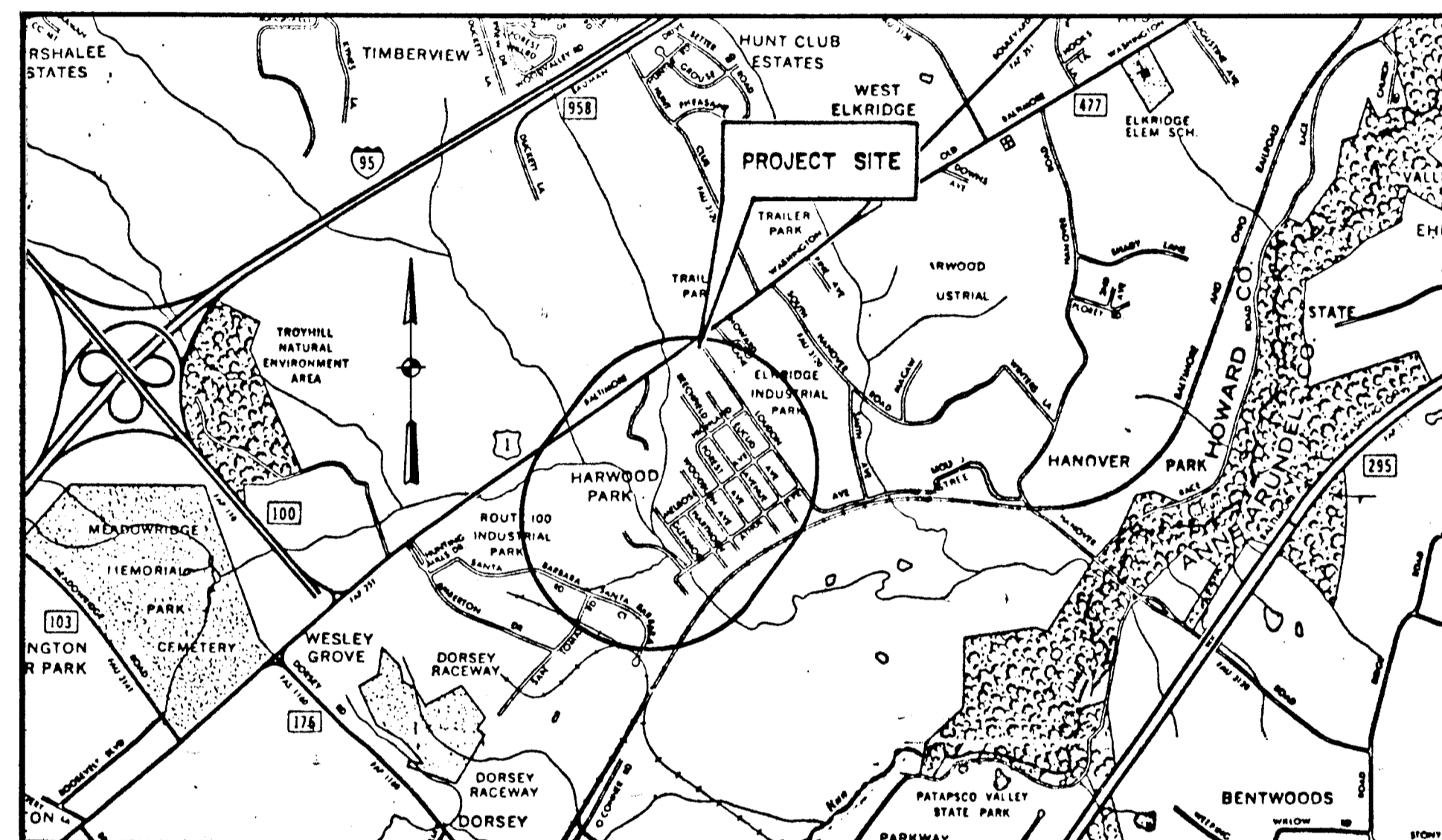




HOWARD COUNTY, MARYLAND DEPARTMENT OF PUBLIC WORKS

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	TITLE SHEET & LOCATION PLAN
2	DRAINAGE AREA MAP
3	CONSTRUCTION DETAILS
4	CONSTRUCTION DETAILS
5	GEOMETRY LAYOUT
6	HORIZONTAL & VERTICAL CONTROLS
7	PLAN SHEET - MELROSE AVENUE
8	PROFILE SHEET - MELROSE AVENUE
9	PLAN SHEET - ATHOL AVENUE
10	PROFILE SHEET - ATHOL AVENUE
11	PLAN SHEET - MELROSE & ATHOL AVE.
12	PROFILE SHEET
13	PROFILE SHEET
14	SEDIMENT & EROSION CONTROL
15	SEDIMENT & EROSION CONTROL
16	SEDIMENT & EROSION CONTROL
17	COUNTY LINE WATER MAIN
18	COUNTY LINE WATER MAIN
19	COUNTY LINE WATER MAIN



LOCATION MAP
SCALE: 1" = 2000'

HARWOOD PARK STORM DRAINS

CAPITAL PROJECT D-6-1039

HARWOOD COMMUNITY ROADS

CAPITAL PROJECT J-0-4063

COUNTY LINE WATER MAIN

CAPITAL PROJECT W-6-8050

REVIEWED FOR Howard S.C.D.
AND MEETS TECHNICAL REQUIREMENTS

NAME: _____ DATE: _____
SIGNATURE: _____
U.S. SOIL CONSERVATION SERVICE

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

APPROVED: [Signature] DATE 1-12-82
HOWARD S.C.D.

CERTIFICATION BY THE DEVELOPER

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL
BE DONE ACCORDING TO THIS PLAN, AND THAT THE RESPONSIBLE PERSONAL
INVOLVED IN THIS CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF
ATTENDANCE AT THE DEPARTMENT OF NATIONAL RESOURCES APPROVED
TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE
BEGINNING THE PROJECT.

[Signature] NAME: _____ DATE: 1-5-82
SIGNATURE OF DEVELOPER

CERTIFICATION BY THE ENGINEER

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS
A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE
OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE
WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT"

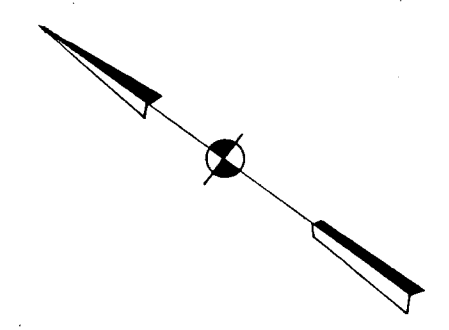
[Signature] REG. NO. 6519 DATE: 2/25/82
SIGNATURE OF ENGINEER



CAPITAL PROJECT NO. W-6-8050
CONTRACT NO. 44-1015

C1446201

174

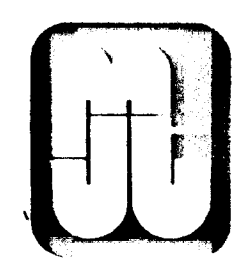


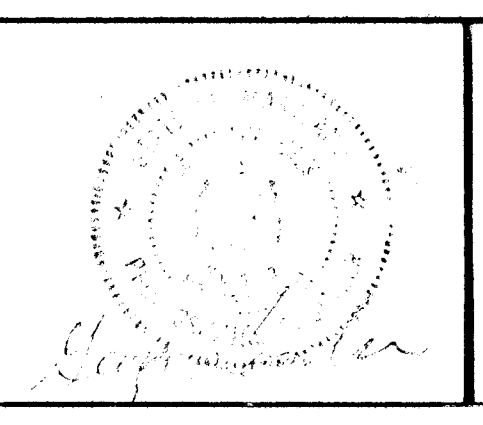
Note:
 100 Year Flood Plain Delineation Shown is Based on the Water Surface Elevation Developed by Greenhome & O'ara, Inc. for the Deep Run Drainage Study, Howard County, Md. Project D-4-1012
 (Flood Plain Elevation Varies from Elev. 92.3 At The B&O Railroad Bridge To 94.4 At Ivy Terrace.)

MATCH LINE THIS SHEET

MATCH LINE THIS SHEET

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 DIRECTOR OF PUBLIC WORKS DATE *11/18/09*
 CHIEF, BUREAU OF ENGINEERING DATE *11/18/09*
Handwritten signature
 CHIEF, ROADS, BRIDGES, & STORM DRAINAGE DIVISION DATE

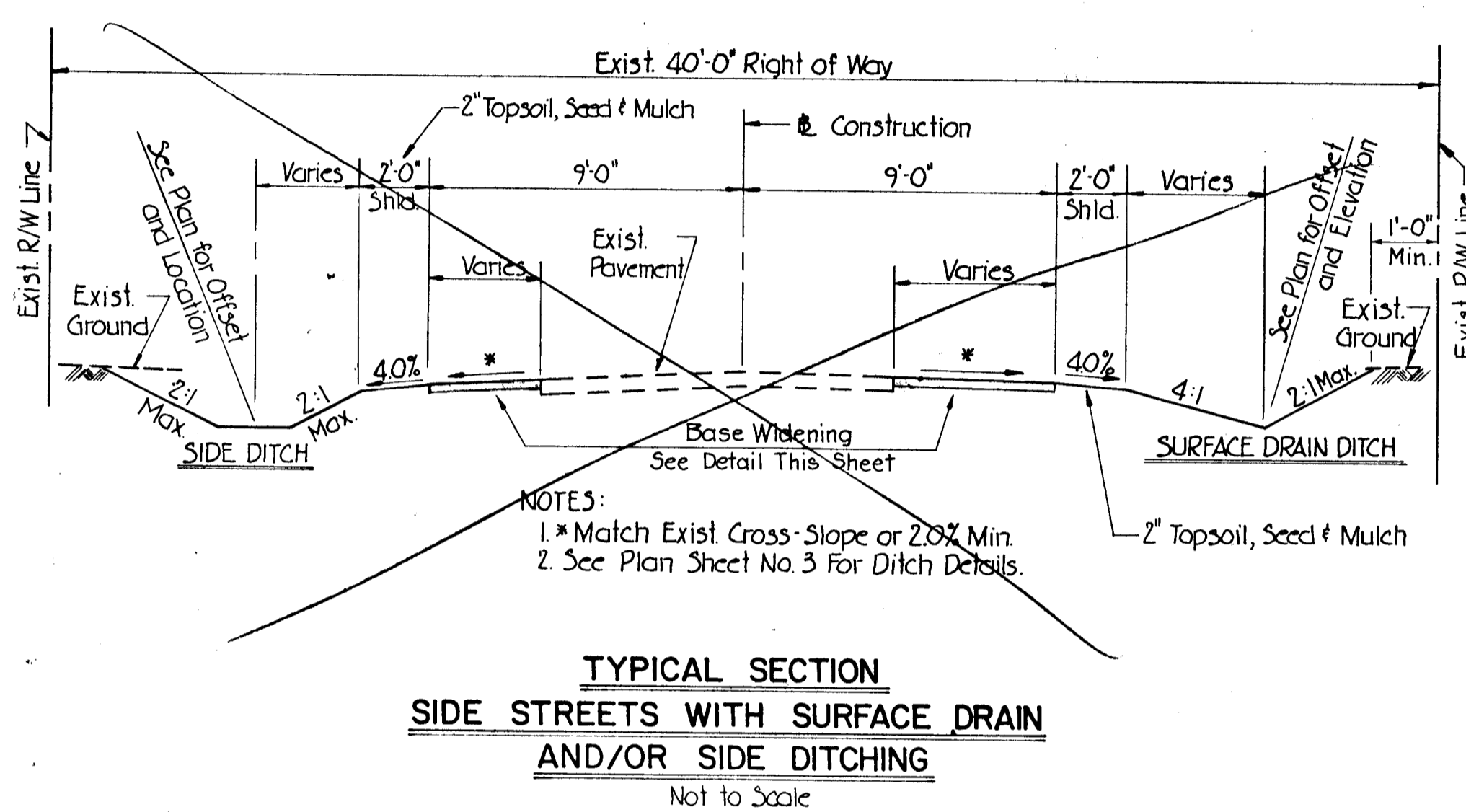
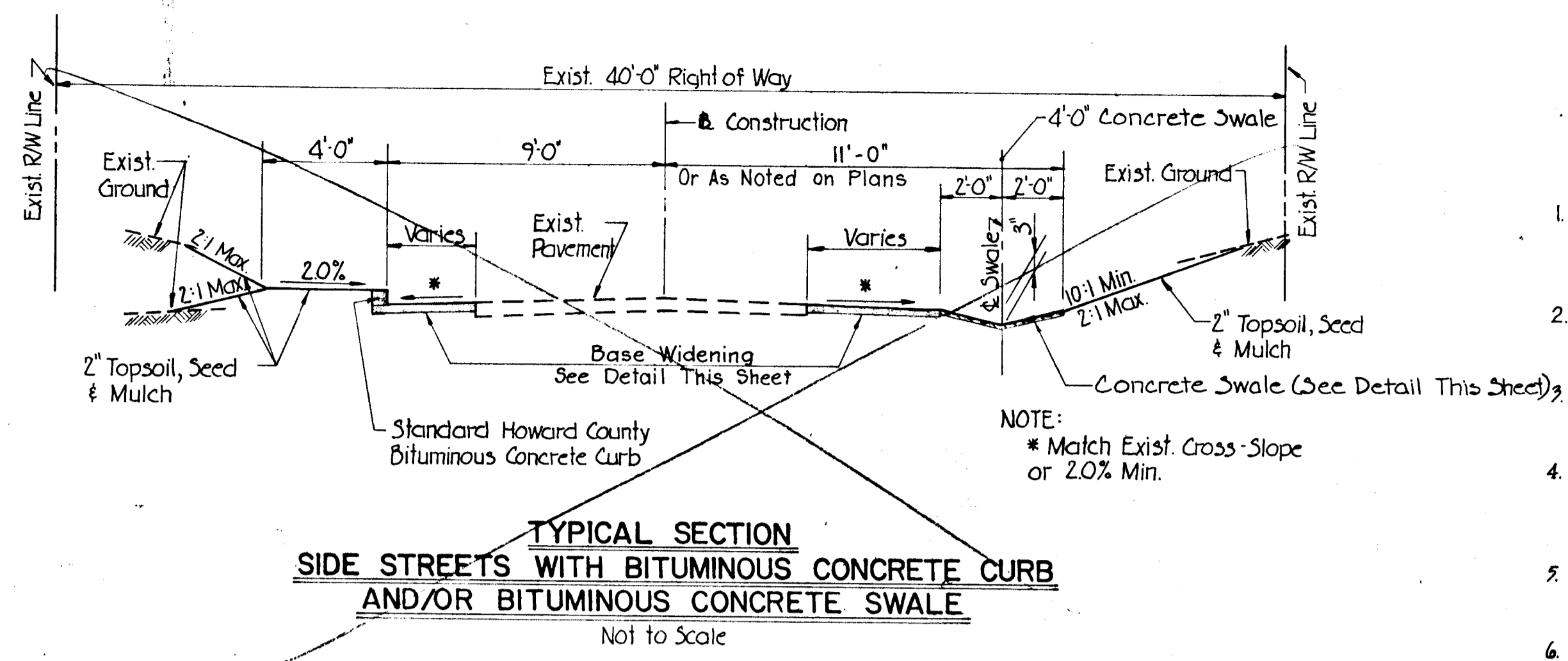
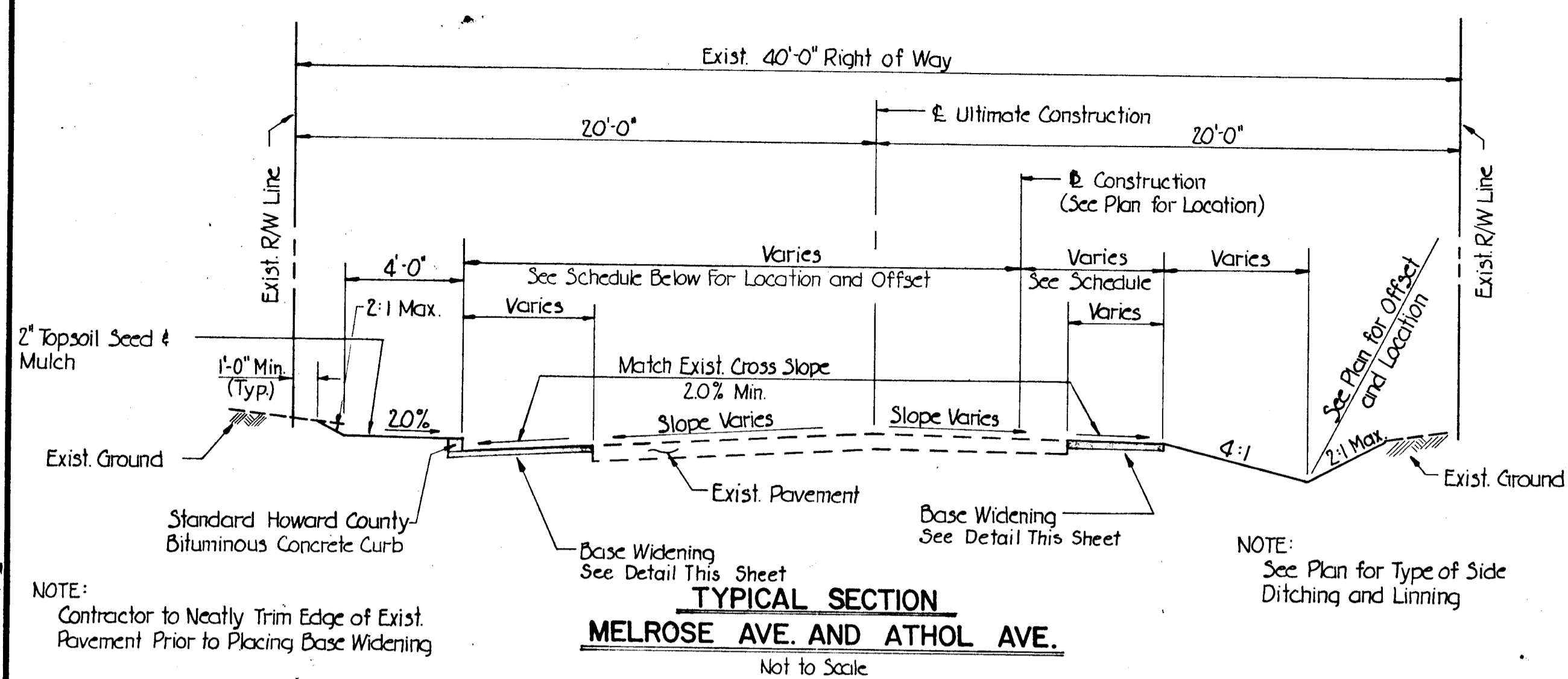
 Johnson, McCordic & Thompson, P. A.
 ENGINEERS • PLANNERS • SURVEYORS • LANDSCAPE ARCHITECTS



DRAINAGE AREA MAP
 HARWOOD PARK

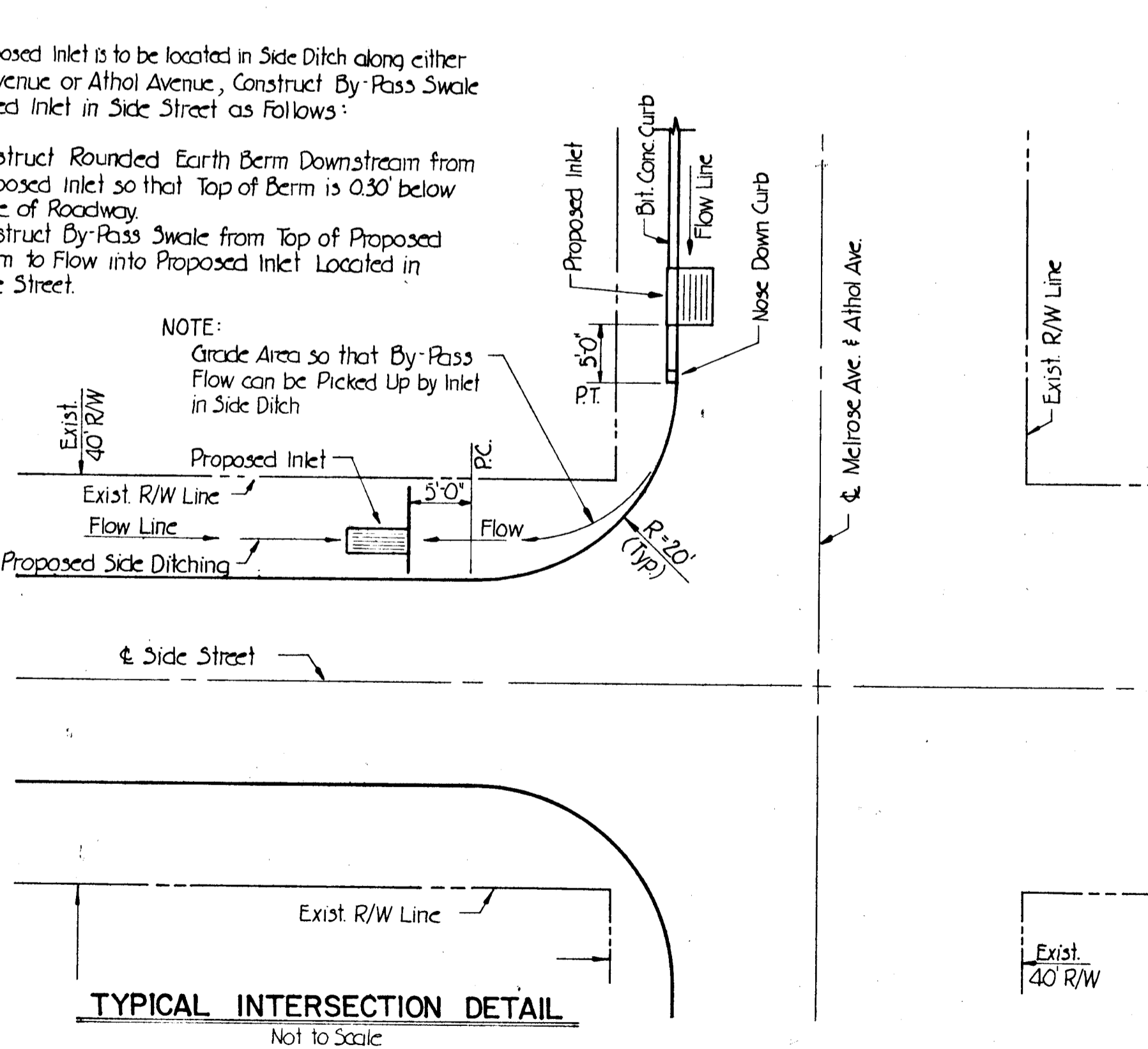
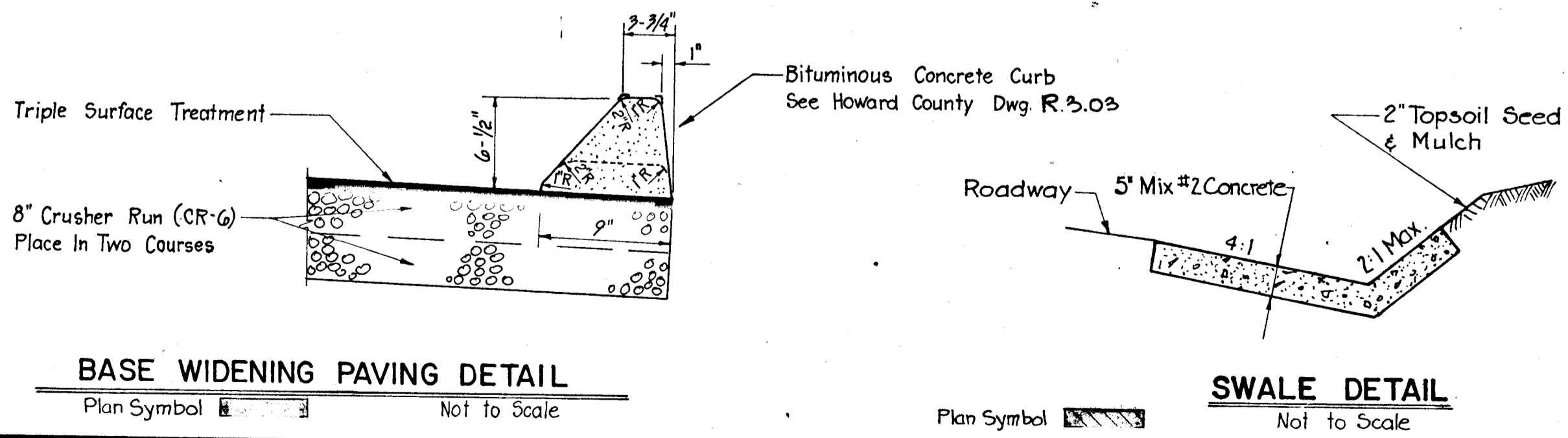
HARWOOD COMMUNITY ROADS CAPITAL PROJECT J-0-4063
 HARWOOD PARK STORM DRAINS CAPITAL PROJECT D-6-1039
 ELECTION DISTRICT NO. 1
 HOWARD COUNTY, MARYLAND

DRAWING	SCALE	DES. PWZ.
NO. 2	1" = 100'	DRW. W.K.S.
OF 19		CHK. J.A.R.



