

GENERAL NOTES

1. CONTRACTOR TO PROVIDE STAKE-OUT GRADE OF PROPOSED CURBS, PROPERTY LINES, STORM DRAINS & OTHER APPURTENANCES WHERE EVER NECESSARY TO FACILITATE THE RELOCATION OF EXISTING B.G. & C&P UTILITIES.
2. ALL REFERENCES TO "SIDEWALK" SHALL BE CONSTRUED TO BE "PATHWAY".

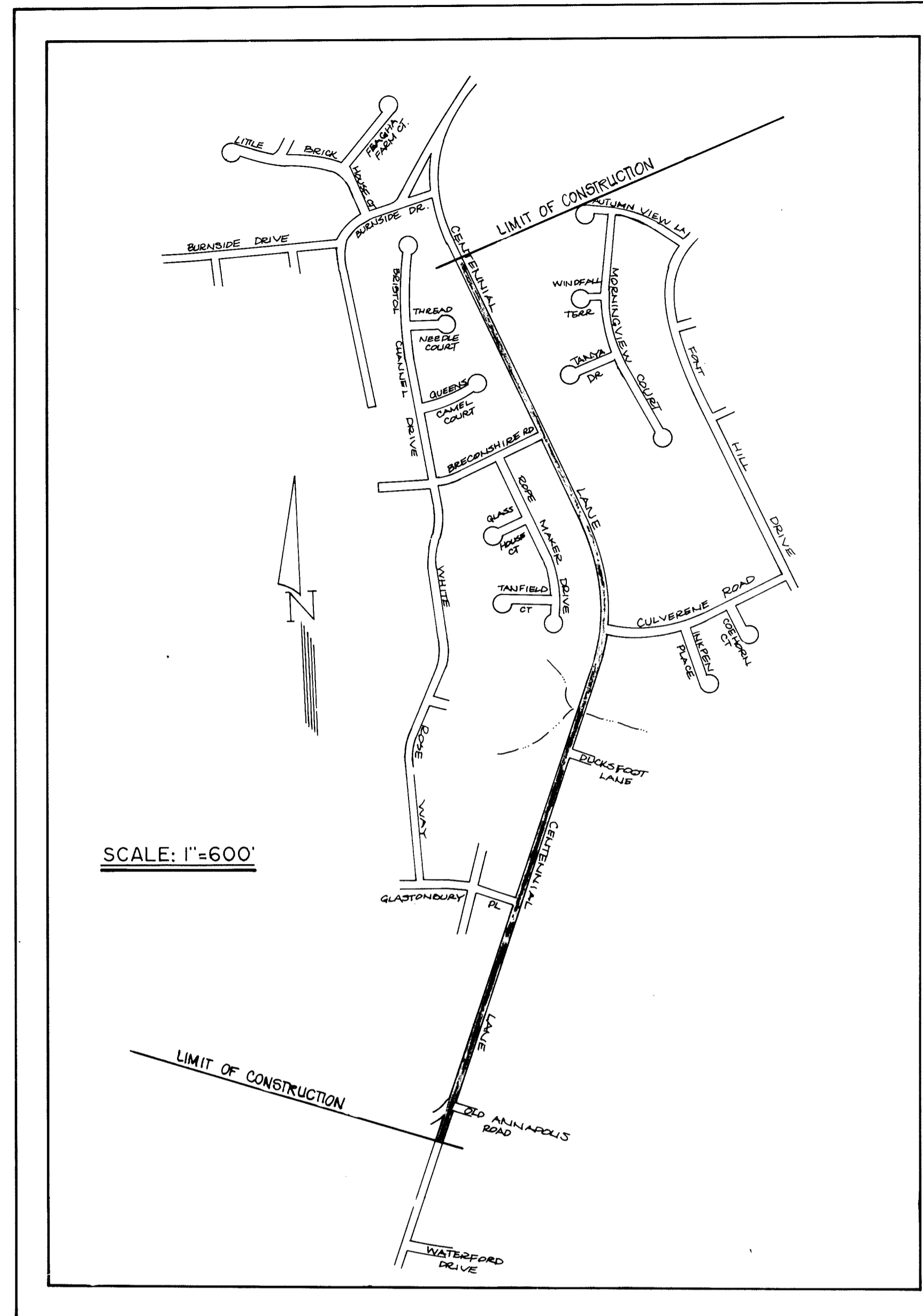
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	PLAN & PROFILE
3	PLAN & PROFILE
4	PLAN & PROFILE
5	PLAN & PROFILE
6	PLAN & PROFILE
7	TYPICAL SECTIONS FOR INTERSECTING ROADS
8	HORIZONTAL & VERTICAL CONTROLS
9	SUPERELEVATION
10	INTERSECTING STREETS PROFILES
11	GABION WALL PROFILES & DETAILS
12	DRAINAGE AREA MAP
13	DRAINAGE AREA MAP
14	STORM DRAIN PROFILES
15	STORM DRAIN PROFILES
16	MAINTENANCE OF TRAFFIC AND SEDIMENT CONTROL NOTES AND DETAILS
17	MAINTENANCE OF TRAFFIC AND SEDIMENT CONTROL PHASE I
18	MAINTENANCE OF TRAFFIC AND SEDIMENT CONTROL PHASE I
19	MAINTENANCE OF TRAFFIC AND SEDIMENT CONTROL PHASE I
20	MAINTENANCE OF TRAFFIC AND SEDIMENT CONTROL PHASE II
21	MAINTENANCE OF TRAFFIC AND SEDIMENT CONTROL PHASE II
22	MAINTENANCE OF TRAFFIC AND SEDIMENT CONTROL PHASE II
23 - 27	LANDSCAPE PLANS

PLAN LEGEND

	EXISTING	PROPOSED
TO BE ABANDONED	TBA	
TO BE REMOVED	TBR	
RIGHT OF WAY	---	---
EDGE OF PAVEMENT	=====	=====
CURB	=====	=====
PAVEMENT	=====	=====
TEMP. SLOPE ESMT.	=====	=====
TEMP. CONST. AREA	=====	=====
IN DRIVEWAY	=====	=====
AREA TO BE RELEASED	=====	=====
AFTER CONST. WITH D.W.	=====	=====
TRAVERSE STATION	-----	-----
EXISTING PAVEMENT TBR	-----	-----
EX. POLES WITH R/W	-----	-----
TBR BY UTILITY	-----	-----
GUARDRAIL	-----	-----
GABION WALL	-----	-----
TRAFFIC FLOW	-----	-----
CUT/FILL	-----	-----

PROFILE LEGEND

AND/OR PGL GRADE AT	-----
R/W AT RIGHT	-----
R/W AT LEFT	-----
CONTINUATION TO NEXT SHEET	----->
PROFILE ELEVATIONS	-----



CAPITAL PROJECT No. J-4015-III
CENTENNIAL LANE
 ROAD IMPROVEMENTS
 OLD ANNAPOLIS ROAD TO BURNSIDE DRIVE
 HOWARD COUNTY, MARYLAND
 DEPARTMENT OF PUBLIC WORKS

CONDITIONS AND MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS

- 1) Properly maintain the structure or fill;
- 2) Adhere to time-of-year restrictions as required by the Maryland Department of the Environment under COMAR 26.08.02. To protect important aquatic species, in-stream work is prohibited as determined by the classification of the stream as follows:
 Class I Waters. In-stream work may not be conducted during the period March 1 through June 15, inclusive, during any year.
- 3) Remove excess fill or construction material or debris to an upland disposal area, outside of the buffer. Any temporary excavation or filling within the nontidal wetland shall be restored to the elevation existing prior to construction;
- 4) If backfill is obtained from sources other than the originally excavated material, use clean material free of waste metal products, unsightly debris, toxic material, or any other deleterious substance;
- 5) Heavy equipment shall conduct work from the road embankment or from upland areas where possible. If equipment must be placed in wetland areas not authorized for permanent disturbance, place heavy equipment on mats or suitably design the equipment to prevent damage to the nontidal wetlands;
- 6) Rectify any nontidal wetlands temporarily impacted by the proposed activity. Vegetative re-stabilization within the nontidal wetlands must be conducted with annual grasses such as rye and millet to allow re-establishment of natural wetland species. Temporarily disturbed areas shall be restored and planted no later than 7 days after construction in those areas is completed. Should construction be interrupted or delayed for more than 14 days, temporary measures shall be provided to prevent soil erosion during that period; and
- 7) All disturbed steep wetland buffers must be stabilized with a stabilization matting or mulch and tack (crimping in, cellulose, or asphalt spray) or equivalent management procedure after construction, to prevent excess sedimentation.

THE FOLLOWING PERMITS APPLY TO THIS PROJECT:
 WCF No. 02-WC-0236
 PSC No. 199165045

APPROVED FOR REVISION
 SCD [Signature]
 SCS [Signature] 9/27/91
 EP-91-38
 9-94-04

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CLASSIFICATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL PERMITS CONSTRUCTION, DEMOLITION AND SEWERAGE COLLECTION.
 [Signature] 12/19/91
 U.S. SOIL CONSERVATION SERVICE

THESE PLANS FOR SMALL PERMITS CONSTRUCTION, DEMOLITION AND SEWERAGE COLLECTION MEET THE REQUIREMENTS OF THE PERMANENT SOIL CONSERVATION DISTRICT.
 [Signature] 12/19/91
 HOWARD SOIL CONSERVATION DISTRICT

1196

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

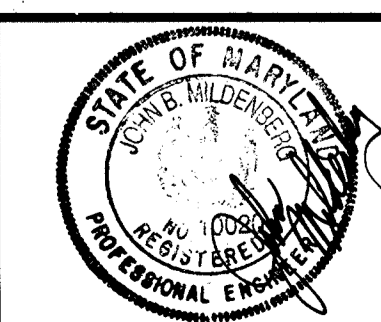
James J. [Signature] 12/2/91
 DIRECTOR OF PUBLIC WORKS

[Signature] 12/2/91
 CHIEF, BUREAU OF ENGINEERING

[Signature] 12/2/91
 CHIEF, BUREAU OF HIGHWAYS

MILDENBERG, MOCHI & ASSOCIATES, INC.
 ENGINEERS • SURVEYORS • PLANNERS

3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
 (301) 461-0078 D.C. Metro No. (301) 621-5768



DES.	REV.	DATE	DESCRIPTION
JEM/KAM	1	10/01	DNR conditions added to sheet 1. Eliminate spill gutter. Eliminate Waterman Retention this project.
WFM	2	7/93	New Sheets Added 14A, 14B & 14C
WFM	3	7/93	E/75 notes added Sheet 14c

DATE	BY	NO.	REVISION	DATE
10/01				

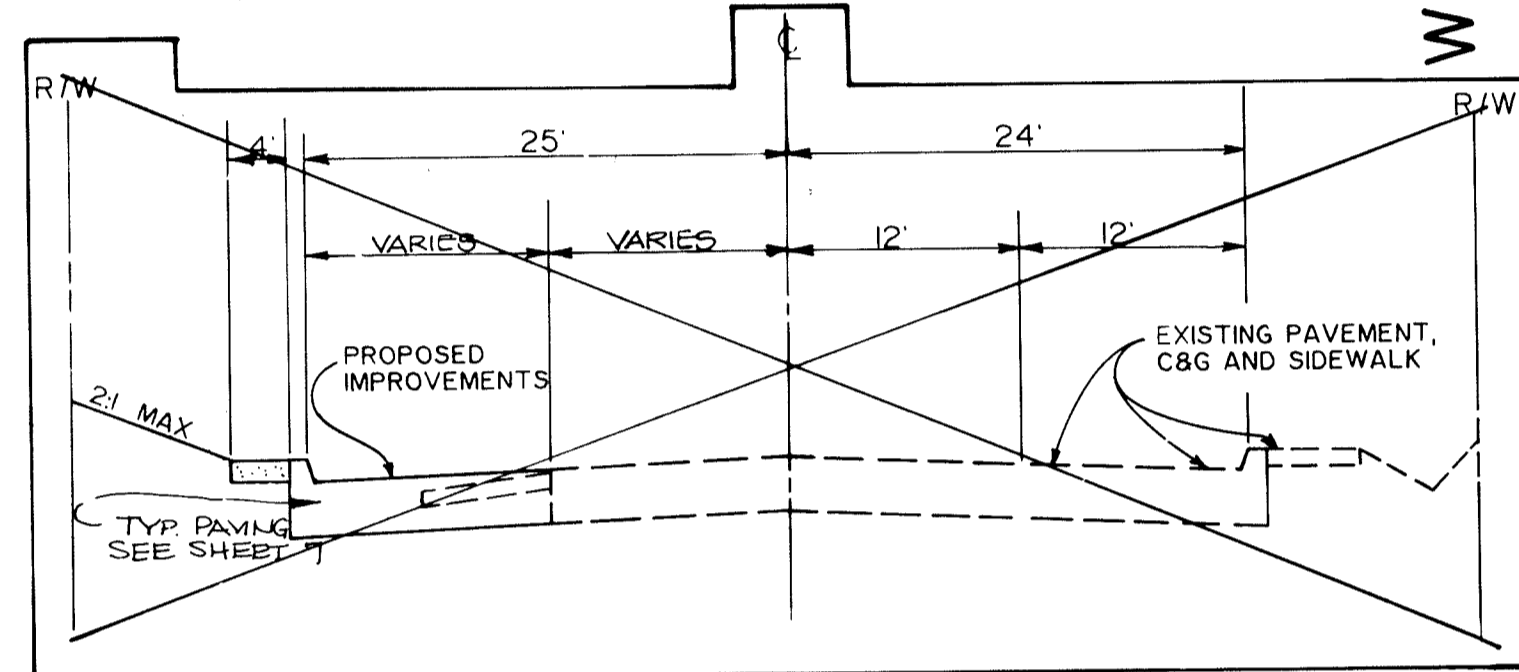
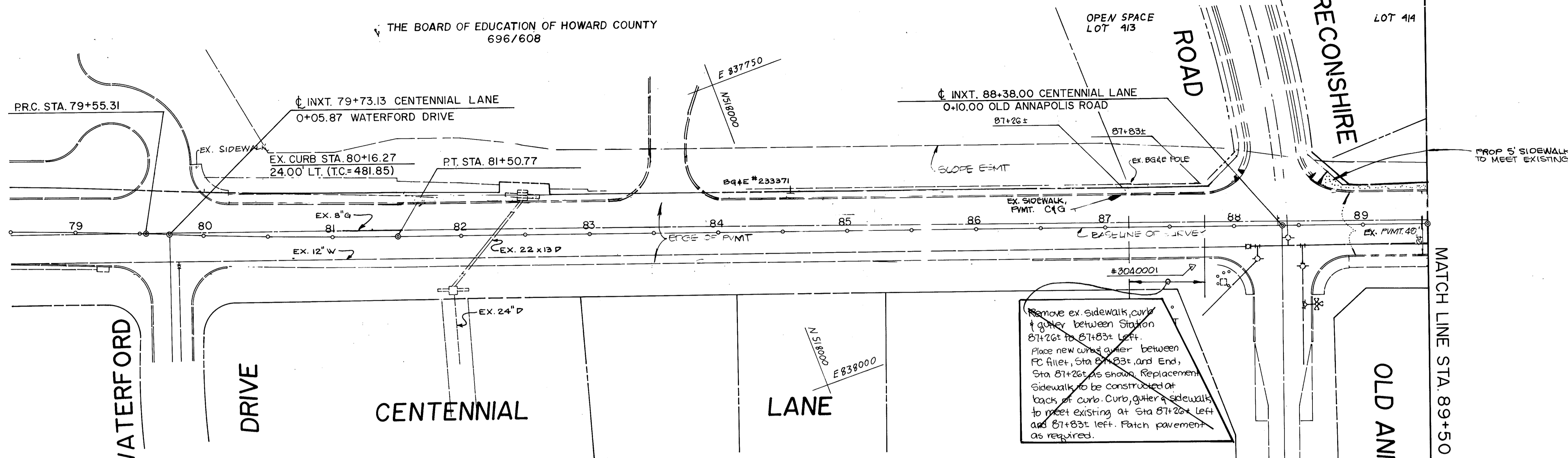
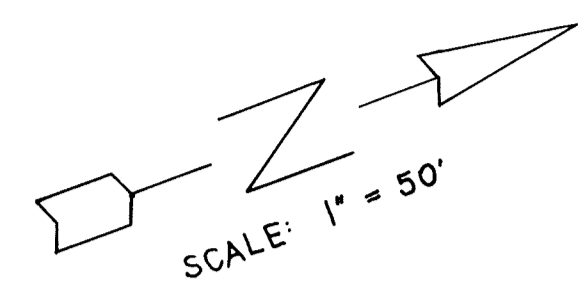
TITLE SHEET

CENTENNIAL LANE
 OLD ANNAPOLIS ROAD TO STA. 136+00
 CAPITAL PROJECT J-4015-III
 ELECTION DISTRICT No. 2
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
1" = 600'

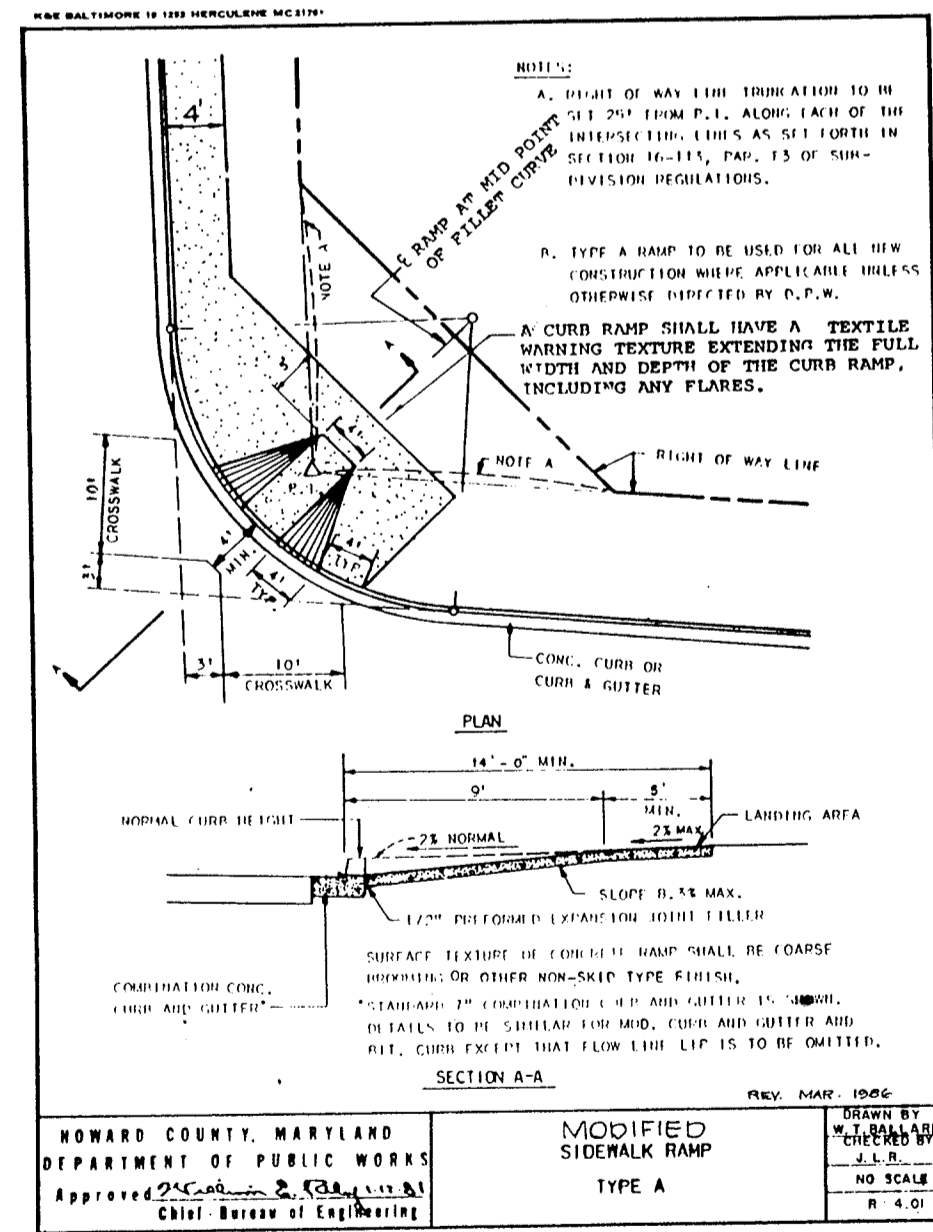
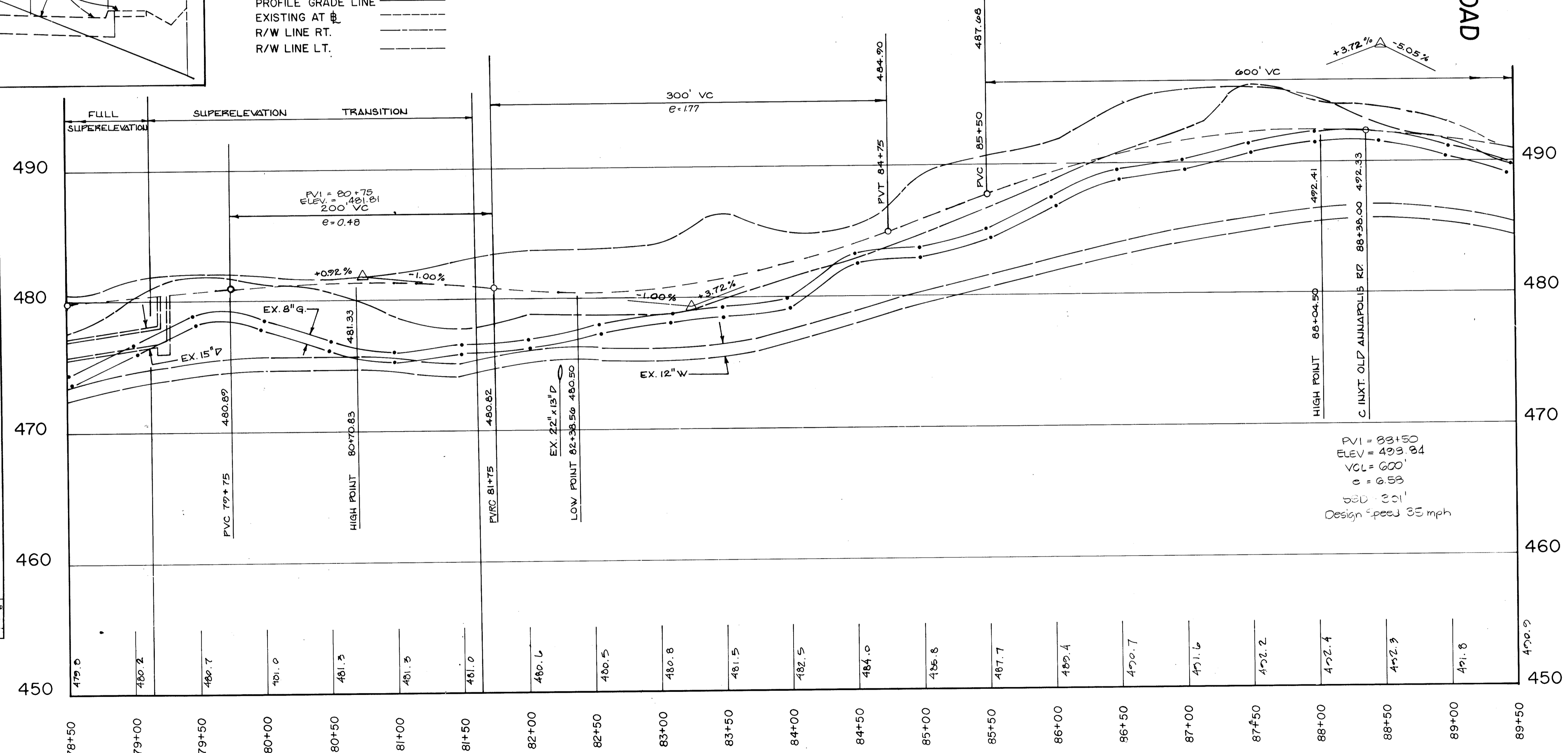
THE BOARD OF EDUCATION OF HOWARD COUNTY
696/608

BURLEIGH SECTION 3
MANOR AREA 3



PROFILE LEGEND
 PROFILE GRADE LINE
 EXISTING AT R/W LINE RT.
 R/W LINE LT.

SCALE: HORIZ. 1" = 50'-0"
 VERT. 1" = 5'-0"



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James P. ... 12/1/91
DIRECTOR OF PUBLIC WORKS
DATE

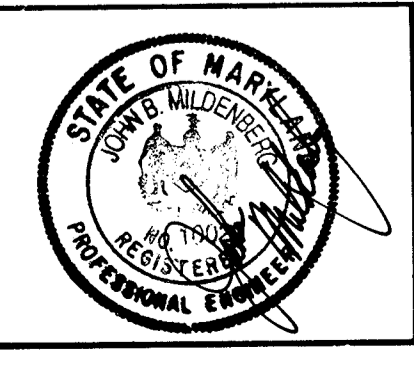
William E. ... 12/1/91
CHIEF, BUREAU OF ENGINEERING
DATE

Stephen ... 12/2/91
CHIEF, ROADS, BRIDGES AND STORM DRAINAGE
DATE

Francis W. ... 12/1/91
CHIEF, BUREAU OF HIGHWAYS
DATE

MILDENBERG, MOCHI & ASSOCIATES, INC.
ENGINEERS • SURVEYORS • PLANNERS

3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
(301) 461-0078 D.C. Metro: (301) 621-5768



DES: STAFF	
DRN: KAM	
CHK: JBM	
DATE: 10/9	
BY NO.	REVISION

PLAN & PROFILE
 STA. 78+50 TO STA. 89+50
 CENTENNIAL LANE

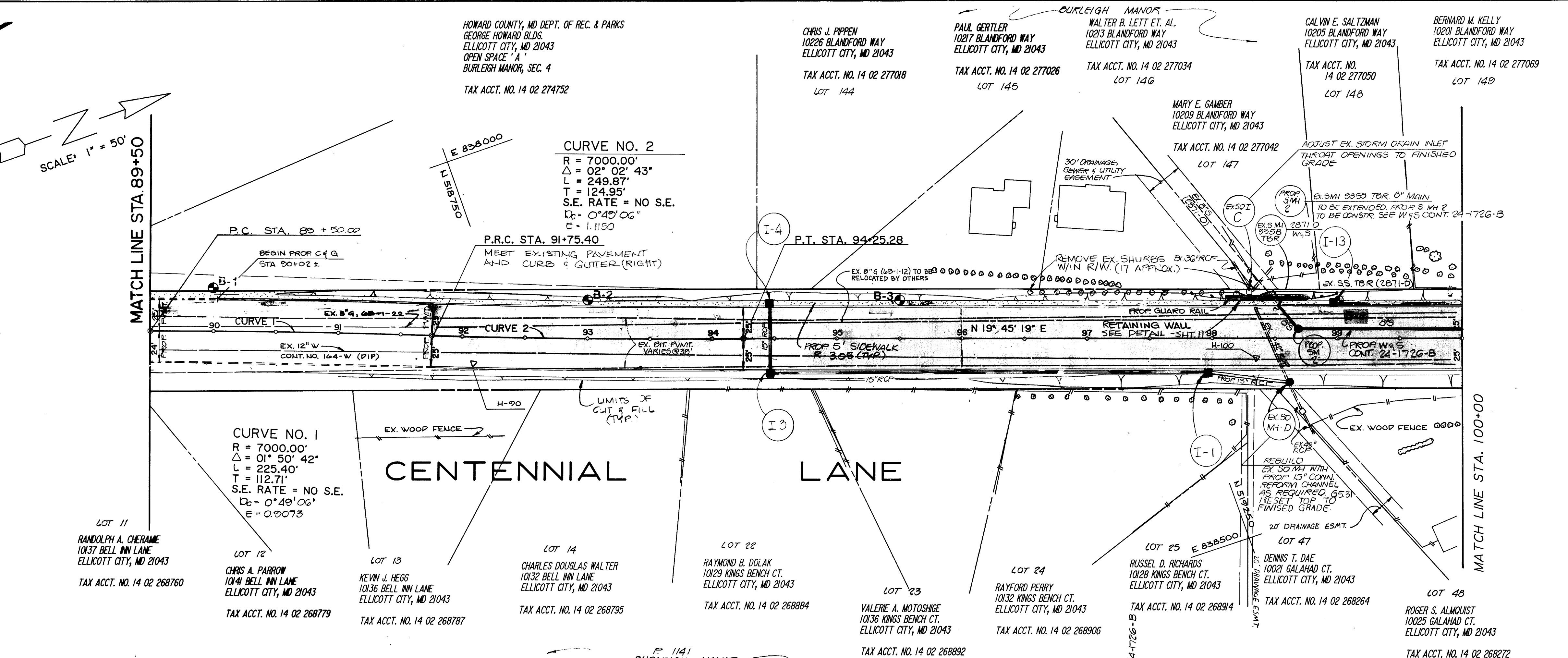
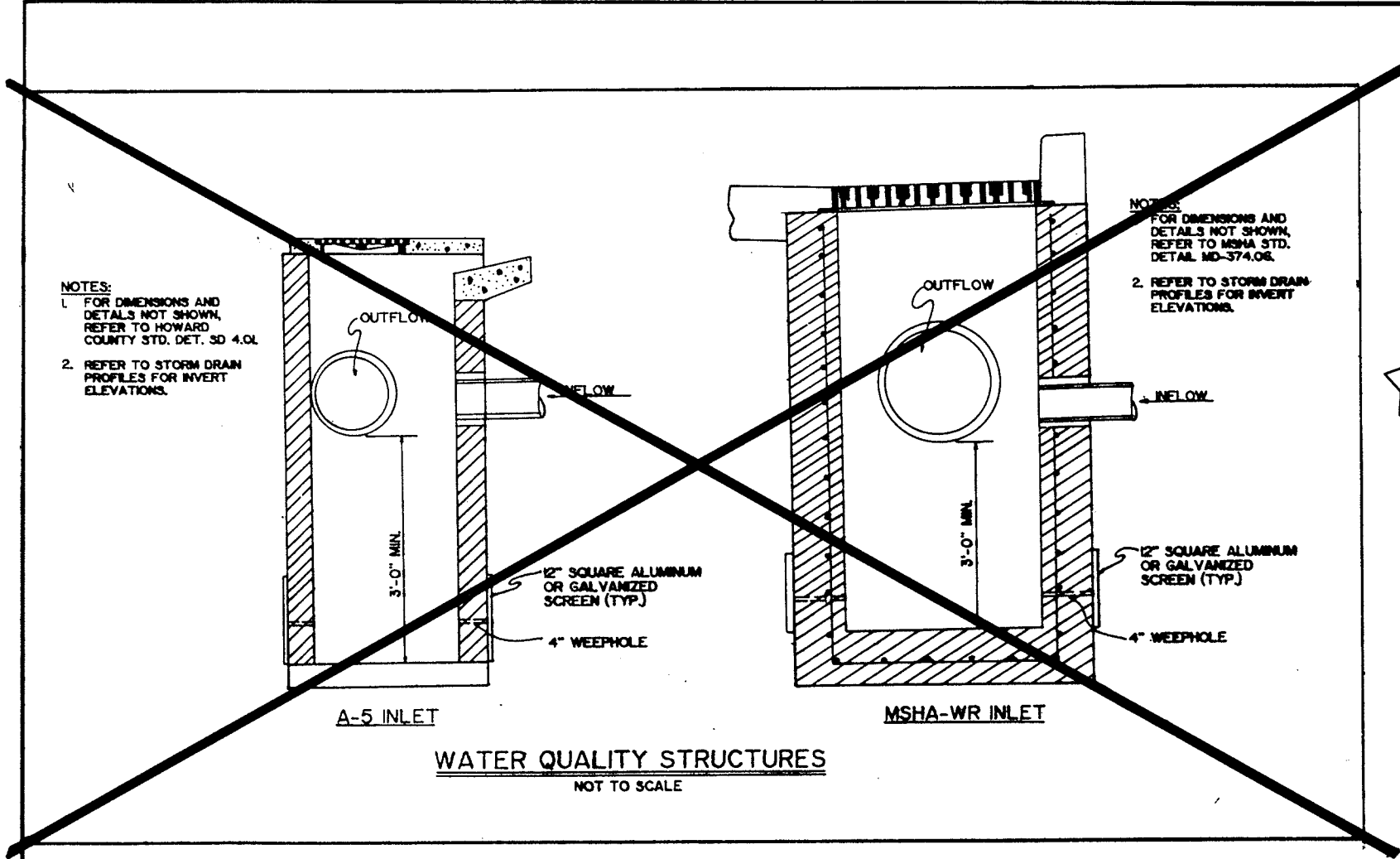
600' SCALE MAP NO. _____ BLOCK NO. _____

CENTENNIAL LANE
 OLD ANNAPOLIS ROAD TO STA. 136+00
 CAPITAL PROJECT J-4015-III
 ELECTION DISTRICT NO. 2
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 2 OF 27

1196

As Submitted for 1st Major Review 12/2/90 As Submitted for 1st Minor Review 12/2/90



