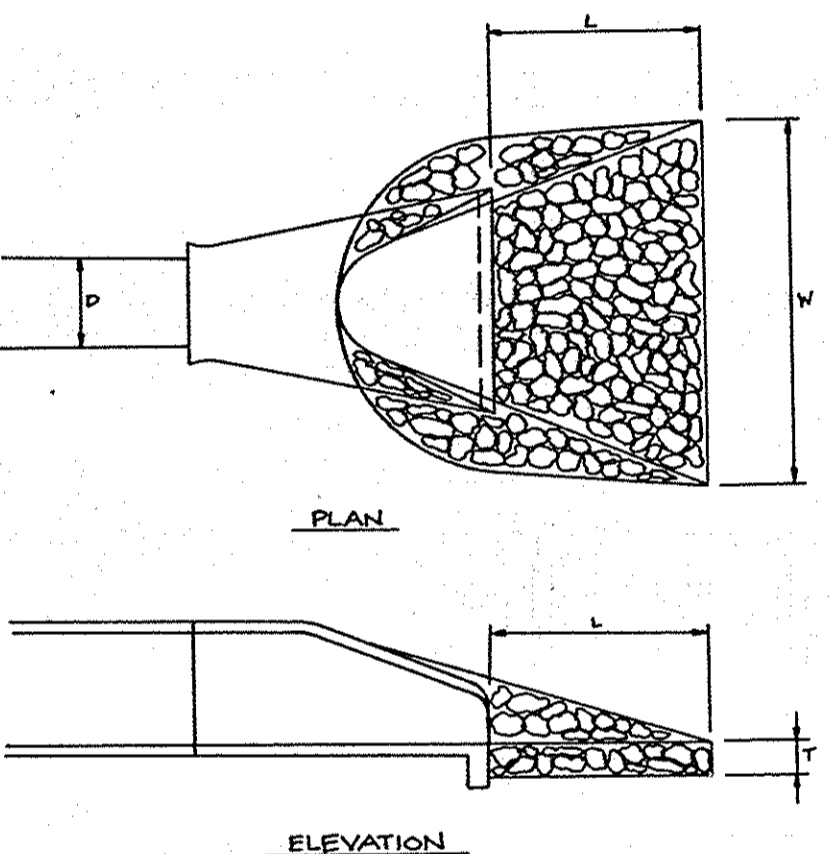
SCALE: 1" = 50' HORIZ., 1" = 5' VERT.



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



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



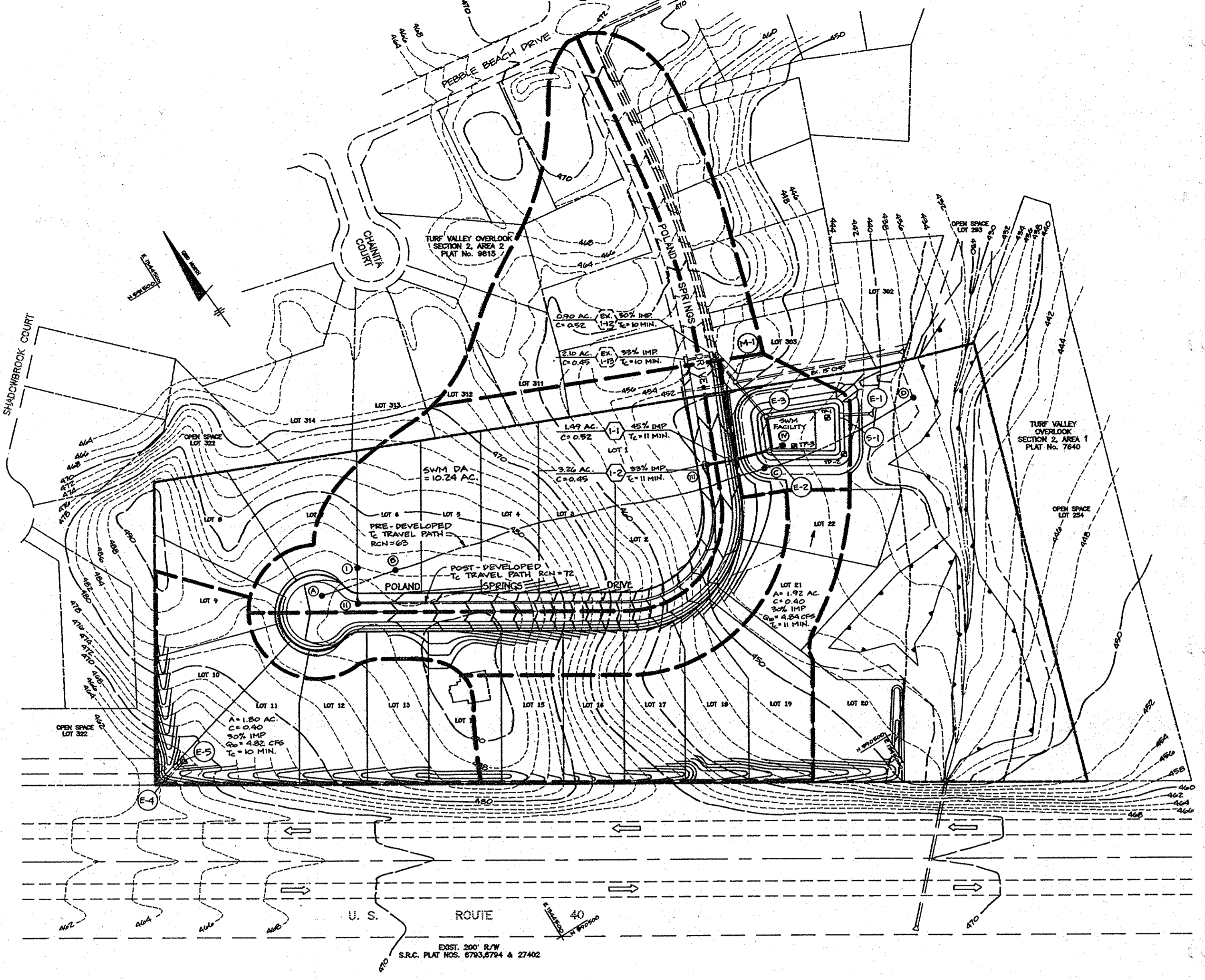
STRUCTURE	D-SLO	LENGTH	WIDTH	THICKNESS
E-1	0.50'	15'	15'	1.0'
E-2	0.75'	9'	6'	1.5'
E-3	0.60'	7'	5'	1.25'
E-4	0.50'	10'	11.5'	1.0'
E-5	0.50'	5'	6.5'	1.0'

OUTLET PROTECTION DETAIL
NOT TO SCALE

SAMPLES		DESCRIPTION OF MATERIALS	REMARKS
DEPTH (FEET)	DEPTH (FEET)		
		Dark brown, moist, silty clay (CL)	Topsoil: 6"
1	1.0	Sandy Clay Loam	
2	2.0	Light brown, light grey to orange brown, moist, silty and sandy clay (CL).	
3	3.0	Sandy Clay Loam	
4	4.0	Sandy Clay Loam	
5	5.0	Grey, moist, silty and sandy clay (CL), trace mica.	In-Situ Infiltration Test @ 5.2 ft Below Ground Surface
6	6.0	Orange and orange-brown, moist to very moist, micaceous sandy silt (ML-SM), trace clay	
7	7.0	Sandy Loam/Sandy Clay Loam	
8	8.0	Sandy Loam	Water at 7.5 ft
9	9.0	Sandy Loam	Water at 8.5 ft
10	10.0	Sandy Loam	Water at 9.5 ft
11	11.0	Terminated @ 10.5 ft	

SAMPLES		DESCRIPTION OF MATERIALS	REMARKS
DEPTH (FEET)	DEPTH (FEET)		
		Dark brown and dark grey, moist, silty and sandy clay (CL).	Topsoil: 6"
1	1.5	Sandy Clay Loam	
2	2.0	Light brown and grey, moist, silty and sandy clay (CL), trace mica.	
3	3.0	Sandy Clay Loam	
4	4.0	Sandy Clay Loam	
5	5.0	Olive grey, moist, silty and sandy clay (CL), trace mica.	In-Situ Infiltration Test @ 5.2 ft Below Ground Surface
6	6.0	Sandy Loam/Sandy Clay Loam	
7	7.0	Sandy Loam	Water at 7.5 ft
8	8.0	Sandy Loam	Water at 8.5 ft
9	9.0	Sandy Loam	Water at 9.5 ft
10	10.0	Terminated @ 10.5 ft	

SAMPLES		DESCRIPTION OF MATERIALS	REMARKS
DEPTH (FEET)	DEPTH (FEET)		
		Dark grey, moist, silty clay (CL) little sand.	Topsoil: 6"
1	1.0	Sandy Loam	
2	2.0	Brown to tan, moist, micaceous sandy silt (ML-S), little clay.	
3	3.0	Sandy Loam	
4	4.0	Orange-brown to grey, moist, silty clay (CL), trace to little mica and sand.	
5	5.0	Sandy Clay Loam	In-Situ Infiltration Test @ 6.5 ft Below Ground Surface
6	6.0	Sandy Clay Loam	
7	7.0	Sandy Clay Loam	Water at 8.5 ft
8	8.0	Orange-brown, moist, silty sand (SM), trace to little mica and clay.	Water at 9.5 ft
9	9.0	Sandy Loam	* taken from bottom of test hole
10	10.0	Terminated @ 10.5 ft	



PLAN
SCALE: 1" = 100'

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 [Signature] 8/17/93
 CHIEF, LAND DEVELOPMENT DIVISION DATE
 [Signature] 7-30-93
 CHIEF, BUREAU OF HIGHWAYS DATE
 [Signature] 8/19/93
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 [Signature] 8/20/93
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

NO	DATE	REVISION

TSA GROUP, INC.
 planning • architecture • engineering
 6480 Baltimore National Pike • Ellicott City, Maryland 21043 • (410) 465-4106