* Construct Bituminous Concrete Curb
** Construct Edge Of Road

PAVING SCHEDULE			
STATION AND OFFSET	BIT. CONC. CURB	EDGE OF ROAD	REMARKS
MELROSE AVENUE			
Sta. 212+86 To Sta. 215+22 - 15' Lt.		**	
Sta. 212+86 To Sta. 215+22 - 9' Rt.	*	**	
Sta. 215+80 To Sta. 218+08 - 15' Lt.		**	
Sta. 215+80 To Sta. 218+08 - 7' Rt.		**	
Sta. 218+69 To Sta. 221+03 - 15' Lt.		**	
Sta. 218+69 To Sta. 221+03 - 7' Rt.		**	
Sta. 221+56 To Sta. 223+90 - 15' Lt.		**	
Sta. 221+56 To Sta. 223+90 - 7' Rt.	*	**	
Sta. 224+48 To Sta. 226+81 - 15' Lt.		**	
Sta. 224+48 To Sta. 226+81 - 7' Rt.		**	
Sta. 227+40 To Sta. 229+75 - 19' Lt.	*	**	
Sta. 227+40 To Sta. 229+62 - 7' Rt.		**	
ATHOL AVENUE			
Sta. 112+86 To Sta. 115+22 - 5' Lt.		**	
Sta. 112+86 To Sta. 115+22 - 17' Rt.		**	
Sta. 115+80 To Sta. 118+08 - 5' Lt.		**	
Sta. 115+80 To Sta. 118+08 - 17' Rt.		**	
Sta. 118+69 To Sta. 121+00 - 9' Lt.	*	**	
Sta. 118+69 To Sta. 121+00 - 17' Rt.		**	
Sta. 121+58 To Sta. 123+93 - 5' Lt.		**	
Sta. 121+58 To Sta. 123+93 - 17' Rt.		**	
Sta. 124+71 To Sta. 126+82 - 9' Lt.	*	**	
Sta. 124+71 To Sta. 126+82 - 17' Rt.		**	
Sta. 127+40 To Sta. 129+70 - 5' Lt.		**	
Sta. 127+40 To Sta. 129+70 - 17' Rt.		**	



GENERAL NOTES

- Right of Way Lines shown on these Plans are shown for assistance in interpreting the Plans. For any Fee Right of Way and Easement Information see Right of Way Plans.
- Endwalls are not to be constructed until grading is completed. The types of endwalls are subject to modifications.
- Existing Private Sidewalks disturbed by the work shall be reconstructed. Steps shall be provided where necessary as a result of grading.
- Clear all Utilities by a minimum of 6'. Clear all Poles 2'-0" minimum or tunnel as required. Cost for tunneling or bracing at Poles shall be included in the unit prices 'bid for Storm Drains.
- All Pipe Elevations shown are invert \odot Elevations.
- All Slopes and/or Disturbed Areas shall receive 2" Topsoil, Seed and Mulch except where otherwise indicated on the Plans or as directed by the Engineer.
- The Contractor shall install and maintain all temporary Sediment Control Measures as shown on the drawings. However, any Sediment Control Measures not specifically indicated in the contract documents, but required as a result of the Contractor's excavations or activities shall not be cause for Extra Payment.
- Location Points for Inlets, Manholes And Structures

Item	Horizontal Location	Vertical Location
Curb Type Inlets	Center Face of Curb	Top of Curb
Grate Type Inlets	Center of Grate	Top of Grate
Manholes	Center of Cover	Top of Cover
Structures w/Stack	Center of Cover	Top of Cover
Endwalls	Center of Wall	Top of Wall
- Approximate location of Existing Utilities is shown. The Contractor shall take all necessary precautions to protect Existing Utilities and to maintain uninterrupted service. Any damage incurred shall be repaired immediately to the satisfaction of the Engineer by the Contractor at the Contractor's expense.
- The Contractor shall locate Existing Utilities a minimum of two weeks in advance of construction operations in vicinity of utilities. Cost shall be included in the unit prices bid for Storm Drains.
- Contractor shall notify the following utilities or agencies at least five (5) days before starting work shown on these plans:
 - Miss Utility (Collect) 1-559-0100;
 - Baltimore Gas & Electric Company - Underground Electric Distribution Engineering "Damage Control" 234-5691;
 - Baltimore Gas & Electric Company - Underground Gas Distribution Engineering 234-5533;
 - Chesapeake and Potomac Telephone Company 725-9976;
 - State Highway Administration 531-5533.
- All manholes shall be 4'-0" inside diameter.
- Standard Details for this Contract shall be the Howard County Standard Details as supplemented by the Maryland State Highway Administration Standard Details.
- Trees are to be protected from damage to the maximum extent.
- Contractor shall remove trees, stumps and roots along line of excavation as directed by the Engineer. Payment for such removal shall be included in the unit price bid for "Clearing and Grubbing".
- Place regulation "Men Working" and warning signs as required to comply with Maryland State Highway Administration Manual of Traffic Control for Highway Construction and Maintenance Operations.
- Top Elevations of structures shall be adjusted in the field to meet existing conditions as directed by the Engineer.
- 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 the Maryland State Grid Coordinate System.
- Corrugated Metal Pipe shall be bituminous coated, Type A, #16 Gauge.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS DATE: *1/18/82*
CHIEF, BUREAU OF ENGINEERING DATE: *1/18/82*

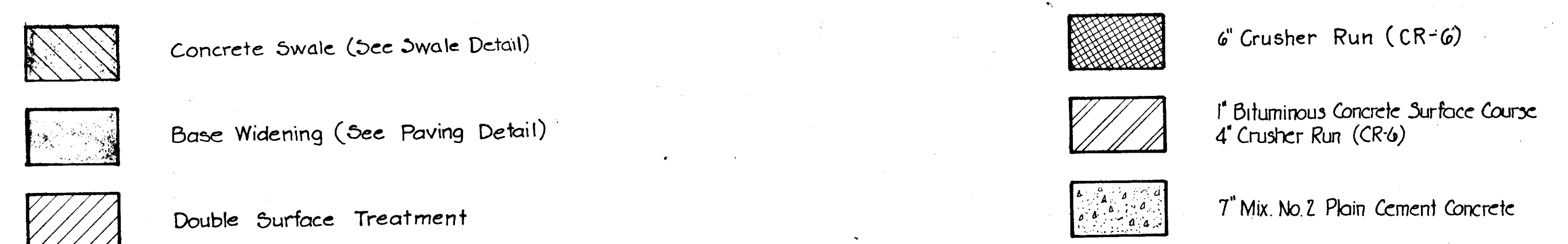
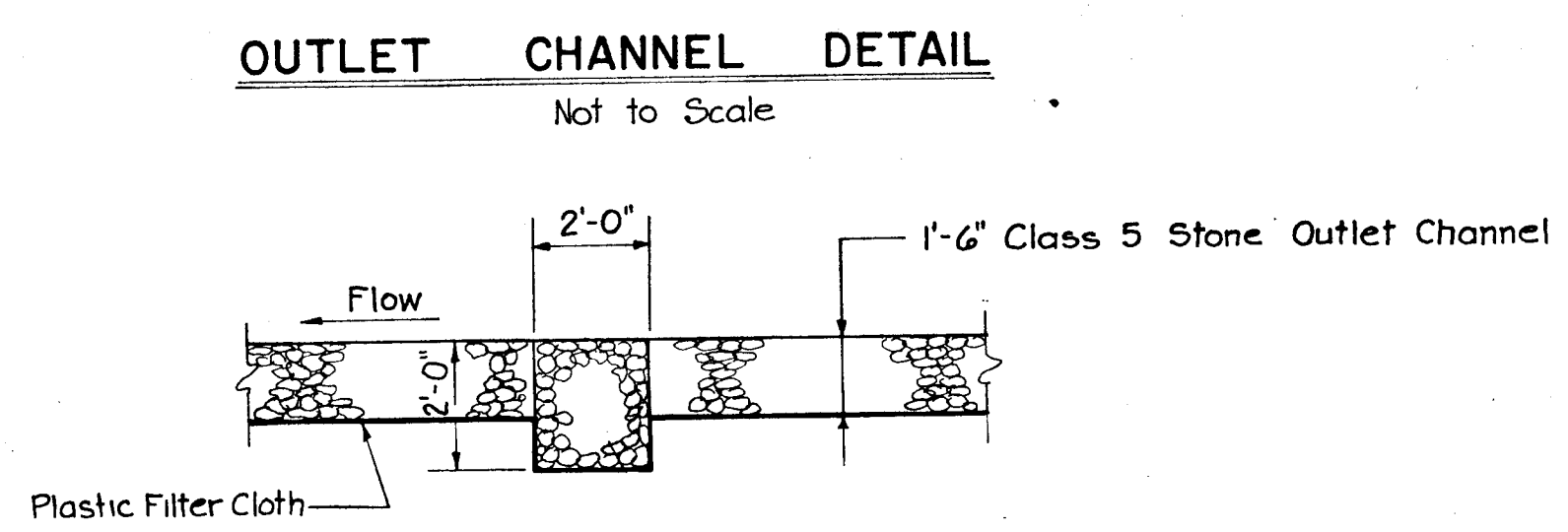
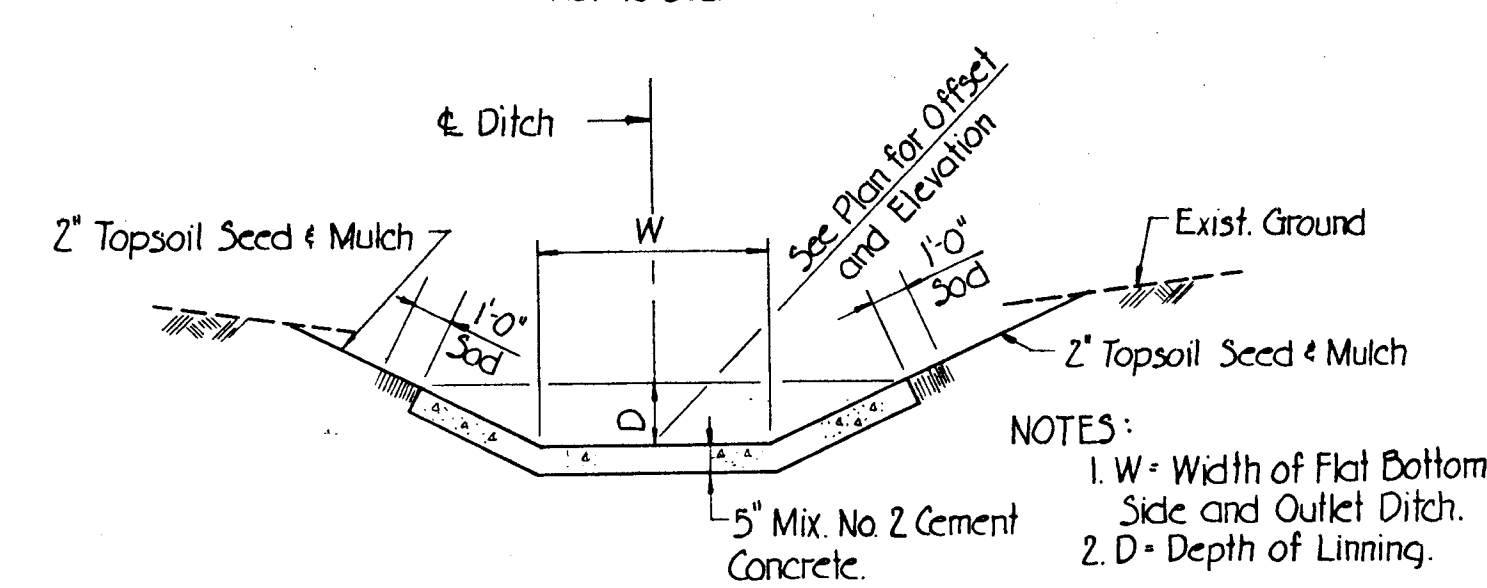
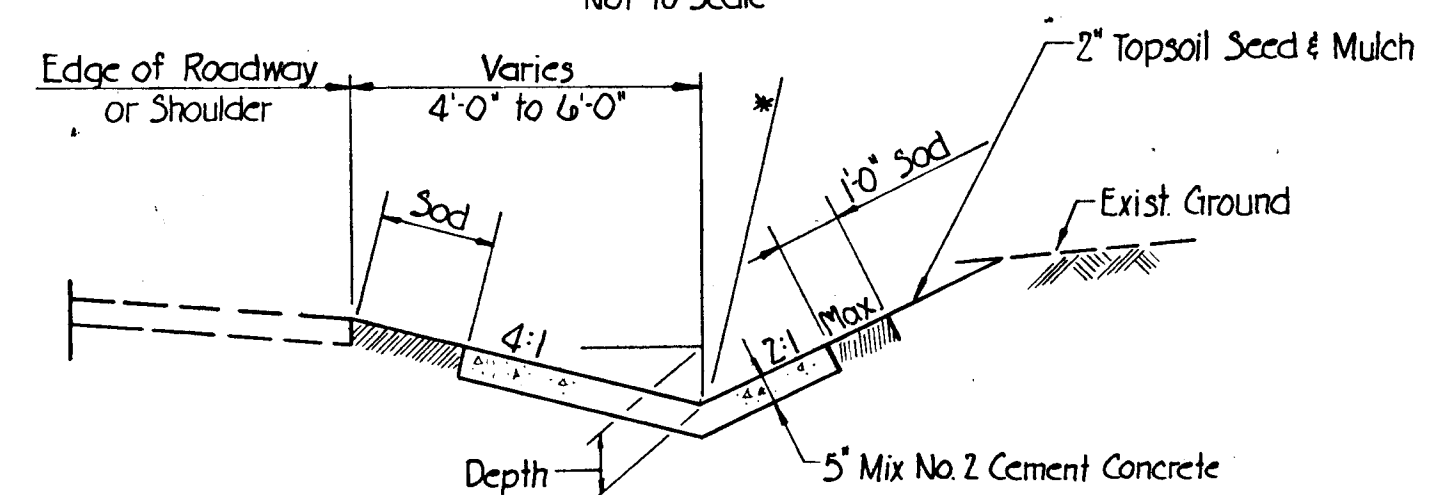
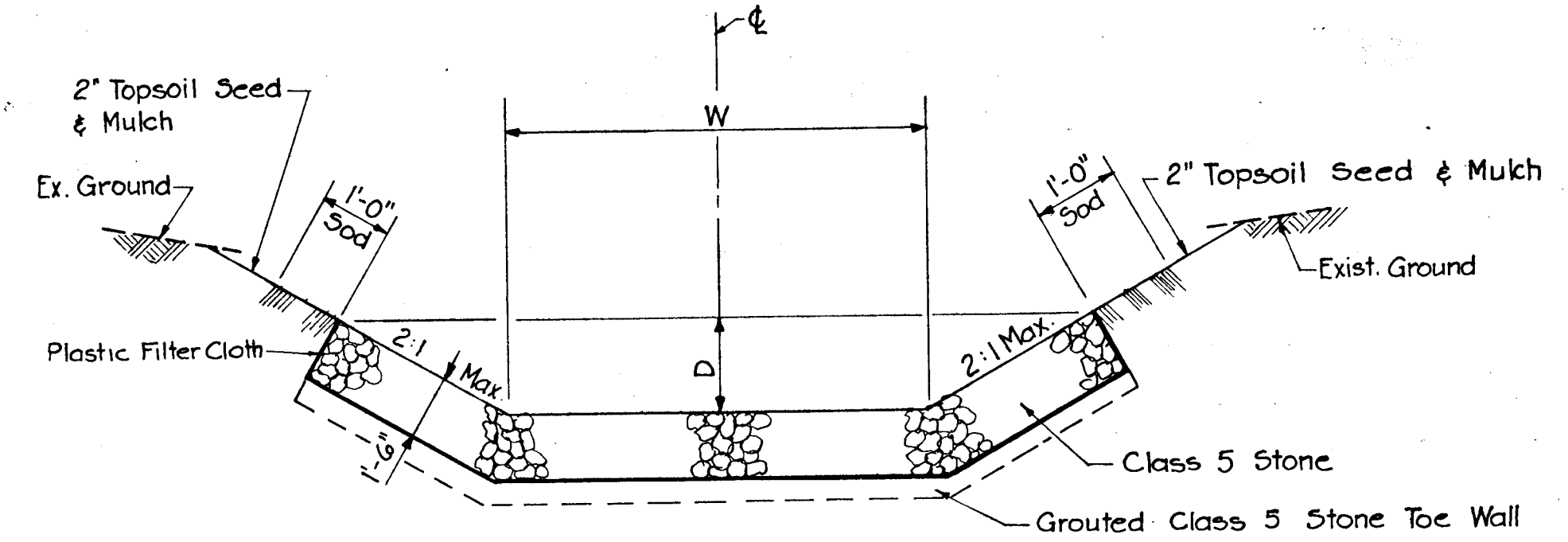
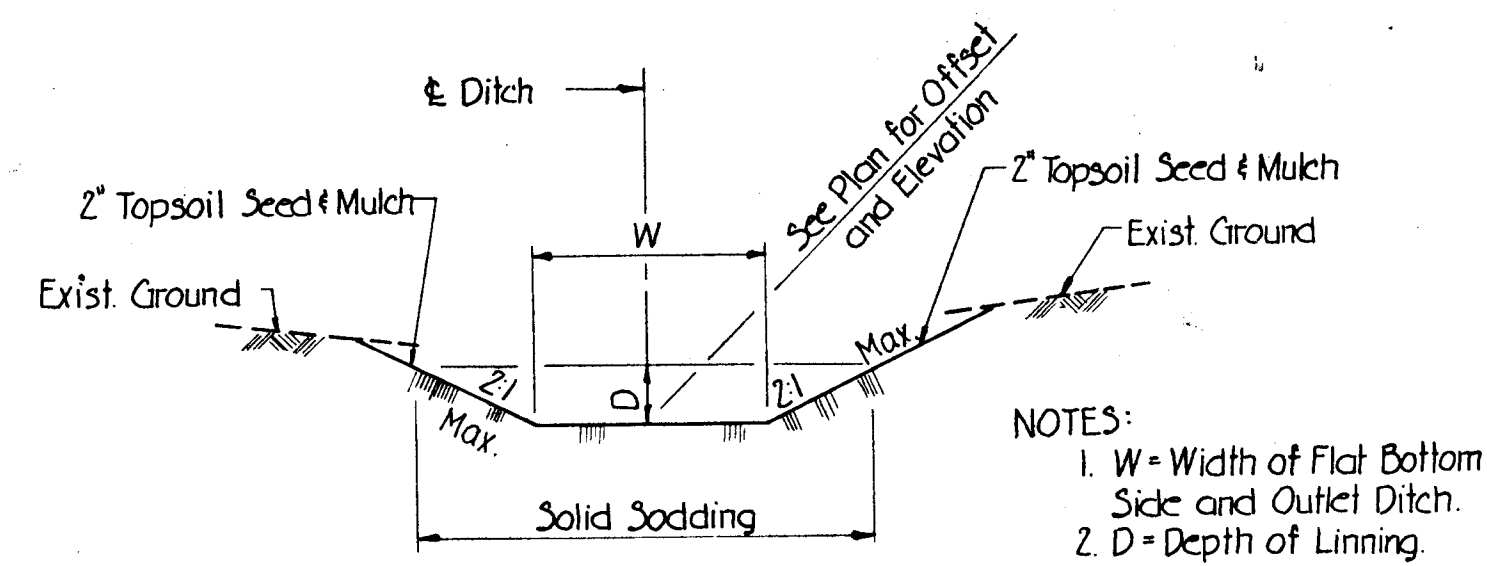
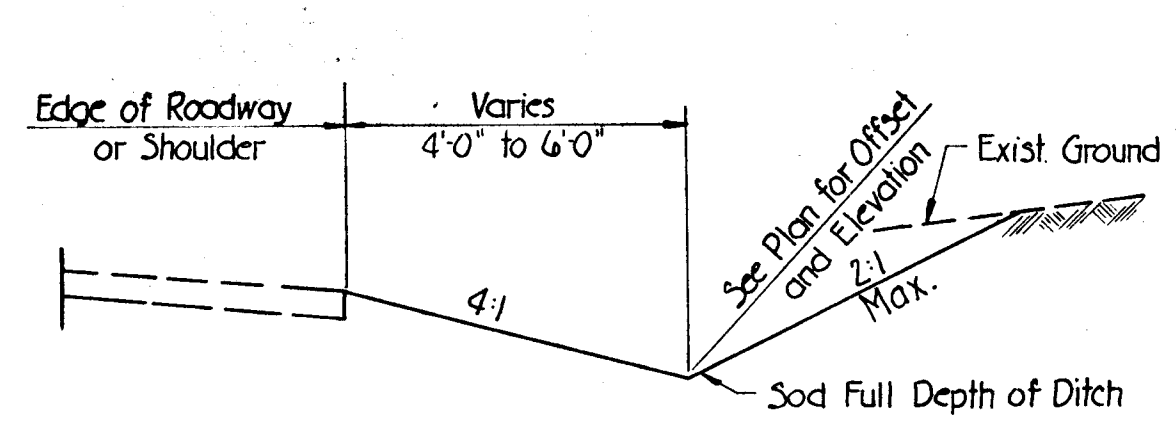
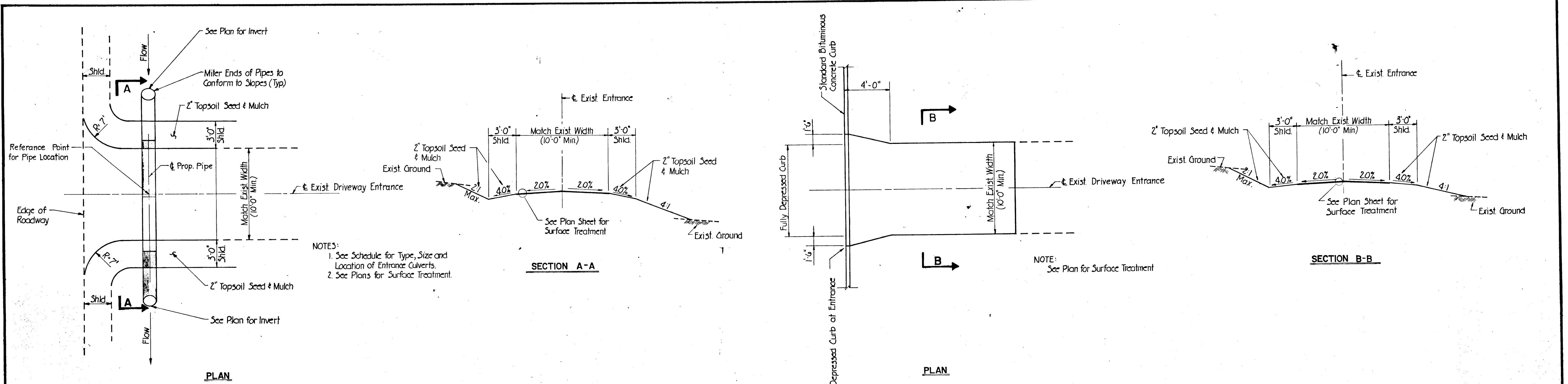
Harold Anderson 1/18/82
CHIEF, ROADS, BRIDGES, & STORM DRAINAGE DIVISION

Johnson, McCordic & Thompson, P. A.
ENGINEERS • PLANNERS • SURVEYORS • LANDSCAPE ARCHITECTS
1526 YORK ROAD • BALTIMORE, MARYLAND • 21203 • (301) 831-6521

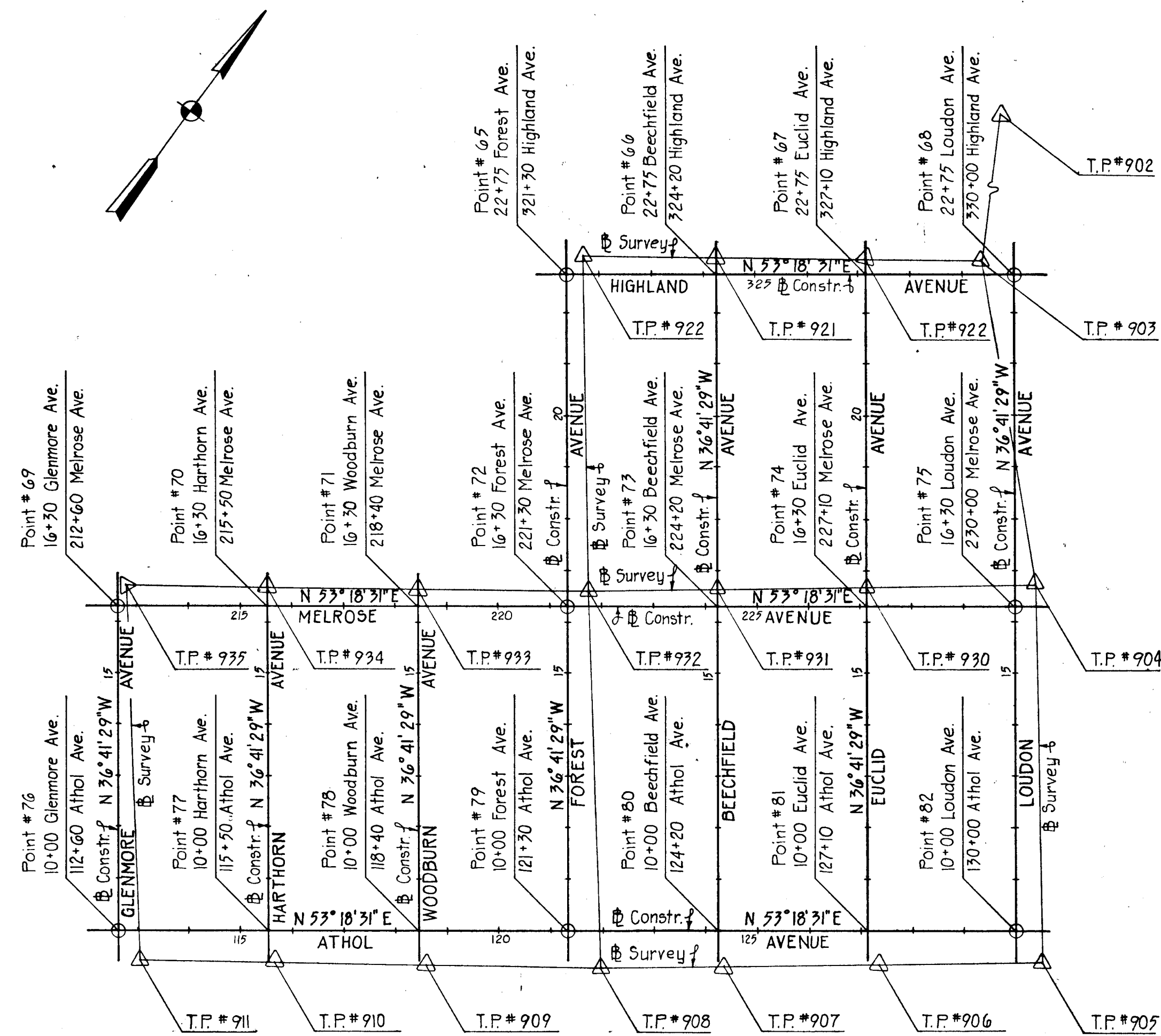
CONSTRUCTION DETAILS
HARWOOD PARK

HARWOOD COMMUNITY ROADS CAPITAL PROJECT J-0-4063
HARWOOD PARK STORM DRAINS CAPITAL PROJECT D-6-1039
ELECTION DISTRICT NO. 1
HOWARD COUNTY, MARYLAND

DRAWING NO. 3	SCALE AS SHOWN	DES. P.W.Z.
OF 19		DRW. R.L.D.
		CHK. J.A.R.