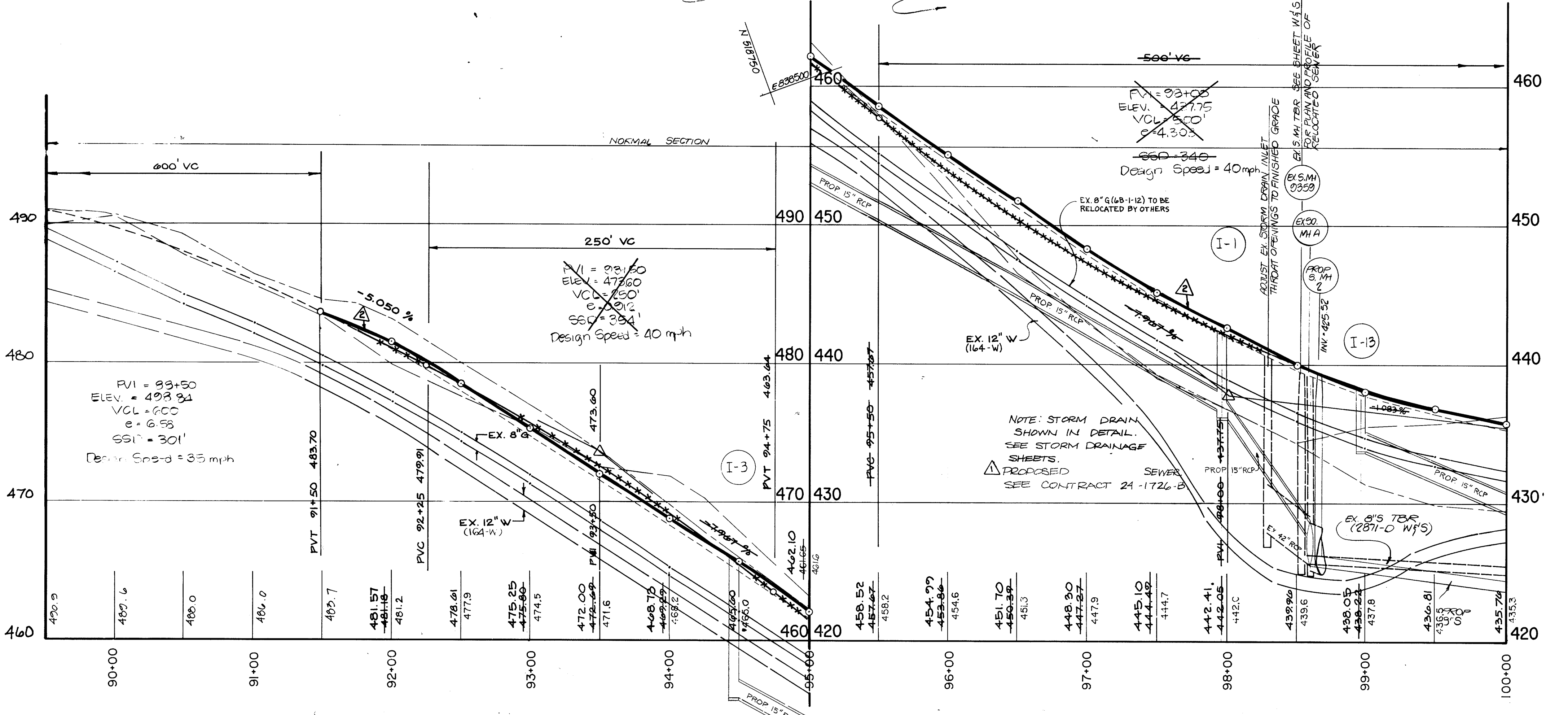
PROFILE LEGEND

PROFILE GRADE LINE: ————

EXISTING AT R/W LINE RT.: - - - - -

R/W LINE LT.: - - - - -

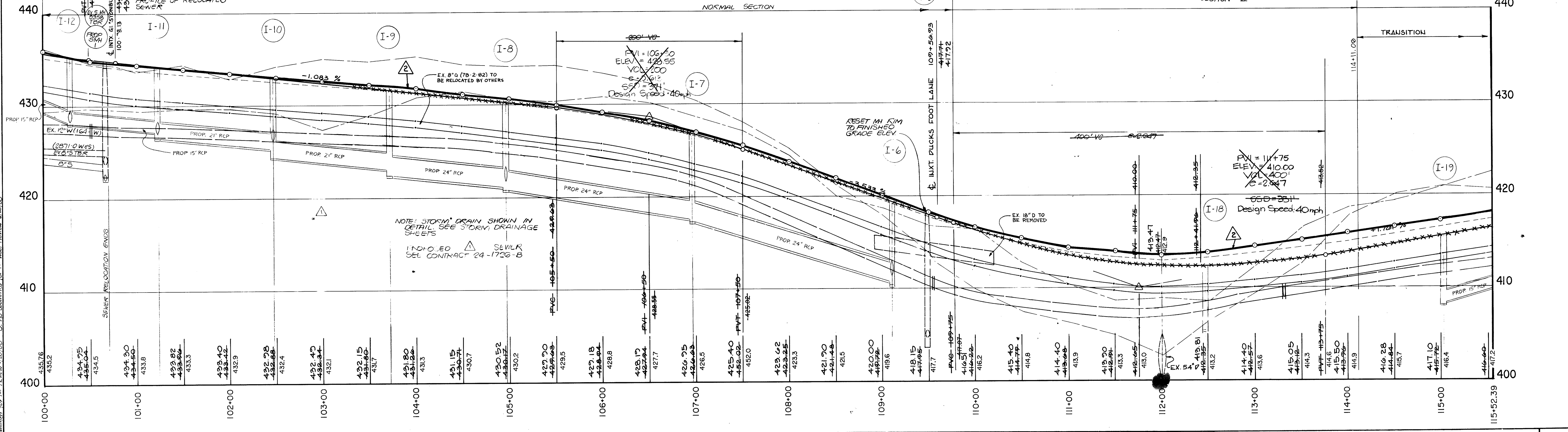
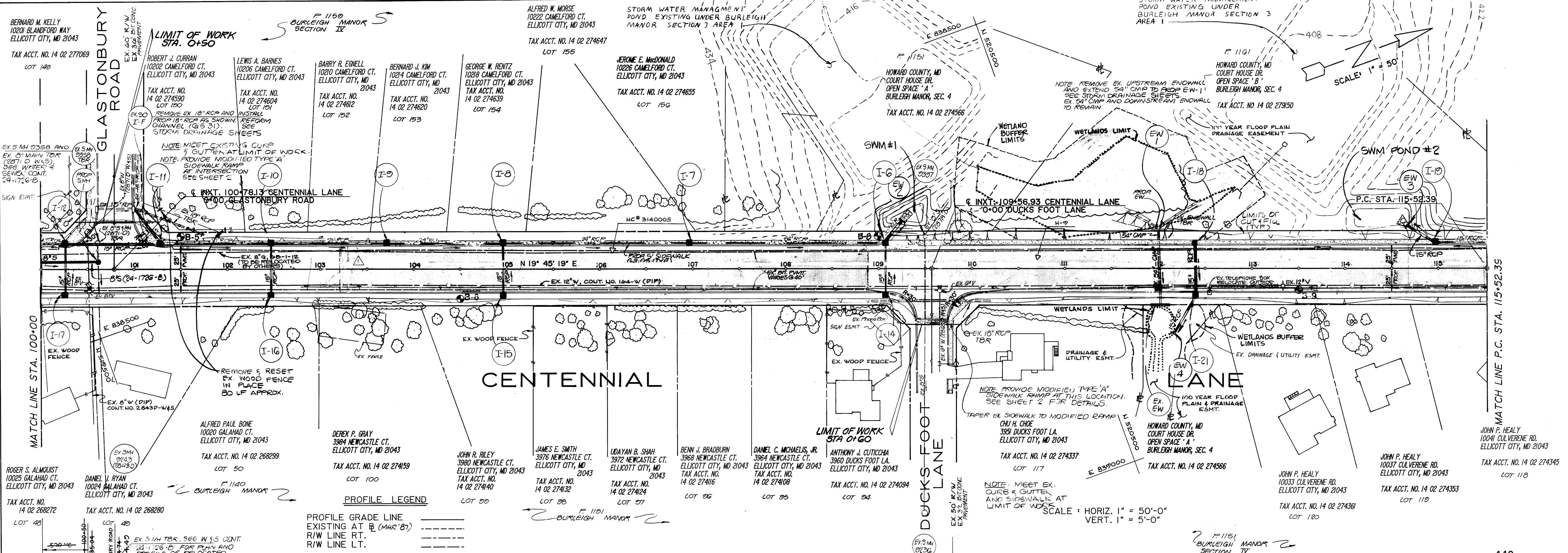
SCALE: HORIZ. 1" = 50'-0"
 VERT. 1" = 5'-0"



BRUNING 44-132-69150, C. A. Submitted for 1st Review 1/20/08, C. A. Submitted for 1st Review 2/20/08

1196

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND Director of Public Works: <i>James J. ...</i> 12/1/09 Chief, Bureau of Engineering: <i>William B. ...</i> 12/3/09 Chief, Roads, Bridges and Storm Drainage: <i>Charles ...</i> 12/1/09 Chief, Bureau of Highways: <i>Lawrence W. ...</i> 12/1/09		MILDENBERG, MOCHI & ASSOCIATES, INC. ENGINEERS • SURVEYORS • PLANNERS 3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350 (301) 481-0078 D.C. Metro: (301) 621-5768	DES: STAFF DRN: KAM CHK: JEM DATE: 10/01	Eliminate waterman relocation this project. New Proposed Grade Line (By Howard Co.) JAN 02 Feb 02	PLAN & PROFILE STA. 89+50 TO STA. 100+00 CENTENNIAL LANE 600' SCALE MAP NO. 21 BLOCK NO.	CENTENNIAL LANE OLD ANNAPOLIS ROAD TO STA. 136+00 CAPITAL PROJECT J-4015-III ELECTION DISTRICT NO. 2 HOWARD COUNTY, MARYLAND SCALE AS SHOWN SHEET 3 OF 27
--	--	---	---	--	---	---



PROFILE LEGEND

—	PROFILE GRADE LINE
- - -	EXISTING AT (MAR 87)
- · - · -	R/W LINE RT.
- · - · -	R/W LINE LT.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Samuel J. Ryan 12/1/91
DIRECTOR OF PUBLIC WORKS DATE

William W. Wallace 12/1/91
CHIEF, BUREAU OF ENGINEERING DATE

Elizabeth Anderson 12/1/91
CHIEF, ROADS, BRIDGES AND STORM DRAINAGE DATE

MILDENBERG MOCHI & ASSOCIATES, INC.
ENGINEERS • SURVEYORS • PLANNERS

3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
(301) 461-0078 D.C. Metro (301) 821-5708

DES-STAFF	KAM	Eliminate watermain Relocation this Project	JAN 92
DRN:	KAM	New Proposed Grade Line (By Howard Co.)	Feb 93
CHK:	JBM		
DATE:	10/01		
BY	NO.	REVISION	DATE

PLAN & PROFILE
STA. 100+00 TO STA. 115+52.39
CENTENNIAL LANE

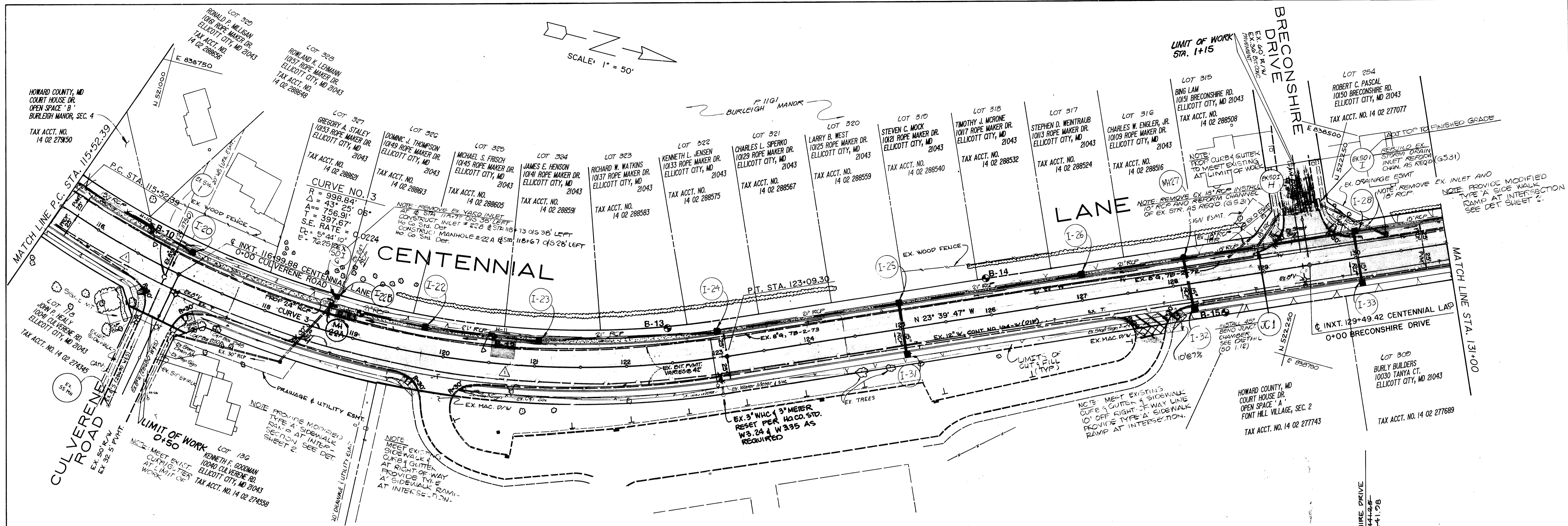
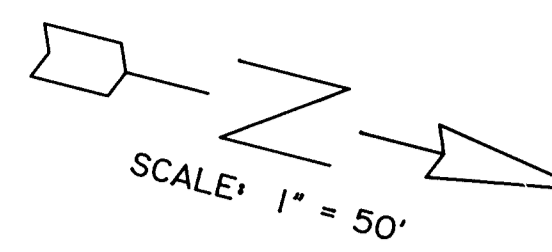
600' SCALE MAP NO. 24 BLOCK NO.

CENTENNIAL LANE
OLD ANNAPOLIS ROAD TO STA. 136+00
CAPITAL PROJECT J-4015-III
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 4 OF 27

1196

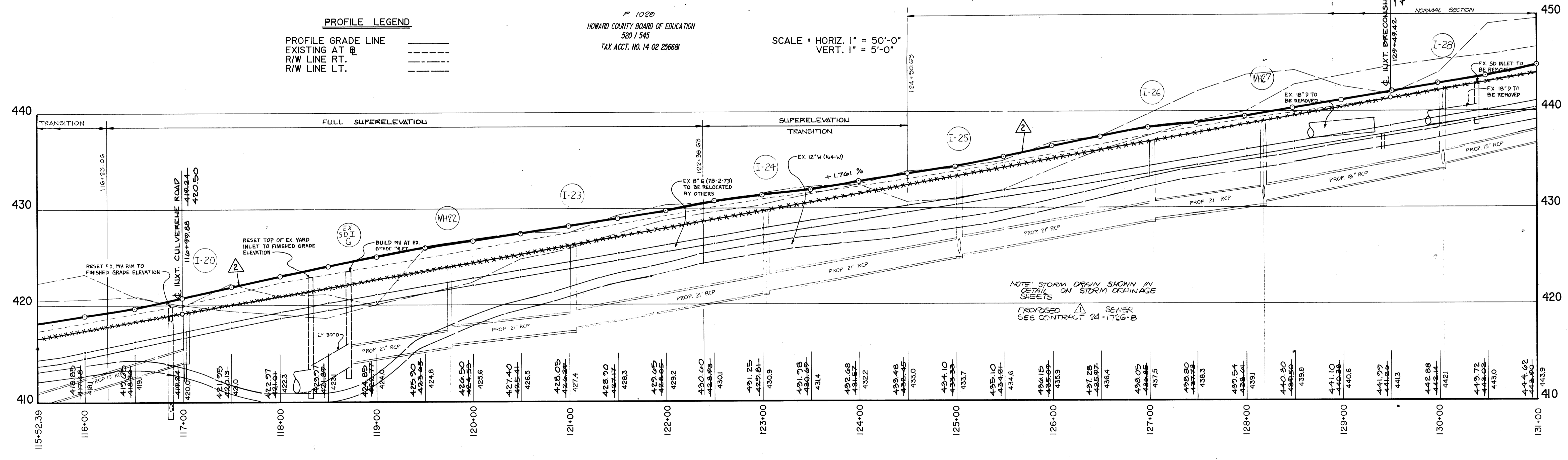
BRUNING 44-13289150 D. As Submitted for Review 1/29/93 D. As Submitted for Review 1/29/93



PROFILE LEGEND
 PROFILE GRADE LINE
 EXISTING AT B
 R/W LINE RT.
 R/W LINE LT.

P 1020
 HOWARD COUNTY BOARD OF EDUCATION
 520 1 545
 TAX ACCT. NO. 14 02 25668

SCALE: HORIZ. 1" = 50'-0"
 VERT. 1" = 5'-0"



BRUNING 44-132 69 150 0. As Submitted for for S.C. Review 1/28/2019. 0. As Submitted for for M.H. Review 2/12/2019

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

James P. ... 12/4/19
 DIRECTOR OF PUBLIC WORKS DATE
Stephen M. ... 12/4/19
 CHIEF, BUREAU OF ENGINEERING DATE
Christopher W. ... 12/4/19
 CHIEF, ROADS, BRIDGES AND STORM DRAINAGE DATE
James W. ... 12/4/19
 CHIEF, BUREAU OF HIGHWAYS DATE

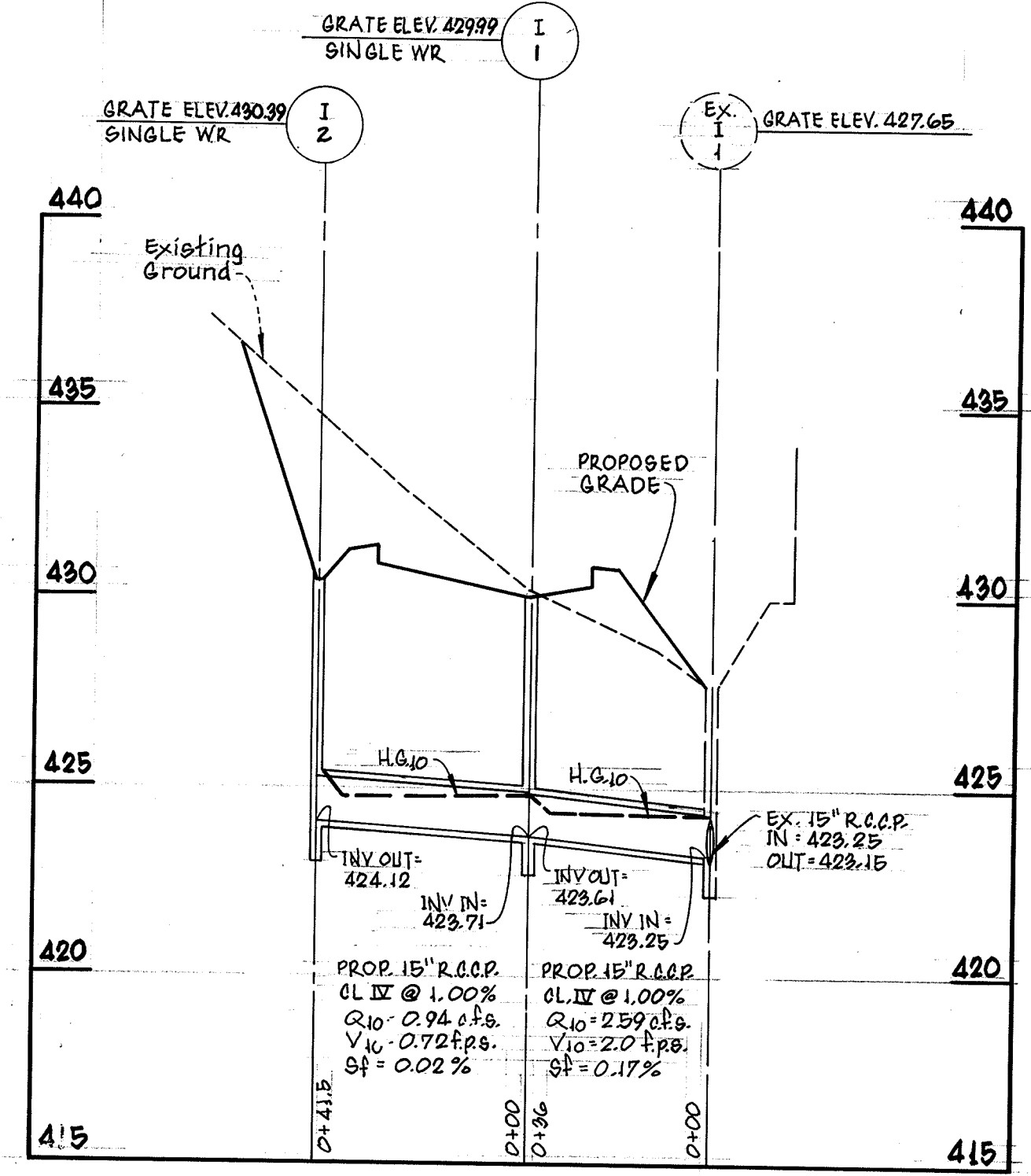
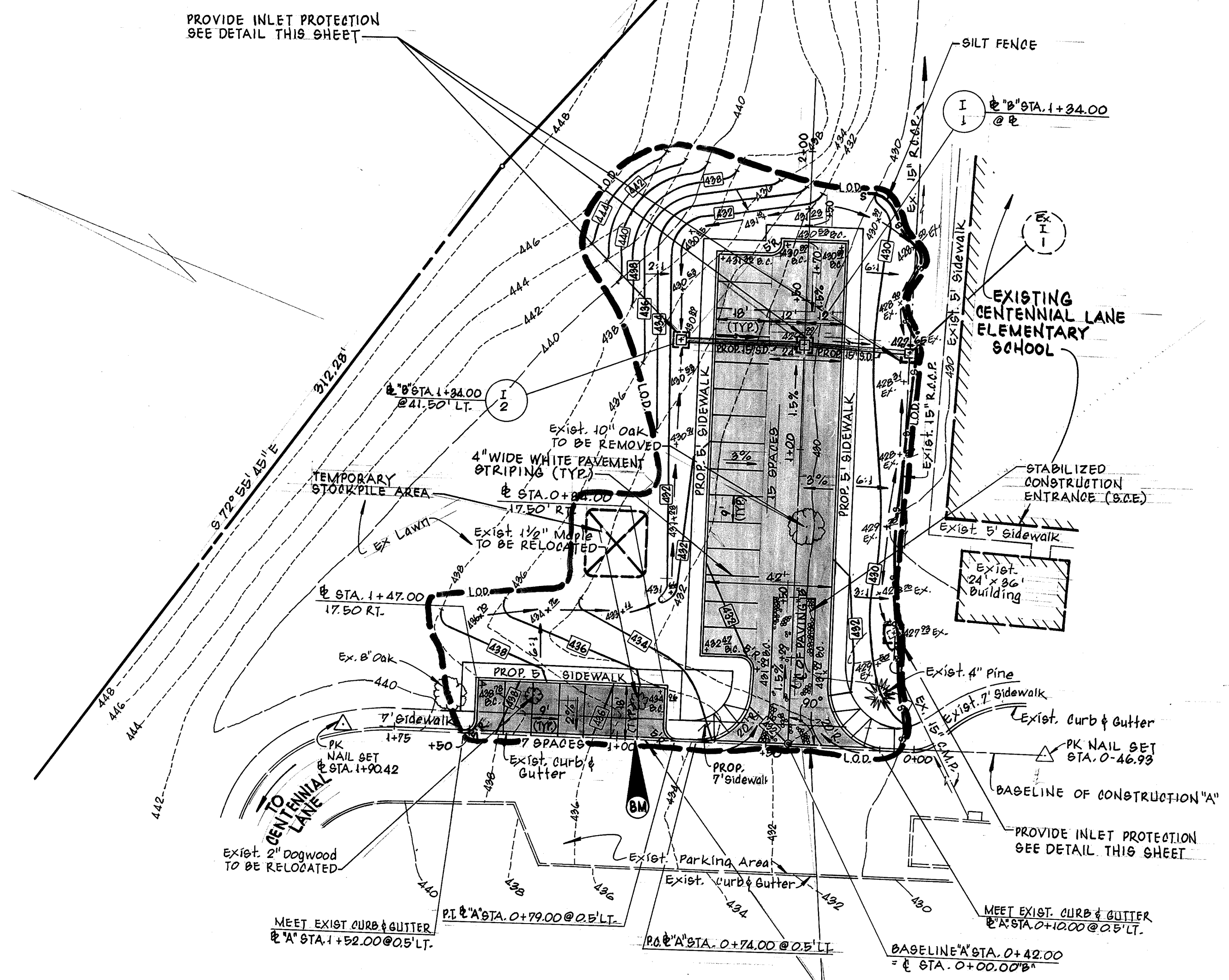
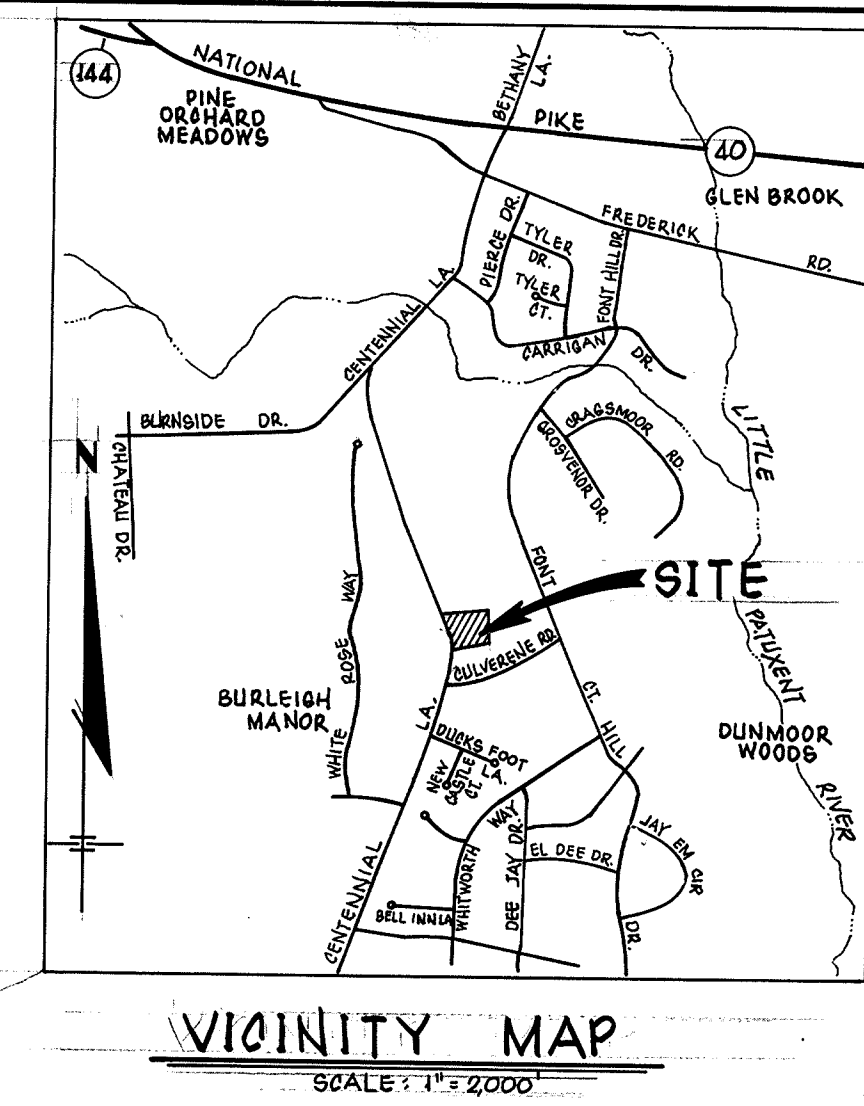
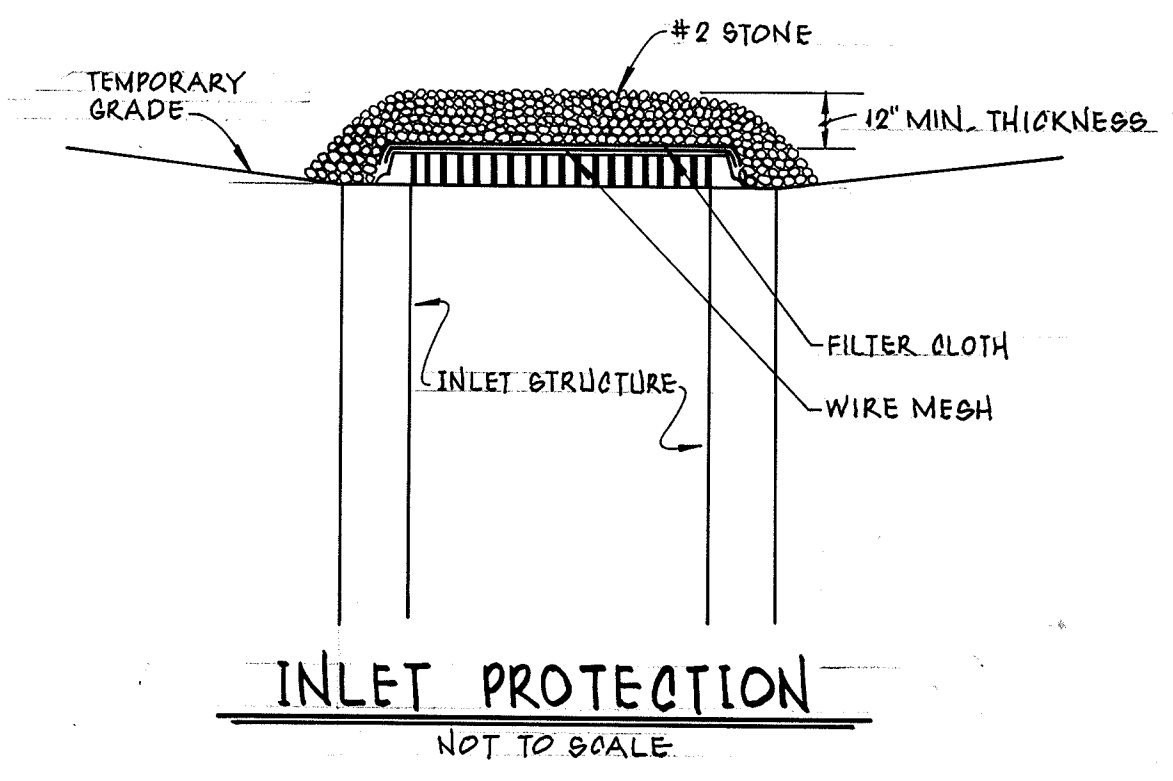
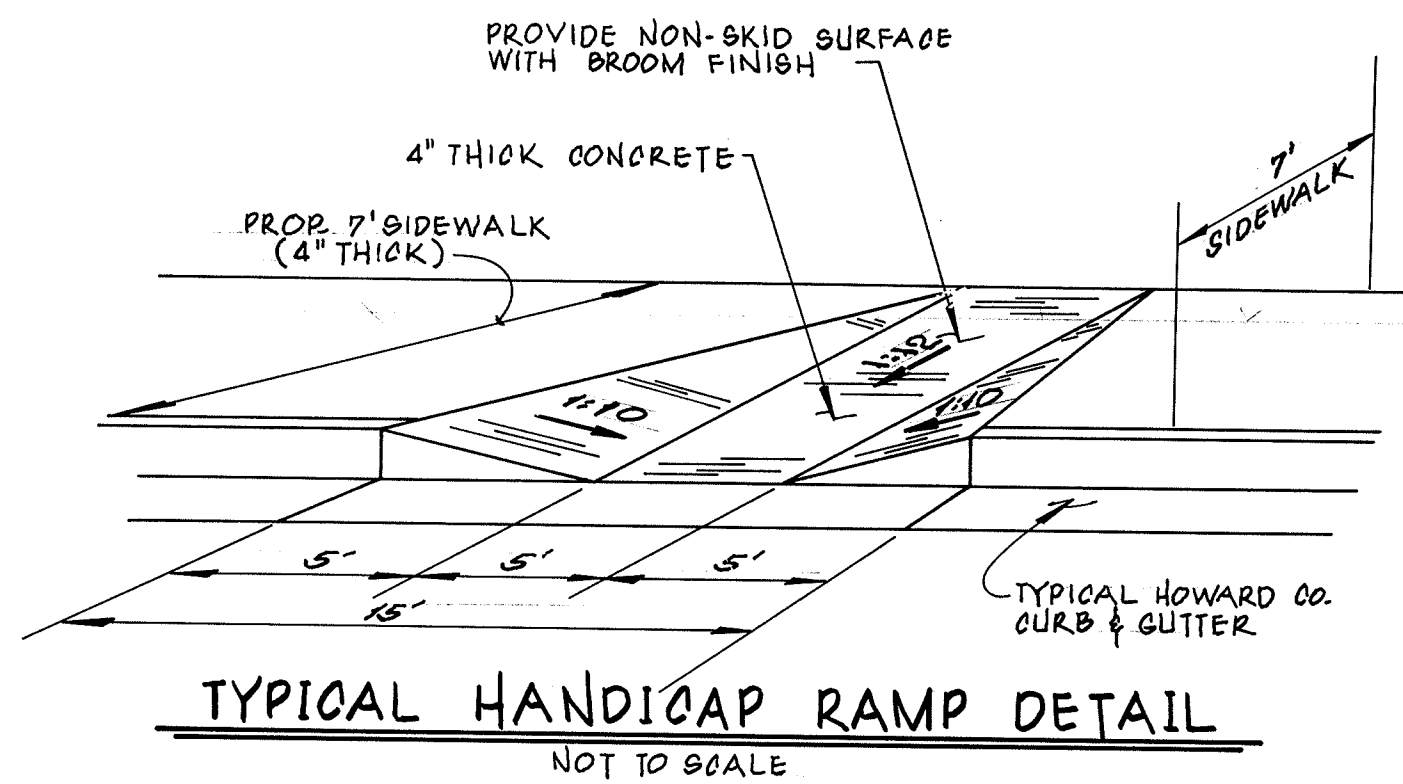
MILDENBERG, MOCHI & ASSOCIATES, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
 (301) 461-0078 D.C. Metro: (301) 621-5768



DES: STAFF	KAM	Eliminate watermain Relocation	JAN 20
DRN: KAM		New Proposed Grade Line (By Howard Co)	Feb 23
CHK: JEM			
DATE: 10/31	BY NO.	REVISION	DATE

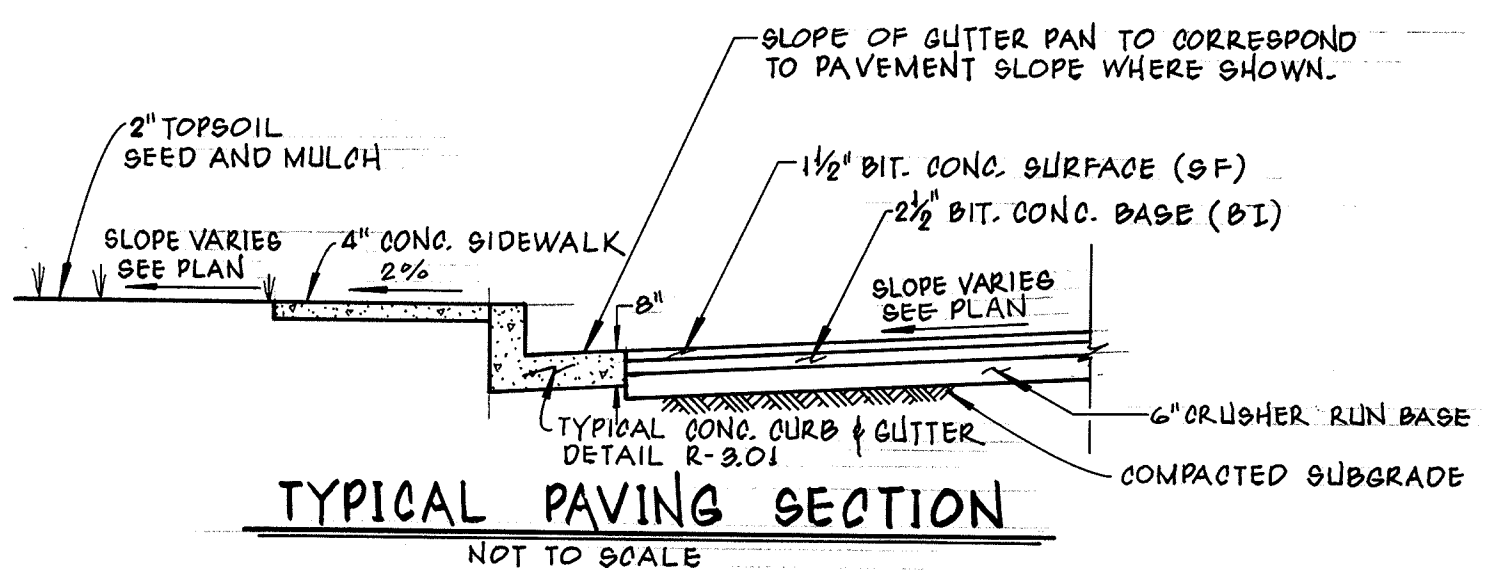
PLAN & PROFILE
 STA. 115+52.39 TO STA. 131+00
 CENTENNIAL LANE
 600' SCALE MAP NO. 24 BLOCK NO.

CENTENNIAL LANE
 OLD ANNAPOLIS ROAD TO STA. 136+00
 CAPITAL PROJECT J-4015-III
 ELECTION DISTRICT NO. 2
 HOWARD COUNTY, MARYLAND
 SCALE AS SHOWN
 SHEET 5 OF 27



GENERAL NOTES

- ALL SLOPES AND/OR DISTURBED AREAS SHALL RECEIVE SEEDING AND MULCHING EXCEPT WHERE OTHERWISE INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- TREES AND SHRUBBERY ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT.
- GRADING SHALL BE DONE IN SUCH A MANNER SO AS TO INSURE POSITIVE DRAINAGE TO THE PROPOSED INLET STRUCTURES.
- HORIZONTAL AND VERTICAL CONTROLS ARE BASED ON ASSUMED DATUM PROVIDED BY HOWARD COUNTY. BASELINE "A" STATION 0+92, BOTTOM OF CURB ELEVATION 425.00.
- THE CONTRACTOR SHALL NOTIFY THE PRINCIPAL OF THE CENTENNIAL LANE ELEMENTARY SCHOOL PRIOR TO COMMENCING WORK SHOWN ON THIS PLAN.
- THE CONTRACTOR SHALL ERECT AND MAINTAIN TEMPORARY CONSTRUCTION FENCING ALONG THE PERIMETER OF THE PROJECT THROUGHOUT THE DURATION OF THE CONSTRUCTION ACTIVITY.
- SITE ANALYSIS:
 - A. DISTURBED AREA: 19,600 S.F.
 - B. PREDOMINANT SOIL TYPE: CHD2 - CHESTER SILT LOAM 3-8% SLOPES MODERATELY ERODED.
 - C. CUT 398 C.Y.
 - D. FILL 392 C.Y.
 - E. AREA TO VEGETATIVELY STABILIZED: 7200 S.F.