OWNER/DEVELOPER: SDC GROUP, INC.
 P.O. BOX 417
 ELLICOTT CITY, MARYLAND 21043
 (410) 465-4244

PROJECT: COLLEGE FARM
 SECTION 1, AREA 1
 LOTS 1-23

LOCATION: TAX MAP 16 - PARCELS 212 & 376
 2nd ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE: DRAINAGE AREA MAP,
 STORM DRAIN PROFILES AND DETAILS

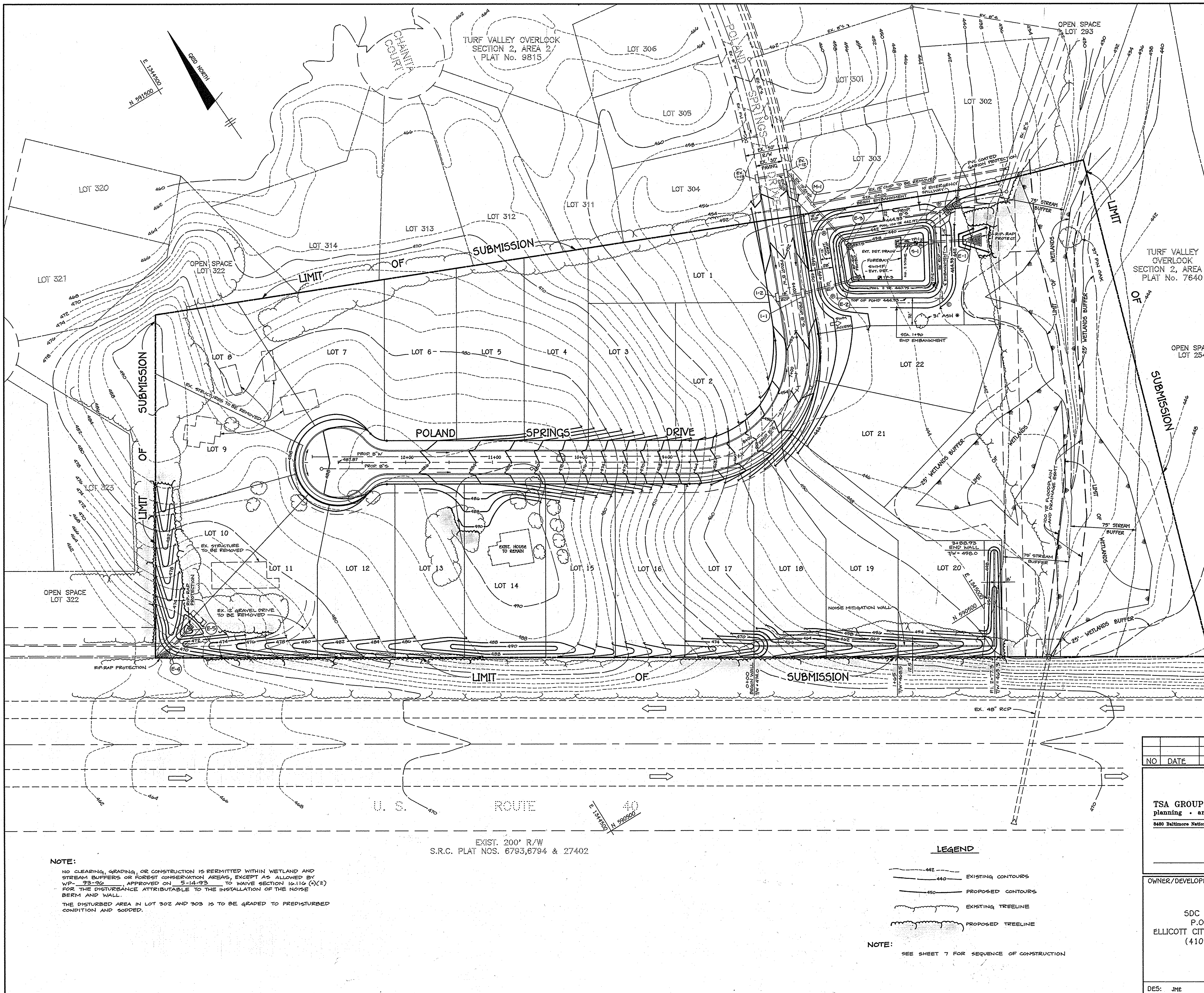
DATE: MARCH 29, 1993
 JUNE 25, 1993

PROJECT NO. 0465

SCALE: AS SHOWN

DRAWING 3 OF 2

1668



BY THE DEVELOPER:
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT 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. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.
 James R. Moxley Jr. 3-30-93
 DEVELOPER: JAMES R. MOXLEY JR. DATE
 SDC GROUP, INC. - PRESIDENT

BY THE ENGINEER:
 I 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. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.
 John M. Florriaga, P.E. # 16891 2/24/93
 ENGINEER: JOHN M. FLORRIAGA, P.E. # 16891 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.
 James M. Zickler, P.E. 7/5/92
 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. Zickler, P.E. 7/5/92
 HOWARD S.C.D. DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Chief, Land Development Division 2/17/93
 Chief, Bureau of Highways 7-20-93
 Chief, Bureau of Engineering 8/19/93

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Chief, Division of Community Planning and Land Development 5/20/93

STORMWATER MANAGEMENT FACILITY CONTROL POINTS

① N 590963.18	E 1345072.50
② N 590912.68	E 1345194.46
③ N 590826.70	E 1345146.05
④ N 590889.17	E 1345041.85

* NOTE:
 LOWER BRANCHES SHALL BE TRIMMED TO MAINTAIN CLEAR ACCESS FOR MAINTENANCE OF SWM OUTFALL.

NOTE:
 NO CLEARING, GRADING, OR CONSTRUCTION IS PERMITTED WITHIN WETLAND AND STREAM BUFFERS OR FOREST CONSERVATION AREAS, EXCEPT AS ALLOWED BY WP-93-32 APPROVED ON 5-14-93 TO WAIVE SECTION 16.116 (c)(2) FOR THE DISTURBANCE ATTRIBUTABLE TO THE INSTALLATION OF THE NOISE BERM AND WALL.
 THE DISTURBED AREA IN LOT 302 AND 303 IS TO BE GRADED TO PREDISTURBED CONDITION AND SOPPED.

EXIST. 200' R/W
 S.R.C. PLAT NOS. 8793, 8794 & 27402

- LEGEND
- 442 — EXISTING CONTOURS
 - 440 — EXISTING CONTOURS
 - 450 — PROPOSED CONTOURS
 - — EXISTING TREELINE
 - — PROPOSED TREELINE

NOTE:
 SEE SHEET 7 FOR SEQUENCE OF CONSTRUCTION

NO	DATE	REVISION

TSA GROUP, INC.
 planning • architecture • engineering
 5480 Baltimore National Pike • Ellicott City, Maryland 21043 • (410) 465-8105

OWNER/DEVELOPER:
 SDC GROUP, INC.
 P.O. BOX 417
 ELLICOTT CITY, MARYLAND 21043
 (410) 465-4244

PROJECT:
COLLEGE FARM
 SECTION 1, AREA 1
 LOTS 1-23

LOCATION:
 TAX MAP 18 - PARCELS 212 & 376
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