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND [Signatures and Dates]	 Johnson, McCordic & Thompson, P.A. ENGINEERS • PLANNERS • SURVEYORS • LANDSCAPE ARCHITECTS	 CONSTRUCTION DETAILS HARWOOD PARK	HARWOOD COMMUNITY ROADS CAPITAL PROJECT J-0-4063 HARWOOD PARK STORM DRAINS CAPITAL PROJECT D-6-1039 ELECTION DISTRICT NO. 1 HOWARD COUNTY, MARYLAND	DRAWING NO. 4 OF 19	SCALE AS SHOWN	DES. P.W.Z. DRW. R.L.D. CHK. J.A.R.
				DEPARTMENT OF PUBLIC WORKS		



BASE LINE CONSTRUCTION STAKEOUT

TO LOCATE	T	B.S.	F.S.	RT. \angle	DIST.	COORDINATES		REMARKS
						NORTH	EAST	
68	903	902	68	119° 22' 03"	2.60	496330.0949	874282.4425	
65	922	921	65	142° 51' 39"	2.35	495810.2669	873584.8188	
75	904	905	75	2° 11' 35"	5.13	495812.8911	874667.8322	
72	932	933	72	280° 26' 49"	5.14	495293.0631	873970.2085	
69	935	934	69	91° 49' 25"	4.79	494773.2332	873272.5847	
82	905	906	82	52° 10' 44"	4.24	495307.7152	875044.2593	
79	908	909	79	67° 40' 10"	6.73	494787.8873	874346.6336	
76	911	910	76	254° 40' 35"	9.45	494268.0593	873649.0118	

DEPARTMENT OF PUBLIC WORKS

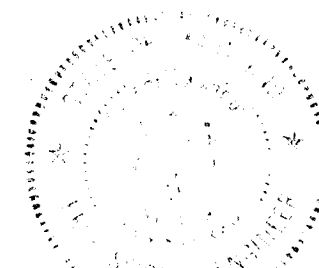
HOWARD COUNTY, MARYLAND

Director of Public Works DATE: 6/8/20
 Chief, Bureau of Engineering DATE: 6/8/20

Chief, Roads, Bridges, & Storm Drainage Division DATE: 11/13/20



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 ENGINEERS • PLANNERS • SURVEYORS • LANDSCAPE ARCHITECTS
 1526 YORK ROAD • BALTIMORE, MARYLAND • 21093 • (301) 821-6201



GEOMETRY LAYOUT

HARWOOD PARK

HARWOOD COMMUNITY ROADS CAPITAL PROJECT J-0-4063

HARWOOD PARK STORM DRAINS CAPITAL PROJECT D-6-1039

ELECTION DISTRICT NO. 1
 HOWARD COUNTY, MARYLAND

DRAWING

NO. 5

OF 19

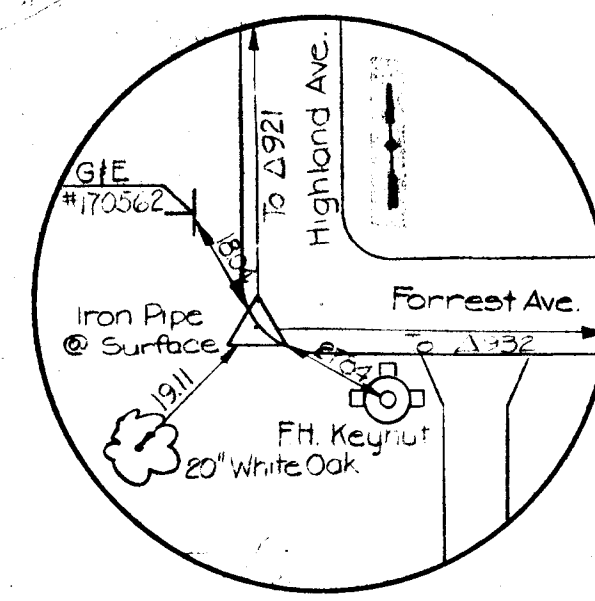
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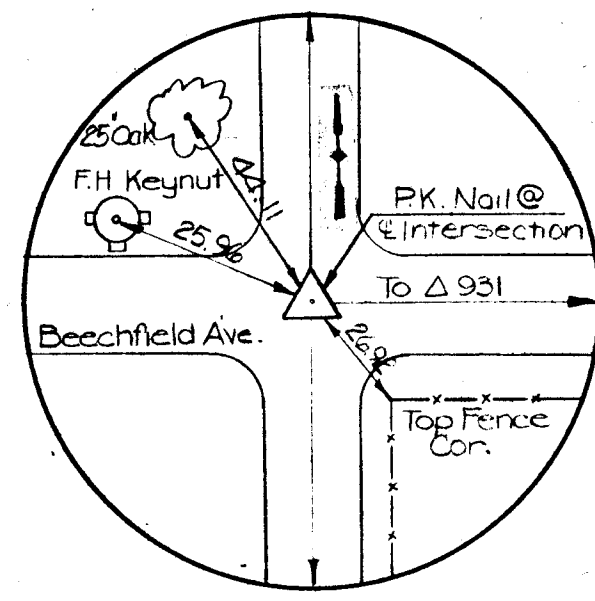
DES. W.K.L.

DRW. M.L.

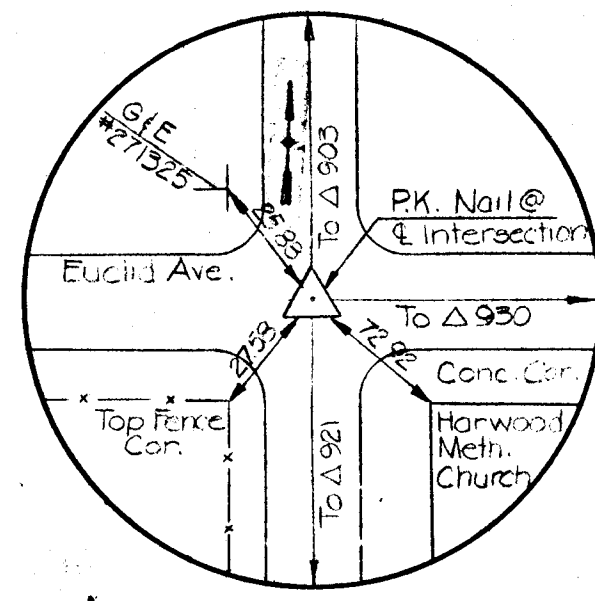
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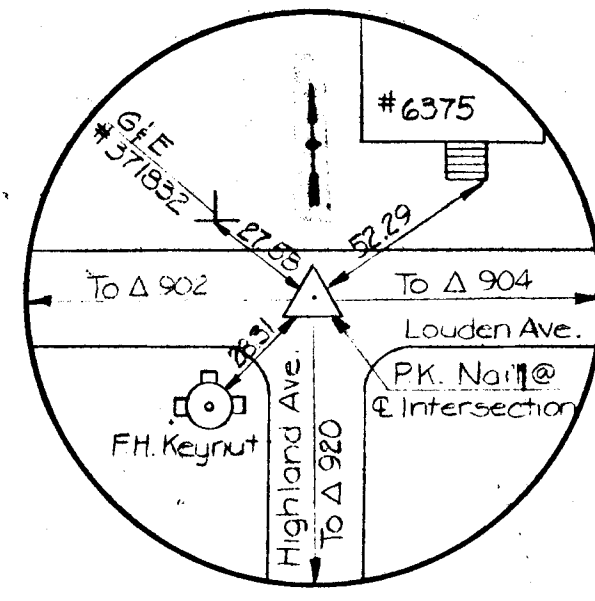
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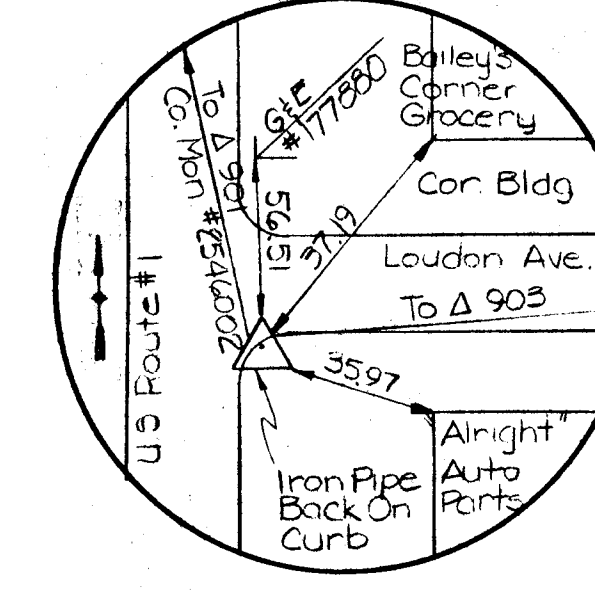
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920



903

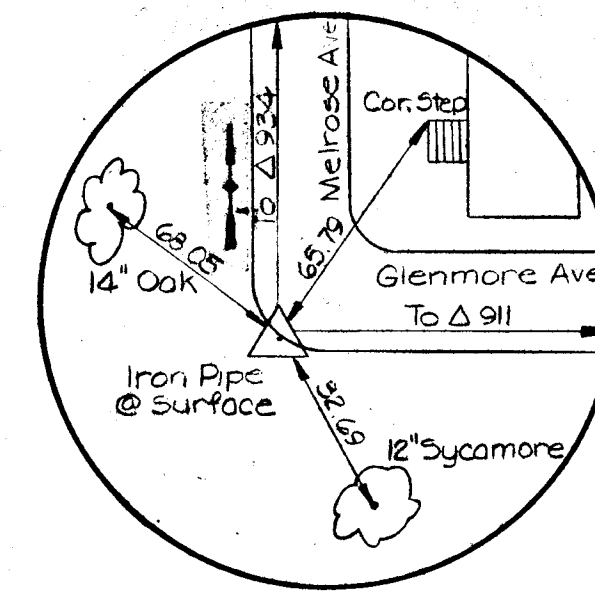


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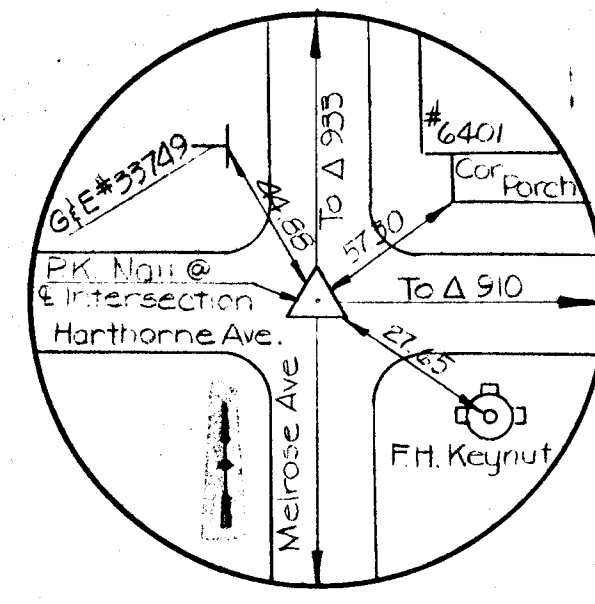
HIGHLAND AVENUE

LOUDON AVENUE

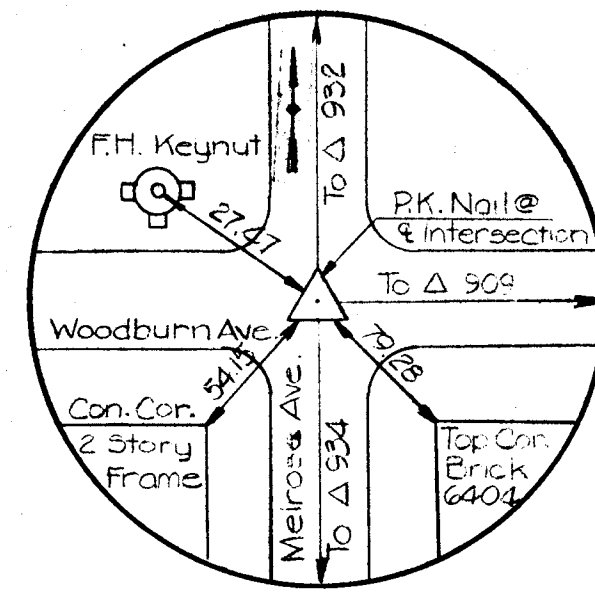
TRAVERSE POINT COORDINATES		
POINT NO.	NORTH	EAST
901	497657.2170	874176.5650
902	497157.5341	873647.6315
903	496329.7322	874279.6630
904	495817.1043	874664.9130
905	495306.5965	875048.3483
906	495132.5456	874816.3434
907	494953.4990	874584.3916
908	494784.4438	874352.4150
909	494610.3680	874120.4163
910	494436.3276	873888.4724
911	494262.2659	873656.4019
912	493997.5550	873288.7434
913	493693.1979	873228.8976
914	492831.6386	873058.3989
915	492359.4000	872959.3130
920	496157.7623	874049.6017
921	495964.5342	873816.9227
922	495812.5231	873585.4760
930	495643.7779	874432.3190
931	495470.4640	874199.8357
932	495297.6735	873967.9346
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934	494950.5430	873502.2670
935	494777.1597	873269.8470



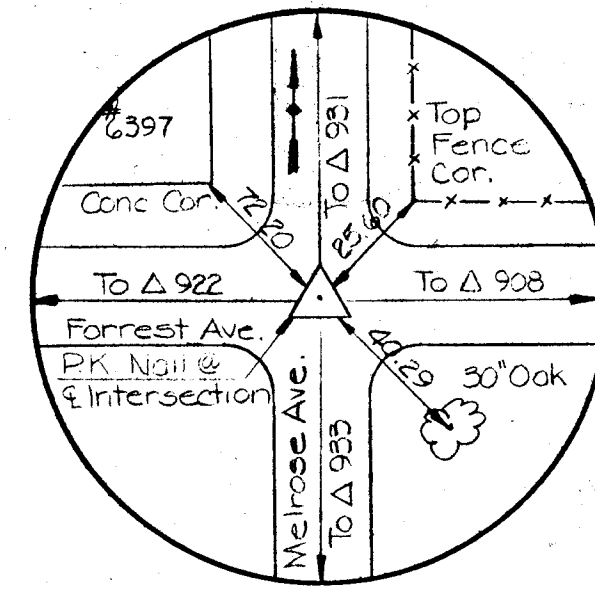
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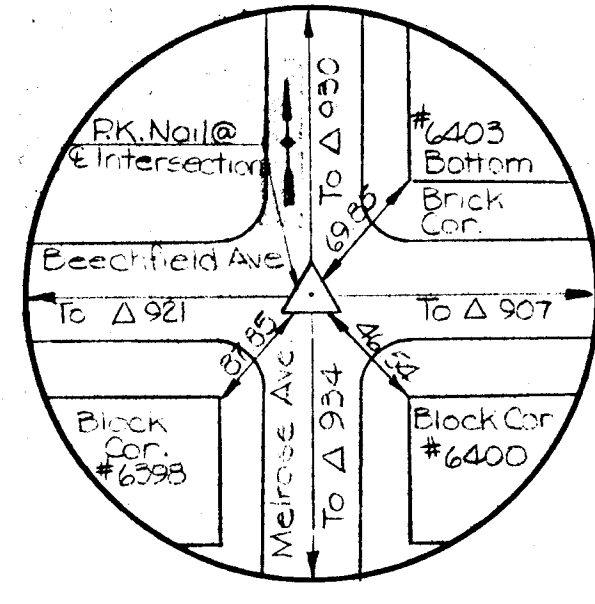
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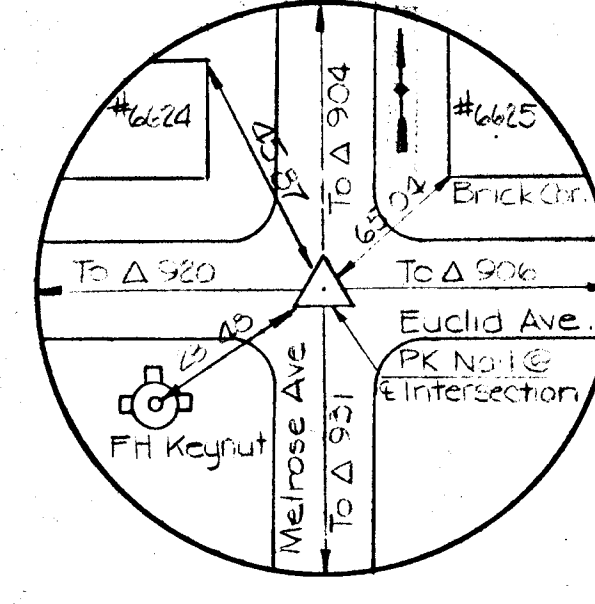
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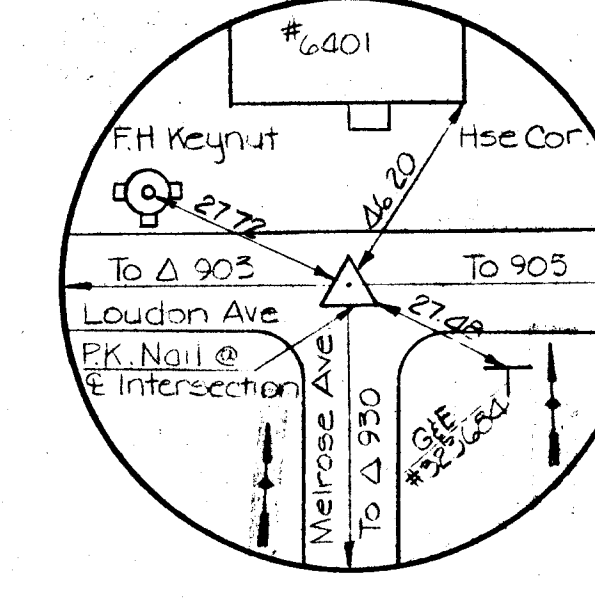
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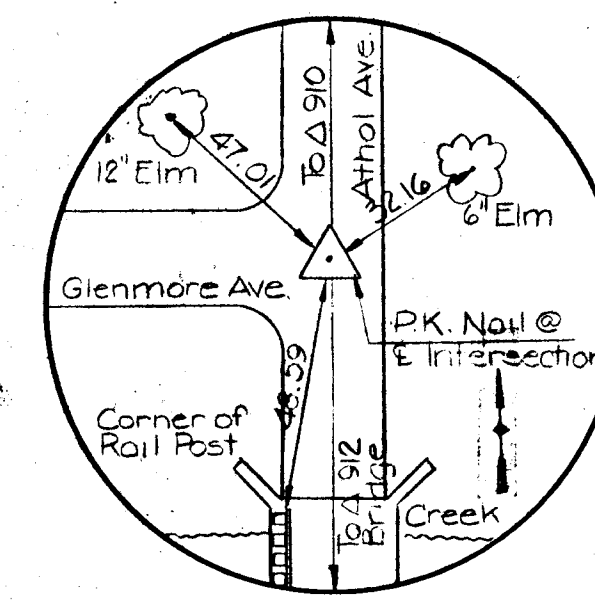


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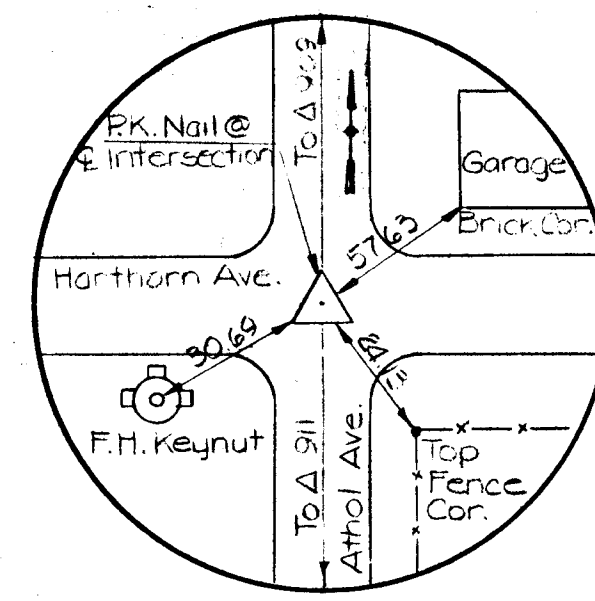


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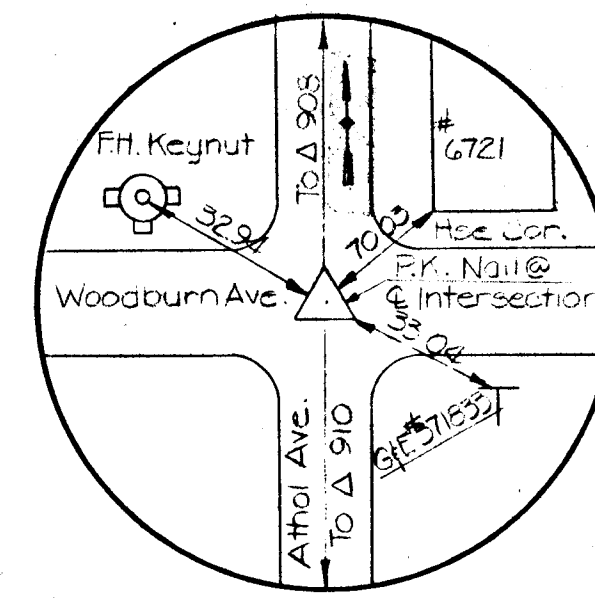
MELROSE AVENUE



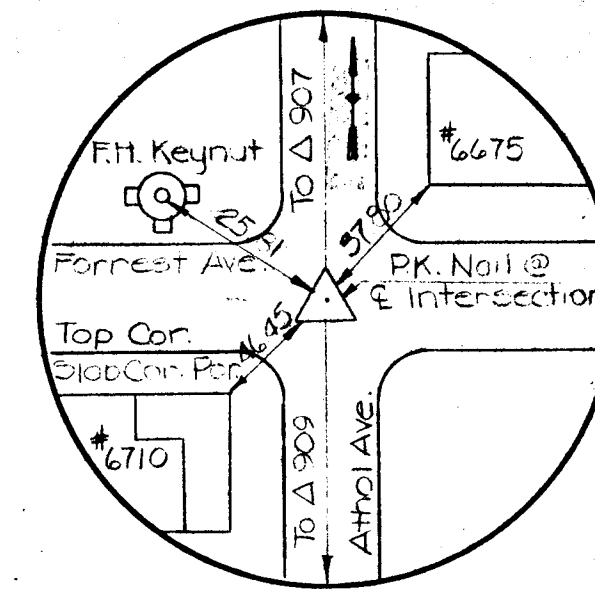
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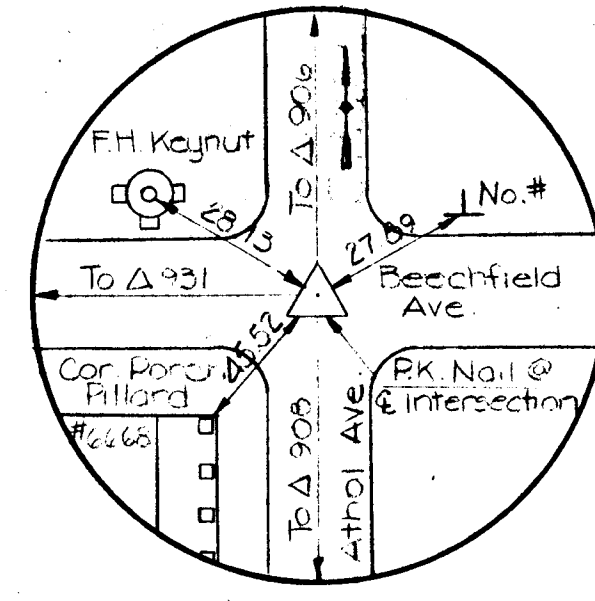
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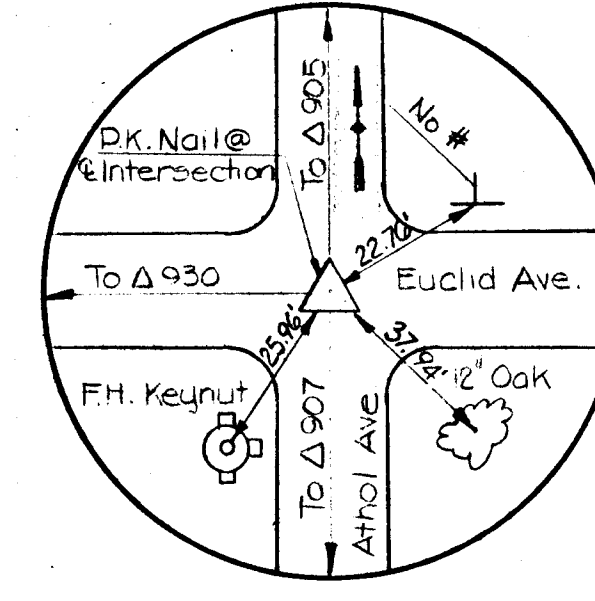
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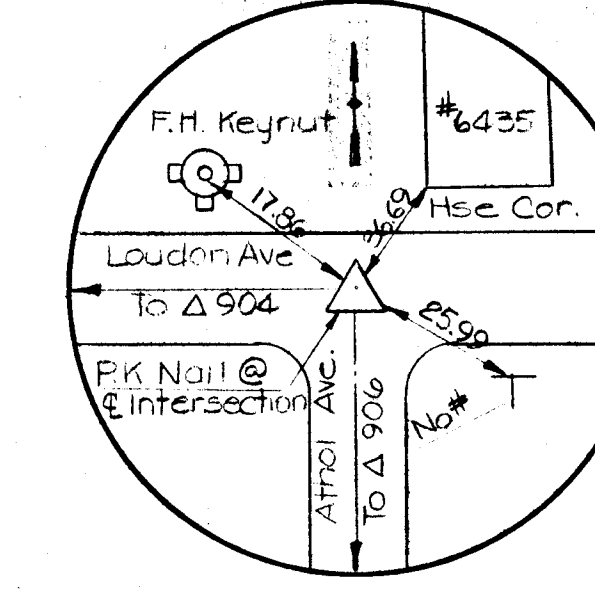
908



907



906



905

ATHOL AVENUE

Bench Mark #102 Elev. 167.06
Cut Nail and Washer, Southside of G#E Pole #516931.100± East of U.S. Route 1, North Side of Loudon Ave.