BENCHMARK:
BASELINE "A" STATION 0+92
BOTTOM OF EXISTING CURB
ELEV. 425.00

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

7/5/94
DIRECTOR OF PUBLIC WORKS DATE

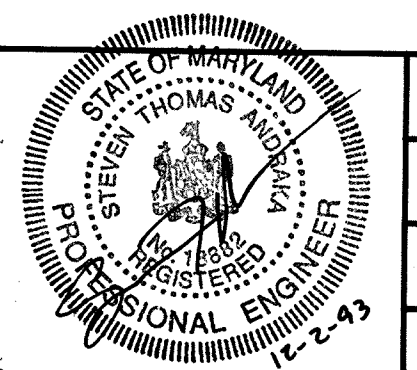
5/27/94
CHIEF, BUREAU OF ENGINEERING DATE

7-5-94
CHIEF, BUREAU OF HIGHWAYS DATE

5/27/94
CHIEF, TRANSPORTATION PROJECTS AND WATERBESHED MANAGEMENT DIVISION DATE

dfi CONSULTING ENGINEERS, SURVEYORS AND LAND PLANNERS

504 BALTIMORE/ANNAPOLIS BLVD.
SEVERNA PARK, MD 21146 847-2727

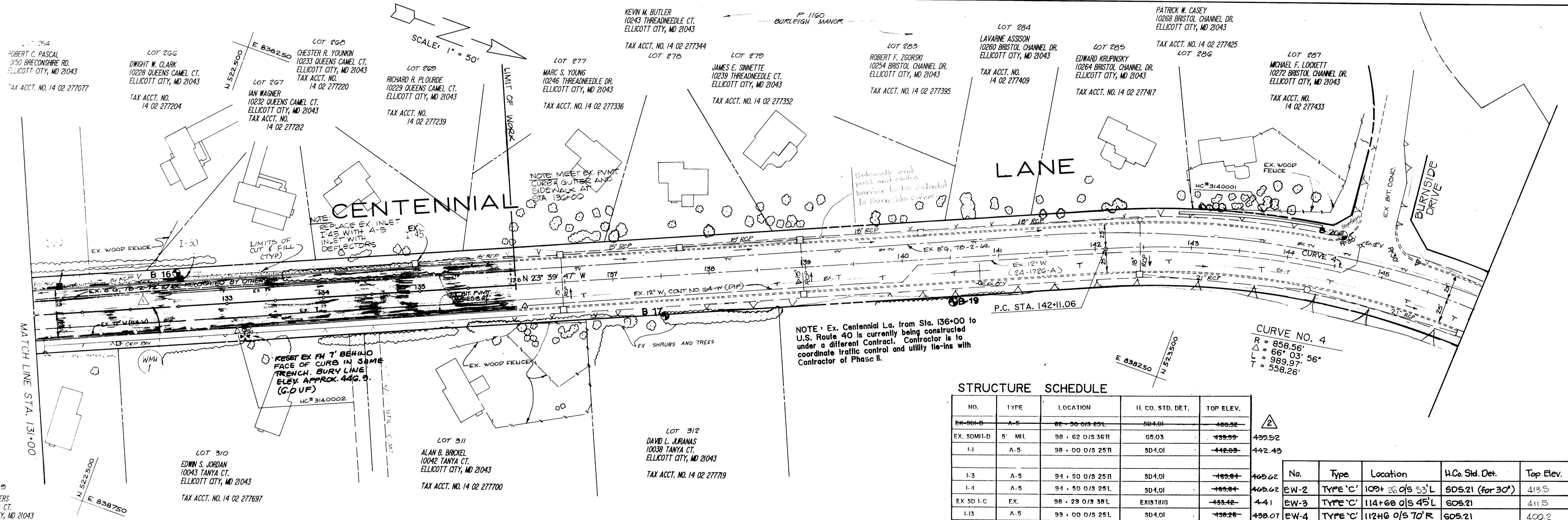


DES: D.D.S.			
DRN: R.J.S.			
CHK: M.M.			
DATE: 12/98			
BY	NO.	REVISION	

SITE AND GRADING AND SEDIMENT CONTROL PLAN
CENTENNIAL LANE ELEMENTARY SCHOOL PARKING LOT

CENTENNIAL LANE
OLD ANNAPOLIS ROAD TO STA. 136+00
CAPITAL PROJECT J-4015 III
ELECTION DISTRICT No. 2

SCALE AS SHOWN
SHEET 5A OF 27
HOWARD COUNTY, MARYLAND



NOTE: Ex. Centennial L.A. from Sta. 136+00 to U.S. Route 40 is currently being constructed under a different Contract. Contractor is to coordinate traffic control and utility tie-ins with Contractor of Phase II.

CURVE NO. 4
 R = 858.56'
 Δ = 66° 03' 56"
 L = 989.97'
 T = 558.26'

STRUCTURE SCHEDULE

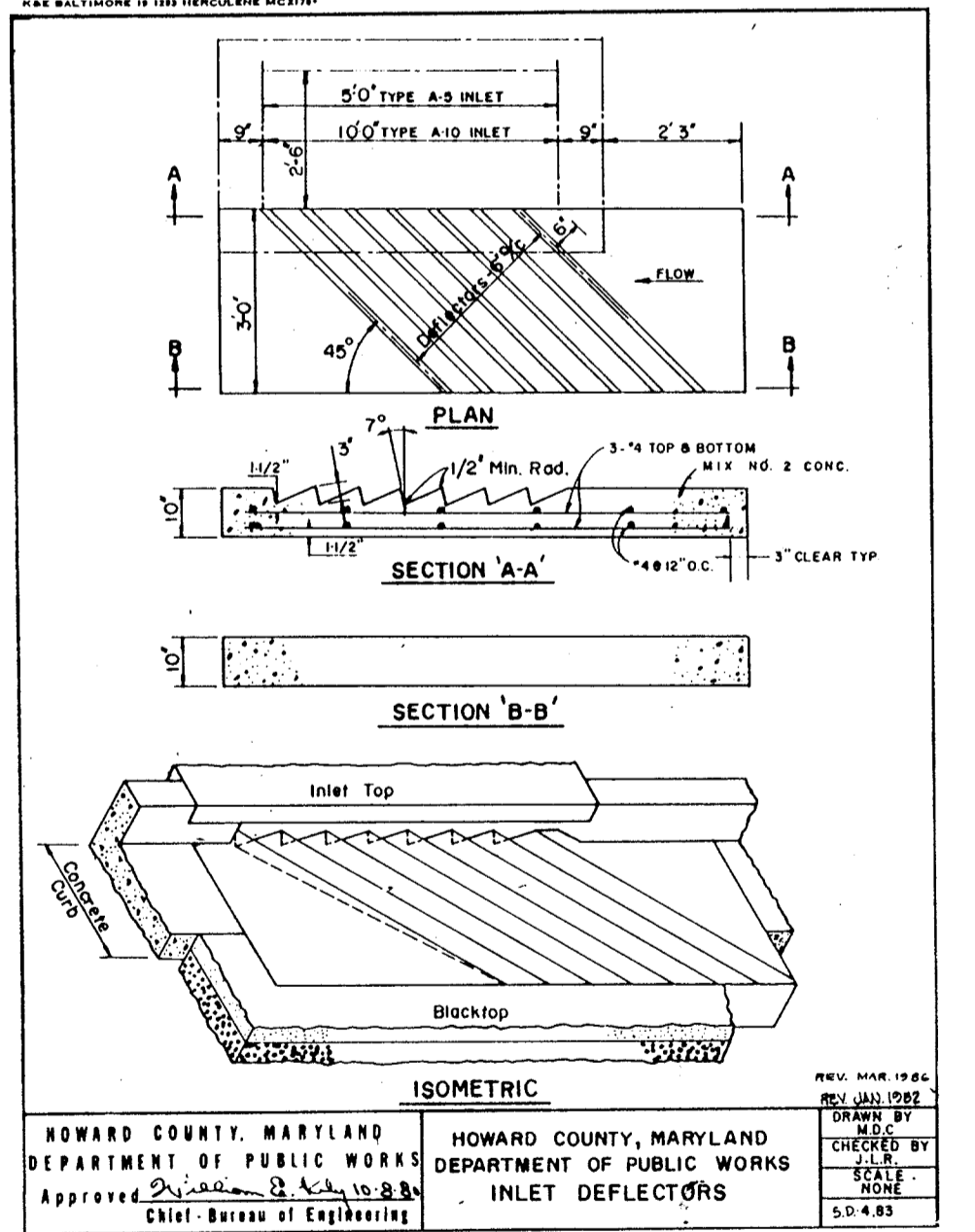
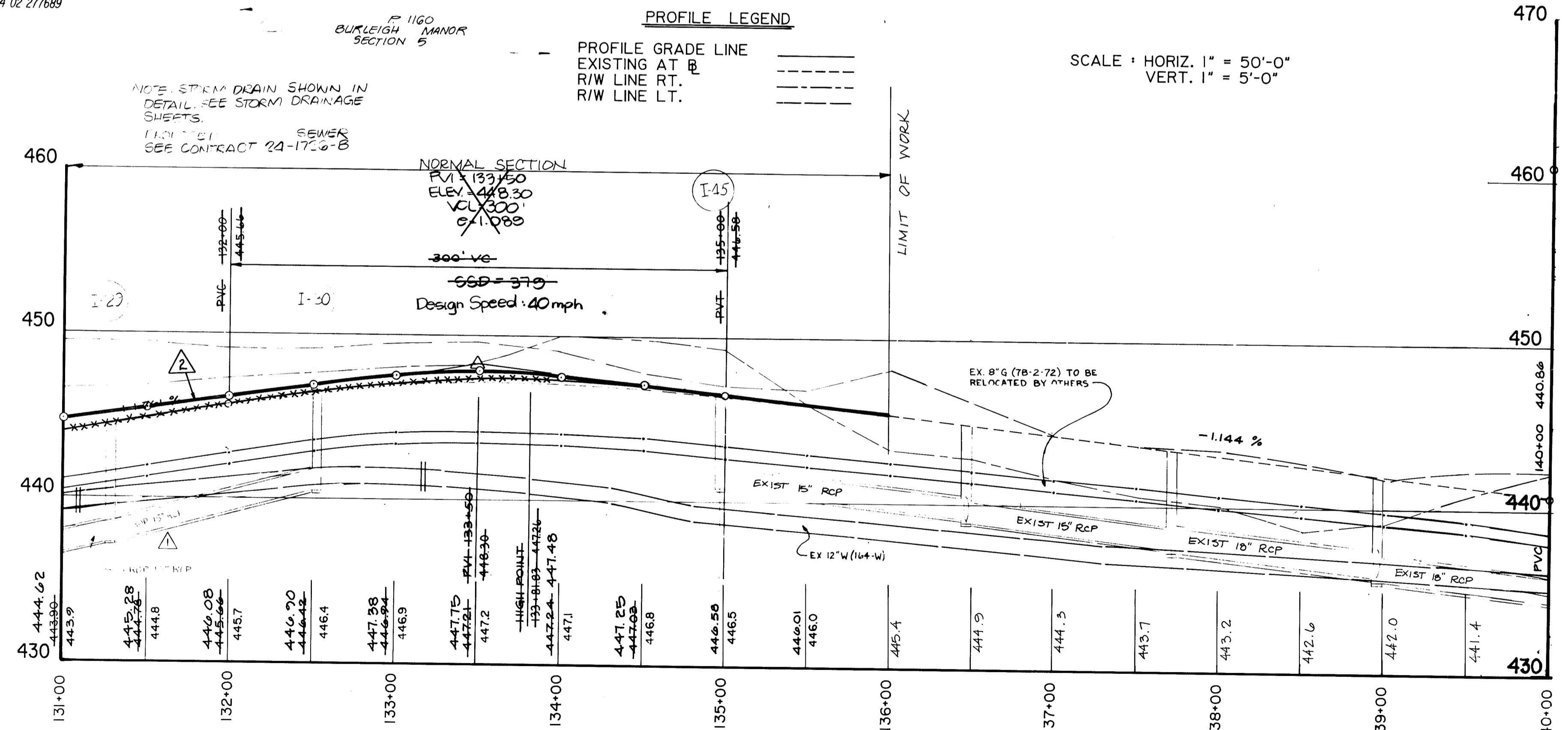
NO.	TYPE	LOCATION	II. CO. STD. DET.	TOP ELEV.
EX-SDI-B	A-5	92 + 50 O/S 25L	SD4.0I	406.52
EX-SDMI-D	5' MI	98 + 62 O/S 36R	GS.03	439.99
I-1	A-5	98 + 00 O/S 25R	SD4.0I	442.09
I-3	A-5	94 + 50 O/S 25R	SD4.0I	465.62
I-4	A-5	94 + 50 O/S 25L	SD4.0I	465.62
EX-SD I-C	EX.	98 + 29 O/S 38L	EXISTING	433.42
I-13	A-5	99 + 00 O/S 25L	SD4.0I	438.28
MI-8	DROP MH	105 + 00 O/S 20L	MO 303.11	417.65
I-6	A-5	109 + 10 O/S 25L	SD4.0I	419.65
I-7	A-5	107 + 00 O/S 25L	SD4.0I	426.07
I-8	A-5	105 + 00 O/S 25L	SD4.0I	430.54
I-9	A-5	103 + 75 O/S 25L	SD4.0I	431.97
I-10	A-5	102 + 50 O/S 25L	SD4.0I	432.92
EX-SDI-F	EXISTING	EXISTING	EXISTING	
I-11	A-5	101 + 32 O/S 25L	SD4.0I	434.01
I-12	A-5	100 + 32 O/S 25L	SD4.0I	435.30
I-14	A-5	109 + 10 O/S 25R	SD4.0I	419.65
I-15	A-5	105 + 00 O/S 25R	SD4.0I	430.54
I-16	A-5	102 + 50 O/S 25R	SD4.0I	432.92
I-17	A-5	100 + 32 O/S 25R	SD4.0I	435.30
I-18	A-5	112 + 40 O/S 25L	SD4.0I	413.5
I-19	A-5	115 + 00 O/S 25L	SD4.0I	415.74
MI-22-A	4' MI	OVER EX. 30" RCP (118.05 O/S 26L)	GS.01	422.27
I-21	A-5	112 + 40 O/S 25R	SD4.0I	413.5
EW-1	TYPE 'A'	112 + 00 O/S 41L	SD5.11	408.40
EX-EW	EXISTING	EXISTING	EXISTING	408.91
I-20	A-5	117 + 00 O/S 25L	SD4.0I	419.27
I-22-B	Y-1	OVER EX. 24" RCP (118.72 O/S 30L)	SD4.14	417.40
I-22	A-5	119 + 75 O/S 25L	SD4.0I	424.11
I-23	A-5	121 + 00 O/S 25L	SD4.0I	426.07
I-24	A-5	123 + 00 O/S 25L	SD4.0I	427.02
I-25	DROP MH	125 + 00 O/S 25L	MO 303.11	433.35
I-26	A-5	127 + 00 O/S 25L	SD4.0I	438.87
MI-27	4' MI	128 + 15 O/S 28L	GS.01	438.97
JC-1	JC	128 + 98 O/S 27L	SDI12	439.75
EX-SDI-II	EXISTING	EXISTING	EXISTING	
EX-SDI-I	EXISTING	EXISTING	EXISTING	
I-28	A-5	130 + 00 O/S 25L	SD4.0I	442.0
I-31	A-5	125 + 00 O/S 25R	SD4.0I	433.66
I-32	A-5	128 + 15 O/S 25R	SD4.0I	438.88
I-33	A-5	130 + 00 O/S 25R	SD4.0I	442.0
I-29	A-5	131 + 25 O/S 25R	SD4.0I	444.38
I-30	A-5	132 + 50 O/S 25L	SD4.0I	446.18
I-45	EX. K to A-5	EXISTING	SD4.0I	446.60

No.	Type	Location	II. Co. Std. Det.	Top Elev.
EW-2	TYPE 'C'	109 + 26 O/S 53L	SD5.21 (for 30')	413.5
EW-3	TYPE 'C'	114 + 68 O/S 45L	SD5.21	411.5
EW-4	TYPE 'C'	112 + 46 O/S 70R	SD5.21	400.2

PROFILE LEGEND

PROFILE GRADE LINE
 EXISTING AT R
 R/W LINE RT.
 R/W LINE LT.

SCALE: HORIZ. 1" = 50'-0"
 VERT. 1" = 5'-0"



NOTE:
 1. INLET LOCATIONS AND ELEVATIONS ARE BASED AT THE TOP OF CURB ON THE DOWN STREAM CORNER OF THE STRUCTURE. MANHOLE LOCATIONS AND ELEVATIONS ARE SHOWN TO THE CENTERLINE OF THE STRUCTURE.
 2. ALL A-5 INLETS TO BE CONSTRUCTED WITH DEFLECTORS. SEE DETAIL THIS SHEET.

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND

James M. Kelly, Director of Public Works
 Date: 12/14/91

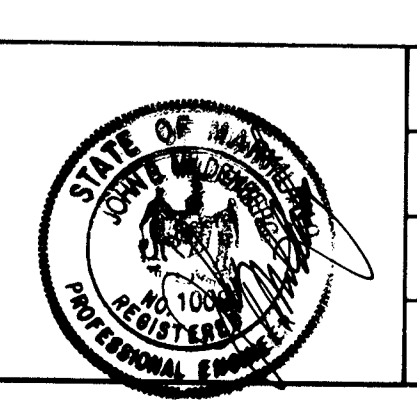
Richard W. Anderson, Chief, Bureau of Engineering
 Date: 12-3-91

Elizabeth Anderson, Chief, Roads, Bridges and Storm Drainage
 Date: 12/14/91

David W. Williams, Chief, Bureau of Highways
 Date: 12/14/91

MILDENBERG, MOCHI & ASSOCIATES, INC.
 ENGINEERS • SURVEYORS • PLANNERS

3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
 (301) 461-0078 D.C. Metro (301) 621-5768



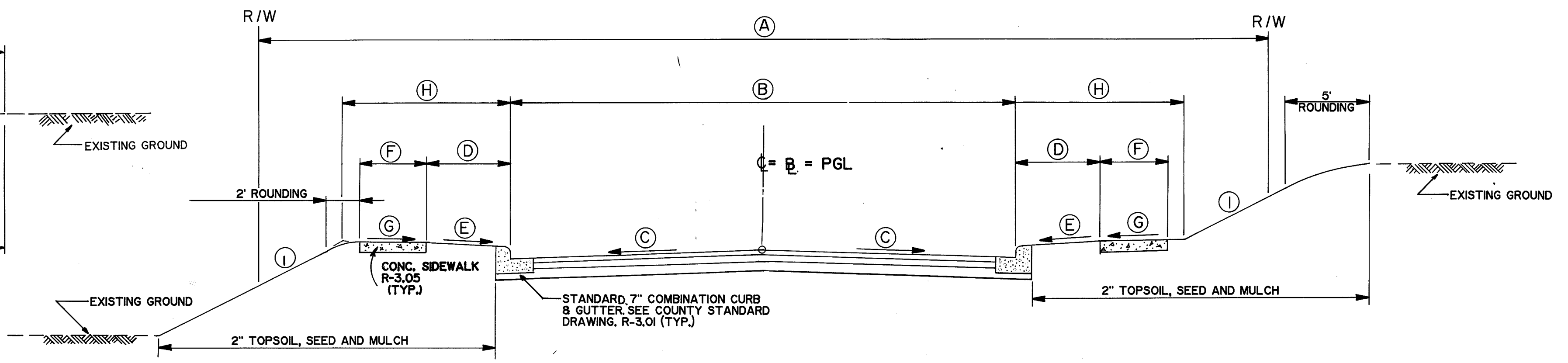
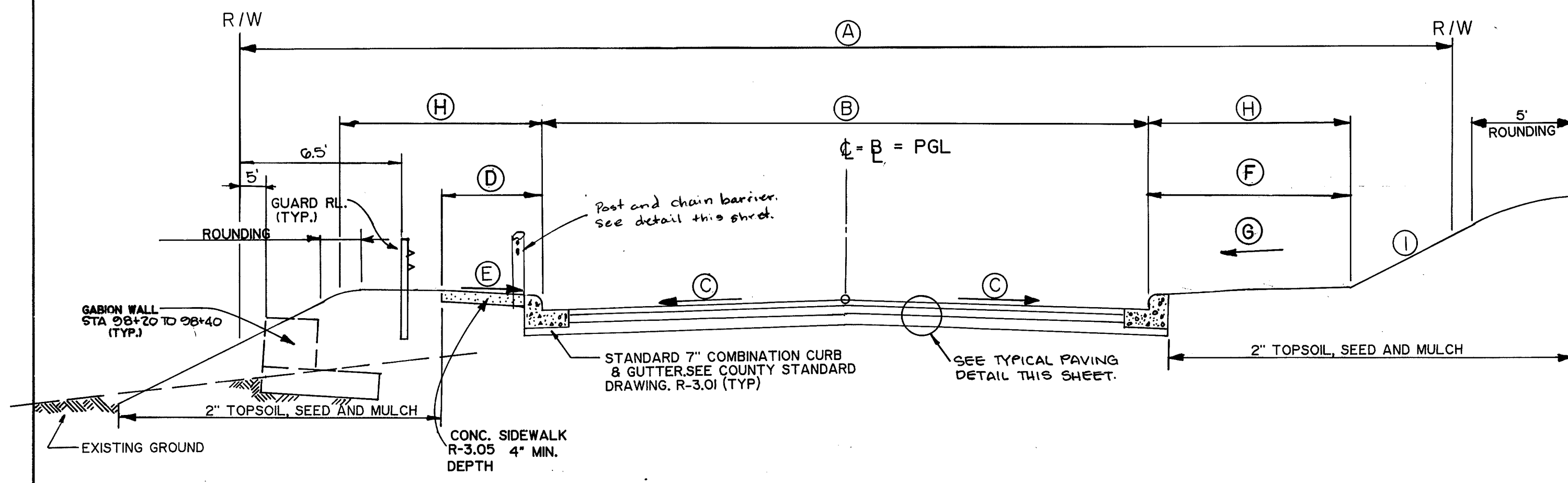
DESIGN	DATE	BY	NO.	REVISION	DATE
DESIGN STAFF	KAM			Eliminate Watermain Relocation.	JAN 92
				New Proposed Grade Line (By Howard Co.)	FEB 93
DRN:	KAM				
CHK:	JBM				
DATE:	10/31				

PLAN & PROFILE
 STA. 131+00 TO STA. 146+00
 CENTENNIAL LANE

600' SCALE MAP NO. 24 BLOCK NO.

CENTENNIAL LANE
 OLD ANNAPOLIS ROAD TO STA. 136+00
 CAPITAL PROJECT J-4015-III
 ELECTION DISTRICT NO. 2
 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
 SHEET 6 OF 27



STATIONING CENTENNIAL LANE	R/W	Pavement Width	Cross Slope	SIDEWALK	Slope	Grass Strip	Slope	Transition to Max. Slope		Max. Slope	Design Speed	Classification
								LEFT	RIGHT			
81+50 to 91+75	80'	49'	2%	5'	4%	8'	4%	8'	8'	2:1	35 mph.	Minor Arterial
91+75 to 96+50	80'	50'	2%	5'	4%	8'	4%	6'	8'	2:1	35 mph.	Minor Arterial
97+00 to 97+50	80'	50'	2%	5'	4%	6.5'	4%	6'	6'	1 1/2:1	35 mph.	Minor Arterial
98+00 to 98+50	80'	50'	2%	5'	4%	6.5'	4%	6'	6'	1 1/2:1	35 mph.	Minor Arterial
99+00 to 100+00	80'	50'	2%	5'	4%	5.5'	4%	6'	4.5'	1 1/2:1	35 mph.	Minor Arterial
100+50 to 103+00	80'	50'	2%	5'	4%	6.5'	4%	6'	6'	1 1/2:1	35 mph.	Minor Arterial
103+50 to 108+50	80'	50'	2%	5'	4%	8'	4%	8'	8'	2:1	35 mph.	Minor Arterial
109+00 to 110+50	80'	50'	2%	5'	4%	8'	4%	6'	8'	1 1/2:1	35 mph.	"
111+00 to 112+00	80'	50'	2%	5'	4%	6.5'	4%	6'	5.5'	1 1/2:1	35 mph.	"
112+50 to 113+00	80'	50'	2%	5'	4%	8'	4%	6'	8'	1 1/2:1	35 mph.	"
113+50 to 114+00	80'	50'	2%	5'	4%	8'	4%	6'	8'	2:1	35 mph.	"
114+50 to 116+00	80'	50'	2%	5'	4%	6.5'	4%	7'	6'	1 1/2:1	35 mph.	Minor Arterial
116+50 to 118+00	80'	50'	2%	5'	4%	8'	4%	8'	8'	2:1	35 mph.	Minor Arterial
118+50 to 119+00	80'	50'	2%	5'	4%	7'	4%	6'	7'	1 1/2:1	35 mph.	Minor Arterial
119+50 to 127+00	80'	50'	2%	5'	4%	8'	4%	8'	8'	2:1	35 mph.	"
127+50 to 136+00	80'	50'	2%	5'	4%	8'	4%	8'	8'	2:1	35 mph.	"

GUARD RAIL TABULATION

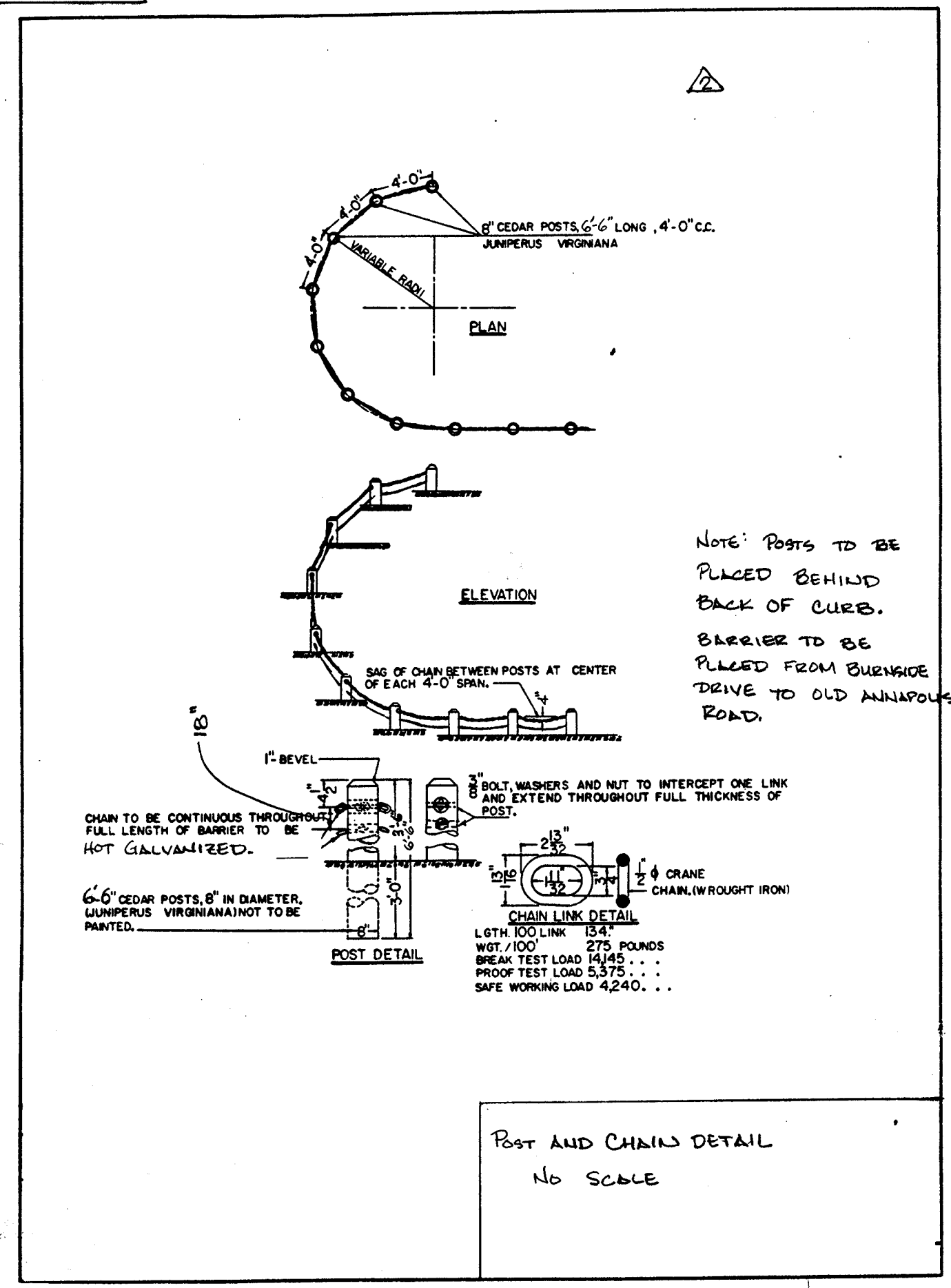
TRAIL END ANCHORAGE	97+05	O/S	40' L
TRANSITION TO NORMAL	98+10	O/S	33.5' L
TRANSITION FROM NORMAL	98+70	O/S	33.5' L
TRAIL END ANCHORAGE	95+01	O/S	40' L

TYPICAL SECTION INTERSECTING ROADS
NO SCALE

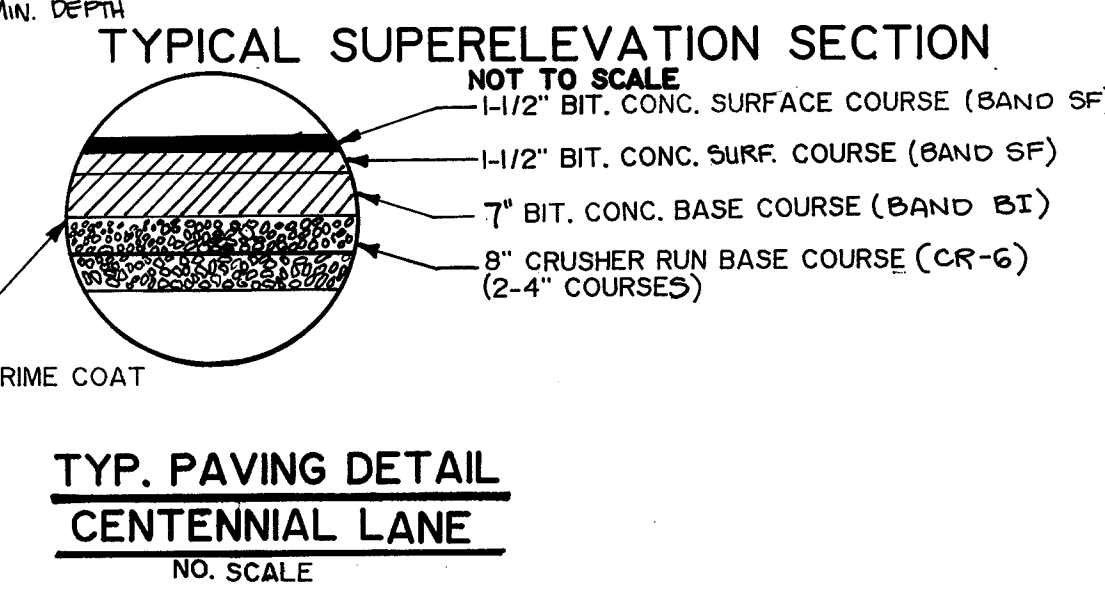
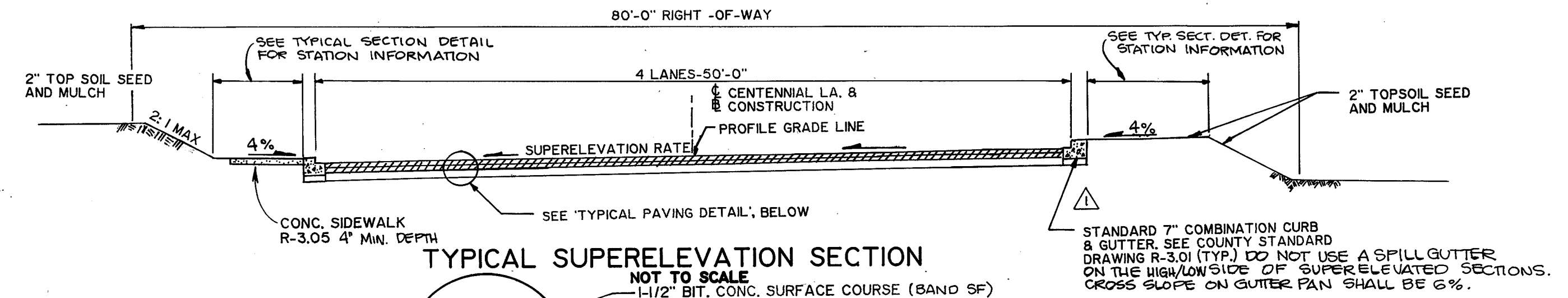
STATIONING	ROADWAY	R/W	Pavement Width	Cross Slope	Grass Strip	Slope	Sidewalk Width	Slope	Transition to Max. Slope	Max. Slope	Type	Classification
0+00 TO 0+00	S. Breconshire Rd.	60'	36'	3%	7'	4%	4'	2%	12'	2:1	P-3	Minor Collector
0+00 TO 0+00	Old Annapolis Rd.	80'	44'	2%	9'	4%	4'	2%	14'	2:1	P-3	Major Collector
0+00 TO 0+50	Glastonbury Road	60'	36'	3%	7'	4%	4'	2%	12'	2:1	P-3	Minor Collector
0+00 TO 0+60	Ducks Foot Lane	50'	32'	3%	4'	4%	4'	2%	9'	2:1	P-2	Local Street
0+00 TO 0+50	Culverene Road	50'	32'	3%	4'	4%	4'	2%	9'	2:1	P-2	Local Street
0+00 TO 1+15	N. Breconshire Road	60'	36'	3%	7'	4%	4'	2%	12'	2:1	P-3	Minor Collector

TYPICAL CLOSED SECTION ROAD - CENTENNIAL LANE
NOT TO SCALE

NOTE: ALONG PORTIONS OF CENTENNIAL LANE NOT SPECIFIED IN THE ABOVE LISTED TABULATION, WHERE GRASS STRIP WIDTH (F), TRANSITION TO MAX. SLOPE LEFT & RIGHT (H) & Max. Slope (I) VARY, PROVIDE SMOOTH TRANSITIONS BETWEEN STATIONS LISTED ABOVE.