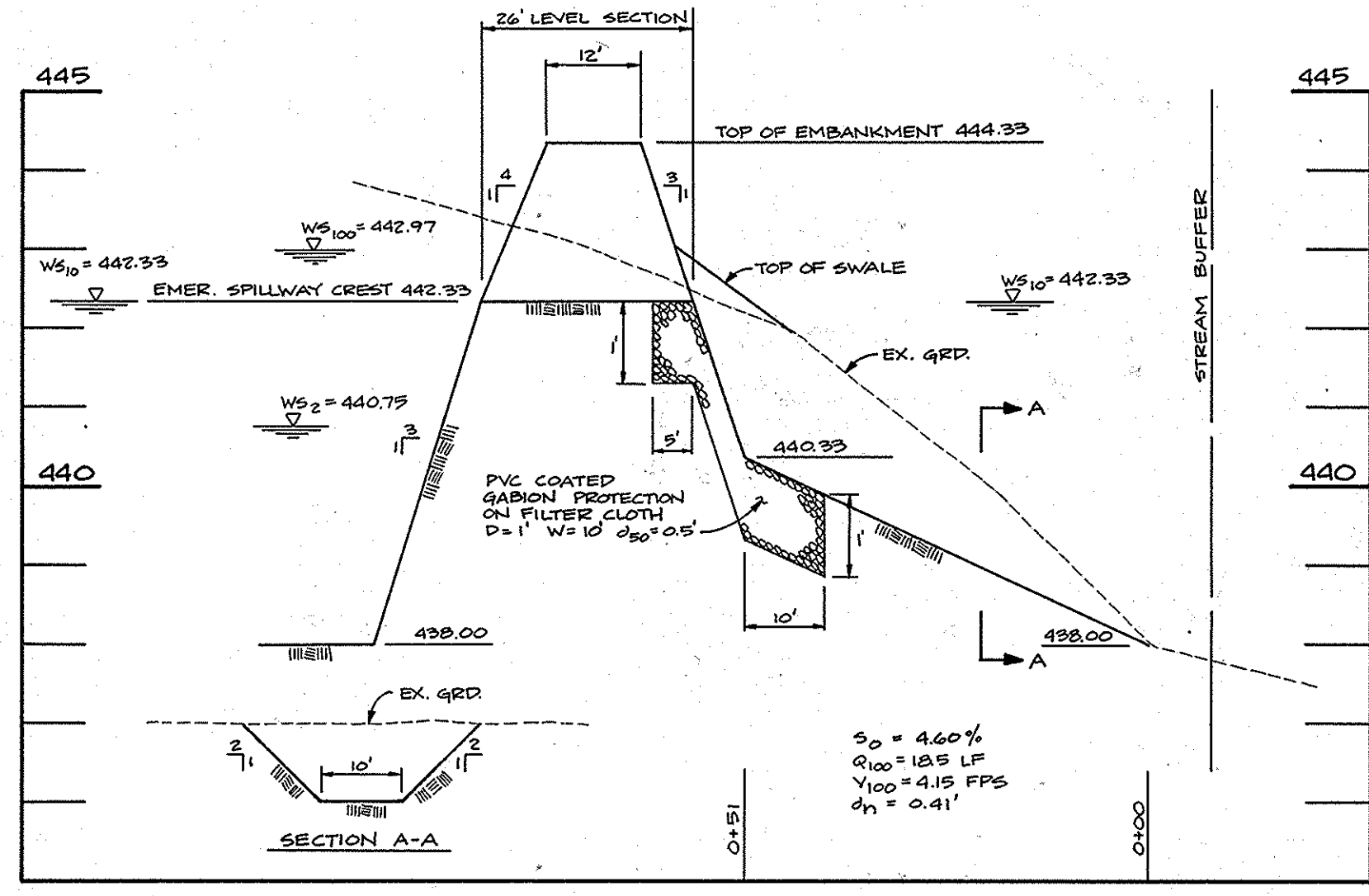
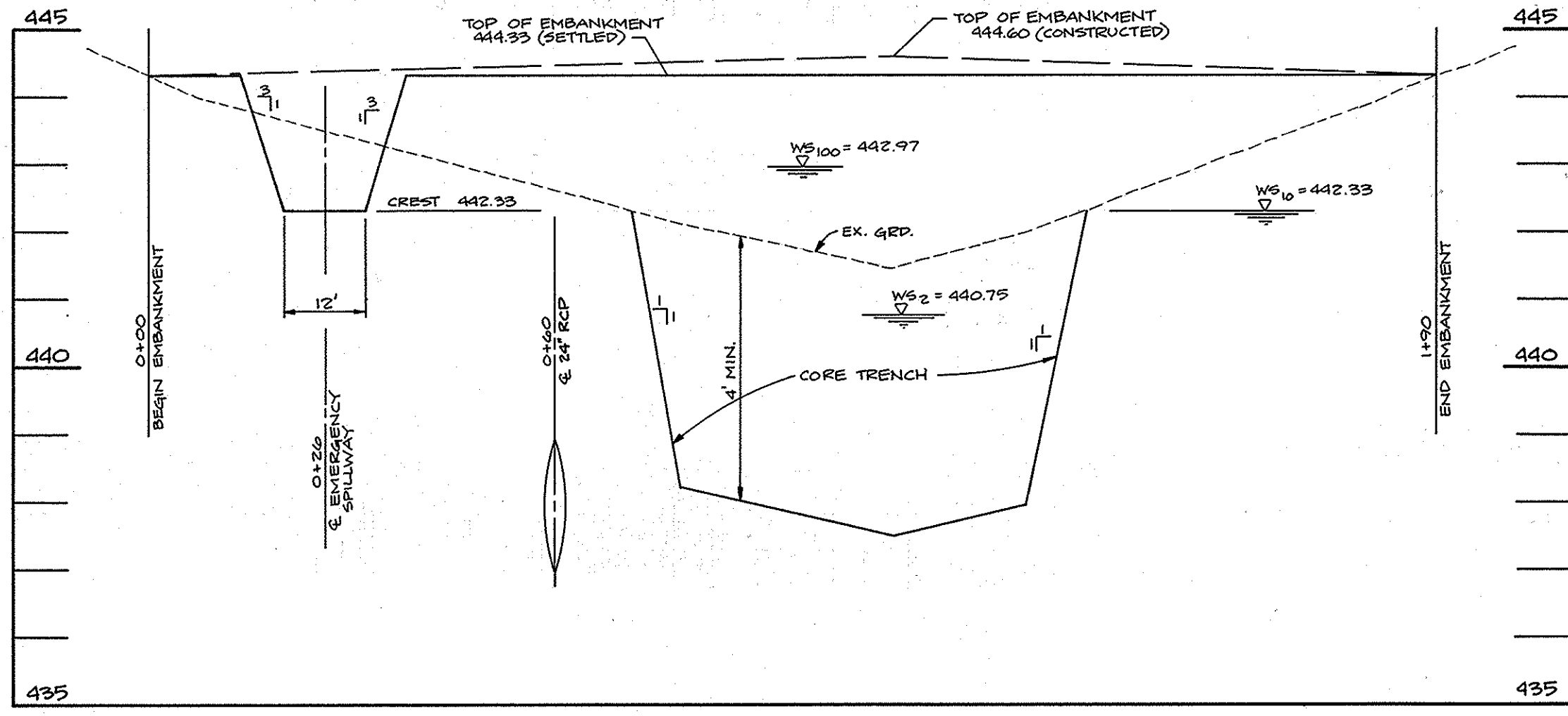
TITLE:
GRADING PLAN
 S-89-5 P-93-06 WP-93-96