Bench Mark #103 Elev. 203.91
X-Cut in F.H.S. Bolt, Southwest Corner of Intersection @ Loudon Ave. and Highland Ave's.

Bench Mark #104 Elev. 162.78
Cut Nail and Washer, Northside of G#E Pole #323684, Southeast Corner of Intersection @ Loudon and Melrose Ave's.

Bench Mark #105 Elev. 143.12
Cut Nail and Washer, Westside of G#E Pole No #, Southeast Corner of Intersection @ Loudon and Athol Ave's.

Bench Mark #106 Elev. 125.04
JMT Δ 900, PK. Nail @ Intersection of Athol and Euclid Ave's.

Bench Mark #107 Elev. 111.04
Cut Nail and Washer, Westside of G#E Pole No #, Northeast Corner of Intersection Athol and Beechfield Ave's.

Bench Mark #108 Elev. 113.38
X-Cut in F.H.S. Bolt, Northwest Corner of Intersection @ Athol and Forest Ave's.

Bench Mark #109 Elev. 101.90
JMT Δ 900, PK. Nail @ Intersection of Athol and Woodburn Ave's.

Bench Mark #110 Elev. 96.84
Cut Nail and Washer, Westside of G#E Pole No #, @ Intersection of Athol and Hartthorn Ave's.

Bench Mark #111 Elev. 85.32
Cut Nail and Washer, Westside of G#E Pole No #, Eastside of Athol and Glenmore Ave's.

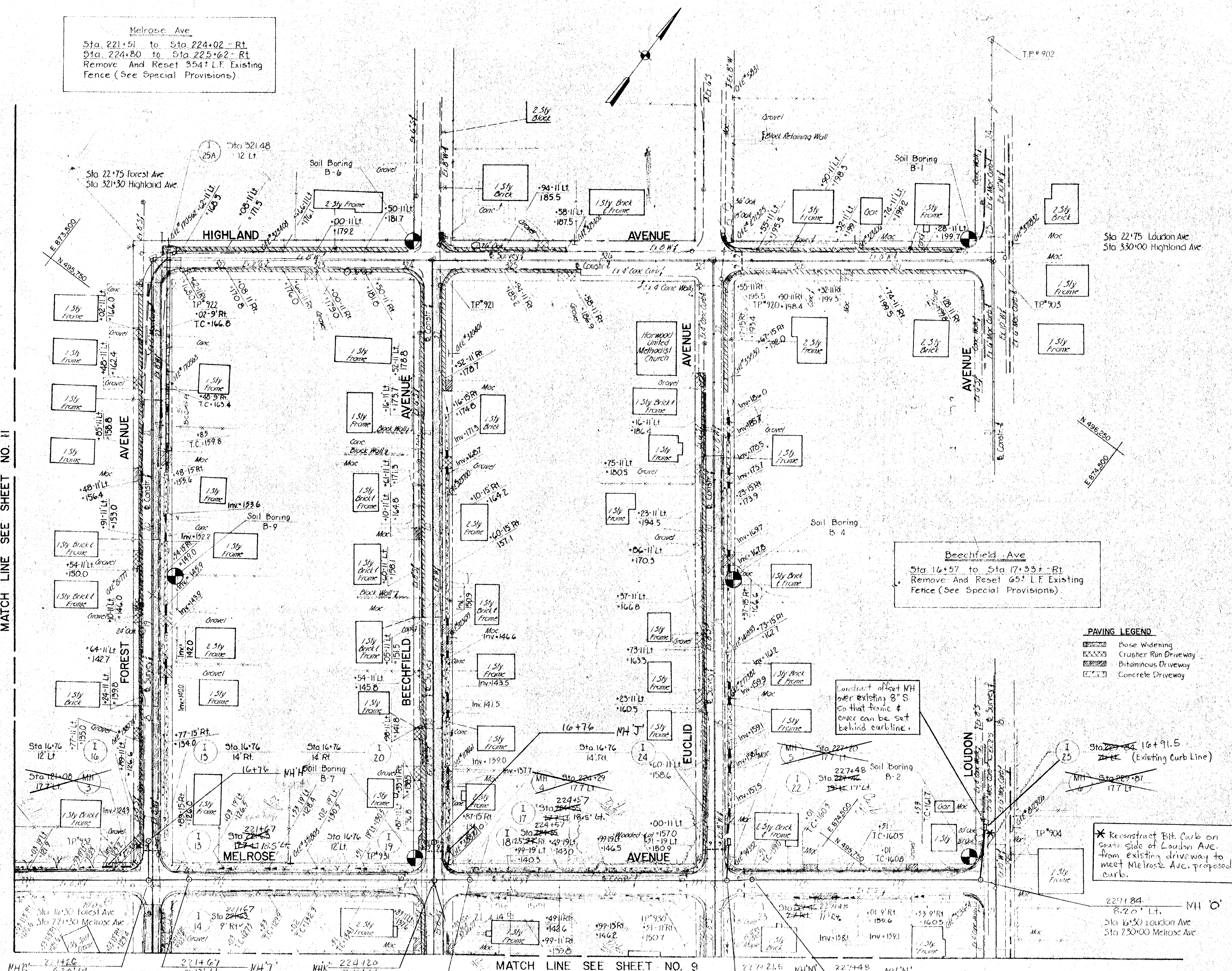
Bench Mark #116 Elev. 107.55
Top of Howard County Concrete Monument #2446002, Located 6± West on Tracks, 600±, South of Hartthorn Ave, 200± South of Stream.

Bench Mark #901 Elev. 194.25
Top of Howard County Concrete Monument #2546002, Located Westside of U.S. Route 1, 100± North of Klamp Liquors

BENCH MARKS

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DIRECTOR OF PUBLIC WORKS DATE	 Johnson, McCordic & Thompson, P. A. ENGINEERS • PLANNERS • SURVEYORS • LANDSCAPE ARCHITECTS 1526 YORK ROAD • BALTIMORE, MARYLAND • 21203 • (301) 871-6501	 HORIZONTAL & VERTICAL CONTROLS HARWOOD PARK	HARWOOD COMMUNITY ROADS CAPITAL PROJECT J-0-4063 HARWOOD PARK STORM DRAINS CAPITAL PROJECT D-6-1039 ELECTION DISTRICT NO. 1 HOWARD COUNTY, MARYLAND	DRAWING	SCALE	DES. W.K.L.
				NO. 6	AS SHOWN	DRW. W.K.S.
				OF 19		CHK. J.A.R.

Melrose Ave
Sta. 221+51 to Sta. 224+02 - Rt.
Sta. 224+80 to Sta. 225+62 - Rt.
Remove And Reset 354' L.F. Existing
Fence (See Special Provisions).



INLET SCHEDULE					
NUMBER	TYPE	INV. IN	INV. OUT	TOP EL.	REMARKS
I-13	WR Inlet DGT	120.52	119.77	125.10	Std No MD-374.06
I-14	Std WR Inlet	---	121.92	126.00	Std No MD-374.06
I-15	WR Inlet DGT	---	120.50	125.80	Std No MD-374.06
I-16	WR Inlet DGT	120.25	120.00	126.50	
I-17	WR Inlet DGT	132.25	132.00	137.50	
I-18	WR Inlet DGT	---	134.25	138.10	
I-19	WR Inlet DGT	---	131.58	136.50	
I-20	WR Inlet DGT	130.80	130.50	135.50	
I-21	WR Inlet DGT	---	130.70	136.50	Std No MD-374.06
I-22	Std WR Inlet	134.46	134.20	138.90	Std No MD-374.06
I-23	WR Inlet DGT	---	134.66	137.00	Std No MD-374.06
I-24	WR Inlet DGT	153.30	153.25	156.80	Std No MD-374.06
I-25	Std WR Inlet	---	158.80	---	Std No MD-374.06
I-25A	WR Inlet DGT	---	165.80	168.00	Std No MD-374.06

* Top Elevation of Inlet to meet Top of Existing Curb
Note: All STD No MD-374.06 INLETS MODIFIED FOR LENGTH (5'-6") TO ACCOMMODATE DOUBLE GRATES AND SUPPORT BEAM AS SHOWN ON STD DETAILS MD-374.02 & MD-374.03

MANHOLE SCHEDULE					
NUMBER	TYPE	SIZE	INV. OUT	TOP EL.	REMARKS
MH-3	Std Type A-1	48"	118.00	---	See 5007.7
MH-4	Std Type A-1	48"	126.96	---	See 5007.7
MH-5	Std Type A-1	48"	150.50	---	See 5007.7
MH-6	Std Type B	48"	158.00	---	See 5007.9

* Top Elevations to be Set in the Field to meet Existing Conditions

ENTRANCE PIPE SCHEDULE			
LOCATION & OFFSET	SIZE & TYPE	LENGTH	REMARKS
Euclid Ave. 16+85 - 13' Rt.	25" x 16" B.C.C.M.P.A.	32'	*
Euclid Ave. 17+60 - 15' Rt.	22" x 13" B.C.C.M.P.A.	26'	*
Euclid Ave. 18+30 - 15' Rt.	22" x 13" B.C.C.M.P.A.	26'	*
Euclid Ave. 19+67 - 15' Rt.	18" x 11" B.C.C.M.P.A.	26'	*
Euclid Ave. 20+51 - 15' Rt.	18" x 11" B.C.C.M.P.A.	26'	*
Euclid Ave. 21+02 - 15' Rt.	18" x 11" B.C.C.M.P.A.	26'	*
Beechfield Ave. 17+43 - 15' Rt.	25" x 16" B.C.C.M.P.A.	26'	*
Beechfield Ave. 18+16 - 15' Rt.	22" x 13" B.C.C.M.P.A.	26'	*
Beechfield Ave. 18+86 - 15' Rt.	18" x 11" B.C.C.M.P.A.	40'	*
Beechfield Ave. 20+68 - 15' Rt.	18" x 11" B.C.C.M.P.A.	26'	*
Forest Ave. 18+70 - 15' Rt.	22" x 13" B.C.C.M.P.A.	26'	*
Forest Ave. 19+05 - 15' Rt.	22" x 13" B.C.C.M.P.A.	26'	*
Forest Ave. 19+99 - 15' Rt.	18" x 11" B.C.C.M.P.A.	28'	*
Melrose Ave. 228+17 - 10' Rt.	18" x 11" B.C.C.M.P.A.	50'	*
Beechfield Ave. 15+70 - 15' Rt.	18" x 11" B.C.C.M.P.A.	26'	*

* All Entrance Pipes to be Mitered on Both Ends to Conform to Proposed Slopes and Side Ditching.

DITCH LINING SCHEDULE				
LOCATION	TYPE	LENGTH	DEPTH	REMARKS
Melrose Ave				
219+07 to 220+78 - Lt.	Sod	91'	0.8'	
219+87 to 221+00 - Rt.	Sod	113'	0.8'	
221+65 to 223+90 - Lt.	Sod	225'	Full Depth	
224+57 to 226+80 - Lt.	Concrete	223'	0.5'	
224+57 to 226+80 - Rt.	Sod	223'	0.5'	
227+48 to 229+68 - Rt.	Sod	170'	0.5'	
Forest Ave				
16+70 to 20+57 - Rt.	Concrete	304'	0.5'	
Beechfield Ave				
16+70 to 21+16 - Rt.	Concrete	334'	0.5'	
Euclid Ave				
17+10 to 20+90 - Rt.	Concrete	292'	0.5'	

DITCH LINING LEGEND:
 Seed and Mulch Surface Drain Ditch
 Sod Surface Drain Ditch
 Concrete Surface Drain Ditch
 Concrete Swale

PAVING LEGEND
 Base Widening
 Crusher Run Driveway
 Bituminous Driveway
 Concrete Driveway

MATCH LINE SEE SHEET NO. 11

MATCH LINE SEE SHEET NO. 9

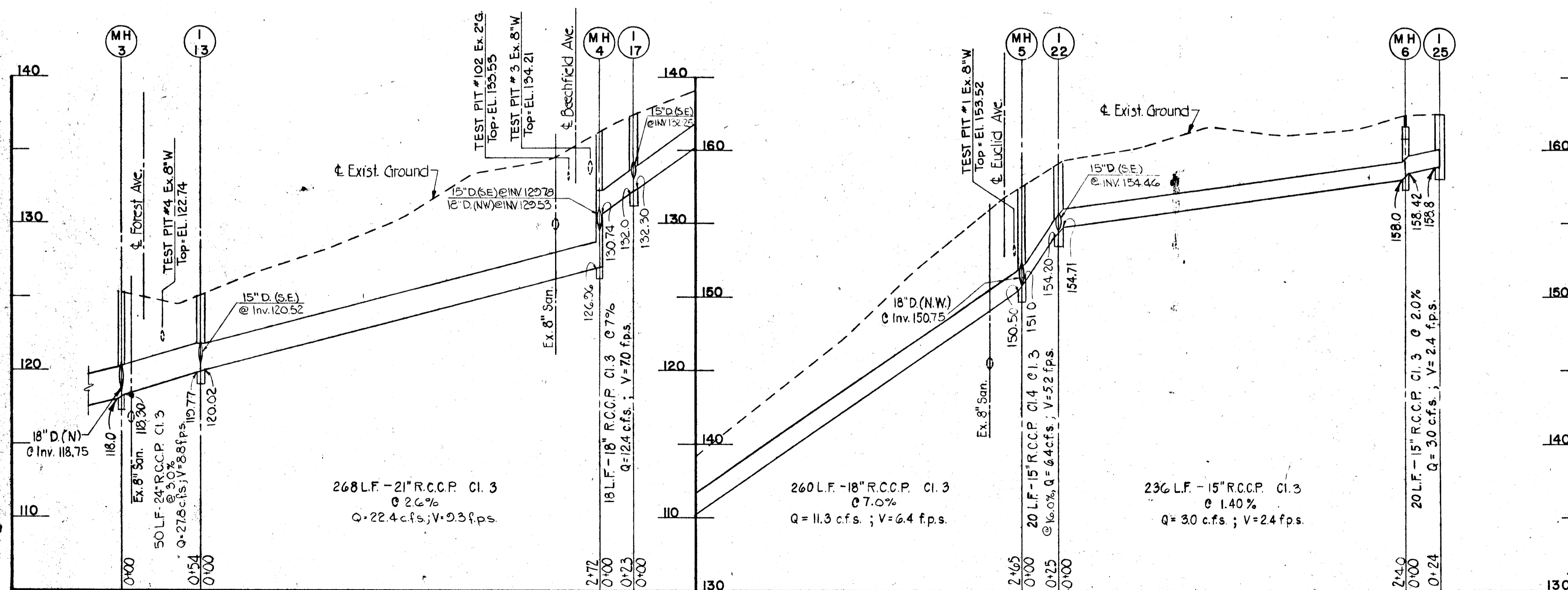
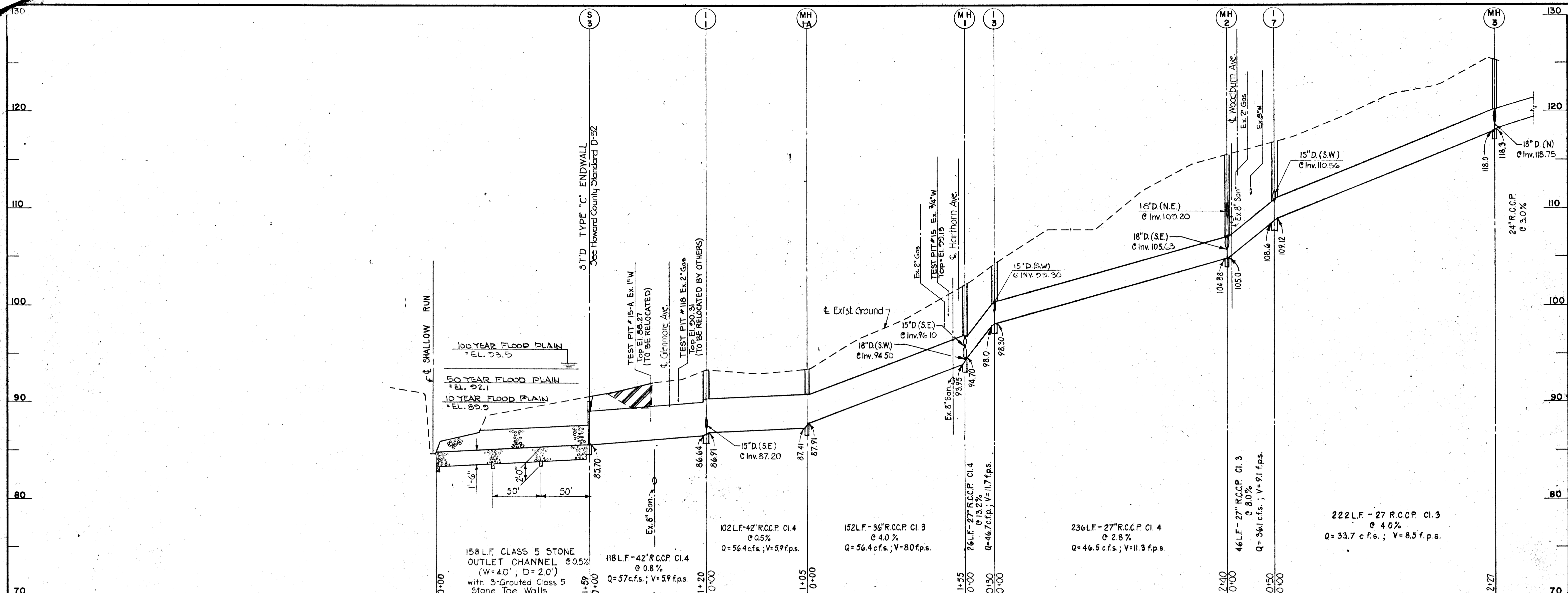
DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 DIRECTOR OF PUBLIC WORKS: [Signature]
 CHIEF BUREAU OF ENGINEERING: [Signature]
 DATE: [Blank]

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STORM DRAIN & ROADWAY
 PLAN
 HARWOOD PARK

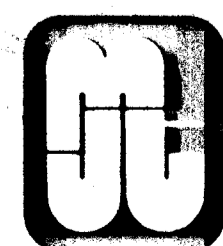
HARWOOD COMMUNITY ROADS CAPITAL PROJECT J-0-4063
 HARWOOD PARK STORM DRAINS CAPITAL PROJECT D-6-1039
 ELECTION DISTRICT NO. 1
 HOWARD COUNTY, MARYLAND

DRAWING SCALE: 1" = 50'
 SHEET NO. 7 OF 25
 DATE: [Blank]
 DESIGNED BY: J.A.R.



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: [Signature] DATE: 1/4/82
 Chief, Bureau of Engineering: [Signature] DATE: 1/4/82
 Chief, Roads, Bridges, & Storm Drainage Division: [Signature] DATE: 1/4/82



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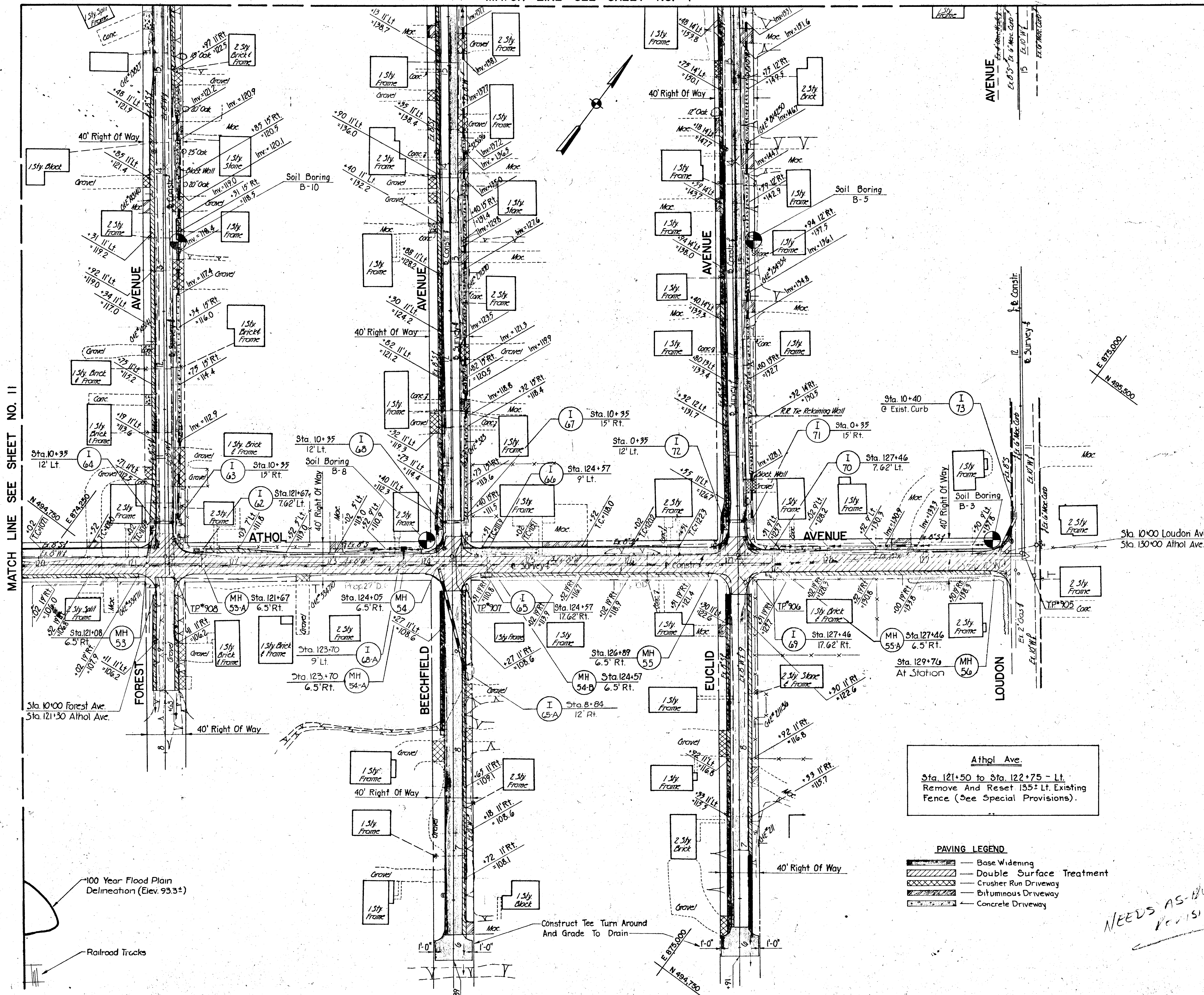


STORM DRAIN PROFILES
 MELROSE AVENUE
 HARWOOD PARK

HARWOOD COMMUNITY ROADS CAPITAL PROJECT J-O-4063
 HARWOOD PARK STORM DRAINS CAPITAL PROJECT D-6-1039
 ELECTION DISTRICT NO. 1
 HOWARD COUNTY, MARYLAND

DRAWING	SCALE	DES. P.W.Z.
NO. 8	HORZ. 1" = 50'	DRW. M.L.
OF 19	VERT. 1" = 5'	CHK. J.A.R.

