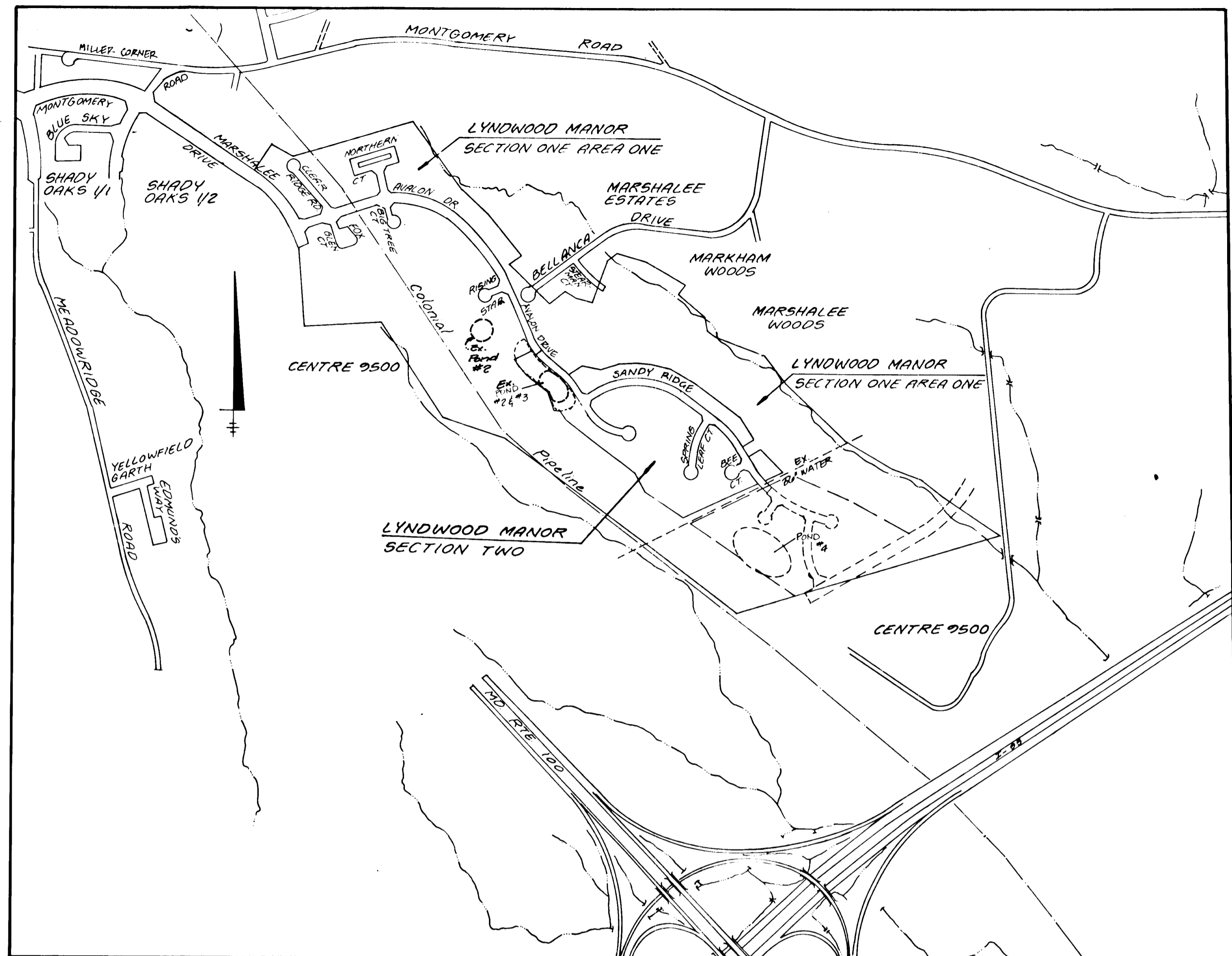


INDEX OF SHEETS	
SHEET NO.	TITLE
1	TITLE SHEET
2	PLAN AND PROFILE - AVULON DRIVE
3	PLAN AND PROFILE - SANDY RIDGE
4	PLAN AND PROFILE - SANDY RIDGE T-TURNAROUND
5	PLAN AND PROFILE - SPRING LEAF CT & BEE COURT
6	ROAD DETAILS
7	STORM DRAIN PROFILES
8	STORM DRAIN PROFILES
9	GRADING & SEDIMENT AND EROSION CONTROL PLAN
10	GRADING & SEDIMENT AND EROSION CONTROL PLAN
11	SEDIMENT AND EROSION CONTROL DETAIL SHEET
12	STORMWATER MANAGEMENT DETAILS
13	DRAINAGE AREA MAP
14	DRAINAGE AREA MAP
15	LANDSCAPE PLAN
16	LANDSCAPE PLAN



LOCATION MAP
Scale: 1" = 600'

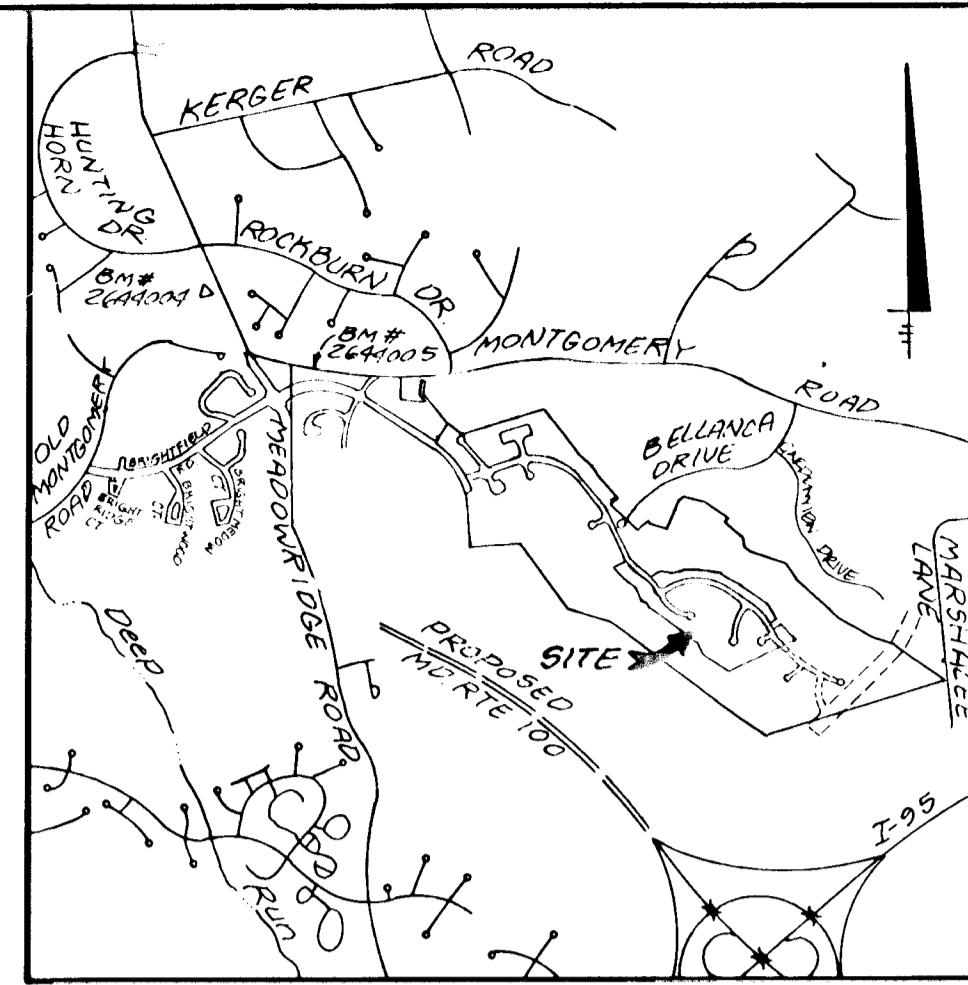
BENCHMARK

Ho. Co. Mon # 2644004 E1.402.135
Ho. Co. Mon # 2644005 E1.416.981

DESCRIPTION

Ho. Co. Mon # 2644006 E1.416.981
Concrete Monument .2' Below Surface
South Side Montgomery Road East
of Meadow Ridge Road.

Ho. Co. Mon # 2644004 E1.402.135
Concrete Monument .1' Below Surface
SW Corner of Intersection Rte 103 and
Old Montgomery Road.



VICINITY MAP
Scale: 1" = 2,000'

NOTES:

- All construction shall be in accordance with the latest standards and specifications of Howard County, Volume IV.
- The contractor shall notify the Department of Public Works/Bureau of Construction Division (410) 213-1130, at least twenty four (24) hours prior to the start of work.
- The contractor shall notify "Miss Utility" at 1-800-257-7777 at least forty-eight (48) hours prior to any excavation work.
- Project background:
Location: Elkridge, Tax Map 37, Parcel 58
PID 85, 529, 542, 640, 643
Zoning: RESC (Residential, Single Detached)
ZB 877, R4M, PD 264, RI 5-199
148
Section/Area: Two
Total Lot Area: 100.43 ac. plus tracts
Section/Area: 237.42 ac. plus tracts
No. of Proposed Lots: 73 (71 34 D, 2 Open Space)
Previous Submittals: WSP93-35, F94-125, S94-102, P93-11, SPP93-75, SPP93-105, F94-27, F94-28
- Traffic control devices, markings, and signing shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD). All street and roadway signs shall be in place prior to the placement of any asphalt.
- Light poles and fixtures for street lights shall be in accordance with the latest Howard County Design Manual, Volume III, Roads and Bridges.
- Storm drain benches within the public road right-of-way shall be backfilled and compacted in accordance with the Howard County Standard Specifications and Details, Design Manual Volume IV.
- Any damage to existing public right-of-way, existing paving, existing curb and gutter, existing utilities, etc. shall be corrected at the contractor's expense.
- The existing utilities shown herein are located from field surveys and construction drawings of record. The approximate location of existing utilities are shown for the contractor's information and convenience. The contractor shall locate existing utilities to his own satisfaction and not in advance of any construction activities. Additionally, the contractor shall take all necessary precautions to protect all existing utilities and maintain uninterrupted service.
- The topography shown herein is compiled from photogrammetric aerial survey, supplemented with field data provided by Land Design Engineering, Inc., June 1992. Aerial survey dates March 16, 1990 by DeWberry & Davis.
- Horizontal and vertical datums are related to the Maryland State Plane Coordinate system as projected from Howard County Control Stations No. 264704 and No. 264690, (E1D127).
- Public water and public sewer are available to the site by means of extensions:
Water: Contract No. 14.3370-D
Sewer: Contract No. 14.3370-D
- Temporary stormwater management is provided by detention. Permanent quantity management is by detention. Quality management is by sedimentation.
- Wetlands delineation by Exploration Research, Inc. dated 1992, approved by United States Army Corps of Engineers June, 1992.
- Notes study compiled by Land Design Engineering, Inc. as part of P93-11 approval, December 31, 1991.
- Foodstamp analysis by Land Design Engineering, Inc. December, 1992, based on field soil data from 1992 and 1993 (7/93-11).
- Traffic study completed by Lee Cunningham & Associates, Inc. dated November, 1992 as part of S93-02 approval.
- Geotechnical reports compiled by H&B, Carney dated February 21, 1994, June 8, 1995 and F94-29.
- 401 Permit #8991-00489-7, exp. August 1, 1995.
WD Permit #92-940-0313, exp. July 28, 1996.
- Water Pollution WSP93-35 for roads to be opened 12/07. Section 16.1150(1)(1) approved December 21, 1992. Waiver request WSP93-36 to waive Section 16.1150(2) to provide 20' minimum buffering for all areas under 40,000 square feet, waive Section 16.1150(b) to limit all public utility projects to existing 200' sections 16.1150, that no more than two (2) operations may be active at any one time. Section 16.1150, grading 5 percent to wetlands shall not be permitted, approved March 18, 1993.
- All hydraulic data is for the 10 year storm unless otherwise noted.
- All existing grades are from survey data March 16, 1990, or proposed grades shown on F-94-29.
- 90% compaction in fill areas shall be determined by ASSHTO T-180.
- Sidewalks and address ramps shall be designed in accordance with current ADA requirements.

ROAD & STORM DRAIN CONSTRUCTION PLANS

LYNDWOOD MANOR

SECTION TWO

1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND

LDE	1	Revised Lot Numbers	4/97
By	NR	Revision	Date

ENGINEER'S CERTIFICATE

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.

Bruce D. Burton
Signature of Engineer
5/16/95
Date

DEVELOPER'S CERTIFICATE

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.

Kurt N.
Signature of Developer
2/18/94
Date

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.

Robert W. Zehner 5/23/95
U.S. Soil Conservation Service Date

This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

Robert W. Zehner 5/23/95
Howard Soil Conservation District Date

APPROVED: Department of Public Works for Storm Drainage Systems and Roads

John J. Seppan 4/1/94
Chief, Bureau of Engineering Date

APPROVED: Department of Planning and Zoning

Robert M. Danek 5-26-95
Chief, Bureau of Highways Date

APPROVED: Department of Planning and Zoning

Bruce D. Burton 5/16/95
Chief, Division of Land Development and Research Date

Bruce D. Burton
5/16/95

LAND DESIGN ENGINEERING, INC.		
8835 Columbia 100 Parkway, Unit N, Columbia, MD 21045 (410) 715-1070 (Balto.) (301) 593-3424 (Wash.) (410) 715-0681 (Fax)		
DESIGNED	TITLE SHEET	SCALE
TO	SECTION TWO	AS SHOWN
DRAWN	LYNDWOOD MANOR	DRAWING
50/100	Lots 179-196, 200, 201, 206-209, 241-249, 337-375	1 of 16
CHECKED	Tax Map 37 Part of Parcels G43, 38, 640	JOB NO.
RM	1st Election District Howard County, MD.	92-176-B
DATE	Previous Submittals: ZB877 R4M, WP91-33, F91-125, S93-35, RES 188, S93-02, F8284, P93-11, F-94-29	FILE NO.
12/94	100 INVESTMENT LIMITED PARTNERSHIP 8835 Columbia 100 Parkway Columbia, Maryland 21045 (410) 730-0610	F94-97

1708

APPROVED: Department of Planning and Zoning

Paul J. Wagner 6/1/95
 Chief, Division of Land Development and Research

APPROVED: Department of Public Works for Storm Drainage Systems and Roads

John Damm 6/1/95
 Chief, Land Development Division

Paul J. Wagner 6/1/95
 Chief, Bureau of Engineering

Robert M. Daniels 5-26-95
 Chief, Bureau of Highways

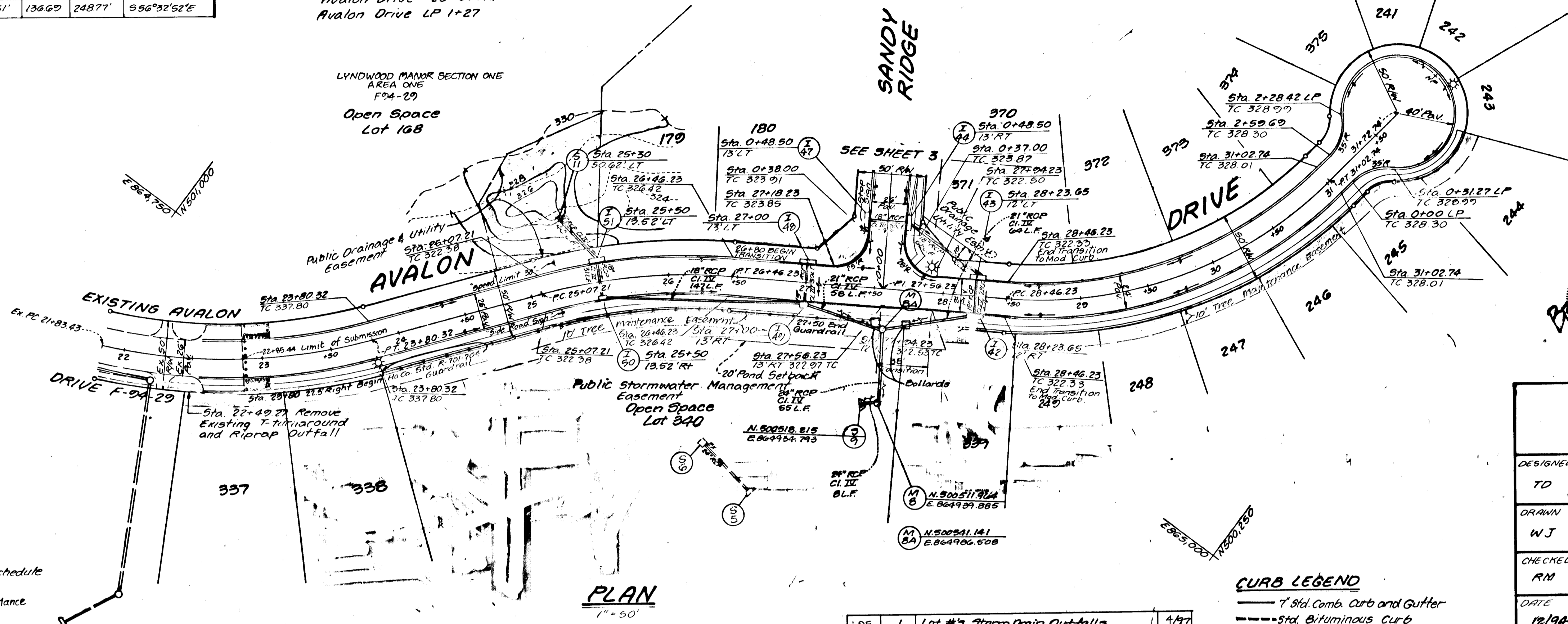
CENTERLINE CURVE DATA					
NAME AND STATION	RADIUS	DELTA	ARC	TAN	CHORD BEARING
AVALON DRIVE 25+85.94 TO 27+80.32*	400.00'	13°35'27"	94.88'	47.67'	94.66' S45°08'27"E
AVALON DRIVE 25+07.21 TO 26+46.23	400.00'	19°54'50"	139.03'	70.22'	138.33' S41°59'45"E
AVALON DRIVE 28+46.23 TO 31+02.74	300.00'	48°59'25"	256.51'	136.69'	248.77' S36°32'52"E

*Existing PC 21+83.43 Shown on F-94-20

LIGHTING LEGEND
 * 100 Watt High Pressure Sodium Vapor Traditional Post
 Top Fixture mounted on a 1" Black Fiberglass embedded Pole
 Location: Avalon Drive 27+84.4T
 Avalon Drive 23+80.4T
 Avalon Drive LP 1+27

Curb Transition Table			
Road	Station	TC Elev	Remarks
Avalon Drive	25+33.56	331.08	Begin Trans. to 7" Std.
Avalon Drive	25+72	328.43	End Trans. to Mod.
Avalon Drive	26+80	324.86	Begin Trans. to 7" Std.
Avalon Drive	28+46.23	322.33	End Trans. to Mod.
Sandy Ridge	0+65	324.76	End Trans. to Mod.

NOTES:
 1) For Street Tree Locations, See Sheet 15.
 2) For Storm Drain Profiles and Structure Schedule See Sheet 7.
 3) Sidewalks and Ramps shall be designed in accordance with ADA requirements.



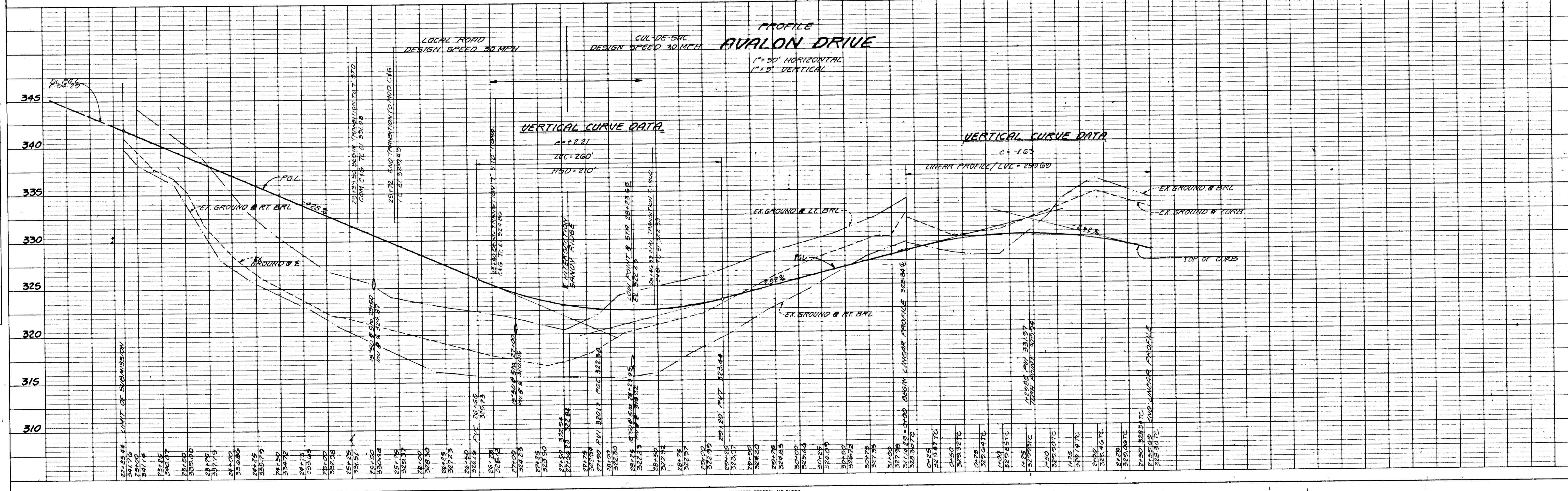
PLAN
 1" = 50'

CURB LEGEND
 — 7" Std. Curb and Gutter
 - - - Std. Bituminous Curb
 — Modified Curb and Gutter

LOE	1	Lot #3, Storm Drain Outfalls	4/97
By	N2	Revision	Date

LAND DESIGN ENGINEERING, INC.
 8835 Columbia 100 Parkway, Unit N, Columbia, MD 21045
 (410) 715-1070 (Balto.) (301) 596-3424 (Wash.) (410) 715-0681 (Fax)

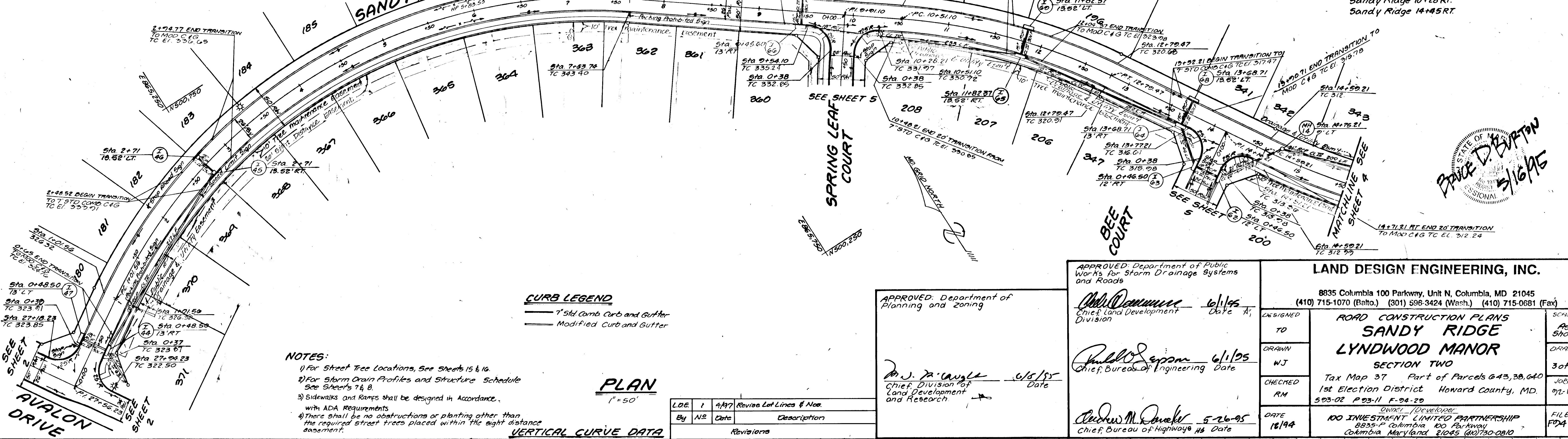
DESIGNED TD	ROAD CONSTRUCTION PLANS AVALON DRIVE LYNDWOOD MANOR SECTION TWO	SCALE AS SHOWN
DRAWN WJ	Tax Map 37 Part of Parcels 643, 30, 640 1st Election District Howard County, MD.	DRAWING 2 of 10
CHECKED RM	593-02 P-93-11 F-94-20	JOB NO 92-176.5
DATE 12/94	Owner/Developer 100 INVESTMENT LIMITED PARTNERSHIP 8835 Columbia 100 Parkway Columbia Maryland 21045 (410) 715-0810	FILE NO F94-94



1708

CENTERLINE CURVE DATA

NAME AND STATION	RADIUS	DELTA	ARC TAN	CHORD	BEARING
101+56 TO 7+63.74	55000'	68°58'56"	662.18'	377.88'	587°32'52"E
10+51.10 TO 12+79.47	60000'	21°48'27"	228.37'	115.98'	842°09'11"E
14+59.21 TO 16+56.49	70000'	16°08'51"	197.28'	99.30'	539°19'23"E

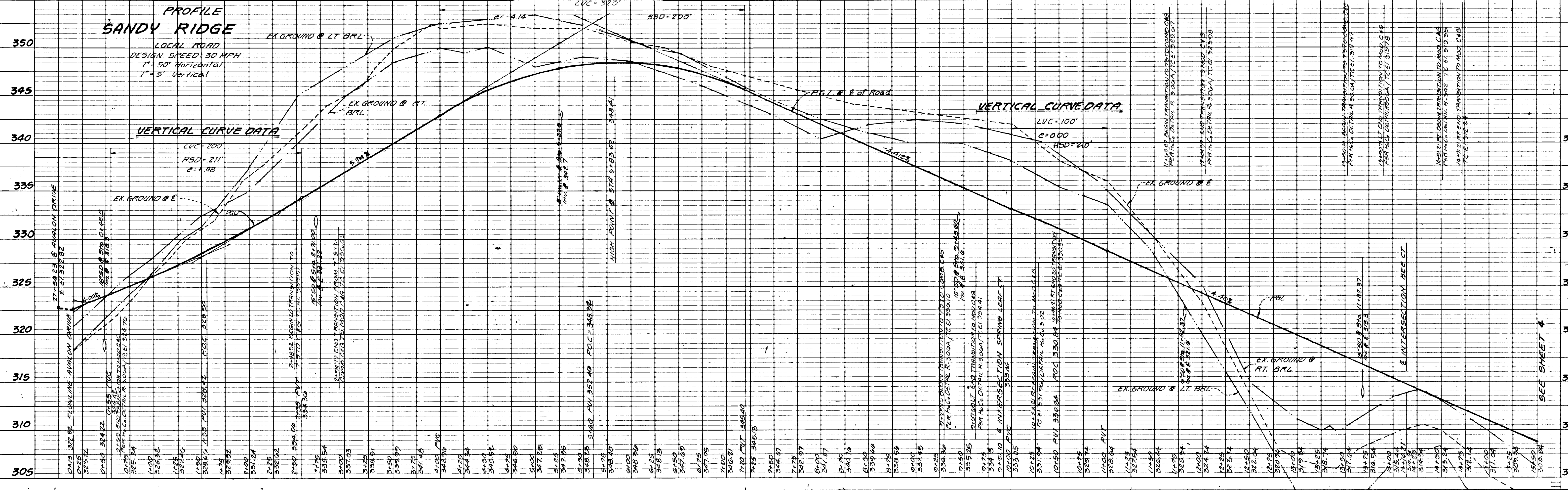


LIGHTING LEGEND
 * 100 Watt High Pressure Sodium Vapor, Traditional Pole. Pole fixture mounted on a 14" Black Fiberglass embedded Pole.
 Location: Sandy Ridge 3+38 LT.
 Sandy Ridge 6+90 LT.
 Sandy Ridge 10+28 RT.
 Sandy Ridge 14+45 RT.

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 PAUL D. BURTON
 5/16/95

LAND DESIGN ENGINEERING, INC. 8835 Columbia 100 Parkway, Unit N, Columbia, MD 21045 (410) 715-1070 (Bato.) (301) 596-3424 (Wash.) (410) 715-0681 (Fax)		ROAD CONSTRUCTION PLANS SANDY RIDGE LYNDWOOD MANOR SECTION TWO Tax Map 37 Part of Parcels 643, 38, 640 1st Election District Howard County, MD. 593-02 P-93-11 F-94-20 <small>CHIEF DEVELOPER:</small> 100 INVESTMENT LIMITED PARTNERSHIP 8835-F Columbia 100 Parkway Columbia Maryland 21045 (410) 300-0810	SCALE: As Shown DRAWING: 3 of 16 JOB NO: 92-170-5 FILE NO: PDA-04
DESIGNED TO: [Signature]	DATE: 6/1/95		
DRAWN BY: [Signature]	DATE: 6/1/95		
CHECKED BY: [Signature]	DATE: 12/94		

LD.E	1	4/97	Revise Lot Lines & Nos.
By	NI	Date	Description
			Revisions



1708

CENTERLINE CURVE DATA						
NAME AND STATION	RADIUS	DELTA	ARC	TAN	CHORD	BEARING
16+59.21 TO 16+56.40	70000'	16°08'51"	197.28	99.30	196.63	S39°19'23"E

FUTURE CENTERLINE CURVE DATA						
NAME AND STATION	RADIUS	DELTA	ARC	TAN	CHORD	BEARING
16+56.49 TO 19+37.37	70000'	22°55'28"	280.89	142.36	270.01	S58°53'32"E
0+23.58 TO 4+64.30	50000'	50°30'00"	440.72	235.85	426.50	S05°38'21"E

PAUL D. BURTON
 PROFESSIONAL ENGINEER
 5/16/95

CURB LEGEND
 — 1" Std Comb Curb and Gutter
 — Bituminous Curb (Temporary)

LOE	1	4/97	Revise Storm Drain Layout/Lot #3 & Layout
By	NR	Date	Description
Revisions			

APPROVED: Department of Public Works for Storm Drainage Systems and Roads
John C. ... 6/1/95
 Chief, Land Development Division

APPROVED: Department of Planning and Zoning
Dr. J. ... 6/15/95
 Chief, Division of Land Development and Research

APPROVED: Chief, Bureau of Engineering
Paul ... 6/1/95
 Date

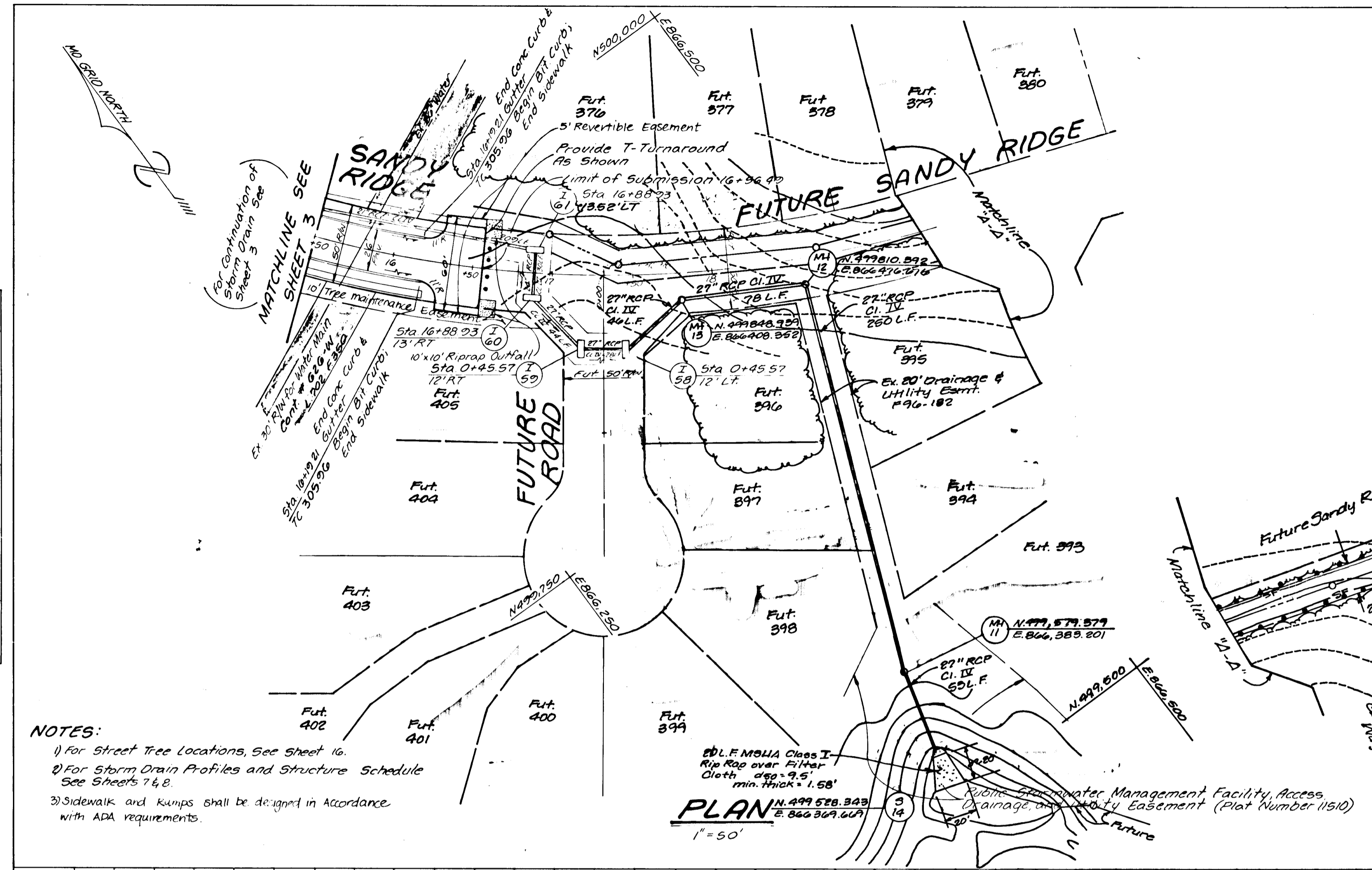
APPROVED: Chief, Bureau of Highways
Andrew M. ... 5-26-95
 Date

LAND DESIGN ENGINEERING, INC.
 8835 Columbia 100 Parkway, Unit N, Columbia, MD 21045
 (410) 715-1070 (Balto.) (301) 596-3424 (Wash.) (410) 715-0681 (Fax)

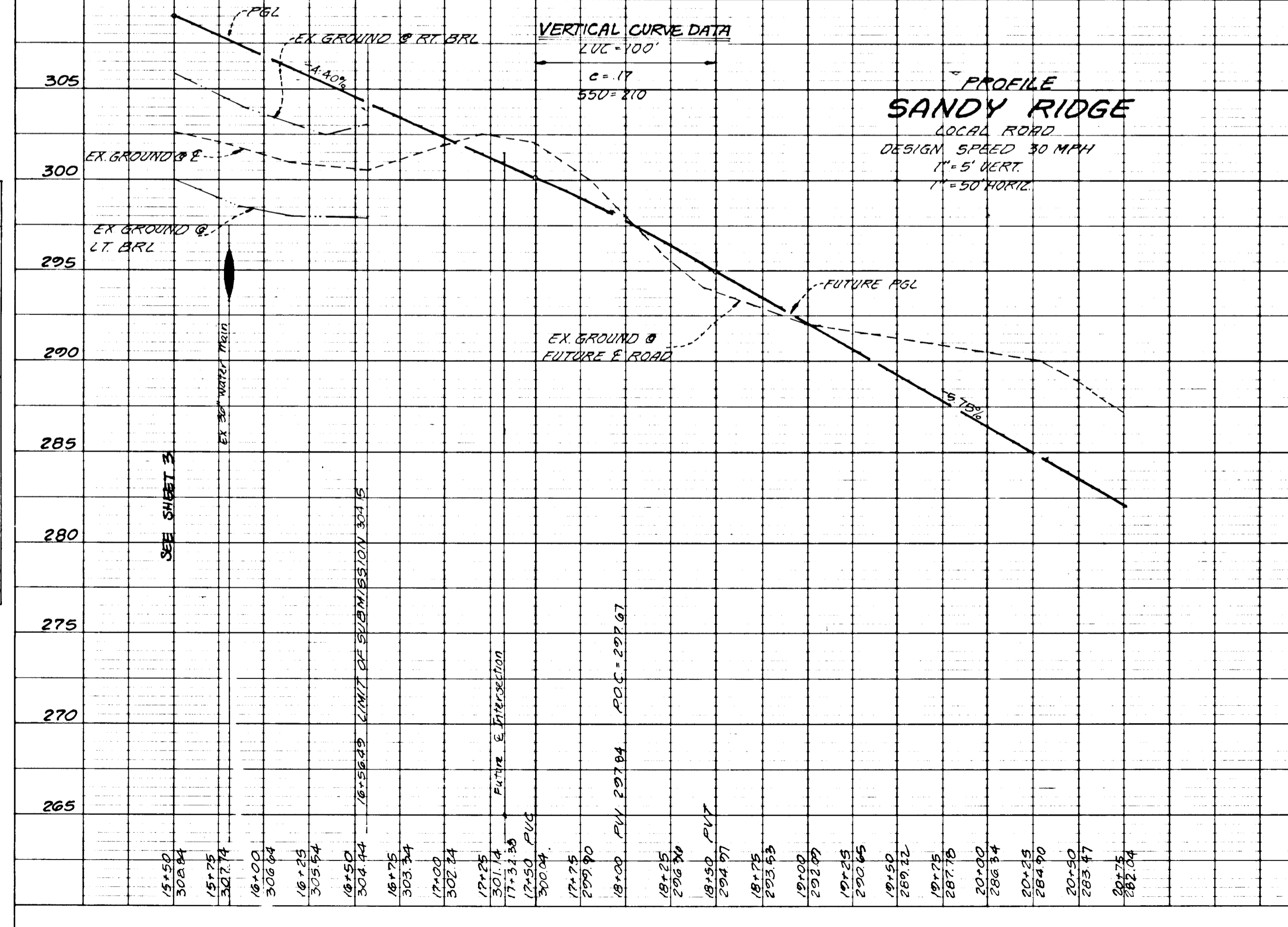
ROAD CONSTRUCTION PLANS
SANDY RIDGE LYNDWOOD MANOR
 SECTION TWO
 Tax Map 37 Part of Parcels 643, 38, 040
 1st Election District 5-23-02 P-23-11 F-24-29 Howard County, MD.