DATE:
 MARCH 29, 1993 PROJECT NO. 0485
 JUNE 25, 1993

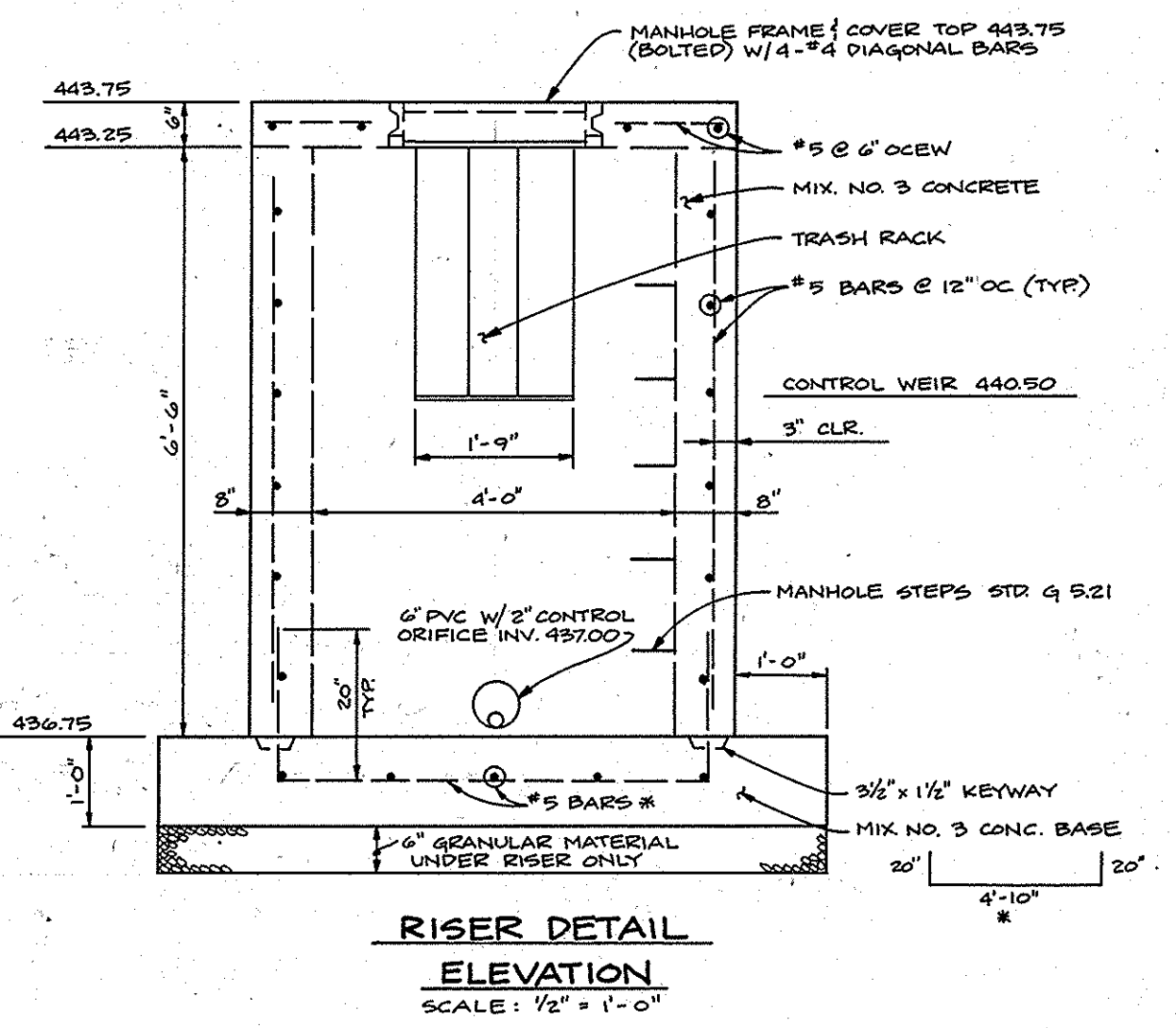
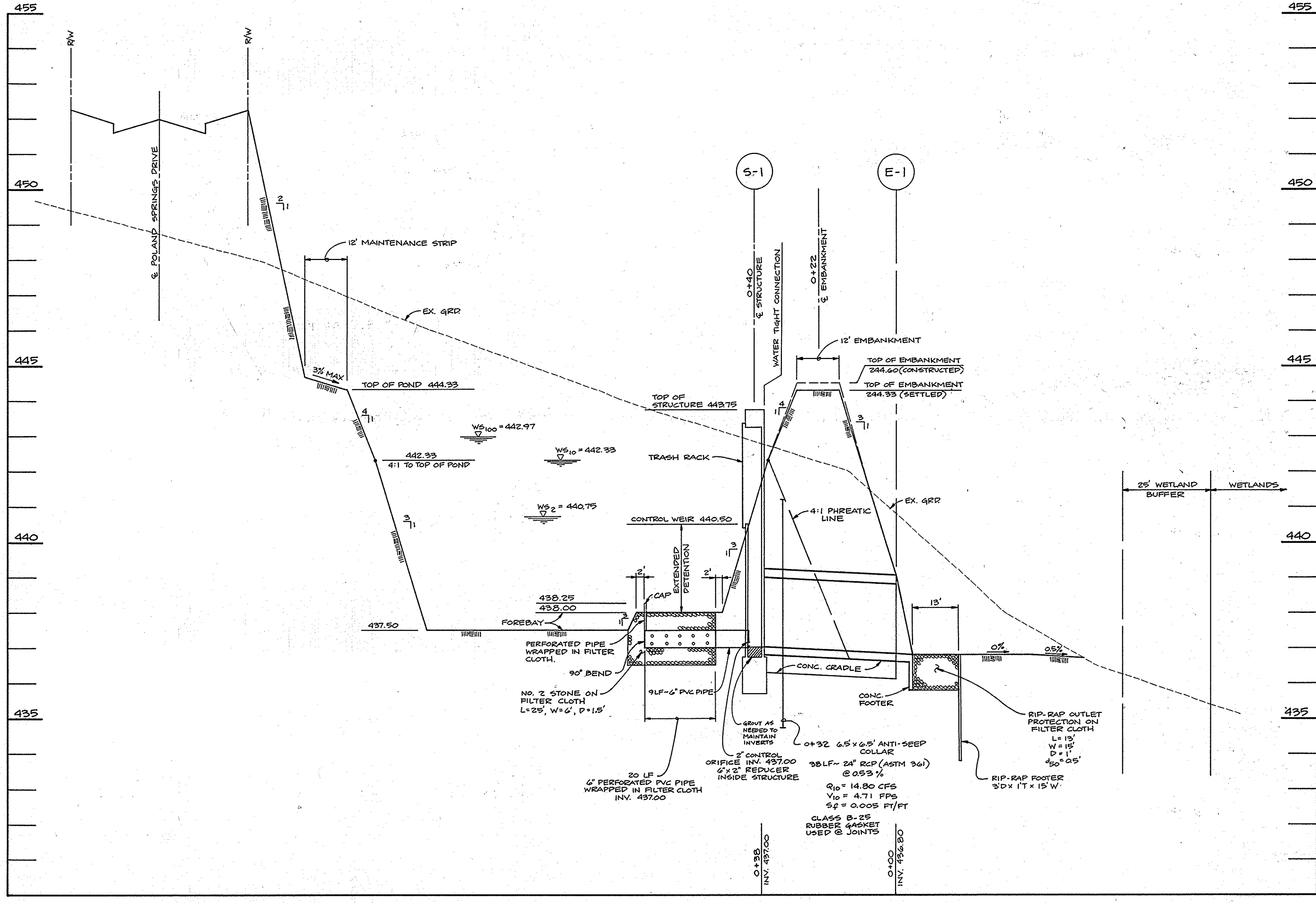
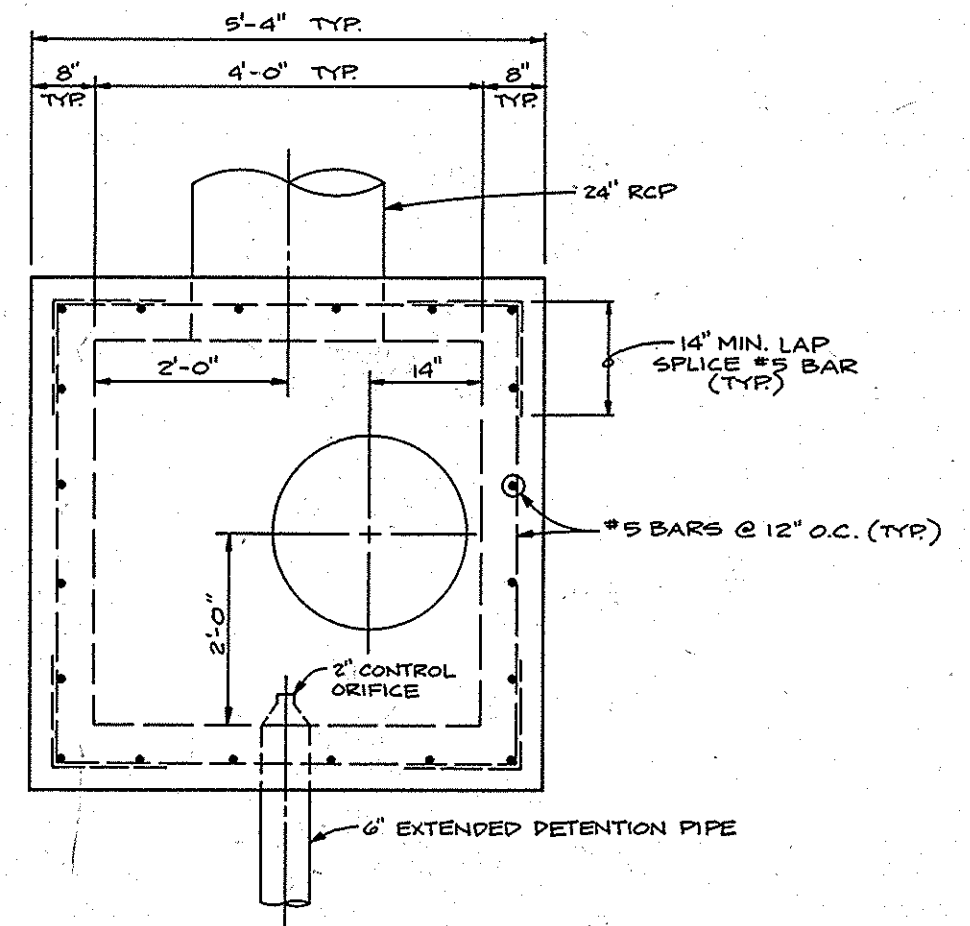
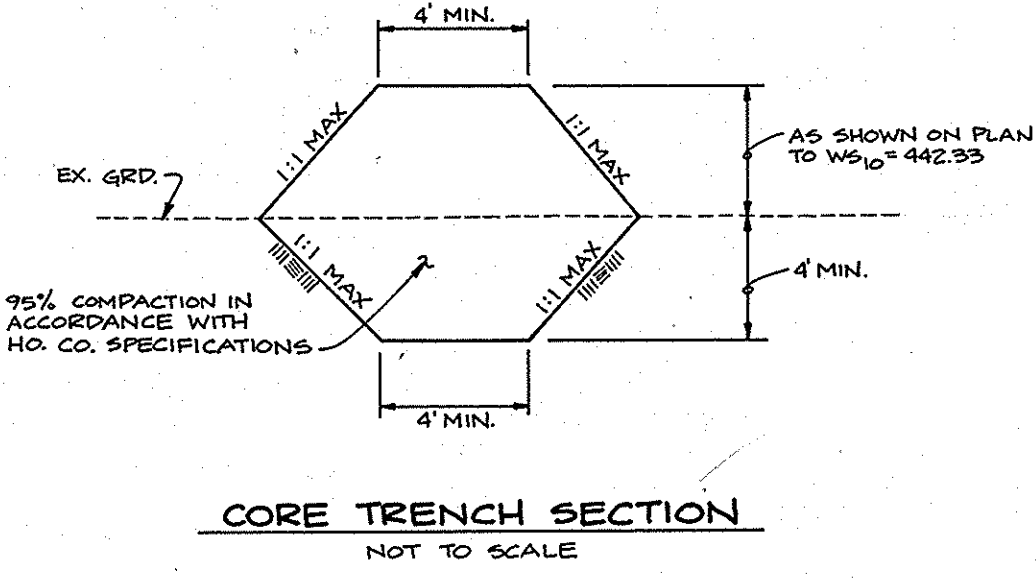
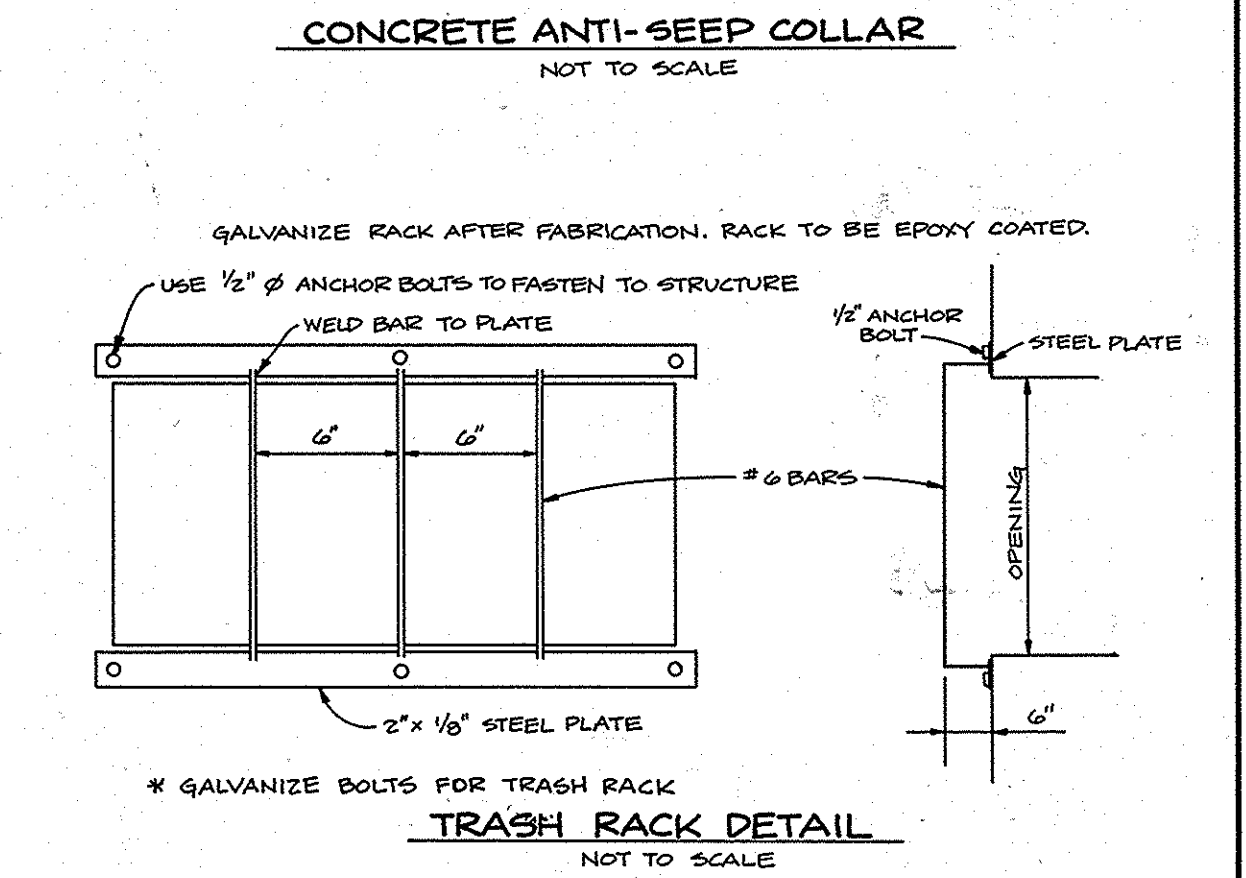
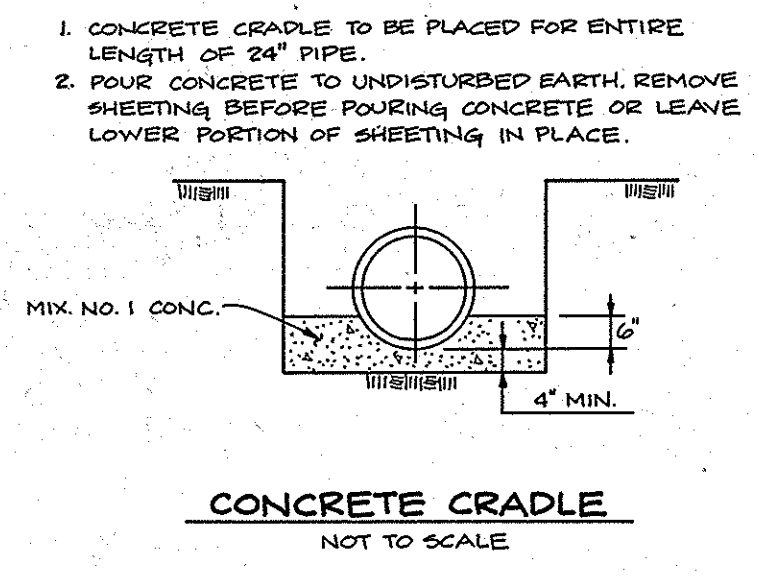
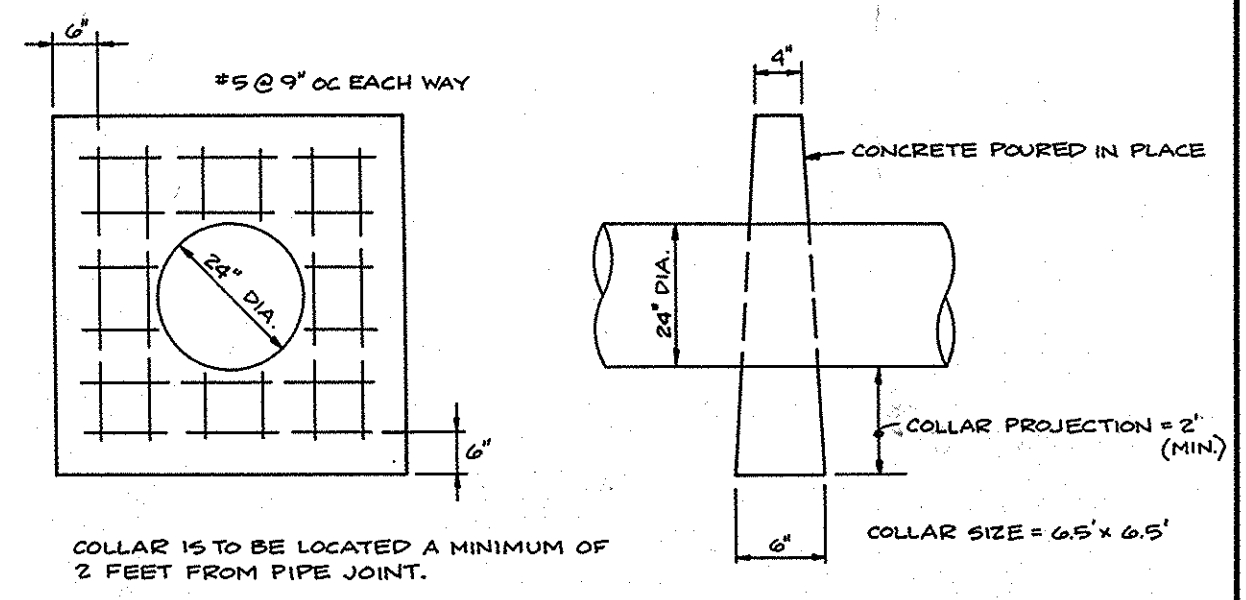
SCALE:
 1" = 50' DRAWING 4 OF 8