MATCH LINE SEE SHEET NO. 7



INLET SCHEDULE					
NUMBER	TYPE	INV. IN	INV. OUT	TOP EL.	REMARKS
I-61	Deleted From Contract				
I-62	WR Inlet D.G.T.		104.70	110.7	STD. No. MD-374.06
I-63	WR Inlet D.G.T.	106.28	105.40	111.0	"
I-64	WR Inlet D.G.T.	104.92	104.68	111.5	"
I-65	WR Inlet D.G.T.		107.92	110.8	STD. No. MD-374.06
I-66	STD. WR Inlet		108.80	112.0	STD. No. MD-374.04
I-67	WR Inlet D.G.T.		106.05	111.3	STD. No. MD-374.06
I-68	WR Inlet D.G.T.	105.30	105.00	112.1	"
I-69	WR Inlet D.G.T.		121.30	125.6	"
I-70	WR Inlet D.G.T.		120.55	125.6	"
I-71	WR Inlet D.G.T.		120.10	124.7	"
I-72	WR Inlet D.G.T.	119.86	119.76	125.3	STD. No. MD-374.06
I-73	STD. WR Inlet		136.71	*	STD. No. MD-374.04
I-65A	WR Inlet D.G.T.		106.30	108.40	STD. No. MD-374.06
I-68A	WR Inlet D.G.T.		105.45	110.50	STD. No. MD-374.06

* Top Elevation To Match Top Of Existing Curb.
 Note: All Std. No. Md. 374.06 Inlets Modified for length (5'-6") to Accommodate Double Grate and Support beam as Shown on Details Md. 374.02 & MD. 374.03

MANHOLE SCHEDULE					
NUMBER	TYPE	SIZE	INV. OUT	TOP EL.	REMARKS
MH 53	STD. Type A-1	48"	99.32	*	See SDD/7
MH 53-A	STD. Type A-1	48"	100.02	*	See SDD/7
MH 54	STD. Type B	48"	104.52	*	See SDD/9
MH 54-A	STD. Type A-1	48"	104.00	*	See SDD/7
MH 54-B	STD. Type B	48"	107.56	*	See SDD/9
MH 55	STD. Type A-1	48"	116.23	*	See SDD/7
MH 55-A	STD. Type A-1	48"	119.00	*	See SDD/7
MH 56	STD. Type A-1	48"	133.50	*	See SDD/7

* Top Elevations To Be Set In The Field To Meet Existing Conditions.

ENTRANCE PIPE SCHEDULE				
LOCATION & OFFSET	SIZE & TYPE	LENGTH	REMARKS	
Euclid Ave. 10+60 - 12 Rt.	22" x 19" BCCMPA	45'	*	
Euclid Ave. 12+53 - 12 Rt.	18" x 11" BCCMPA	28'	*	
Euclid Ave. 14+03 - 12 Rt.	18" x 11" BCCMPA	32'	*	
Euclid Ave. 15+28 - 12 Rt.	18" x 11" BCCMPA	28'	*	
Beechfield Ave. 11+34 - 15 Rt.	18" x 11" BCCMPA	26'	*	
Beechfield Ave. 12+09 - 15 Rt.	18" x 11" BCCMPA	30'	*	
Beechfield Ave. 13+04 - 15 Rt.	18" x 11" BCCMPA	26'	*	
Beechfield Ave. 14+41 - 15 Rt.	18" x 11" BCCMPA	30'	*	
Beechfield Ave. 15+22 - 15 Rt.	18" x 11" BCCMPA	32'	*	
Forest Ave. 10+77 - 15 Rt.	25" x 16" BCCMPA	80'	*	
Forest Ave. 12+88 - 15 Rt.	18" x 11" BCCMPA	44'	*	
Forest Ave. 13+59 - 15 Rt.	18" x 11" BCCMPA	28'	*	
Forest Ave. 14+36 - 15 Rt.	18" x 11" BCCMPA	28'	*	
Athol Ave. 128+78 - 9 Lt.	18" x 11" BCCMPA	32'	*	

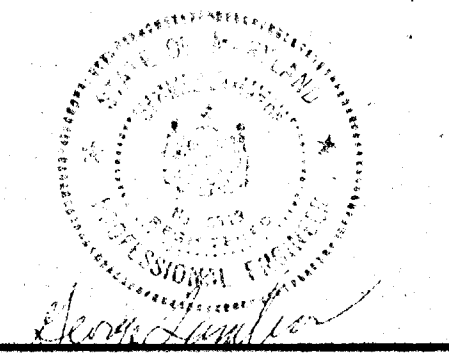
* All Entrance Pipes Shall be Mitered on Both Ends to Conform to Proposed Slopes and Side Ditching.

DITCH LINING SCHEDULE				
LOCATION	TYPE	LENGTH	DEPTH	REMARKS
Athol Ave.				
123+14 to 124+00 - Lt.	Sod	86'	0.5'	
127+48 to 129+70 - Lt.	Sod	190'	0.5'	
Forest Ave.				
10+25 to 10+65 - Rt.	Sod	40'	0.5'	
11+17 to 14+76 - Rt.	Concrete	260'	0.5'	
Beechfield Ave.				
10+25 to 14+26 - Rt.	Concrete	297'	0.5'	
14+56 to 15+95 - Rt.	Sod	105'	0.5'	
Euclid Ave.				
10+25 to 10+58 - Rt.	Sod	33'	0.5'	
10+82 to 15+14 - Rt.	Concrete	374'	0.5'	
15+42 to 16+00 - Rt.	Sod	58'	0.5'	

DITCH LINING LEGEND:		
	Seed and Mulch Surface Drain Ditch	
	Sod Surface Drain Ditch	
	Concrete Surface Drain Ditch	
	Concrete Swale	

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 DATE: 4/1/82
 CHIEF, BUREAU OF ENGINEERING
 DATE: 4/1/82
 CHIEF, ROADS, BRIDGES, & STORM DRAINAGE DIVISION

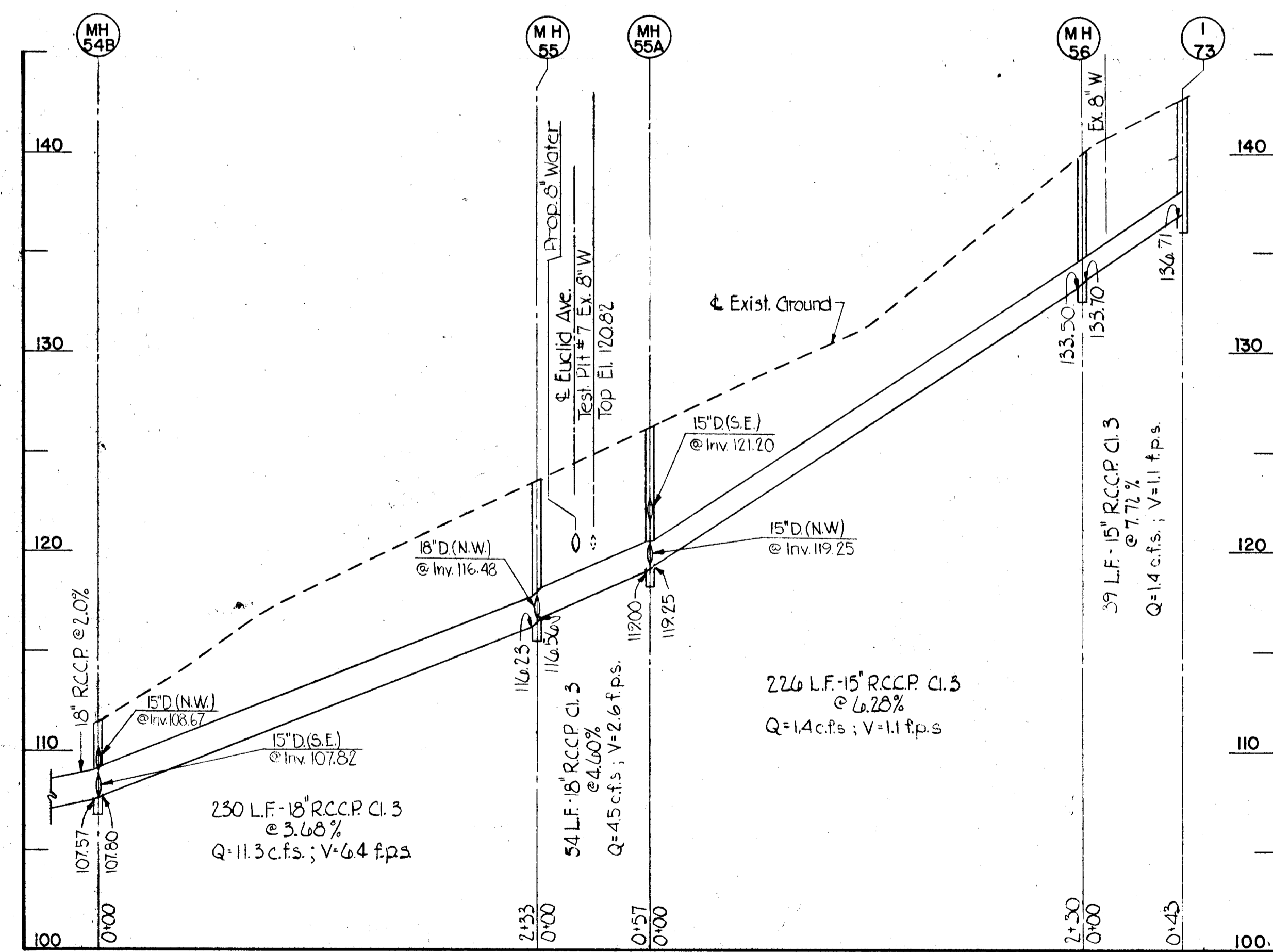
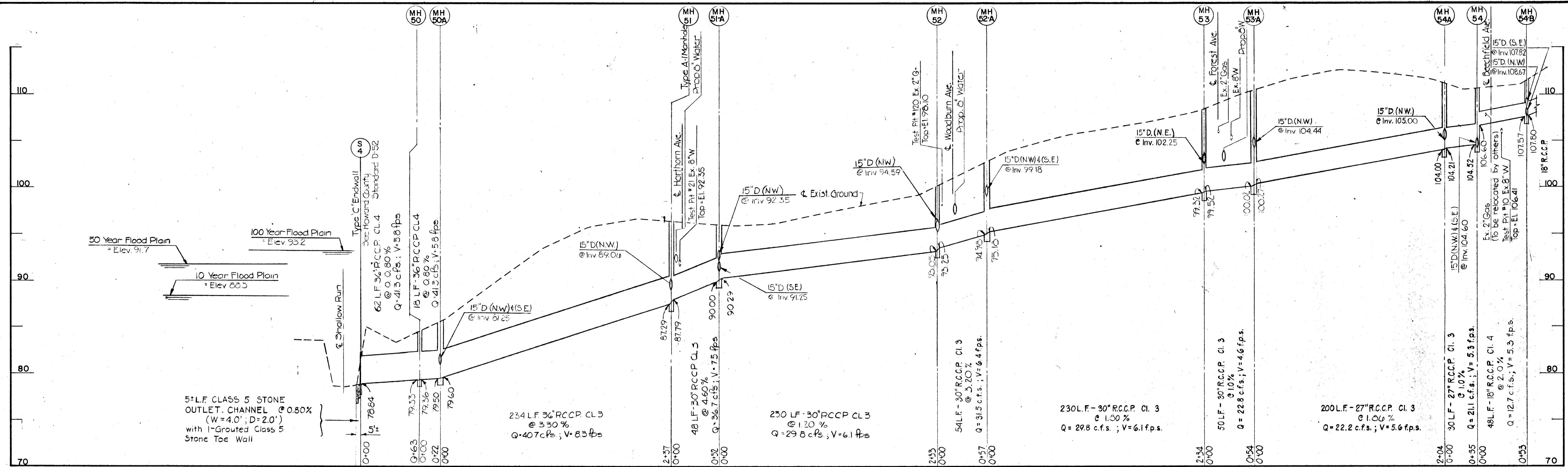
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STORM DRAIN & ROADWAY
 PLAN
 HARWOOD PARK

HARWOOD COMMUNITY ROADS CAPITAL PROJECT J-0-4063
 HARWOOD PARK STORM DRAINS CAPITAL PROJECT D-6-1039
 ELECTION DISTRICT NO. 1
 HOWARD COUNTY, MARYLAND

DRAWING	SCALE	DES. P.W.Z.
NO. 9	1"=50'	DRW. R.L.D.
OF 19		CHK. J.A.R.



DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: *[Signature]* DATE: *1/4/20*
 Chief, Bureau of Engineering: *[Signature]* DATE: *1/4/20*
 Chief, Roads, Bridges, & Storm Drainage Division: *[Signature]* DATE: *1/4/20*

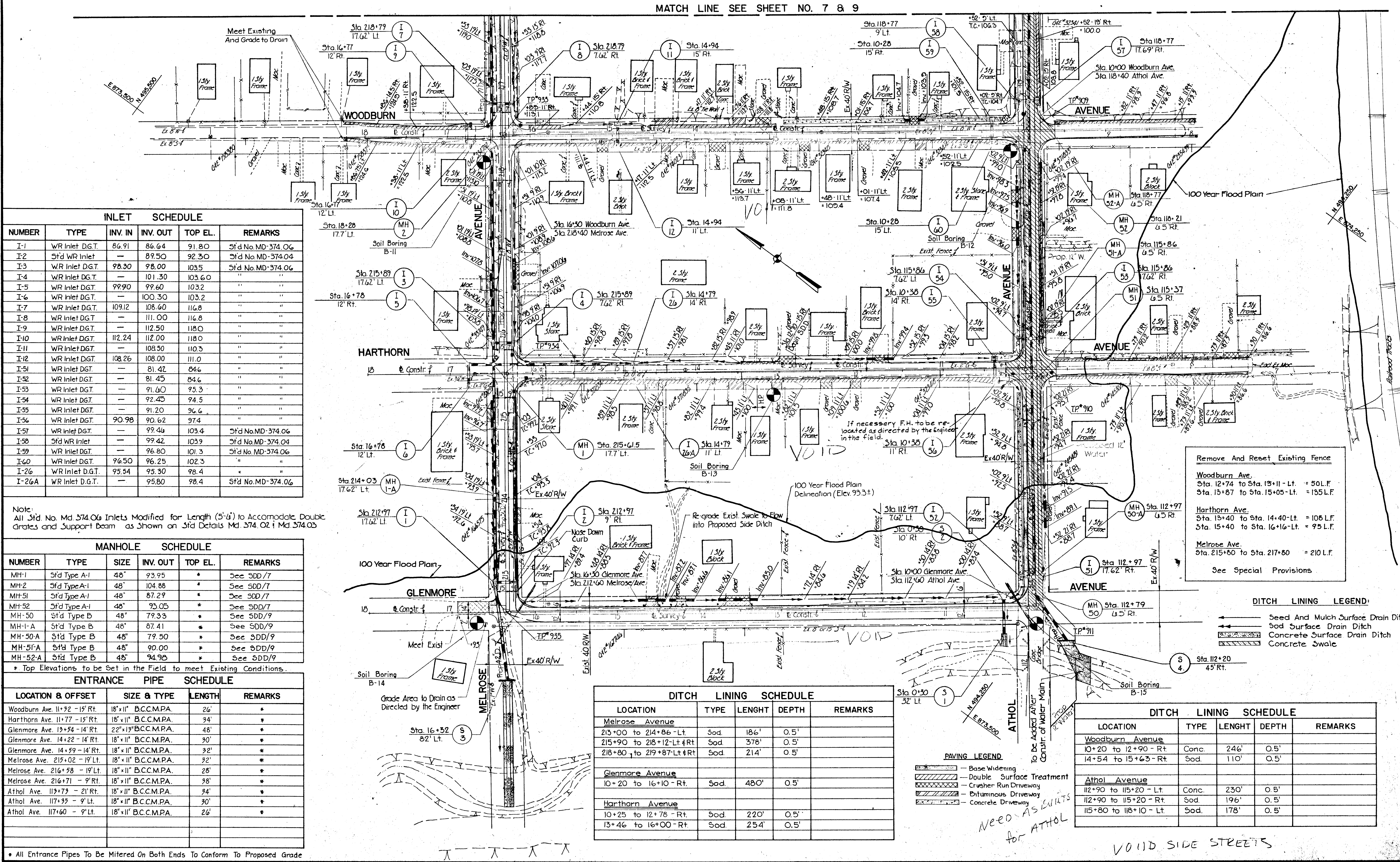
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STORM DRAIN PROFILES
 ATHOL AVENUE
 HARWOOD PARK

HARWOOD COMMUNITY ROADS CAPITAL PROJECT J-0-4063
 HARWOOD PARK STORM DRAINS CAPITAL PROJECT D-6-1039
 ELECTION DISTRICT NO. 1
 HOWARD COUNTY, MARYLAND

DRAWING	SCALE	DES. P.W.Z.
NO. 10	HORIZ. 1"=50'	DRW. M.L.
OF 19	VERT. 1"=5'	CHK. J.A.R.



INLET SCHEDULE

NUMBER	TYPE	INV. IN	INV. OUT	TOP EL.	REMARKS
I-1	WR Inlet D.G.T.	86.91	86.64	91.80	Sfd No. MD-374.06
I-2	Sfd WR Inlet	—	87.50	92.30	Sfd No. MD-374.04
I-3	WR Inlet D.G.T.	98.30	98.00	103.5	Sfd No. MD-374.06
I-4	WR Inlet D.G.T.	—	101.30	103.60	"
I-5	WR Inlet D.G.T.	99.90	99.60	103.2	"
I-6	WR Inlet D.G.T.	—	100.30	103.2	"
I-7	WR Inlet D.G.T.	109.12	108.60	116.8	"
I-8	WR Inlet D.G.T.	—	111.00	116.8	"
I-9	WR Inlet D.G.T.	—	112.50	118.0	"
I-10	WR Inlet D.G.T.	112.24	112.00	118.0	"
I-11	WR Inlet D.G.T.	—	108.50	110.3	"
I-12	WR Inlet D.G.T.	108.26	108.00	111.0	"
I-51	WR Inlet D.G.T.	—	81.42	84.6	"
I-52	WR Inlet D.G.T.	—	81.45	84.6	"
I-53	WR Inlet D.G.T.	—	91.60	95.3	"
I-54	WR Inlet D.G.T.	—	92.45	94.5	"
I-55	WR Inlet D.G.T.	—	91.20	96.6	"
I-56	WR Inlet D.G.T.	90.98	90.62	97.4	"
I-57	WR Inlet D.G.T.	—	99.46	103.4	Sfd No. MD-374.06
I-58	Sfd WR Inlet	—	99.42	103.9	Sfd No. MD-374.04
I-59	WR Inlet D.G.T.	—	96.80	101.3	Sfd No. MD-374.06
I-60	WR Inlet D.G.T.	96.50	96.25	102.3	"
I-26	WR Inlet D.G.T.	95.54	95.30	98.4	"
I-26A	WR Inlet D.G.T.	—	95.80	98.4	Sfd No. MD-374.06

Note:
All Sfd. No. Md. 374.06 Inlets Modified for Length (5'-4") to Accommodate Double Grates and Support Beam as Shown on Sfd Details Md. 374.02 & Md. 374.03

MANHOLE SCHEDULE

NUMBER	TYPE	SIZE	INV. OUT	TOP EL.	REMARKS
MH-1	Sfd Type A-1	48"	93.95	*	See SDD/7
MH-2	Sfd Type A-1	48"	104.88	*	See SDD/7
MH-51	Sfd Type A-1	48"	87.29	*	See SDD/7
MH-52	Sfd Type A-1	48"	93.05	*	See SDD/7
MH-50	Sfd Type B	48"	79.33	*	See SDD/9
MH-1-A	Sfd Type B	48"	87.41	*	See SDD/9
MH-50-A	Sfd Type B	48"	79.50	*	See SDD/9
MH-51A	Sfd Type B	48"	90.00	*	See SDD/9
MH-52A	Sfd Type B	48"	94.95	*	See SDD/9

* Top Elevations to be Set in the Field to meet Existing Conditions.

ENTRANCE PIPE SCHEDULE

LOCATION & OFFSET	SIZE & TYPE	LENGTH	REMARKS
Woodburn Ave. 11+92 - 15' Rt.	18" x 11" B.C.C.M.P.A.	26'	*
Harthorn Ave. 11+77 - 15' Rt.	18" x 11" B.C.C.M.P.A.	34'	*
Glenmore Ave. 13+54 - 14' Rt.	22" x 13" B.C.C.M.P.A.	48'	*
Glenmore Ave. 14+22 - 14' Rt.	18" x 11" B.C.C.M.P.A.	30'	*
Glenmore Ave. 14+59 - 14' Rt.	18" x 11" B.C.C.M.P.A.	32'	*
Melrose Ave. 215+02 - 19' Lt.	18" x 11" B.C.C.M.P.A.	32'	*
Melrose Ave. 216+58 - 19' Lt.	18" x 11" B.C.C.M.P.A.	28'	*
Melrose Ave. 216+71 - 9' Rt.	18" x 11" B.C.C.M.P.A.	38'	*
Athol Ave. 117+73 - 21' Rt.	18" x 11" B.C.C.M.P.A.	34'	*
Athol Ave. 117+95 - 9' Lt.	18" x 11" B.C.C.M.P.A.	30'	*
Athol Ave. 117+60 - 9' Lt.	18" x 11" B.C.C.M.P.A.	26'	*

* All Entrance Pipes To be Mitered On Both Ends To Conform To Proposed Grade

DITCH LINING SCHEDULE

LOCATION	TYPE	LENGHT	DEPTH	REMARKS
Melrose Avenue				
215+00 to 214+86 - Lt.	Sod.	186'	0.5'	
215+90 to 218+12 - Lt. & Rt.	Sod.	378'	0.5'	
218+80 to 219+87 - Lt. & Rt.	Sod.	214'	0.5'	
Glenmore Avenue				
10+20 to 16+10 - Rt.	Sod.	480'	0.5'	
Harthorn Avenue				
10+25 to 12+78 - Rt.	Sod.	220'	0.5'	
13+46 to 16+00 - Rt.	Sod.	254'	0.5'	

DITCH LINING SCHEDULE

LOCATION	TYPE	LENGHT	DEPTH	REMARKS
Woodburn Avenue				
10+20 to 12+90 - Rt.	Conc.	246'	0.5'	
14+54 to 15+63 - Rt.	Sod.	110'	0.5'	
Athol Avenue				
112+90 to 115+20 - Lt.	Conc.	230'	0.5'	
112+90 to 115+20 - Rt.	Sod.	196'	0.5'	
115+80 to 118+10 - Lt.	Sod.	178'	0.5'	

Remove And Reset Existing Fence
Woodburn Ave.
Sta. 12+74 to Sta. 13+11 - Lt. = 50L.F.
Sta. 13+87 to Sta. 15+05 - Lt. = 135L.F.
Harthorn Ave.
Sta. 13+40 to Sta. 14+40 - Lt. = 108L.F.
Sta. 15+40 to Sta. 16+16 - Lt. = 75L.F.
Melrose Ave.
Sta. 215+60 to Sta. 217+60 = 210L.F.
See Special Provisions

DITCH LINING LEGEND:

- Seed And Mulch Surface Drain Ditch
- Sod Surface Drain Ditch
- Concrete Surface Drain Ditch
- Concrete Swale

PAVING LEGEND

- Base Widening
- Double Surface Treatment
- Crusher Run Driveway
- Bituminous Driveway
- Concrete Driveway

Need As Built for ATHOL

VOID SIDE STREETS

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
Director of Public Works: [Signature]
Chief, Bureau of Engineering: [Signature]
Chief, Roads, Bridges, & Storm Drainage Division: [Signature]

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STORM DRAIN & ROADWAY PLAN
HARWOOD PARK

HARWOOD COMMUNITY ROADS CAPITAL PROJECT J-O-4063
HARWOOD PARK STORM DRAINS CAPITAL PROJECT D-6-1039
ELECTION DISTRICT NO. 1
HOWARD COUNTY, MARYLAND

DRAWING NO.	SCALE	DES. R.W.Z.
11	1" = 50'	R.L.D.
OF 19		CHK. J.A.R.