DESIGNED TO: **SCALE AS SHOWN**
 DRAWN BY: **WJ** **DRAWING 4 of 10**
 CHECKED BY: **RM** **JOB NO. 92-1765**
 DATE: **10/94** **FILE NO. F04-04**

Owner/Developer:
100 INVESTMENT LIMITED PARTNERSHIP
 8835 P. Columbia 100 Parkway
 Columbia Maryland 21045 (410) 30-0810



- NOTES:**
- 1) For Street Tree Locations, See Sheet 16.
 - 2) For Storm Drain Profiles and Structure Schedule See Sheets 7 & 8.
 - 3) Sidewalk and Ramps shall be designed in accordance with ADA requirements.

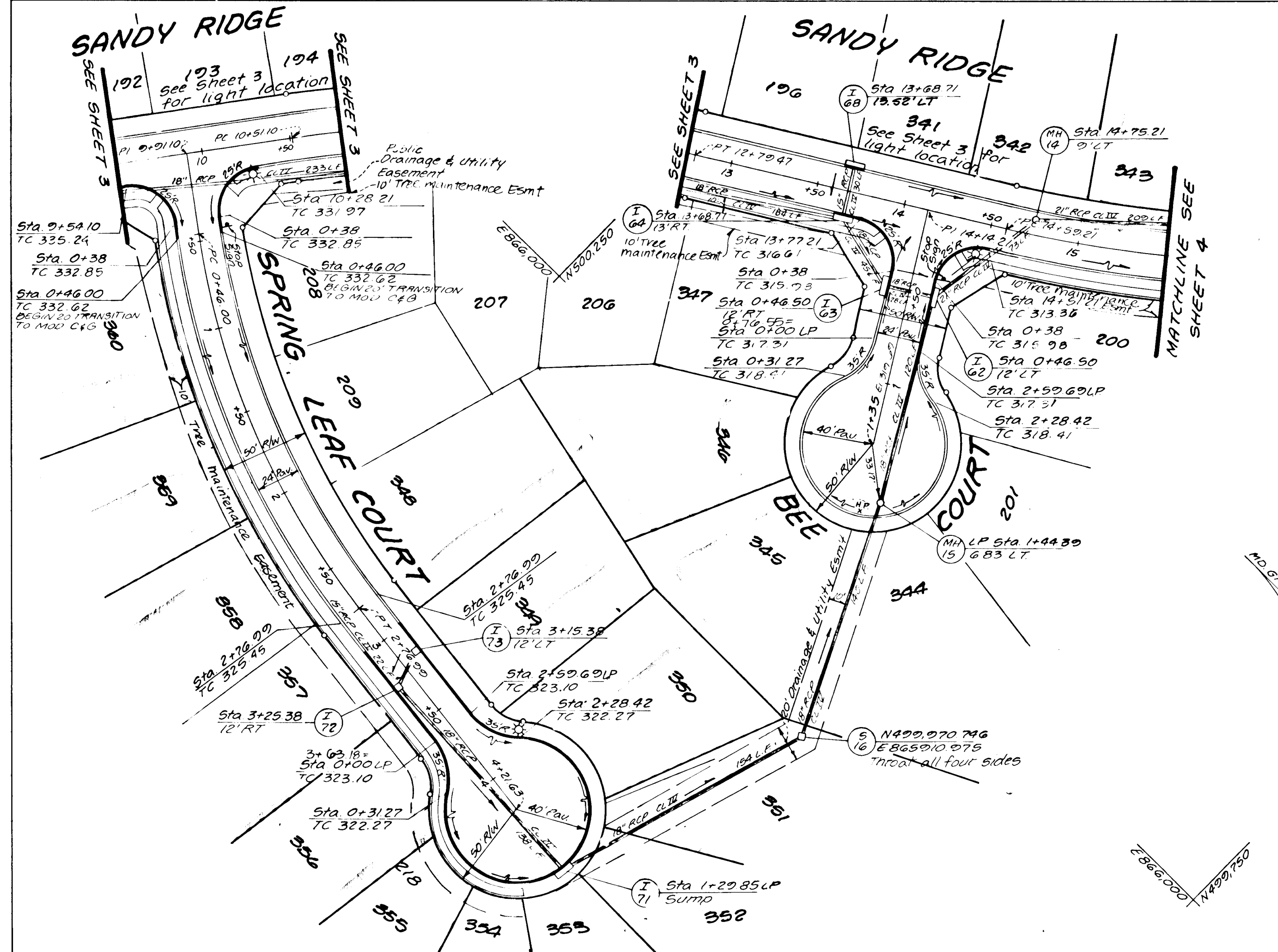


1708

1708

DATE: _____ BY: _____
 PLAN SURVEYED, PLOTTED, NOTE BOOK, GRADES CHECKED, ALIGNMENT CHECKED, REVISIONS CHECKED, NO. _____

DATE: _____ BY: _____
 PROFILE SURVEYED, PLOTTED, NOTE BOOK, GRADES CHECKED, VERTICAL CURVE DATA CHECKED, NO. _____



CENTERLINE CURVE DATA						
NAME AND STATION	RADIUS	DELTA	ARC	TAN	CHORD	BEARING
0+46.00 TO 2+78.99	4500'	29°24'38"	230°00'	118.10'	228.46'	S 22°14'16" W

LIGHTING LEGEND
 * 100 Watt High Pressure Sodium Vapor Traditional Post Top Fixture mounted on a 14' Black Fiberglass embedded Pole
 Location: Spring Leaf Court 3+88.17

CURB LEGEND
 7" Std Comb Curb and Gutter
 Modified Curb and Gutter

Curb Transition Table			
Road	Station	TC Elev	Remarks
Spring Leaf Court	0+46	332.62	Begin Trans. to Mod.
Spring Leaf Court	0+66	331.78	End Trans. to Mod.
Spring Leaf Court	2+76.99	325.45	Begin Trans. to 7" Std.
Spring Leaf Court	2+96.99	325.09	End Trans. to 7" Std.
Bee Court	0+63	316.74	End Trans. to Mod.

PLAN
 1" = 50'

L.R.	1	4/97	Revise Lot Lines & Nos.
By	ME	Date	Description
			Revisions

- NOTES:**
- For Street Tree Locations, See Sheet 16.
 - For Storm Drain Profiles and Structure Schedule See Sheets 7 & 8.
 - Sidewalks and Ramps shall be designed in accordance with ADA requirements.

BRUCE D. BURTON
 5/16/95
 PROFESSIONAL ENGINEER

APPROVED: Department of Planning and Zoning

D. J. Sawyer
 Chief, Division of Land Development and Research
 6/1/95 Date

APPROVED: Department of Public Works for Storm Drainage Systems and Roads
 Chief, Division of Storm Drainage
 6/1/95 Date

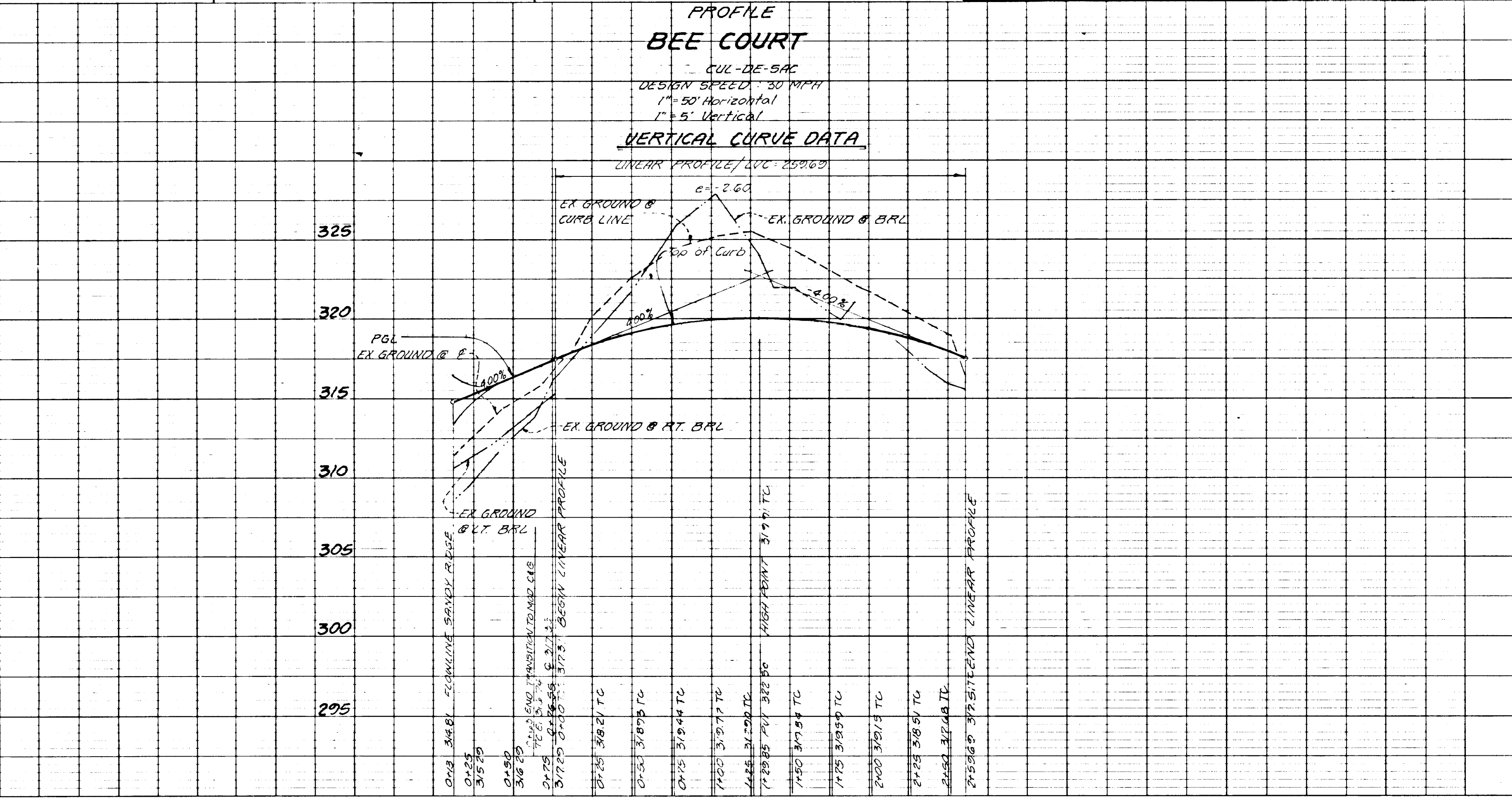
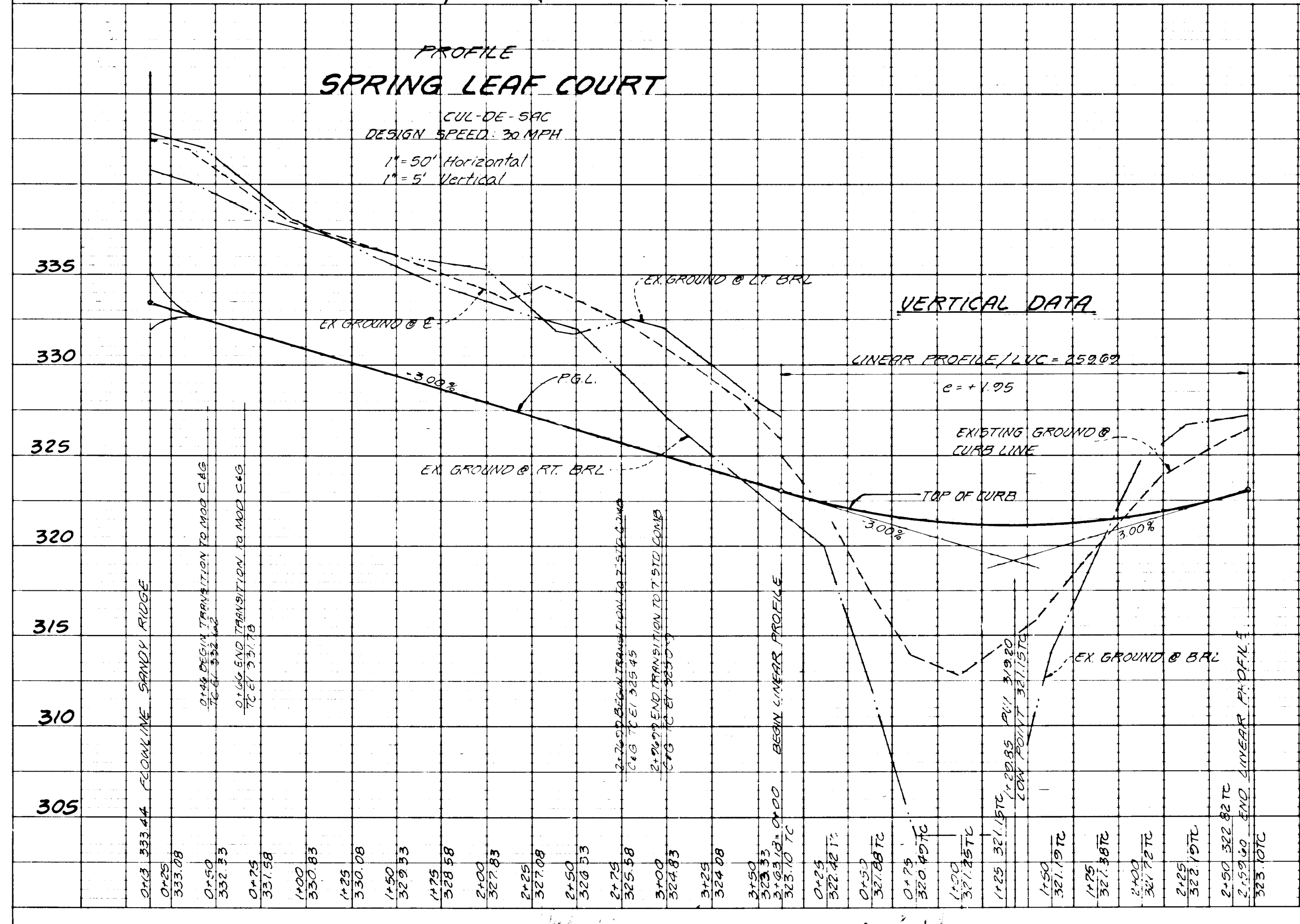
Paul J. Seppon
 Chief, Bureau of Engineering
 6/1/95 Date

Andrew M. Daulton
 Chief, Bureau of Highways
 5-26-95 Date

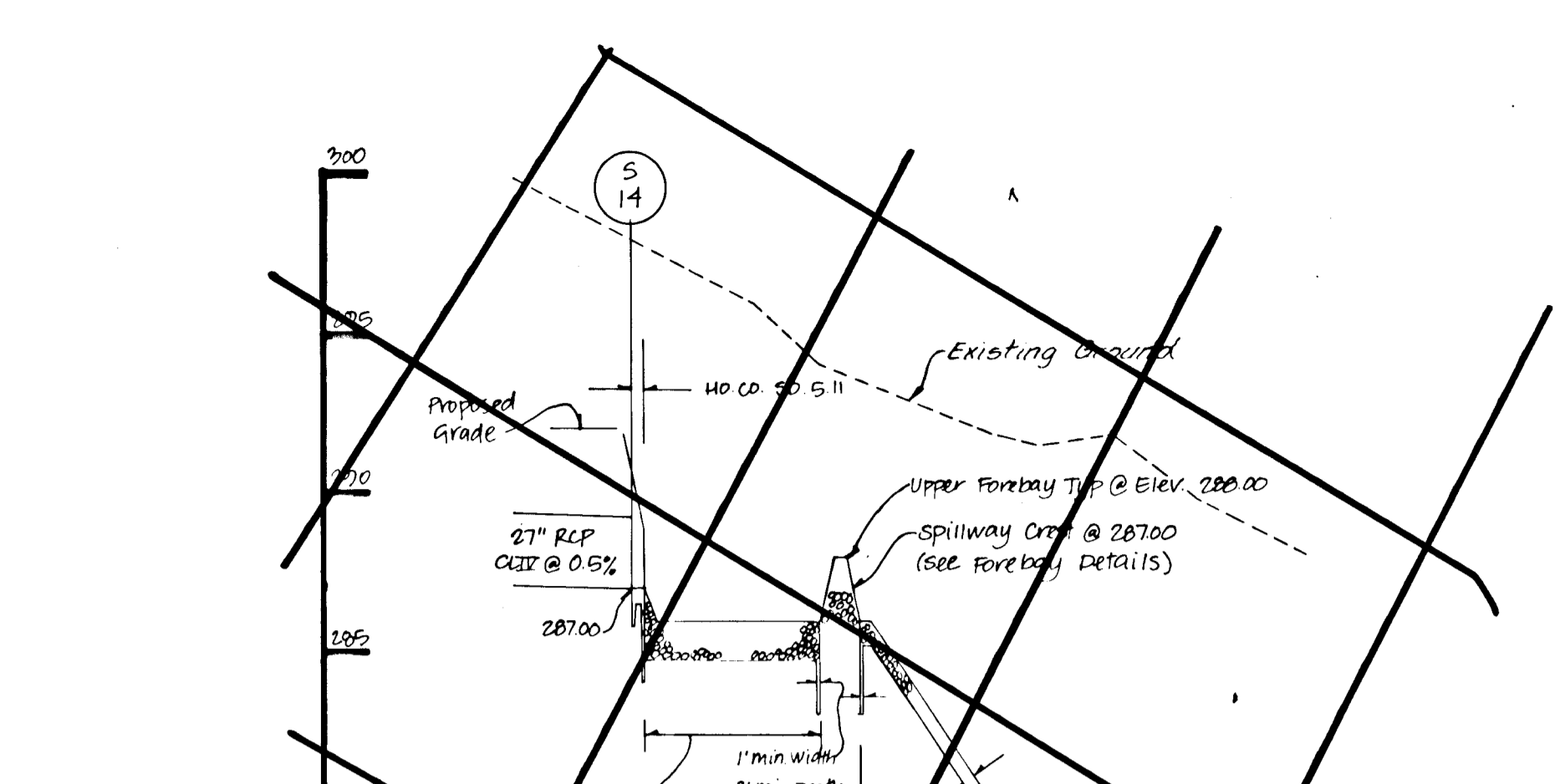
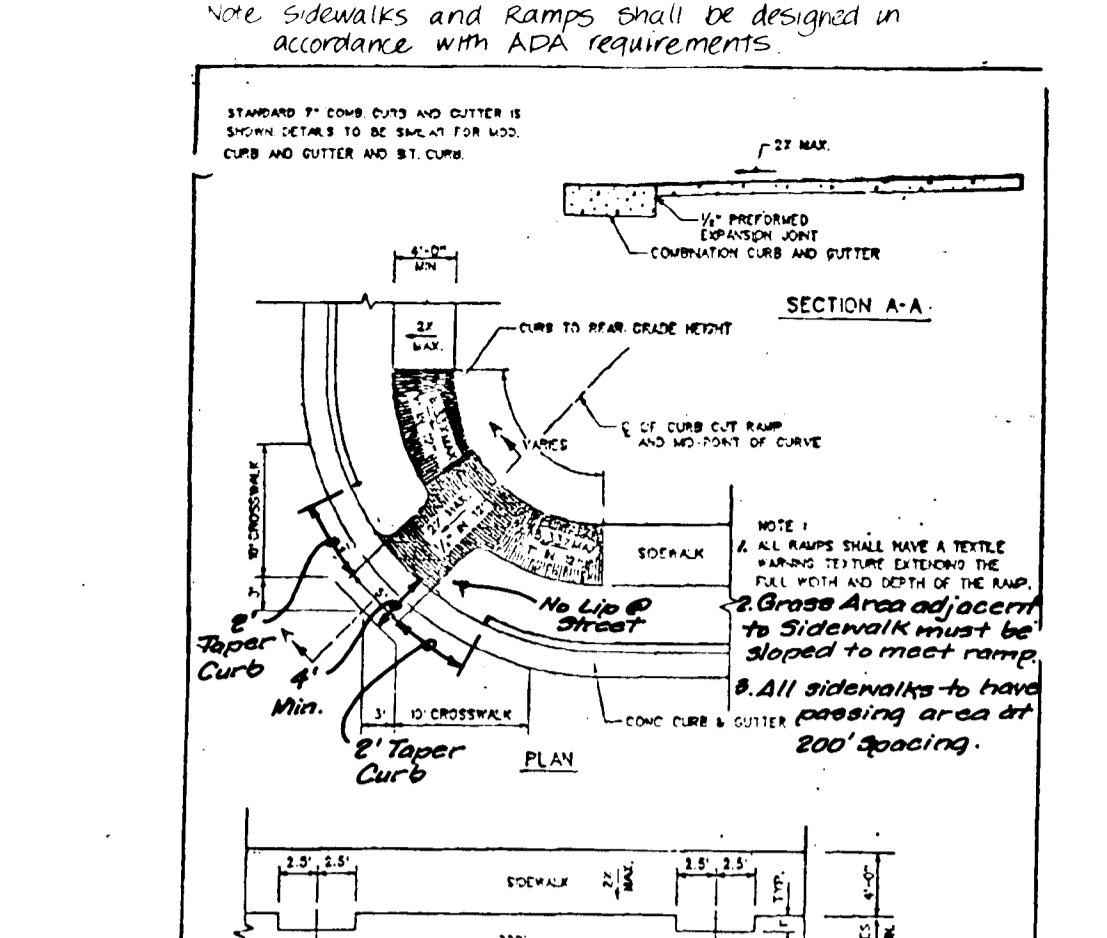
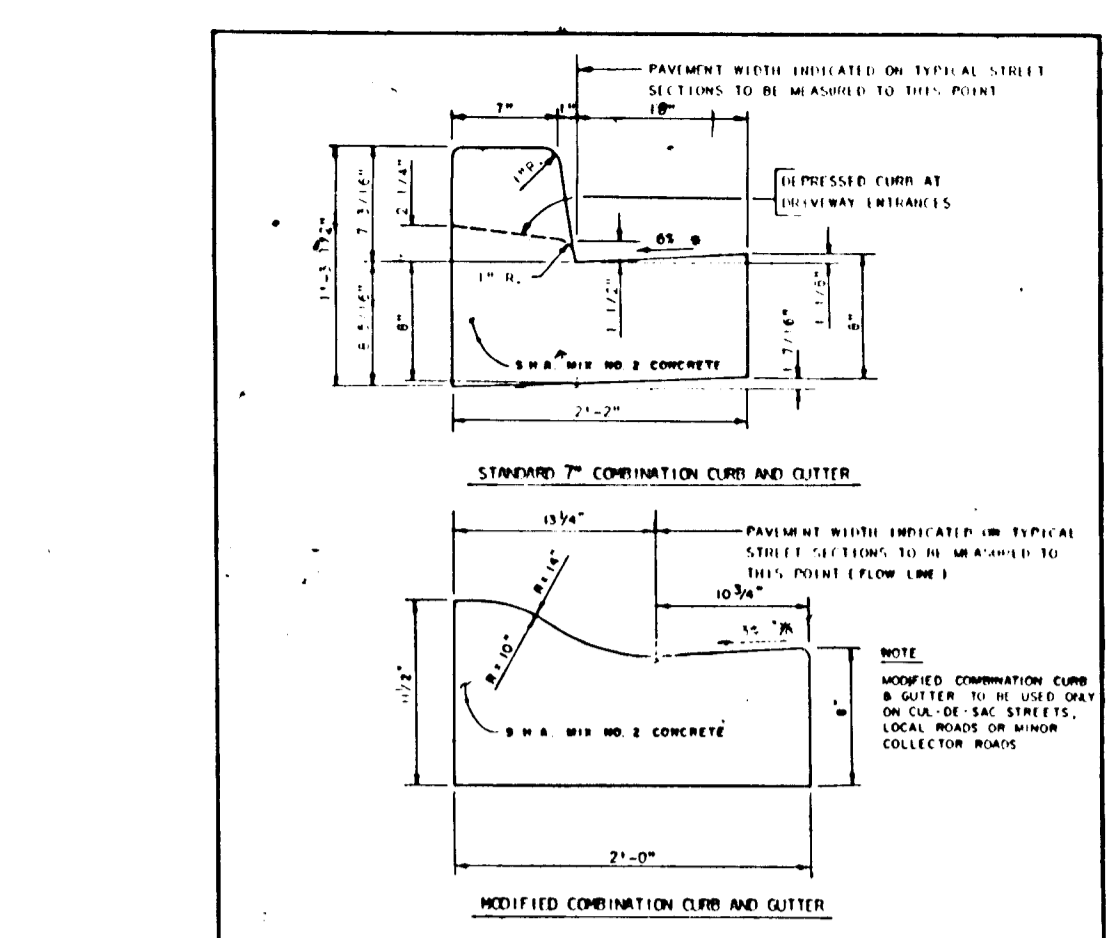
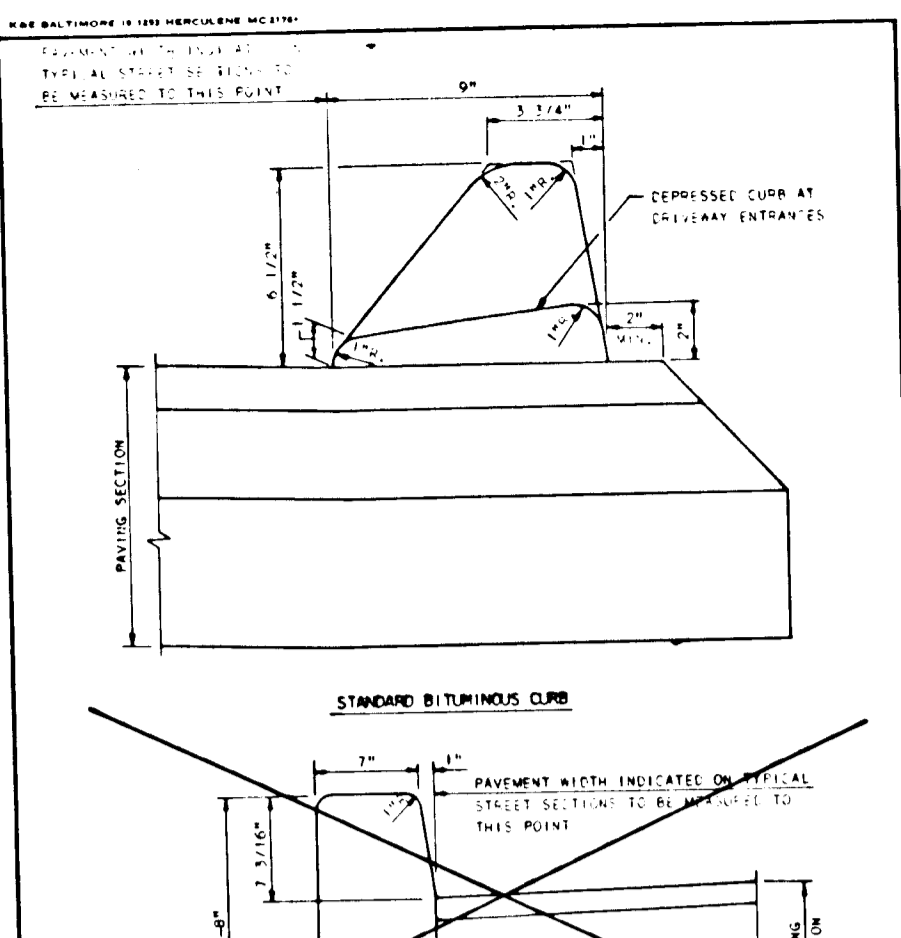
LAND DESIGN ENGINEERING, INC.
 8835 Columbia 100 Parkway, Unit N, Columbia, MD 21045
 (410) 715-1070 (Balto.) (301) 596-3424 (Wash.) (410) 715-0681 (Fax)

DESIGNED TO	ROAD CONSTRUCTION PLANS	SCALE AS SHOWN
DRAWN BY	SPRING LEAF COURT, BEE COURT	DRAWING NO. 6 of 16
CHECKED BY	SECTION TWO	JOB NO. 92-176-5
DATE	Tax Map 37, Part of Parcels G43, 38, G40 1st Election District Howard County, MD 9-23-02 P-23-11 F-24-29	FILE NO. F94-9A

Owner/Developer:
 100 INVESTMENT LIMITED PARTNERSHIP
 8835 Columbia 100 Parkway
 Columbia, Maryland 21045 (410) 730-0810



SECTION NUMBER	ROAD AND STREET CLASSIFICATION	PAVEMENT MATERIALS	PAVEMENT MATERIALS
		FULL DEPTH BIT. CONC. ALTERNATE	GRAVEL BASE ALTERNATE
P-1	INDUSTRIAL ZONES WITH HEAVY TRUCKS	1" BIT. CONC. SURFACE 4" BIT. CONC. BASE	1" BIT. CONC. SURFACE 4" BIT. CONC. BASE
P-2	INDUSTRIAL ZONES WITH ALLEYS AND PRIVATE ROADS SERVING INDUSTRIAL TRAVELERS	1" BIT. CONC. SURFACE 4" BIT. CONC. BASE	1" BIT. CONC. SURFACE 4" BIT. CONC. BASE
P-3	INDUSTRIAL ZONES WITH ALLEYS AND PRIVATE ROADS SERVING INDUSTRIAL TRAVELERS	1" BIT. CONC. SURFACE 4" BIT. CONC. BASE	1" BIT. CONC. SURFACE 4" BIT. CONC. BASE
P-4	INDUSTRIAL ZONES WITH ALLEYS AND PRIVATE ROADS SERVING INDUSTRIAL TRAVELERS	1" BIT. CONC. SURFACE 4" BIT. CONC. BASE	1" BIT. CONC. SURFACE 4" BIT. CONC. BASE



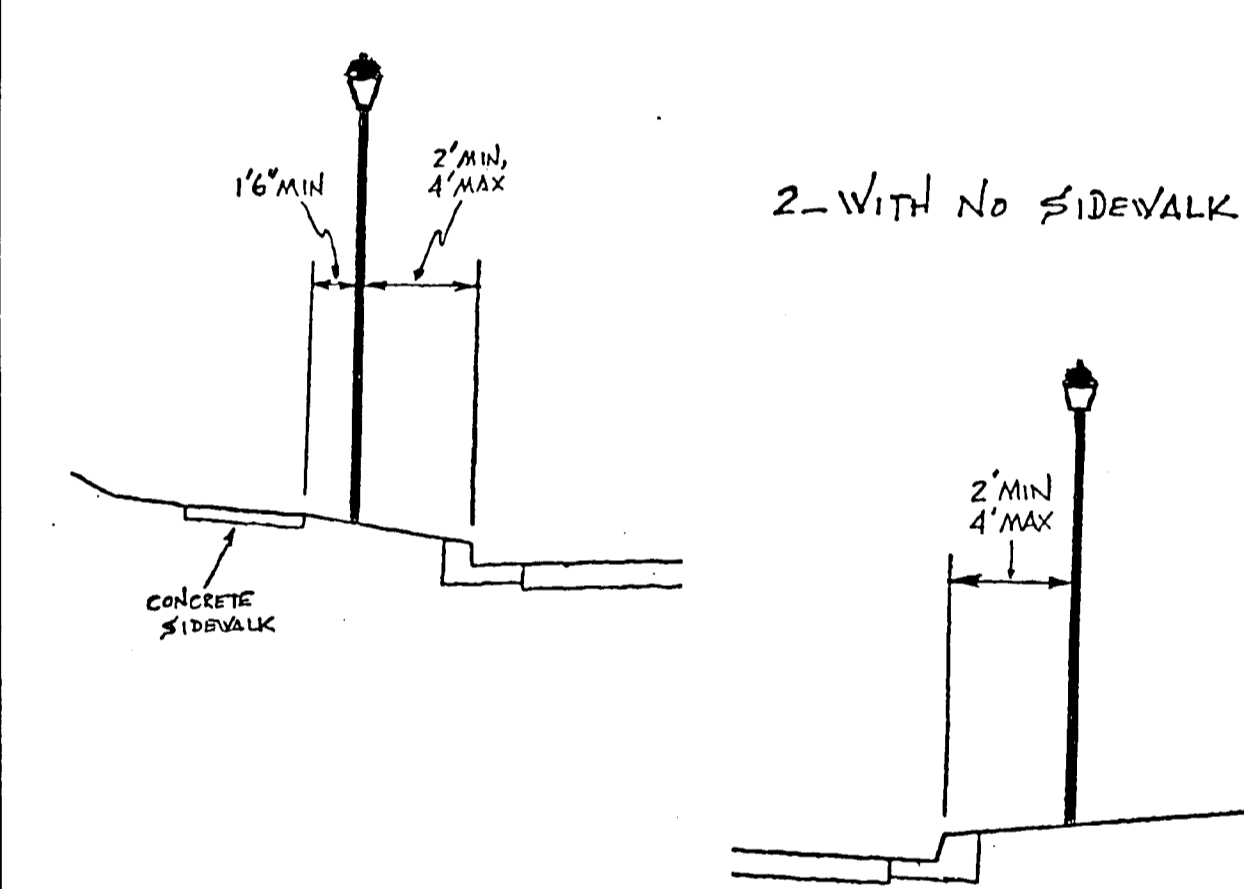
Note: Miscellaneous soil substrates require the use of either of the aggregate base pavement sections as shown on the Pavement Section Tables. Either the full depth bituminous concrete section or the aggregate base pavement sections can be used for all other substrate soils.