DES: JME DRN: DRK/DBT

16691



- NOTES**
1. MATERIAL FOR EMBANKMENT CONSTRUCTION IS TO BE USCS GC, SC, CH, OR CL.
 2. ONLY CL, CH, OR SC SOILS ARE TO BE USED FOR CORE TRENCH CONSTRUCTION.
 3. ALL SLOPES AROUND POND ARE TO BE 3:1 MAX.
 4. SHOULD WATER BE ENCOUNTERED DURING CONSTRUCTION OF CORE TRENCH, IT IS TO BE REMOVED BY PUMPING.
 5. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" @ 1-800-287-7177 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
 6. SEE SHEET 7 OF 8 FOR CONSTRUCTION NOTES.



BY THE DEVELOPER:
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT 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. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.
 James R. Moxley, Jr. 3-30-93 DATE
 DEVELOPER: JAMES R. MOXLEY, JR. SDC GROUP, INC. - PRESIDENT

BY THE ENGINEER:
 I 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. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.
 John M. Elorriaga, P.E. # 16891 3/29/93 DATE
 ENGINEER: JOHN M. ELORRIAGA, P.E. # 16891

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.
 James M. Zehn, P.E. 7/5/92 DATE
 U.S. SOIL CONSERVATION SERVICE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 Robert W. Zehn, P.E. 7/5/92 DATE
 HOWARD S.C.D.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Chief, Land Development Division 2/17/93 DATE
 Chief, Bureau of Highways 7-20-93 DATE
 Chief, Bureau of Engineering M.K. 8/9/93 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Chief, Division of Community Planning and Land Development 1/20/93 DATE

NO	DATE	REVISION

TSA GROUP, INC.
 planning • architecture • engineering
 8460 Baltimore National Pike • Elliott City, Maryland 21048 • (410) 465-8105

OWNER/DEVELOPER: SDC GROUP, INC.
 P.O. BOX 417
 ELLICOTT CITY, MARYLAND 21043
 (410) 465-4244

PROJECT: COLLEGE FARM
 SECTION 1, AREA 1
 LOTS 1-23

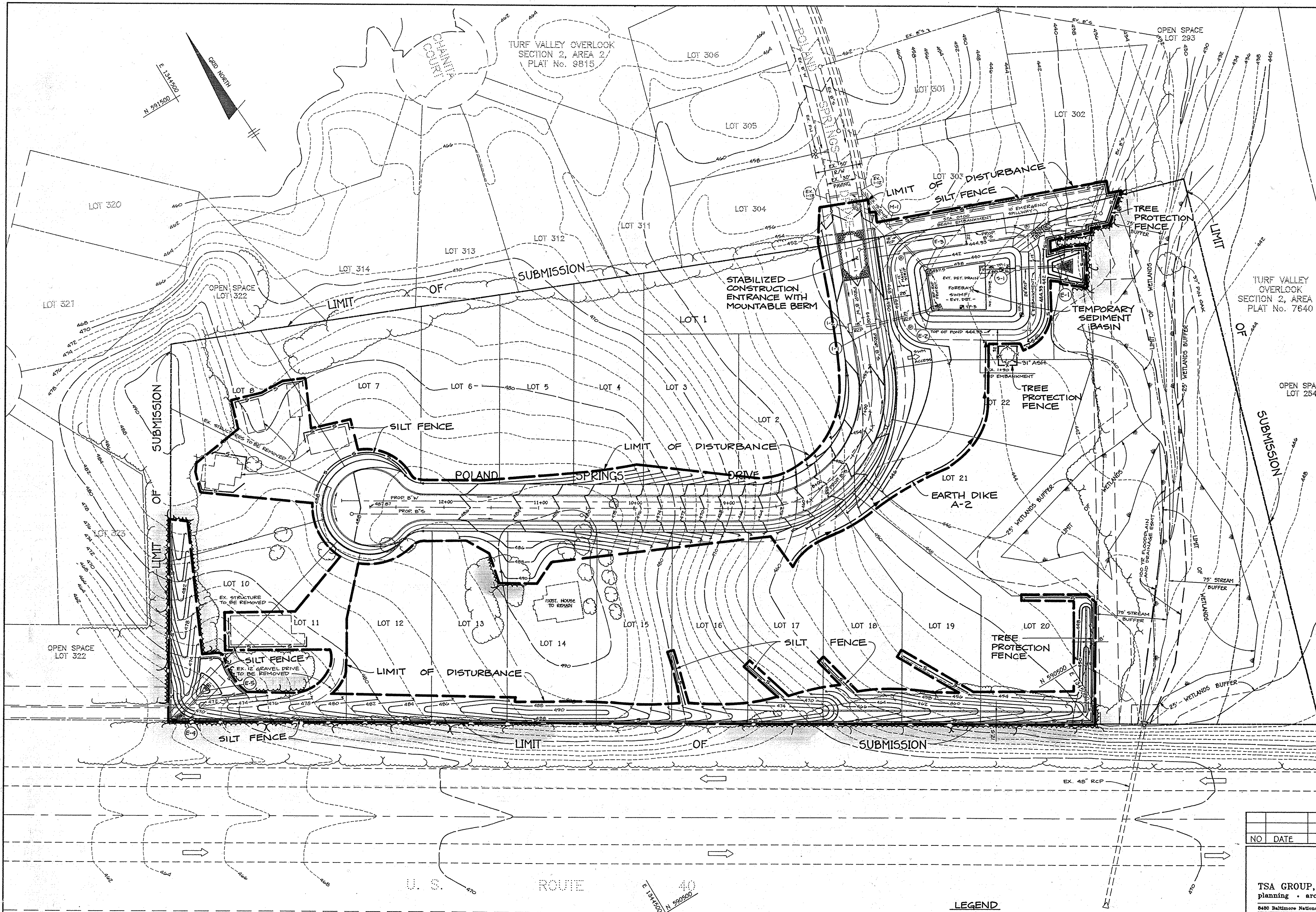
LOCATION: TAX MAP 16 - PARCELS 212 & 376
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE: STORMWATER MANAGEMENT DETAILS
 5-89-5 P-93-06 WP-93-96