CENTENNIAL LANE



SUPERELEVATION TABULATION

BEGIN SUPERELEVATION TRANSITION	114+11.06
BEGIN FULL SUPERELEVATION	116+23.06
END FULL SUPERELEVATION	122+36.63
END SUPERELEVATION TRANSITION	124+50.63

* SEE SUPERELEVATION HORIZONTAL AND VERTICAL CONTROL SHEET FOR MORE INFORMATION.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

MILDBERG, MOCHI & ASSOCIATES, INC.
ENGINEERS - SURVEYORS - PLANNERS
3300 North Ridge Road, Suite 225, Ellicott City, Maryland 21043-3350
(301) 481-0078 D.C. Metro: (301) 621-5788



DESIGNED BY	JBM/KAM	KAM	1	Eliminate spill gutter from super-elevated sections.	JAN 92
DRN. BY	STAFF		2	Post and chain barrier added per Director's decision and agreement of homeowners.	MAY 92
CHK. BY	JBM				
DATE	10/91	BY	NO.	REVISION	DATE

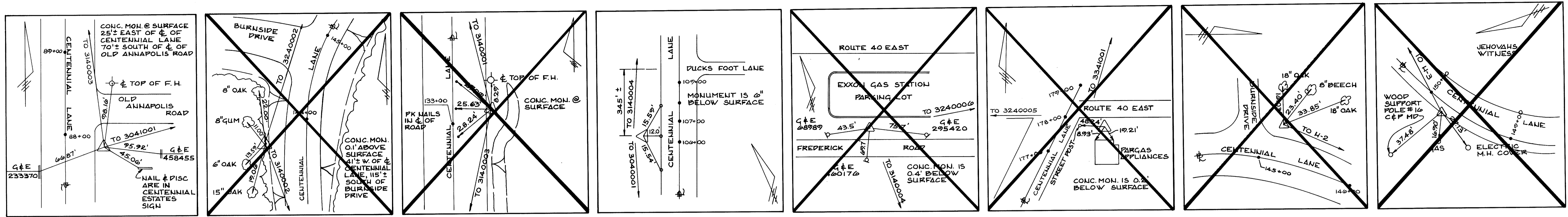
MISC. TYPICAL SECTIONS FOR INTERSECTING ROADS CENTENNIAL LANE

CENTENNIAL LANE
OLD ANNAPOLIS ROAD TO STA. 136+00
CAPITAL PROJECT J-4015- III
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 7 OF 27

1196

BRUNING 44-132 69150



HOWARD CO. # 3040001

N 518298.243
E 838017.587
ELEV. = 494.42
STA. 87+70 ± 0/5 32' ± R

HOWARD CO. # 3140001

N 523547.740
E 839056.376
ELEV. = 436.43
STA. 143+70 ± 0/5 37' ± L

HOWARD CO. # 3140002

N 522590.105
E 838530.841
ELEV. = 445.77
STA. 133+10 ± 0/5 30' ± R

HOWARD CO. # 3140005

N 520049.576
E 838994.190
ELEV. = 426.95
STA. 106+15 ± 0/5 20' ± L

HOWARD CO. # 3240005

N 526615.577
E 838351.344
ELEV. = 408.33
STA. 178+04 ± 0/5 76' ± R

HOWARD CO. # 3240006

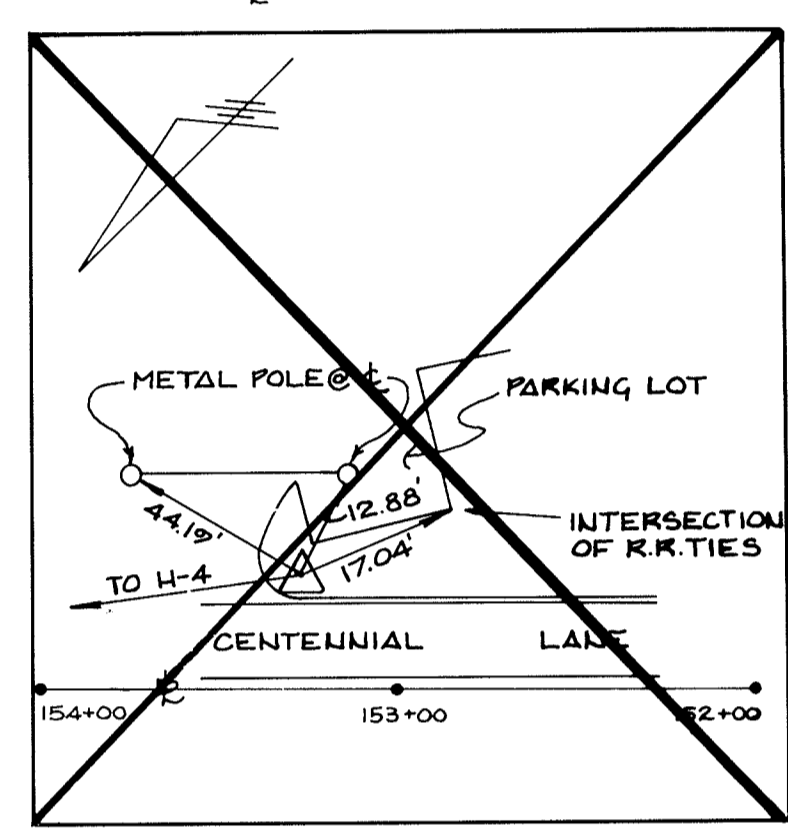
N 526558.644
E 839530.099
ELEV. = 418.06
STA. 145+30 ± 0/5 25' ± L

H-1

N 52373.218
E 838046.549
ELEV. = 418.06
STA. 145+30 ± 0/5 25' ± L

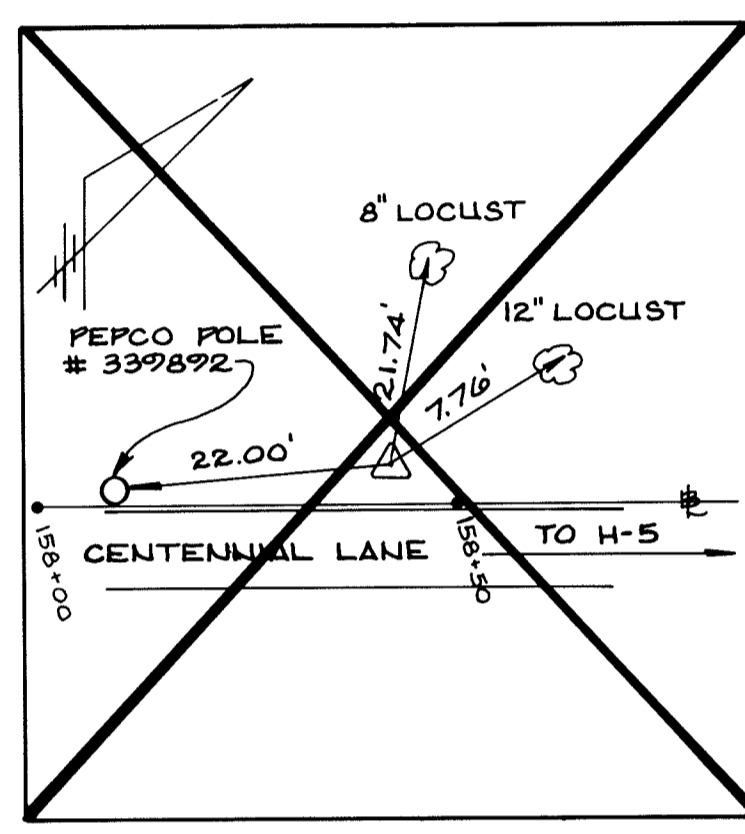
H-2

N 52458.117
E 838169.845
ELEV. = 383.82
STA. 149+90 ± 0/5 5' ± L



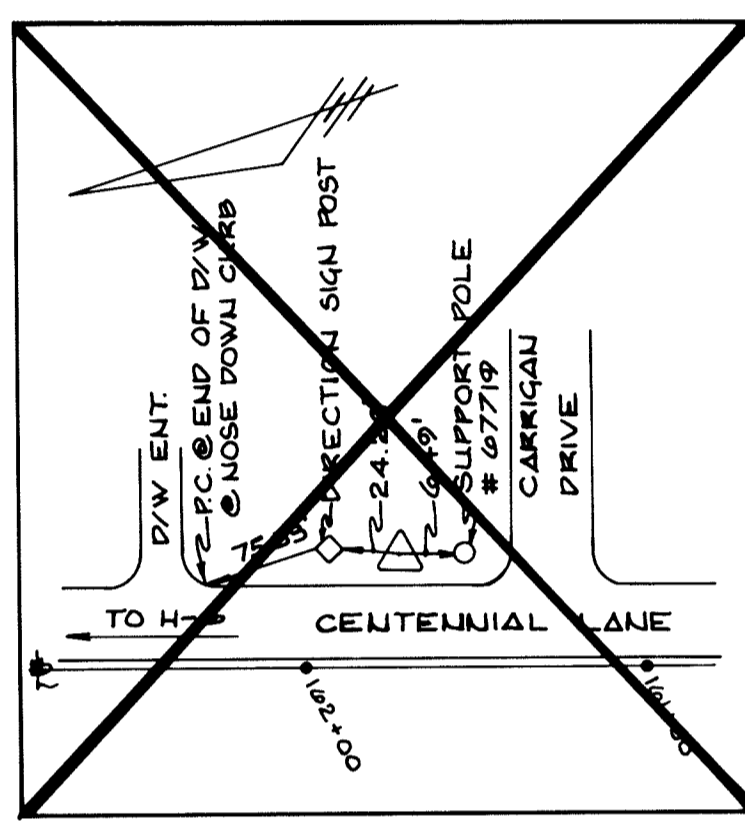
H-3

N 524403.962
E 838400.668
ELEV. = 374.04
STA. 153+26 ± 0/5 27' ± R



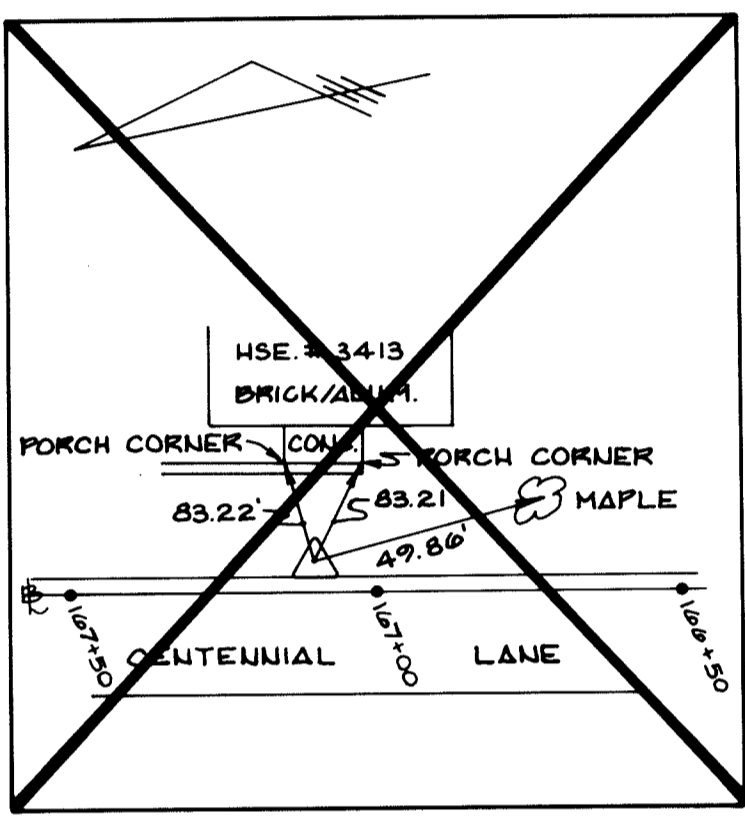
H-4

N 524800.695
E 838721.728
ELEV. = 361.89
STA. 158+97 ± 0/5 5' ± L



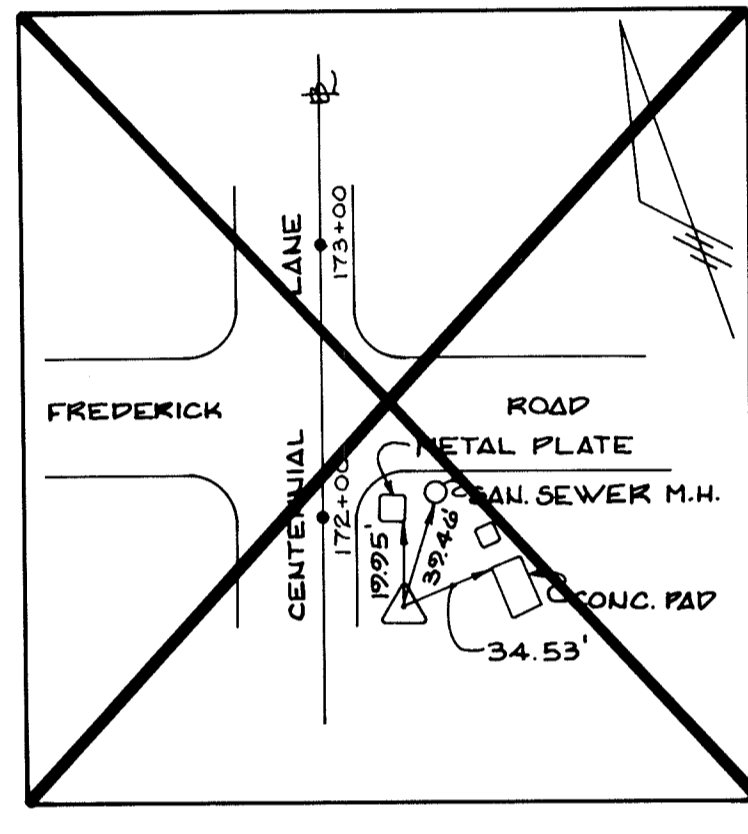
H-5

N 525046.407
E 838973.591
ELEV. = 363.91
STA. 161+83 ± 0/5 31' ± R



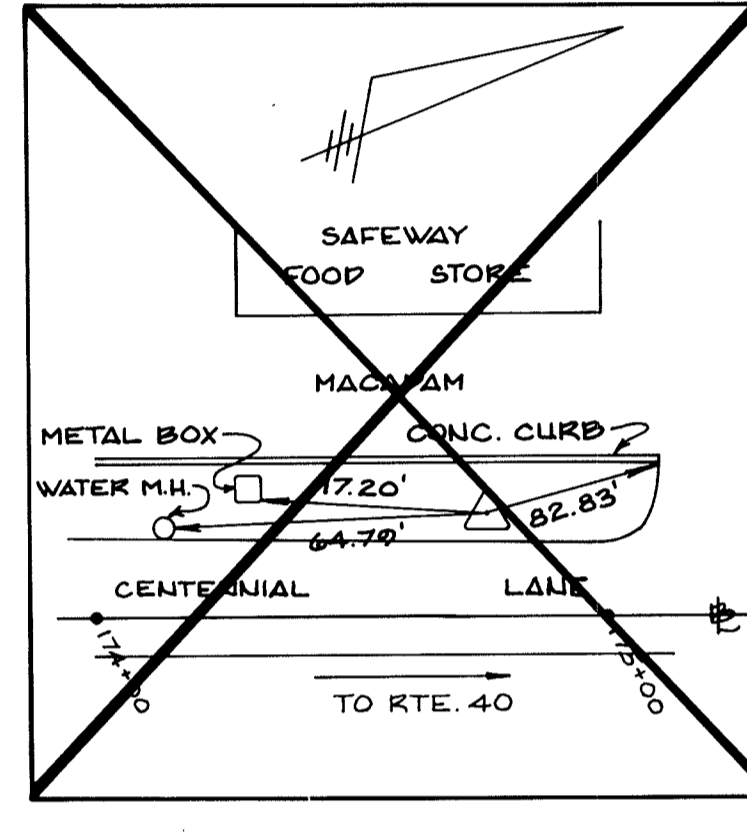
H-6

N 525566.666
E 839106.332
ELEV. = 446.30
STA. 107+15 ± 0/5 3' ± R



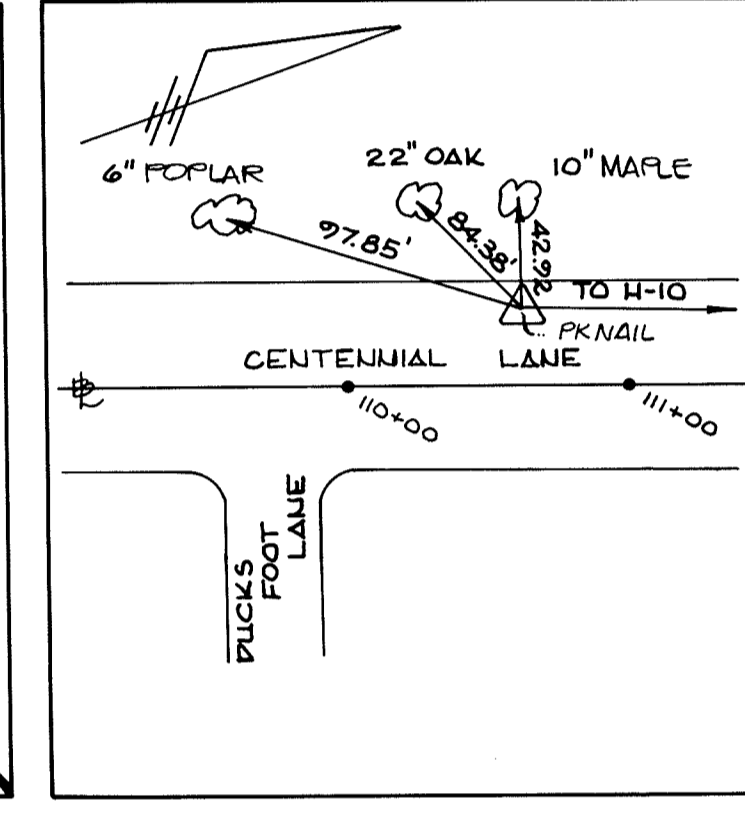
H-7

N 526004.030
E 839217.444
ELEV. = 425.31
STA. 171+65 ± 0/5 14' ± R



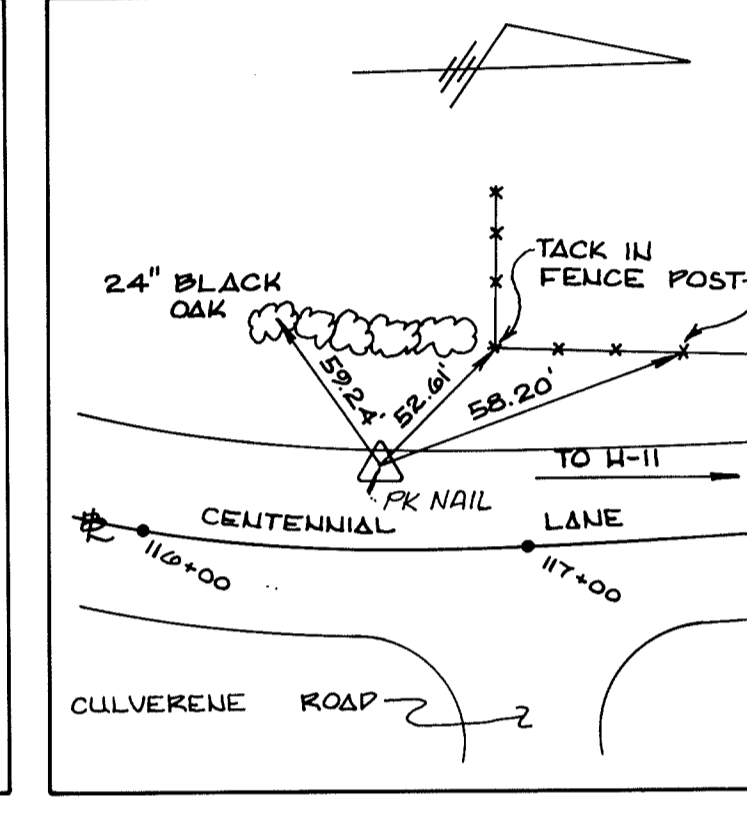
H-8

N 526317.482
E 839296.061
ELEV. = 426.35
STA. 174+85 ± 0/5 34' ± L



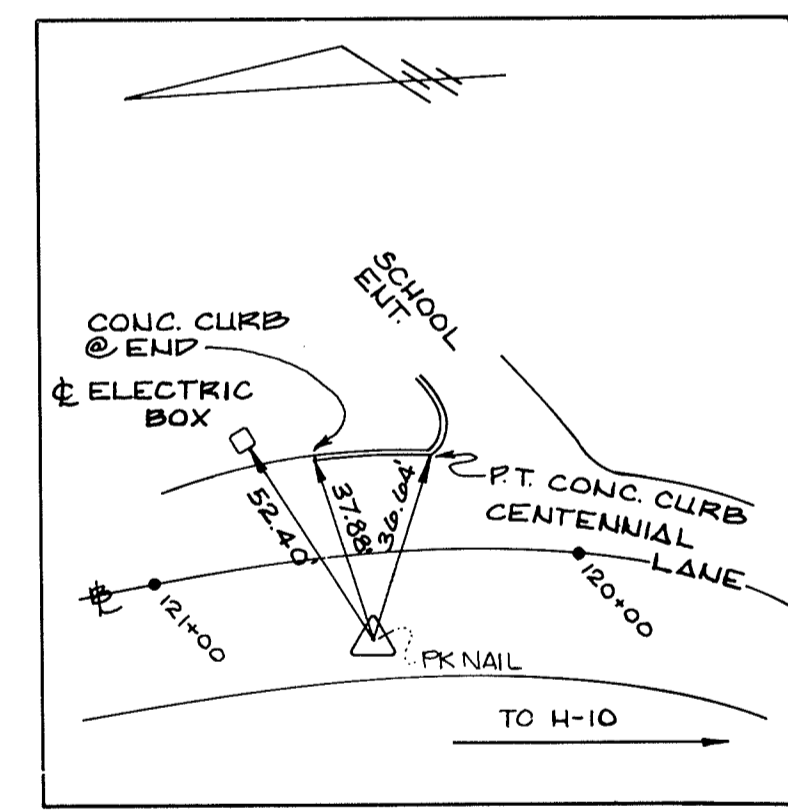
H-9

N 520476.628
E 838757.086
ELEV. = 413.88
STA. 110+70 ± 0/5 12' ± L



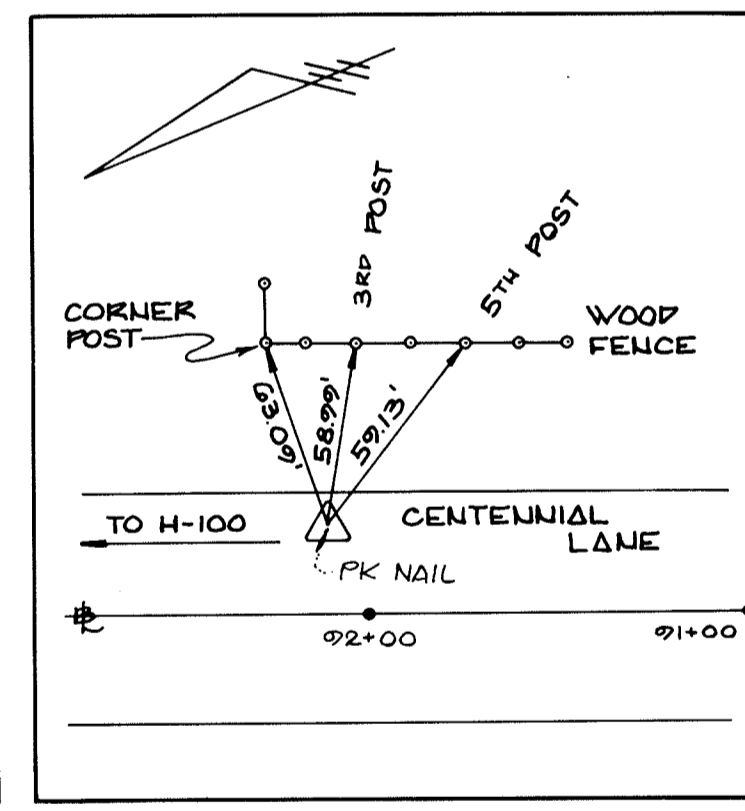
H-10

N 521034.270
E 838948.916
ELEV. = 416.69
STA. 116+00 ± 0/5 16' ± L



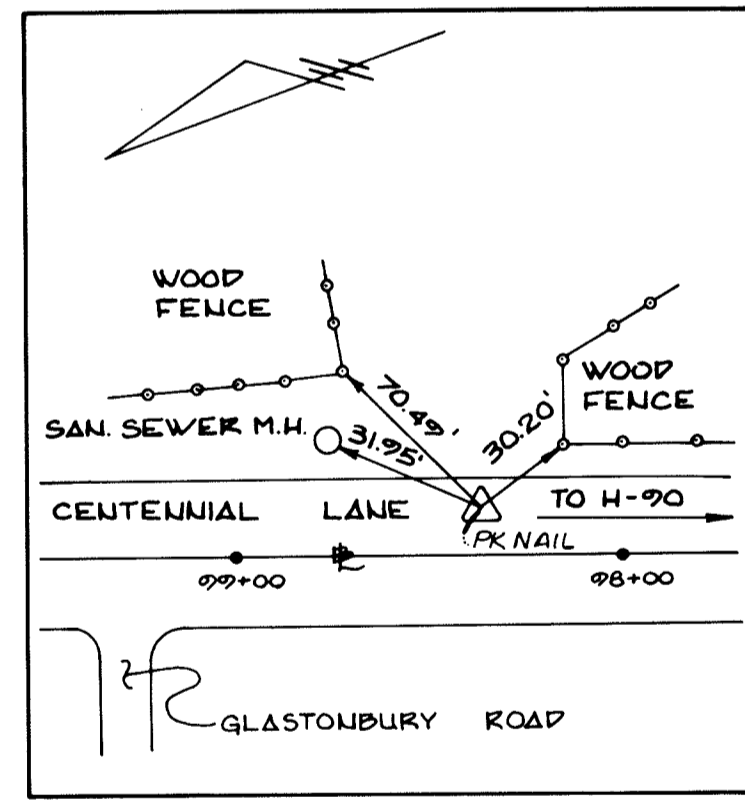
H-11

N 521408.854
E 838968.613
ELEV. = 425.71
STA. 120+45 ± 0/5 12' ± L



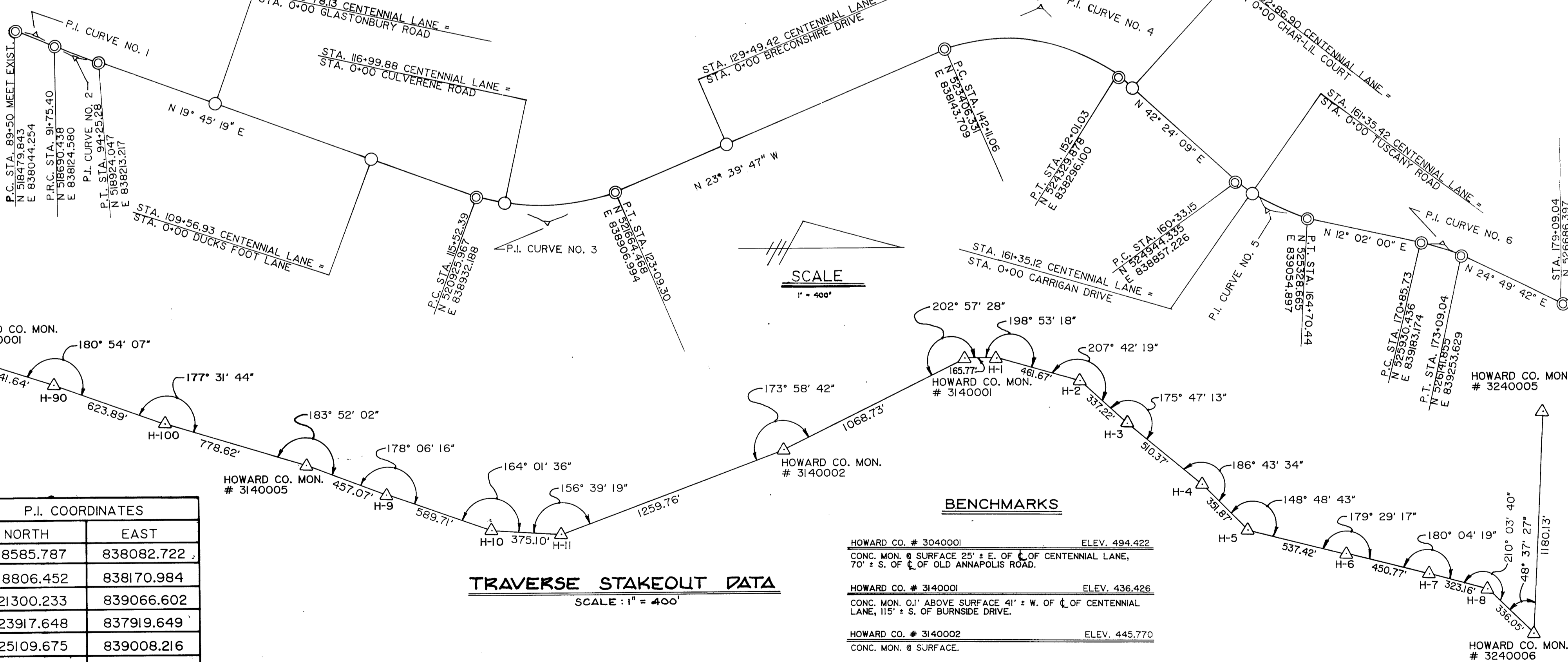
H-12

N 518716.862
E 838158.311
ELEV. = 419.99
STA. 92+10 ± 0/5 22' ± R



H-13

N 519305.026
E 838366.393
ELEV. = 439.08
STA. 96+35 ± 0/5 10' ± R



TRAVERSE STAKEOUT DATA

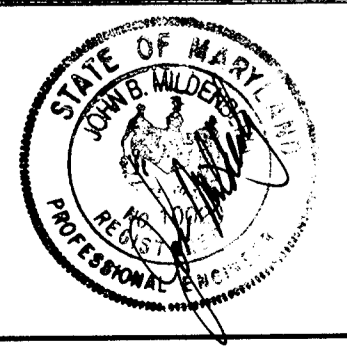
SCALE: 1" = 400'

CURVE NO.	DELTA	DC	RADIUS	TAN	ARC	EXT	CHORD	CENTER CURVE COORDINATES		P.I. COORDINATES	
								NORTH	EAST	NORTH	EAST
1	01° 50' 42"	00° 49' 07"	7000.00'	112.71'	225.40'	0.91'	N 20° 52' 41" E, 225.39'	516090.803	844623.957	518585.787	838082.722
2	02° 02' 43"	00° 49' 07"	7000.00'	124.95'	249.87'	1.12'	N 20° 46' 40" E, 249.86'	521290.073	831625.203	518806.452	838170.984
3	43° 25' 06"	05° 44' 10"	998.84'	397.67'	756.91'	76.25'	N 01° 57' 14" W, 738.93'	521263.578	837992.138	521300.233	839066.602
4	66° 03' 56"	06° 40' 24"	858.56'	558.26'	989.97'	165.54'	N 09° 22' 11" E, 936.04'	523750.920	838930.083	523917.648	837919.649
5	30° 22' 09"	06° 56' 42"	825.00'	223.91'	437.29'	29.85'	N 27° 13' 05" E, 432.18'	525500.661	838248.025	525109.675	839008.216
6	12° 47' 42"	05° 43' 46"	1000.00'	112.12'	223.31'	6.27'	N 18° 25' 51" E, 222.85'	525721.955	840161.200	526040.095	839206.549

BENCHMARKS
 HOWARD CO. # 3040001 ELEV. 494.422
 CONC. MON. @ SURFACE 25' ± E. OF C. OF CENTENNIAL LANE, 70' ± S. OF E. OF OLD ANNAPOLIS ROAD.
 HOWARD CO. # 3140001 ELEV. 436.426
 CONC. MON. 0.1' ABOVE SURFACE 41' ± W. OF C. OF CENTENNIAL LANE, 115' ± S. OF BURNSIDE DRIVE.
 HOWARD CO. # 3140002 ELEV. 445.770
 CONC. MON. @ SURFACE.

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: *James J. ...*
 Chief, Bureau of Engineering: *William B. ...*
 Chief, Bureau of Highways: *Charles W. ...*

MILDENBERG, MOCHI & ASSOCIATES, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
 (301) 461-0078 D.C. Metro: (301) 621-5768



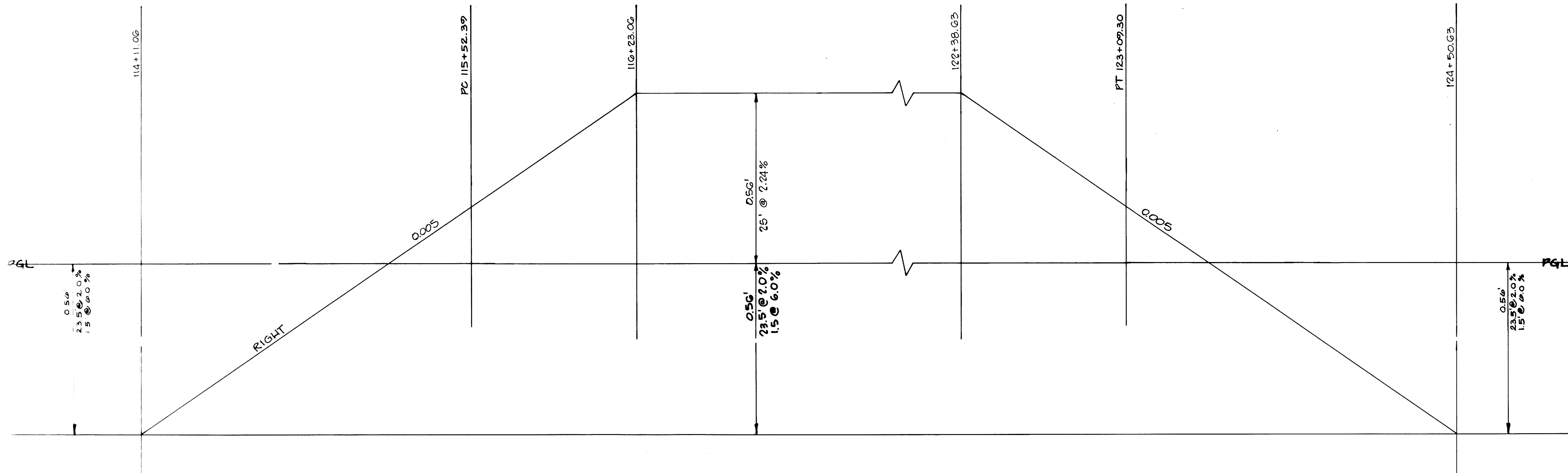
DES: JEM/KAM	DATE: 10/01
DRN: STAFF	BY: NO.
CHK: JEM	REVISION
DATE: 10/01	DATE

HORIZONTAL & VERTICAL CONTROLS
 CENTENNIAL LANE
 600' SCALE MAP NO. _____ BLOCK NO. _____

OLD ANNAPOLIS ROAD TO STA. 136+00
 CAPITAL PROJECT J-4015- III
 ELECTION DISTRICT NO. 2
 HOWARD COUNTY, MARYLAND

NOT TO SCALE
 SHEET 27 OF 27

1196

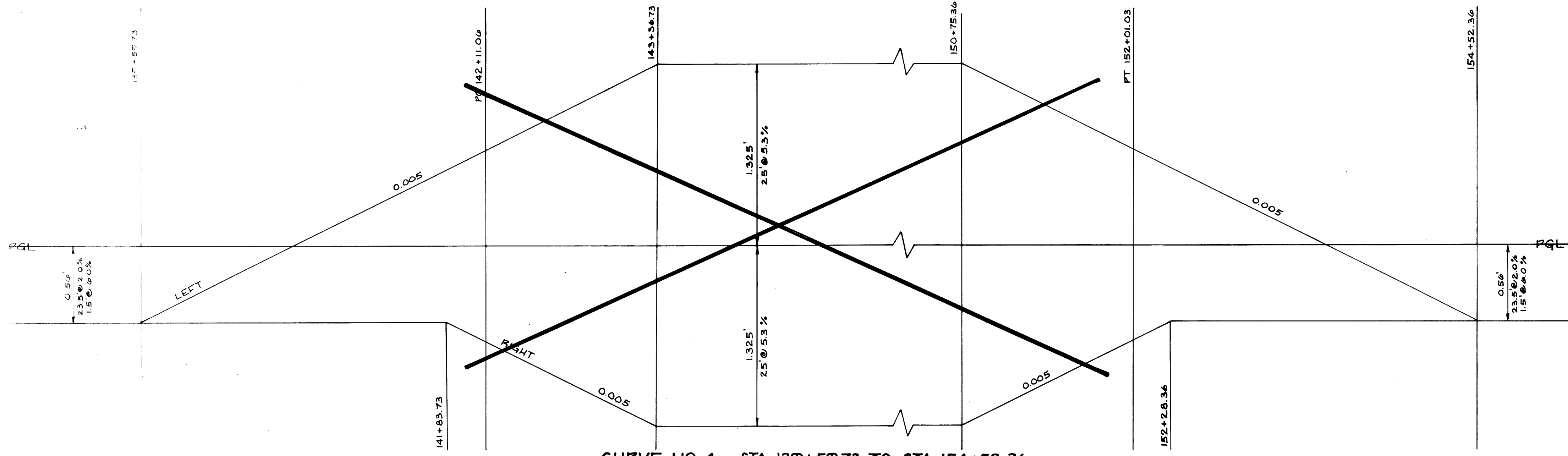


CURVE NO. 3 - STA. 113+11.06 TO STA. 125+50.63
 SCALE: HORIZ. 1" = 50'
 VERT. 1" = 1/2"

SUPERELEVATION DATA, CURVE 3

DESIGN SPEED 40 MPH HORIZONTAL CURVE R=998.84 P.C. STA. 115+52.39
 DEGREE OF CURVE 05-44-10 E = 76.25 P.T. STA. 123+09.30
 M.A. S.E.: 0.0254 LENGTH OF RUNOUT: 212'

TOP OF CURB	LT. F.L.	C.L. STATION	PGL ELEV.	RT. F.L.	TOP OF CURB
414.18	413.60	114 + 11.06	414.16	413.60	414.18
414.86	414.28	114 + 50.00	414.84	414.49	415.07
415.74	415.16	115 + .00	415.72	415.63	416.21
416.62	416.04	115 + 50.00	416.60	416.77	417.35
417.50	416.92	116 + .00	417.48	417.92	418.50
417.91	417.33	116 + 23.06	417.89	418.45	419.03
418.38	417.80	116 + 50.00	418.36	418.92	419.50
419.26	418.68	116 + 99.88	419.24	419.80	420.38
419.27	418.69	117 + .00	419.25	419.81	420.39
420.15	419.57	117 + 50.00	420.13	420.69	421.27
421.03	420.45	118 + .00	421.01	421.57	422.15
421.91	421.33	118 + 50.00	421.89	422.45	423.03
422.79	422.21	119 + .00	422.77	423.33	423.91
423.67	423.09	119 + 50.00	423.65	424.21	424.79
424.55	423.97	120 + .00	424.53	425.09	425.67
425.43	424.85	120 + 50.00	425.41	425.97	426.55
426.31	425.73	121 + .00	426.29	426.85	427.43
427.19	426.61	121 + 50.00	427.17	427.73	428.31
428.07	427.49	122 + .00	428.05	428.61	429.19
428.75	428.17	122 + 50.00	428.73	429.29	429.87
429.63	429.05	123 + .00	429.81	430.05	430.63
430.71	430.13	123 + 50.00	430.69	430.66	431.24
431.59	431.01	124 + .00	431.57	431.28	431.86
432.47	431.89	124 + 50.00	432.45	431.89	432.47
432.48	431.90	124 + 50.63	432.46	431.90	432.48