ROAD NAME	STA. TO STA.	CLASS.	R/W	DES. SPD.	PAV. SECT.	ZONE	A	B	C	D
MALDEN DRIVE	22+85.44 TO 27+56.23	LOCAL	50'	30MPH	P-2	RSC	26'	5'	4'	10'
MALDEN DRIVE	27+56.23 TO 31+72.74	CUL-DE-SAC	50'	30MPH	P-2	RSC	24'	5'	4'	10'
SANDY RIDGE	0+00 TO 16+56.40	LOCAL	50'	30MPH	P-2	RSC	26'	5'	4'	10'
SPRING LEAF COURT	0+00 TO END	CUL-DE-SAC	50'	30MPH	P-2	RSC	24'	5'	4'	10'
BEE COURT	0+00 TO END	CUL-DE-SAC	50'	30MPH	P-2	RSC	24'	5'	4'	10'

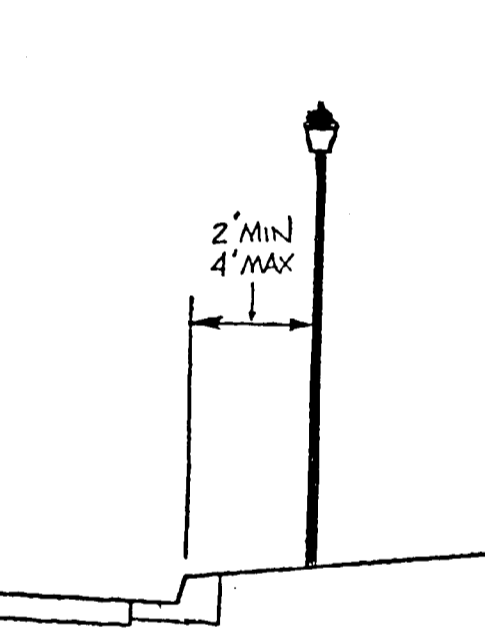
PLACEMENT OF STREET LIGHTS

• LATERAL: (May 1993)

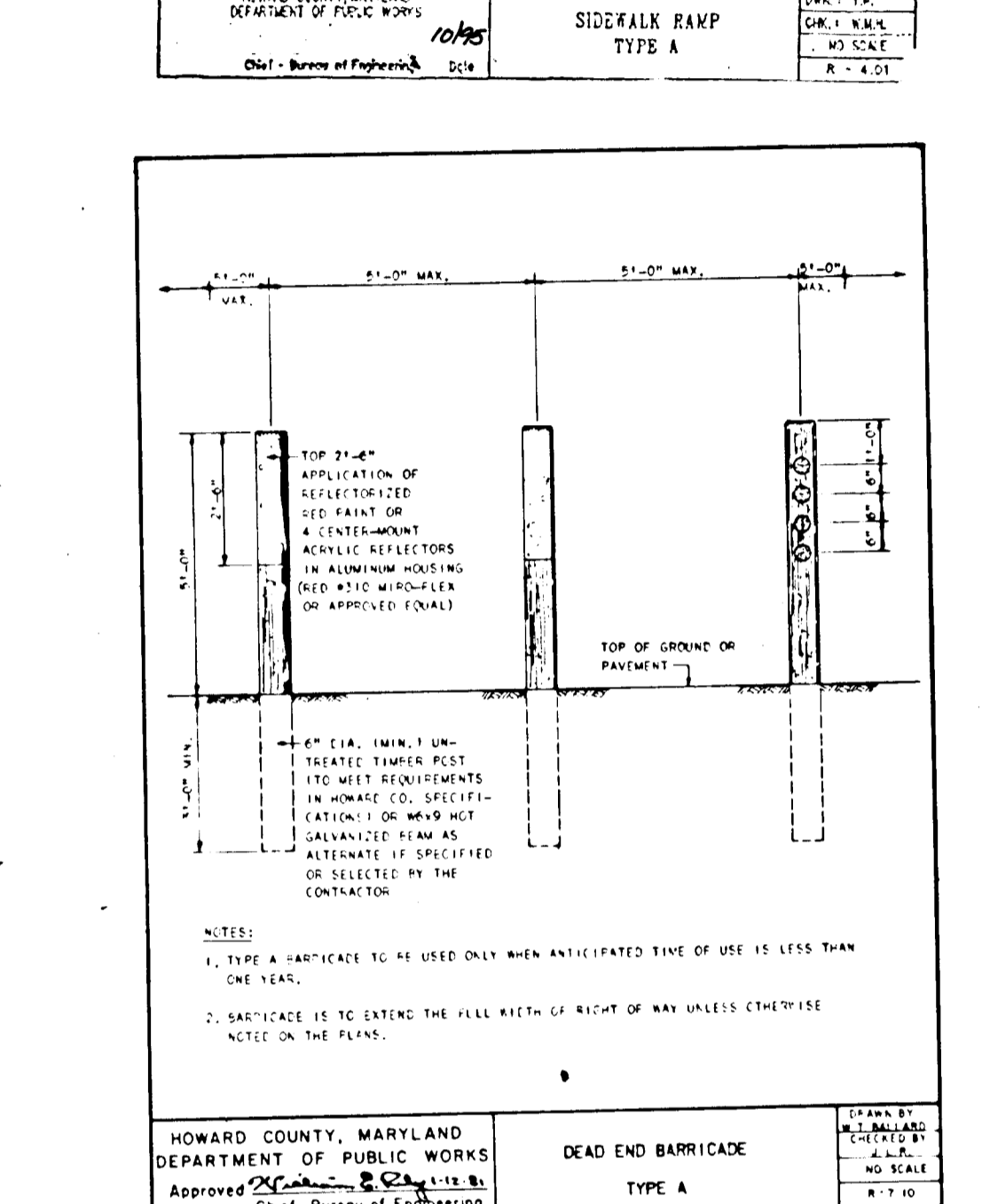
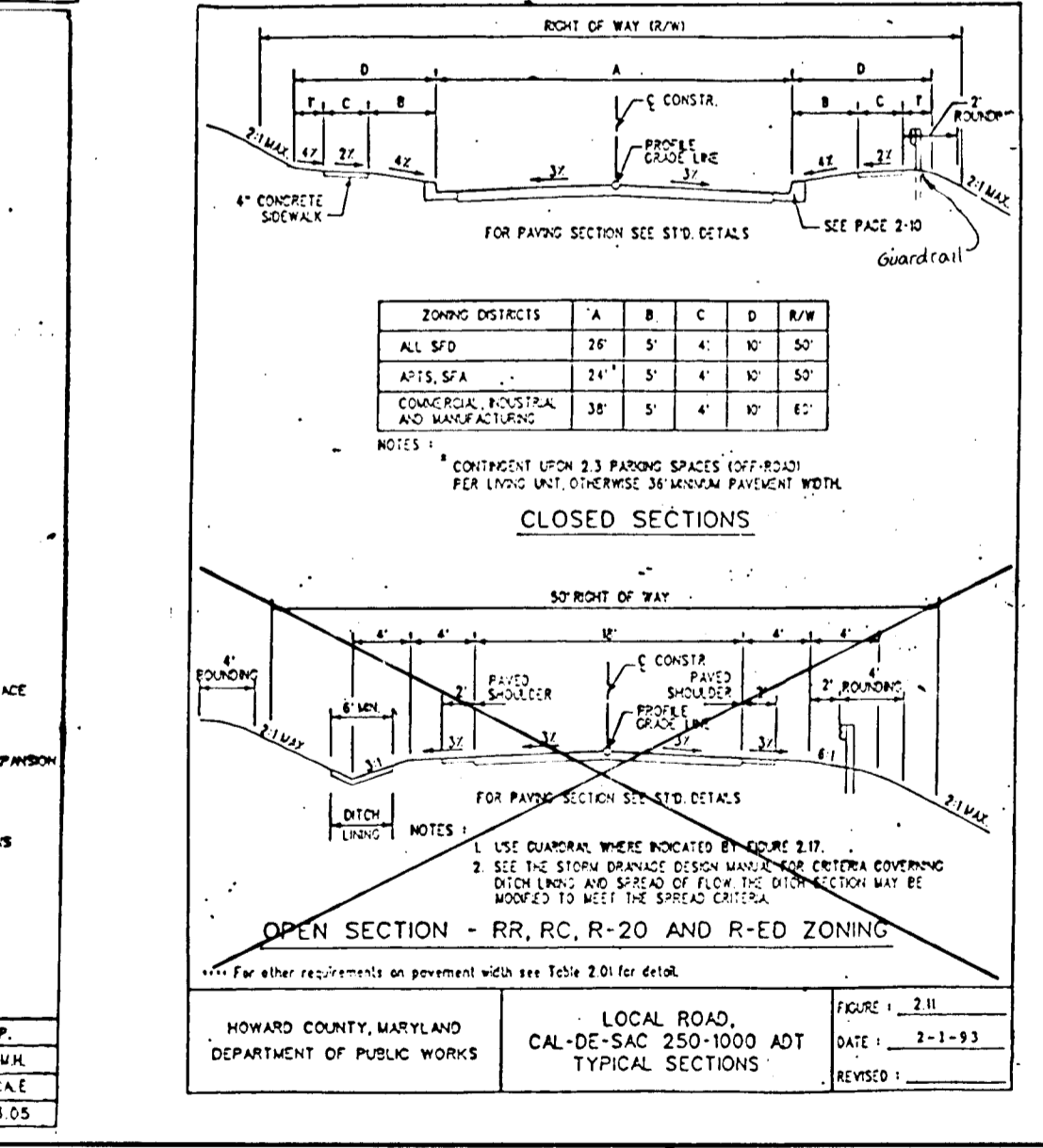
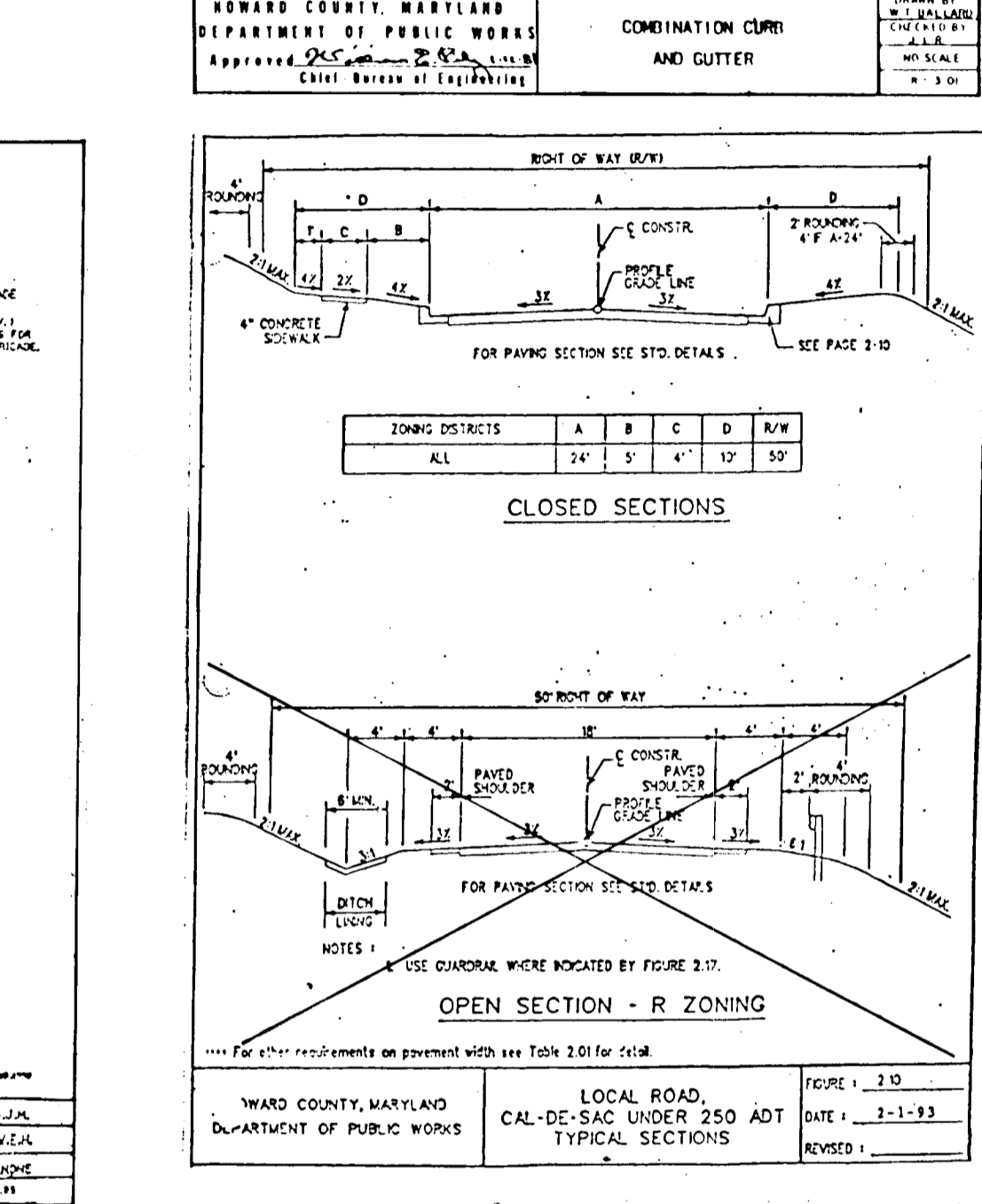
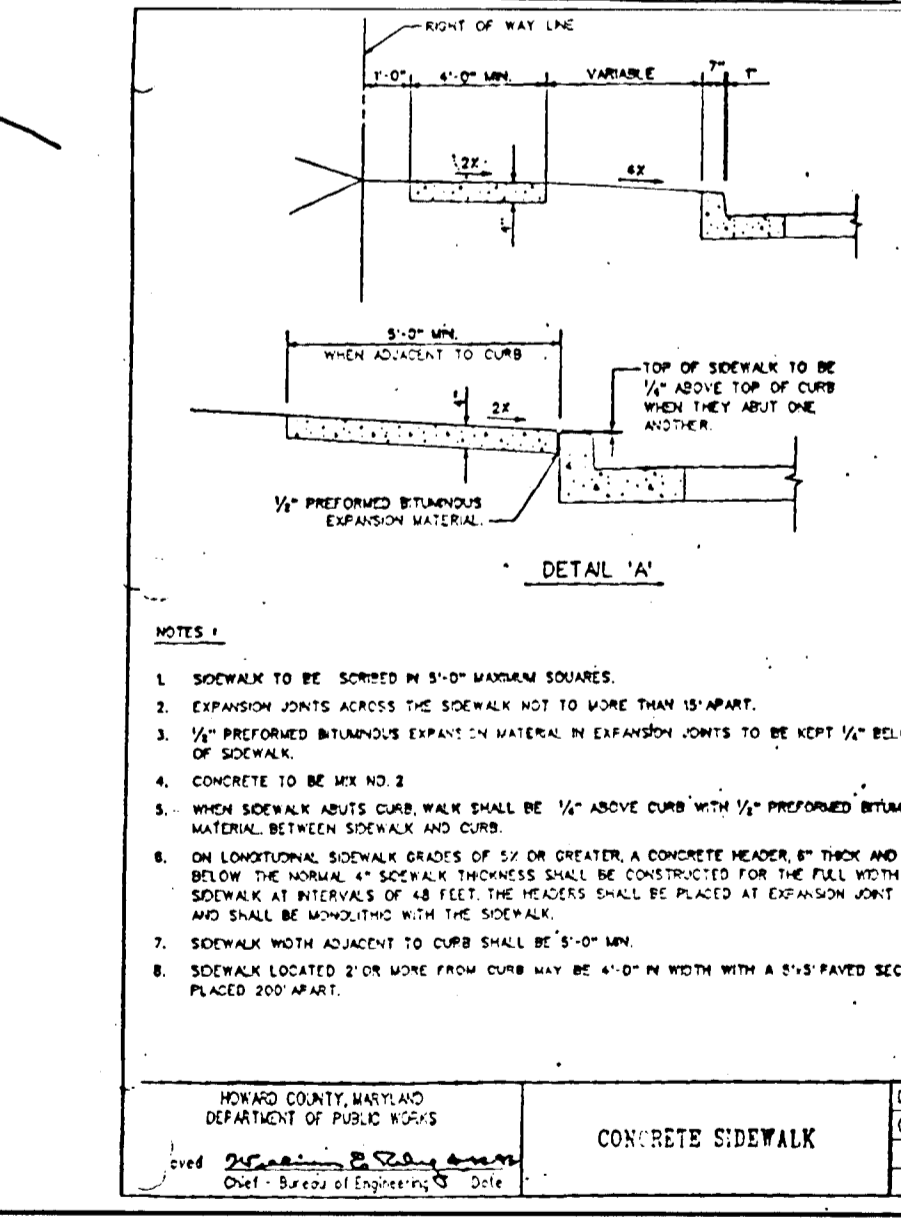
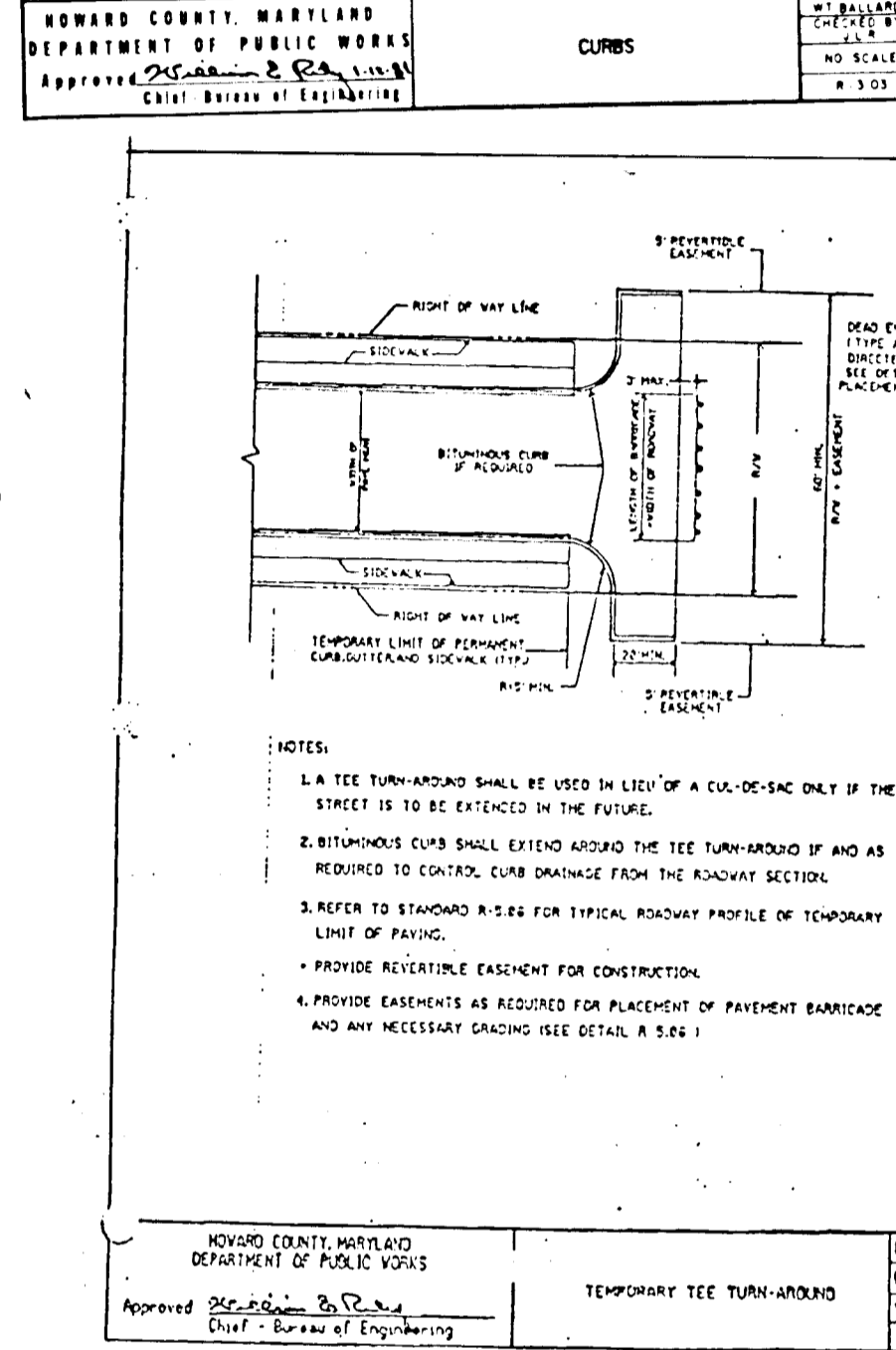
1. WITH CONCRETE SIDEWALK:



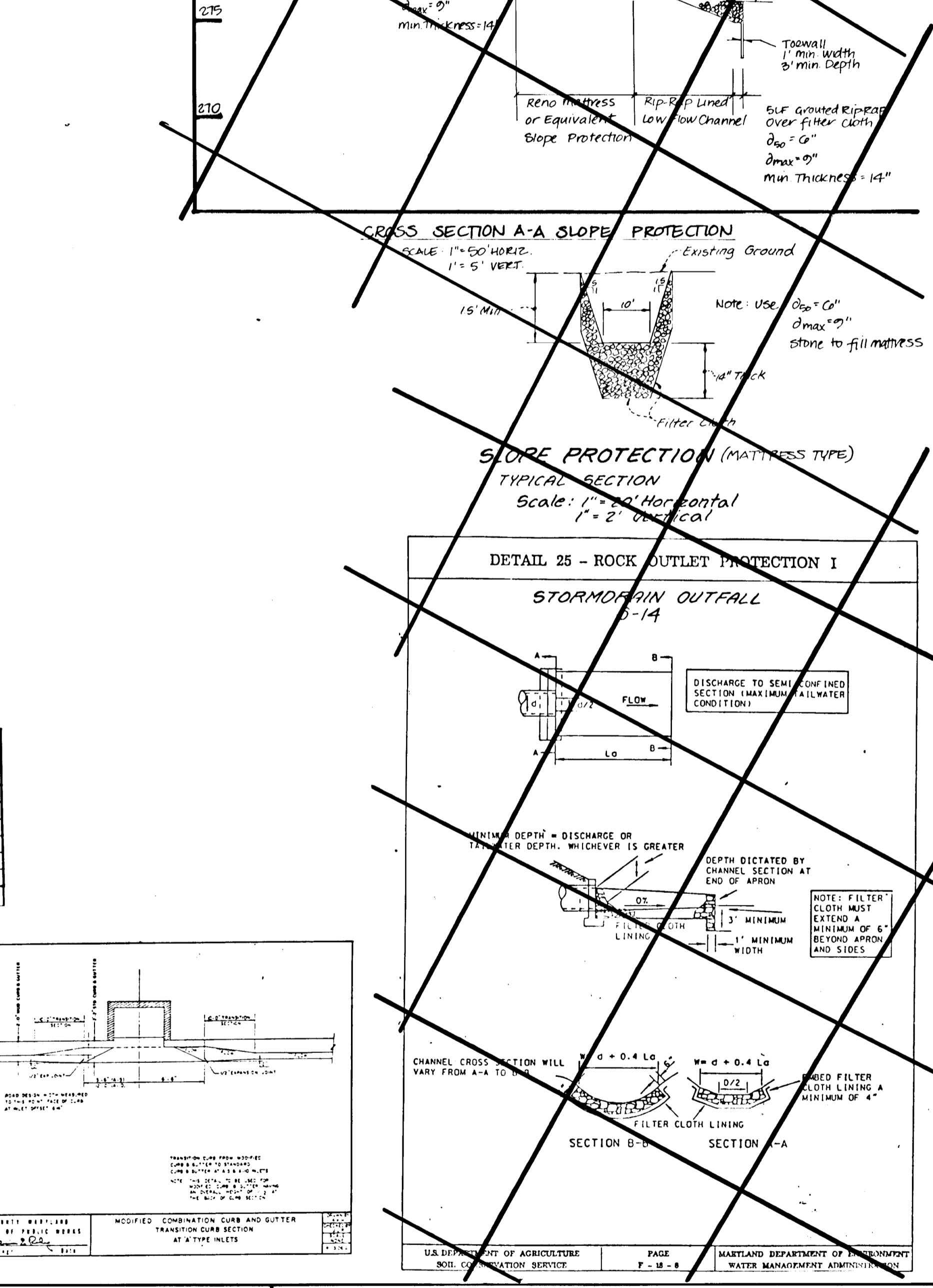
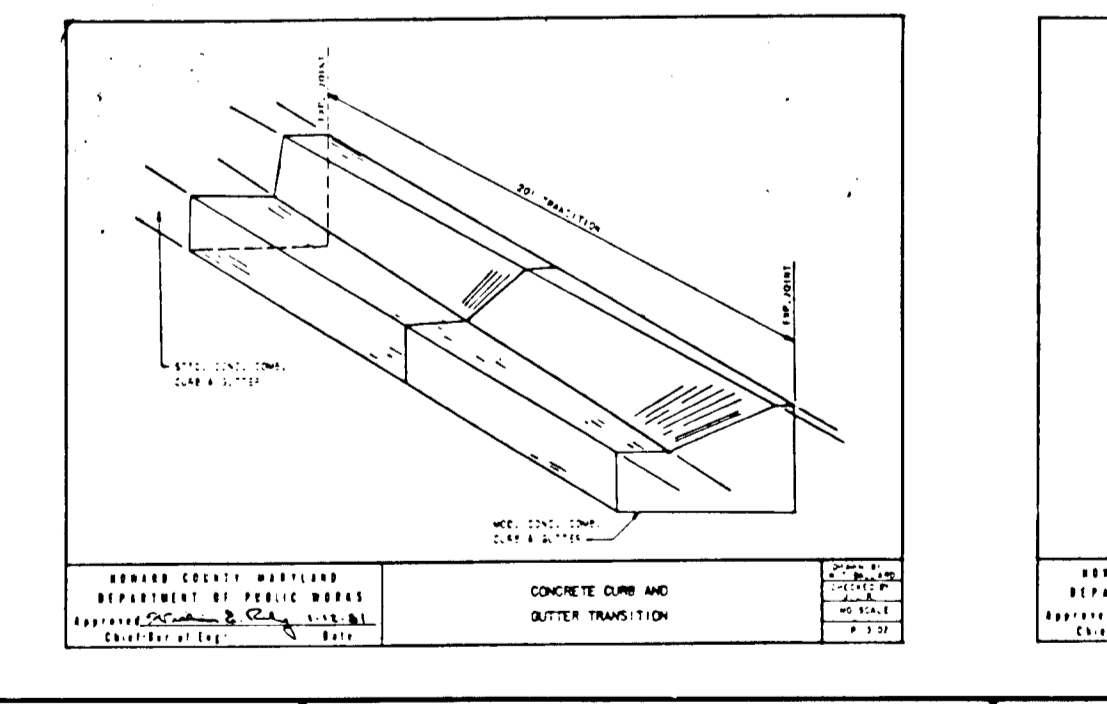
2. WITH NO SIDEWALK:



ROAD NAME	STA.	LAMP TYPE	POST TYPE	POLE TYPE
SANDY RIDGE	3+30 LT	100 WHPS	TRADITIONNAIRE POST	14" BLACK FIBERGLASS EMBEDDED
SANDY RIDGE	6+90 LT	100 WHPS	TRADITIONNAIRE POST	14" BLACK FIBERGLASS EMBEDDED
SANDY RIDGE	10+28 RT	100 WHPS	TRADITIONNAIRE POST	14" BLACK FIBERGLASS EMBEDDED
SANDY RIDGE	14+45 RT	100 WHPS	TRADITIONNAIRE POST	14" BLACK FIBERGLASS EMBEDDED
MALDEN DRIVE	27+80 LT	100 WHPS	TRADITIONNAIRE POST	14" BLACK FIBERGLASS EMBEDDED
SPRING LEAF CT.	3+80 LT	100 WHPS	TRADITIONNAIRE POST	14" BLACK FIBERGLASS EMBEDDED
AVOLON DRIVE	25+00 RT	100 WHPS	TRADITIONNAIRE POST	14" BLACK FIBERGLASS EMBEDDED
AVOLON DRIVE	LP 1+27	100 WHPS	TRADITIONNAIRE POST	14" BLACK FIBERGLASS EMBEDDED



Symbol	Street Name	Centerline Station	Offset	Type
■	Sandy Ridge	0+40	16' LT.	R1-1, "STOP" Sign, 30" x 30" Octagon
■	Sandy Ridge	2+00	16' LT.	W3-1a, "Stop Ahead" Sign, 36" x 36" Diamond
■	Sandy Ridge	2+40	16' RT.	R2-1, "Speed Limit 25" 24" x 30" Rectangle
■	Spring Leaf Court	0+40	15' LT.	R1-1, "STOP" Sign, 30" x 30" Octagon
■	Bee Court	0+35	15' LT.	R1-1, "STOP" Sign, 30" x 30" Octagon
■	Avolon Drive	25+16	17' RT.	W2-2, Side Road Sign, 30" x 30" Diamond
■	Avolon Drive	25+16	17' LT.	R2-1, "Speed Limit 30" Sign, 24" x 30" Rectangle



NO.	DESCRIPTIONS	DATE
1	UPDATE R-401 / CROSS OUT OLD DETAILS	4/97

ENGINEER'S CERTIFICATE

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.

Prince D. Burton 5/16/95
Signature of Engineer Date

DEVELOPER'S CERTIFICATE

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.

Jim E. M. 2/18/94
Signature of Developer Date

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.

Patricia E. H. 5/12/95
U.S. Soil Conservation Service Date

This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

Robert W. Ziehm 5/23/95
Howard Soil Conservation District Date

APPROVED: Department of Public Works for Storm Drainage Systems and Roads

Robert W. Ziehm 4/1/95
Chief, Bureau of Engineering Date

APPROVED: Department of Public Works

Robert W. Ziehm 4/1/95
Chief, Bureau of Engineering Date

APPROVED: Department of Planning and Zoning

Dr. U. M. W. 6/5/95
Chief, Division of Land Development and Research Date

LAND DESIGN ENGINEERING, INC.

8835 Columbia 100 Parkway, Unit N, Columbia, MD 21045
(410) 715-1070 (Balto.) (301) 596-3424 (Wash.) (410) 715-0681 (Fax)

DESIGNED: TOLES SCALE: AS SHOWN
DRAWN: WJ DRAWING: 6 OF 16
CHECKED: RM VOB No: 92-176-5
DATE: 12/94 FILE No: F94-94

ROAD DETAILS

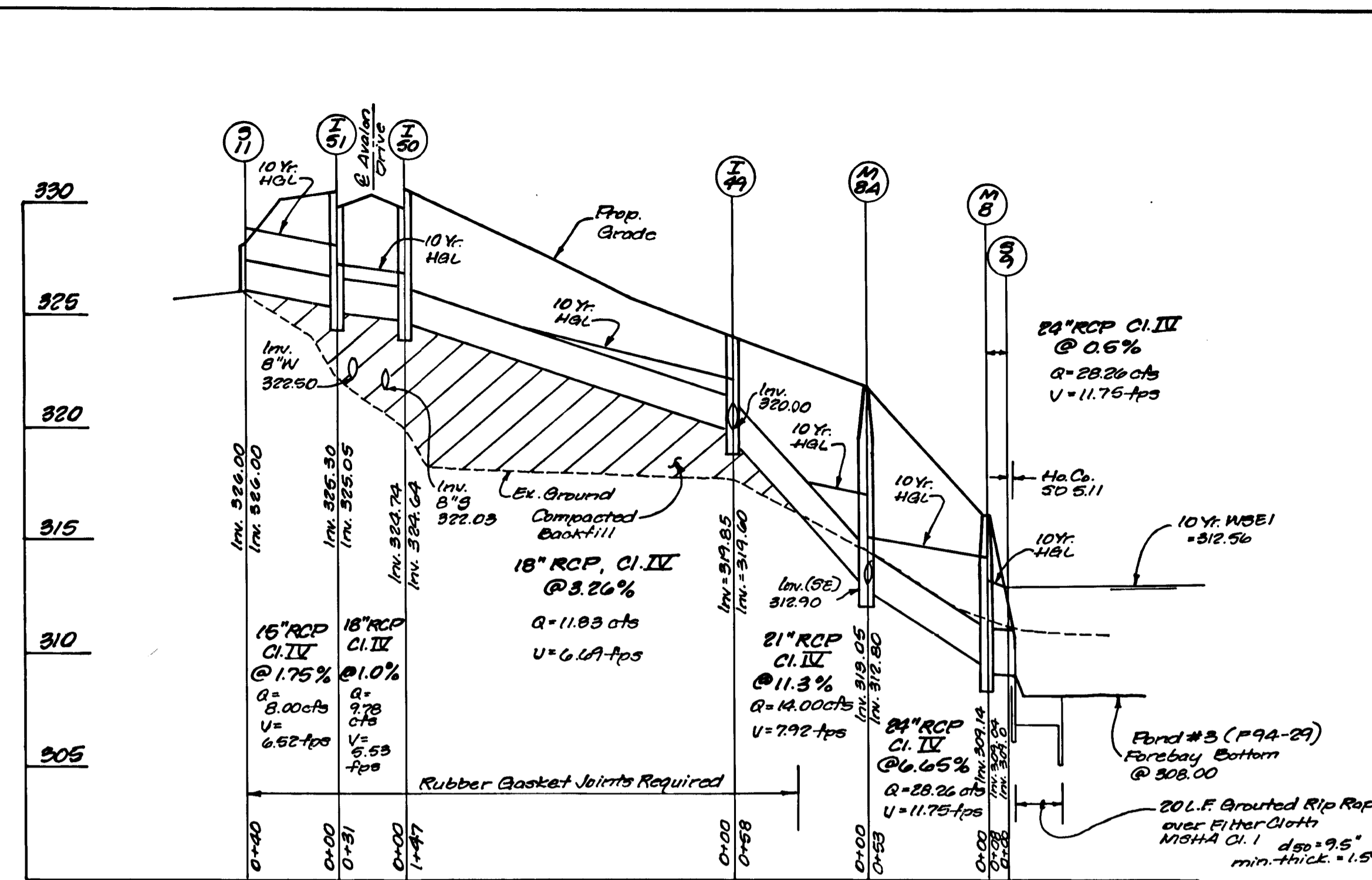
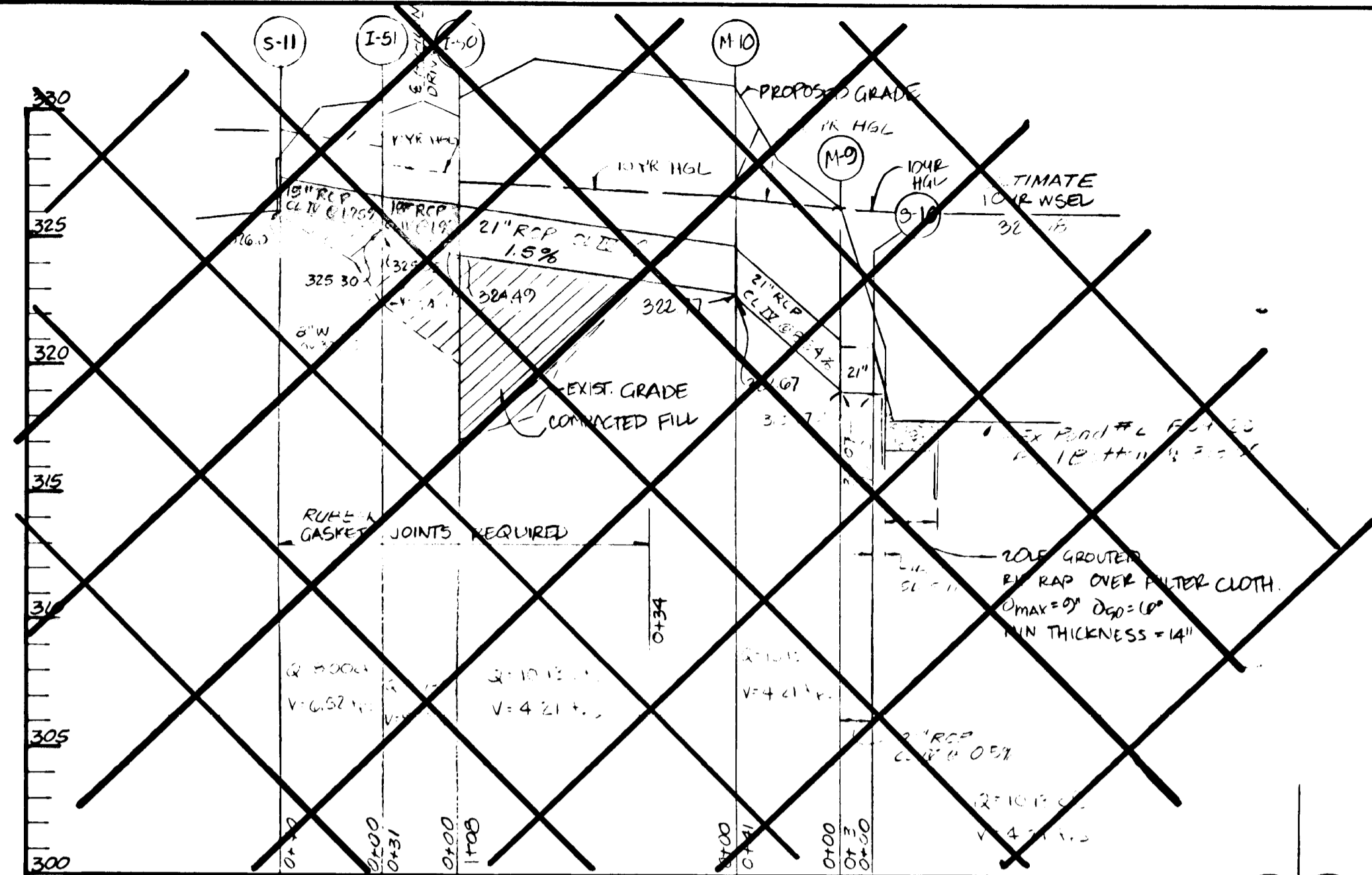
LYNDWOOD MANOR SECTION TWO