DATE: MARCH 29, 1993 PROJECT NO. 0485
 JUNE 25, 1993

SCALE: AS SHOWN DRAWING NO. OF 8

DES: JME DRN: DBT



BY THE DEVELOPER:
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT 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. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."
 DEVELOPER: James R. Moxley, Jr. 3-30-72 DATE
 SOC GROUP, INC. - PRESIDENT

BY THE ENGINEER:
 "I 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. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."
 ENGINEER: John M. Elorriaga, P.E. 3/29/72 DATE
 # 16891

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.
 U.S. SOIL CONSERVATION SERVICE 7/5/92 DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 HOWARD S.C.D. Robert W. Zehn, P.E. 7/5/92 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 CHIEF, LAND DEVELOPMENT DIVISION Charles W. ... 8/17/93 DATE
 CHIEF, BUREAU OF HIGHWAYS Andrew M. Daniels 7-30-93 DATE
 CHIEF, BUREAU OF ENGINEERING M.A.K. Elizabeth Anderson Calca 8/19/93 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT Robert ... 8/20/93 DATE

EXIST. 200' R/W
 S.R.C. PLAT NOS. 6793, 6794 & 27402

- LEGEND**
- - - - - EXISTING CONTOURS
 - - - - - PROPOSED CONTOURS
 - - - - - SILT FENCE
 - x - x - TREE PROTECTION FENCE
 - - - - - EARTH DIKE
 - - - - - LIMIT OF DISTURBANCE
 - - - - - EXISTING TREELINE
 - - - - - PROPOSED TREELINE

NO	DATE	REVISION

TSA GROUP, INC.
 planning • architecture • engineering
 8480 Baltimore National Pike • Ellicott City, Maryland 21045 • (410) 465-6105

OWNER/DEVELOPER:
 SOC GROUP, INC.
 P.O. BOX 417
 ELLICOTT CITY, MARYLAND 21043
 (410) 465-4244

PROJECT: COLLEGE FARM
 SECTION 1, AREA 1
 LOTS 1-23

LOCATION: TAX MAP 16 - PARCELS 212 & 376
 2nd ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE: SEDIMENT CONTROL PLAN
 6-89-5 P-93-06 WP-93-96

DATE: MARCH 29, 1993
 JUNE 23, 1993

PROJECT NO. 0405

DES: JME **DRN:** DRK/DBT **SCALE:** 1" = 50' **DRAWING** 6 OF 8

1668

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 obstructions shall be removed.

Areas to be covered by the reservoir will be cleared of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans.

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.

Earth Fill

Material - The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, stones greater than 6", frozen or other objectionable materials.

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 tyred or vibratory roller.

Where a minimum required density is specified, it shall not be less than 95% of maximum dry density with a moisture content within +/- 2% of the optimum.

Out Off Trench - The cutoff trench shall be excavated into impervious material along or parallel to the centerline of the embankment as shown on the plans.

Structure Backfill - Backfill adjacent to pipes or structures shall be of the type and quality conforming to that specified for the adjoining fill material.

Pipe Conduits - All pipes shall be circular in cross section. Corrugated Metal Pipe - All of the following criteria shall apply for corrugated metal pipe:

- 1. Materials - (Steel Pipe) - This pipe and its appurtenances shall be galvanized and fully bituminous coated and shall conform to the requirements of AASHTO Specification M-190 Type A with watertight coupling bands.

Materials - (Aluminum Coated Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-274 with watertight coupling bands or flanges.

Materials - (Aluminum Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-195 or M-211 with watertight coupling bands or flanges.

- 2. Coupling bands, anti-seep collars, and sections, etc., must be composed of the same material as the pipe.

- 3. 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.

All connections shall use a rubber or neoprene gasket when joining pipe sections. The end of each pipe shall be re-rolled an adequate number of corrugations to accommodate the band width.

- 4. Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length.

- 5. Backfilling shall conform to "Structure Backfill."

Reinforced Concrete Pipe - All of the following criteria shall apply for reinforced concrete pipe:

- 1. Materials - Reinforced concrete pipe shall have bell and spigot joints with rubber gaskets and shall equal or exceed ASTM Designation C-361. An approved equivalent is AWWA Specification C-302.

- 4. Backfilling shall conform to "Structure Backfill."

Polyvinyl Chloride (PVC) Pipe - All of the following criteria shall apply for polyvinyl chloride (PVC) pipe:

- 1. Materials - PVC pipe shall be PVC-1120 or PVC-1220 conforming to ASTM D-1785 or ASTM D-2241.

Concrete shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 608, Mix No. 3.

Concrete Riprap - All rock shall be dense, sound, and free from cracks, seams, and other defects conducive to accelerated weathering.

The rock shall have the following properties:

- 1. Bulk specific gravity (saturated surface-dry basis) not less than 2.5.

Care of Water during Construction - All work on permanent structures shall be carried out in areas free from water.

Stabilization - All borrow areas shall be graded to provide proper drainage and left in a slightly condition.

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.

SEQUENCE OF CONSTRUCTION

- 1. OBTAIN GRADING PERMIT. STABILIZE ALL DISTURBED AREAS. NOISE BARRIERS TO BE CONSTRUCTED AND IMMEDIATELY STABILIZED IN 100' LENGTHS.

PERMANENT SEEDING PREPARATION

SEEDING PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAZING, DICING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

- 1. PREFERRED - APPLY 2 TONS PER ACRE DOLICITE LIMESTONE (14 LBS/1000 SQ FT) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ FT) BEFORE SEEDING.

SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS PER ACRE OF BUREN BIRD SEED (14 LBS/1000 SQ FT) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ FT) BEFORE SEEDING.

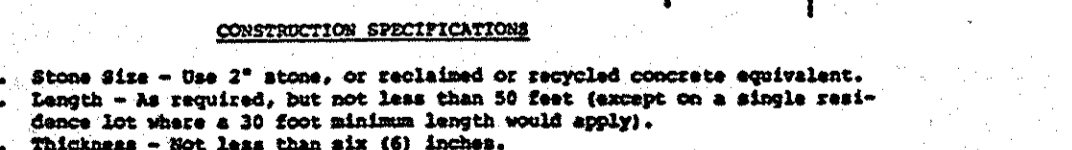
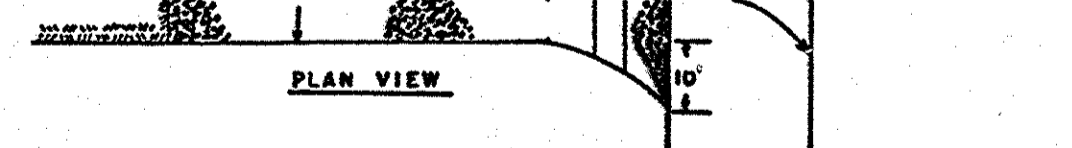
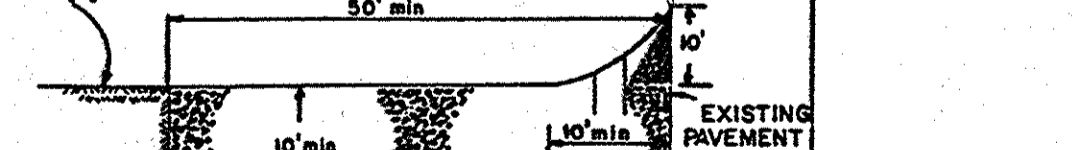
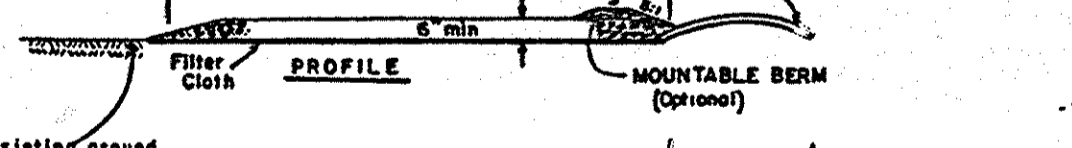
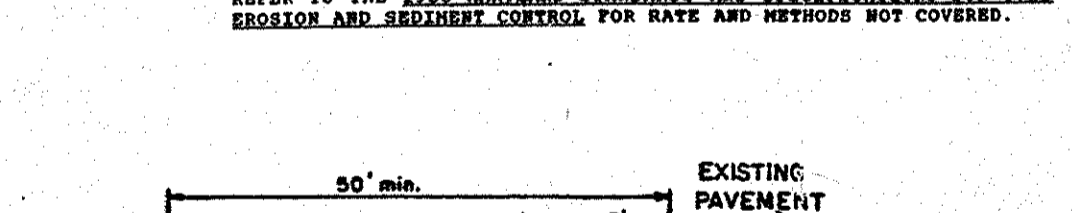
MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (170 TO 280 LBS/1000 SQ FT) OF SCREENED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING.