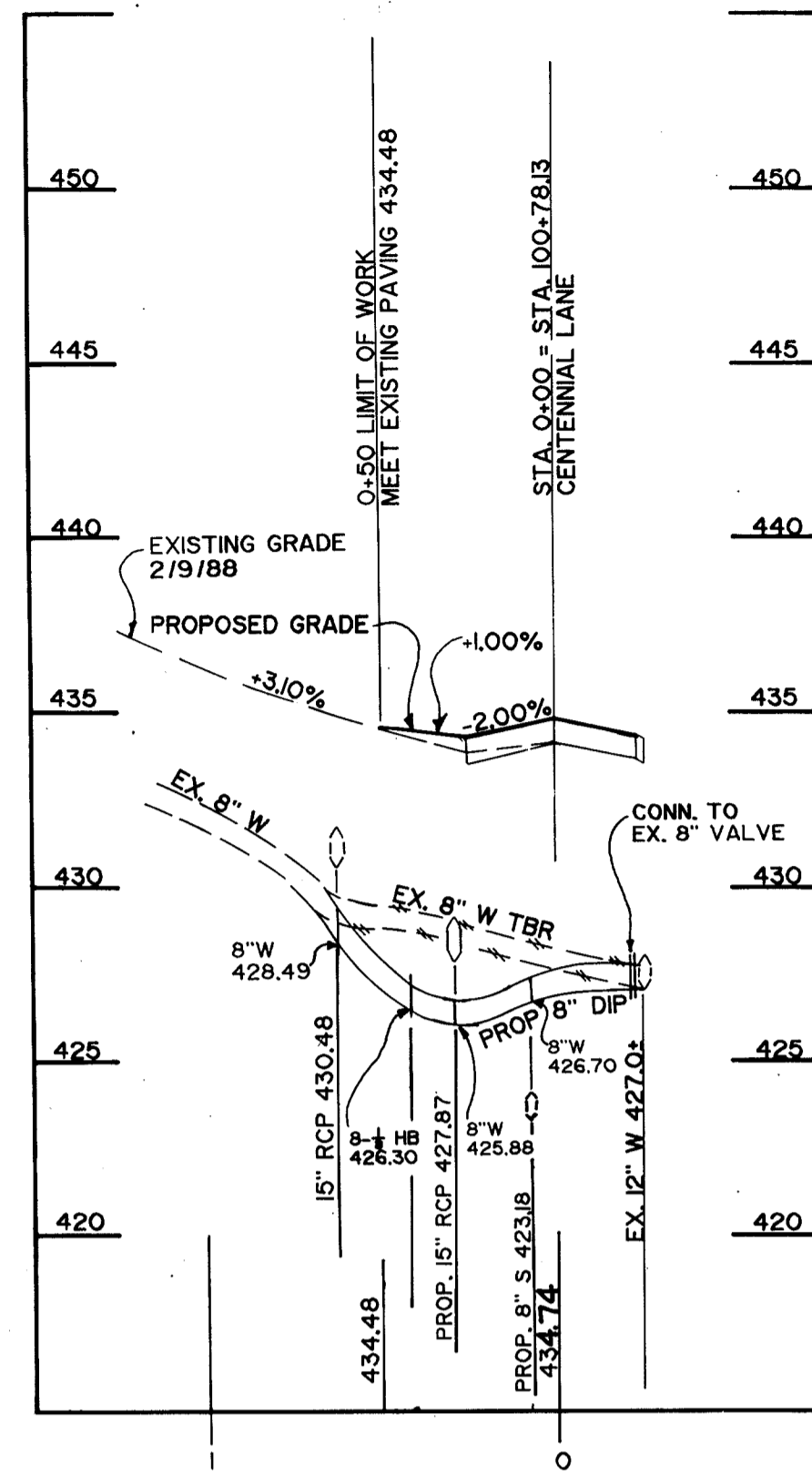


CURVE NO. 4 - STA. 137+59.73 TO STA. 154+52.36
 SCALE: HORIZ. 1" = 50'
 VERT. 1" = 1/2"

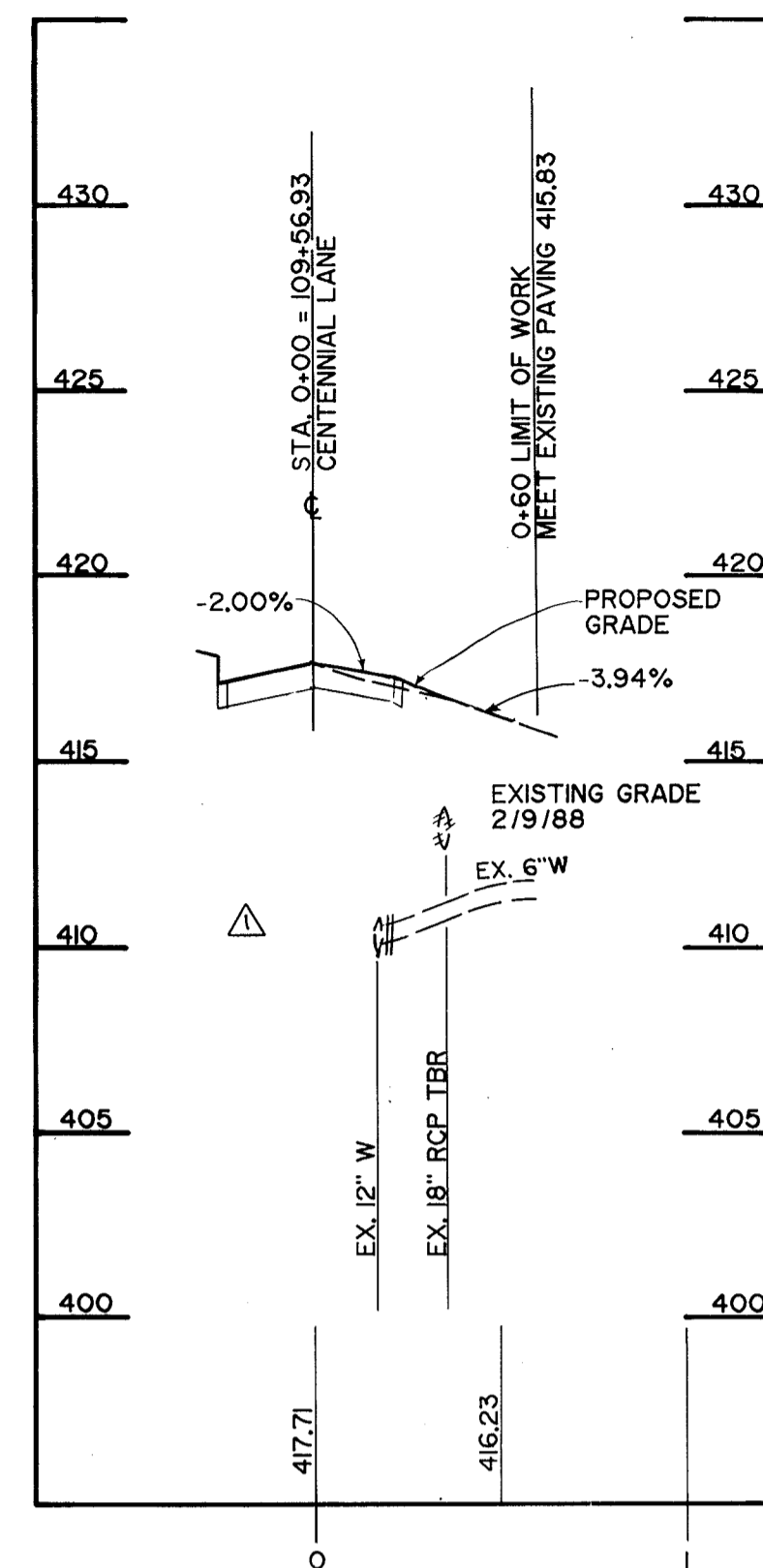
SUPERELEVATION DATA, CURVE 4

DESIGN SPEED 40 MPH HORIZONTAL CURVE R=850.56 P.C. STA. 142+11.06
 DEGREE OF CURVE 06-00-24 E = 165.54 P.T. STA. 152+01.03
 M.A. S.E.: 0.053 LENGTH OF RUNOUT: 377'

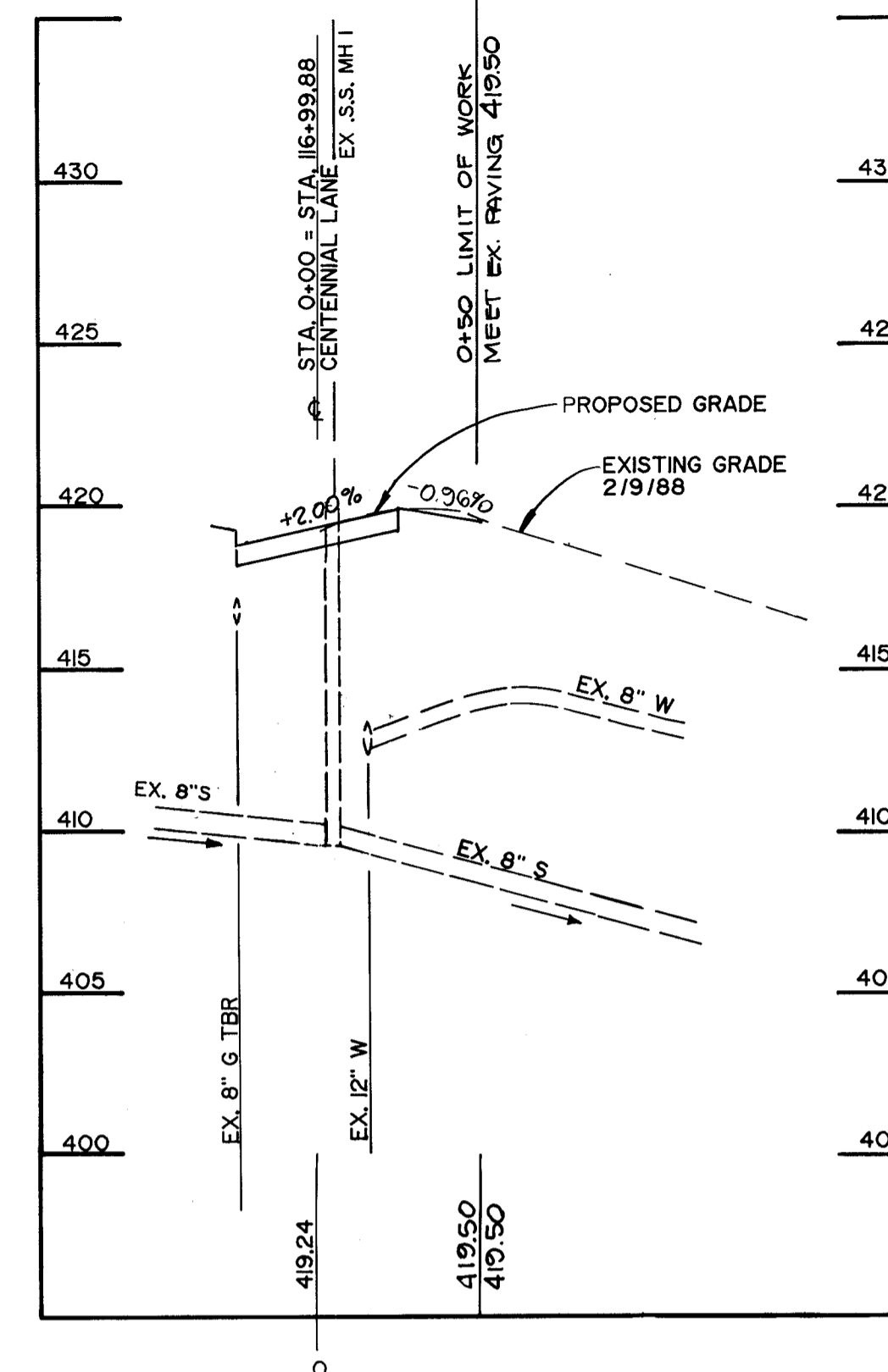
TOP OF CURB	LT. F.L.	C.L. STATION	PGL ELEV.	RT. F.L.	TOP OF CURB
441.34	440.74	137 + 59.73	441.32	440.74	441.34
441.10	440.50	140 + .00	440.86	440.50	440.90
440.62	440.02	140 + 50.00	440.13	439.67	440.17
439.81	439.21	141 + .00	439.07	438.91	439.11
438.89	438.29	141 + 50.00	437.78	437.14	437.74
437.75	437.15	141 + 85.73	436.59	435.03	436.65
437.24	436.64	142 + .00	436.00	435.36	435.96
436.88	436.28	142 + 11.06	435.58	434.88	435.48
435.87	435.27	142 + 50.00	435.98	435.09	435.89
435.38	434.78	143 + .00	435.14	434.50	435.10
434.85	434.25	143 + 26.75	434.27	433.40	434.00
434.91	434.31	143 + 50.00	434.78	433.66	434.28
434.75	434.33	144 + .00	434.00	433.00	434.68
434.85	434.43	144 + 50.00	434.78	434.38	434.98
434.34	433.74	144 + 85.73	433.41	432.09	433.49
434.00	433.40	145 + .00	433.07	431.75	433.55
433.22	432.62	145 + 50.00	433.29	431.97	433.57
433.43	432.83	146 + .00	433.00	431.18	433.00
433.64	433.04	146 + 50.00	433.71	433.39	433.99
433.86	433.26	147 + .00	433.43	432.61	433.21
434.07	433.47	147 + 50.00	434.14	433.82	434.42
434.46	433.86	148 + .00	433.53	433.21	434.01
434.84	434.24	148 + 50.00	434.25	433.93	434.55
435.23	434.63	149 + .00	434.00	433.00	434.00
435.61	435.01	149 + 50.00	434.71	434.39	435.09
436.00	435.40	150 + .00	434.43	433.62	434.43
436.38	435.78	150 + 50.00	435.14	434.84	435.74
436.77	436.17	151 + .00	434.85	434.05	434.85
437.15	436.55	151 + 50.00	435.57	435.25	436.25
437.54	436.94	152 + .00	435.28	434.48	435.28
437.92	437.32	152 + 50.00	436.00	435.60	436.60
438.31	437.71	153 + .00	435.71	434.91	435.91
438.70	438.10	153 + 50.00	436.43	436.13	437.13
439.09	438.49	154 + .00	436.14	435.44	436.44
439.48	438.88	154 + 50.00	436.86	436.64	437.64
439.87	439.27	155 + .00	436.57	435.95	436.95
440.26	439.66	155 + 50.00	437.29	437.17	438.17
440.65	440.05	156 + .00	437.00	436.48	437.48
441.04	440.44	156 + 50.00	437.72	437.72	438.72
441.43	440.83	157 + .00	437.43	437.03	438.03
441.82	441.22	157 + 50.00	438.15	438.15	439.15
442.21	441.61	158 + .00	437.86	437.46	438.46
442.60	442.00	158 + 50.00	438.58	438.58	439.58
442.99	442.39	159 + .00	438.29	437.89	438.89
443.38	442.78	159 + 50.00	439.01	439.01	440.01
443.77	443.17	160 + .00	438.72	438.32	439.32
444.16	443.56	160 + 50.00	439.44	439.44	440.44
444.55	443.95	161 + .00	439.15	438.75	439.75
444.94	444.34	161 + 50.00	439.87	439.87	440.87
445.33	444.73	162 + .00	439.58	439.18	440.18
445.72	445.12	162 + 50.00	440.30	440.30	441.30
446.11	445.51	163 + .00	440.01	439.61	440.61
446.50	445.90	163 + 50.00	440.73	440.73	441.73
446.89	446.29	164 + .00	440.44	440.04	441.04
447.28	446.68	164 + 50.00	441.16	441.16	442.16
447.67	447.07	165 + .00	440.87	440.47	441.47
448.06	447.46	165 + 50.00	441.59	441.59	442.59
448.45	447.85	166 + .00	441.30	440.90	441.80
448.84	448.24	166 + 50.00	442.02	442.02	443.02
449.23	448.63	167 + .00	441.73	441.33	442.33
449.62	449.02	167 + 50.00	442.45	442.45	443.45
449.99	449.39	168 + .00	442.16	441.76	442.76
450.38	449.78	168 + 50.00	442.88	442.88	443.88
450.75	450.15	169 + .00	442.59	442.19	443.19
451.14	450.54	169 + 50.00	443.31	443.31	444.31
451.51	450.91	170 + .00	443.02	442.62	443.62
451.89	451.29	170 + 50.00	443.74	443.74	444.74
452.26	451.66	171 + .00	443.45	443.05	444.05
452.63	452.03	171 + 50.00	444.17	444.17	445.17
452.99	452.39	172 + .00	443.88	443.48	444.48
453.36	452.76	172 + 50.00	444.60	444.60	445.60
453.72	453.12	173 + .00	444.31	443.91	444.91
454.08	453.48	173 + 50.00	445.03	445.03	446.03
454.43	453.83	174 + .00	444.74	444.34	445.34
454.78	454.18	174 + 50.00	445.46	445.46	446.46
455.12	454.52	175 + .00	445.17	444.77	445.77
455.46	454.86	175 + 50.00	445.89	445.89	446.89
455.79	455.19	176 + .00	445.60	445.20	446.20
456.12	455.52	176 + 50.00	446.32	446.32	447.32
456.44	455.84	177 + .00	446.03	445.63	446.63
456.76	456.16	177 + 50.00	446.75	446.75	447.75
457.07	456.47	178 + .00	446.46	446.06	447.06
457.38	456.78	178 + 50.00	447.18	447.18	448.18
457.68	457.08	179 + .00	446.89	446.49	447.49
457.97	457.37	179 + 50.00	447.61	447.61	448.61
458.26	457.66	180 + .00	447.32	446.92	447.92
458.55	457.95	180 + 50.00	448.04	448.04	449.04
458.83	458.23	181 + .00	447.75	447.35	448.35
459.11	458.51	181 + 50.00	448.47	448.47	449.47
459.38	458.78	182 + .00	448.18	447.78	448.78
459.65	459.05	182 + 50.00	448.90	448.90	449.90
459.91	459.31	183 + .00	448.61	448.21	449.21
460.17	459.57	183 + 50.00	449.33	449.33	450.33
460.42	459.82	184 + .00	449.04	448.64	449.64
460.66	460.06	184 + 50.00	449.76	449.76	450.76
460.89	460.29	185 + .00	449.47	449.07	450.07
461.11	460.51	185 + 50.00	450.19	450.19	451.19
461.32	460.72	186 + .00	449.90	449.50	450.50
461.53	460.93	186 + 50.00	450.62	450.62	451.62
461.73	461.13	187 + .00	450.33	450.33	451.33
461.92	461.32	187 + 50.00	451.05	451.05	452.05
462.10	461.50	188 + .00	450.76	450.36	451.36
462.27	461.67	188 + 50.00	451.48	451.48	452.48
462.43	461.83	189 + .00	451.19	450.79	451.79
462.58	461.98	189 + 50.00	451.91	451.91	452.91
462.72	462.12	190 + .00	451.62	451.22	452.22
462.84	462.24	190 + 50.00	452.34	452.34	453.34
462.95	462.35	191 + .00	452.05	451.65	452.65
463.05	462.45	191 + 50.00	452.77	452.77	453.77
463.14	462.54	192 + .00	452.48	452.08	453.08
463.22	462.62	192 + 50.00	453.20	453.20	454.20
463.29	462.69	193 + .00	452.91	452.51	453.51
463.35	462.75	193 + 50.00	453.63	453.63	454.63
463.40	462.80	194 + .00	453.34	452.94	453.94
463.44	462.84	194 + 50.00	454.06	454.06	455.06
463.47	462.87	195 + .00	453.77	453.37	454.37
463.49	462.89	195 + 50.00	454.49	454.49	455.49
463.50	462.90	196 + .00	454.20	453.80	454.80
463.51	462.91	196 + 50.00	454.92	454.92	455.92
463.52	462.92	197 + .00	454.63	454.23	455.23
463.53	462.93	197 + 50.00	455.35	455.35	456.35
463.54	462.94	198 + .00	455.06	454.66	455.66
463.55	462.95	198 + 50.00	455.78	455.78	456.78
463.56	462.96	199 + .00	455.49	455.09	456.09
463.57	462.97	199 + 50.00	456.21	456.21	457.21
463.58	462.98	200 + .00	455.92	455.52	456.52
463.59	462.99	200 + 50.00	456.64	456.64	457.64
463.60	463.00	201 + .00	456.35	455.95	456.95
463.61	463.01	201 + 50.00	457.07	457.07	458.07
463.62	463.02	202 + .00	45		



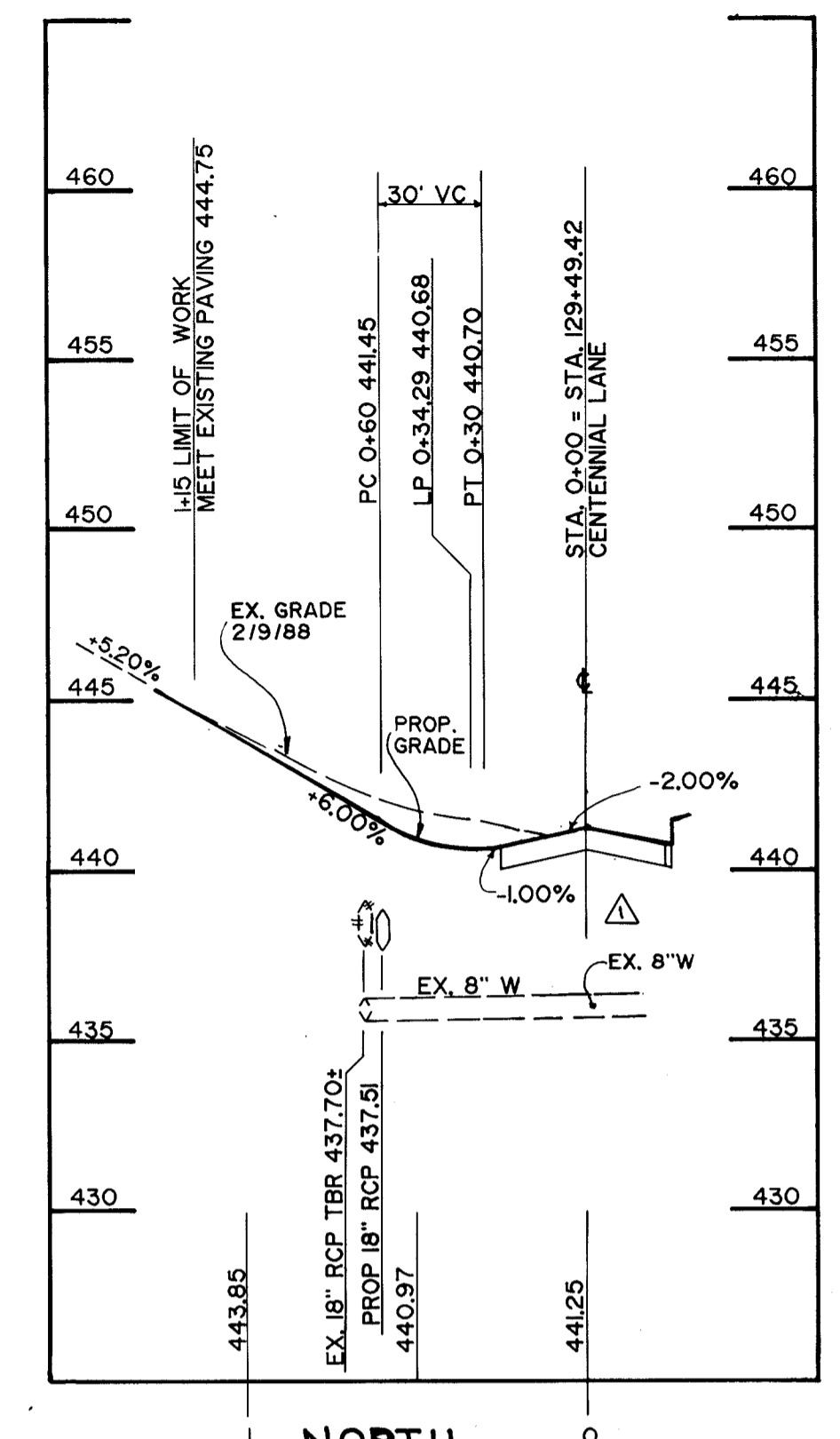
GLASTONBURY PLACE



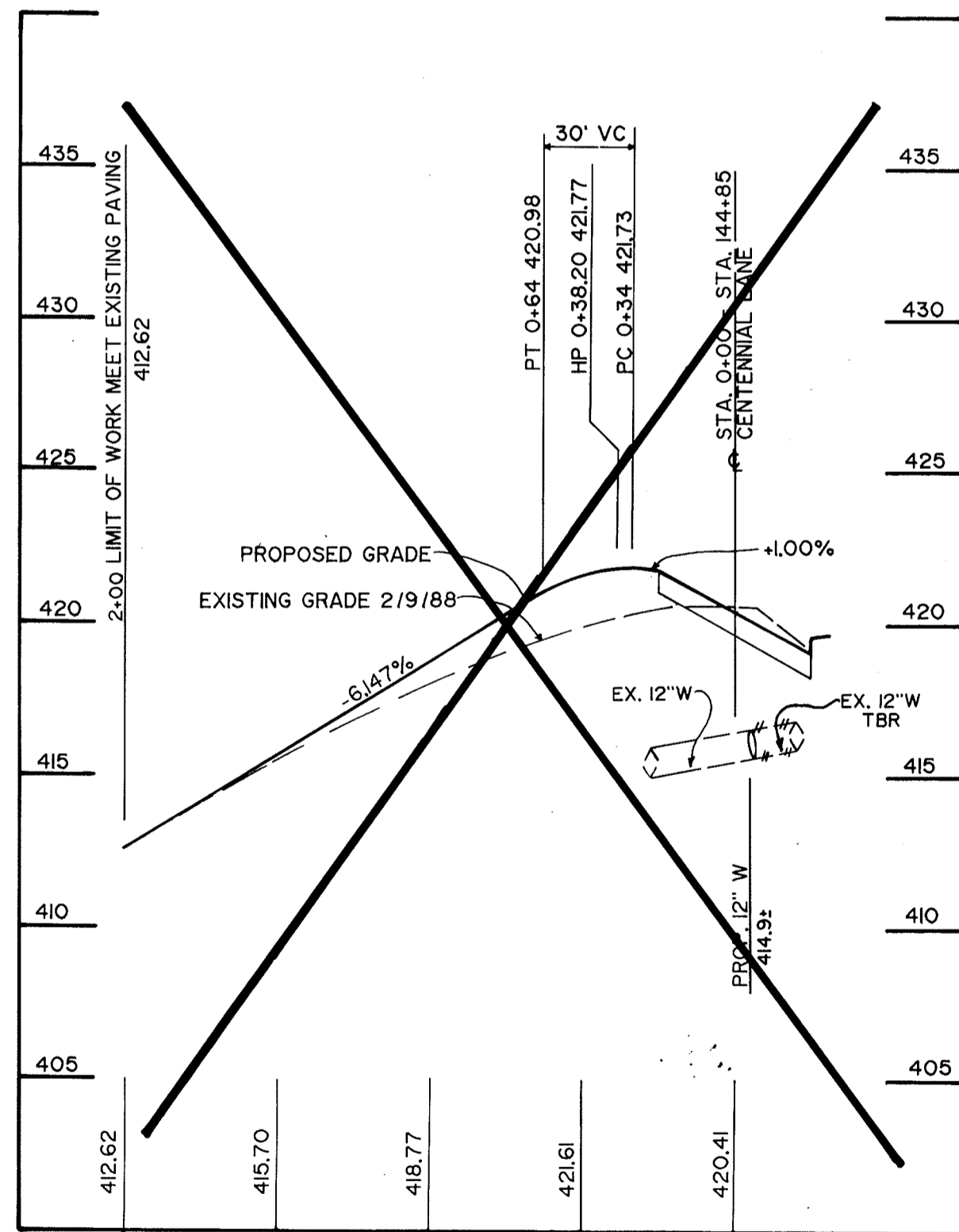
DUCKS FOOT LANE



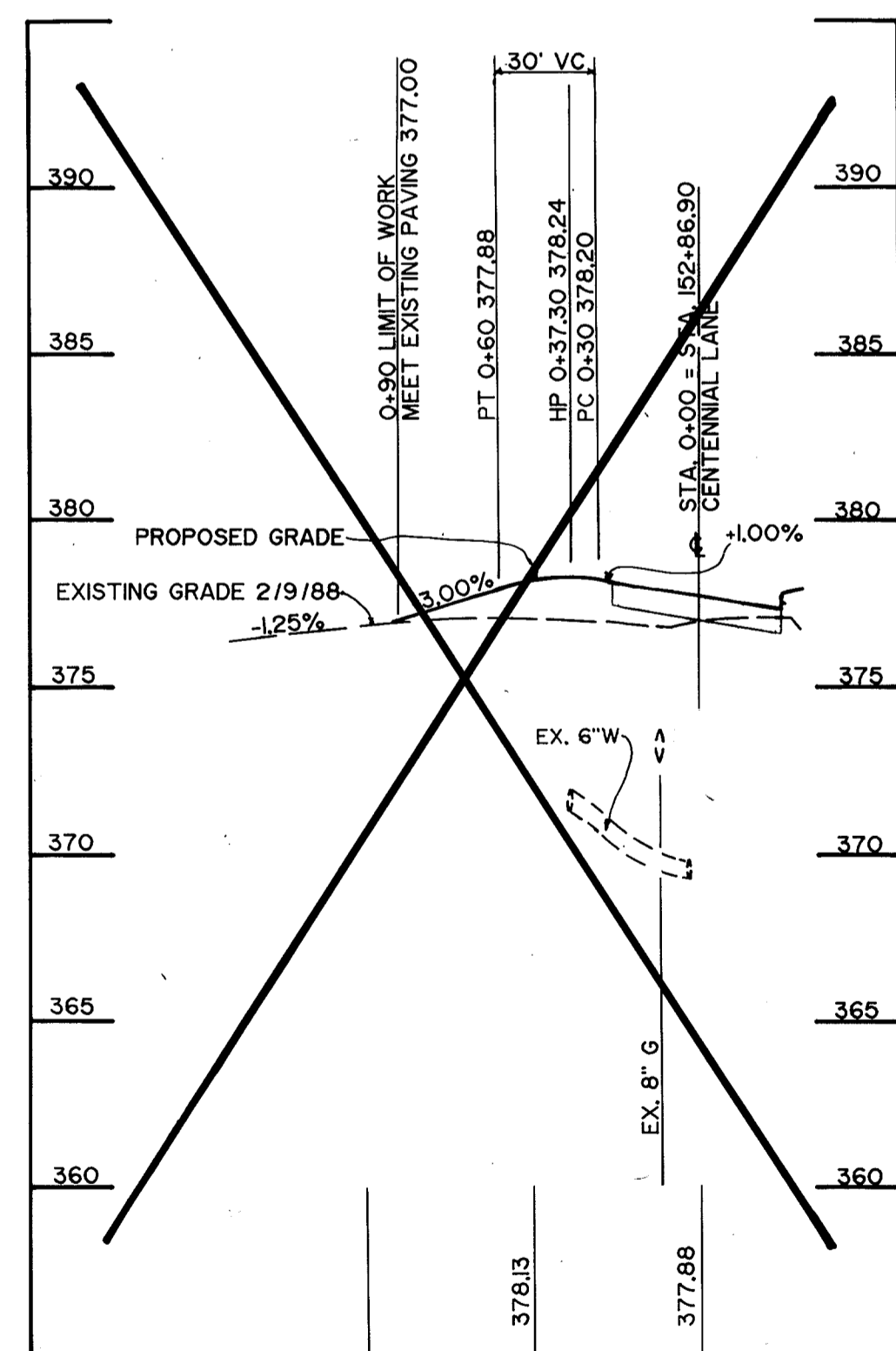
CULVERENE ROAD



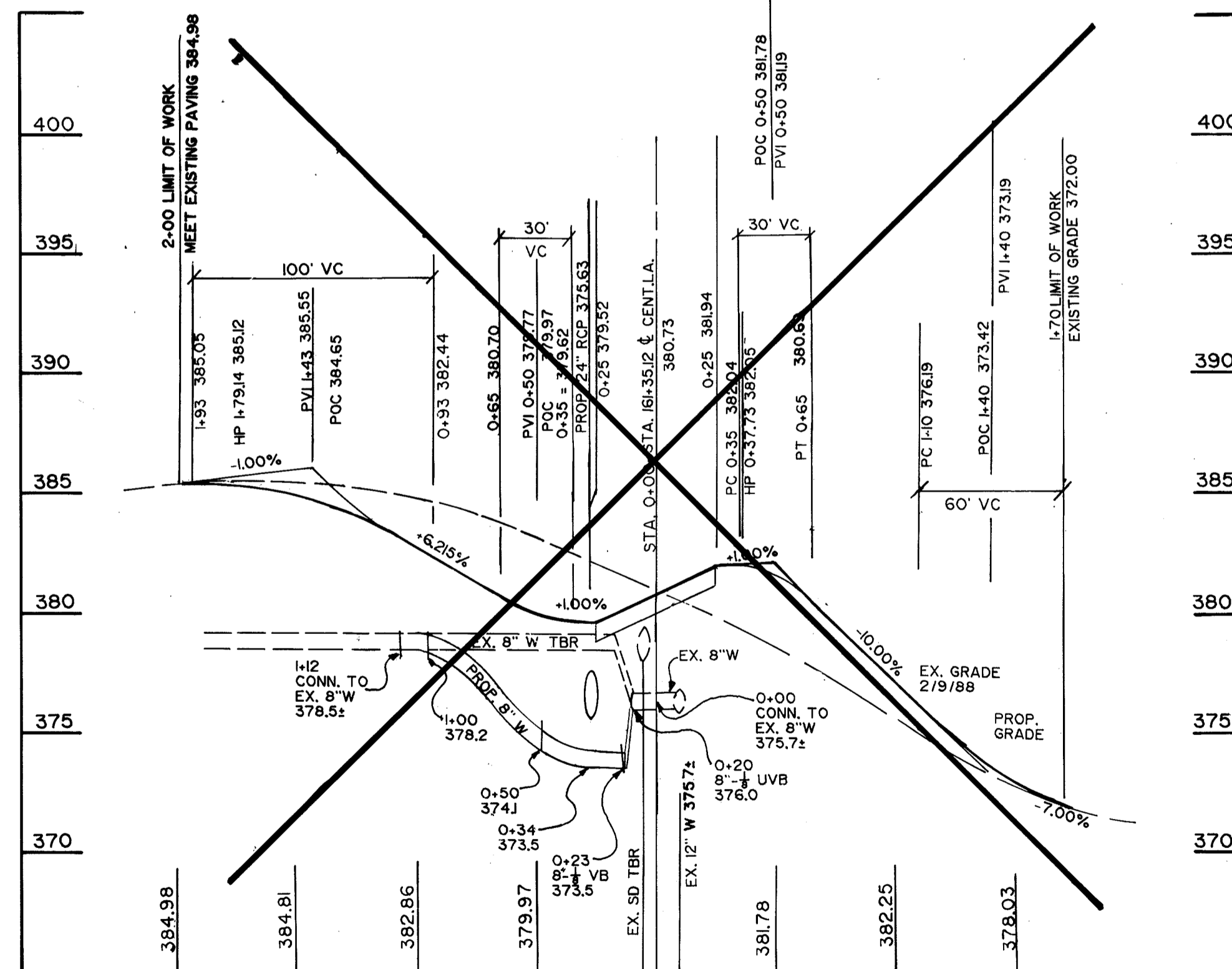
NORTH BRECONSHIRE ROAD



BURNSIDE DRIVE



CHAR-LIL COURT



TUSCANY ROAD AND CARRIGAN DRIVE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James P. Ryan 12/1/91
DIRECTOR OF PUBLIC WORKS DATE
Aracium E. Riley 12-3-91
CHIEF, BUREAU OF ENGINEERING DATE
Drew Williams 12/1/91
CHIEF, BUREAU OF HIGHWAYS DATE

MILDENBERG,
MOCHI & ASSOCIATES, INC.
ENGINEERS • SURVEYORS • PLANNERS
3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
(301) 461-9078 D.C. Metro: (301) 621-5768