INLET SCHEDULE					
NUMBER	TYPE	INV. IN	INV. OUT	TOP EL.	REMARKS
I-1	WR Inlet DGT	86.91	86.64	91.80	Sfd No MD-374.06
I-2	Sfd WR Inlet	—	89.50	92.30	Sfd No MD-374.04
I-3	WR Inlet DGT	98.30	98.00	103.5	Sfd No MD-374.06
I-4	WR Inlet DGT	—	101.30	103.60	"
I-5	WR Inlet DGT	99.90	99.60	103.2	"
I-6	WR Inlet DGT	—	100.30	103.2	"
I-7	WR Inlet DGT	109.12	108.60	116.8	"
I-8	WR Inlet DGT	—	111.00	116.8	"
I-9	WR Inlet DGT	—	112.50	118.0	"
I-10	WR Inlet DGT	112.24	112.00	118.0	"
I-11	WR Inlet DGT	—	108.50	110.3	"
I-12	WR Inlet DGT	108.26	108.00	111.0	"
I-51	WR Inlet DGT	—	81.42	84.6	"
I-52	WR Inlet DGT	—	81.45	84.6	"
I-53	WR Inlet DGT	—	91.60	95.3	"
I-54	WR Inlet DGT	—	92.45	94.5	"
I-55	WR Inlet DGT	—	91.20	96.6	"
I-56	WR Inlet DGT	90.98	90.62	97.4	"
I-57	WR Inlet DGT	—	99.46	103.4	Sfd No MD-374.06
I-58	Sfd WR Inlet	—	99.42	103.9	Sfd No MD-374.04
I-59	WR Inlet DGT	—	96.80	101.3	Sfd No MD-374.06
I-60	WR Inlet DGT	96.50	96.25	102.5	"
I-26	WR Inlet DGT	95.54	95.30	98.4	"
I-26A	WR Inlet DGT	—	95.80	98.4	Sfd No MD-374.06

Note:
All Sfd No. Md 374.06 Inlets Modified for Length (5'-6") to Accommodate Double Grates and Support Beam as Shown on Sfd Details Md 374.02 & Md 374.03

MANHOLE SCHEDULE					
NUMBER	TYPE	SIZE	INV. OUT	TOP EL.	REMARKS
MH-1	Sfd Type A-1	48"	93.95	*	See SDD/7
MH-2	Sfd Type A-1	48"	104.88	*	See SDD/7
MH-51	Sfd Type A-1	48"	87.29	*	See SDD/7
MH-52	Sfd Type A-1	48"	93.05	*	See SDD/7
MH-50	Sfd Type B	48"	79.33	*	See SDD/9
MH-1-A	Sfd Type B	48"	87.41	*	See SDD/9
MH-50-A	Sfd Type B	48"	79.50	*	See SDD/9
MH-51-A	Sfd Type B	48"	90.00	*	See SDD/9
MH-52-A	Sfd Type B	48"	94.95	*	See SDD/9

ENTRANCE PIPE SCHEDULE			
LOCATION & OFFSET	SIZE & TYPE	LENGTH	REMARKS
Woodburn Ave. 11+32 - 15' Rt.	18" x 11" B.C.C.M.P.A.	26'	*
Harthorn Ave. 11+77 - 15' Rt.	18" x 11" B.C.C.M.P.A.	34'	*
Glenmore Ave. 13+54 - 14' Rt.	22" x 13" B.C.C.M.P.A.	48'	*
Glenmore Ave. 14+22 - 14' Rt.	18" x 11" B.C.C.M.P.A.	30'	*
Glenmore Ave. 14+59 - 14' Rt.	18" x 11" B.C.C.M.P.A.	32'	*
Melrose Ave. 215+02 - 19' Lt.	18" x 11" B.C.C.M.P.A.	32'	*
Melrose Ave. 216+58 - 19' Lt.	18" x 11" B.C.C.M.P.A.	28'	*
Melrose Ave. 216+71 - 9' Rt.	18" x 11" B.C.C.M.P.A.	38'	*
Athol Ave. 113+73 - 21' Rt.	18" x 11" B.C.C.M.P.A.	34'	*
Athol Ave. 117+33 - 9' Lt.	18" x 11" B.C.C.M.P.A.	30'	*
Athol Ave. 117+60 - 9' Lt.	18" x 11" B.C.C.M.P.A.	26'	*

* All Entrance Pipes To Be Mitered On Both Ends To Conform To Proposed Grade

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

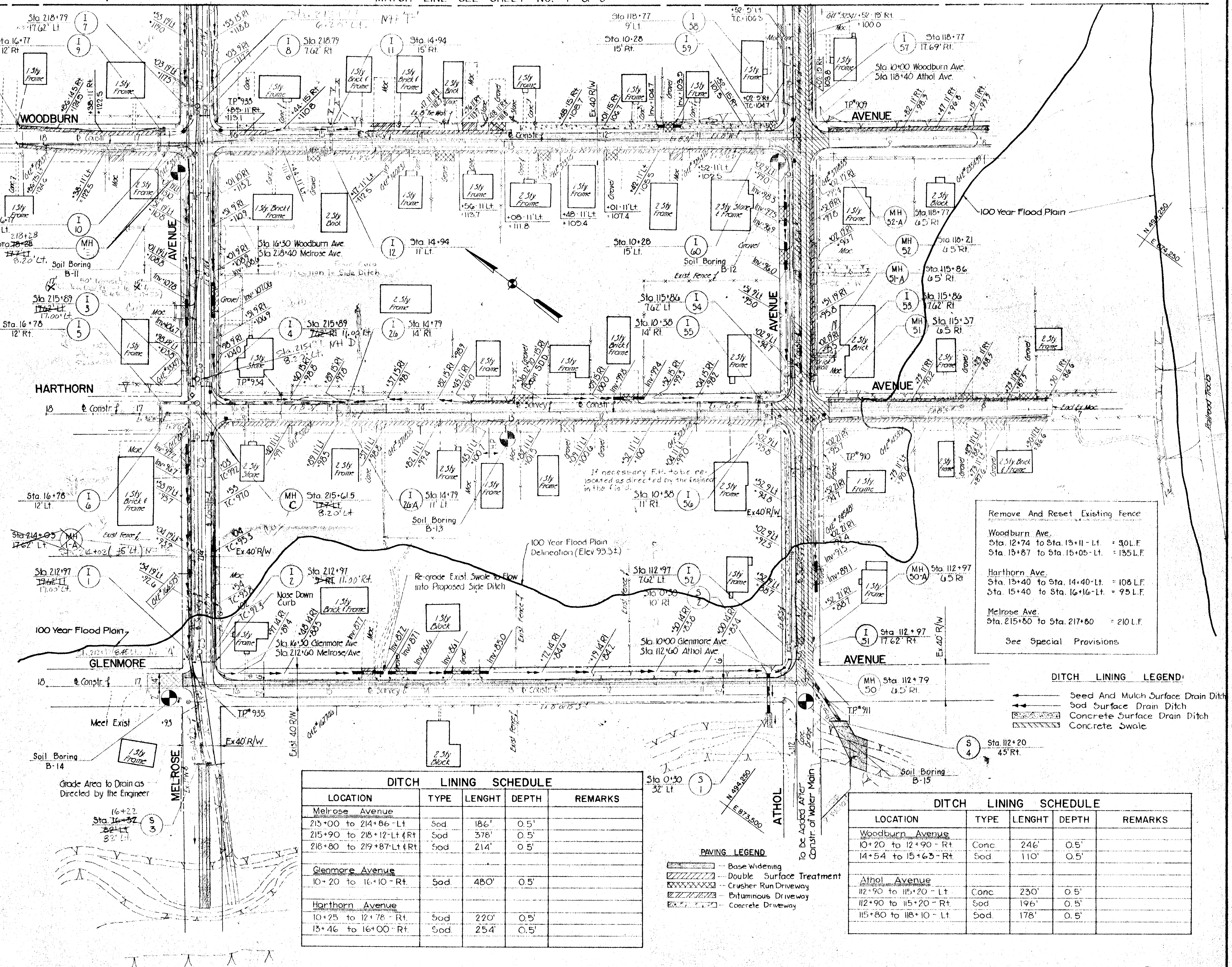
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STORM DRAIN & ROADWAY PLAN
HARWOOD PARK

HARWOOD COMMUNITY ROADS CAPITAL PROJECT J-0-4063
HARWOOD PARK STORM DRAINS CAPITAL PROJECT D-6-1039
ELECTION DISTRICT NO. 1
HOWARD COUNTY, MARYLAND

DRAWING NO. 11	SCALE 1" = 50'	DES. EWZ
OF 19		CHK. J.A.R.

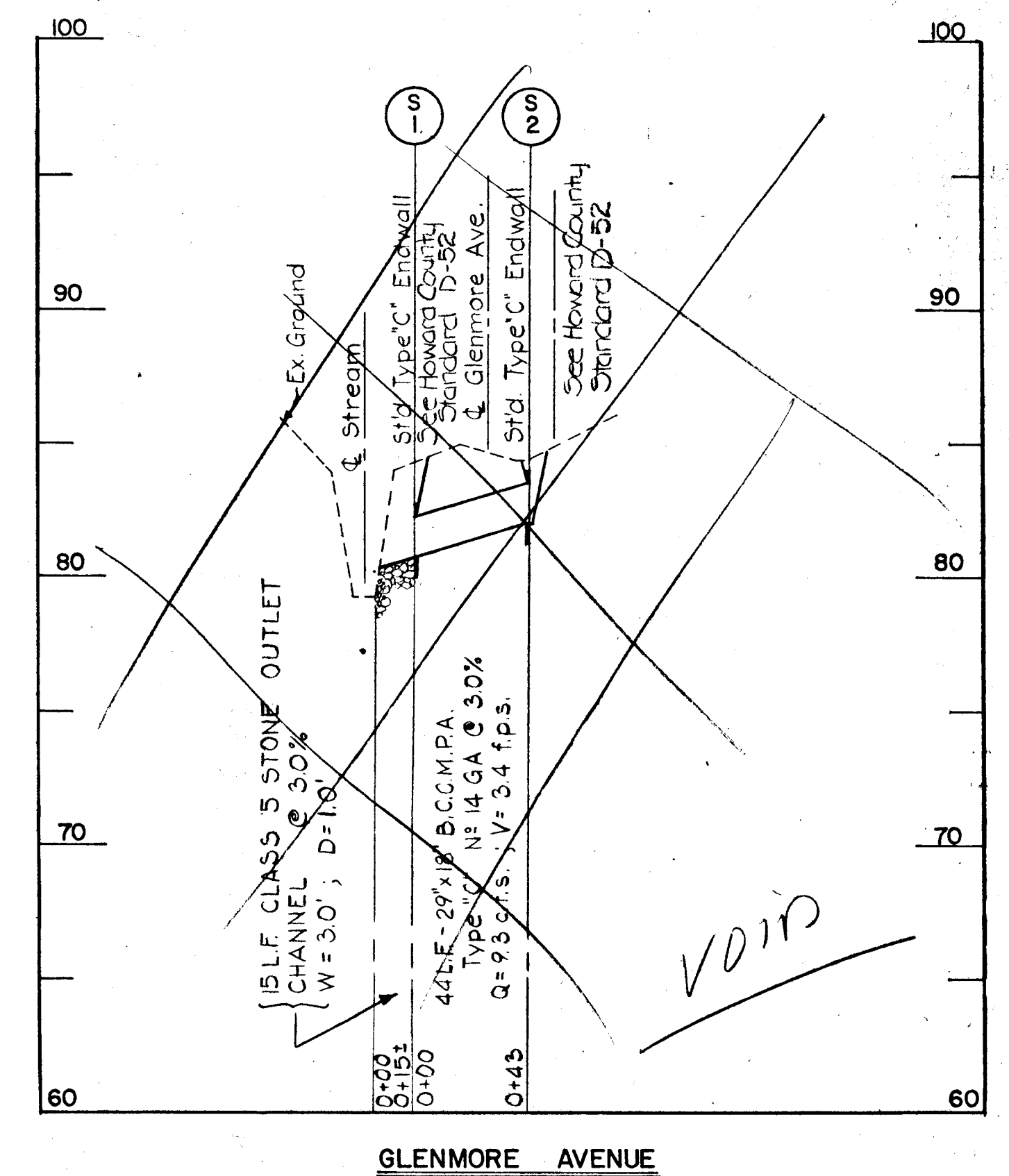
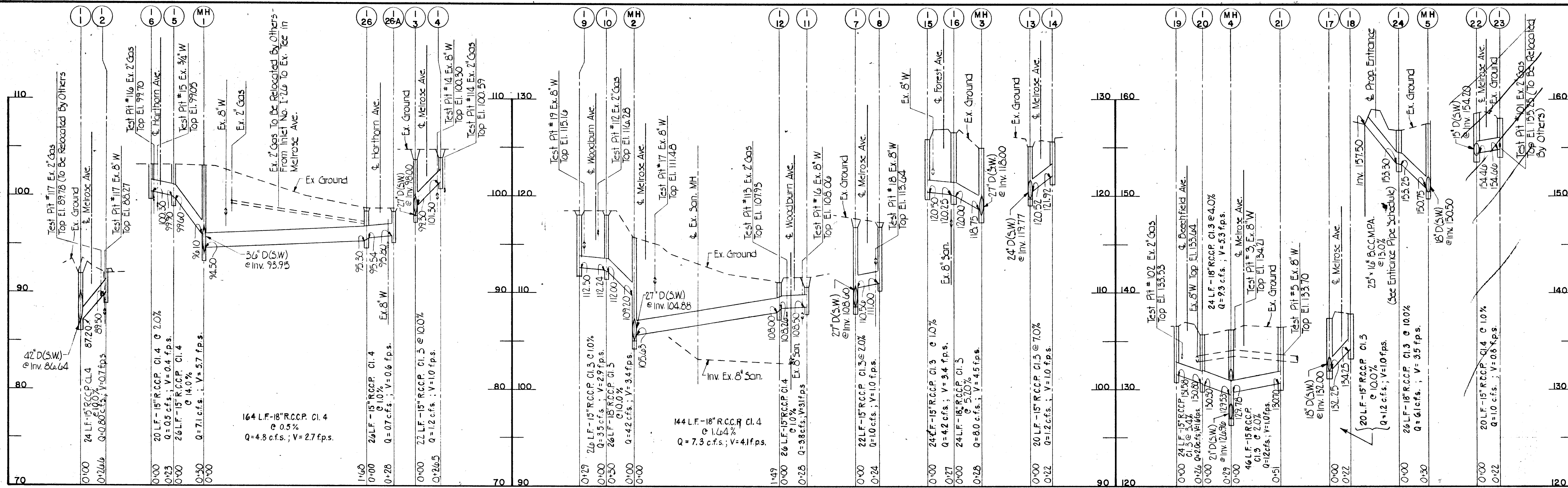


DITCH LINING SCHEDULE				
LOCATION	TYPE	LENGTH	DEPTH	REMARKS
Melrose Avenue				
213+00 to 214+86 - Lt	Sod	186'	0.5'	
215+90 to 218+12 Lt & Rt	Sod	378'	0.5'	
218+80 to 219+87 Lt & Rt	Sod	214'	0.5'	
Glenmore Avenue				
10+20 to 16+10 - Rt.	Sod	480'	0.5'	
Harthorn Avenue				
10+25 to 12+78 - Rt.	Sod	220'	0.5'	
13+46 to 16+00 - Rt.	Sod	254'	0.5'	

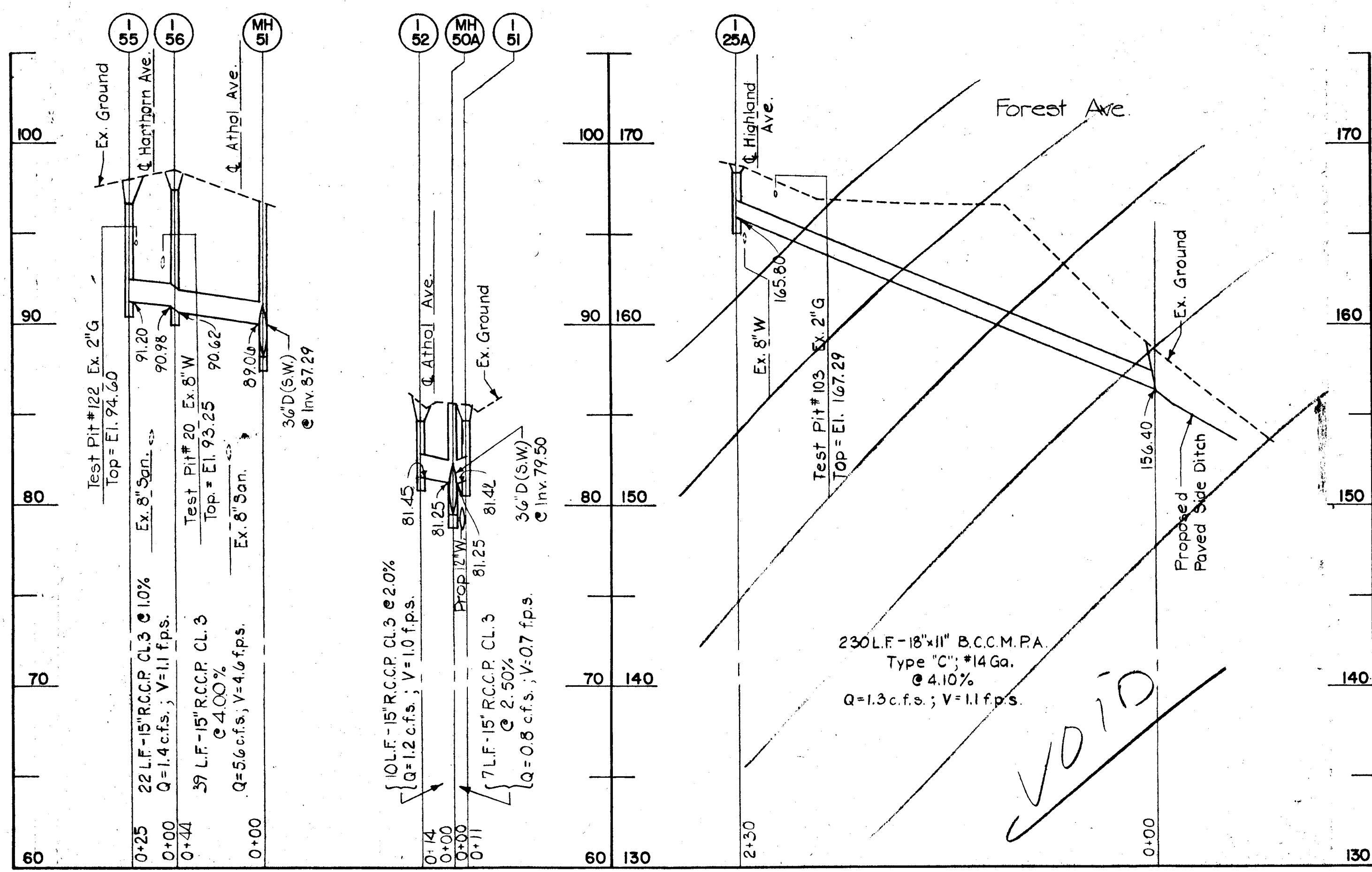
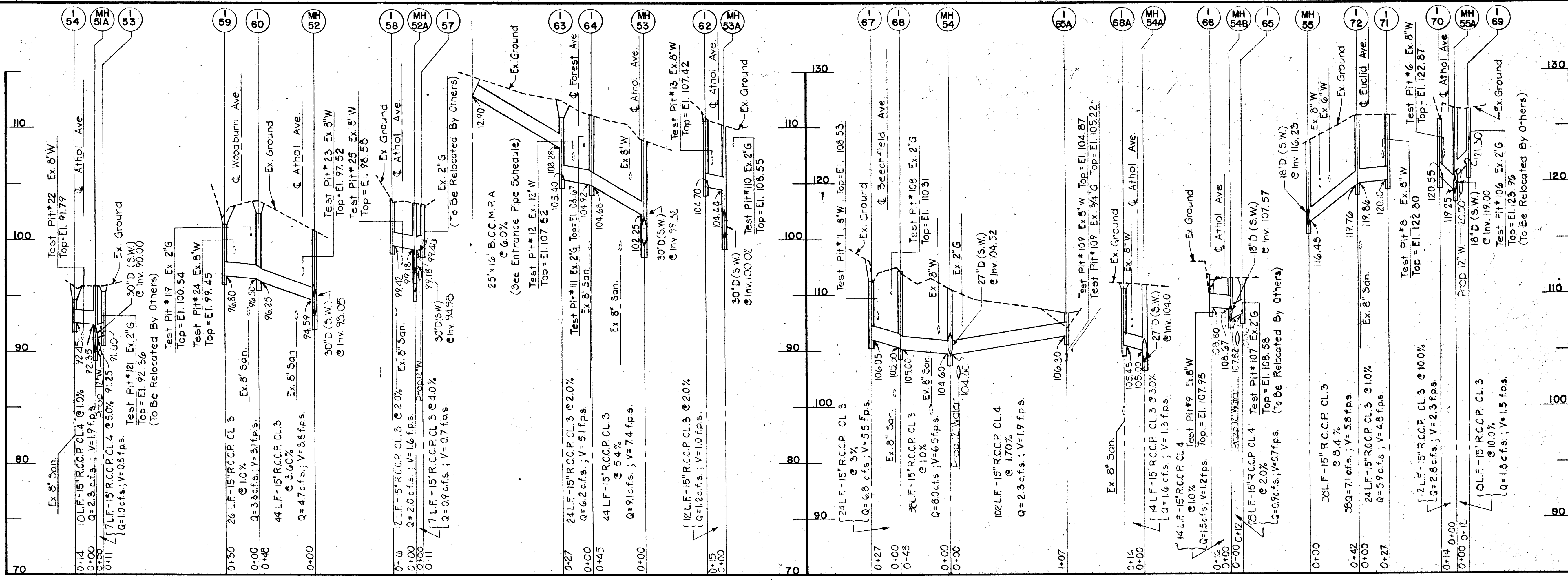
DITCH LINING SCHEDULE				
LOCATION	TYPE	LENGTH	DEPTH	REMARKS
Woodburn Avenue				
10+20 to 12+90 - Rt	Conc	246'	0.5'	
14+54 to 15+63 - Rt	Sod	110'	0.5'	
Athol Avenue				
112+90 to 115+20 - Lt	Conc	230'	0.5'	
112+90 to 115+20 - Rt	Sod	196'	0.5'	
115+80 to 118+10 - Lt	Sod	178'	0.5'	

PAVING LEGEND	
[Symbol]	Base Widening
[Symbol]	Double Surface Treatment
[Symbol]	Crusher Run Driveway
[Symbol]	Bituminous Driveway
[Symbol]	Concrete Driveway

DITCH LINING LEGEND	
[Symbol]	Seed And Mulch Surface Drain Ditch
[Symbol]	Sod Surface Drain Ditch
[Symbol]	Concrete Surface Drain Ditch
[Symbol]	Concrete Swale



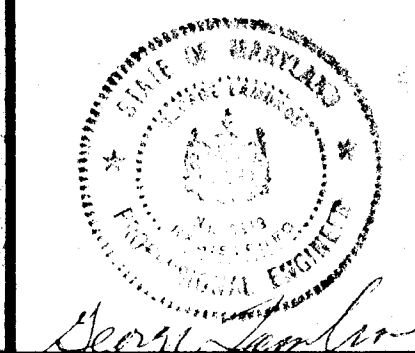
DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND <i>W. F. N...</i> DIRECTOR OF PUBLIC WORKS <i>Shubell Anderson</i> CHIEF, ROADS, BRIDGES, & STORM DRAINAGE DIVISION	Johnson, McCordic & Thompson, P. A. ENGINEERS • PLANNERS • SURVEYORS • LANDSCAPE ARCHITECTS 1526 YORK ROAD • BALTIMORE, MARYLAND • 21286 • (301) 821-6501		STORM DRAIN PROFILES MELROSE AVENUE HARWOOD PARK		HARWOOD COMMUNITY ROADS CAPITAL PROJECT J-0-4063 HARWOOD PARK STORM DRAINS CAPITAL PROJECT D-6-1039 ELECTION DISTRICT NO. 1 HOWARD COUNTY, MARYLAND		DRAWING NO. 12 OF 19	SCALE HORZ. 1"=50' VERT. 1"=5' V.O.I.D.	DES. P.W.Z. DRW. R.L.D. M.L. CHK. J.A.R.	
			DATE: <i>11/12/12</i>		DATE: <i>11/12/12</i>		DATE: <i>11/12/12</i>			
			DATE: <i>11/12/12</i>		DATE: <i>11/12/12</i>		DATE: <i>11/12/12</i>			



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: *[Signature]*
 Chief, Bureau of Engineering: *[Signature]*
 Chief, Roads, Bridges, & Storm Drainage Division: *[Signature]*
 DATE: 1/4/82

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 1526 YORK ROAD • BALTIMORE, MARYLAND • 21203 • (301) 821-6601