Tax Map 37 Part of Parcels 643, 38, 640
1st Election District Howard County, MD

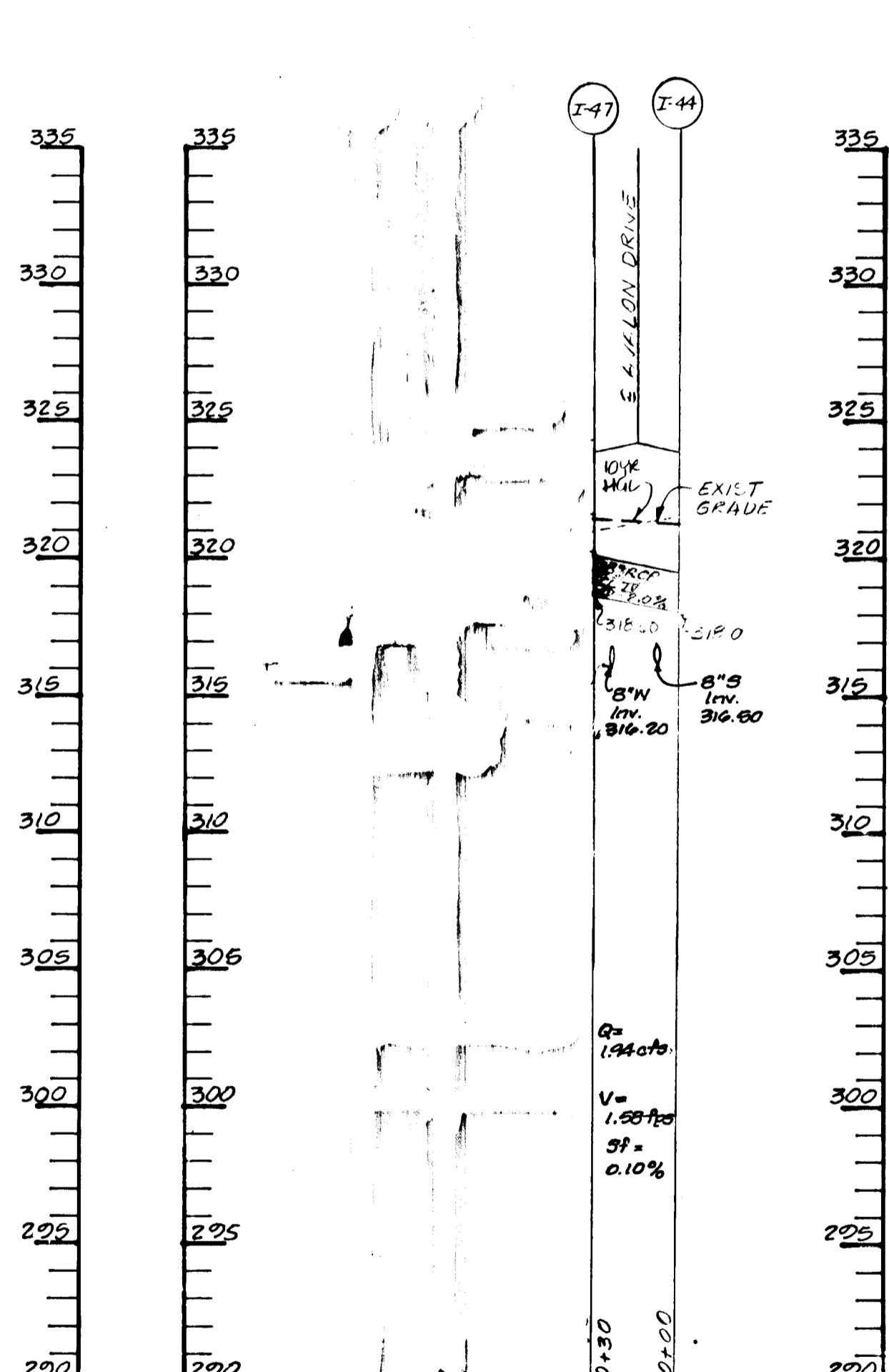
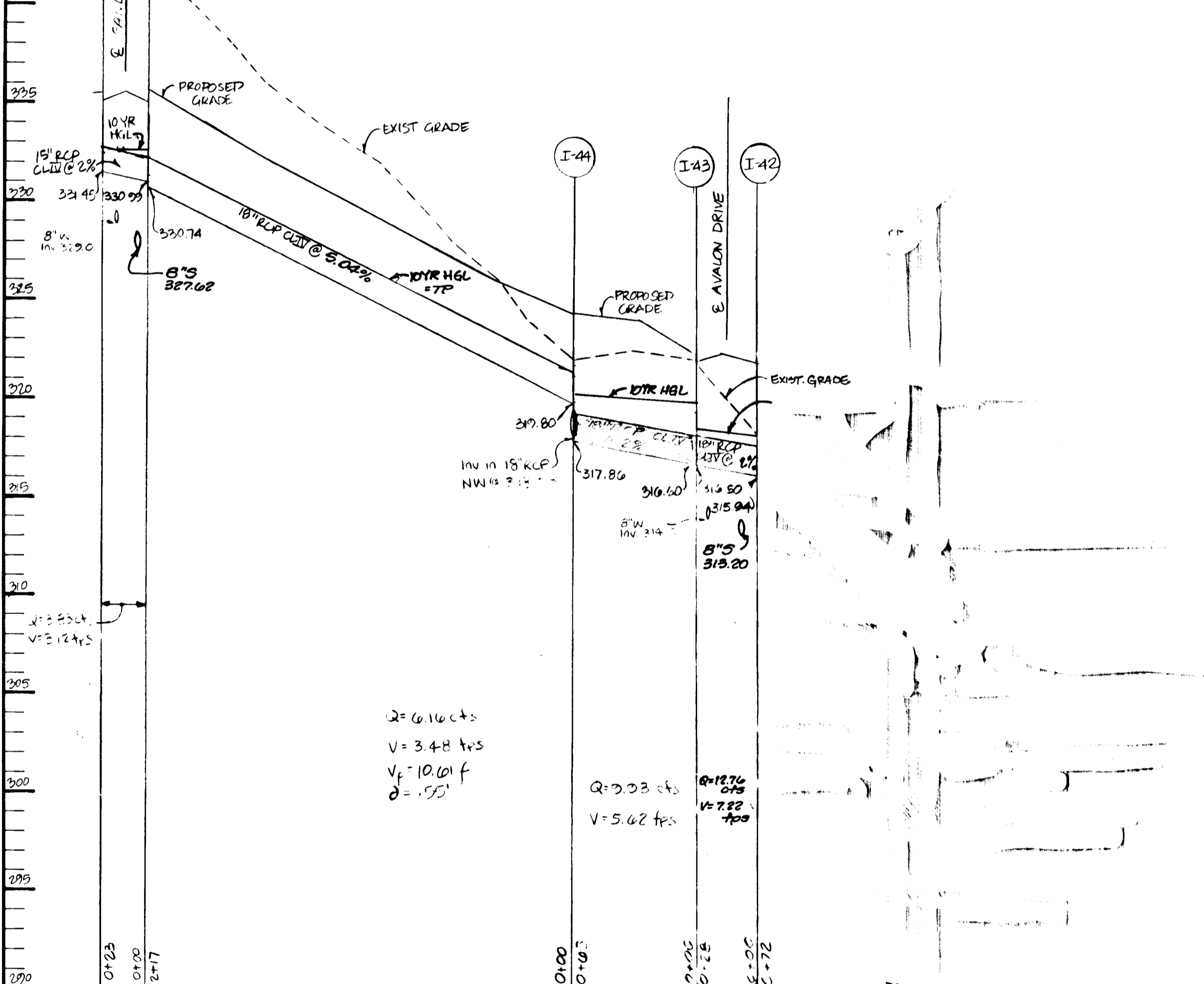
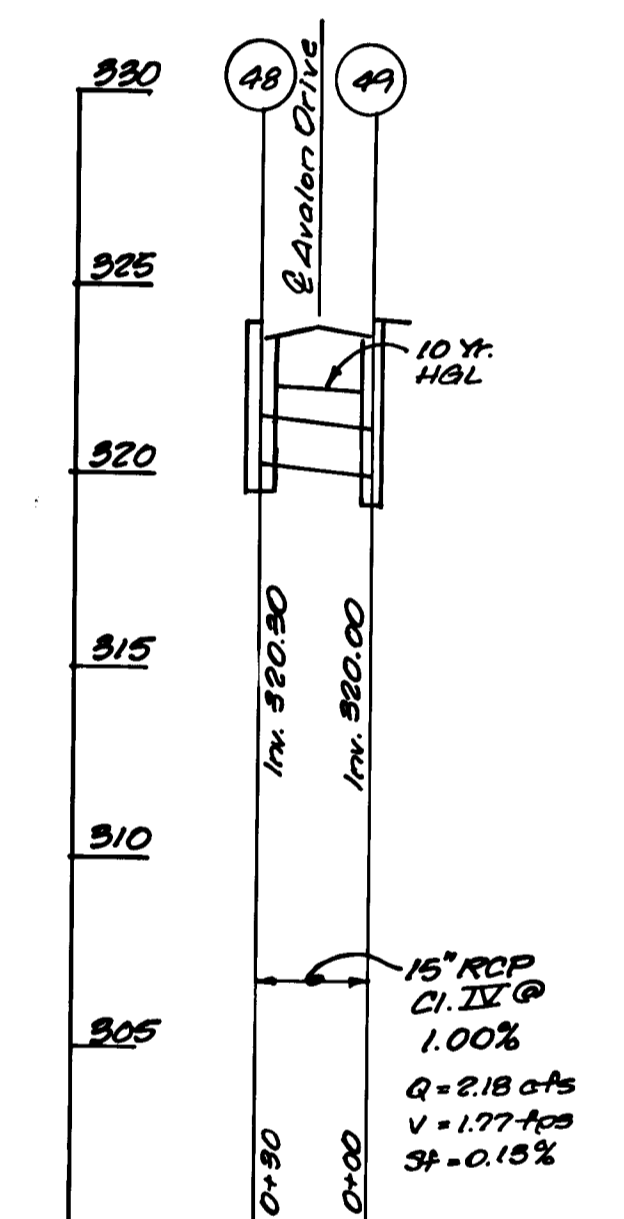
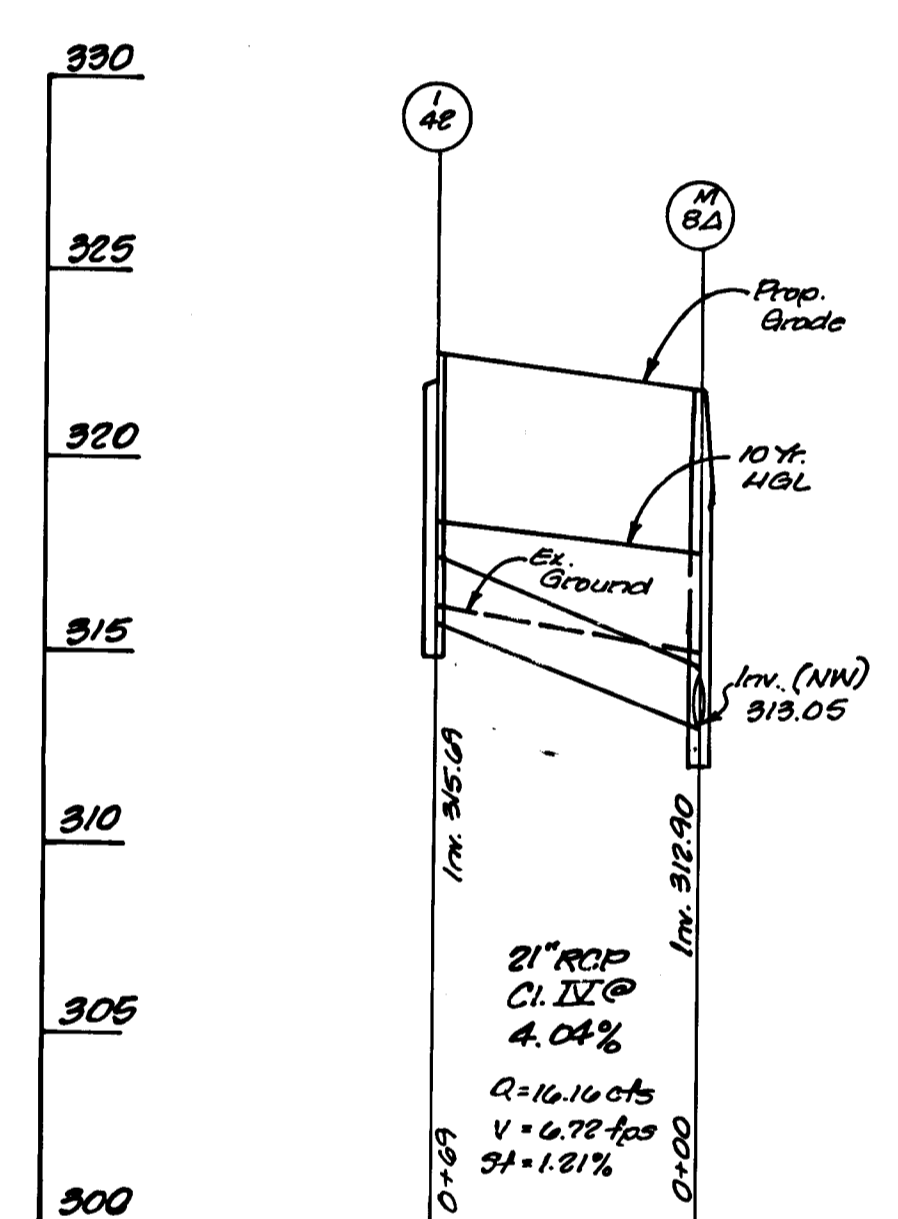
6-23-02 P-93-11 F-24-20
100 INVESTMENT LIMITED PARTNERSHIP
8835-P Columbia 100 Parkway
Columbia, Maryland 21045 (410) 730-0810

Prince D. Burton 5/16/95
Professional Engineer

F-94-94



STRUCTURE SCHEDULE							
NUMBER	TYPE	INV. IN	INV. OUT	UPPER	LOWER	DETAIL	LOCATION
142	A-10(DEPR)	315.94	315.69	322.39	322.39	S04.02	28'-23.65 SUMP, 12' RT. AVALON DRIVE
143	A-10(DEPR)	316.60	315.50	322.39	322.39	S04.02	28'-23.65 SUMP, 12' RT. AVALON DRIVE
144	A-10	317.86	317.86	324.54	324.10	S04.00	28'-23.65 SUMP, 12' RT. AVALON DRIVE
145	S-COMBO INLET	315.70	315.70	324.54	324.54	S04.37	24'71.00, SANDY RIDGE 15.52' LT
146	S-COMBO INLET	331.45	331.45	335.65	335.27	S04.37	24'71.00, SANDY RIDGE 15.52' LT
147	A-10	318.70	318.60	324.54	324.10	S04.02	27'-48.50, 13' RT. SANDY RIDGE
148	A-10	318.70	318.60	324.54	324.10	S04.02	27'-48.50, 13' RT. SANDY RIDGE
149	A-5	324.64	324.64	330.78	330.42	S04.34	25'-50.00, 13' RT. AVALON DRIVE
150	DBL S-COMBO INLET	324.64	324.64	330.78	330.42	S04.34	25'-50.00, 13' RT. AVALON DRIVE
151	A-10	325.90	325.05	330.82	330.37	S04.02	25'-50.00, 13' RT. AVALON DRIVE
152	A-10	295.25	295.15	302.48	301.99	S04.02	0'-45.57, 12' LT. FUTURE ROAD
153	A-10	295.25	295.15	302.48	301.99	S04.02	0'-45.57, 12' LT. FUTURE ROAD
154	A-10	296.50	296.25	303.65	303.13	S04.02	16'-48.80, SANDY RIDGE 15.52' LT
155	A-10	296.50	296.25	303.65	303.13	S04.02	16'-48.80, SANDY RIDGE 15.52' LT
156	A-10	311.25	311.00	318.53	318.09	S04.02	0'-45.57, 12' LT. BEE COURT
157	A-10	311.25	311.00	318.53	318.09	S04.02	0'-45.57, 12' LT. BEE COURT
158	A-10	311.25	311.00	318.53	318.09	S04.02	0'-45.57, 12' LT. BEE COURT
159	A-10	311.25	311.00	318.53	318.09	S04.02	0'-45.57, 12' LT. BEE COURT
160	A-10	311.25	311.00	318.53	318.09	S04.02	0'-45.57, 12' LT. BEE COURT
161	A-10	311.25	311.00	318.53	318.09	S04.02	0'-45.57, 12' LT. BEE COURT
162	A-10	311.25	311.00	318.53	318.09	S04.02	0'-45.57, 12' LT. BEE COURT
163	A-10	311.25	311.00	318.53	318.09	S04.02	0'-45.57, 12' LT. BEE COURT
164	A-10	311.25	311.00	318.53	318.09	S04.02	0'-45.57, 12' LT. BEE COURT
165	A-10	311.25	311.00	318.53	318.09	S04.02	0'-45.57, 12' LT. BEE COURT
166	A-10	311.25	311.00	318.53	318.09	S04.02	0'-45.57, 12' LT. BEE COURT
167	A-10	311.25	311.00	318.53	318.09	S04.02	0'-45.57, 12' LT. BEE COURT
168	A-10	311.25	311.00	318.53	318.09	S04.02	0'-45.57, 12' LT. BEE COURT
169	A-10	311.25	311.00	318.53	318.09	S04.02	0'-45.57, 12' LT. BEE COURT
170	A-10	311.25	311.00	318.53	318.09	S04.02	0'-45.57, 12' LT. BEE COURT
171	A-10(DEPR)	317.15	317.05	324.32	324.14	S04.37	34'-25.38, 12' RT. SPRING LEAF COURT
172	S-COMBO INLET	320.36	320.11	324.32	324.14	S04.37	34'-25.38, 12' RT. SPRING LEAF COURT
173	S-COMBO INLET	320.36	320.11	324.32	324.14	S04.37	34'-25.38, 12' RT. SPRING LEAF COURT
S-9	TYPE 'A' HEADWALL	309.00		TOP EL. 318.25		S05.11	N. 600518.215 E. 600518.743
S-11	TYPE 'C' ENDWALL		326.00	TOP EL. 328.00		S05.21	25'-55.50 RT. LY. AVALON DRIVE
S-12	TYPE 'C' ENDWALL		275.70	TOP EL. 277.80		S05.21	25'-55.50 RT. LY. AVALON DRIVE
S-13	BEE SWM DETAIL SHD	276.00		TOP EL. 263.33		S05.11	N490465.776 E. 8667123.166
S-14	TYPE 'A' HEADWALL	280.00		TOP EL. 283.75		S05.11	N490465.776 E. 8667123.166
S-16	TYPE 'D' INLET	315.51	315.41	TOP EL. 311.00		S04.31	N490465.776 E. 8667123.166
MH-8A	STD. MANHOLE	314.00	313.80	EL. 312.00		A5.17	N. 600518.215 E. 600518.743
MH-8	STD. MANHOLE	309.14	309.04	EL. 316.00		G5.11	N. 600518.215 E. 600518.743
MH-11	STD. MANHOLE	284.42	280.27	EL. 281.50		G5.13	N. 497010.579 E. 8667123.166
MH-12	STD. MANHOLE	289.42	289.42	EL. 294.45		G5.13	N. 497010.579 E. 8667123.166
MH-13	STD. MANHOLE	289.77	289.47	EL. 294.15		G5.13	N. 497010.579 E. 8667123.166
MH-14	STD. MANHOLE	307.50	307.40	EL. 311.85		G5.11	14'-75.21, 91.11, SANDY RIDGE
MH-15	STD. MANHOLE	314.01	313.91	EL. 318.40		G5.11	1P. STA. 1+44.39, 6.831 LT., BEE COURT



By	NR	Date	Description
			Revisions

ENGINEER'S CERTIFICATE

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.

BRUCE D. BURTON 5/16/95
Signature of Engineer Date

DEVELOPER'S CERTIFICATE

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 of 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.

W. L. N. 2/18/94
Signature of Developer Date

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.

Patricia Engle 5/26/95
US Soil Conservation Service Date

This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

Robert W. Zehner 5/23/95
Howard Soil Conservation District Date

APPROVED: Department of Public Works for Storm Drainage Systems and Roads

John D. ... 6/1/95
Chief, Construction Division Date

Paul ... 6/1/95
Chief, Bureau of Engineering Date

Andrew M. ... 5-26-95
Chief, Bureau of Highways Date

APPROVED: Department of Planning and Zoning

M. J. ... 6/5/95
Chief, Division of Land Development and Research Date

BRUCE D. BURTON 5/16/95
Professional Engineer

LAND DESIGN ENGINEERING, INC.

8835 Columbia 100 Parkway, Unit N, Columbia, MD 21045
(410) 715-1070 (Balto.) (301) 596-3424 (Wash.) (410) 715-0681 (Fax)

DESIGNED: ES
DRAWN: GL
CHECKED: RM
DATE: 12/94

STORMDRAIN PROFILES

LYNDWOOD MANOR
SECTION TWO

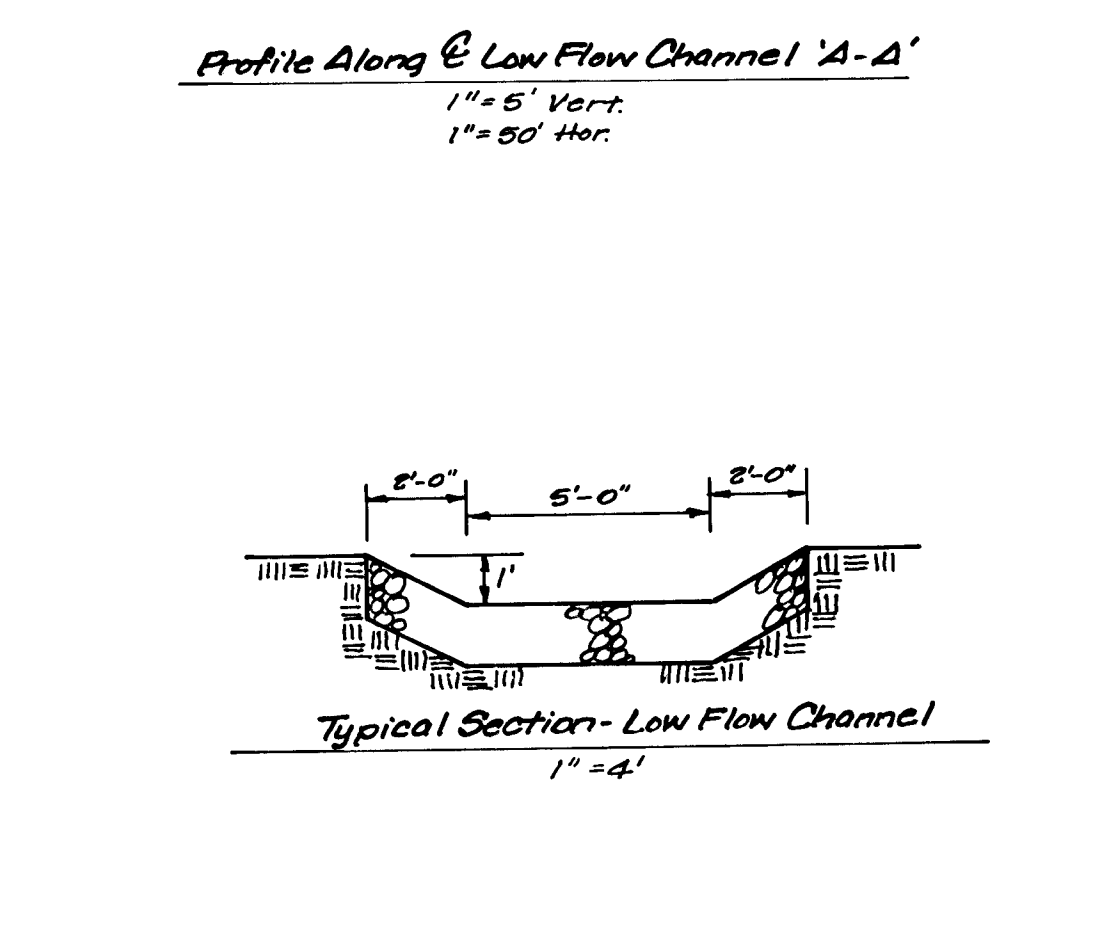
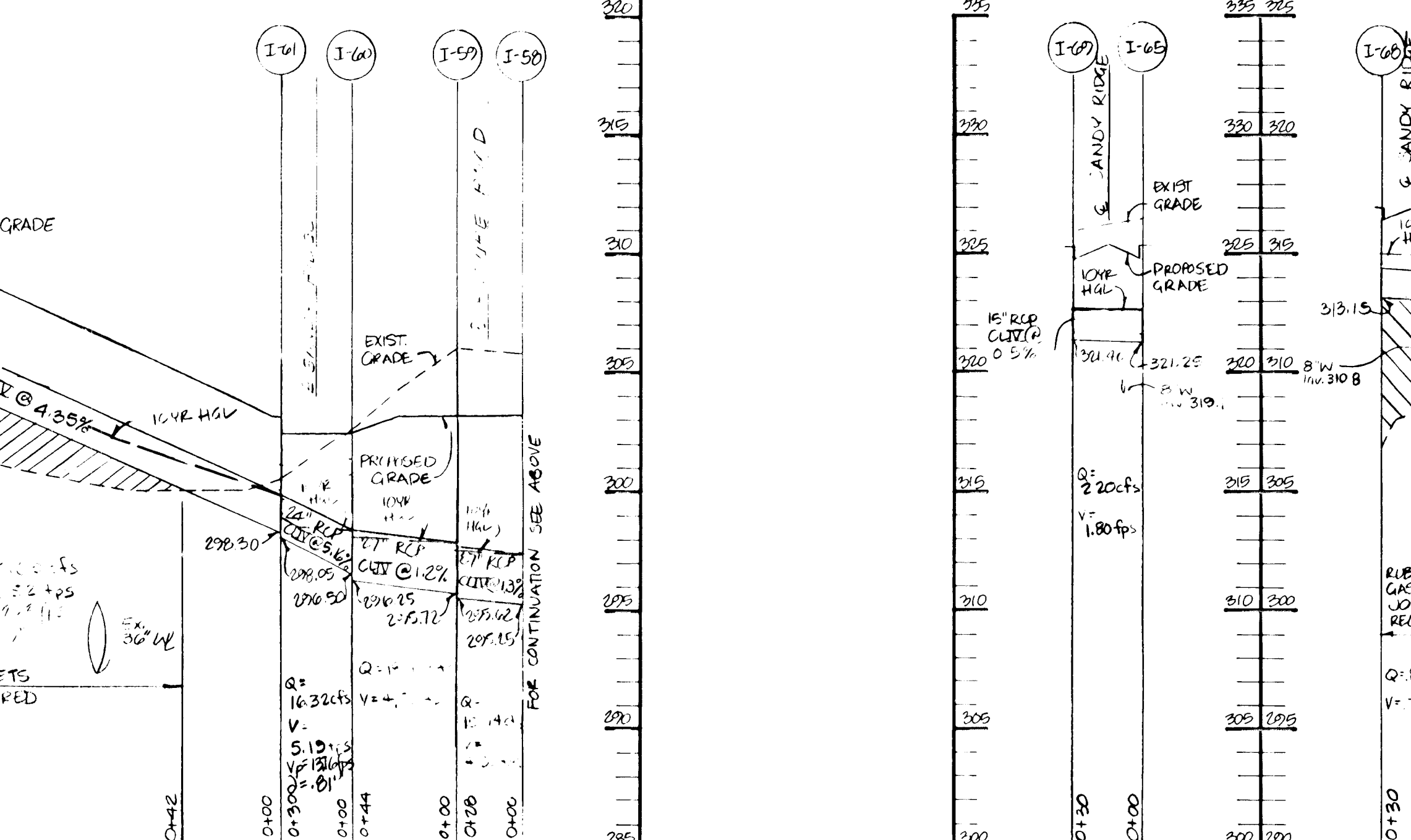
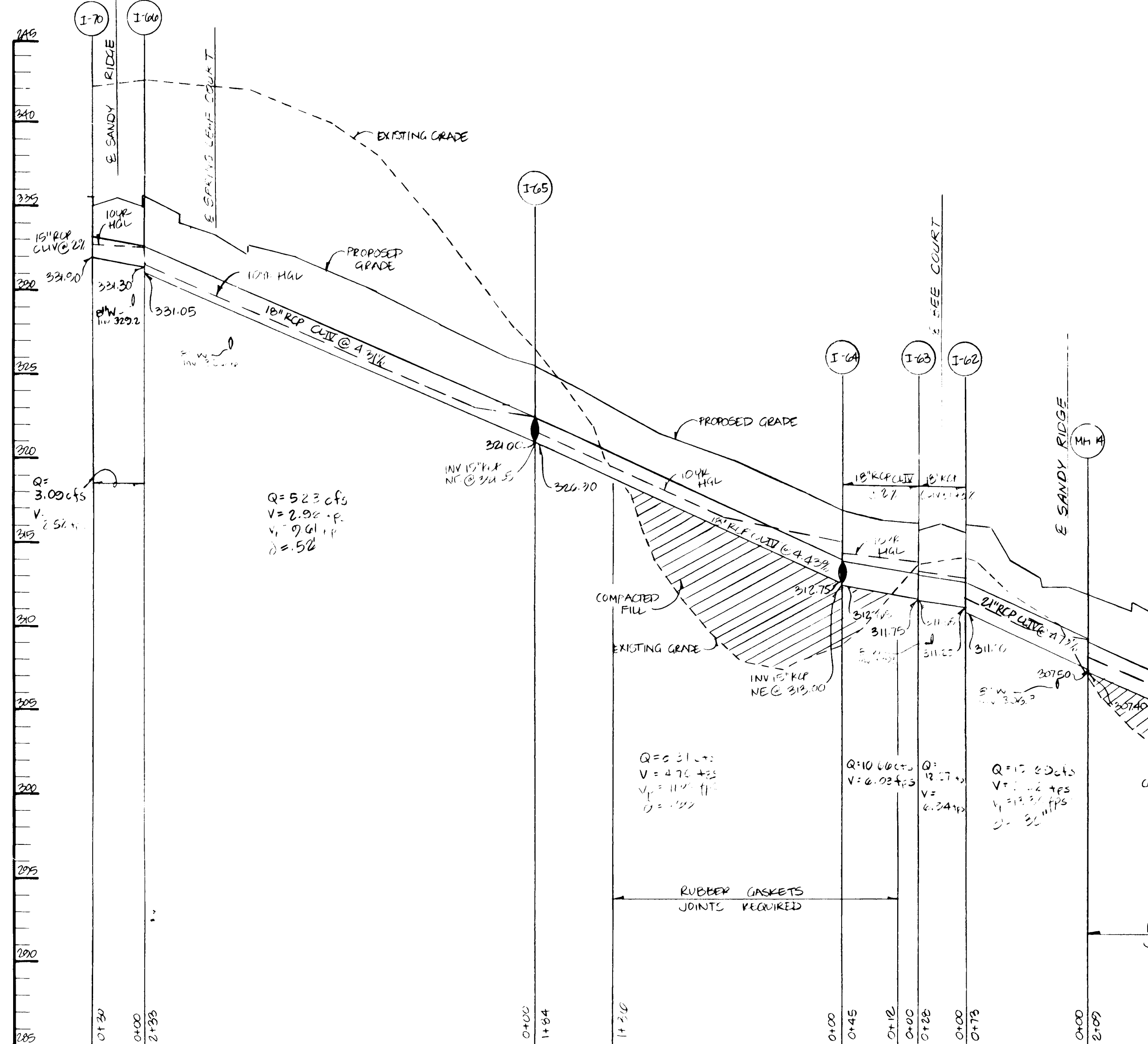
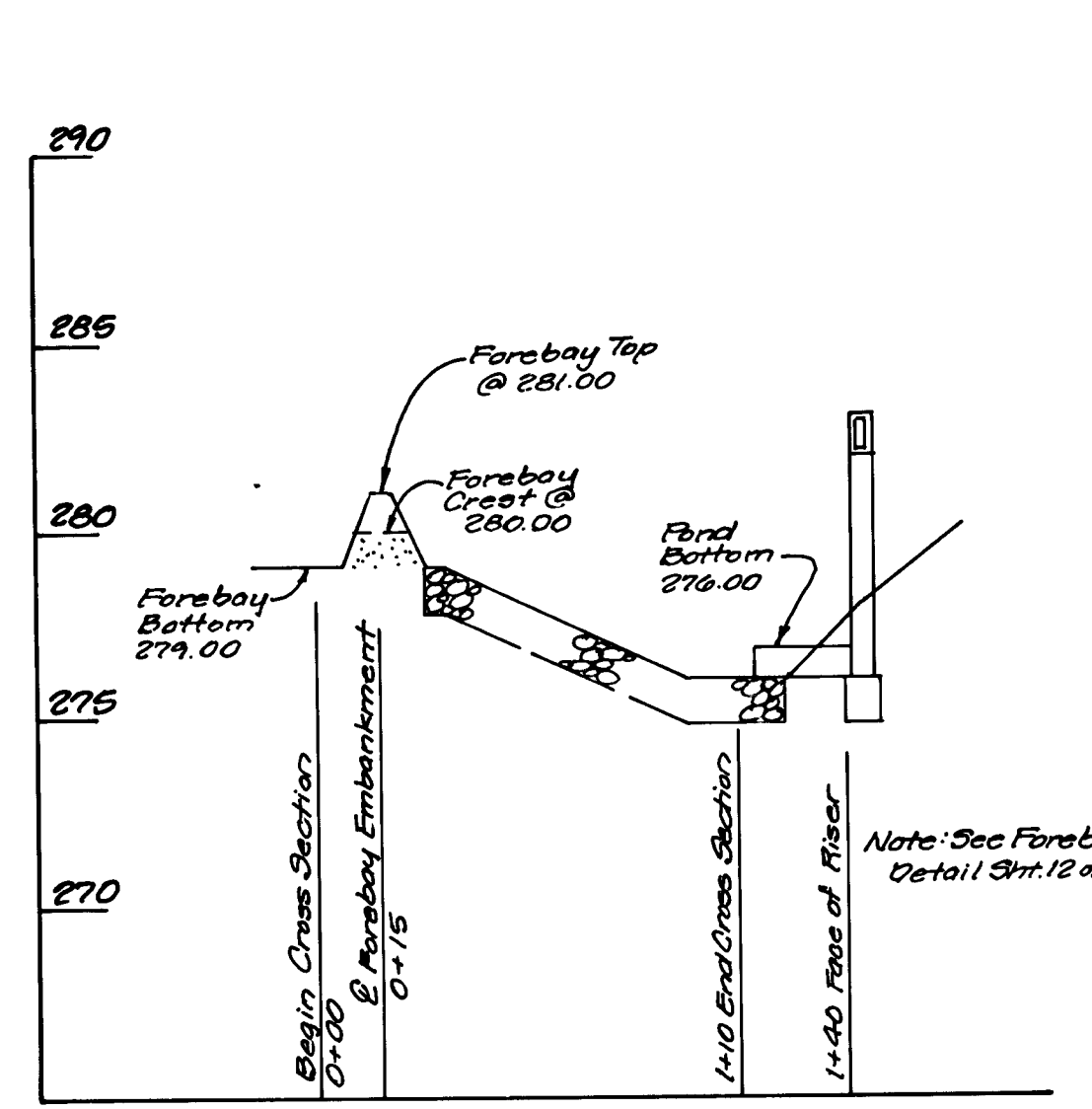
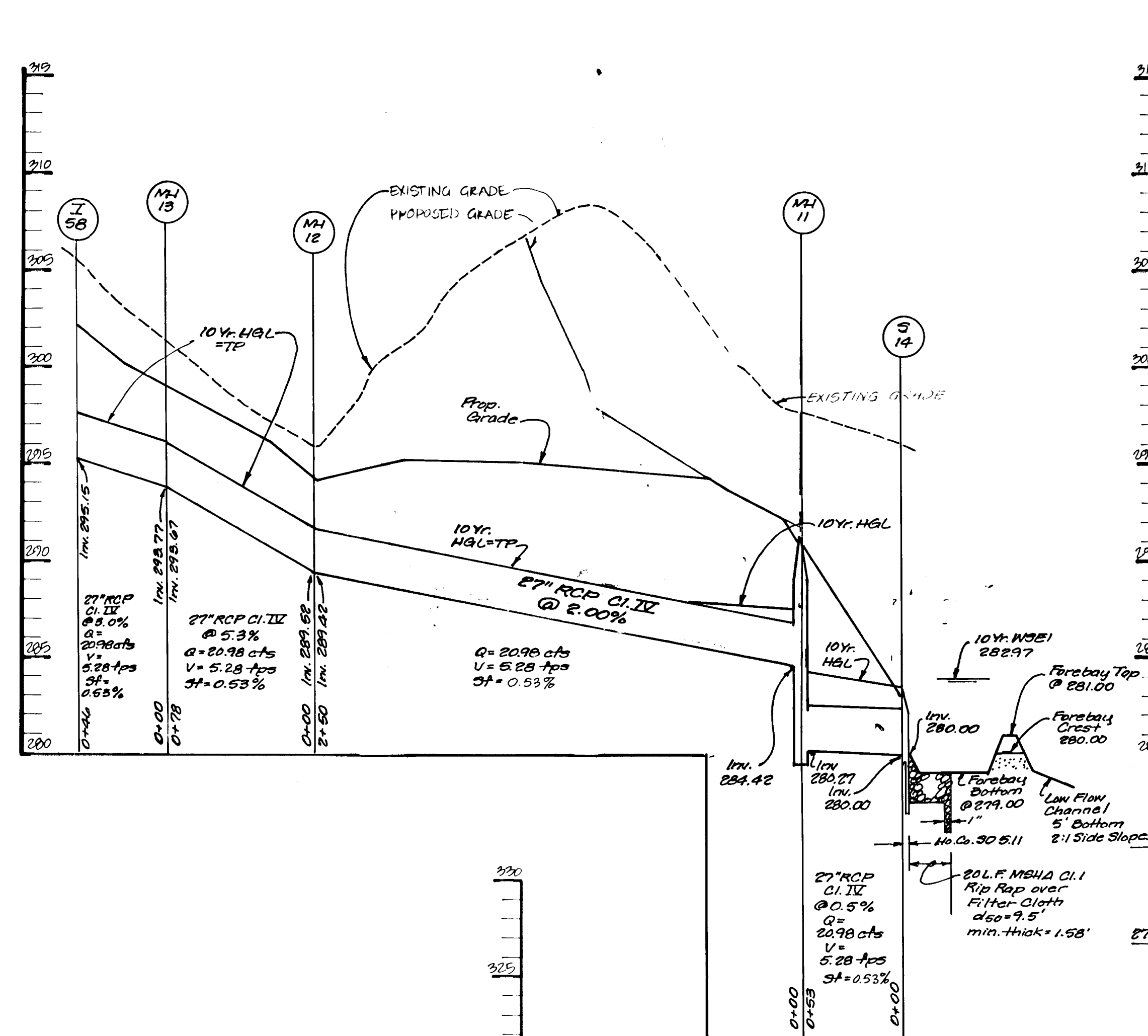
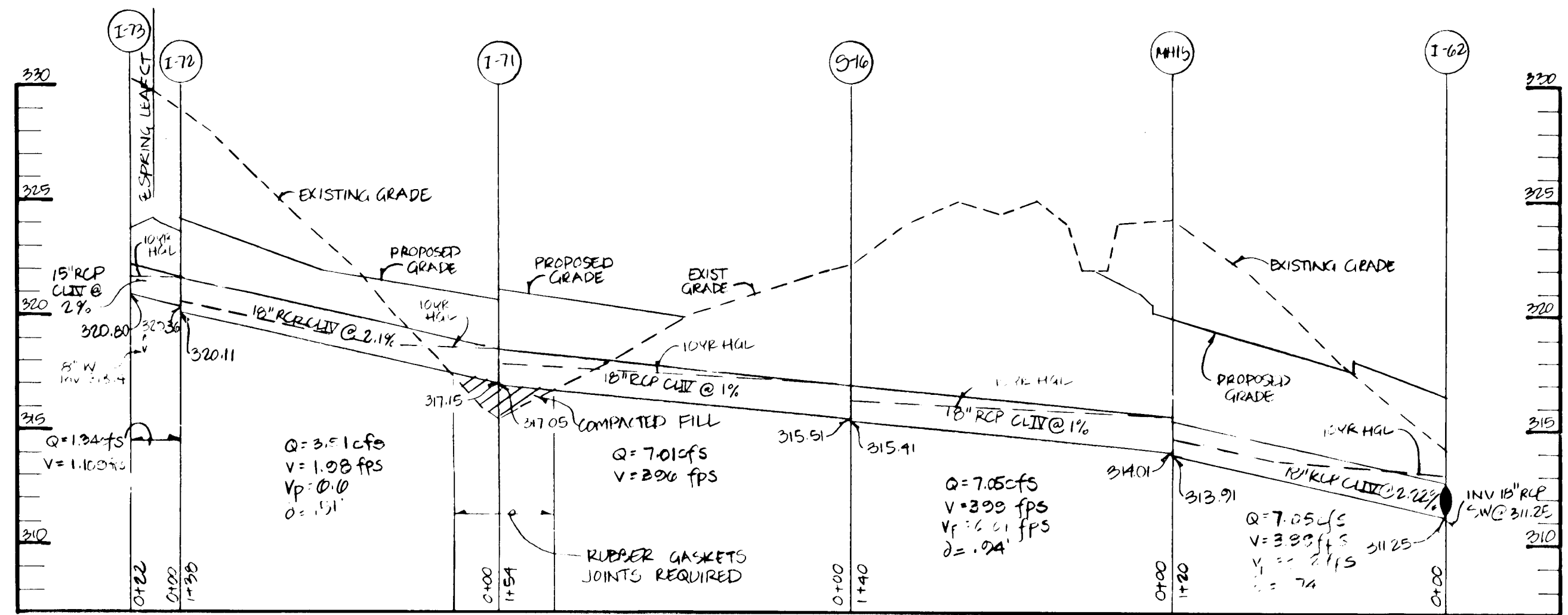
Tax Map 37 Part of Parcels G-93, 38, G-40
1st Election District Howard County, MD.
5-23-02 P-93-11 F-94-29
Owner/Developer
100 INVESTMENT LIMITED PARTNERSHIP
8835 Columbia 100 Parkway
Columbia, Maryland 21045 (410) 715-0681

SCALE: 1" = 5' Vert, 1" = 50' Horiz
DRAWING: 7 of 16
JOB No: 92-1165
FILE No: F04-94

F-94-94

1708

1701



LOE	1	4/97	Revise Storm Drain Profile, Add Details
By	NB	CHC	Description
Revisions			

ENGINEER'S CERTIFICATE

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.

Bruce D. Burton 5/16/95
Signature of Engineer Date

DEVELOPER'S CERTIFICATE

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.

W.L.N. 2/18/94
Signature of Developer Date

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.

Adrian Engle 5/12/95
S.D.S. Soil Conservation Service Date

This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

Robert W. Ziehm 5/23/95
Howard Soil Conservation District Date

APPROVED: Department of Public Works for Storm Drainage Systems and Roads.

Chad D. Dammann 6/1/95
Chief, Land Development Division

Paul D. Jegan 6/1/95
Chief, Bureau of Engineering

Andrew M. Decker 5-26-95
Chief, Bureau of Highways

APPROVED: Department of Planning and Zoning.

M.W. Clayton 6/15/95
Chief, Division of Land Development and Research

Bruce D. Burton 5/16/95
Professional Engineer Seal

LAND DESIGN ENGINEERING, INC.