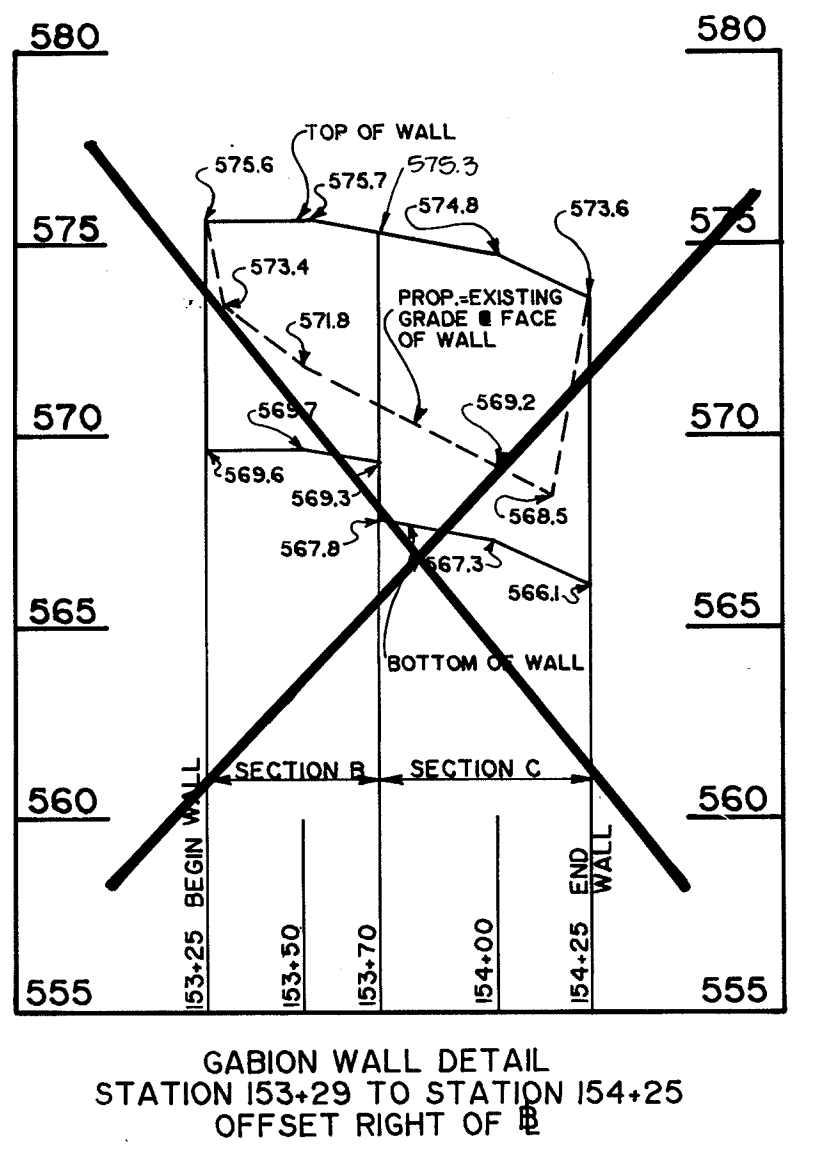
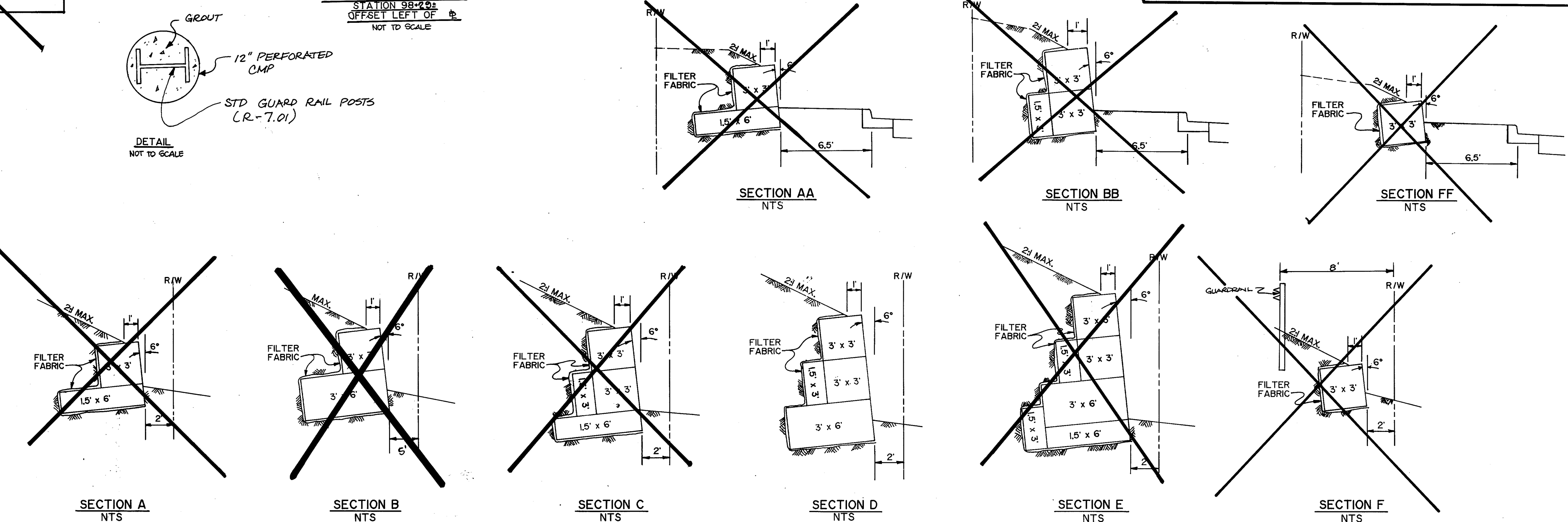
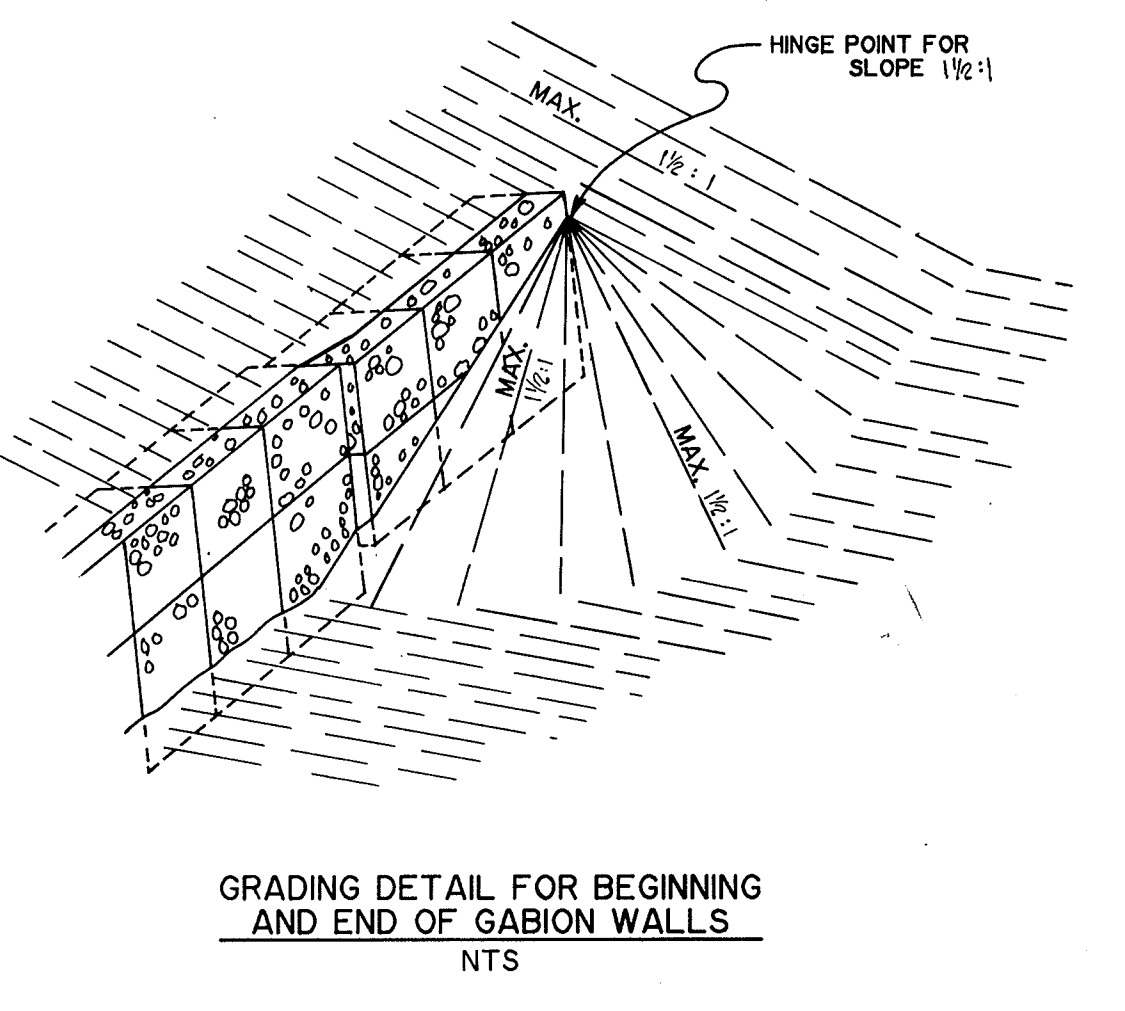
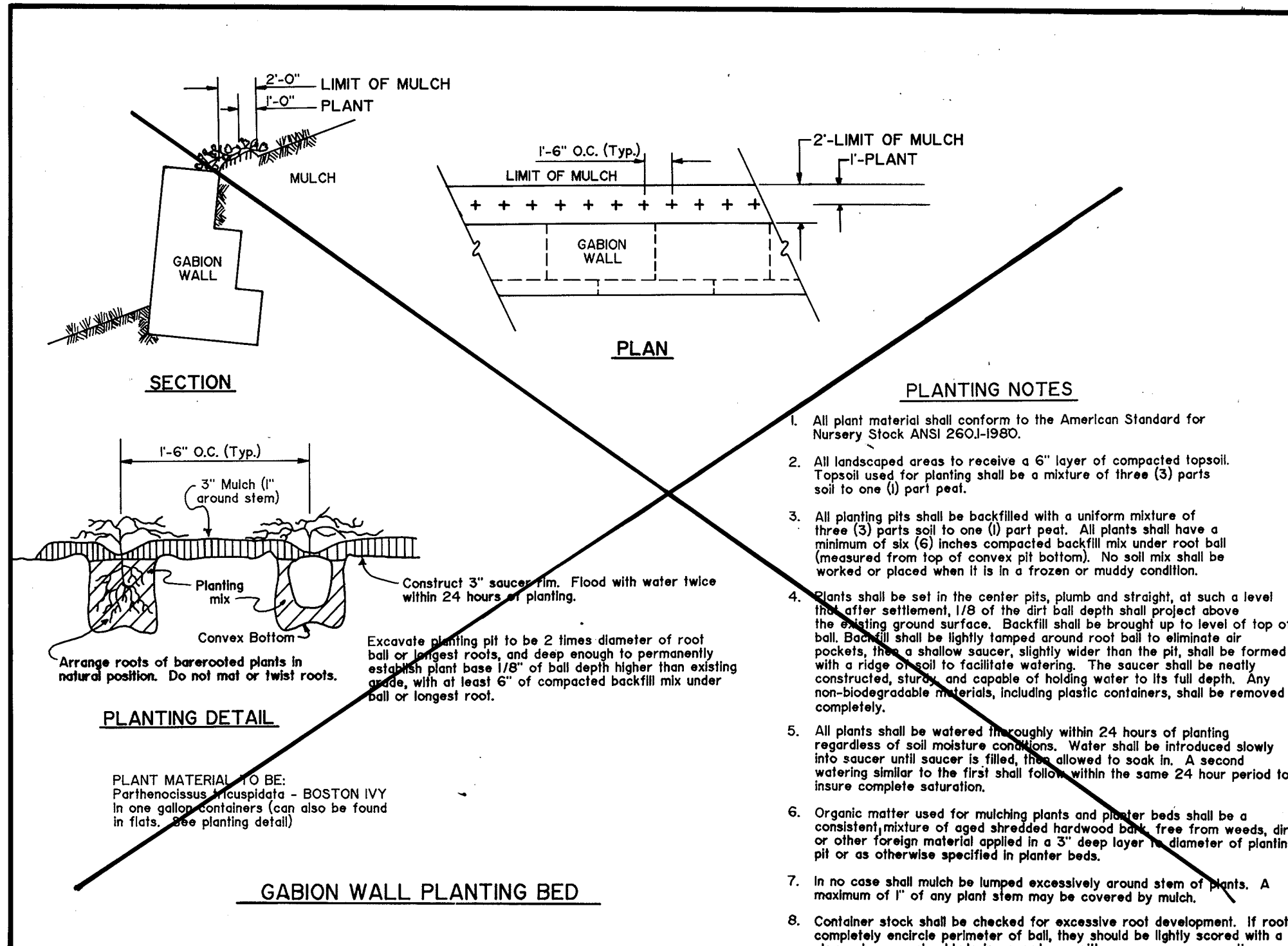
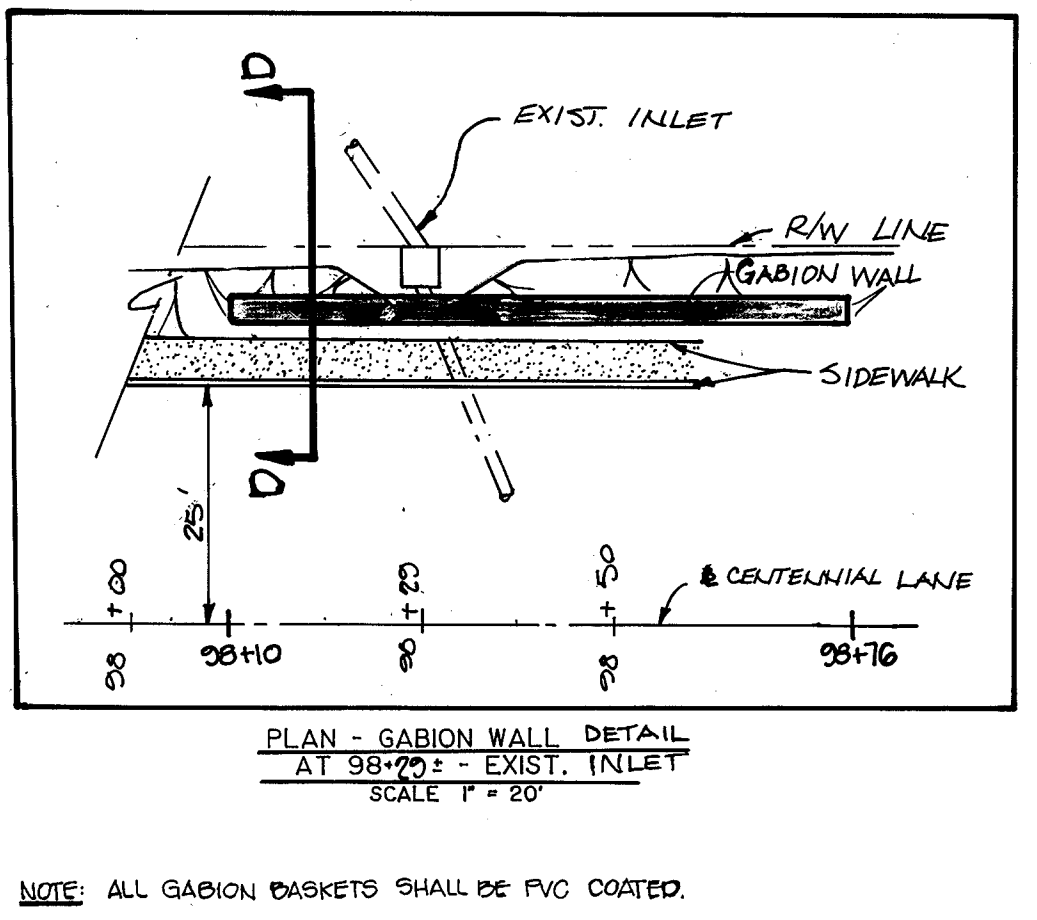
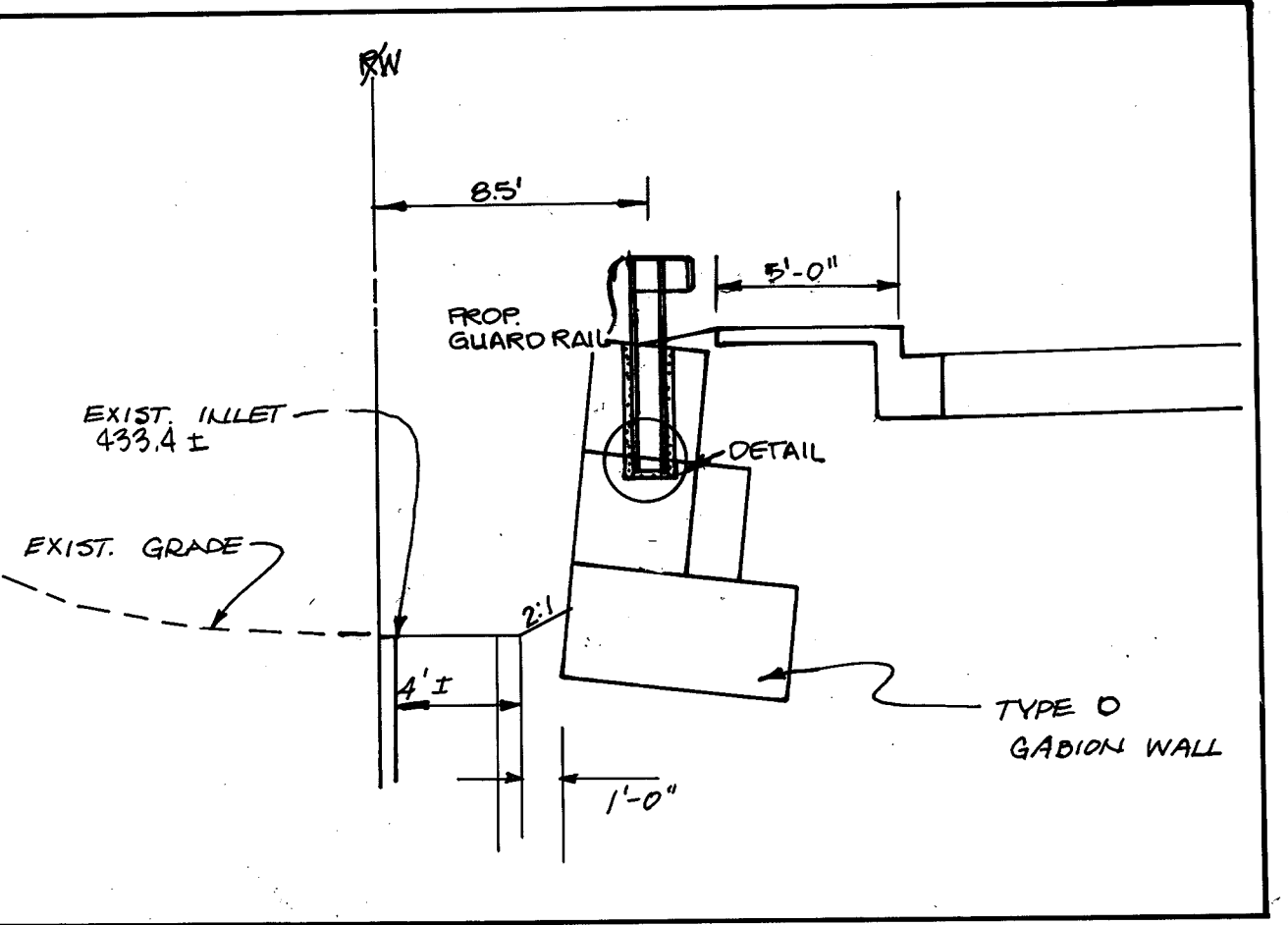
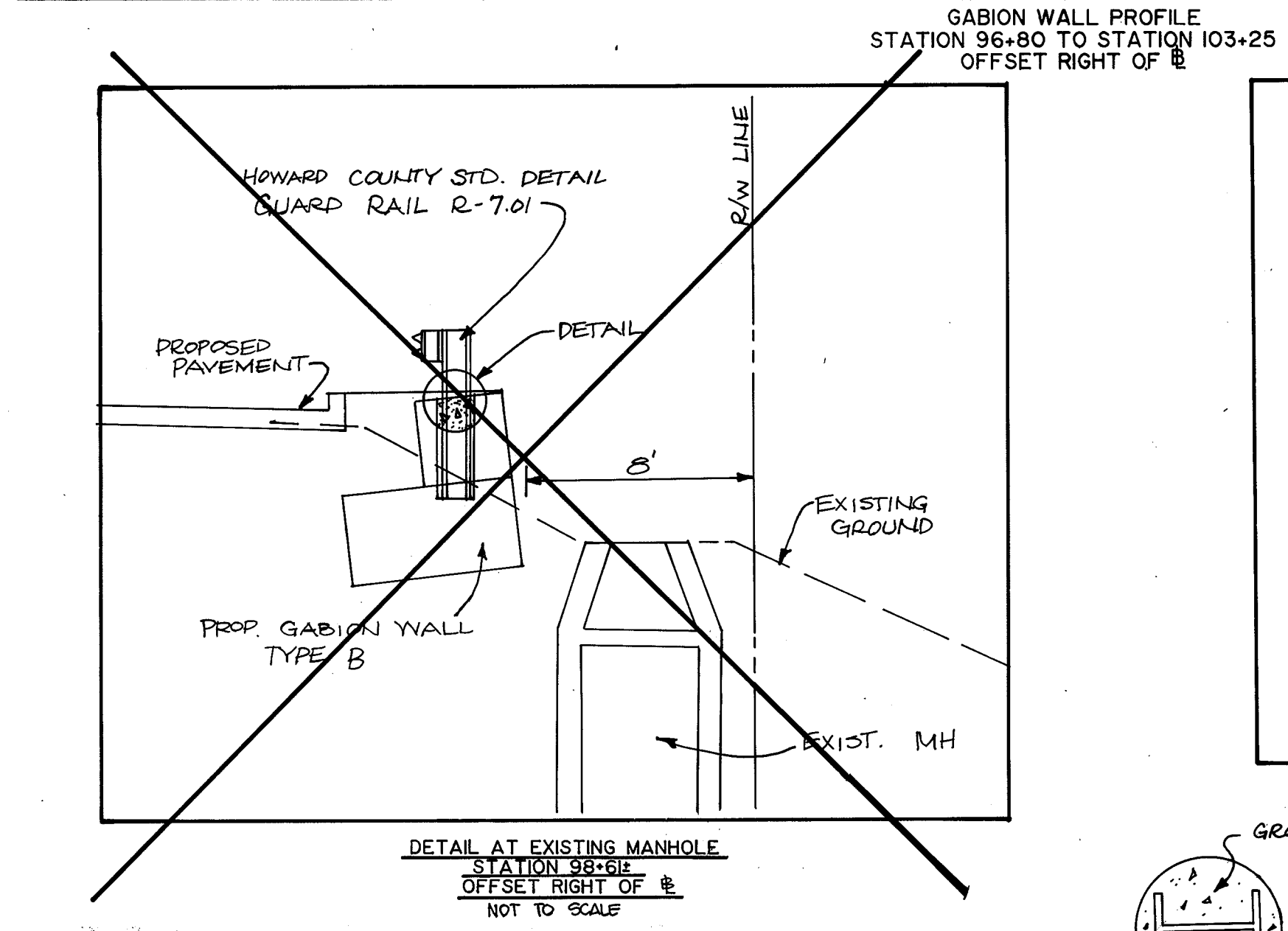
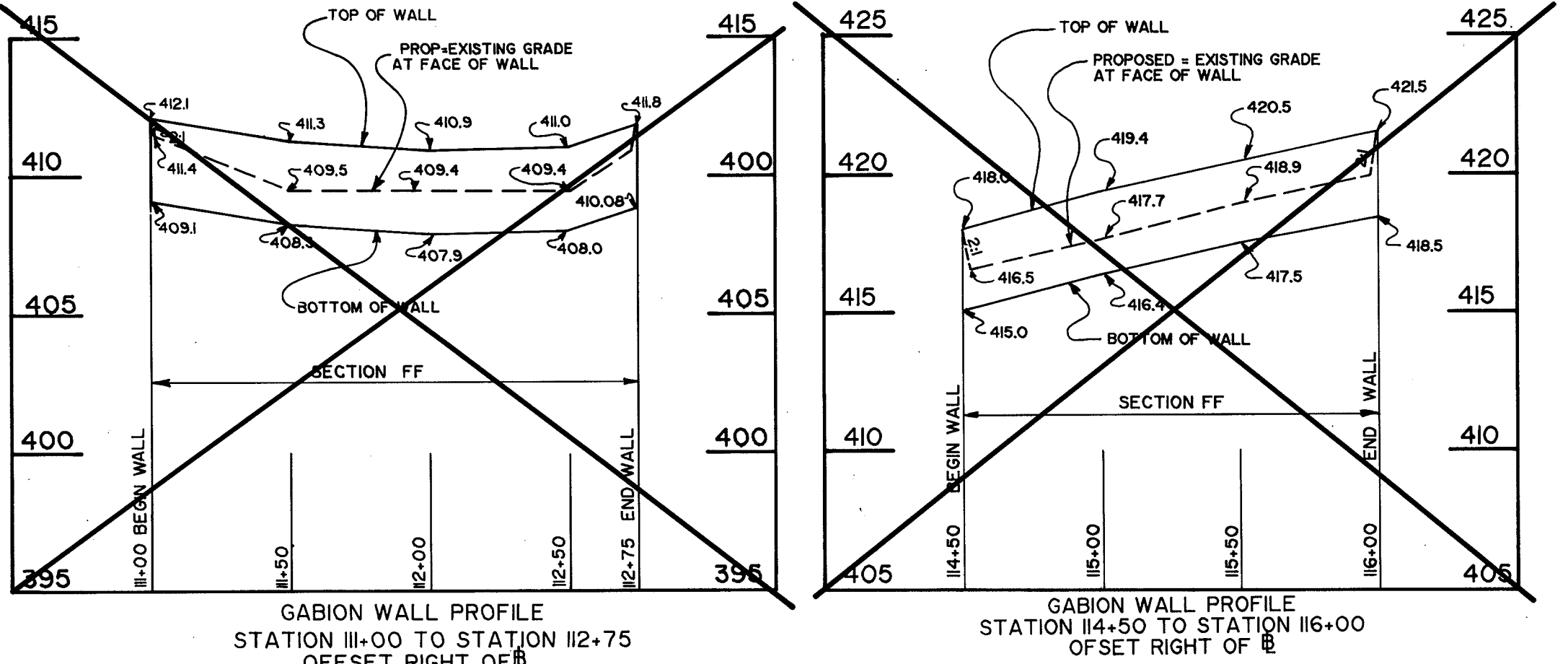
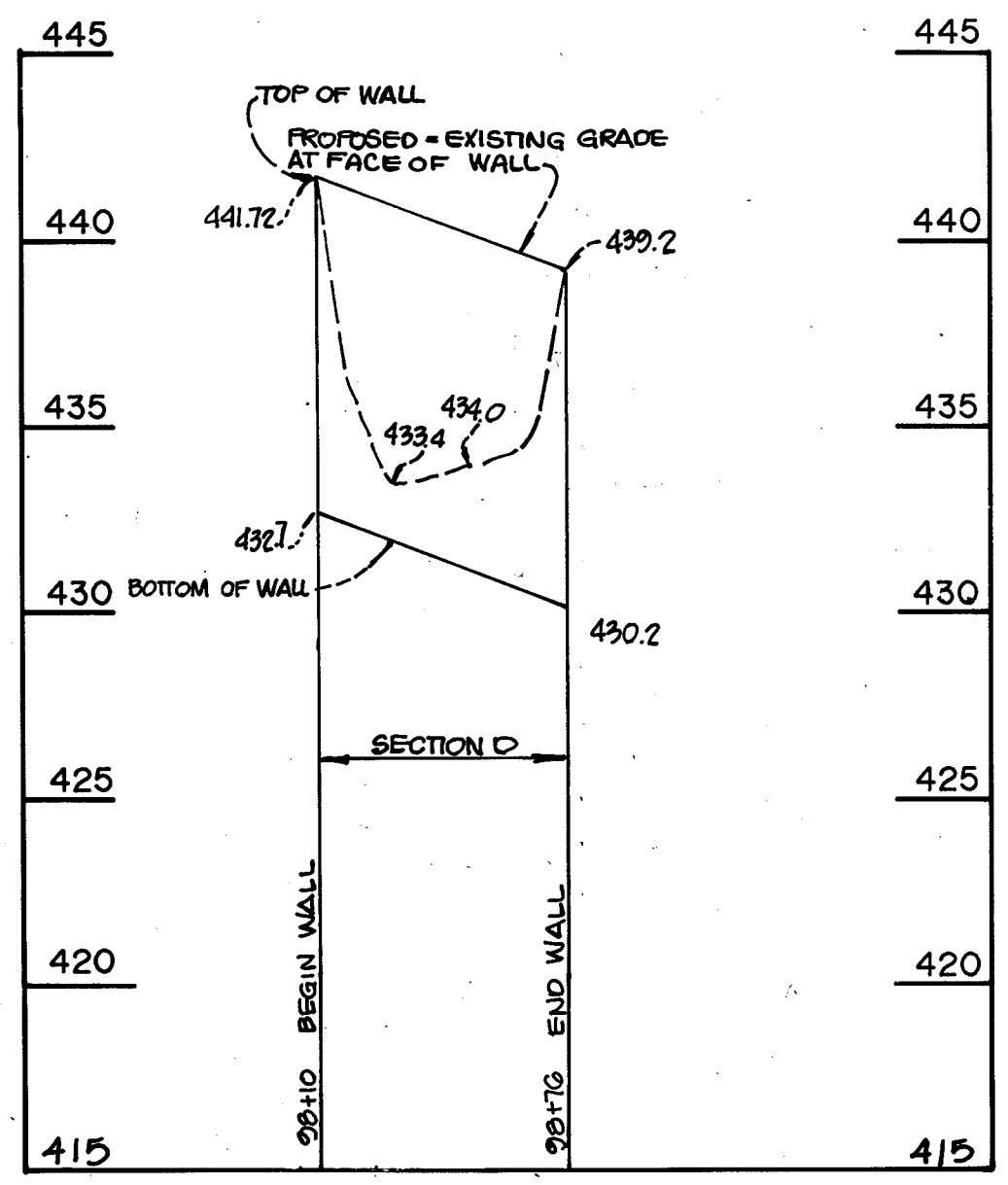
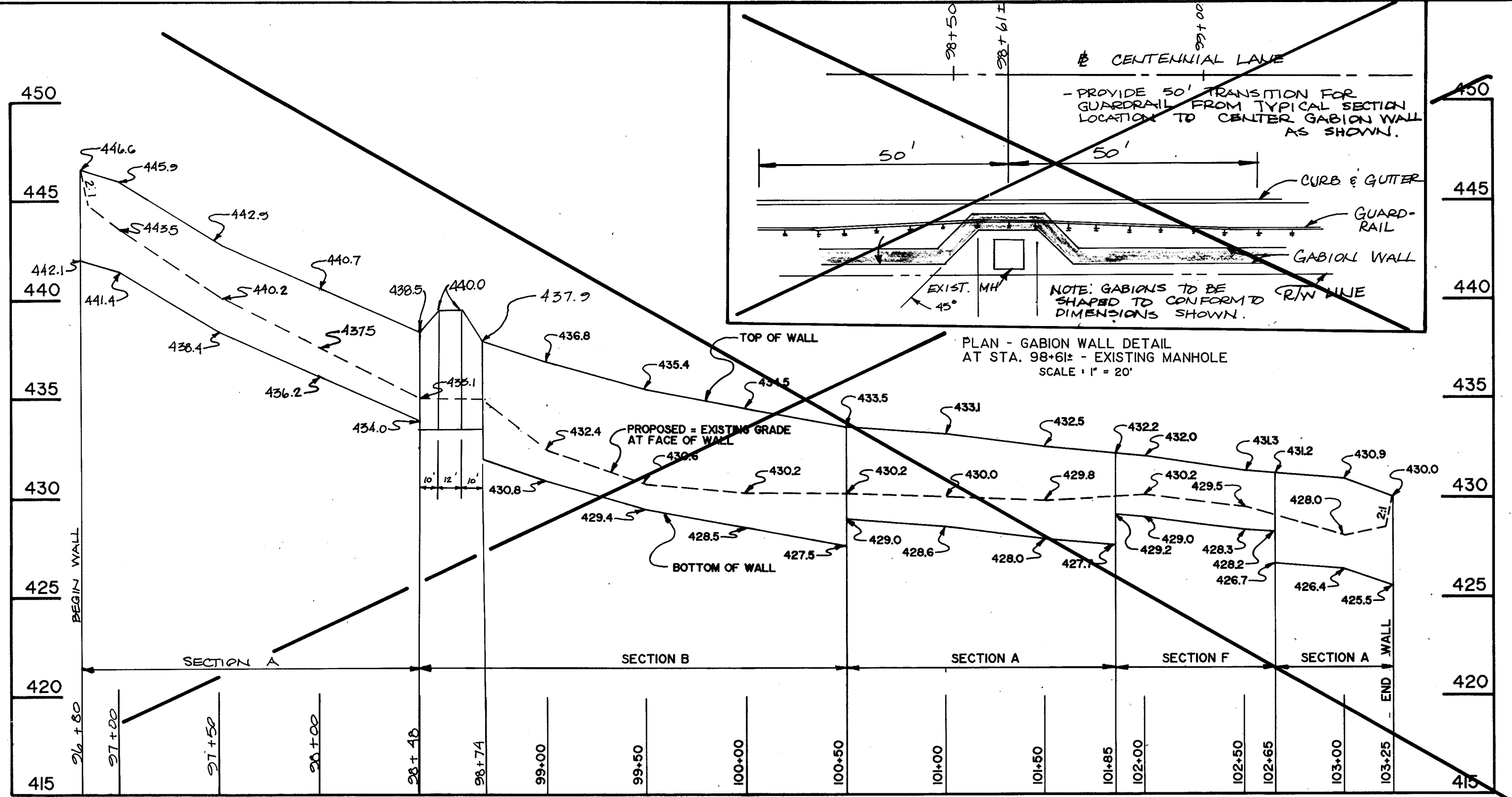
DES: JBM/KAM	KAM	1	Eliminate Watermain Relocation	JAN 92
DRN: STAFF				
CHK: JBM				
DATE: 10/91	BY	NO.	REVISION	DATE

CENTENNIAL LANE
INTERSECTING STREETS
PROFILES

CENTENNIAL LANE
OLD ANNAPOLIS ROAD TO STA. 136+00
CAPITAL PROJECT J-4015- III
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND

PROFILE
SCALE:
5" = 8' 0"
SHEET
10 OF 27

1196



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James J. ... 12/1/91
DIRECTOR OF PUBLIC WORKS DATE

... 12-3-91
CHIEF, BUREAU OF ENGINEERING DATE

... 12/1/91
CHIEF, BUREAU OF HIGHWAYS DATE

MILDENBERG,
MOCHI & ASSOCIATES, INC.
ENGINEERS - SURVEYORS - PLANNERS

3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
(301) 461-0076 D.C. Metro: (202) 621-5788



DES:	JBM				
DRN:	LJG				
CHK:	JBM				
DATE:	10/91				
BY:		NO.		REVISION	

GABION WALL PROFILES & DETAILS
CENTENNIAL LANE

600' SCALE MAP NO. _____ BLOCK NO. _____

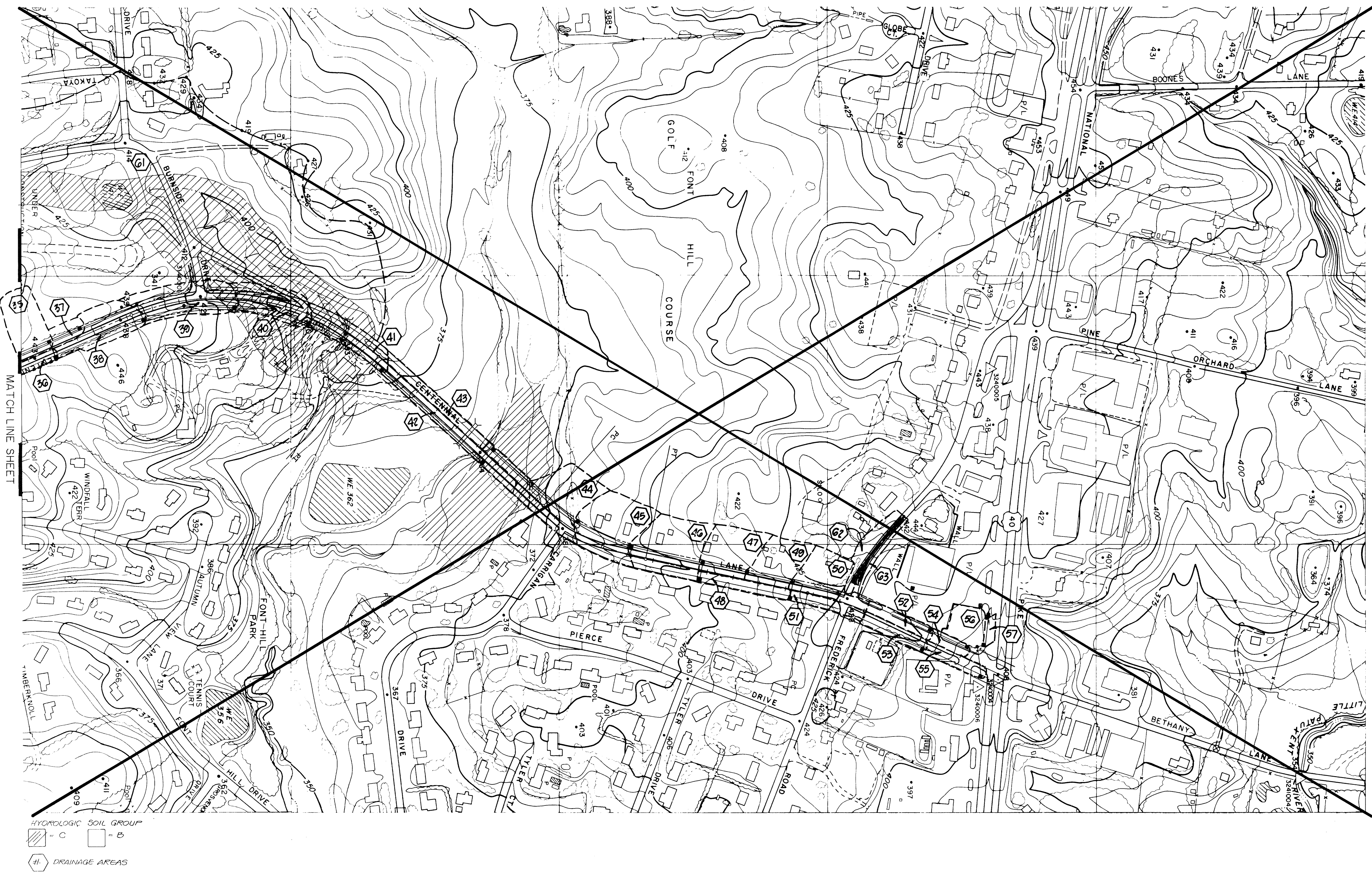
CENTENNIAL LANE
OLD ANNAPOLIS ROAD TO STA. 136+00
CAPITAL PROJECT J-4015- III
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND

PROFILE SCALE: 5' & 50'
SHEET 11 OF 27

1196

BRUNING 44-32 831 950

SCALE: 1" = 200'
TRUE NORTH



AREA TABULATION FOR DRAINAGE AREA MAP

DA	TOTAL ACRES	AREA IN ACRES HYDROLOGICAL SOIL GROUP		COMPOSITE C-FACTOR	% OF IMPERVIOUS AREA	ZONING
		"B"	"C"			
1	0.67	----	0.67	0.72	70%	
2	1.22	----	1.22	0.53	40%	
3	0.66	0.33	0.33	0.53	40%	
4	0.46	0.23	0.23	0.72	70%	
5	0.14	0.14	----	0.72	70%	
6	0.29	0.19	0.10	0.68	60%	
7	0.50	0.10	0.40	0.44	15%	
8	0.65	----	0.65	0.44	15%	
9	0.25	0.25	----	0.88	60%	
10	0.57	0.17	0.40	0.44	15%	
11	0.57	0.40	0.17	0.44	15%	
12	0.29	0.29	----	0.68	15%	
13	0.61	0.61	----	0.46	30%	
14	0.25	0.25	----	0.68	50%	
15	0.47	0.47	----	0.68	60%	
16	0.78	0.35	0.43	0.54	60%	
17	0.82	0.42	0.40	0.54	50%	
18	0.70	0.70	----	0.46	40%	
19	0.51	0.26	0.25	0.56	55%	
20	0.51	0.26	0.25	0.56	55%	
21	0.51	0.51	----	0.56	55%	
22	0.51	0.51	----	0.56	55%	
23	0.41	0.41	----	0.49	33%	
24	0.36	0.36	----	0.56	22%	
25	0.62	0.62	----	0.49	33%	
26	0.33	0.33	----	0.55	60%	
27	0.79	0.79	----	0.38	11%	
28	0.44	0.44	----	0.54	60%	
29	0.82	0.82	----	0.38	11%	
30	0.88	0.88	----	0.35	10%	
31	0.86	0.86	----	0.36	12%	
32	0.86	0.86	----	0.36	12%	
33	0.25	0.25	----	0.81	80%	
34	0.72	0.72	----	0.38	12%	
35	0.72	0.72	----	0.36	12%	
36	0.23	0.23	----	0.81	80%	
37	0.17	0.17	----	0.55	46%	
38	0.77	0.77	----	0.57	46%	
39	1.03	0.78	0.25	0.57	46%	
40	0.88	----	0.88	0.57	46%	
41	0.44	----	0.44	0.57	46%	
42	0.69	0.49	0.20	0.71	80%	
43	0.84	0.29	0.55	0.69	75%	
44	1.24	1.10	0.14	0.44	26%	
45	1.32	1.32	----	0.44	26%	
46	1.52	1.52	----	0.44	26%	
47	0.88	0.88	----	0.34	14%	
48	0.32	0.32	----	0.72	80%	
49	0.88	0.88	----	0.34	14%	
50	1.17	1.17	----	0.34	14%	
51	0.26	0.26	----	0.72	80%	
52	0.28	0.28	----	0.62	96%	
53	0.25	0.25	----	0.72	89%	
54	0.19	0.19	----	0.82	96%	
55	0.21	0.21	----	0.77	89%	
56	0.17	0.17	----	0.16	0%	
57	0.13	0.13	----	0.68	50%	
58	29.42	14.71	14.71	0.45	----	
59	29.93	29.93	29.93	0.45	----	
60	11.42	11.42	1.10	0.42	----	
61	31.73	31.73	6.35	0.29	----	
62	0.41	0.41	----	0.45	28%	
63	0.19	0.19	----	0.68	50%	

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

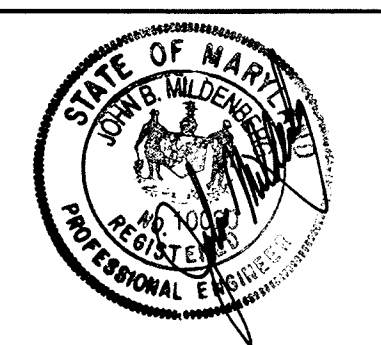
James R. ... 12/1/91
DIRECTOR OF PUBLIC WORKS DATE

William E. ... 12/3/91
CHIEF, BUREAU OF ENGINEERING DATE

Elizabeth Anderson ... 12/4/91
CHIEF BUREAU OF HIGHWAYS DATE

MILDENBERG,
MOCHI & ASSOCIATES, INC.
ENGINEERS • SURVEYORS • PLANNERS

3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
(301) 461-0078 D.C. Metro: (301) 621-5768



DES: KAM	
DRN: LTG	
CHK: JBM	
DATE: 10/91	
BY	NO.
	REVISION
	DATE

DRAINAGE AREA MAP
STA. 137+50 TO END
CENTENNIAL LANE

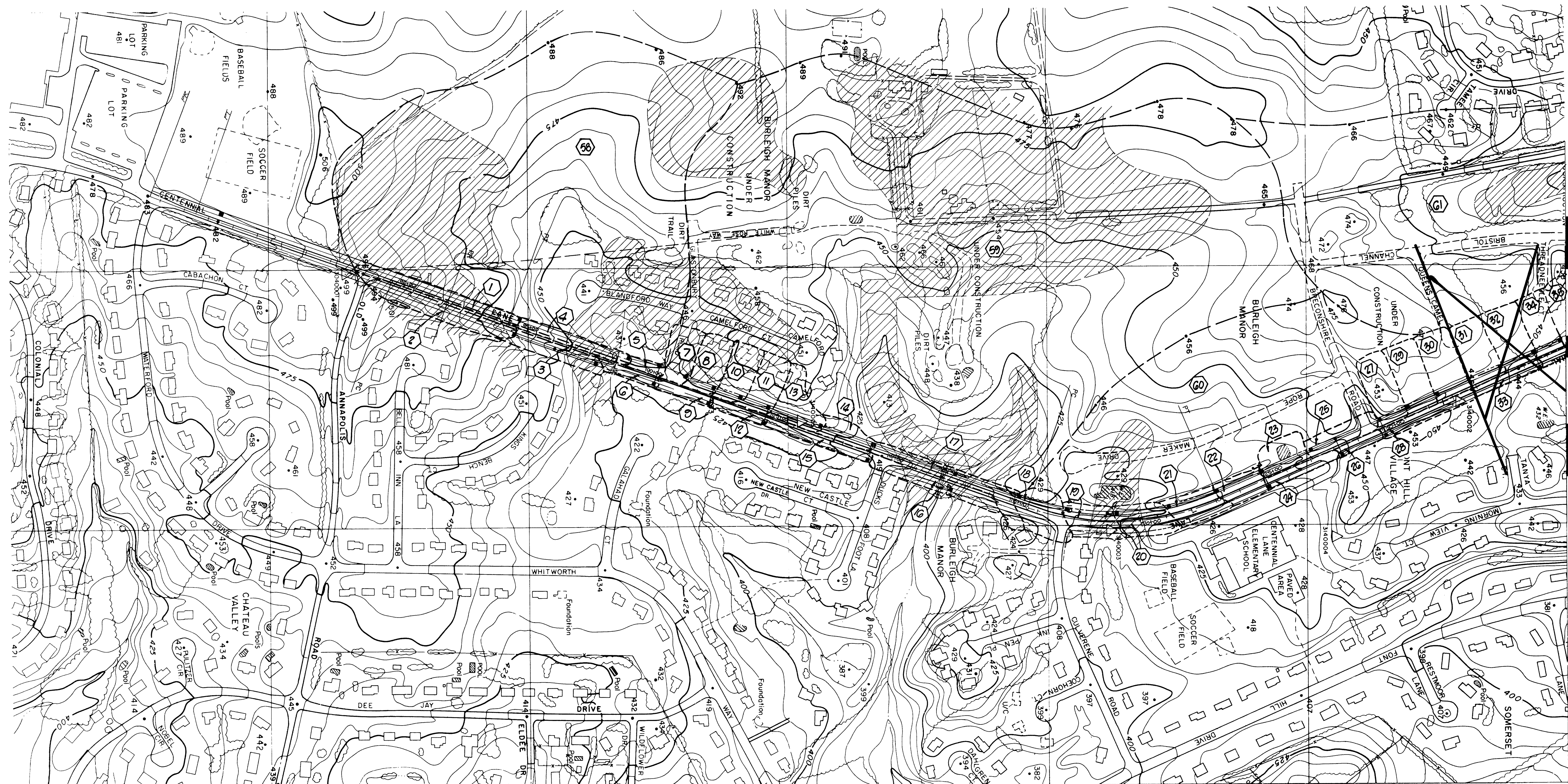
600' SCALE MAP NO. 24 BLOCK NO. _____

CENTENNIAL LANE
OLD ANNAPOLIS ROAD TO STA. 136+00
CAPITAL PROJECT J-4015- III
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 12 OF 27

1196



MATCH LINE SHEET

196/1

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James M. Shaw 12/14/91
Chief, Bureau of Engineering

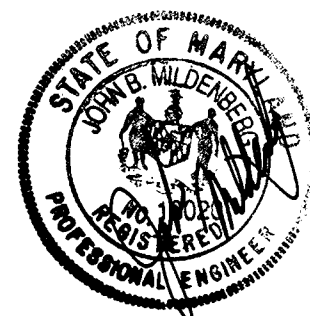
Michael W. Kelly 12/31/91
Chief, Bureau of Engineering

Ernest W. Anderson 12/14/91
Chief, Bureau of Engineering

Frank W. McDaniel 12/14/91
Chief, Bureau of Highways

MILDENBERG,
MOCHI & ASSOCIATES, INC.
ENGINEERS • SURVEYORS • PLANNERS

3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
(301) 461-0078 D.C. Metro (301) 621-5768



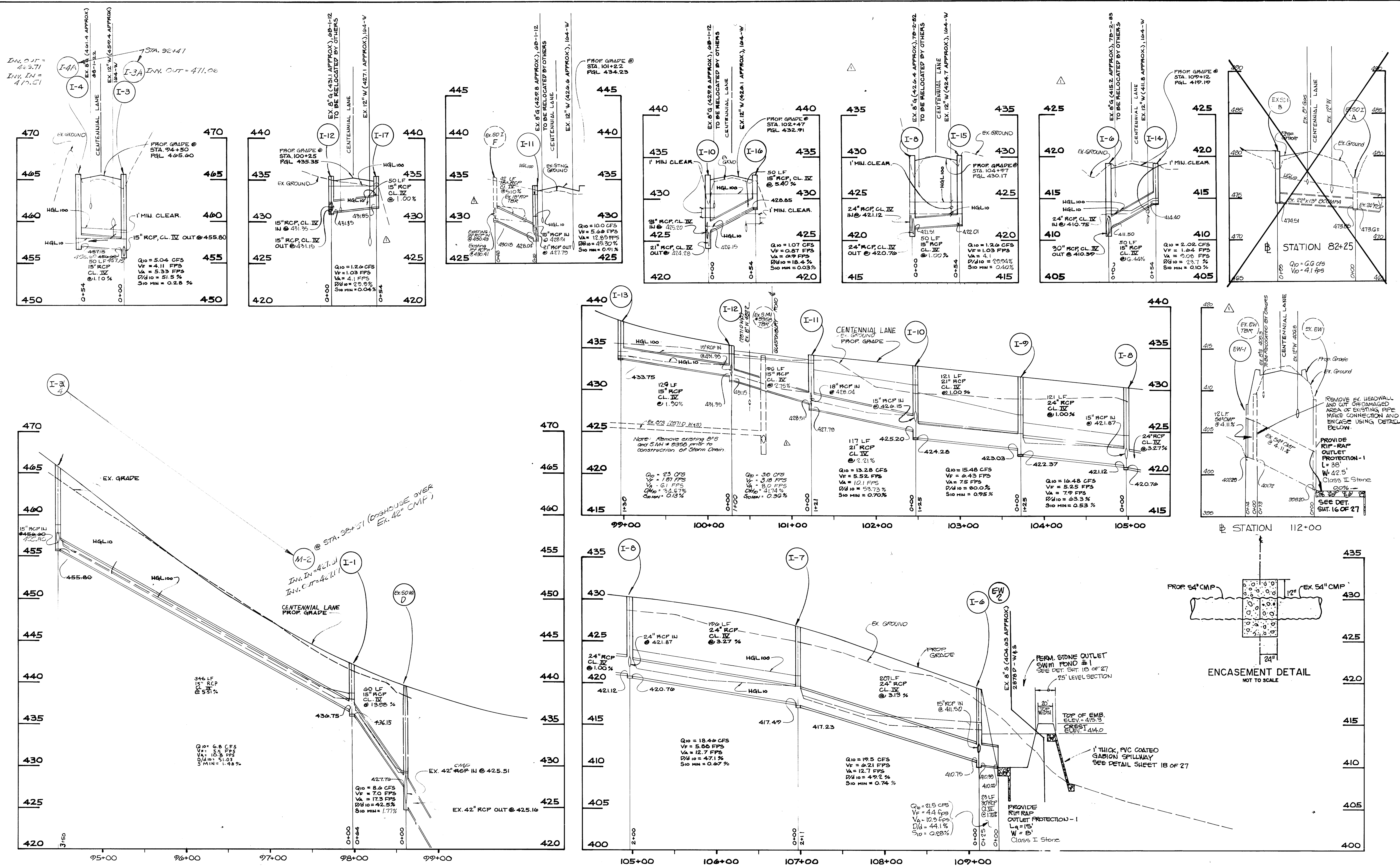
DES: KAM					
DRN: LTA					
CHK: JBM					
DATE: 10/1/91	BY: NO.	REVISION	DATE	600 SCALE MAP NO. 1-4	BLOCK NO.

DRAINAGE AREA MAP
STA. 88+00 TO STA. 136+50
CENTENNIAL LANE

CENTENNIAL LANE
OLD ANNAPOLES ROAD TO STA. 136+00
CAPITAL PROJECT J-4015- III
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 13 OF 27



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James J. Ryan 12/29/91
DIRECTOR OF PUBLIC WORKS DATE
Stephen J. Anderson 12/29/91
CHIEF OF STAFF DATE
William W. Wallace 12/19/91
CHIEF BUREAU OF HIGHWAYS DATE

MILDBERG, MOCH & ASSOCIATES, INC.
ENGINEERS - SURVEYORS - PLANNERS
3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
(301) 461-0078 D.C. Metro: (301) 621-5768



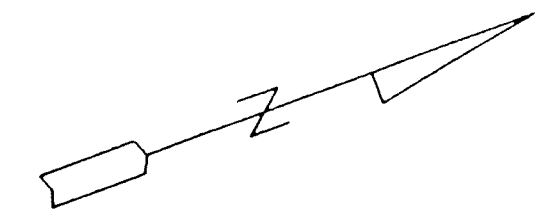
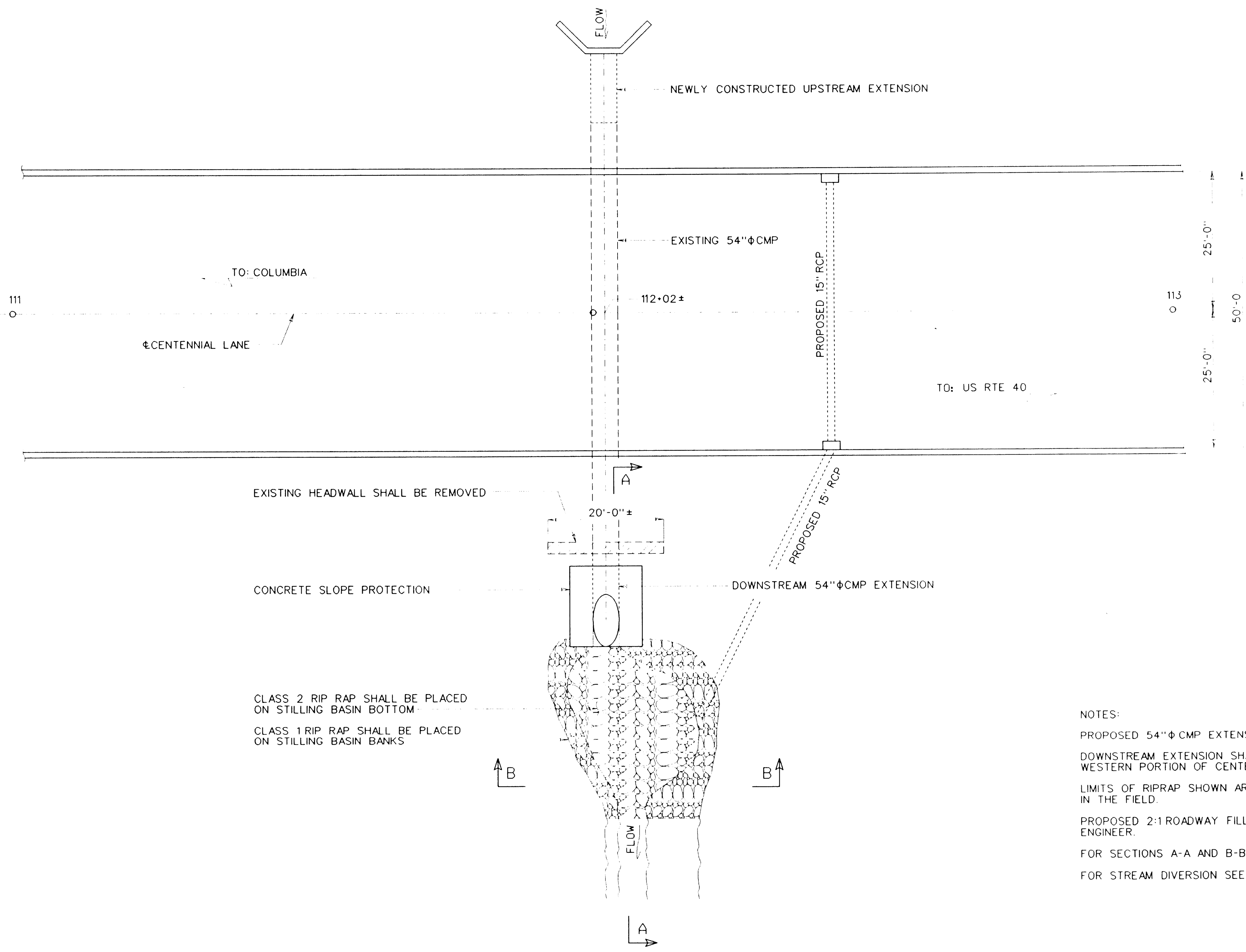
DES: KAM	KAM	1	Eliminate Watermain Relocation	JAN 92
DRN: JMS				
CHK: JBM				
DATE: 10/91	BY: NO.		REVISION	DATE

STORM DRAIN PROFILES
STA. 94+50 TO STA. 112+00
CENTENNIAL LANE

CENTENNIAL LANE
OLD ANNAPOLIS ROAD TO STA. 136+00
CAPITAL PROJECT J-4015- III
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 14 OF 27
AS-BUILT 2-9-92

1196



NOTES:

PROPOSED 54" ϕ CMP EXTENSION SHALL BE 14 ga.

DOWNSTREAM EXTENSION SHALL BE CONSTRUCTED WHEN TRAFFIC HAS BEEN SHIFTED TO THE WESTERN PORTION OF CENTENNIAL LANE.

LIMITS OF RIPRAP SHOWN ARE APPROXIMATE AND SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

PROPOSED 2:1 ROADWAY FILL SLOPE SHALL TIE INTO EXISTING SLOPES AS DIRECTED BY THE ENGINEER.

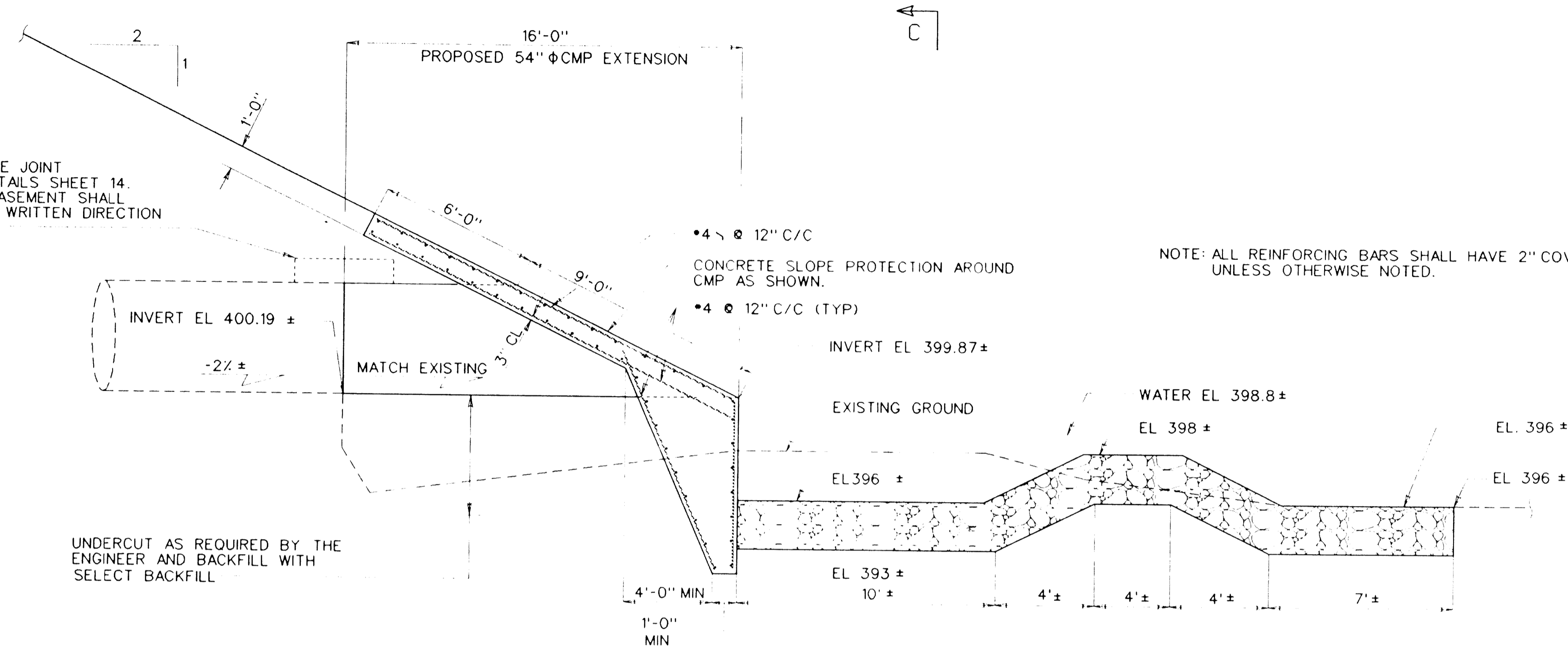
FOR SECTIONS A-A AND B-B SEE SHEET 14B.

FOR STREAM DIVERSION SEE SHEET 14C.

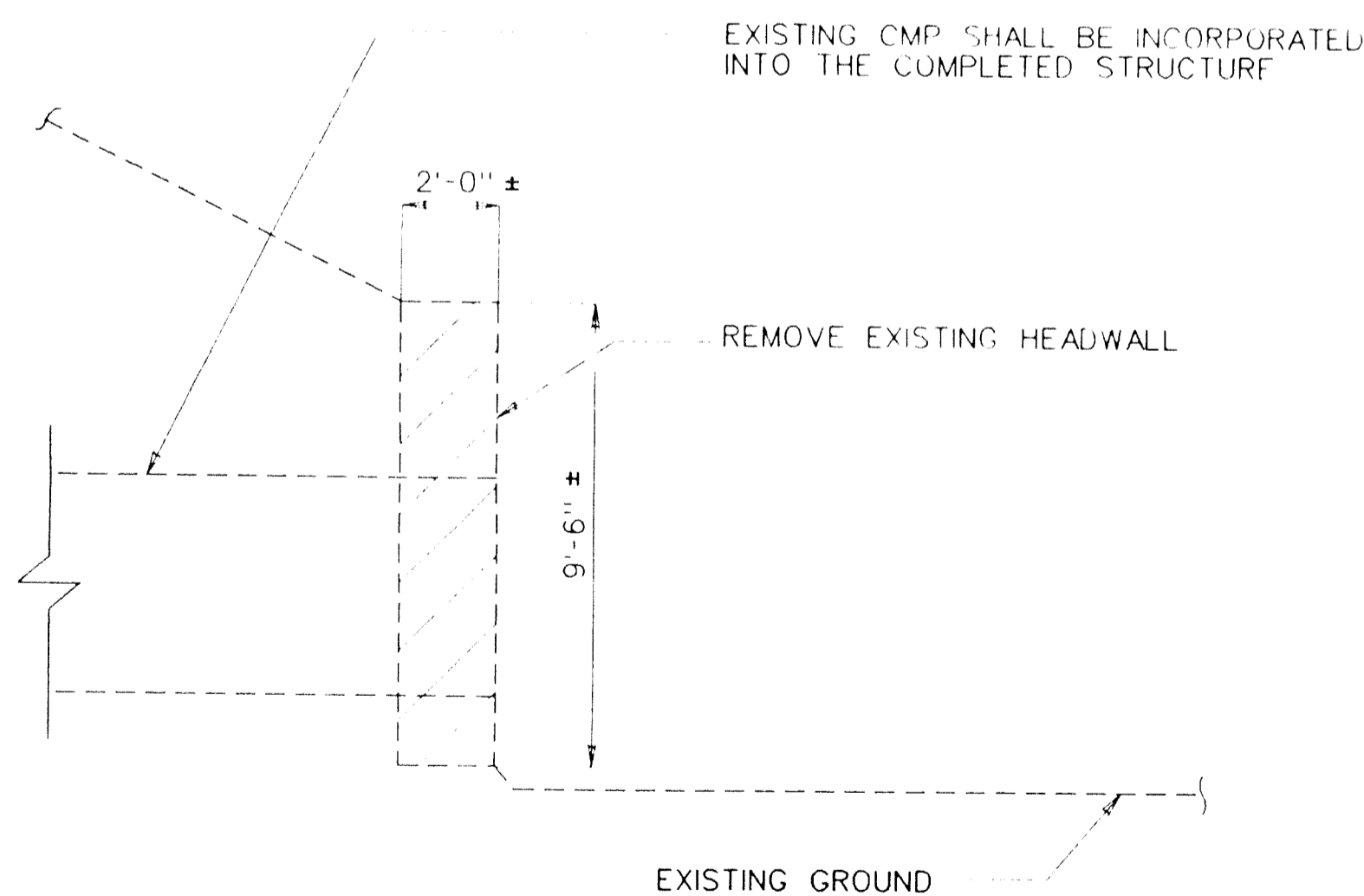
PLAN VIEW
SCALE: 1" = 10'

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>James J. ...</i> 2/13/93 DIRECTOR OF PUBLIC WORKS <i>Robert ...</i> 8/11/93 CHIEF, BUREAU OF ENGINEERING <i>Christopher ...</i> 8/11/93 CHIEF, TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT DIVISION <i>Andrew M. ...</i> 8-12-93 CHIEF, BUREAU OF HIGHWAYS		PREPARED BY : TRANSPORTATION PROJECTS AND WATERSHED MANAGEMENT DIVISION D.P.W. / BUREAU OF ENGINEERING HOWARD COUNTY, MARYLAND.				DR : WFM DSG : WFM BR : TW DATE : 7/28/93	WFM 2 NEW SHEET ADDED 7/93	54" DIA CMP AT STA 112+ DOWNSTREAM EXTENSION GENERAL PLAN	CENTENNIAL LANE OLD ANNAPOLIS ROAD TO STA 136+00 CAPITAL PROJECT J-4015-111 ELECTION DISTRICT NO 2 HOWARD COUNTY, MARYLAND	SCALE AS SHOWN SHEET 14 OF 27
--	--	--	--	--	--	--	----------------------------------	---	--	-------------------------------------

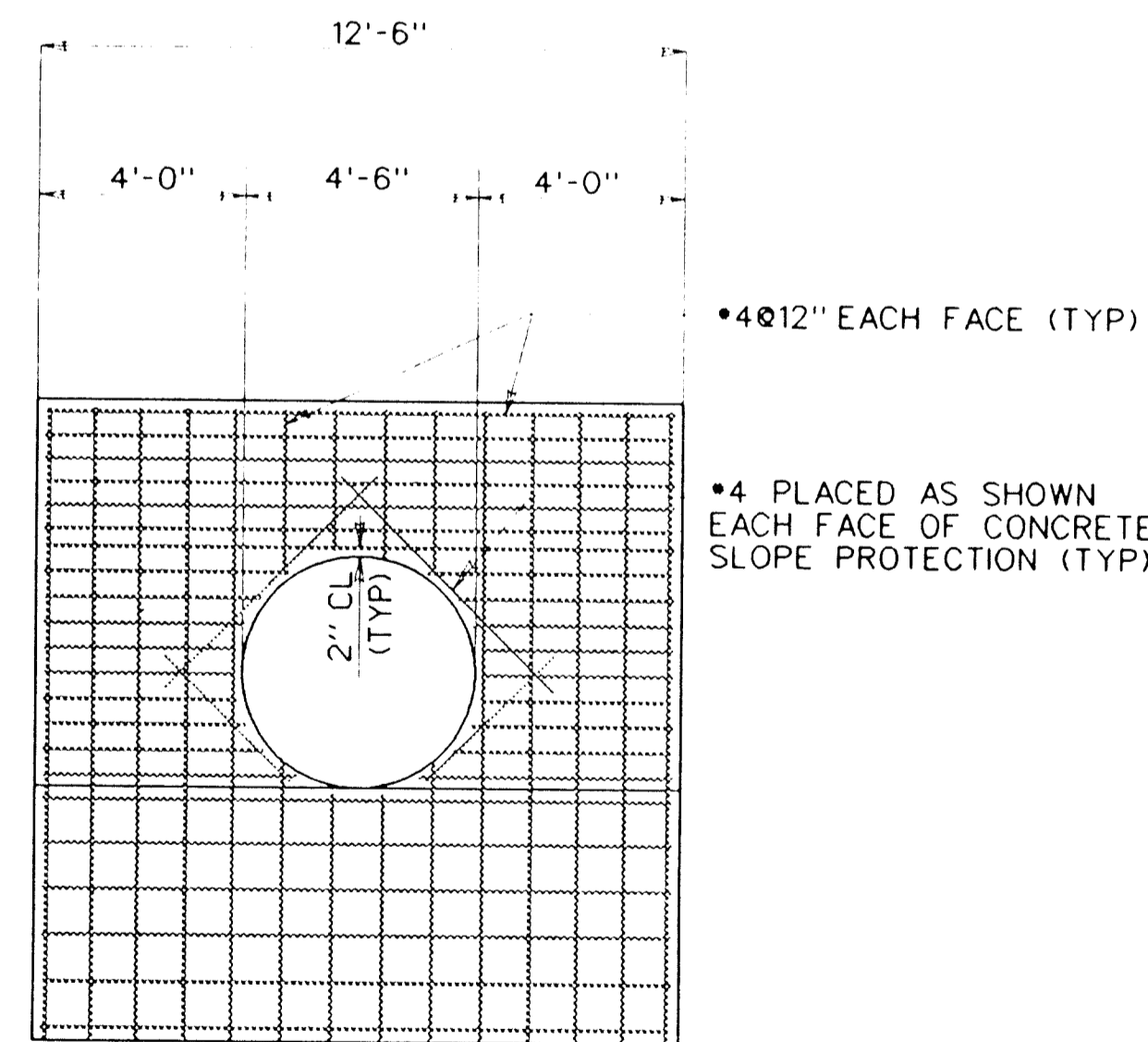
CONTINGENT CONCRETE JOINT ENCASUREMENT. SEE DETAILS SHEET 14. CONCRETE JOINT ENCASUREMENT SHALL BE USED ONLY UPON WRITTEN DIRECTION OF THE ENGINEER.



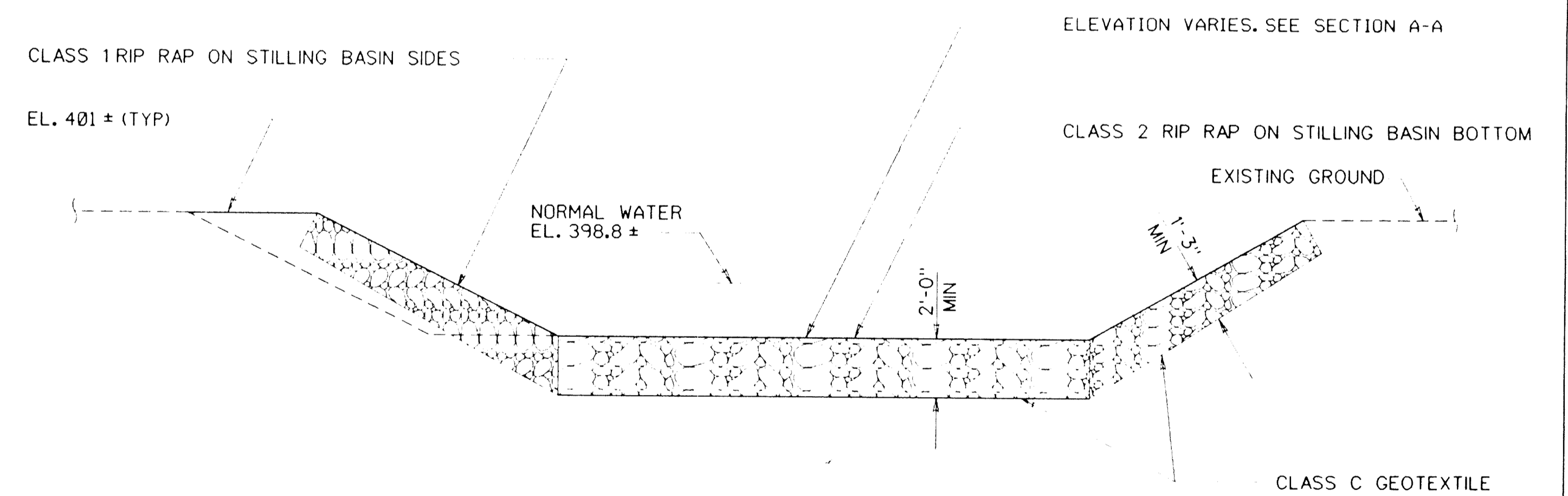
SECTION A-A
SCALE: NTS



REMOVAL
SCALE: NTS



SECTION C-C
SCALE: NTS

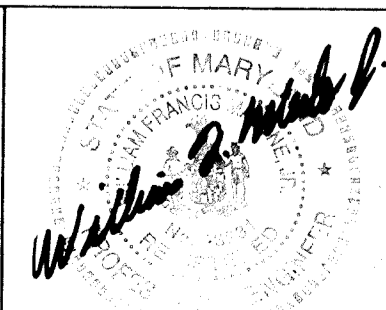


SECTION B-B
SCALE: NTS

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Carla A. Lee 8/13/93
 DIRECTOR OF PUBLIC WORKS
Paul D. Johnson 8/11/93
 CHIEF, BUREAU OF ENGINEERING
Elizabeth Anderson-Cole 8/11/93
 CHIEF, TRANSPORTATION PROJECTS AND STORMWATER MANAGEMENT
Andrew M. Danek 8-12-93
 CHIEF, BUREAU OF HIGHWAYS

PREPARED BY:
 TRANSPORTATION PROJECTS AND
 WATERSHED MANAGEMENT DIVISION
 D.P.W. / BUREAU OF ENGINEERING
 HOWARD COUNTY, MARYLAND.