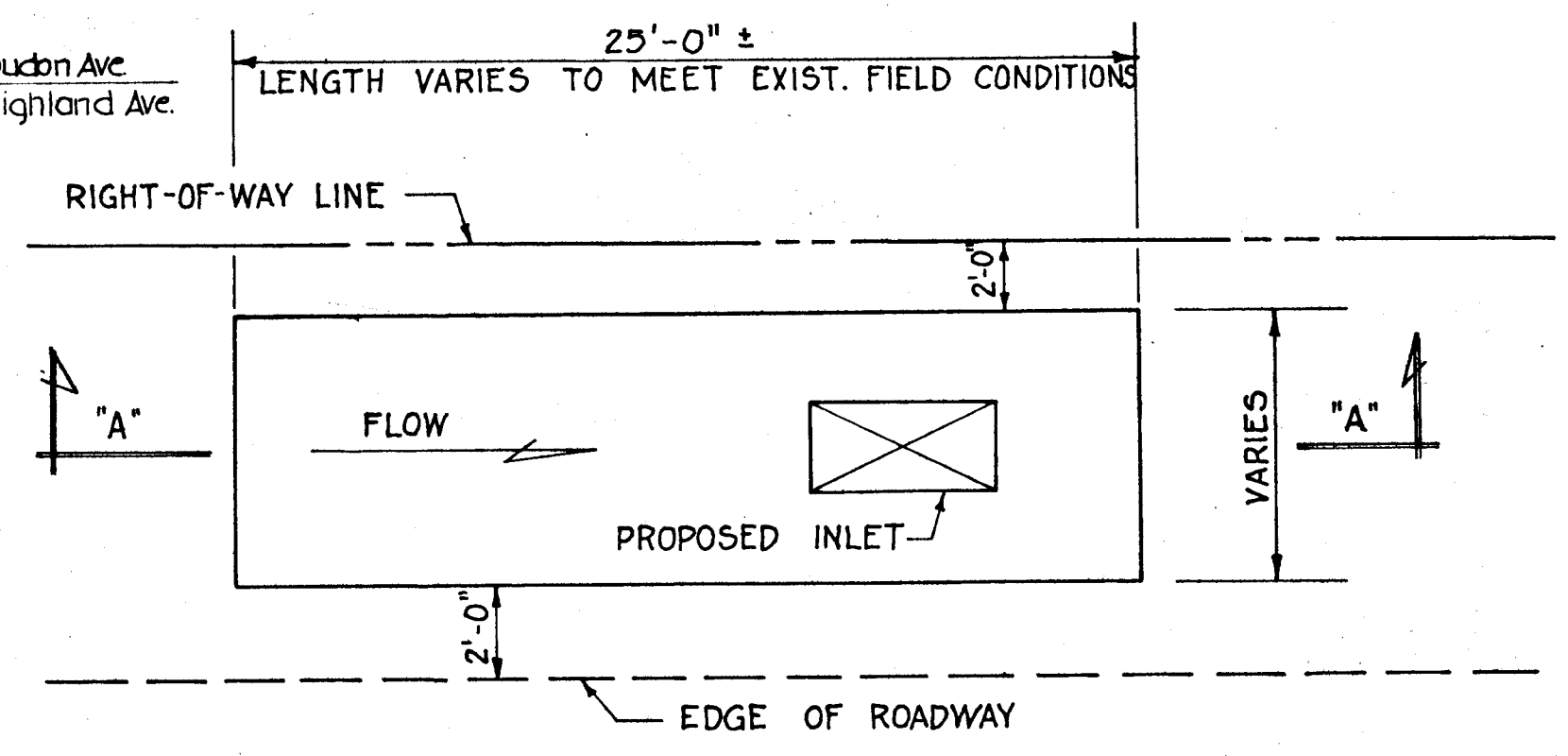
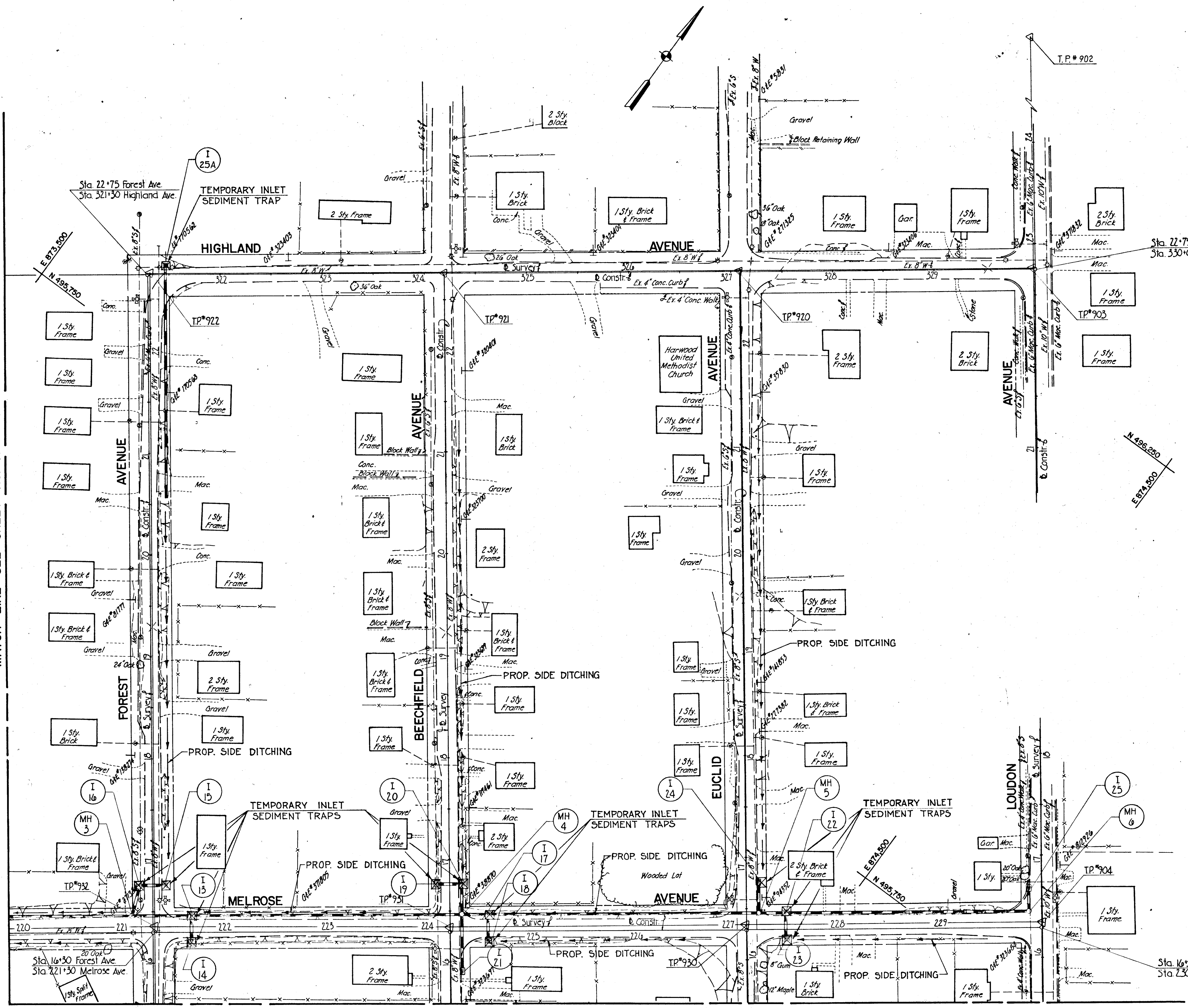


STORM DRAIN PROFILES
 HARWOOD PARK

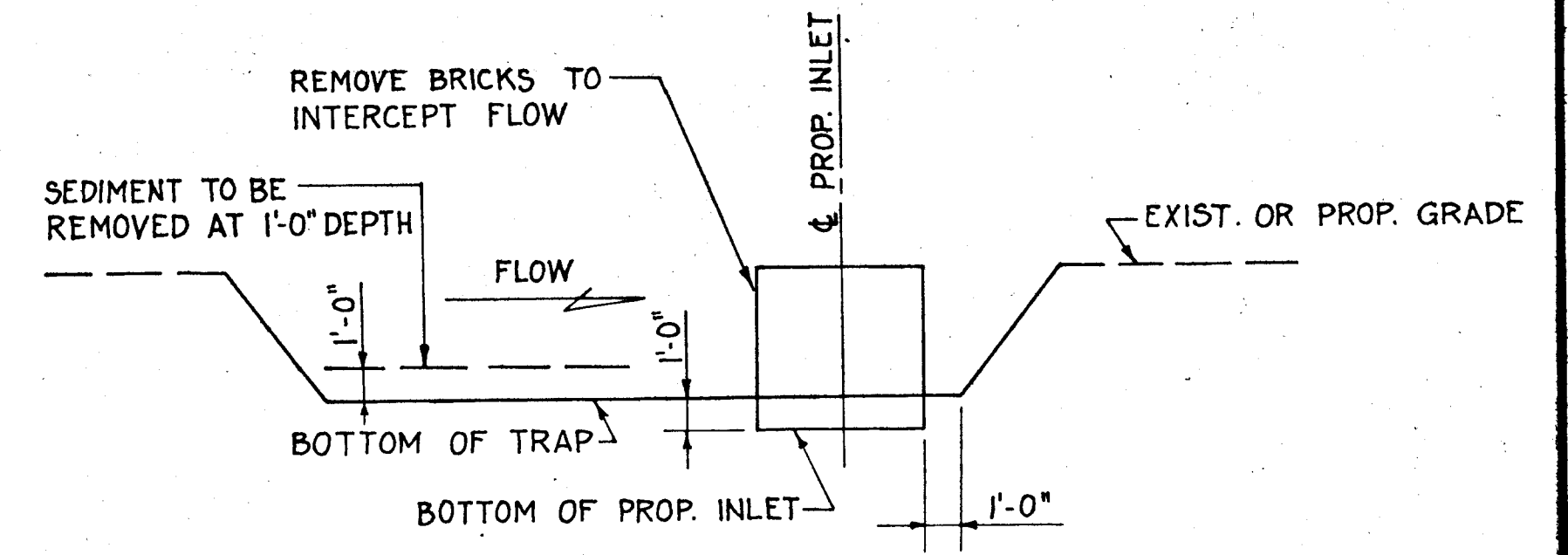
HARWOOD COMMUNITY ROADS CAPITAL PROJECT J-0-4063
 HARWOOD PARK STORM DRAINS CAPITAL PROJECT D-6-1039
 ELECTION DISTRICT NO. 1
 HOWARD COUNTY, MARYLAND

DRAWING NO. 13	SCALE: HORZ. 1"=50', VERT. 1"=5'	DES. P.W.Z.
OF 15	DRW. M.L.	CHK. J.A.R.

MATCH LINE SEE SHEET NO. 16 OF 16



TEMPORARY INLET SEDIMENT TRAP
Not To Scale



SECTION A-A
Not To Scale

NOTE:
All proposed side ditching shall be stabilized using the materials indicated on the plans as soon as possible.

MATCH LINE SEE SHEET NO. 15 OF 16

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

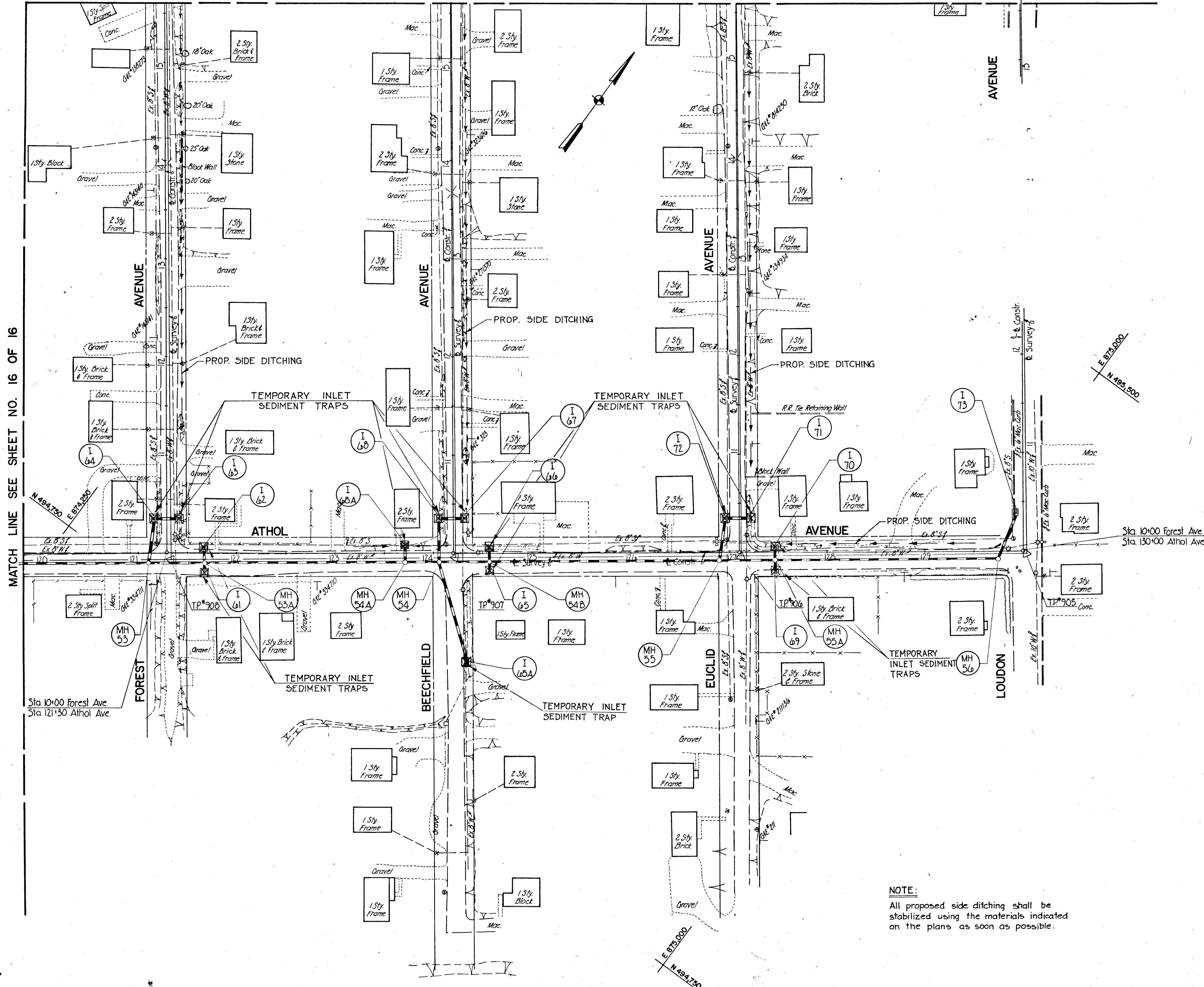
Director of Public Works: *William J. Kelly* 1/13/22
Chief, Bureau of Engineering: *Alan Both Anderson* 1/14/22

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SEDIMENT & EROSION CONTROL PLAN
HARWOOD PARK



HARWOOD COMMUNITY ROADS CAPITAL PROJECT J-0-4063
HARWOOD PARK STORM DRAINS CAPITAL PROJECT D-6-1039
ELECTION DISTRICT NO. 1
HOWARD COUNTY, MARYLAND

DRAWING NO. 14	SCALE 1" = 50'	DES. PW.Z.
OF 19		DRW. M.L.
		CHK. PW.Z.



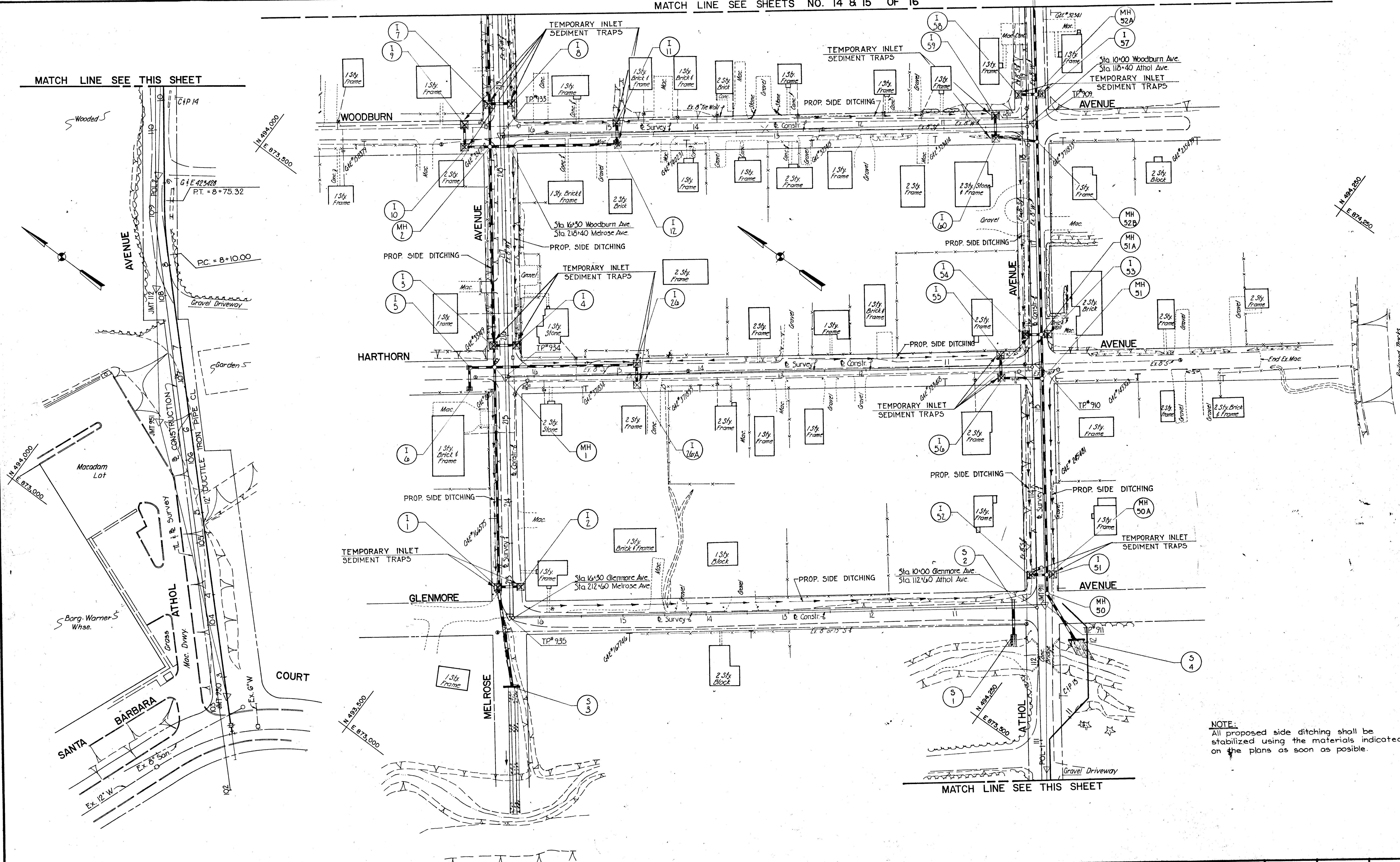
MATCH LINE SEE SHEET NO. 16 OF 16

NOTE:
All proposed side ditching shall be stabilized using the materials indicated on the plans as soon as possible.

<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND</p> <p><i>John F. ...</i> <i>...</i> <i>...</i> DIRECTOR OF PUBLIC WORKS DATE CHIEF, BUREAU OF ENGINEERING DATE</p> <p><i>Charlotta Anderson ...</i> CHIEF, ROADS, BRIDGES, & STORM DRAINAGE DIVISION DATE</p>	 <p>Johnson, McCordic & Thompson, P. A. ENGINEERS • PLANNERS • SURVEYORS • LANDSCAPE ARCHITECTS 1524 YORK ROAD • BALTIMORE, MARYLAND • 21286 • (410) 621-6501</p>	 <p>SEDIMENT & EROSION CONTROL PLAN HARWOOD PARK</p>	<p>HARWOOD COMMUNITY ROADS CAPITAL PROJECT J-0-4063 HARWOOD PARK STORM DRAINS CAPITAL PROJECT D-6-1039 ELECTION DISTRICT NO. 1 HOWARD COUNTY, MARYLAND</p>	<p>DRAWING NO. <u>15</u> OF <u>19</u></p>	<p>SCALE 1" = 50'</p>	<p>DES. <u>P.W.Z.</u> DRW. <u>M.L.</u> CHK. <u>J.A.R.</u></p>
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MATCH LINE SEE THIS SHEET

MATCH LINE SEE THIS SHEET



NOTE:
All proposed side ditching shall be stabilized using the materials indicated on the plans as soon as possible.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DIRECTOR OF PUBLIC WORKS DATE: 11/13/82
CHIEF, BUREAU OF ENGINEERING DATE: 11/13/82
CHIEF, ROADS, BRIDGES, & STORM DRAINAGE DIVISION DATE: 11/13/82