TEMPORARY SEEDING PREPARATION - APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

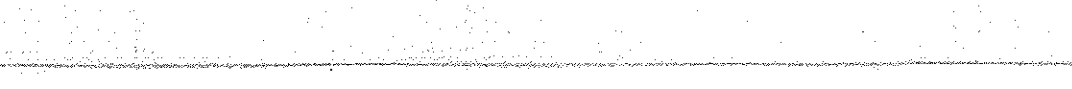
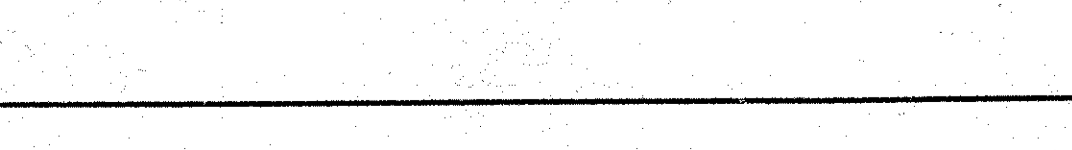
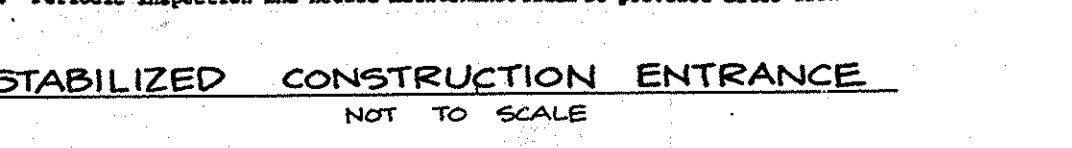
SEEDING: FOR PERIOD MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER 15, SEED WITH 2-1/2 BUSSELS PER ACRE OF BUREN BIRD SEED (14 LBS/1000 SQ FT) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ FT).

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (170 TO 280 LBS/1000 SQ FT) OF SCREENED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING.

REFER TO THE 1983 HANDBOOK STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR MORE DETAILS.



- 1. Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.



SEQUENCE OF CONSTRUCTION

- 1. OBTAIN GRADING PERMIT. STABILIZE ALL DISTURBED AREAS. NOISE BARRIERS TO BE CONSTRUCTED AND IMMEDIATELY STABILIZED IN 100' LENGTHS.

SEEDING PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAZING, DICING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

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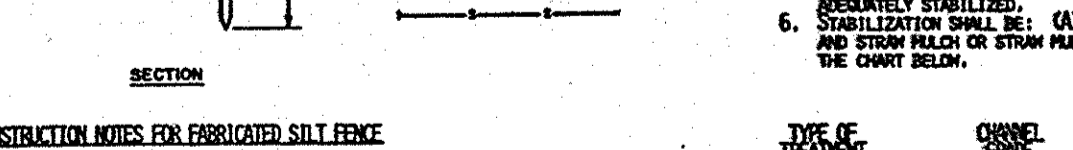
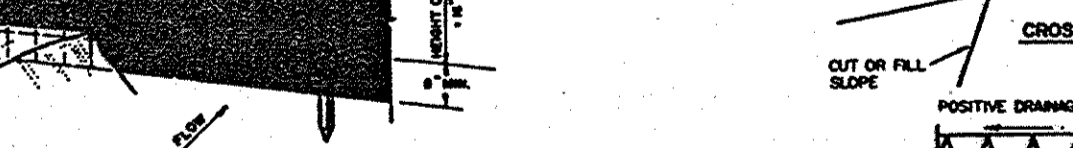
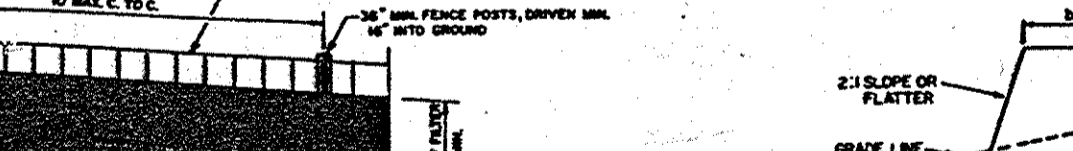
REFER TO THE 1983 HANDBOOK STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR MORE DETAILS.

- 1. FOREST PROTECTION DEVICE ONLY.

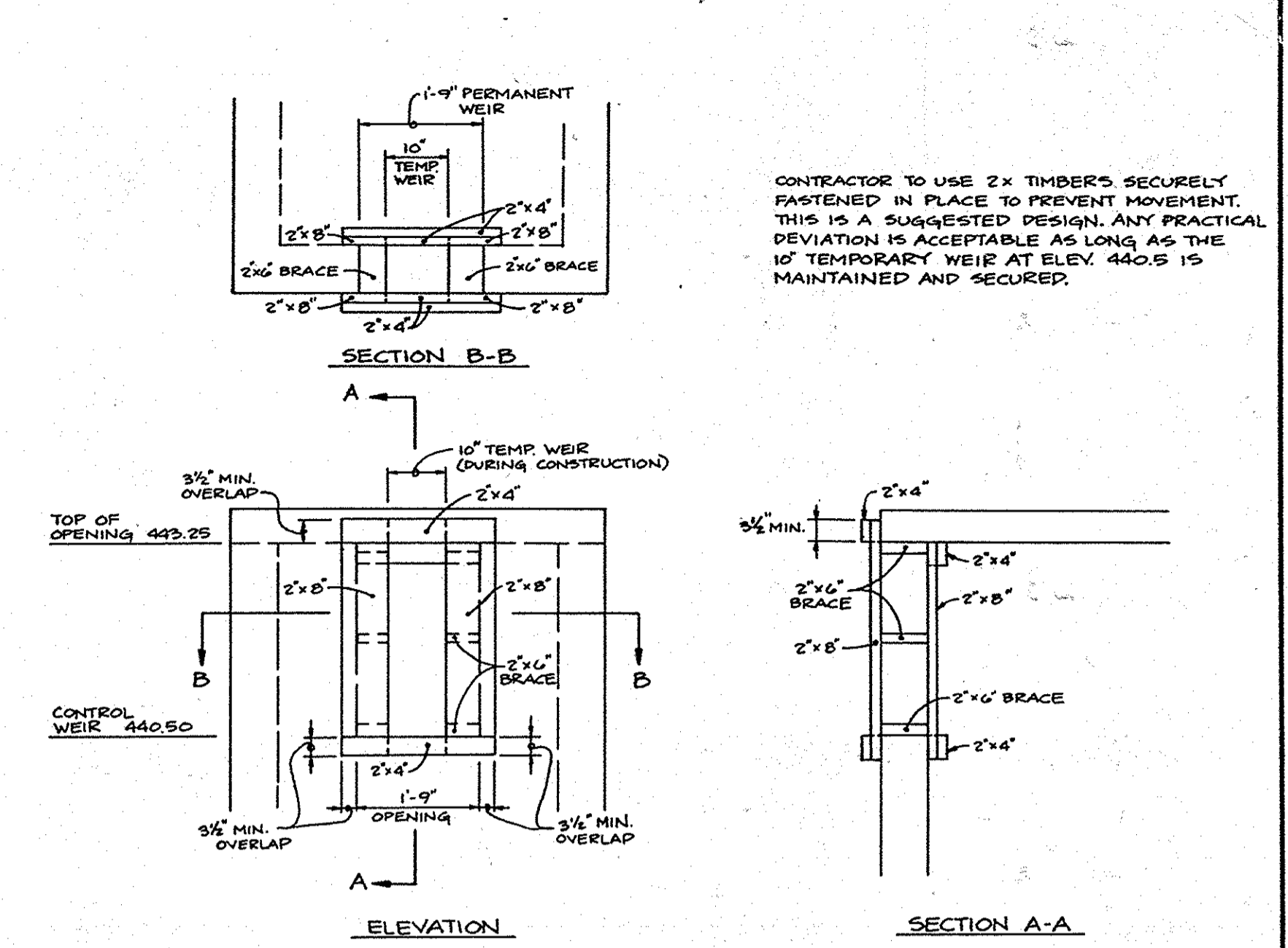
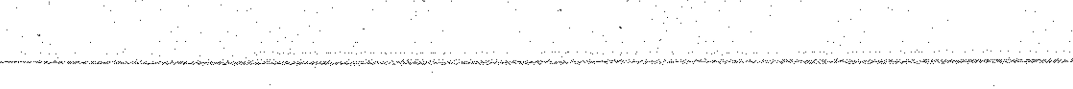
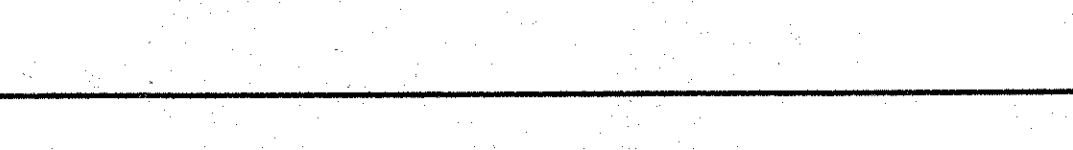
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REFER TO THE 1983 HANDBOOK STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR MORE DETAILS.



- 1. Stone to be 2 inch stone, or recycled concrete equivalent, in a layer at least 3 inches in thickness and be pressed into the soil with construction equipment.



CONTROL WEIR TEMPORARY SWM SCALE: 1/2" = 1'-0"

BY THE DEVELOPER: I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN AND THAT THE RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

BY THE ENGINEER: I 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.

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

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

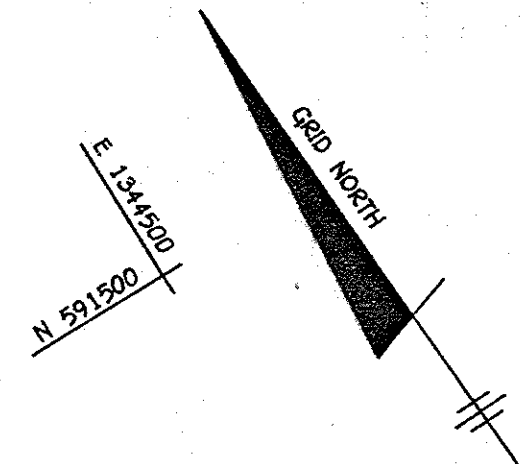
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

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Table with columns for NO, DATE, and REVISION.