8835 Columbia 100 Parkway, Unit N, Columbia, MD 21045
(410) 715-1070 (Balto.) (301) 596-3424 (Wash.) (410) 715-0681 (Fax)

DESIGNED: ES
DRAWN: GL
CHECKED: RM
DATE: 12/94

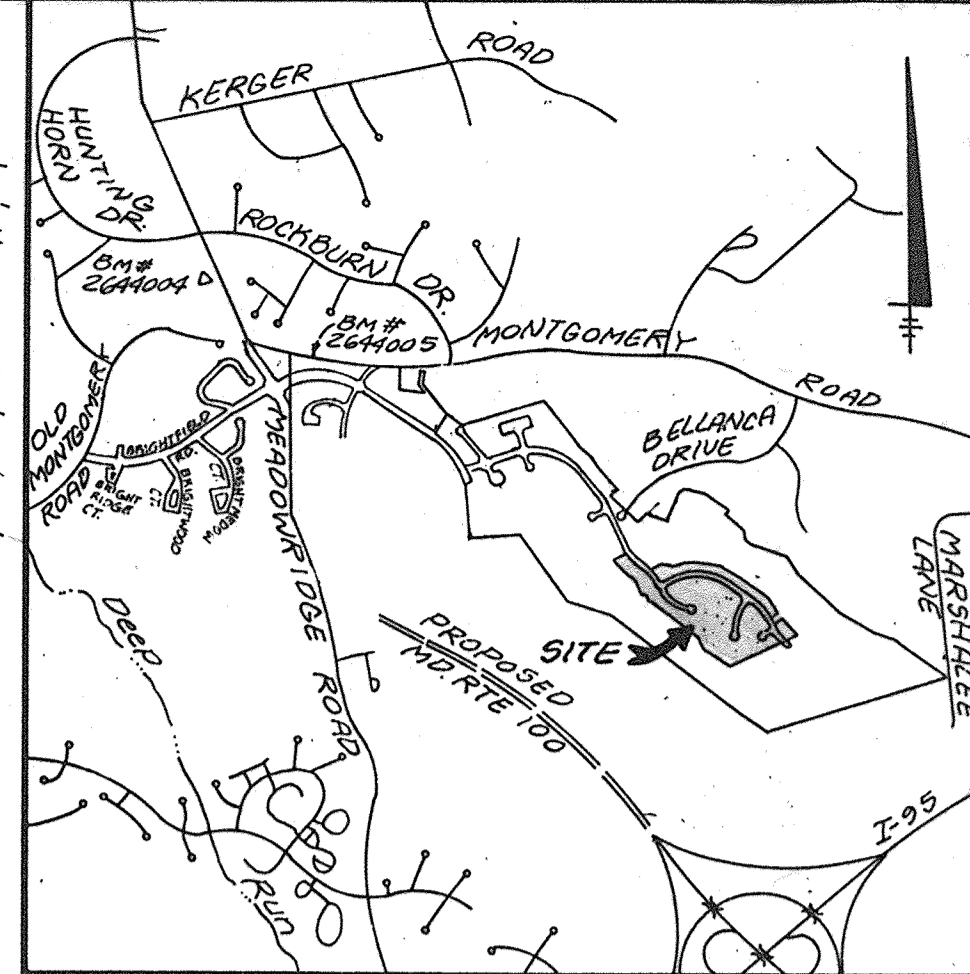
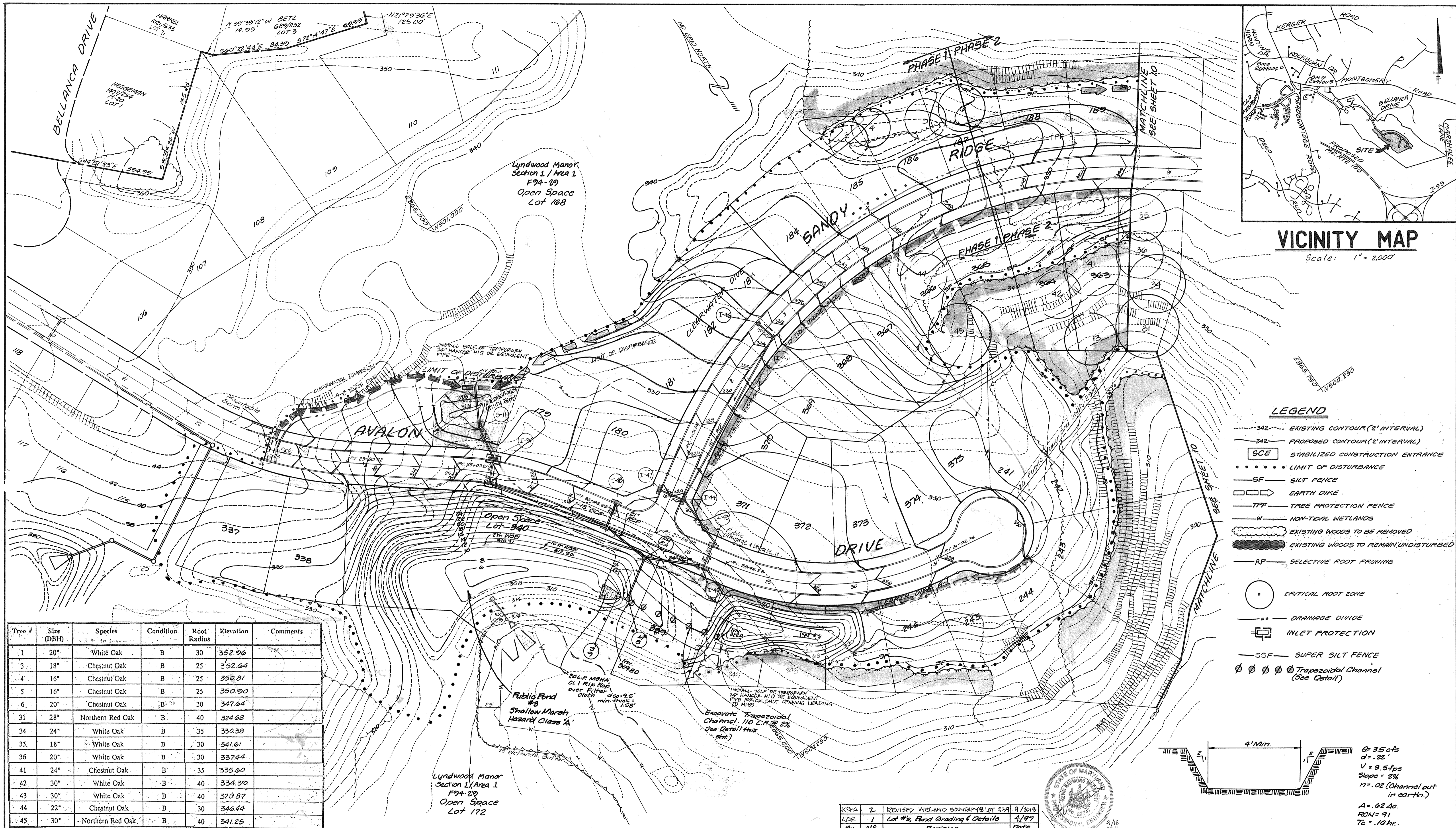
STORM DRAIN PROFILES

LYNDWOOD MANOR

SECTION TWO

Tax Map 37 Part of Parcels G43, 38, 640
1st Election District Howard County, MD.
5-23-02 P.03-11 F.03-29

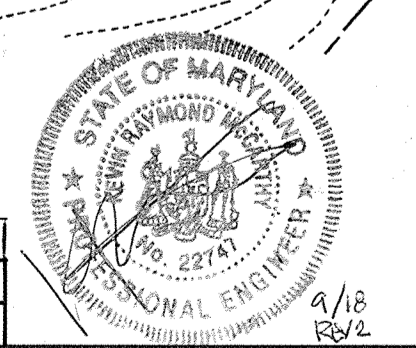
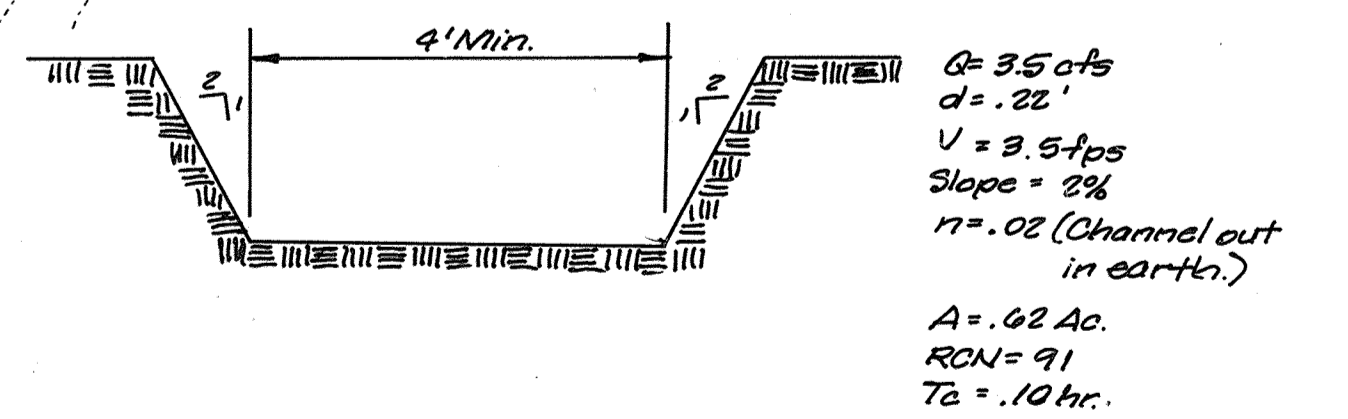
SHEET 12 OF 16
DRAWING 8 OF 16
JOB No. 92-116-5
FILE No. F94-04



VICINITY MAP
Scale: 1" = 2,000'

- LEGEND**
- 342 --- EXISTING CONTOUR (2' INTERVAL)
 - 342 --- PROPOSED CONTOUR (2' INTERVAL)
 - [SCE] STABILIZED CONSTRUCTION ENTRANCE
 - LIMIT OF DISTURBANCE
 - SF SILT FENCE
 - [EARTH DIKE] EARTH DIKE
 - [TPF] TREE PROTECTION FENCE
 - W NON-TIDAL WETLANDS
 - [WOODS] EXISTING WOODS TO BE REMOVED
 - [WOODS] EXISTING WOODS TO REMAIN UNDISTURBED
 - RP SELECTIVE ROOT PRUNING
 - [CIRCLE] CRITICAL ROOT ZONE
 - DRAINAGE DIVIDE
 - [INLET] INLET PROTECTION
 - SSF SUPER SILT FENCE
 - [TRAP] Trapezoidal Channel (See Detail)

Tree #	Stem (DBH)	Species	Condition	Root Radius	Elevation	Comments
1	20"	White Oak	B	30	352.96	
3	18"	Chestnut Oak	B	25	352.64	
4	16"	Chestnut Oak	B	25	350.81	
5	16"	Chestnut Oak	B	25	350.90	
6	20"	Chestnut Oak	B	30	347.64	
31	28"	Northern Red Oak	B	40	324.68	
34	24"	White Oak	B	35	330.38	
35	18"	White Oak	B	30	341.61	
36	20"	White Oak	B	30	337.44	
41	24"	Chestnut Oak	B	35	335.60	
42	30"	White Oak	B	40	334.39	
43	30"	White Oak	B	40	320.87	
44	22"	Chestnut Oak	B	30	346.44	
45	30"	Northern Red Oak	B	40	341.25	



ENGINEER'S CERTIFICATE

I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he/she must engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion.

BRUCE D. BURTON
Signature of Engineer
5/16/95
Date

DEVELOPER'S CERTIFICATE

I/We certify that all developments and/or construction will be done according to these plans, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I shall engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District.

W.L. W.
Signature of Developer
2/18/94
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.

Patricia Engler 5/23/95
US 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 Ziehm 5/23/95
Howard Soil Conservation District Date

APPROVED: Department of Public Works for Storm Drainage Systems and Roads.

John Dammann 6/1/95
Chief, Land Development Division Date

Paul Segan 6/1/95
Chief, Bureau of Engineering Date

Andrew M. Daniels 5-26-95
Chief, Bureau of Highways H4 Date

APPROVED: Department of Planning and Zoning.

Dr. J. M. Wright 6/5/95
Chief, Division of Land Development and Research Date

BRUCE D. BURTON
5/16/95

LAND DESIGN ENGINEERING, INC.

8835 Columbia 100 Parkway, Unit N, Columbia, MD 21045
(410) 715-1070 (Baltimore) (301) 596-3424 (Wash.) (410) 715-0681 (Fax)

DESIGNED	GRADING & SEDIMENT AND EROSION CONTROL PLAN	SCALE
DRAWN		1"=50'
CHECKED	LYNDWOOD MANOR SECTION TWO	DRAWING
DATE		9 of 10
Tax Map 27 Part of Parcels 643, 38, 640		JOB No
1st Election District Howard County, MD.		02-110-5
5-23-02 P-23-11 F-24-29		Owner / Developer
100 INVESTMENT LIMITED PARTNERSHIP		FILE No
8835 Columbia 100 Parkway		F94-94
Columbia, Maryland 21045 (410) 730-0810		

F-94-94

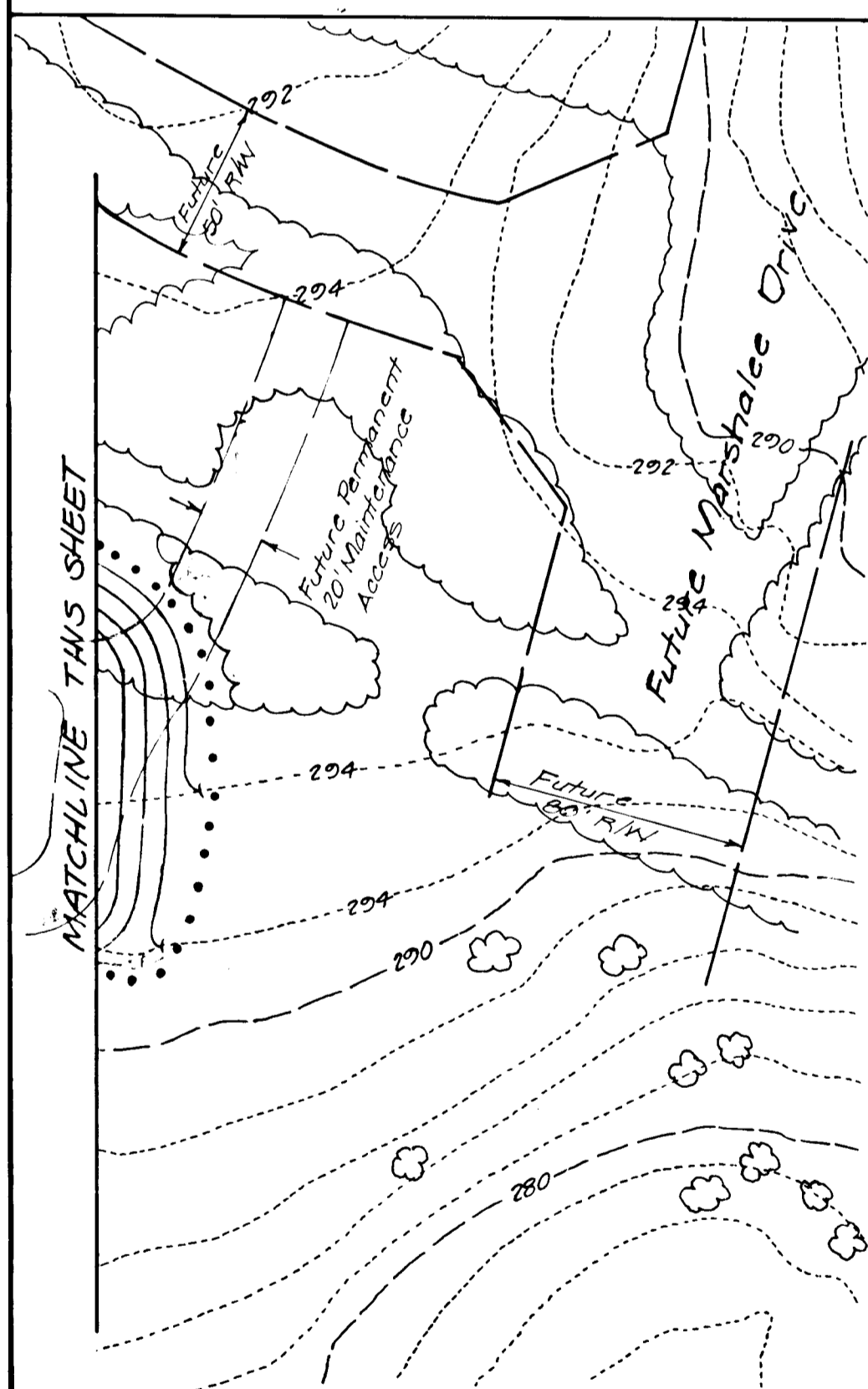
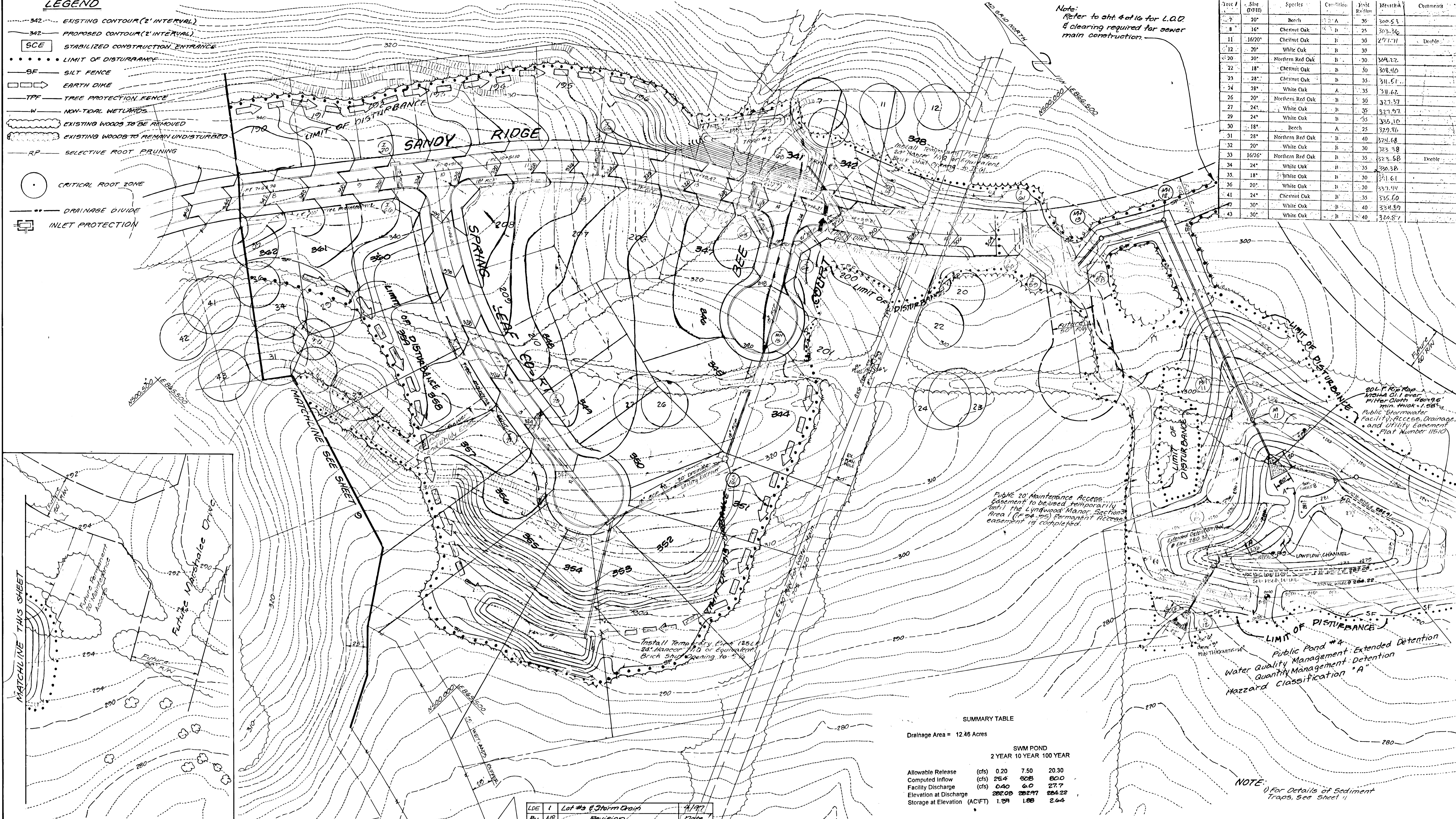
17018

LEGEND

- 342 --- EXISTING CONTOUR (2' INTERVAL)
- 342 --- PROPOSED CONTOUR (2' INTERVAL)
- [SCE] STABILIZED CONSTRUCTION ENTRANCE
- LIMIT OF DISTURBANCE
- SF SILT FENCE
- [] EARTH DIKE
- TPF --- TREE PROTECTION FENCE
- W NON-TIDAL WETLANDS
- [] EXISTING WOODS TO BE REMOVED
- [] EXISTING WOODS TO REMAIN UNDISTURBED
- RP SELECTIVE ROOT PRUNING
- [] CRITICAL ROOT ZONE
- DRAINAGE DIVIDE
- [] INLET PROTECTION

Note: Refer to sheet 4 of 16 for L.O.D. & clearing required for sewer main construction.

Tree #	Size (DBH)	Species	Condition	Post Radius	Height	Comments
7	20"	Beech	A	35'	300.53	
8	16"	Chestnut Oak	B	25'	303.36	
11	1670"	Chestnut Oak	B	30'	271.11	Double
12	20"	White Oak	B	30'		
20	20"	Northern Red Oak	B	30'	304.22	
22	18"	Chestnut Oak	B	30'	308.10	
23	28"	Chestnut Oak	B	35'	311.61	
24	28"	White Oak	A	35'	311.62	
26	20"	Northern Red Oak	B	30'	327.37	
27	24"	White Oak	B	35'	327.97	
29	24"	White Oak	B	35'	335.10	
30	18"	Beech	A	25'	329.36	
31	28"	Northern Red Oak	B	40'	324.68	
32	20"	White Oak	B	30'	323.38	
33	1676"	Northern Red Oak	B	35'	323.58	Double
34	24"	White Oak	B	35'	326.38	
35	18"	White Oak	B	30'	311.61	
36	20"	White Oak	B	30'	327.44	
41	24"	Chestnut Oak	B	35'	335.00	
47	30"	White Oak	B	40'	324.39	
43	30"	White Oak	B	40'	324.87	



SUMMARY TABLE

Drainage Area = 12.46 Acres

	SWM POND		
	2 YEAR	10 YEAR	100 YEAR
Allowable Release (cfs)	0.20	7.50	20.30
Computed Inflow (cfs)	26.4	608	80.0
Facility Discharge (cfs)	0.40	6.0	27.7
Elevation at Discharge	282.08	282.97	284.22
Storage at Elevation (ACFT)	1.29	1.88	2.64

NOTE: For Details of Sediment Traps, See Sheet 11

ENGINEER'S CERTIFICATE

I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he/she must engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion.

Bruce D. Burton 5/16/95
Signature of Engineer Date

DEVELOPER'S CERTIFICATE

I certify that all developments and/or construction will be done according to these plans, and that any responsible personnel involved in the construction project will have a Certificate of Attendance of a Department of the Environment approved Training Program for the control of sediment and erosion before beginning the project. I shall engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District.

W.T. N 2/18/94
Signature of Developer 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.

Patricia Engler /es 5/21/95
US 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. Ziehm 5/23/95
Howard Soil Conservation District Date

APPROVED: Department of Public Works for Storm Drainage Systems and Roads

Allen Dorman 6/1/95
Chief, Land Use/Development Division Date

Paul D. Sporn 6/1/95
Chief, Bureau of Engineering Date

Andrew M. Daniels 5-26-95
Chief, Bureau of Highways Date

APPROVED: Department of Planning and Zoning

J. J. Laughlin 6/5/95
Chief, Division of Land Development and Research Date

Bruce D. Burton 5/16/95
Professional Engineer

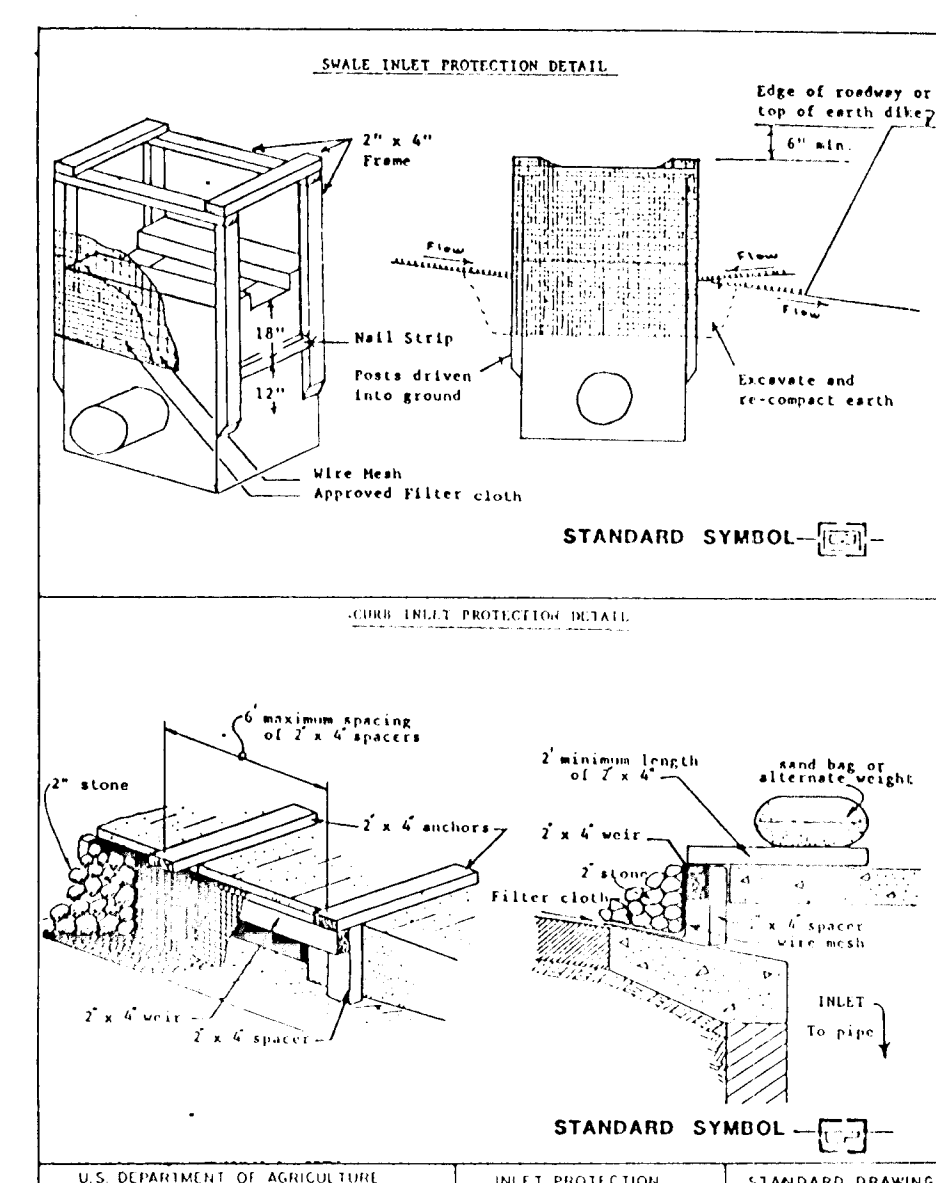
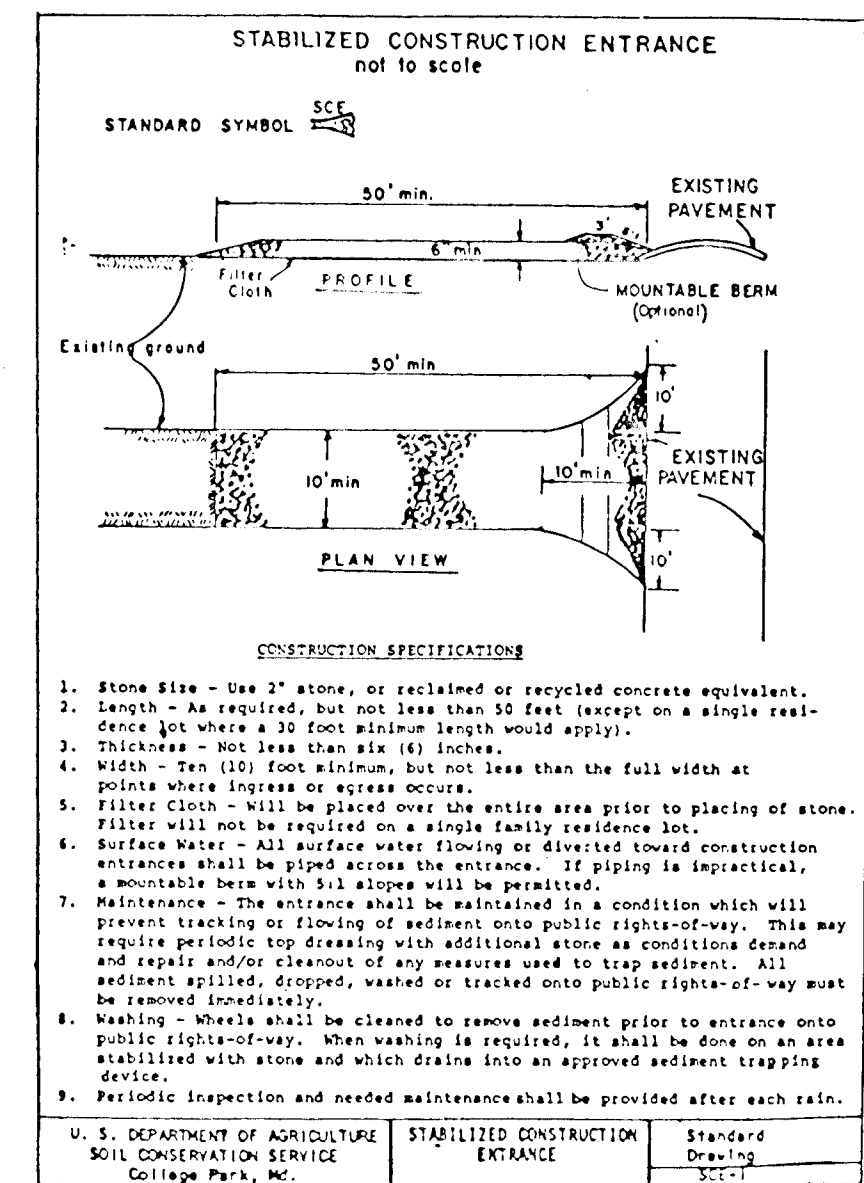
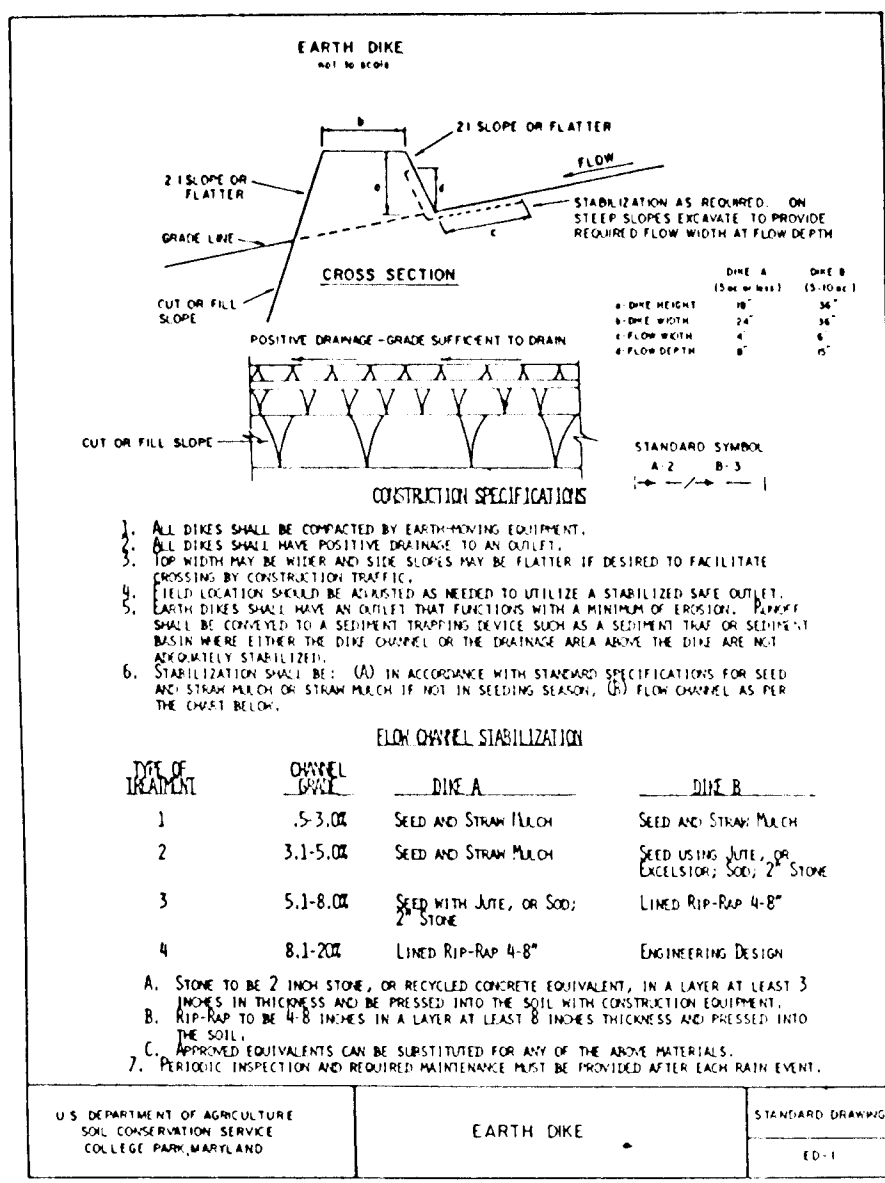
LAND DESIGN ENGINEERING, INC.