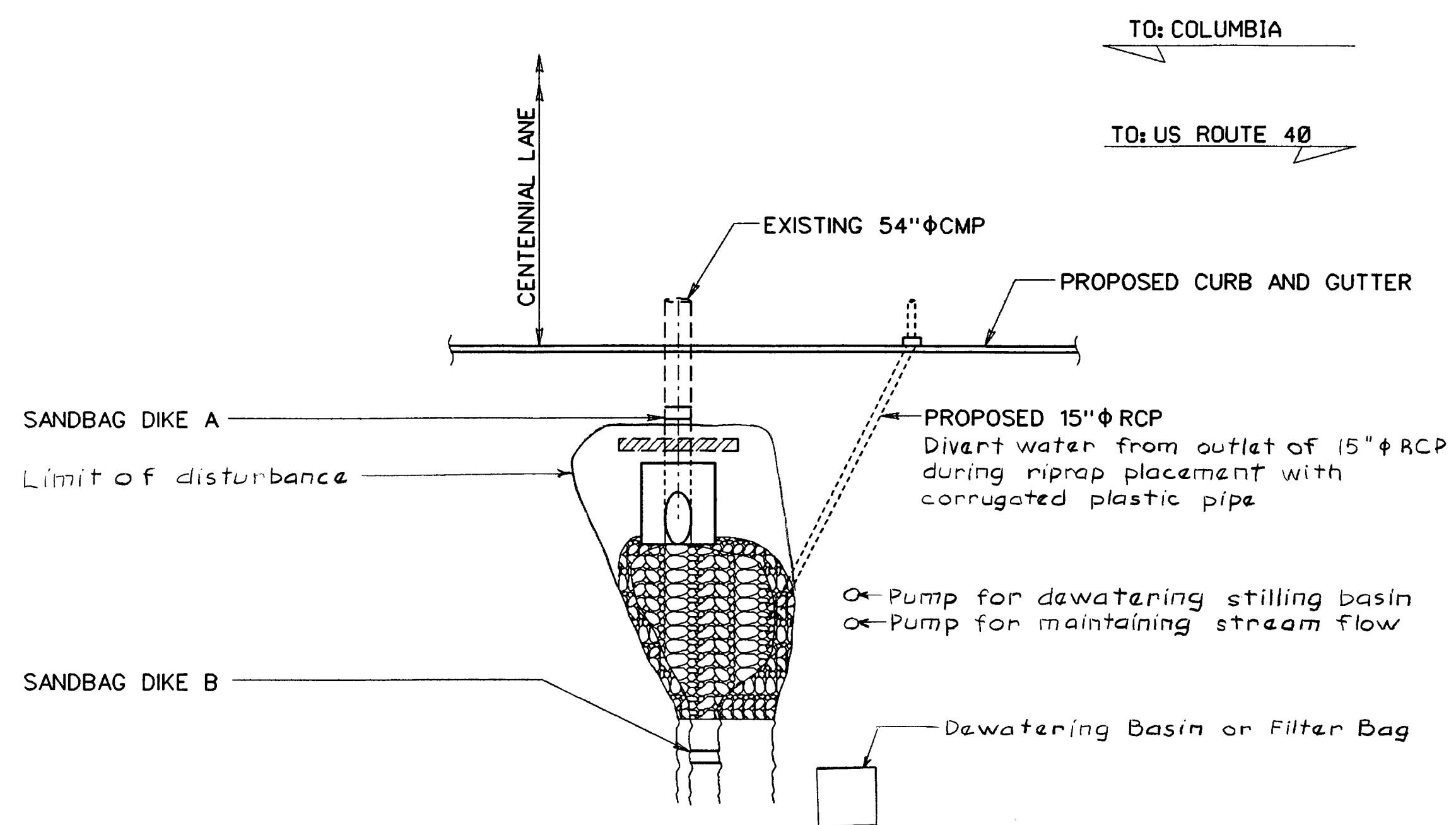
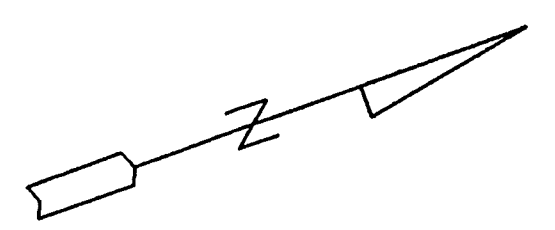


DES: WFM	WFM	2	NEW SHEET ADDED	7/93
DRN: WFM				
CHK: TW				
DATE: 7/28/93	BY:	NO.	REVISION	DATE

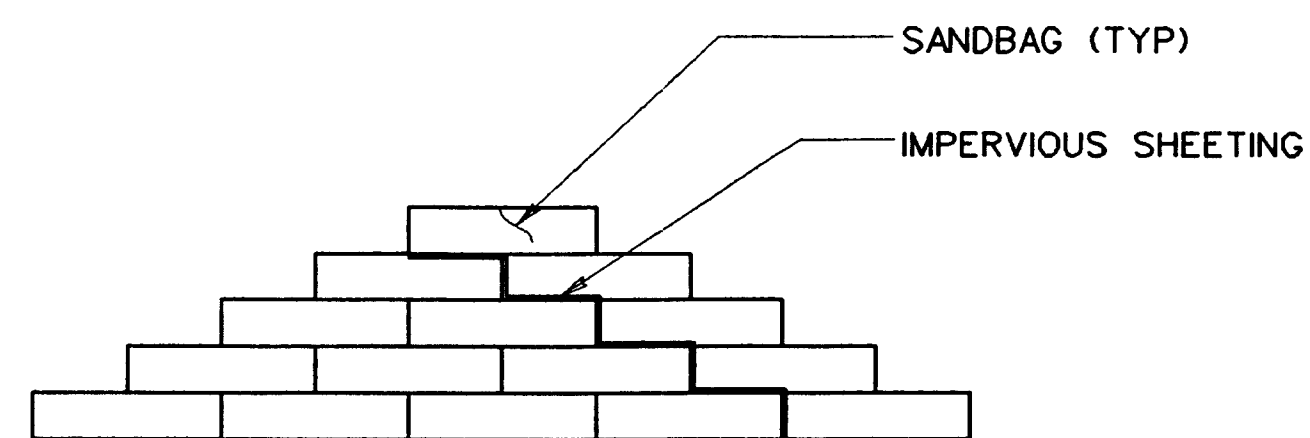
54" DIA CMP AT STA 112+
DOWNSTREAM EXTENSION
SECTIONS

CENTENNIAL LANE
 OLD ANNAPOLIS ROAD TO STA 136+00
 CAPITAL PROJECT J-4015-111
 ELECTION DISTRICT NO 2
 HOWARD COUNTY, MARYLAND

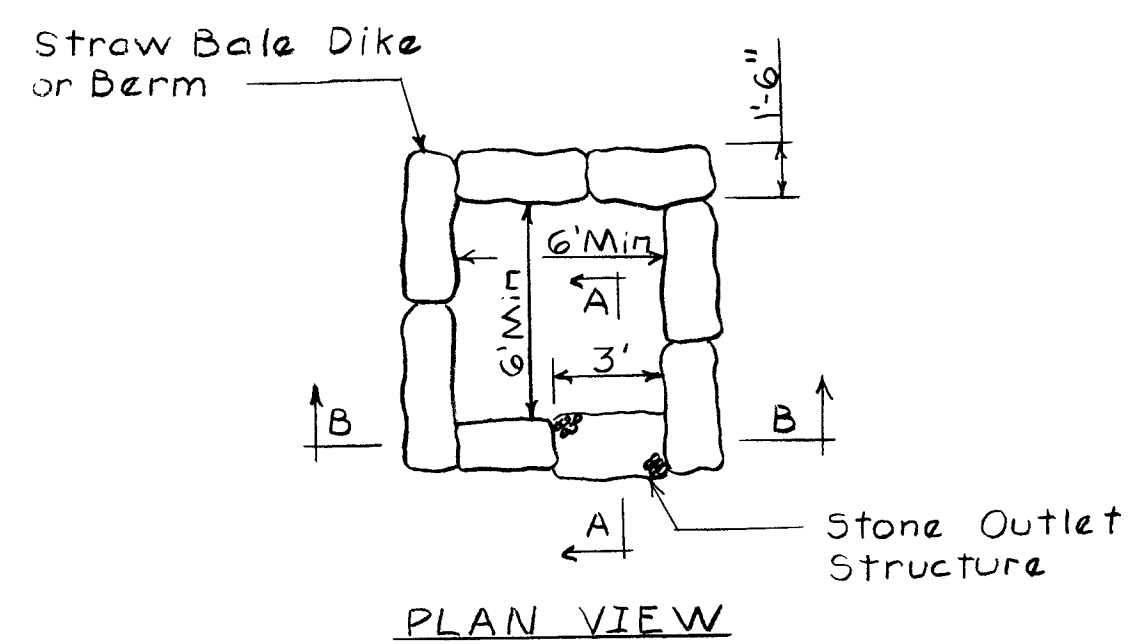
SCALE
 AS
 SHOWN
 SHEET
 14B OF 27



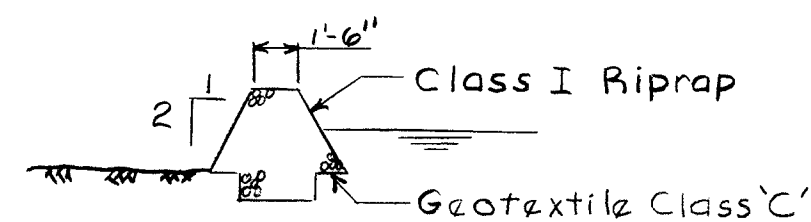
PLAN VIEW
SCALE: 1" = 10'



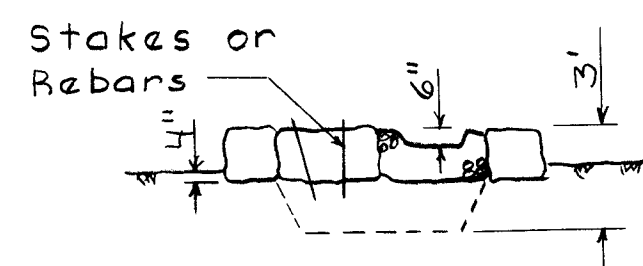
TYPICAL SANDBAG DIKE
SCALE: NTS



PLAN VIEW



SECTION A-A



SECTION B-B

DEWATERING BASIN DETAILS
Scale: None

SEQUENCE OF STREAM DIVERSION:

	DURATION
CONSTRUCT SANDBAG DIKE A.	1 Day
*PUMP WATER FROM UPSTREAM OF SANDBAG DIKE A TO DOWNSTREAM OF PROPOSED SANDBAG DIKE B.	NA
CONSTRUCT SANDBAG DIKE B.	1 Day
**PUMP WATER FROM STILLING BASIN TO DOWNSTREAM OF SANDBAG DIKE B. Dewatering Basin	NA
CONSTRUCT CMP EXTENSION AND RCP.	15 Days
CONSTRUCT RIP RAP STILLING BASIN.	6 Days
REMOVE SANDBAG DIKE B.	1 Day
REMOVE SANDBAG DIKE A AND CEASE PUMPING.	1 Day

* Pump shall be capable of 5 gal/min minimum
** Pump shall be capable of 10 gal/min minimum

NOTES:

- There shall be a 5 day clear weather forecast prior to starting this work.
- The Engineer shall notify the Sediment Control Inspector prior to allowing the Contractor to begin this work.
- The Contractor shall not remove the sandbag dikes until permission is received from the Sediment Control Inspector.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND.

PREPARED BY:
TRANSPORTATION PROJECTS AND
WATERSHED MANAGEMENT DIVISION
D.P.W. / BUREAU OF ENGINEERING
HOWARD COUNTY, MARYLAND.

DES: WFM	WFM 2	NEW SHEET ADDED	7/93
DRN: WFM	WFM 3	Sediment/Erosion Notes Added	9/93
CHK: TW			
DATE: 7/28/93	BY NO.	REVISION	DATE

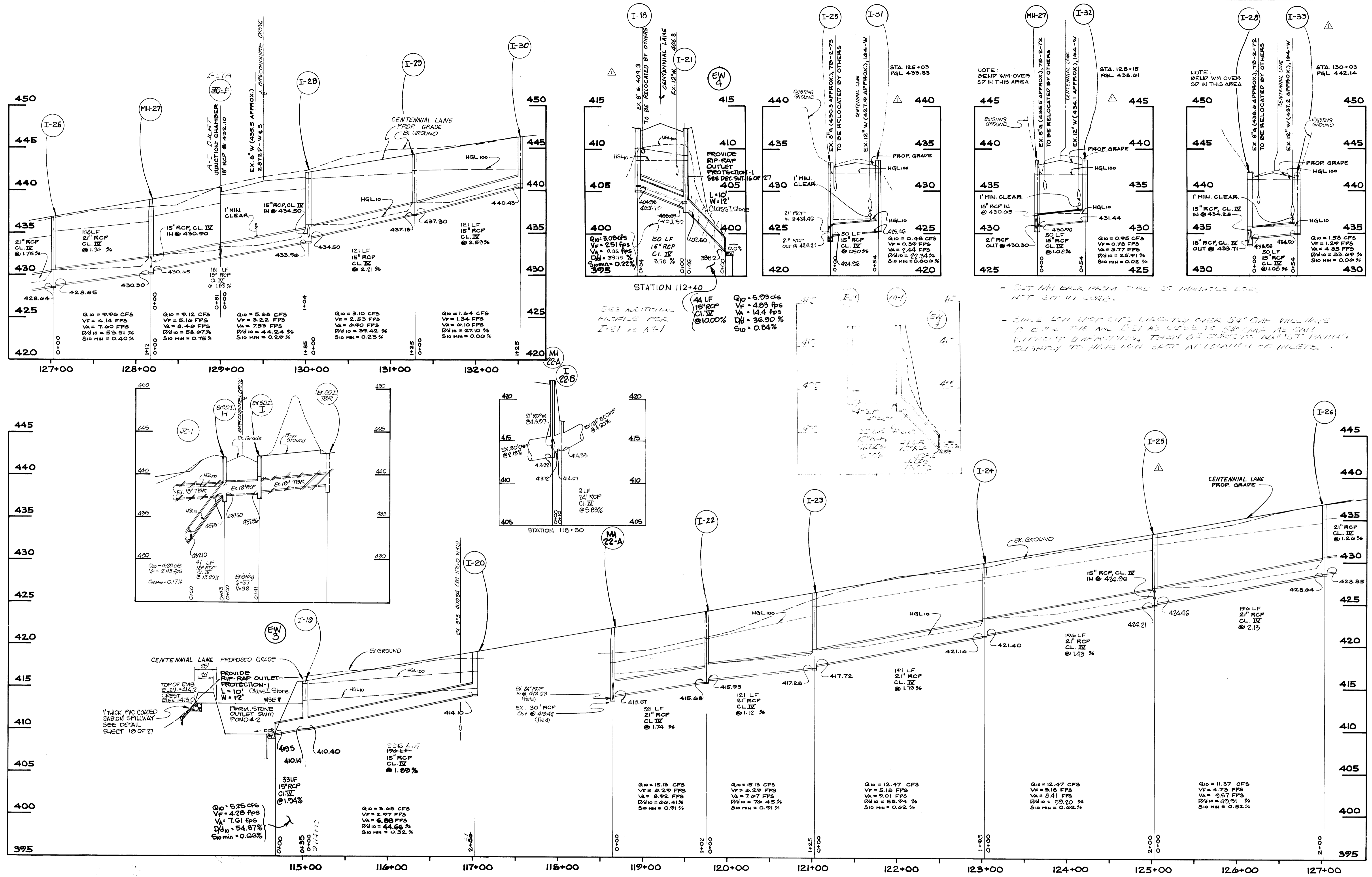
54" DIA CMP AT STA 112 +
DOWNSTREAM EXTENSION
STREAM DIVERSION

CENTENNIAL LANE
OLD ANNAPOLIS ROAD TO STA 136+00
CAPITAL PROJECT J-4015-111
ELECTION DISTRICT NO 2
HOWARD COUNTY, MARYLAND

SCALE
AS
SHOWN
SHEET
14CDF 27

1196

1196



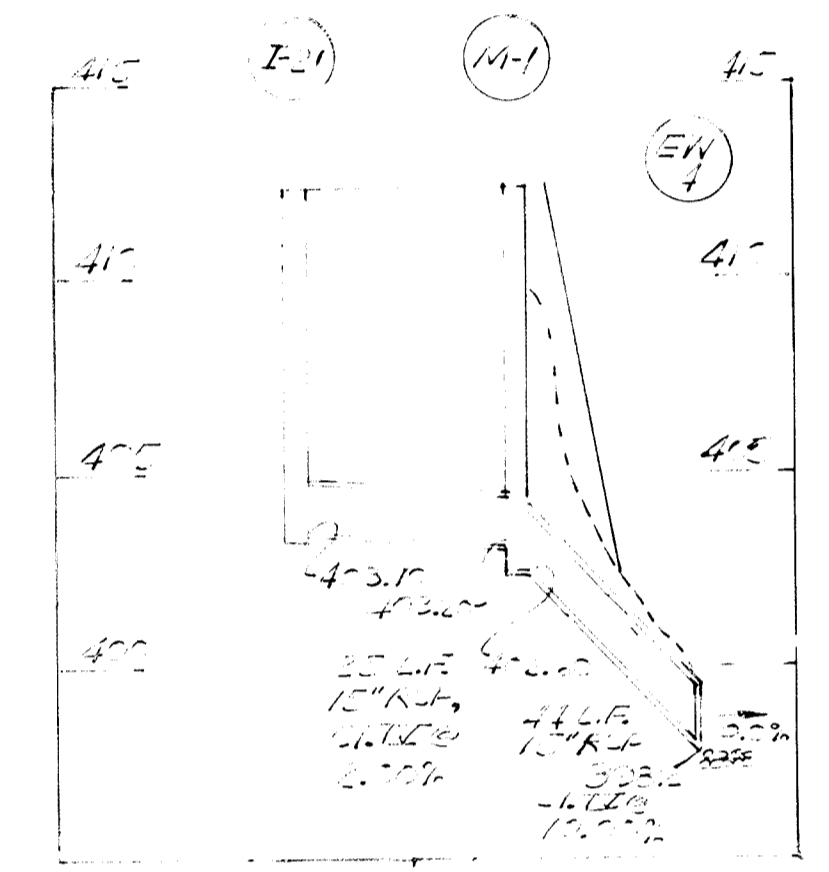
NOTE: BEUP WM OVER SP IN THIS AREA

NOTE: BEUP WM OVER SP IN THIS AREA

SET 4\"/>

CHISEL BIT SET SIDE LIBERTY OVER 5\"/>

SEE ADDITIONAL
HANDS FOR
I-21 TO I-1



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James R. Lee 12/14/91
DIRECTOR OF PUBLIC WORKS DATE

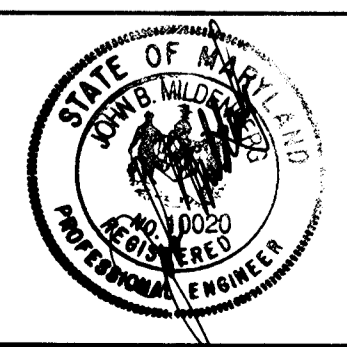
Richard E. Reed 12-3-91
CHIEF, BUREAU OF ENGINEERING DATE

Elizabeth Anderson-Calis 12/2/91
REF. ROADS, BRIDGES, AND STORM DRAINAGE DATE

Francis W. Wickland 12/14/91
CHIEF, BUREAU OF HIGHWAYS DATE

MILDENBERG,
MOCHI & ASSOCIATES, INC.
ENGINEERS - SURVEYORS - PLANNERS

3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
(301) 461-0078 D.C. Metro: (301) 621-5766



DES: KAM	KAM	1	Eliminate water relocation	JAN 92
DRN: LJG/vms				
CHK: JBM				
DATE: 10/91	BY: N.O.		REVISION	DATE

STORM DRAIN PROFILES
STA. 112+00 TO STA. 132+00
CENTENNIAL LANE

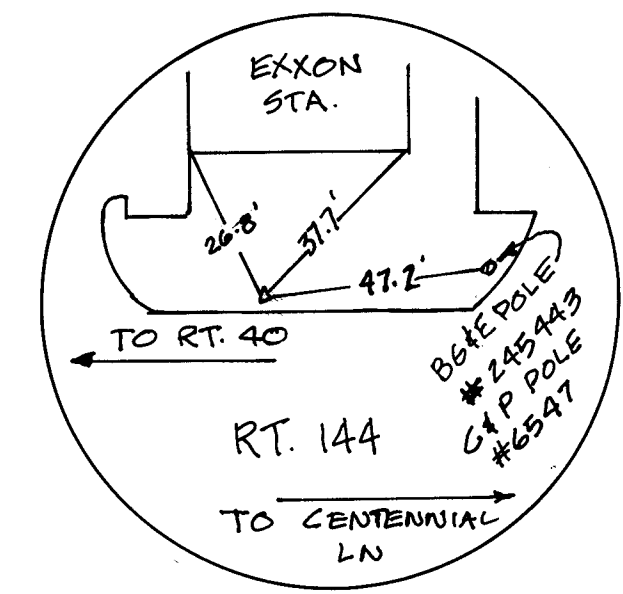
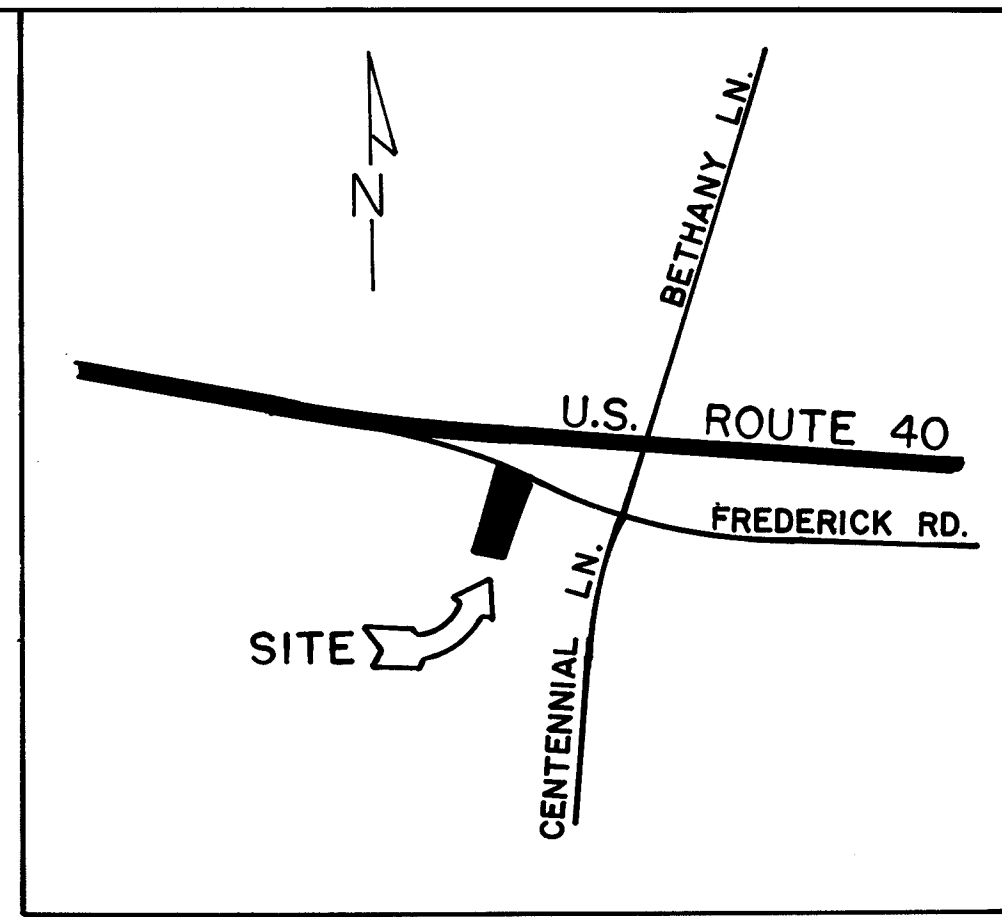
600' SCALE MAP NO. 24 BLOCK NO.

CENTENNIAL LANE
OLD ANNAPOLIS ROAD TO STA. 136+00
CAPITAL PROJECT J-4015-III
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND

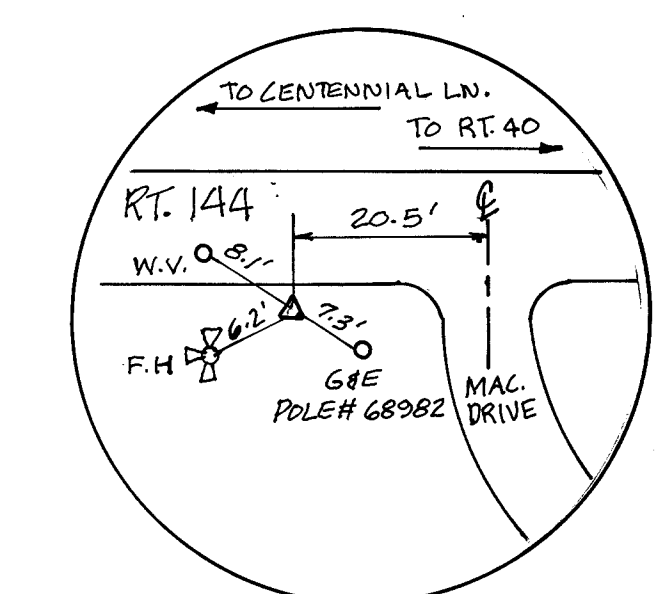
SCALE AS SHOWN

SHEET 15 OF 27

AS-BUILT
2-3-92

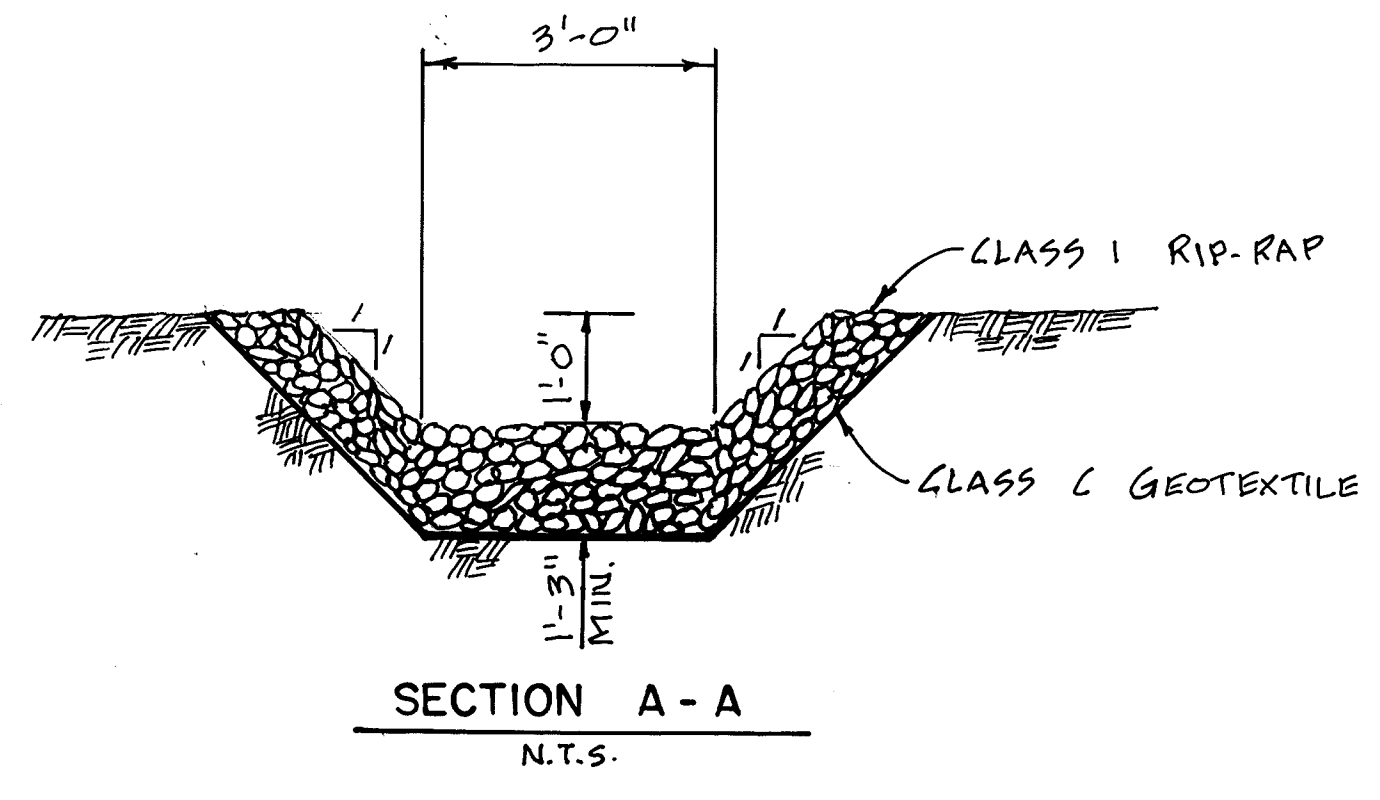


N-587264.584, E-1351034.480



N-587008.209, E-1351381.298

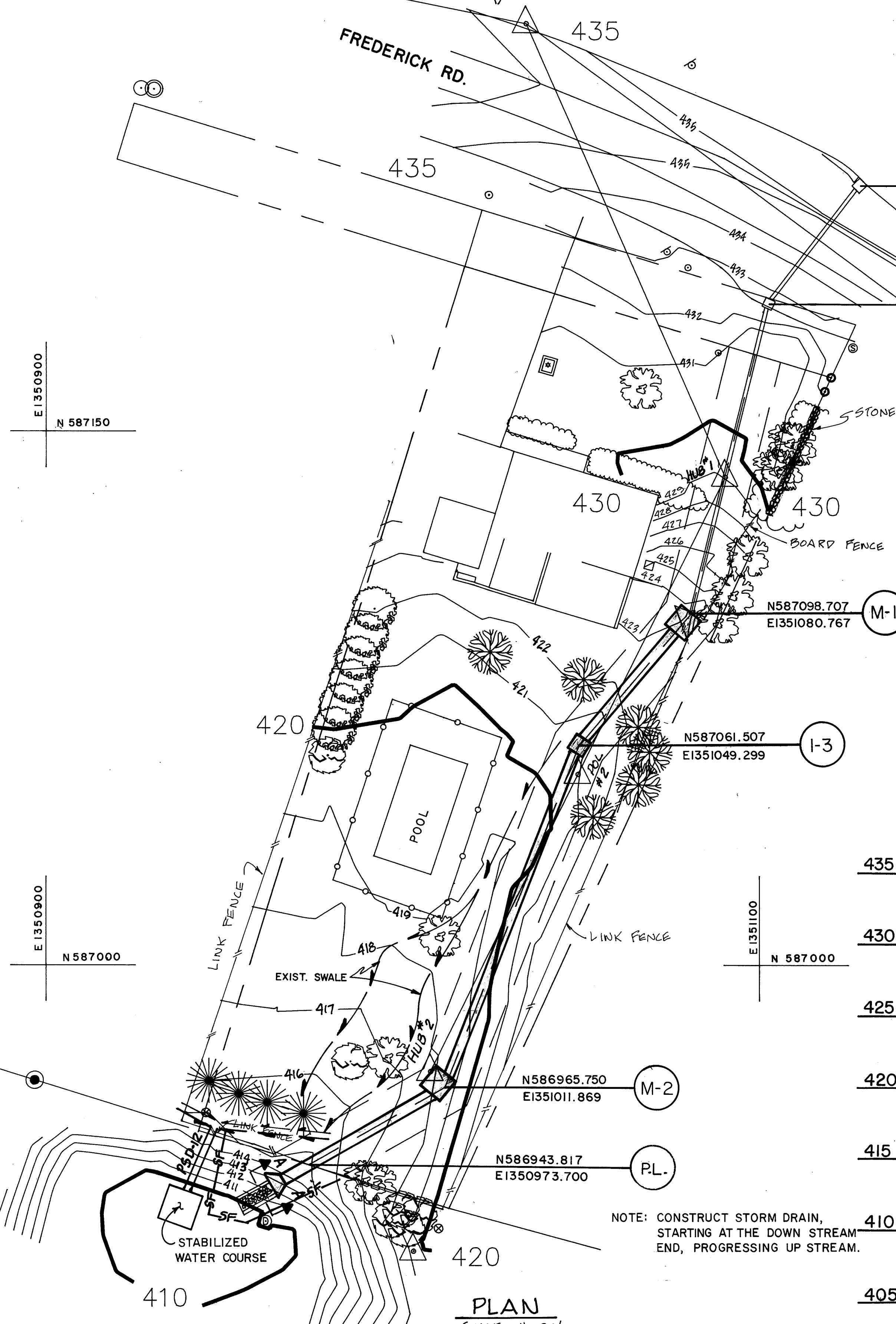
STAKE OUT TABLE				
TO	OCC. POINT	BACK SIGHT	ANGLE	DIST.
M-1	HUB 2	HUB 1	3° 16' 32"	147.814'
I-3	"	"	358° 07' 41"	100.333'
M-2	"	"	110° 58' 58"	6.001'
PL.	"	"	206° 00' 25"	43.008'



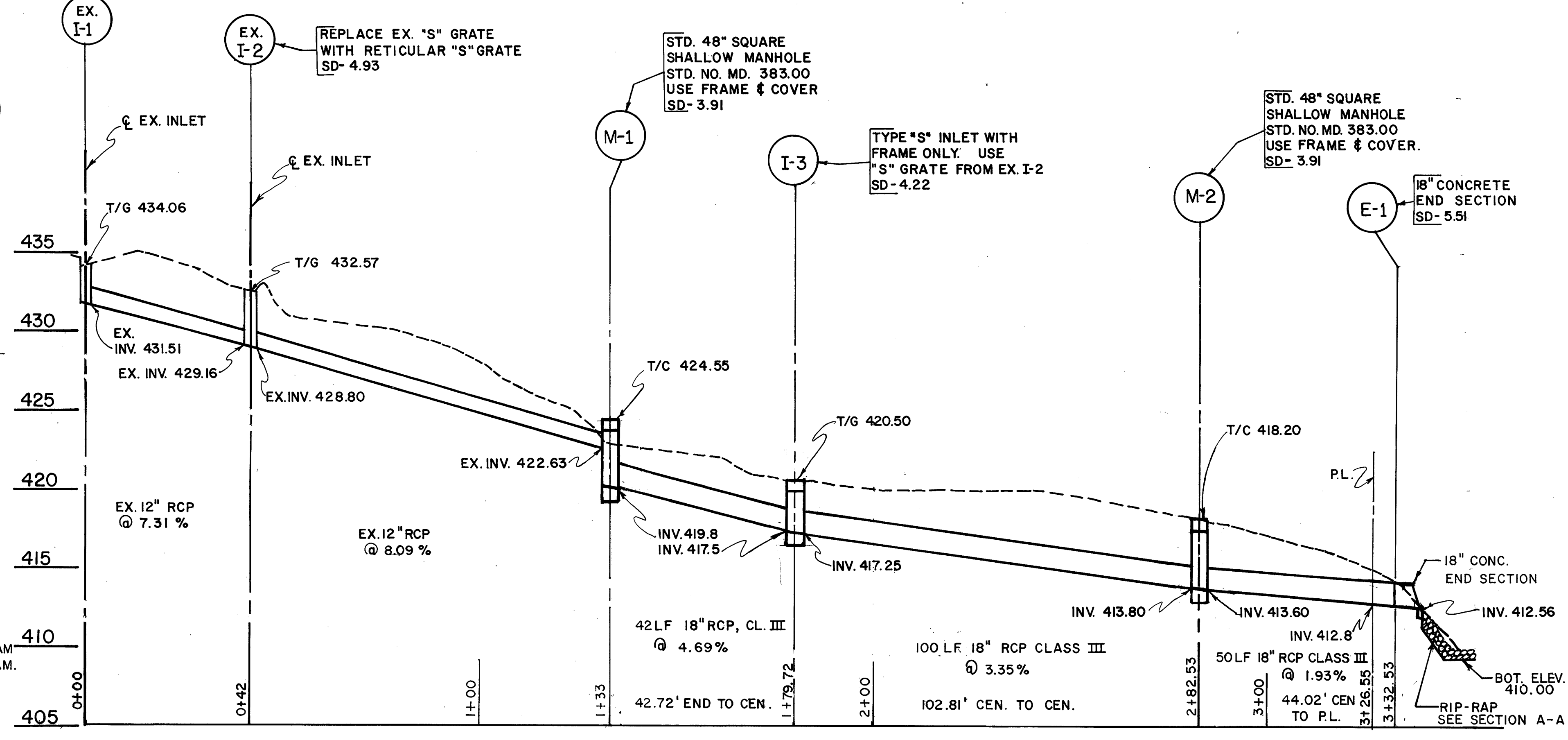
E 1350900
N 587150

E 1350900
N 587000

E 1351100
N 587000

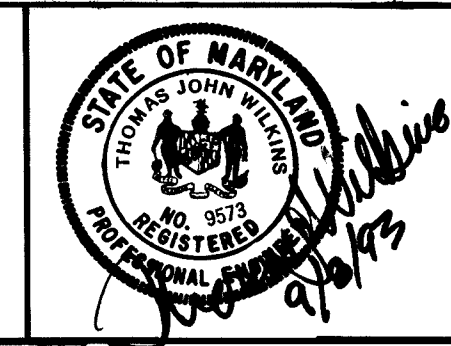


NOTE: CONSTRUCT STORM DRAIN, STARTING AT THE DOWN STREAM END, PROGRESSING UP STREAM.



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: *James G. [Signature]* DATE: 9/8/93
 Chief, Bureau of Engineering: *Richard [Signature]* DATE: 9/8/93
Elizabeth Anderson [Signature] DATE: 9/8/93
Robert [Signature] DATE: 9/8/93



DES: T.W.			
DRN: AM/WH			
CHK: T.W.			
DATE:	BY:	NO.:	REVISION:

STORM DRAIN PROFILES
STA. 6+40±
FREDERICK ROAD

600' SCALE MAP NO. 24 BLOCK NO. 1

CENTENNIAL LANE
CAPITAL PROJECT J-4015-II
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 15A OF 36