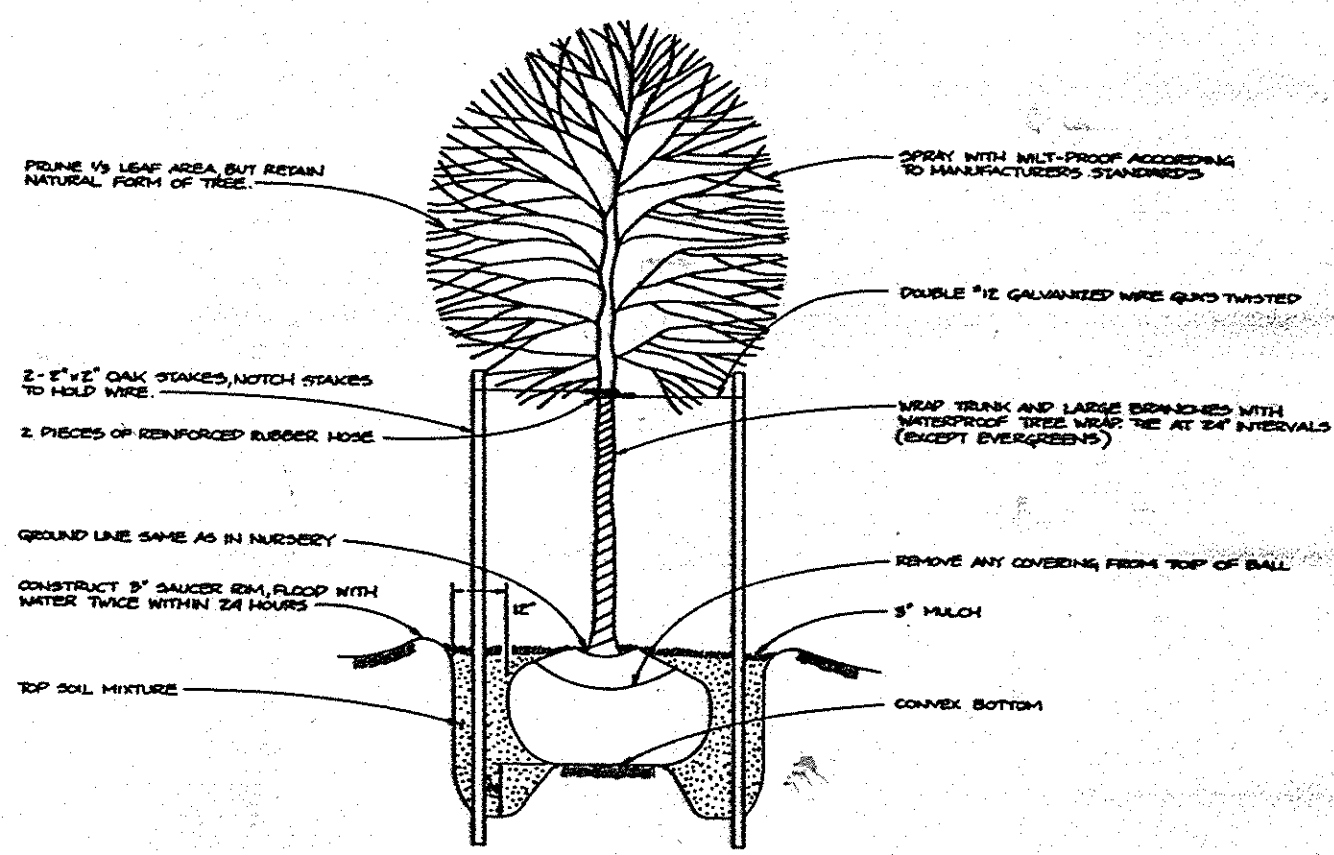
TSA GROUP, INC. planning • architecture • engineering 8480 Baltimore National Pike • Beltsville City, Maryland 21043 • (410) 465-6105

OWNER/DEVELOPER: SDC GROUP, INC. PROJECT: COLLEGE FARM SECTION 1, AREA 1 LOTS 1-23 LOCATION: TAX MAP 16 - PARCELS 212 & 376 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

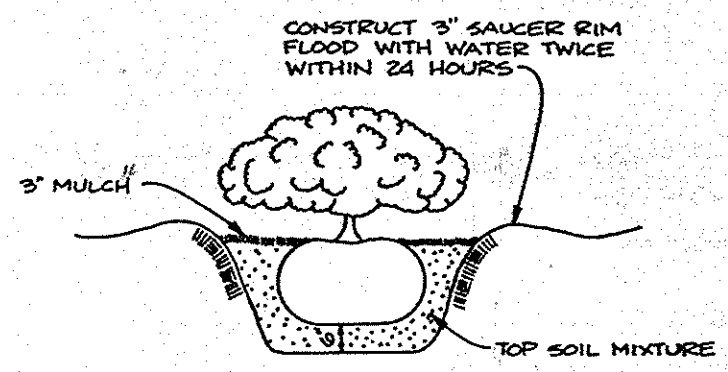


PLANT LIST			
SYMBOL	QUANTITY	NAME	REMARKS
	42	AGED RUBRUM Red Maple	2 1/2" MIN. CALIBER D+B FULLHEAD
	90	PINUS STROBUS White Pine	4'-6" HEIGHT B+D
	128	ARONIA ARBUTIFOLIA Bullard Red Chokeberry	2-2 1/2' HT B+D

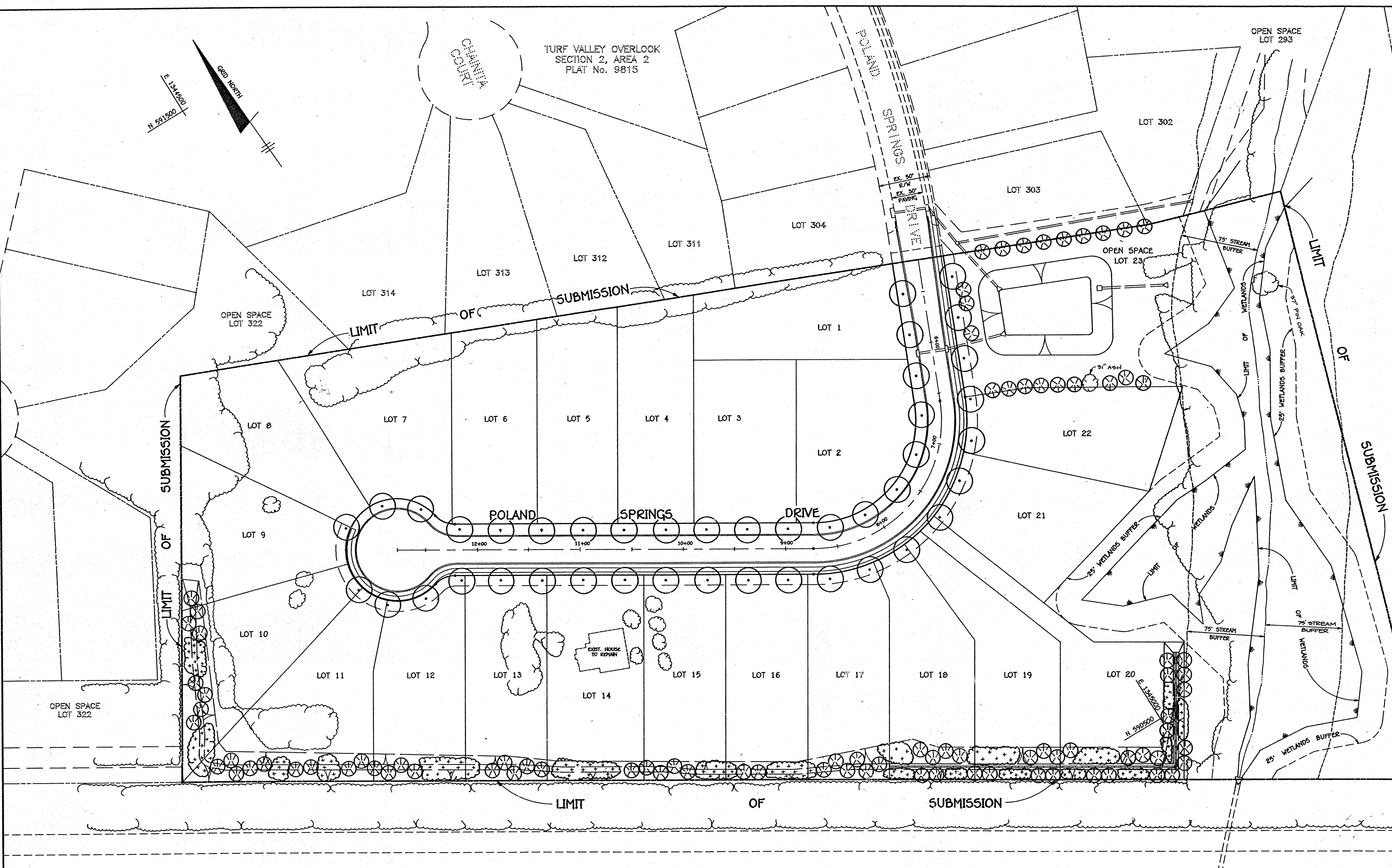
* ALL SCREENING OF THE STORMWATER MANAGEMENT FACILITY IS TO BE DONE ON THE OPEN SPACE LOT 23.



TREE PLANTING DETAIL
NOT TO SCALE



SHRUB PLANTING DETAIL
NOT TO SCALE



TURF VALLEY OVERLOOK SECTION 2, AREA 1 PLAT No. 7840

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 _____ DATE 8/17/93
 CHIEF, LAND DEVELOPMENT DIVISION
 _____ DATE 7-30-93
 CHIEF, BUREAU OF HIGHWAYS
 _____ DATE 8/19/93
 CHIEF, BUREAU OF ENGINEERING
 APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 _____ DATE 8/20/93
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

NO	DATE	REVISION

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OWNER/DEVELOPER: SDC GROUP, INC.
 P.O. BOX 417
 ELLICOTT CITY, MARYLAND 21043
 (410) 465-4244

PROJECT: COLLEGE FARM
 SECTION 1, AREA 1
 LOTS 1-23

LOCATION: TAX MAP 16 - PARCELS 212 & 376
 2nd ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE: LANDSCAPE PLAN
 5-89-5 P-93-06 WP-93-96

DATE: MARCH 29, 1993
 JUNE 25, 1993

PROJECT NO. 0485

SCALE: 1" = 50'

DRAWING OF OF

U. S. ROUTE 40
 EXIST. 200' R/W
 S.R.C. PLAT NOS. 6793, 6794 & 27402

1668