8835 Columbia 100 Parkway, Unit N, Columbia, MD 21045
(410) 715-1070 (Balt.) (301) 596-3424 (Wash.) (410) 715-0681 (Fax)

DESIGNED TO/GLES	GRADING & SEDIMENT AND EROSION CONTROL PLAN	SCALE 1" = 50'
DRAWN WJ/BAJ/SL	LYNDWOOD MANOR SECTION TWO	DRAWING 10 of 16
CHECKED RM	Tax Map 37 Part of Parcels 043, 38, 040 1st Election District Howard County, MD 5-03-02 P.03-11 F-04-20	DATE No. 92-116-5
DATE 12/94	100 INVESTMENT LIMITED PARTNERSHIP 8830 Columbia 100 Parkway Columbia, Maryland 21045 (410) 200-0910	FILE No. F94-04

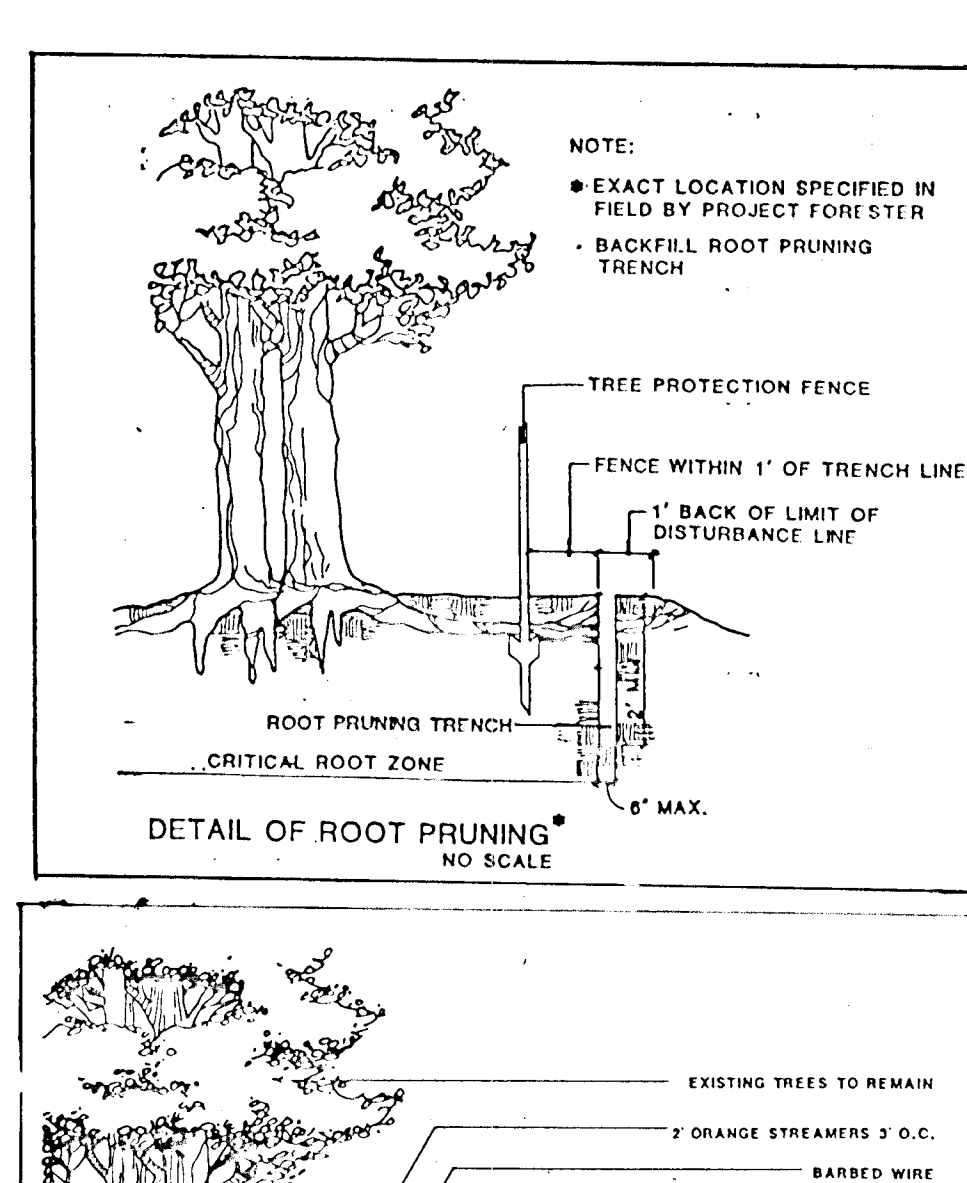
F-94-94

1708



TREE PROTECTION NOTES

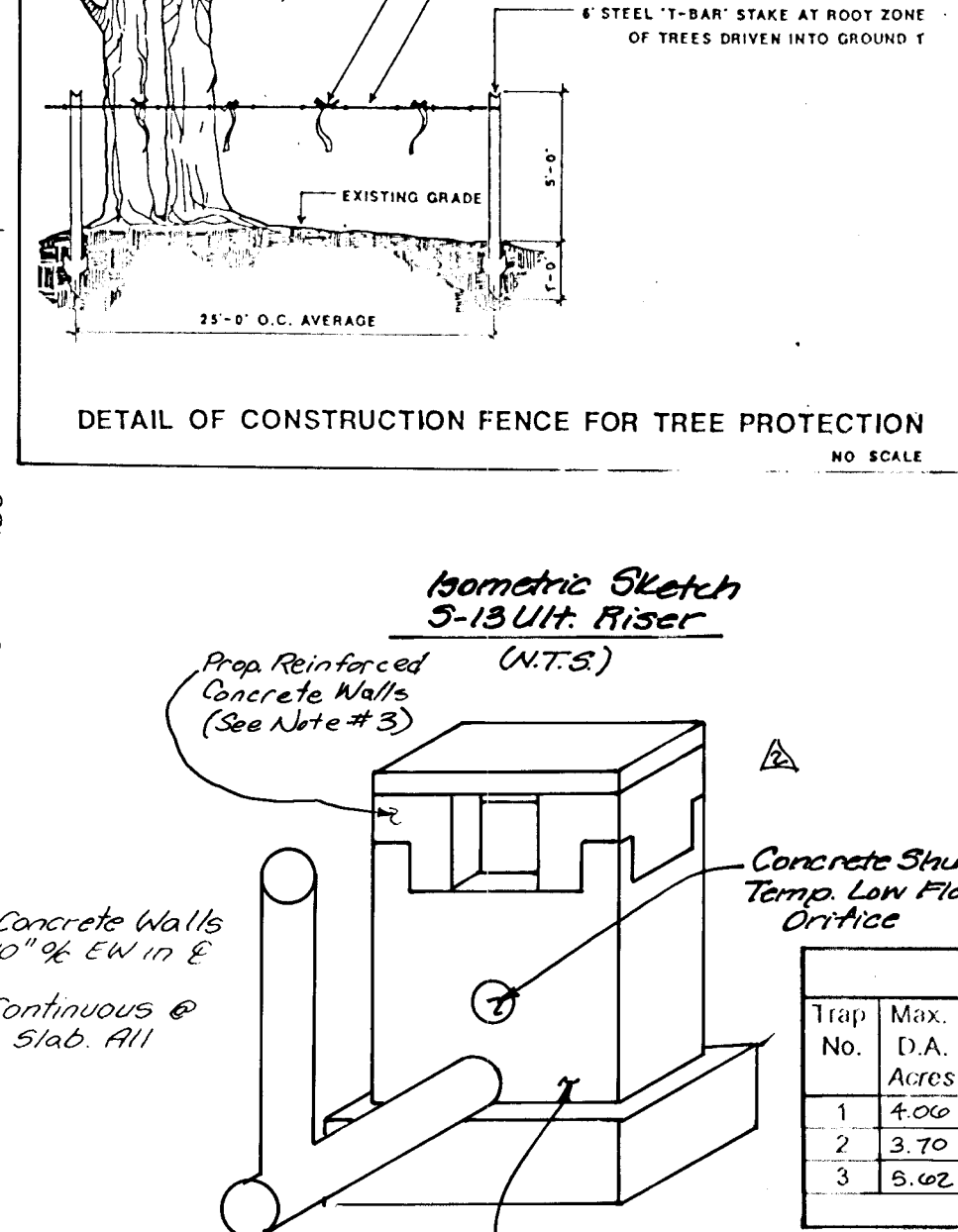
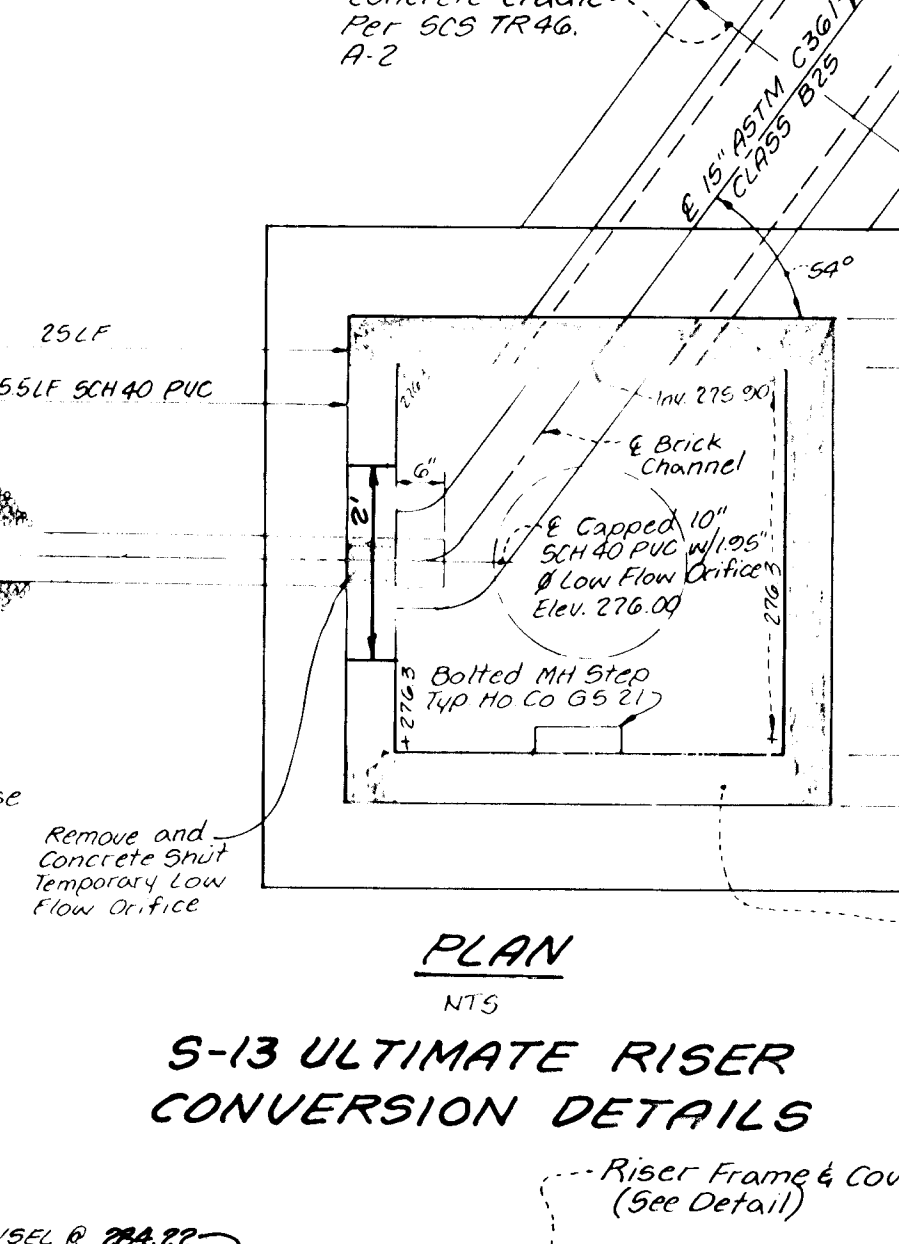
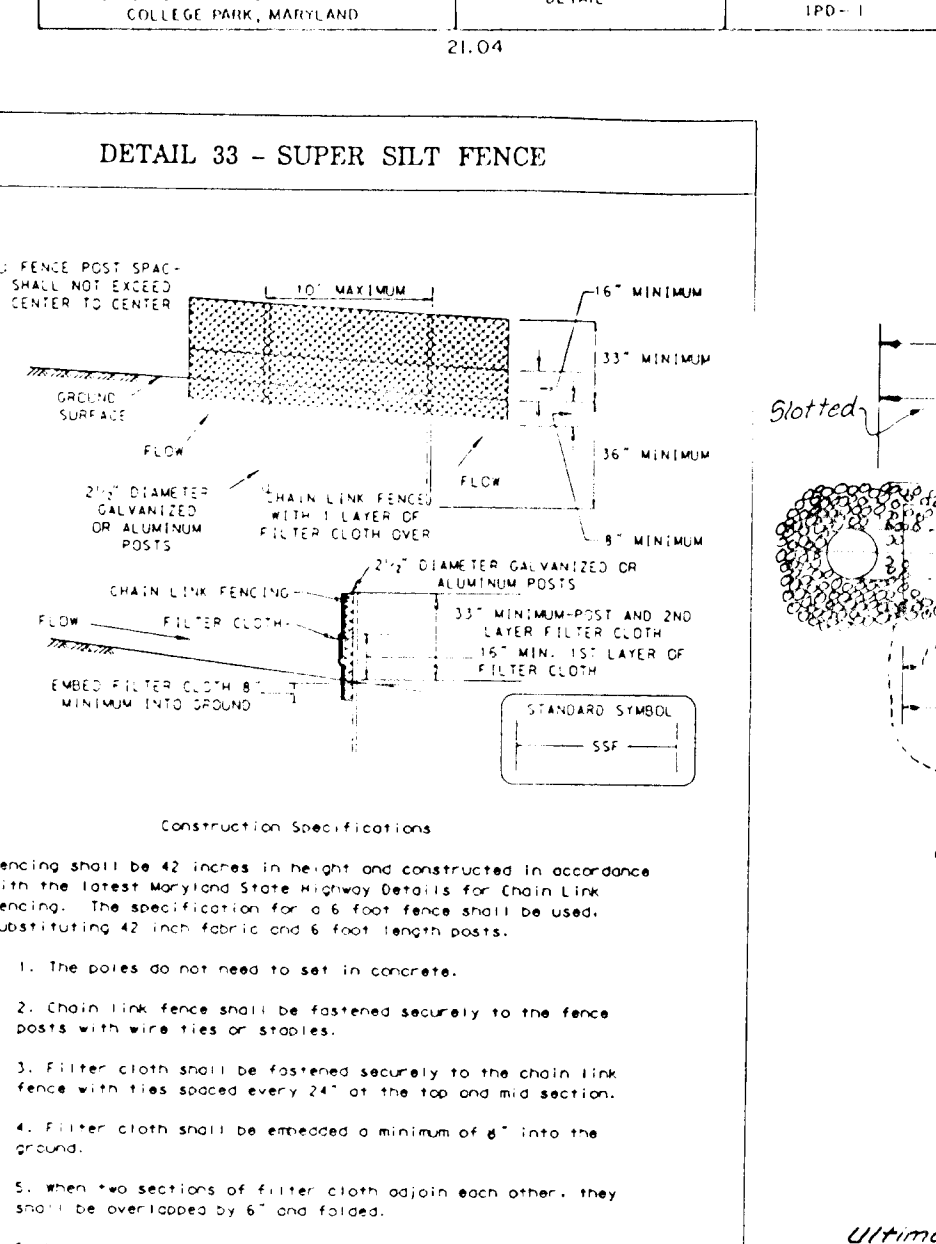
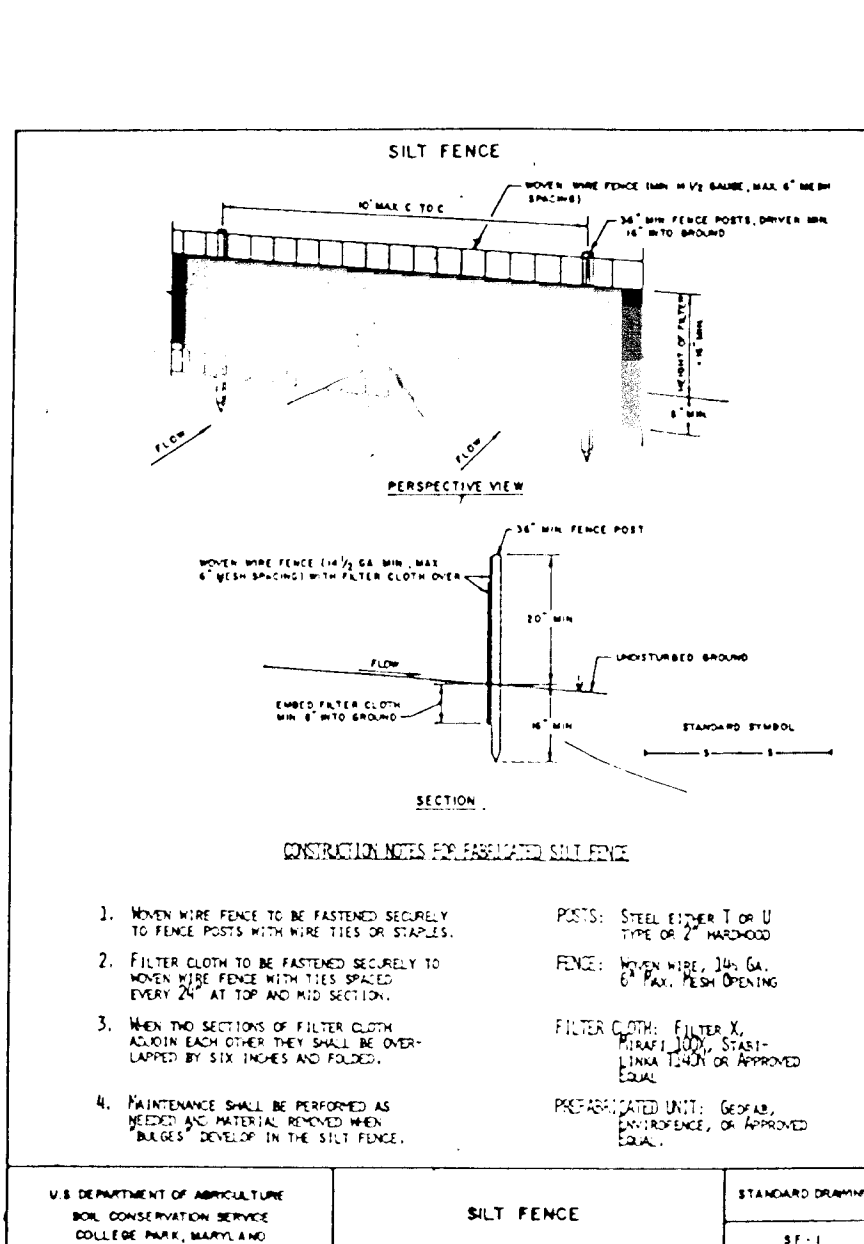
- PRE-CONSTRUCTION MEETING TO INCLUDE EDUCATIONAL SLIDE PRESENTATION ON TREE PROTECTION MEASURES TO BE EMPLOYED.
- LOCATION OF MATERIALS STORAGE, EQUIPMENT ACCESS, STOCKPILING, CONSTRUCTION PARKING AND CONCRETE WASHOUTS TO BE DESIGNATED ON A CONSTRUCTION STRATEGY PLAN FOR TREE PROTECTION PRIOR TO START UP.
- CLEARING LIMITS ARE TO BE FIELD ADJUSTED BY THE PROJECT FORESTER FOR TREE PRESERVATION PRIOR TO ANY SITE WORK.
- NO SITE PREPARATION WORK SHALL BEGIN IN AREAS WHERE TREE TREATMENT AND PRESERVATION MEASURES HAVE NOT BEEN COMPLETED AND APPROVED.
- THE SEQUENCE OF TREE TREATMENT AND PRESERVATION MEASURES SHALL BE:
 - STAKE OUT OF LIMITS OF DISTURBANCE
 - SELECTIVE PRUNING AND CHEMICAL TREATMENT OF SIGNIFICANT TREES TO BE AFFECTED BY CONSTRUCTION
 - ROOT PRUNING
 - TREE PROTECTION FENCING
 - TREE PROTECTION SIGNAGE INSTALLATION
 - COMMENCEMENT OF CLEARING OPERATION
- TREE PROTECTION FENCING SHALL BE MAINTAINED AND REPAIRED BY THE CONTRACTOR DURING CONSTRUCTION.



- CONSTRUCTION SEQUENCE**
- Obtain Grading Permit 1 day
 - Install stabilized construction entrance. Stakeout limits of disturbance. 3 days
 - Walk limits of disturbance with project forester and adjust limits as required. see Sheet 11 of 16 for tree protection notes. 1 day
 - Install tree protection fence and begin root pruning. 1 week
 - Phase 1 2 weeks
 - Install super silt fence where shown hereon or as directed by Sediment Control Inspector
 - Construct sediment trap #3 and diversion dikes.
 - Complete Phase 1 grading upon permission of Sediment Control Inspector.
 - Install utilities and the temporary diversion pipes where shown hereon. Back-shut opening to M1-B.
 - Repair areas disturbed by utility installation and stabilize with permanent seeding mixture and straw mulch.
 - Phase 2 2 weeks
 - Install silt fence where shown hereon or as directed by Sediment Control Inspector.
 - Construct sediment trap #1 and #2 as well as the diversion dikes and basins #4.
 - Grade site upon permission of Sediment Control Inspector.
 - Install utilities and temporary pipes which empty into sediment traps #1 and #2. Back-shut openings and provide inlet protection where shown hereon.
 - Repair diversion dikes damaged by utility installation and stabilize with permanent seeding mixture and straw mulch.
 - Sediment shall be removed from sediment traps when the ground elevation has been reached. 1 day
 - The contractor shall inspect and provide necessary maintenance on the sediment and erosion control structures shown hereon after each rainfall and on a daily basis. 1 day
 - The sediment traps shall be dewatered by pumping. The accumulated sediment from the traps shall be placed up grade from the traps in such a manner as not to interfere with construction operations or cause erosion down grade from the traps. 1 day
 - Install curb and gutter and paving. 2 weeks
 - Complete any grading and stabilize disturbed areas with permanent seeding mixture and straw mulch. 1 week
 - After all upgrade areas from the storm water management facilities have been stabilized and permission has been given by the Sediment Control Inspector, flush the storm drain system into sediment traps. 1 day
 - After permission has been given by Sediment Control Inspector, begin conversion of sediment basin to permanent stormwater management pond. 1 week
 - Convert riser to permanent specification by removing per detail this sheet. (1 Week)
 - Remove temporary pipes and brick shut temporary openings. 1 week
 - After permission has been given by Sediment Control Inspector, backfill all traps, remove silt fence and stabilize disturbed areas with permanent seeding mixture and straw mulch. 1 week

HOWARD SOIL CONSERVATION DISTRICT
STANDARD ADJUSTMENT CONTROL NOTES

- A minimum of 48 hours notice must be given to the Howard County Department of Inspection, Licensing and Permits, Sediment Control Division prior to the start of any construction. (S-13-855)
- All vegetation and structural practices are to be limited according to the provisions of this plan and are to be in accordance with the most current "NATIONAL STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" and revision thereon.
- Following initial soil disturbance or reconstruction, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes not all slopes greater than 3:1; b) 14 days for 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 structural areas must be stabilized within the time period specified above in accordance with the 1993 HANDBOOK STANDARD AND SPECIFICATIONS FOR SILT FENCE AND SILT TRAP CONSTRUCTION FOR PERMANENT SEEDING (Sec. 511), and (Sec. 541), temporary seeding (Sec. 540 and 541) and (Sec. 542). Temporary stabilization shall be in place until the permanent stabilization has been completed. Seeding shall not be allowed until the initial approval of the inspection agency is made.
- 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: 13.124 Acres
 - Area Disturbed: 10.00 Acres
 - Area to be seeded or paved: 10.00 Acres
 - Area to be vegetatively stabilized: 7.00 Acres
 - Total C.U.: 13.124 C.U.
 - Definite water/borrow area location: 0
- 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.
- All sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. After building or grading inspection agencies may not be authorized until this initial approval by the inspection agency is made.
- Timber for the construction of utilities is limited to three pipe lengths or that which can be back-filled and stabilized within one working day, whichever is shorter.



Sediment Trap Schedule

Trap No.	Max. D.A. Acres	Stor. Req'd #3	Stor. Prov. #3	Stor. Elev.	Wear Depth ft.	Bottom Elev.	Clean. Elev.	Grid Elev.	Top Elev.	Trap Size	Type
1	4.00	7306	9893	293	3	10	290	291.5	293	200	SEE PLAN
2	3.10	7306	7738	296	2	10	296	297.0	298	300	See Plan
3	5.02	10116	10590	313	3	10	308	311.0	313	1:14	See Plan

HOWARD SOIL CONSERVATION DISTRICT
TEMPORARY SEEDING NOTES

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

Soil 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:

- 1) Fertilizer - Apply 2 tons per acre of annual fertilizer (14 lb/1000 sq. ft.) and 400 lb per acre of 10-10-10 fertilizer (14 lb/1000 sq. ft.) before seeding. Harvest on site after three inches of soil. At time of seeding, apply 400 lb per acre of 10-10-10 fertilizer (14 lb/1000 sq. ft.).
- 2) Ammonia - Apply 2 tons per acre of annual fertilizer (14 lb/1000 sq. ft.) and 1000 lb per acre of 10-10-10 fertilizer (14 lb/1000 sq. ft.) before seeding. Harvest on site after three inches of soil.

Seeding - For the period March 1 thru April 30, and August 1 thru October 15, seed with 4 lb per acre (4 lb/1000 sq. ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 3 lb per acre of Kentucky 31 Tall Fescue per acre and 2 lb per acre of 10-10-10 fertilizer (14 lb/1000 sq. ft.) before seeding. During the period of October 16 thru February 28, protect site by applying 2 tons per acre of well aerated straw mulch and seed as soon as possible in the spring (2) - Use seed: (Sec. 511) - Seed with 2 lb per acre of Kentucky 31 Tall Fescue and mulch with 2 tons/acre well aerated straw.

Planting - Apply 1-1/2 to 2 tons per acre (10 to 20 lb/1000 sq. ft.) of universal small grain straw immediately after seeding. After mulch immediately after application using heavy mulching tool or 200 gallon per acre (5 gal/1000 sq. ft.) of mulched organic on the areas. On slopes 8 ft. or higher, use 300 gallon per acre (6 gal/1000 sq. ft.) for watering.

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

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

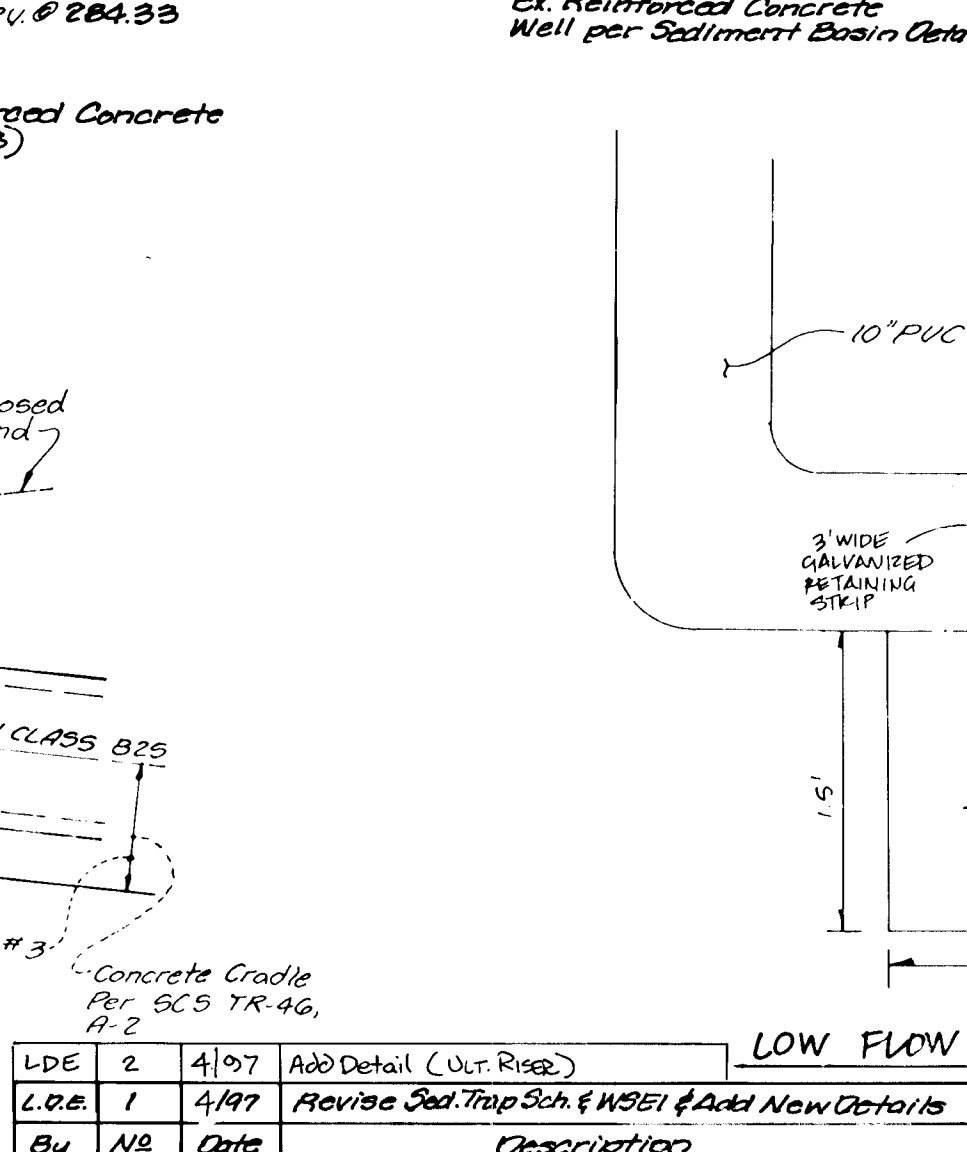
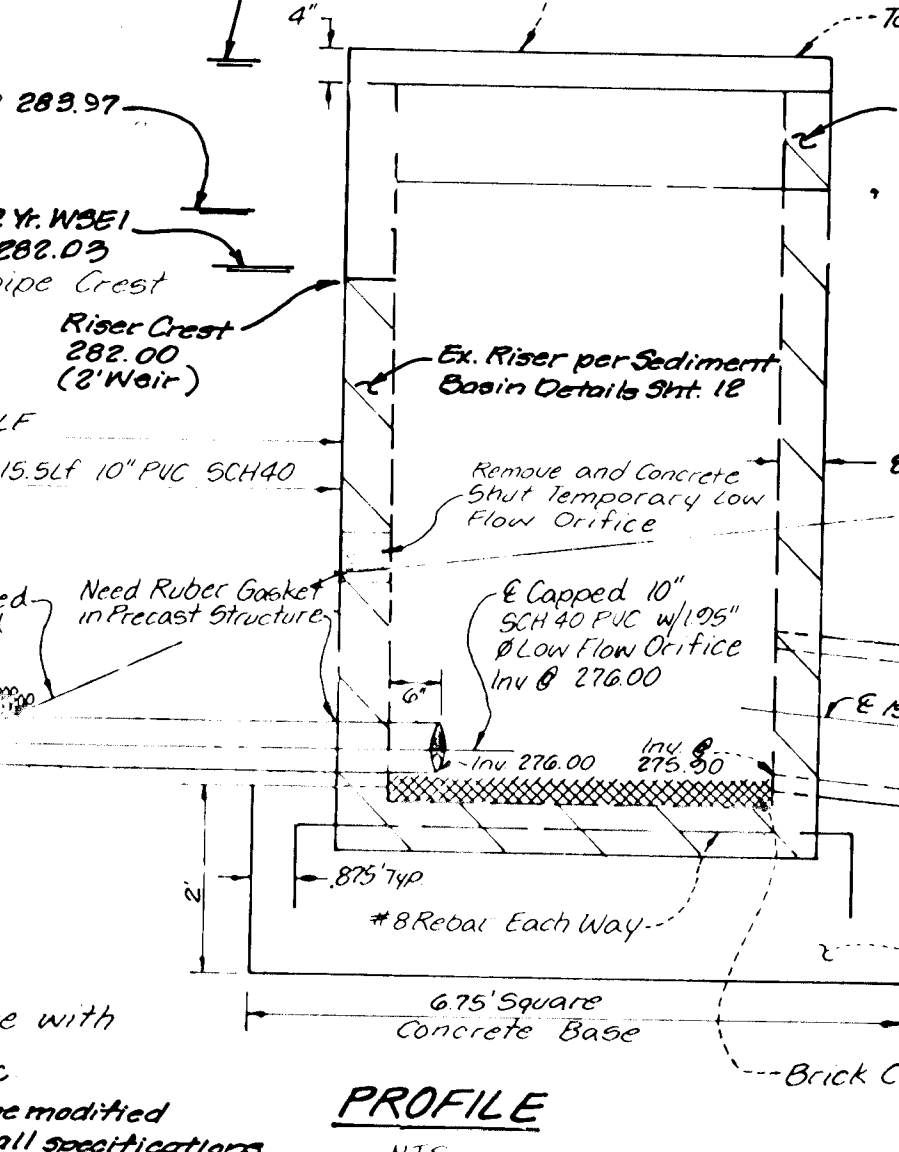
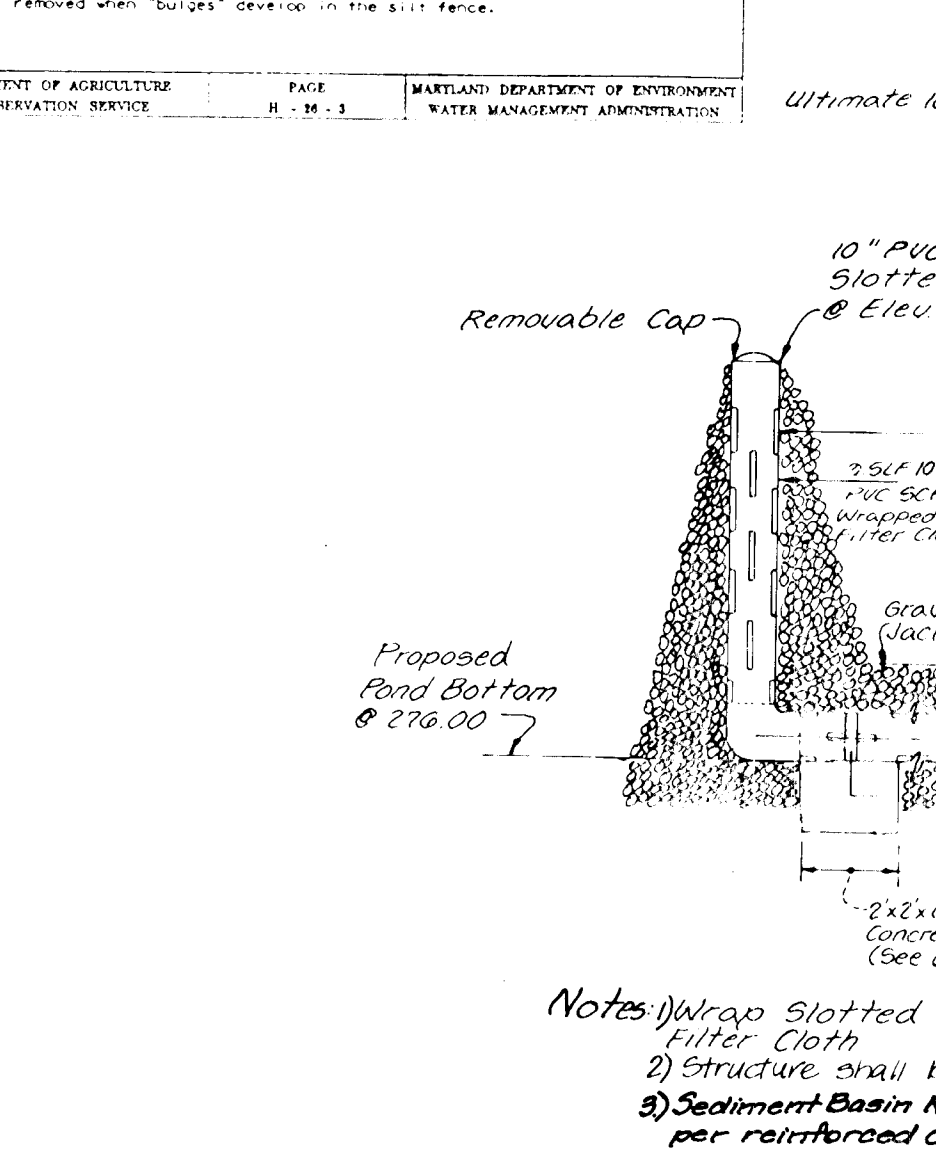
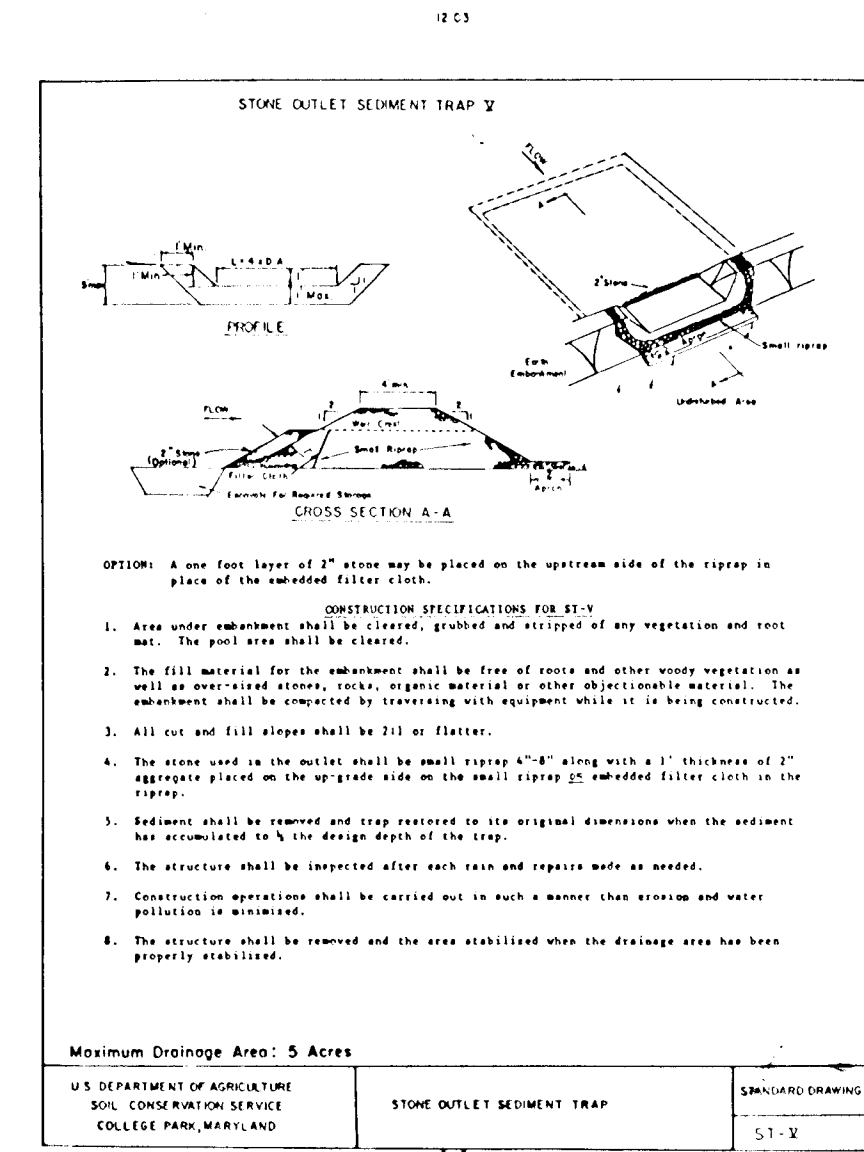
Soil Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

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

Seeding - For the period March 1 thru April 30 and from August 15 thru October 15, seed with 2-1/2 lb/acre per acre of annual ryegrass (12 lb/1000 sq. ft.). For the period May 1 thru August 14, seed with 3 lb per acre of annual ryegrass (12 lb/1000 sq. ft.). For the period February 29 thru February 28, protect site by applying 2 tons per acre of well aerated straw mulch and seed as soon as possible in the spring, or use seed.

Planting - Apply 1-1/2 to 2 tons per acre (10 to 20 lb/1000 sq. ft.) of universal small grain straw immediately after seeding. After mulch immediately after application using heavy mulching tool or 200 gal per acre (5 gal/1000 sq. ft.) of mulched organic on the areas. On slopes 8 ft. or higher, use 300 gal per acre (6 gal/1000 sq. ft.) for watering.

Refer to the 1993 HANDBOOK STANDARD AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for additional rates and methods not covered.



LOW FLOW CONCRETE BASE DETAIL

NTS

3" WIDE GALVANIZED BASTARD BARS

10" PVC SCHED 40

10" PVC SCHED 40

5" MAX

MAX #3 CONCRETE

GALVANIZED ANCHOR BOLT

4" DIA

ENGINEER'S CERTIFICATE

I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my professional knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he/she must engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion.

BRUCE D. BURTON 5/16/95
Signature of Engineer Date

DEVELOPER'S CERTIFICATE

I/We certify that all developments and/or construction will be done according to these plans, and that any responsible persons 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 shall engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District.

W.L.N. 2/18/94
Signature of Developer Date

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for Small Stream Construction, Soil Erosion and Sediment Control.

Patricia Eny 6/5/95
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. Ziehm 5/23/95
Howard Soil Conservation District Date

APPROVED: Department of Planning and Zoning

Chad Dawson 6/1/95
Chief of Planning and Zoning

Paul J. Sapon 6/1/95
Chief of Bureau of Highways Date

Andrew M. Daniels 5-22-95
Chief of Bureau of Highways Date

APPROVED: Department of Planning and Zoning

Paul D. Burton 5/16/95
Chief of Bureau of Highways Date

LAND DESIGN ENGINEERING, INC.

8835 Columbia 100 Parkway, Unit N, Columbia, MD 21045
(410) 715-1070 (Balt.) (301) 596-3424 (Wash.) (410) 715-0681 (Fax)

DESIGNED BY: EDS/GL
DRAWN BY: WJ/GL
CHECKED BY: RM
DATE: 12/94

GRAVING, SEDIMENT AND EROSION CONTROL DETAILS
Ultimate Riser Conversion Details

LYNDWOOD MANOR SECTION TWO

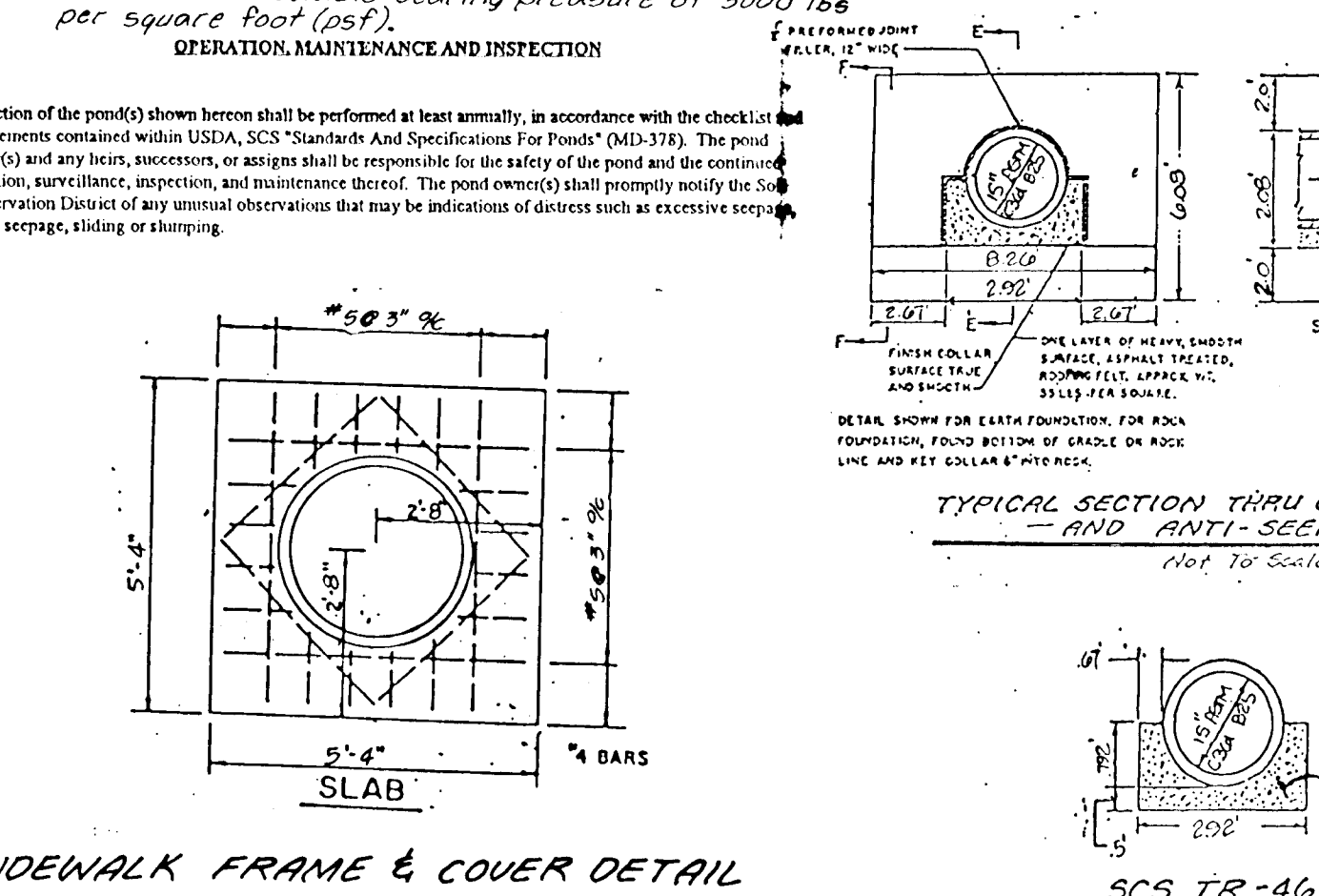
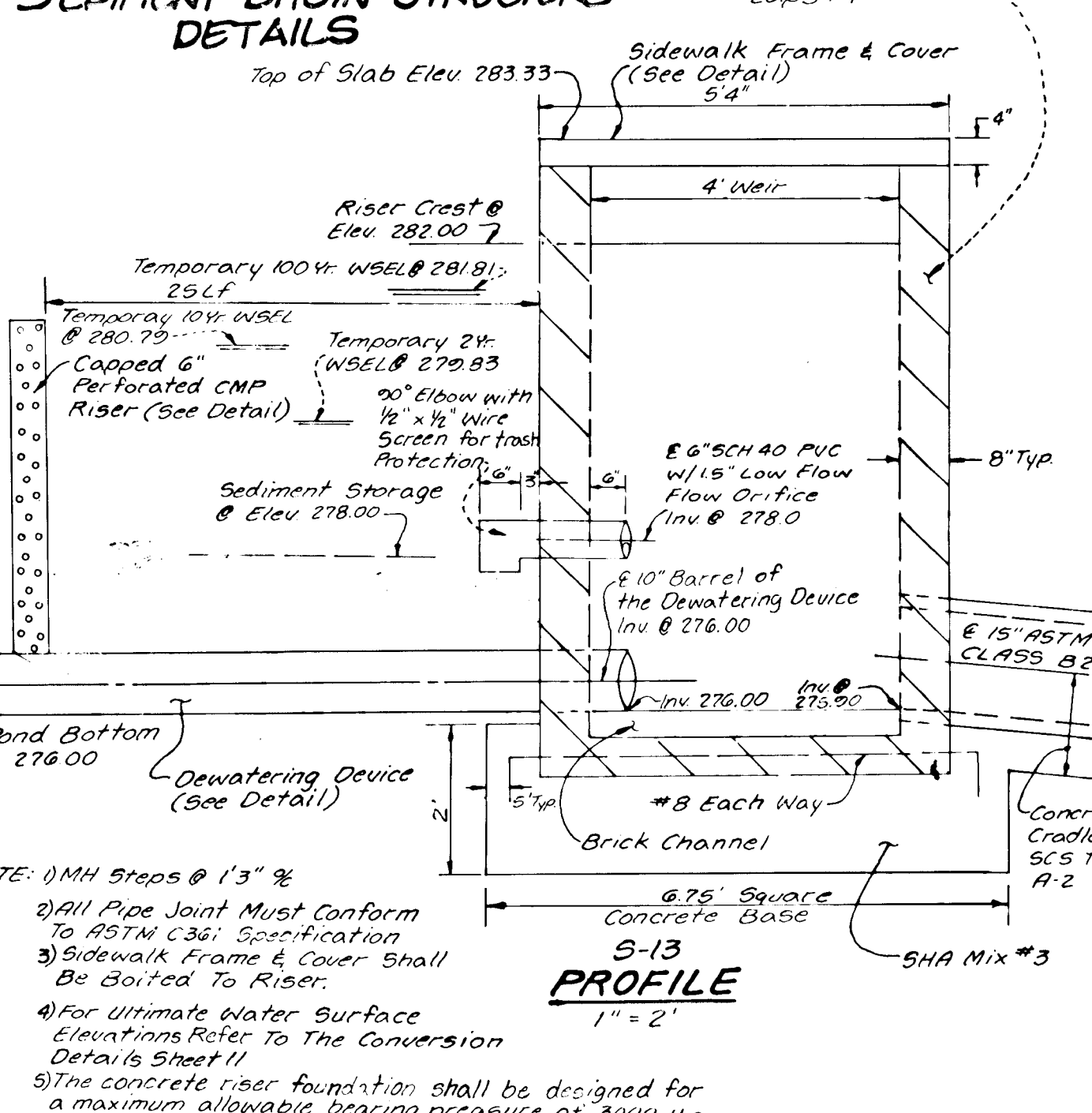
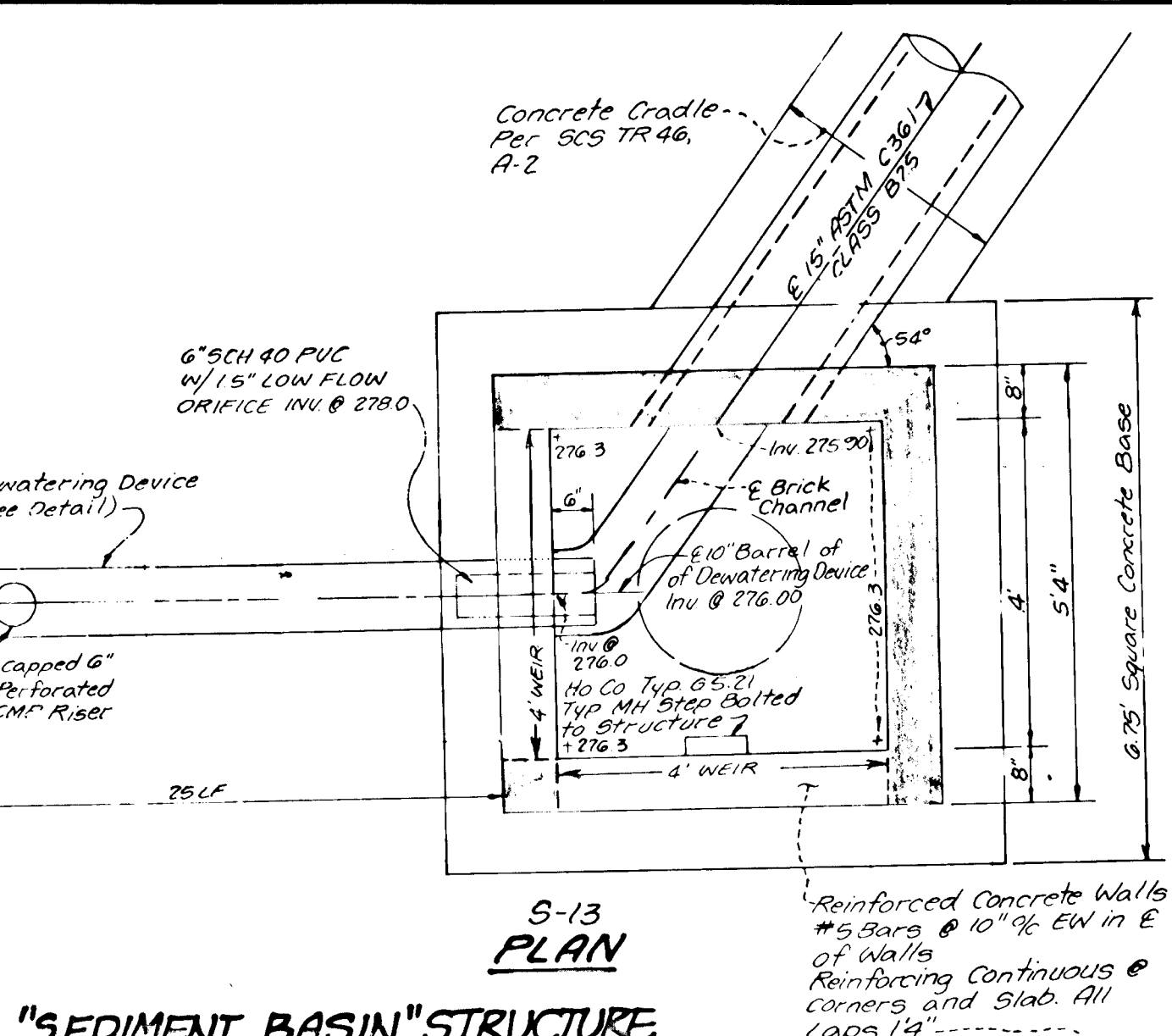
Tax Map 37 Part of Parcels 043, 38, 040
1st Election District Howard County, MD
S-93-02 P-93-11 F-94-20

SCALE: NONE
DRAWING: 11 of 16
SHEET NO: 92-116.5
FILE NO: P74-94

1708

SPECIFICATIONS

These specifications are applicable to all ponds... Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and... Areas to be offered by the contractor shall be... Material: The fill material shall be uniform approved... Backfill structure for pipes or structures shall be... Temporary Low Flow Detail... S-13 PLAN... 'SEDIMENT BASIN' STRUCTURE DETAILS... S-13 PROFILE... TRASH RACK DETAIL... TYPICAL SECTION THRU CULVERT, CRADLE AND ANTI-SEEP COLLAR... SIDEWALK FRAME & COVER DETAIL

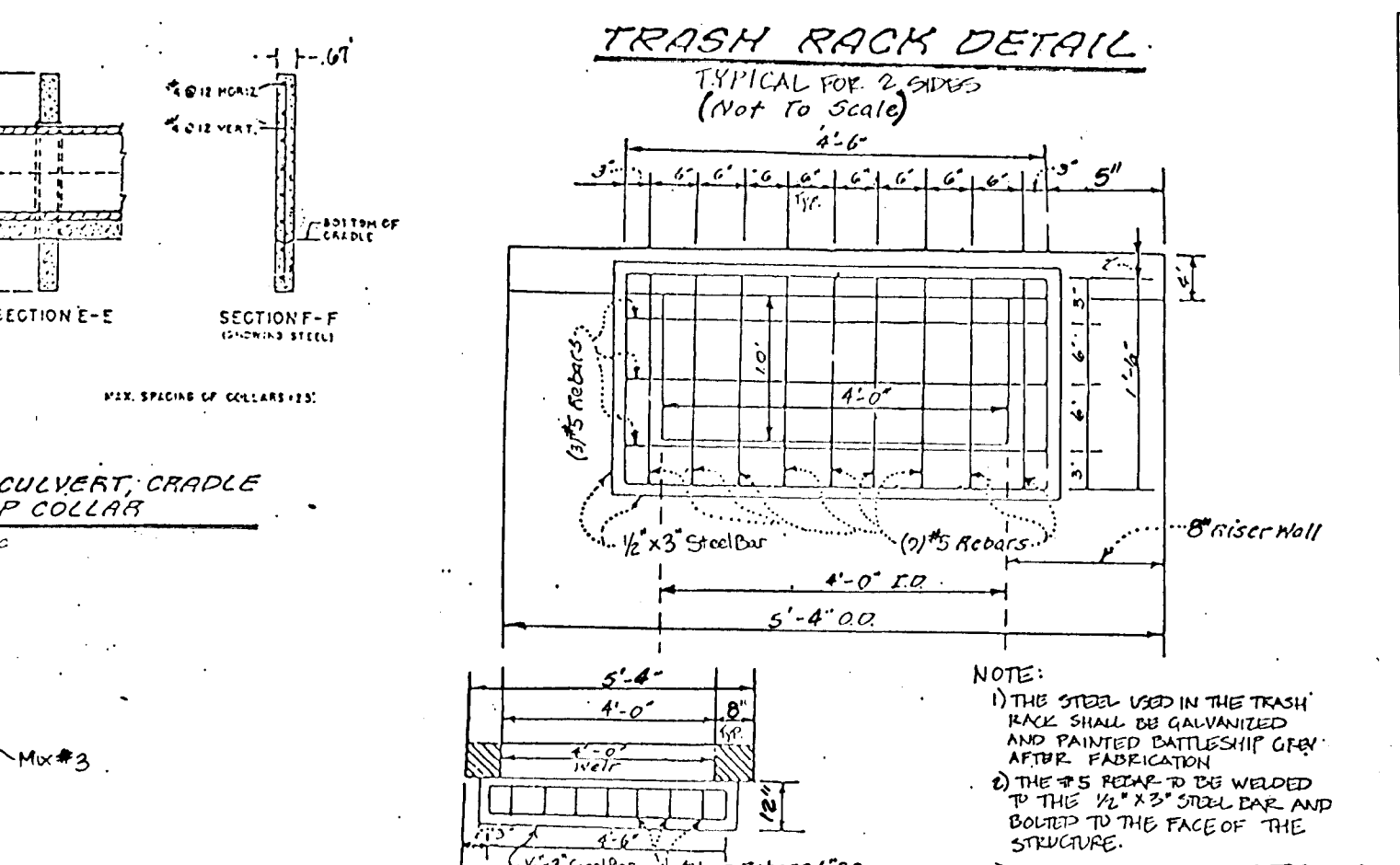
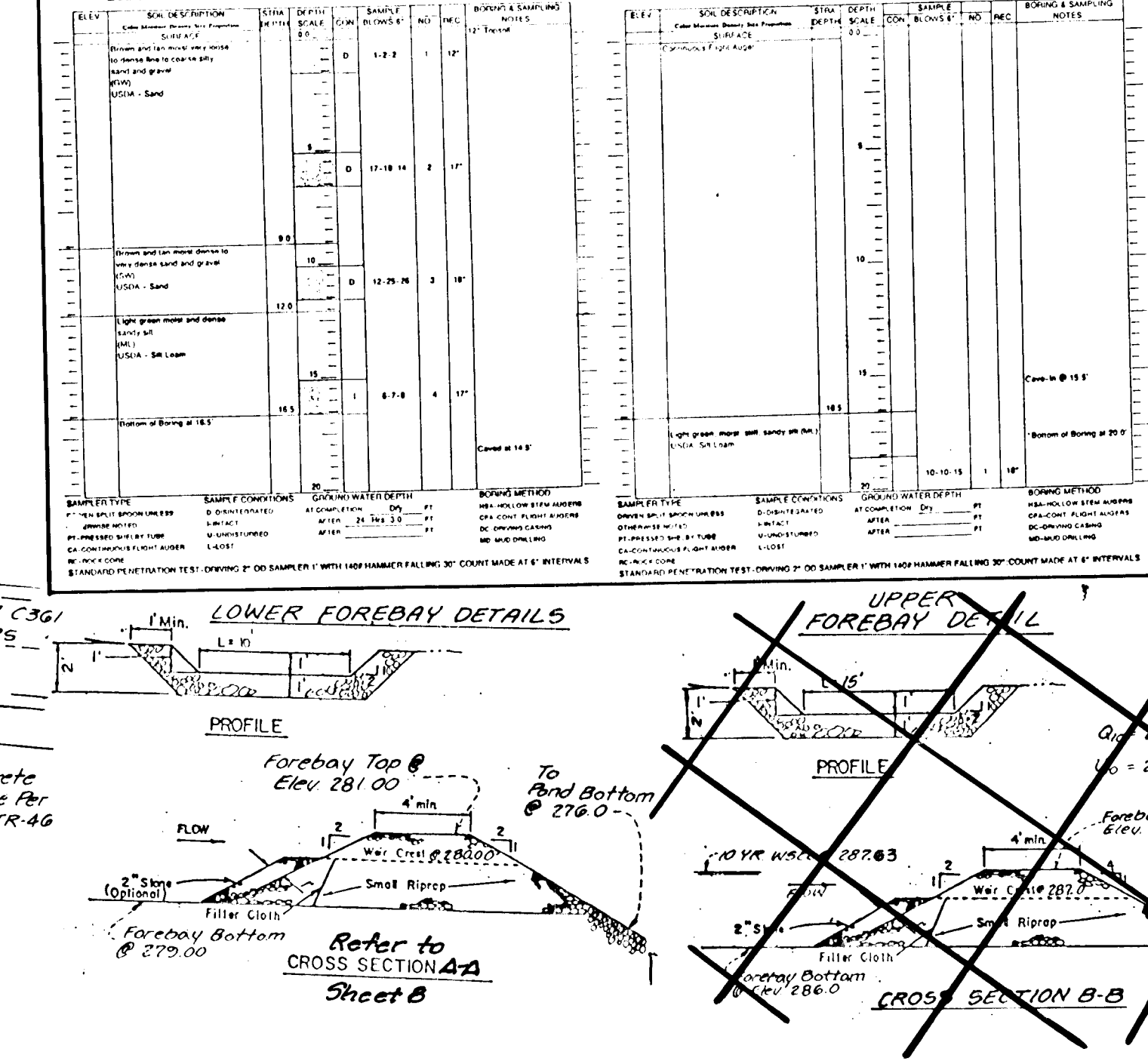
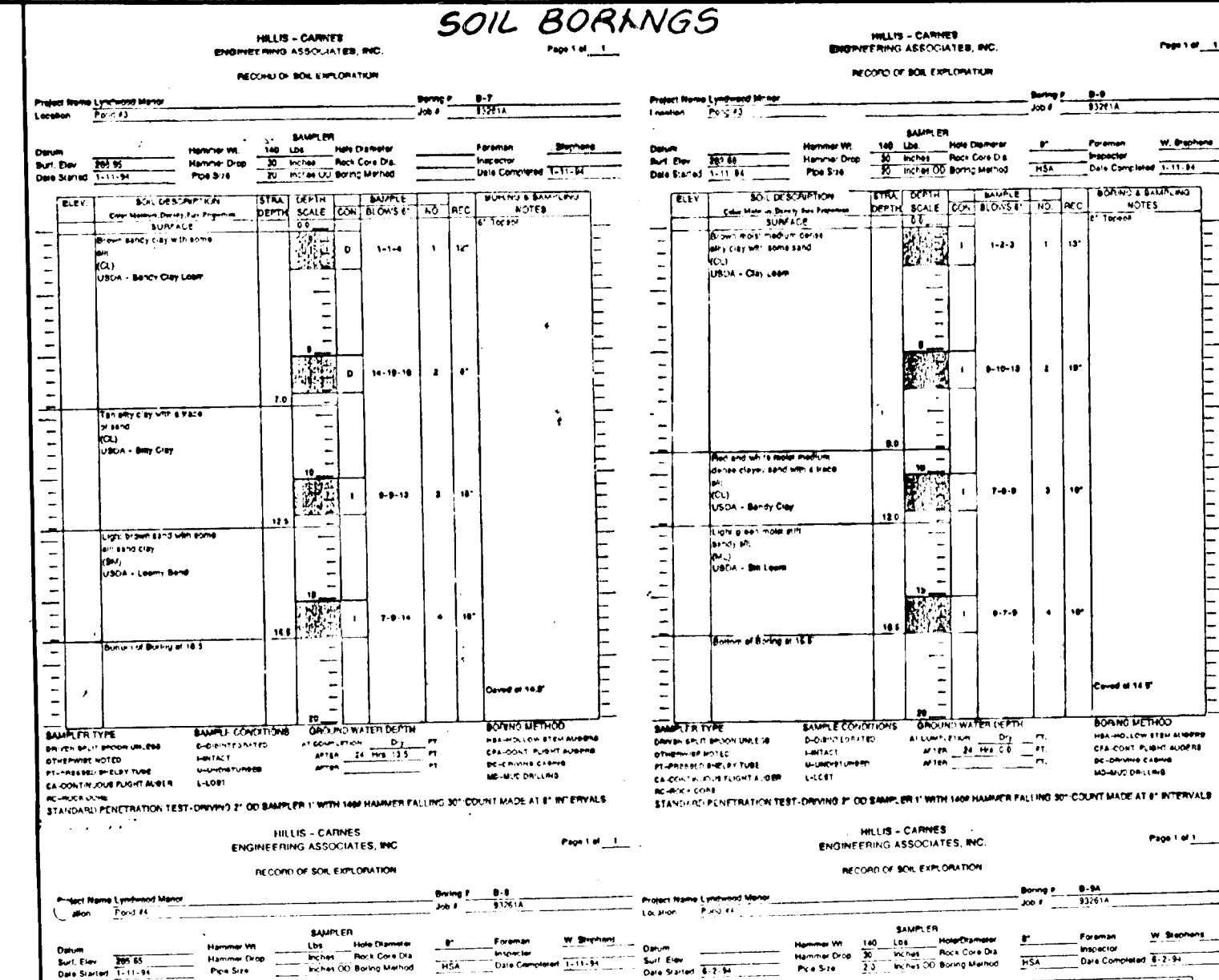


ENGINEER'S CERTIFICATE

I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions... **Bruce D. Burton** 5/16/95

DEVELOPER'S CERTIFICATE

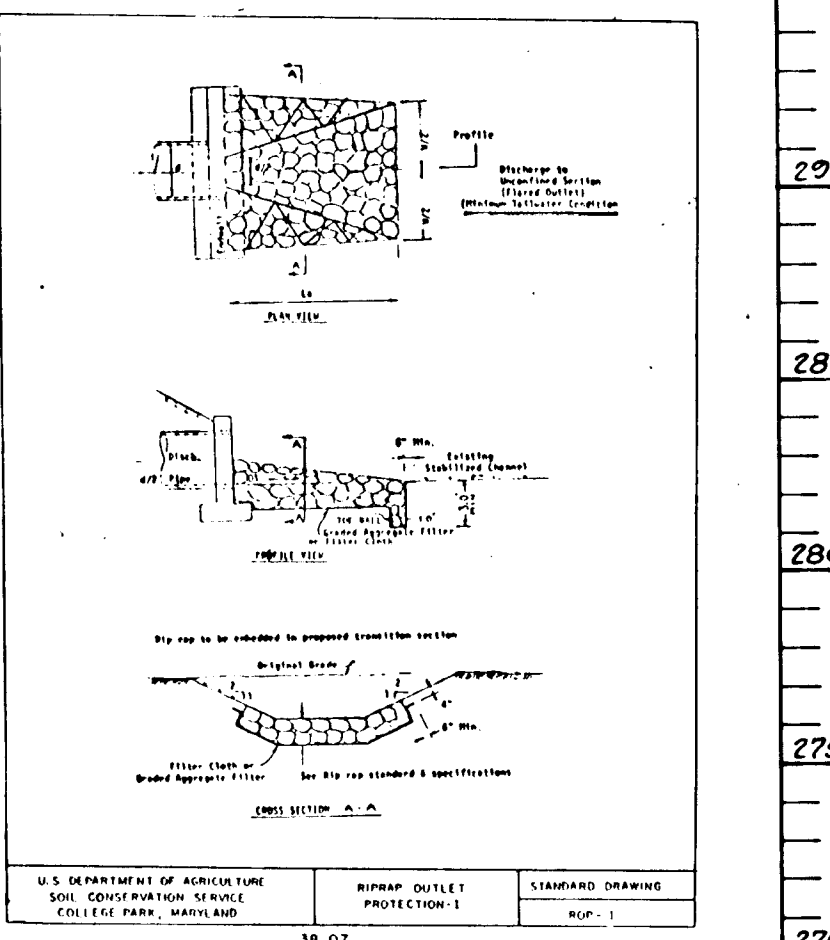
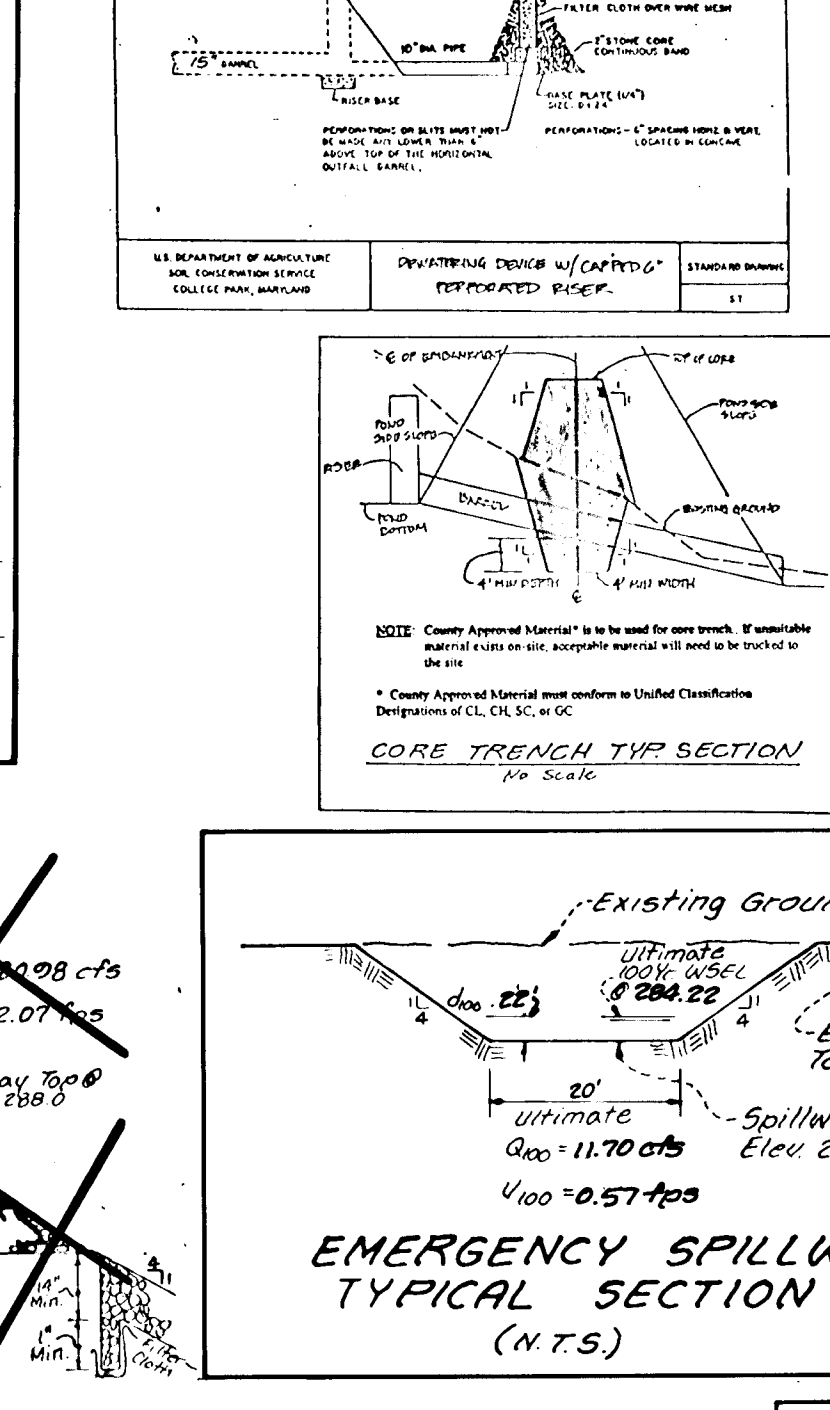
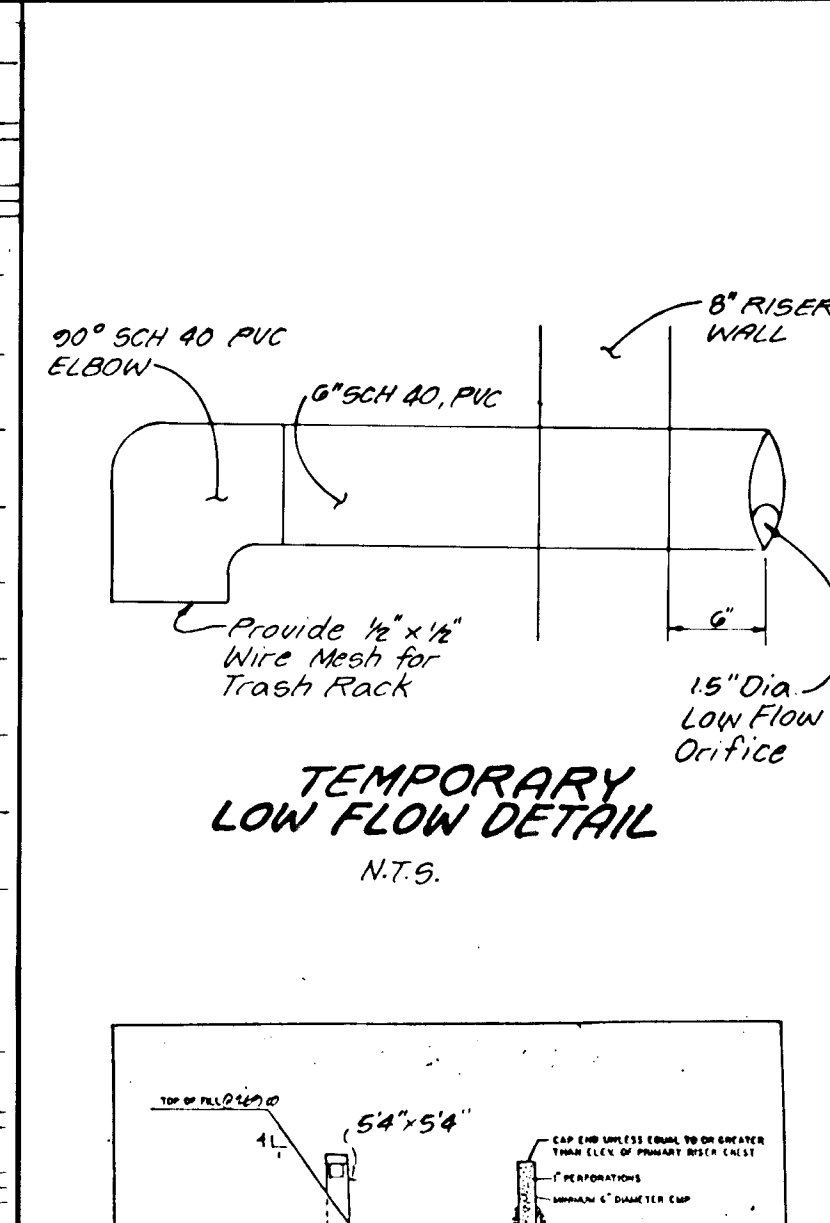
I certify that all developments and/or construction will be done according to these plans and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program... **W. J. [Signature]** 2/18/94



APPROVED: Department of Public Works for Storm Drainage Systems and Roads. **Chief, Land Development Division** 6/1/95

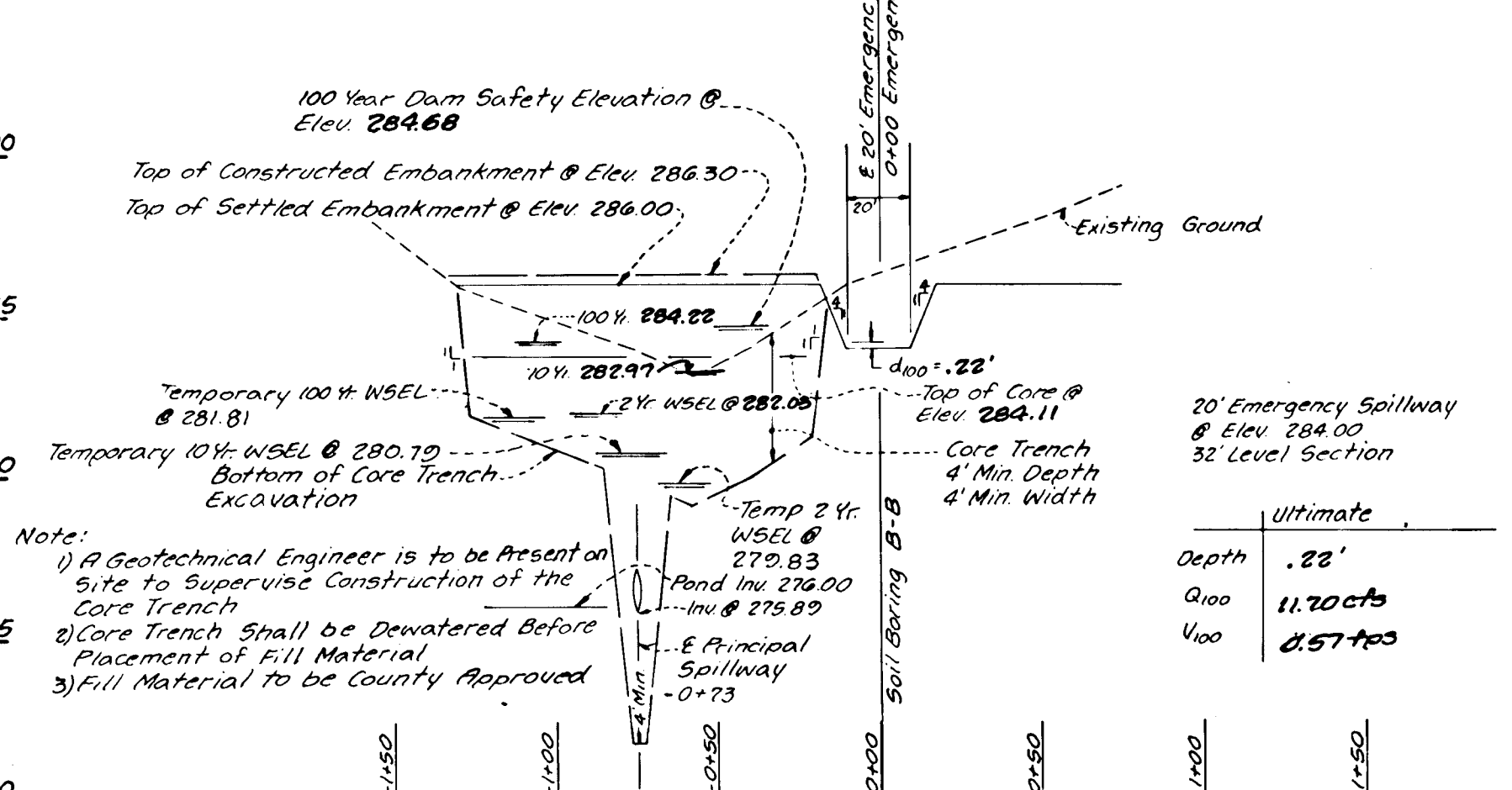
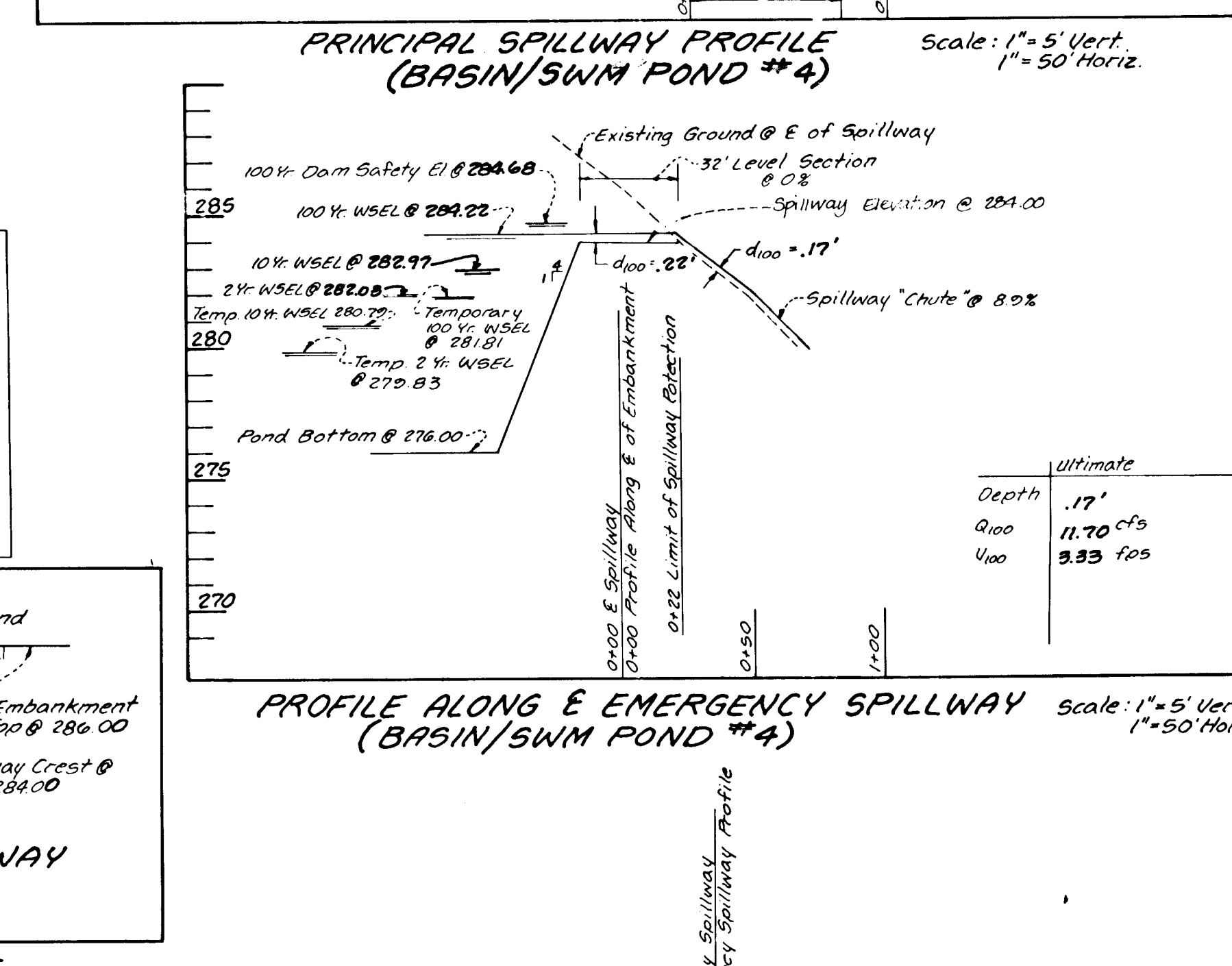
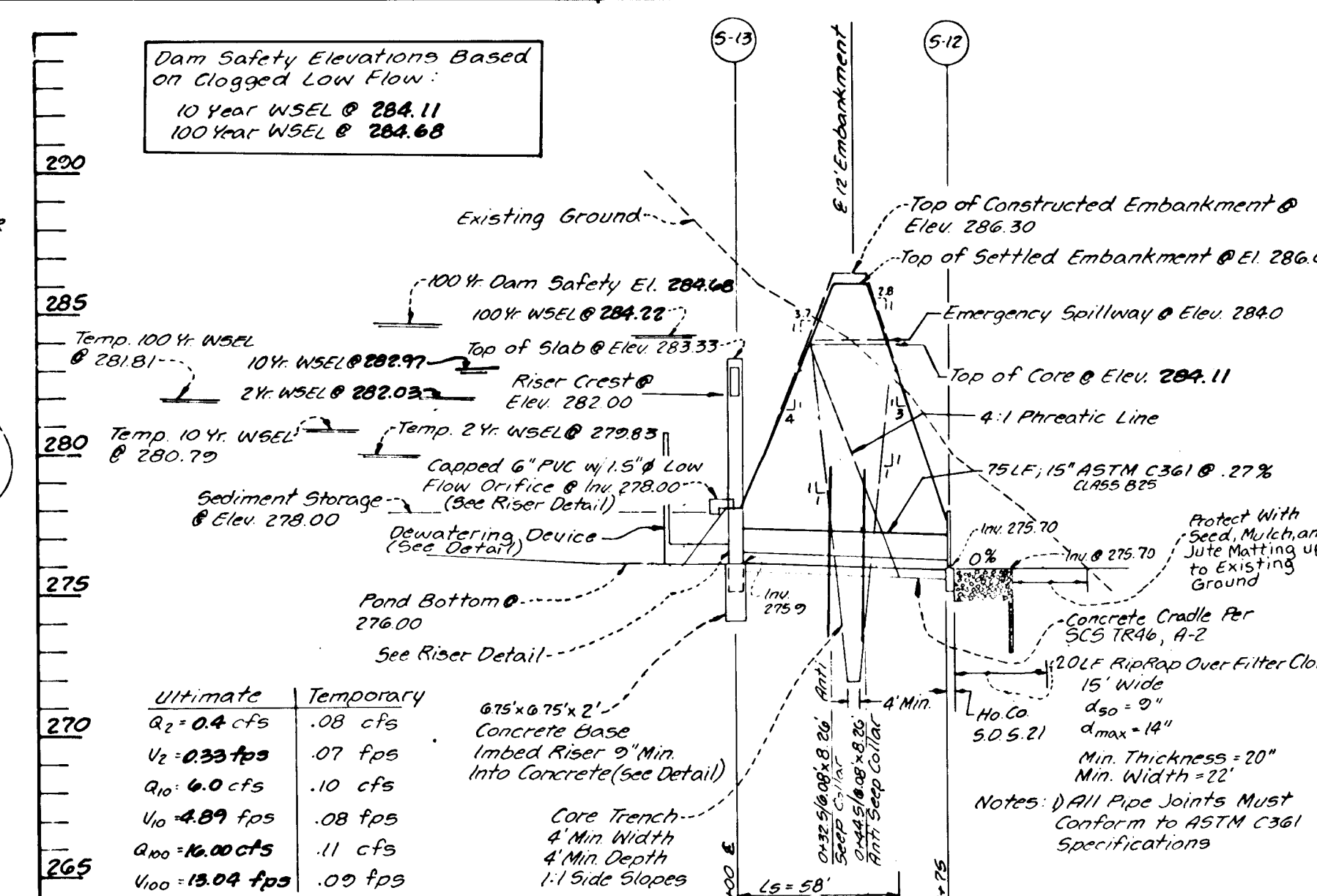
APPROVED: Department of Planning and Zoning. **Chief, Division of Land Development and Research** 4/5/95

APPROVED: Department of Highway Administration. **Chief, Bureau of Highways** 5-26-95



APPROVED: Department of Planning and Zoning. **Chief, Division of Land Development and Research** 4/5/95

APPROVED: Department of Highway Administration. **Chief, Bureau of Highways** 5-26-95



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DESIGNED: ES
DRAWN: WJ
CHECKED: RM
DATE: 12/94

STORMWATER MANAGEMENT DETAILS (Sediment Basin)

LYNDWOOD MANOR SECTION TWO

Tax Map 37 Part of Parcel's 643, 38, 640
1st Election District Howard County, MD.
5-23-02 P-93-11 E-24-29
OWNER / Developer
100 INVESTMENT LIMITED PARTNERSHIP
8835 P Columbia 100 Parkway
Columbia, Maryland 21045 (410) 730-0810

SCALE: AS SHOWN
DRAWING: 12 OF 10
JOB NO: 92-174-5
FILE NO: F94-94

1708

Bruce D. Burton 5/16/95
Signature of Engineer Date

W. J. [Signature] 2/18/94
Signature of Developer Date

Patricia Engle Jcs. 5/23/95
US Soil Conservation Service Date

Robert Zichner 5/23/95
Howard Soil Conservation District Date

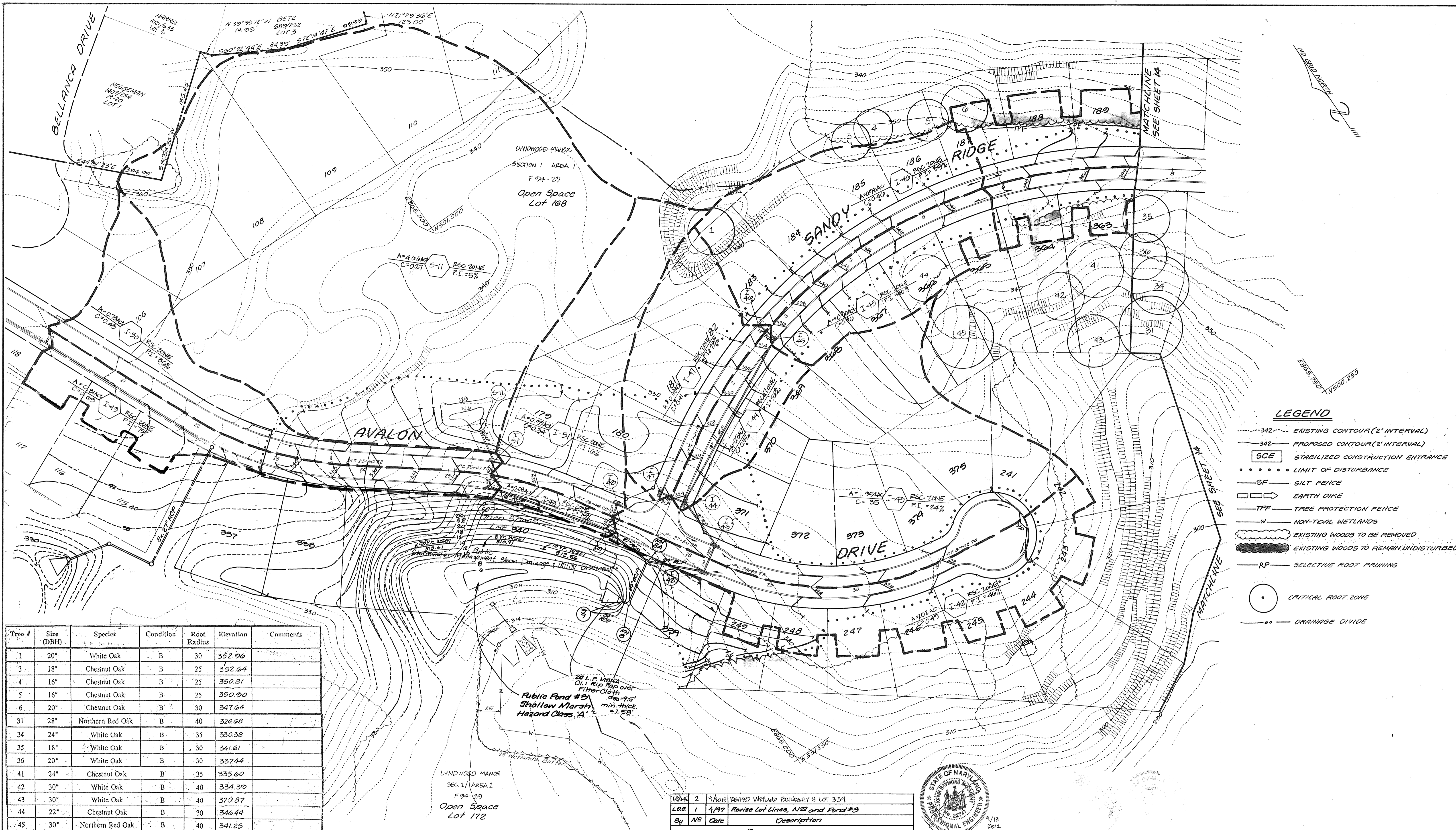
Andrew M. Demko 5-26-95
Chief, Bureau of Highways Date

Paul J. [Signature] 4/5/95
Chief, Division of Land Development and Research Date

Paul J. [Signature] 5/16/95
Professional Engineer Date

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LEGEND

- EXISTING CONTOUR (2' INTERVAL)
- - - PROPOSED CONTOUR (2' INTERVAL)
- [SCE] STABILIZED CONSTRUCTION ENTRANCE
- LIMIT OF DISTURBANCE
- SF SILT FENCE
- [EARTH DIKE] EARTH DIKE
- TPF TREE PROTECTION FENCE
- W NON-TIDAL WETLANDS
- [WOODS TO BE REMOVED] EXISTING WOODS TO BE REMOVED
- [WOODS TO REMAIN UNDISTURBED] EXISTING WOODS TO REMAIN UNDISTURBED
- RP SELECTIVE ROOT PRUNING
- [CIRCLE] CRITICAL ROOT ZONE
- DRAINAGE DIVIDE

Tree #	Size (DBH)	Species	Condition	Root Radius	Elevation	Comments
1	20"	White Oak	B	30	352.06	
3	18"	Chestnut Oak	B	25	352.64	
4	16"	Chestnut Oak	B	25	350.81	
5	16"	Chestnut Oak	B	25	350.90	
6	20"	Chestnut Oak	B	30	347.64	
31	28"	Northern Red Oak	B	40	324.68	
34	24"	White Oak	B	35	330.38	
35	18"	White Oak	B	30	341.61	
36	20"	White Oak	B	30	337.44	
41	24"	Chestnut Oak	B	35	335.60	
42	30"	White Oak	B	40	334.39	
43	30"	White Oak	B	40	320.87	
44	22"	Chestnut Oak	B	30	346.44	
45	30"	Northern Red Oak	B	40	341.25	

Rev#	Date	Description
2	9/10/18	REVISED WETLAND BOUNDARY @ LOT 339
1	4/97	Revise Lot Lines, N22 and Pond #3

ENGINEER'S CERTIFICATE

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.

BRUCE D. BURTON 5/16/95
Signature of Engineer Date

DEVELOPER'S CERTIFICATE

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.

W.F. Z 2/18/94
Signature of Developer Date

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.

Robert Ziehm 5/23/95
Howard Soil Conservation District Date

This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

APPROVED: Department of Public Works for Storm Drainage Systems and Roads

William Dammann 6/1/95
Chief, Land Development Division Date

Paul J. Ryan 6/1/95
Chief, Bureau of Engineering Date

APPROVED: Department of Planning and Zoning

M.S. J. Wyle 6/5/95
Chief, Division of Land Development and Research Date

BRUCE D. BURTON 5/16/95
Professional Engineer

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8835 Columbia 100 Parkway, Unit N, Columbia, MD 21045
(410) 715-1070 (Balto.) (301) 596-3424 (Wash.) (410) 715-0681 (Fax)

DESIGNED ES	DRAINAGE AREA MAP LYNDWOOD MANOR SECTION TWO Tax Map 37 Part of Parcels 643, 38, 640 1st Election District Howard County, MD. 5-93-02 P-93-11 E-94-20 Owner / Developer 100 INVESTMENT LIMITED PARTNERSHIP 8337 Columbia 100 Parkway Columbia, Maryland 21045 (410) 730-0810 F-94-94	SCALE 1"=50'
DRAWN GL		DRAWING 13 of 10
CHECKED RM		Job No. 92-170-5
DATE 12/94		FILE No. F94-94

1708

LEGEND

- 342 --- EXISTING CONTOUR (2' INTERVAL)
- - - 342 - - - PROPOSED CONTOUR (2' INTERVAL)
- [SCE] STABILIZED CONSTRUCTION ENTRANCE
- LIMIT OF DISTURBANCE
- SF - SILT FENCE
- [EARTH DIKE] EARTH DIKE
- [TPF] TREE PROTECTION FENCE
- [W] NON-TIDAL WETLANDS
- [WOODS] EXISTING WOODS TO BE REMOVED
- [WOODS] EXISTING WOODS TO REMAIN UNDISTURBED
- [R] SELECTIVE ROOT PRUNING
- [CIRCLE] CRITICAL ROOT ZONE
- [DRAINAGE DIVIDE] DRAINAGE DIVIDE
- [S.B.] STRAW BALE DIKE

LYNDWOOD MANOR
SECTION ONE AREA ONE
F-94-29, LOT 169

Tree #	Size (DBH)	Species	Condition	Root Radius	Elevation	Comments
7	20"	Beech	A	35	300.53	
8	16"	Chestnut Oak	B	25	303.36	
11	16/20"	Chestnut Oak	B	30	297.71	Double
12	20"	White Oak	B	30		
20	20"	Northern Red Oak	B	30	304.22	
22	18"	Chestnut Oak	B	30	308.40	
23	28"	Chestnut Oak	B	35	311.51	
24	28"	White Oak	A	35	311.62	
26	20"	Northern Red Oak	B	30	327.37	
27	24"	White Oak	B	35	327.97	
29	24"	White Oak	B	35	335.10	
30	18"	Beech	A	25	329.86	
31	28"	Northern Red Oak	B	40	324.68	
32	20"	White Oak	B	30	323.38	
33	16/26"	Northern Red Oak	B	35	323.58	Double
34	24"	White Oak	B	35	326.38	
35	18"	White Oak	B	30	341.61	
36	20"	White Oak	B	30	337.44	
41	24"	Chestnut Oak	B	35	335.60	
42	30"	White Oak	B	40	334.39	
43	30"	White Oak	B	40	320.87	

1708

ENGINEER'S CERTIFICATE

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.

Bruce D. Burton 5/16/95
Signature of Engineer

DEVELOPER'S CERTIFICATE

I 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 Approval 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.

W.F. Z 2/18/94
Signature of Developer

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.

Patricia Engr / as. 5/23/95
Howard Soil Conservation District

This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

Robert W. Ziehm 5/23/95
Howard Soil Conservation District

APPROVED Department of Public Works for Storm Drainage Systems and Roads

Chad Daneman 6/1/95
Chief, Storm Drainage

Paul J. Spon 6/1/95
Chief, Bureau of Engineering

Andrew M. Decker 5-26-95
Chief, Bureau of Highways

APPROVED Department of Planning and Zoning

Dr. J. L. Cayle 4/5/95
Chief, Division of Land Development and Research

Bruce D. Burton 5/16/95
Professional Engineer

LAND DESIGN ENGINEERING, INC.

8835 Columbia 100 Parkway, Unit N, Columbia, MD 21045
(410) 715-1070 (Balto.) (301) 596-3424 (Wash.) (410) 715-0681 (Fax)

DESIGNED 7/6/95	DRAINAGE AREA MAP	SHEET 14 of 16
DRAWN WJ/SJ/BL	LYNDWOOD MANOR	DRAWING 02-116-5
CHECKED RM	SECTION TWO	FILE NO F04-94
DATE 12/94	Tax Map 37 Part of Parcels 643, 39, 640 1st Election District Howard County, MD 5-93-02 F-93-11 F-94-29	
	100 INVESTMENT LIMITED PARTNERSHIP 8835 P. Columbia 100 Parkway Columbia, Maryland 21045 (410) 730-0810	

F-94-94

By	NE	Date	Description
		4/97	Revise Lot Lines, W/S, Revise Pond & add exit

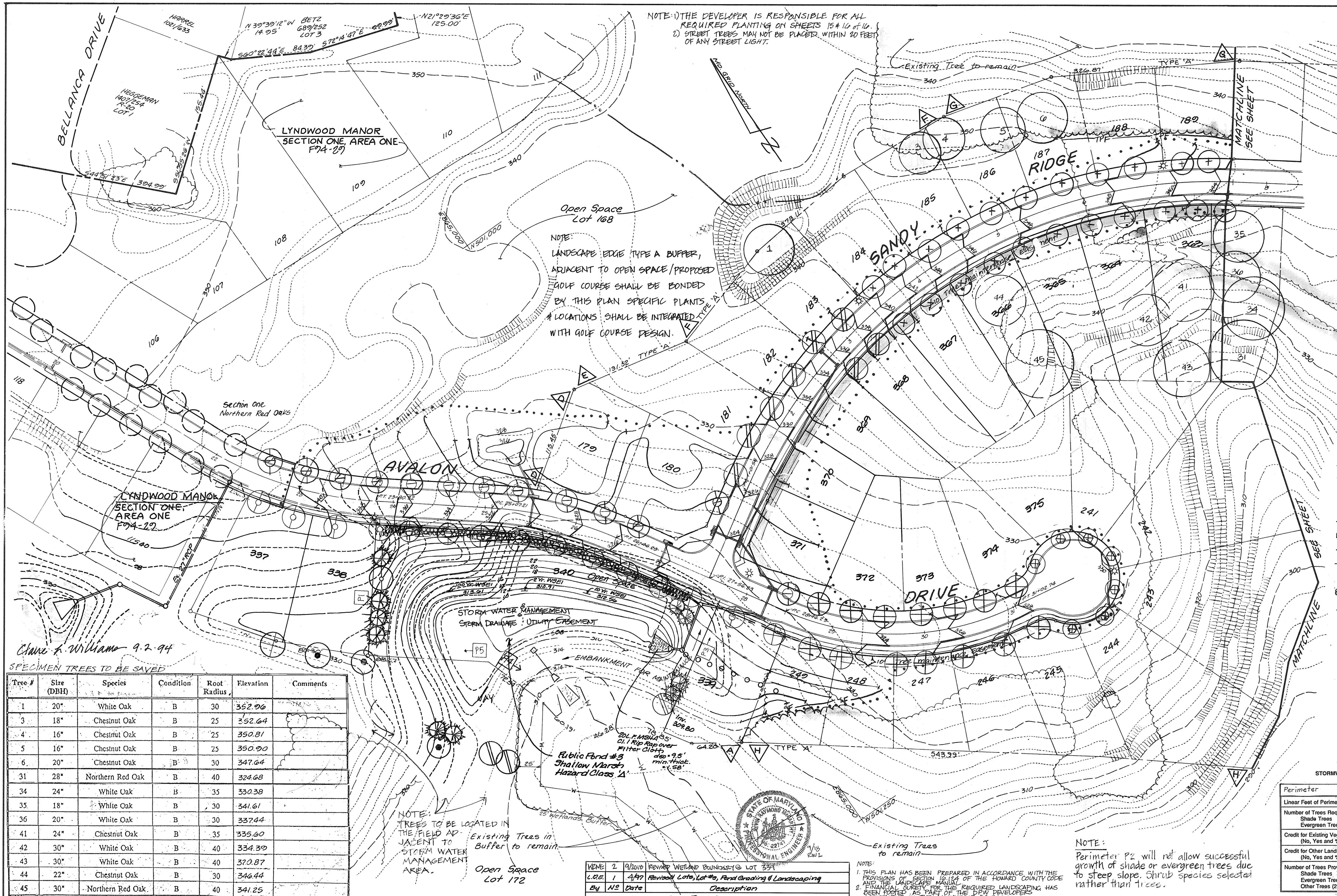
NOTES:

- For details of Sediment Traps, See Sheet 11
- The Site Development Plan will show grading of the site in accordance with the drainage pattern shown on this sheet.

Public Stormwater Management Facility Access Drainage and Utility Easement (Plot Number 11510)

Install Temporary Pipe 24" Diameter HDG or Equivalent Brick Shut Opening to 5'6"

LYNDWOOD MANOR
SECTION ONE AREA ONE
F-94-29
LOT 172



SCHEDULE A PERIMETER LANDSCAPE EDGE

Category	Adjacent to Perimeter Properties
Landscape Type	A
Linear Feet of Roadway Frontage/Perimeter	1470.94
Credit for Existing Vegetation (Yes, No, Linear Feet) (Describe below if needed)	YES 1110.80'
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (Describe below if needed)	NO
Number of Plants Required Shade Trees Evergreen Trees Shrubs	0 TREES
Number of Plants Provided Shade Trees Evergreen Trees Other Trees (2:1 substitution) Shrubs (10:1 substitution) (Describe plant substitution credits below if needed)	0 TREES TO BE BONDED SEE NOTE ABOVE

Comments: SEE SCHEDULE D BELOW, 18 TREES
 5 Shade x 10
 8 Evergreen x 5
 Req. 90 Shrubs

SCHEDULE A SHRUBS SUBST. FOR TREES

SCHEDULE A PERIMETER LANDSCAPE EDGE

PROPERTY LINE	LENGTH	LANDSCAPE TYPE	EX. VEG.
A	653.20'	TYPE B	0
B	123.55'	TYPE B	0
C	399.13'	TYPE B	0
D	115.45'	TYPE A	0
E	131.92'	TYPE A	0
F	373.11'	TYPE A	85'
G	326.87'	TYPE A	326.87'
H	343.77'	TYPE A	445'

- LEGEND**
- 342 --- EXISTING CONTOUR (2' INTERVAL)
 - 342 --- PROPOSED CONTOUR (2' INTERVAL)
 - LIMIT OF DISTURBANCE
 - SF SILT FENCE
 - EARTH DIKE
 - TPF TREE PROTECTION FENCE
 - W NON-TIDAL WETLANDS
 - EXISTING WOODS TO REMAIN UNDISTURBED
 - RP SELECTIVE ROOT PRUNING
 - CRITICAL ROOT ZONE
 - DRAINAGE DIVIDE
 - SDP STRAW BALE DIKE
 - △ PERIMETER
 - ☀ STREET LIGHT
 - LANDSCAPE TREES SHOWN ON PRIOR SUBMISSION F74-29

SCHEDULE B STORMWATER MANAGEMENT AREA LANDSCAPING

Perimeter	P1	P2	P3	P4	P5
Linear Feet of Perimeter	140	300	145	214	160
Number of Trees Required Shade Trees Evergreen Trees	2 3	5 8	2 3	6 8	6 8
Credit for Existing Vegetation (No, Yes and %)	NO	NO	NO	YES 77%	NO
Credit for Other Landscaping (No, Yes and %)	NO	NO	NO	NO	NO
Number of Trees Provided Shade Trees Evergreen Trees Other Trees (2:1 substitution)	2 4	4 100 shrubs	2 3	2 0	2 2

SPECIMEN TREES TO BE SAVED

Tree #	Size (DBH)	Species	Condition	Root Radius	Elevation	Comments
1	20"	White Oak	B	30	352.96	
3	18"	Chestnut Oak	B	25	352.64	
4	16"	Chestnut Oak	B	25	350.81	
5	16"	Chestnut Oak	B	25	350.90	
6	20"	Chestnut Oak	B	30	347.64	
31	28"	Northern Red Oak	B	40	324.68	
34	24"	White Oak	B	35	330.38	
35	18"	White Oak	B	30	341.61	
36	20"	White Oak	B	30	337.44	
41	24"	Chestnut Oak	B	35	335.60	
42	30"	White Oak	B	40	334.30	
43	30"	White Oak	B	40	322.87	
44	22"	Chestnut Oak	B	30	346.44	
45	30"	Northern Red Oak	B	40	341.25	

ENGINEER'S CERTIFICATE

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.

Bruce D. Burton 5/16/95
 Signature of Engineer Date

DEVELOPER'S CERTIFICATE

I/we certify that all development and construction will be done according to this plan and that any responsible person 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.

W.F. Jr 2/18/94
 Signature of Developer Date

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.

Patricia Early / G.S. 5/21/95
 U.S. Soil Conservation Service Date

This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

Robert W. Ziehm 5/23/95
 Howard Soil Conservation District Date

APPROVED: Department of Public Works for Storm Drainage Systems and Roads

Michael J. Dammann 6/1/95
 Chief, Land Development Division Date

APPROVED: Department of Planning and Zoning

Paul D. Larson 6/5/95
 Chief, Division of Land Development and Research Date

LAND DESIGN ENGINEERING, INC.

8835 Columbia 100 Parkway, Unit N, Columbia, MD 21045
 (410) 715-1070 (Balto.) (301) 596-3424 (Wash.) (410) 715-0681 (Fax)

DESIGNED: **CLW**
 DRAWN: **CLW**
 CHECKED: **CLW**
 DATE: 2/94
 KEY: 6/94

LANDSCAPE PLAN
LYNDWOOD MANOR
 SECTION TWO
 Tax Map 37 Part of Parcels G43, 38, 640
 1st Election District, Howard County, MD.
 5-23-02 P-23-11 F-24-29
 Owner/Developer: 100 INVESTMENT LIMITED PARTNERSHIP
 8835 Columbia 100 Parkway, Columbia, Maryland 21045 (410) 715-0681

SCALE: 1"=50'
 DRAWING: 15 of 16
 JOB No: 92-176.5
 FILE No: F74-94

1708

LEGEND

- 342 --- EXISTING CONTOUR (2' INTERVAL)
- 342 --- PROPOSED CONTOUR (2' INTERVAL)
- LIMIT OF DISTURBANCE
- SF SILT FENCE
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- TPF TREE PROTECTION FENCE
- W NON-TIDAL WETLANDS
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- RP SELECTIVE ROOT PRUNING
- CRITICAL ROOT ZONE
- DRAINAGE DIVIDE
- SBD STRAW BALE DIKE
- PERIMETER
- STREET LIGHT

SCHEDULE A PERIMETER LANDSCAPE EDGE

Category	Adjacent to Roadways	Adjacent to Perimeter Properties
Linear Feet of Roadway Frontage/Perimeter	NA	2284.80
Credit for Existing Vegetation (Yes, No, Linear Feet) (Describe below if needed)	NA	2284.80
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (Describe below if needed)	NA	NO
Number of Plants Provided	NA	0
Number of Plants Provided	NA	0

SCHEDULE B PERIMETER LANDSCAPE EDGE

PROPERTY LINE	LENGTH	LANDSCAPE TYPE
A	577.70'	Type 'A'
B	286.98'	Type 'A'
C	232.80'	Type 'A'
D	150.00'	Type 'A'
E	375.07'	Type 'A'
F	325.62'	Type 'A'
G	139.33'	Type 'A'

NOTE: ALL PERIMETERS 100% VEG.

PLANTING NOTES

- Notify "Miss Utility" 72 hours prior to the installation of all plant material.
- Plant installation must conform to the minimum standards cited in the latest edition of Landscape Specification Guide Lines, published by the Landscape Contractors Association.
- Plants to be located in the field by the owner or the owner's representative. Notify owner 72 hrs. in advance of planting.
- A Certification of Landscape Installation is required as per the Howard County Landscape Ordinance.
- Contact Landscape Architect regarding the substitution of plant material.
- The number, size and location of plants shall not be changed. Substitutions must be included in the recommended plant list as per Howard County Landscape Ordinance.
- Street tree locations have been shown wherever possible. Drive aprons of proposed units may not allow a traditional placement of trees.
- Biologic root inhibition barrier or containment shall be installed for trees planted closer than 3 feet to sidewalk.
- Trees shall be placed 30 feet (min) from all sign and intersections when planting occurs between sidewalk and curb.
- Street trees may not be planted within 5 feet of a drain inlet.
- Topsoil shall be supplied from a source meeting the Maryland Land Development Regulations and the Department of Public Works' Design Manual of Howard County.
- PLANTING
- Balled and Buhapped plant material shall not be accepted if ball is cracked or broken before or during planting. Protect all plants from drying by either sun or wind.
- Tree pits shall be backfilled with 60% topsoil, 25% peat and 15% sand with one pound of 10-10-10 fertilizer per pit.
- Topsoil shall be supplied from a source meeting the Maryland Land Development Regulations and the Department of Public Works' Design Manual of Howard County.
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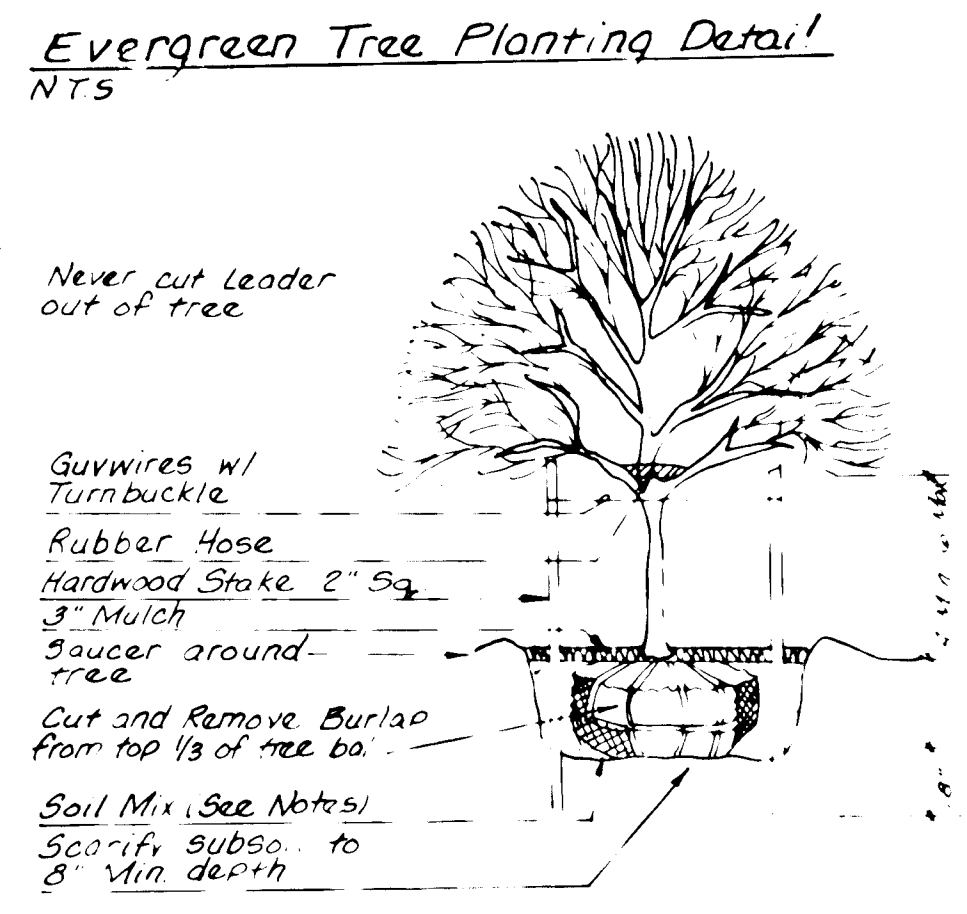
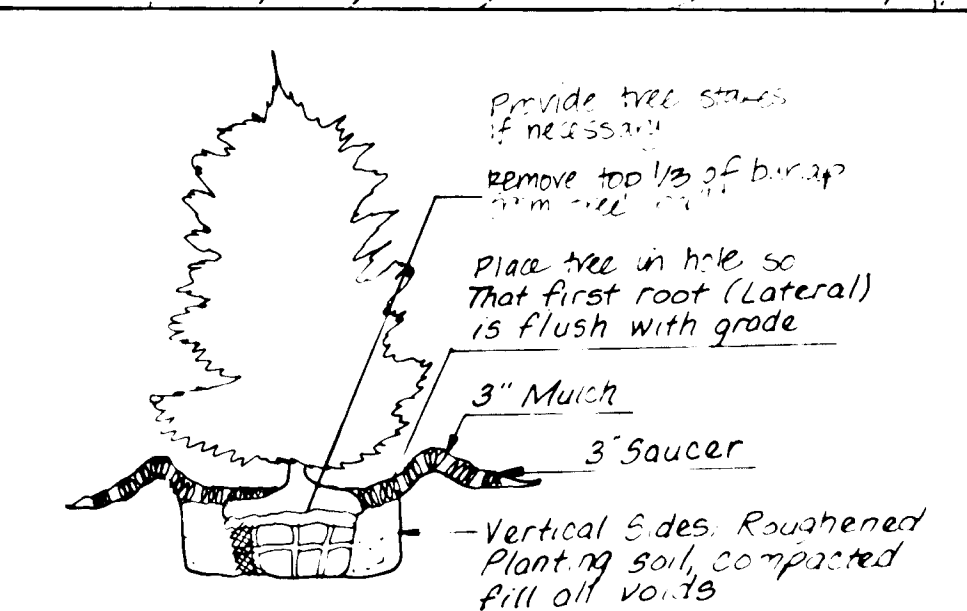
Proposed LYNDWOOD MANOR SECTION TWO

Proposed LYNDWOOD MANOR SECTION THREE

CRIVE L. WILLIAMS
9-2-94

SPECIMEN TREES TO BE SAVED

Tree #	Size (DBH)	Species	Condition	Root Radius	Elevation	Comments
7	20"	Beech	A	35	300.53	
8	16"	Chestnut Oak	B	25	303.36	
11	16/20"	Chestnut Oak	B	30	297.71	Double
12	20"	White Oak	B	30		
20	20"	Northern Red Oak	B	30	304.22	
22	18"	Chestnut Oak	B	30	308.40	
23	28"	Chestnut Oak	B	35	311.51	
24	28"	White Oak	A	35	311.62	
26	20"	Northern Red Oak	B	30	327.37	
27	24"	White Oak	B	35	327.97	
29	24"	White Oak	B	35	335.10	
30	18"	Beech	A	25	329.26	
31	28"	Northern Red Oak	B	40	324.68	
32	20"	White Oak	B	30	323.38	
33	16/26"	Northern Red Oak	B	35	323.58	Double
34	24"	White Oak	B	35	330.38	
35	18"	White Oak	B	30	341.61	
36	20"	White Oak	B	30	337.44	
41	24"	Chestnut Oak	B	35	335.60	
42	30"	White Oak	B	40	334.39	
43	30"	White Oak	B	40	320.87	



NOTE: PLANT LIST IS PROVIDED FOR THE CONTRACTORS' CONVENIENCE IF DISCREPANCIES EXIST REFER TO DWGS. STREET TREES MAY NOT BE PLACED WITHIN 20 FT OF ANY STREET LIGHT.

PLANT LIST

No	Key	Quan.	Plant Name	Size	Cond.	Remarks
1	22		Acer rubrum 'Red Sunset'	2.5-3'	B&B	FULL 40' O.C.
2	25		Fraxinus pennsylvanica 'Marshall's Seedless'	2.5-3'	B&B	FULL 40' O.C.
3	22		Platanus x aconifolia 'Columbia'	2.5-3'	B&B	FULL 40' O.C.
4	20		Prunus sargentii 'Sargent Cherry'	2.5-3'	B&B	FULL 30' O.C.
5	20		Quercus palustris 'Sovereign'	2.5-3'	B&B	FULL 40' O.C.
6	33		Quercus rubra 'Northern Red Oak'	2.5-3'	B&B	FULL 40' O.C.
7	84		Forsythia intermedia 'Spectabilis'	2-5'	B&B or HT.	4-5' O.C.
8	9		Pinus strobus 'Eastern White Pine'	6-8'	B&B	10-15' O.C.
9	30		Viburnum dentatum 'Arrowwood'	2-4-5'	HT.	CONT.

REVISIONS

L.D.E.	By	NR	Date	Description
1	4/97			Revise Lot Lines, NED, Sed. Trap & Plant List

ENGINEER'S CERTIFICATE

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.

BRUCE D. BURTON
Signature of Engineer
5/16/95
Date

DEVELOPER'S CERTIFICATE

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.

W.F. R.
Signature of Developer
2/18/94
Date

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.

Patricia Engle
5/14/95
U.S. Soil Conservation Service

This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

Robert W. Zehner
5/23/95
Howard Soil Conservation District

APPROVED: Department of Public Works for Storm Drainage Systems and Roads.

John J. O'Connor
6/1/95
Chief, Land Development Division

APPROVED: Department of Planning and Zoning.

M.W. McLaughlin
6/5/95
Chief, Division of Land Development and Research

LAND DESIGN ENGINEERING, INC.

8835 Columbia 100 Parkway, Unit N, Columbia, MD 21045
(410) 715-1070 (Balto.) (301) 596-3424 (Wash.) (410) 715-0681 (Fax)

LANDSCAPE PLAN

LYNDWOOD MANOR SECTION TWO

Tax Map 3T Part of Parcels G43, 38, G40
1st Election District Howard County, MD
5-93-02 P-23-11 P-24-20

DATE: 5/16/95
REV: 6/94

SCALE: 1" = 50'
DRAWING: 16 of 10
JOB NO: 1045
92-176.5
FILE NO: F94-94

1708