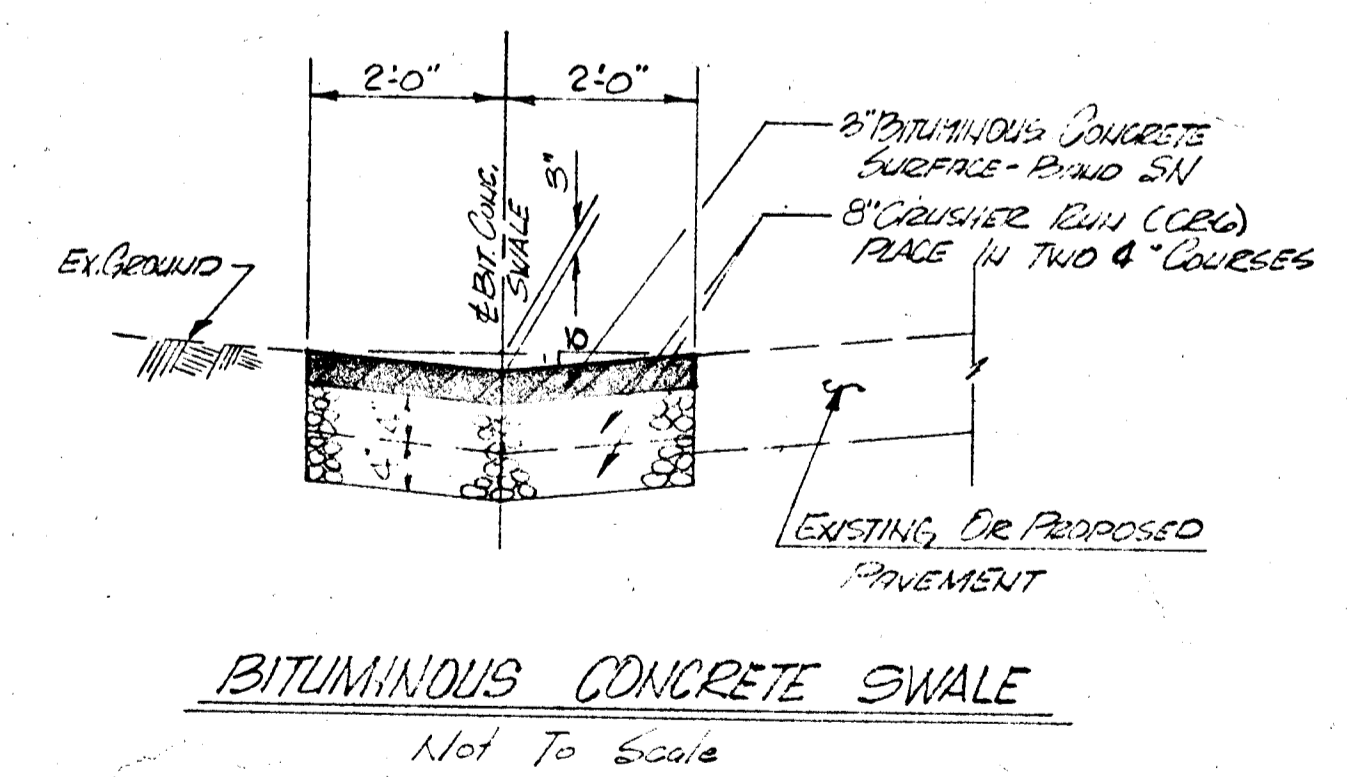
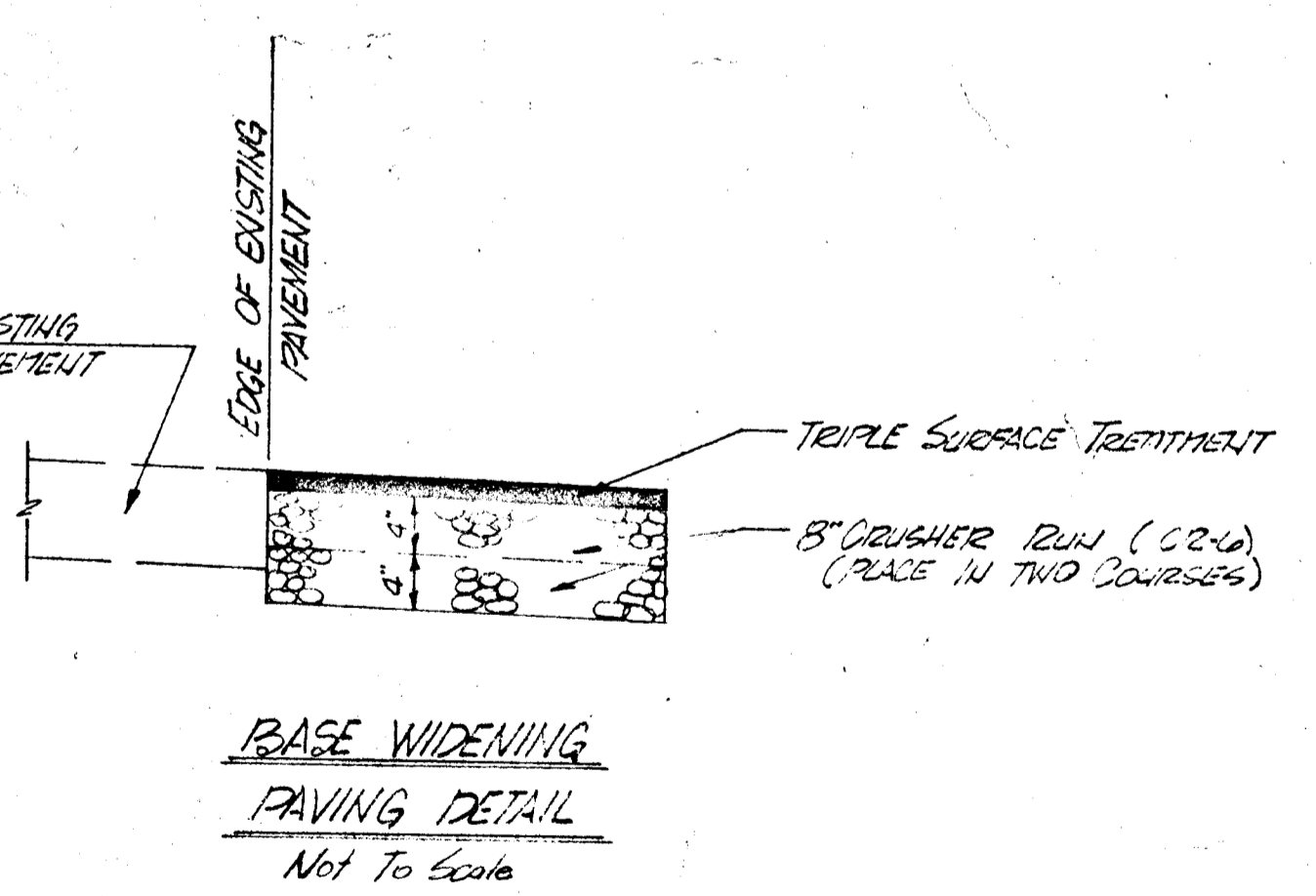
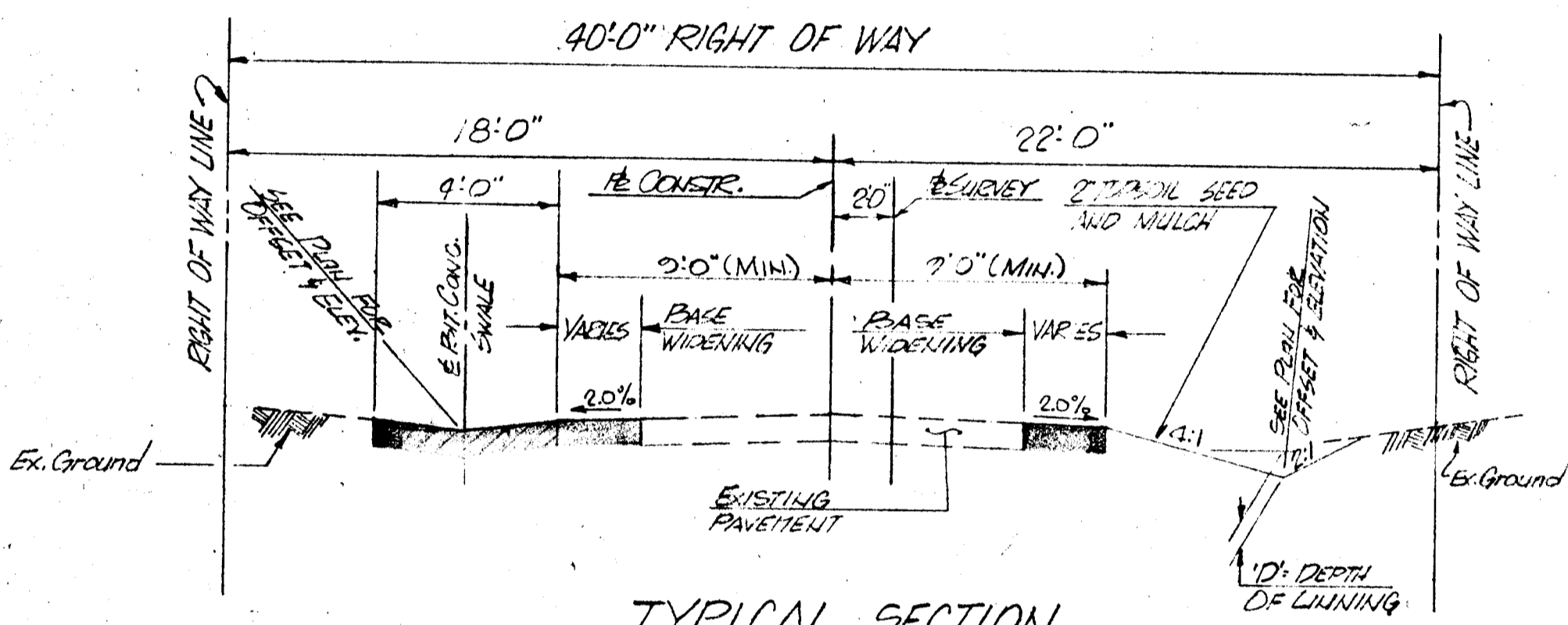
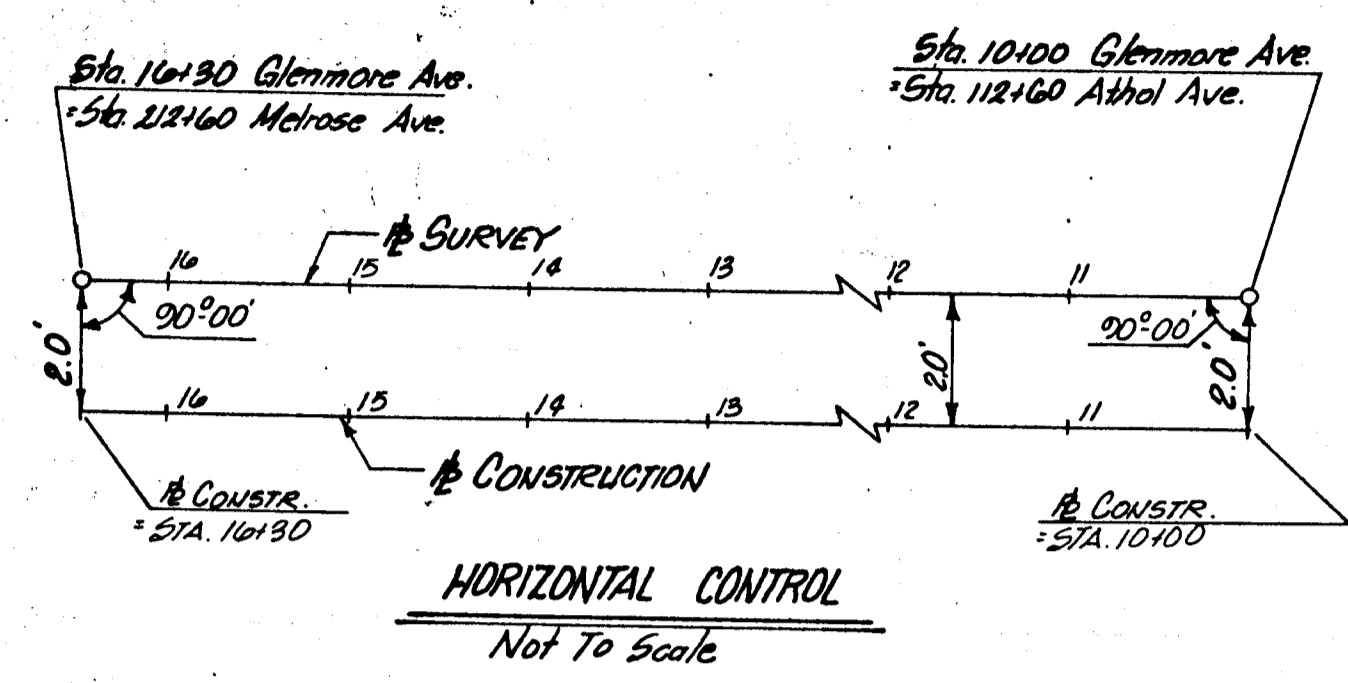
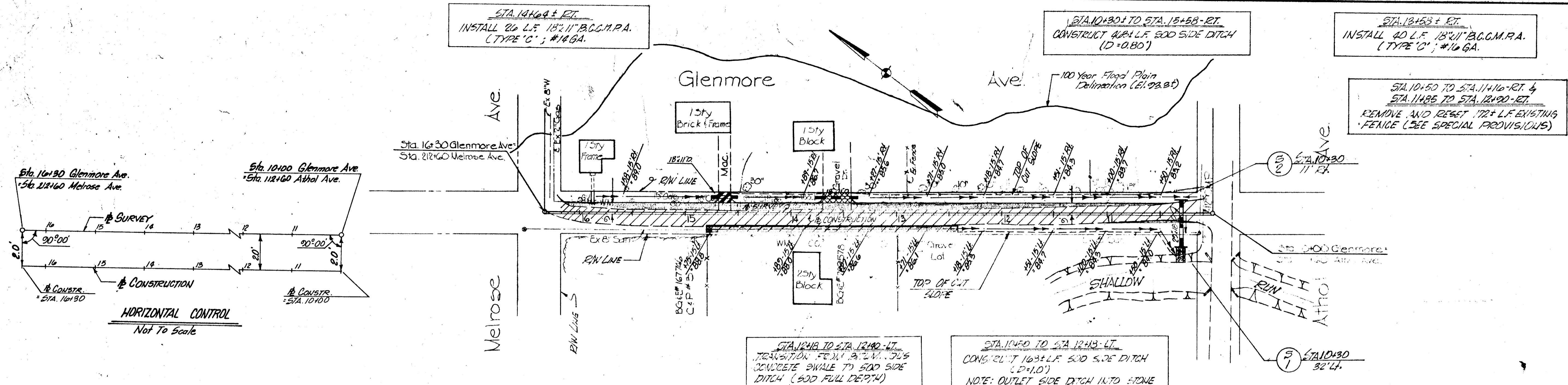
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SEDIMENT & EROSION CONTROL PLAN
HARWOOD PARK

HARWOOD COMMUNITY ROADS CAPITAL PROJECT J-0-4063
HARWOOD PARK STORM DRAINS CAPITAL PROJECT D-6-1039
ELECTION DISTRICT NO. 1
HOWARD COUNTY, MARYLAND

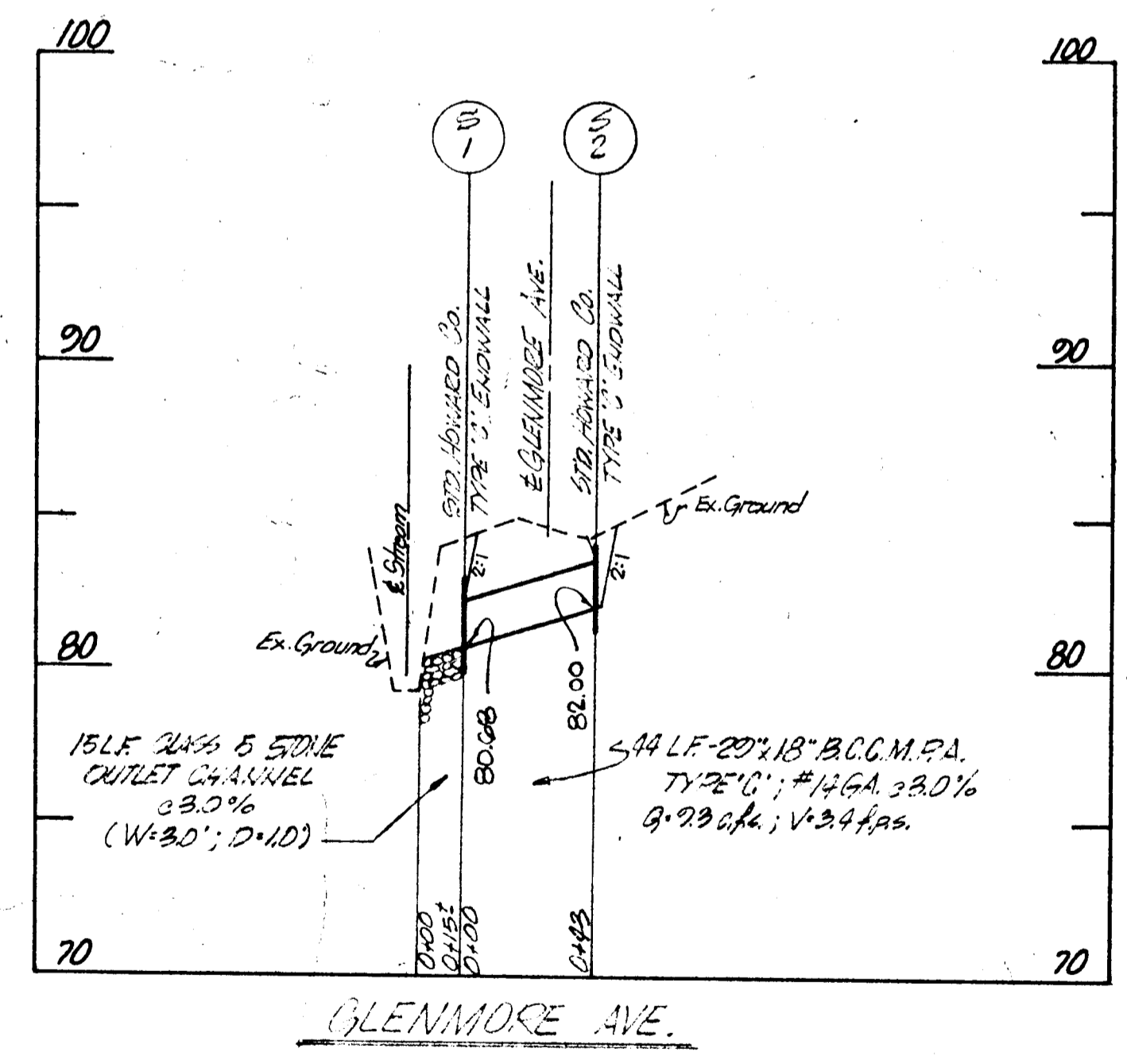
DRAWING NO. 16	SCALE 1" = 50'	DES. P.W.Z.
OF 19		DRW. M.L.
		CHK. P.W.Z.



STA. 12+45 TO STA. 12+43-1/2
CONSTRUCT 103 L.F. 500 SIDE DITCH (D=1.0')
NOTE: OUTLET SIDE DITCH INTO STONE OUTLET DITCH AT S-1

STA. 12+45 TO STA. 12+43-1/2
CONSTRUCT 240 L.F. BITUMINOUS CONCRETE SWALE

NOTE: SEE ODDS SECTIONS FOR BASE WIDENING AND DITCH LOCATIONS.



- LEGEND**
- BASE WIDENING (SEE PAVING DETAIL)
 - BITUMINOUS CONCRETE SWALE (SEE SWALE DETAIL)
 - 6" CRUSHER RUN (CR-6) - FOR DRIVEWAYS
 - 1" BITUMINOUS CONCRETE SURFACE COURSE
 - 4" CRUSHER RUN (CR-4)
 - 7" MIX NO. 2 CEMENT CONCRETE - FOR DRIVEWAYS
 - TRIPLE SURFACE TREATMENT

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

F. Newman 4/24/83
DIRECTOR OF PUBLIC WORKS DATE

Richard S. Peltz 4/29/83
CHIEF, BUREAU OF ENGINEERING DATE

Elizabeth Anderson Colvin 4/29/83
CHIEF, ROADS, BRIDGES, & STORM DRAINAGE DIVISION DATE

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HARWOOD PARK

HARWOOD COMMUNITY ROADS CAPITAL PROJECT J-0-4063
HARWOOD PARK STORM DRAINS CAPITAL PROJECT D-6-1039
ELECTION DISTRICT NO. 1
HOWARD COUNTY, MARYLAND

DRAWING NO. 20
SCALE Horiz: 1"=50' Vert: 1"=5'
REVISION OF SHEETS 11, 12, 13 & 14
OF 25

DES. P.W.Z.
DRW. P.W.Z.
CHK. P.W.Z.

NOTE: FOR CONSTRUCTION IN MELROSE AVENUE SEE RE-DESIGN PLANS

STA. 14+70 TO STA. 14+05-RT.
INSTALL 12.5' L.F. BITUMINOUS CONCRETE SWALE

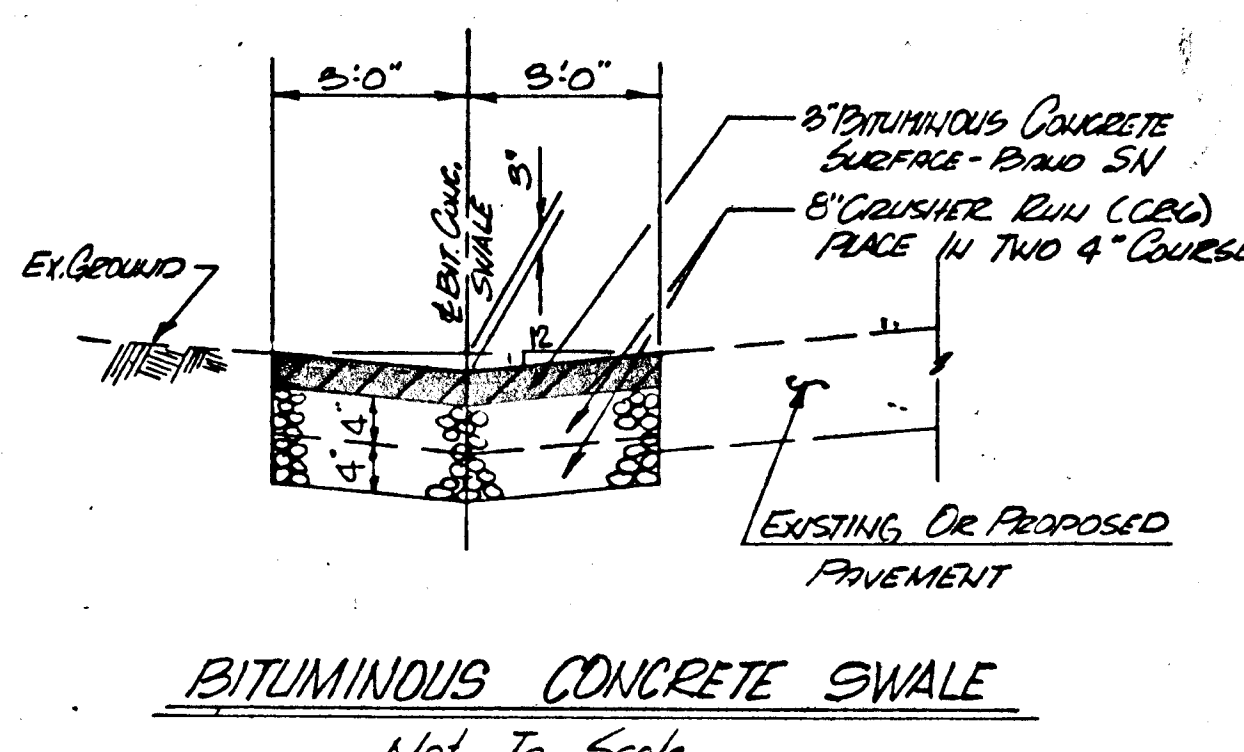
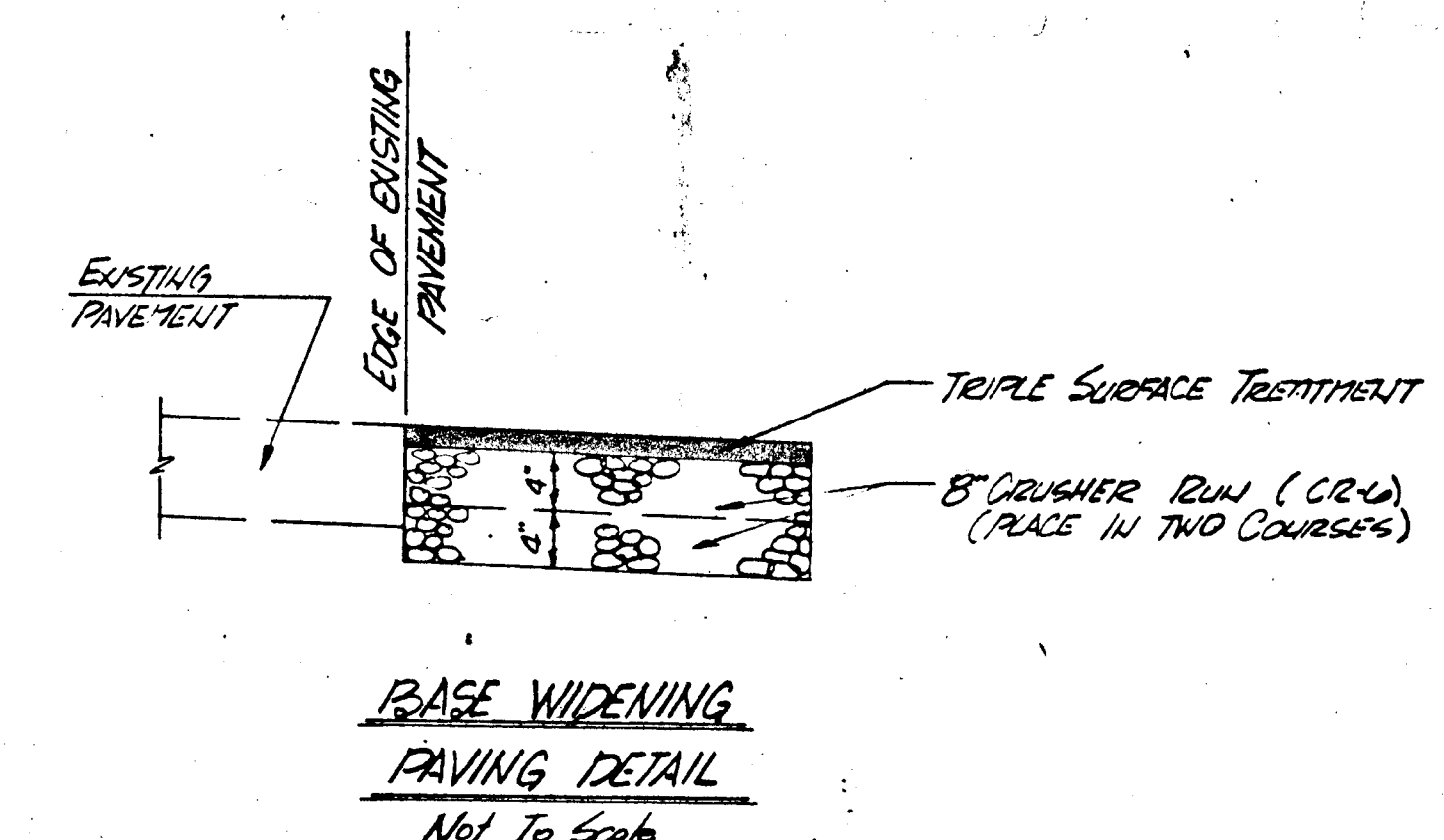
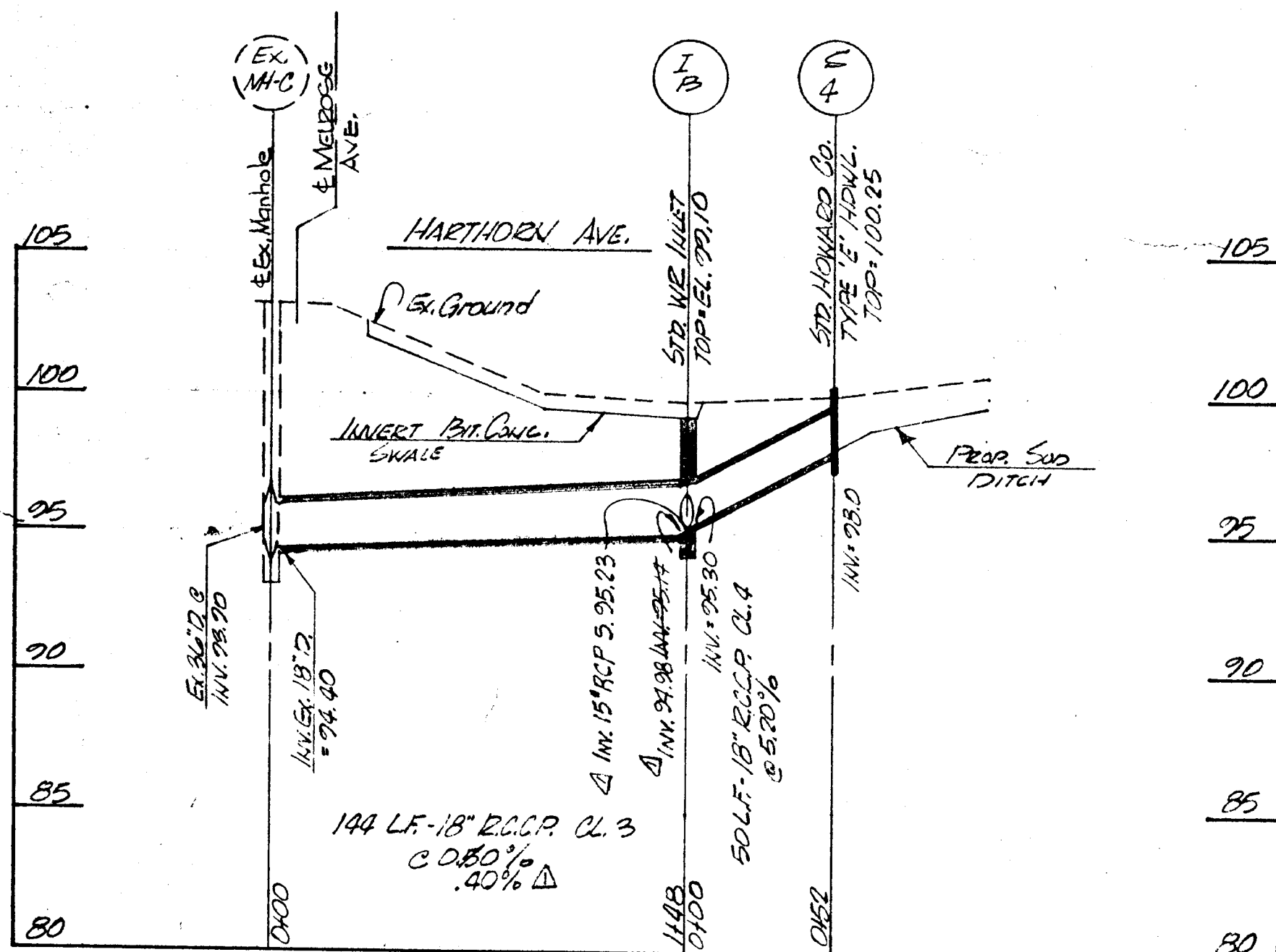
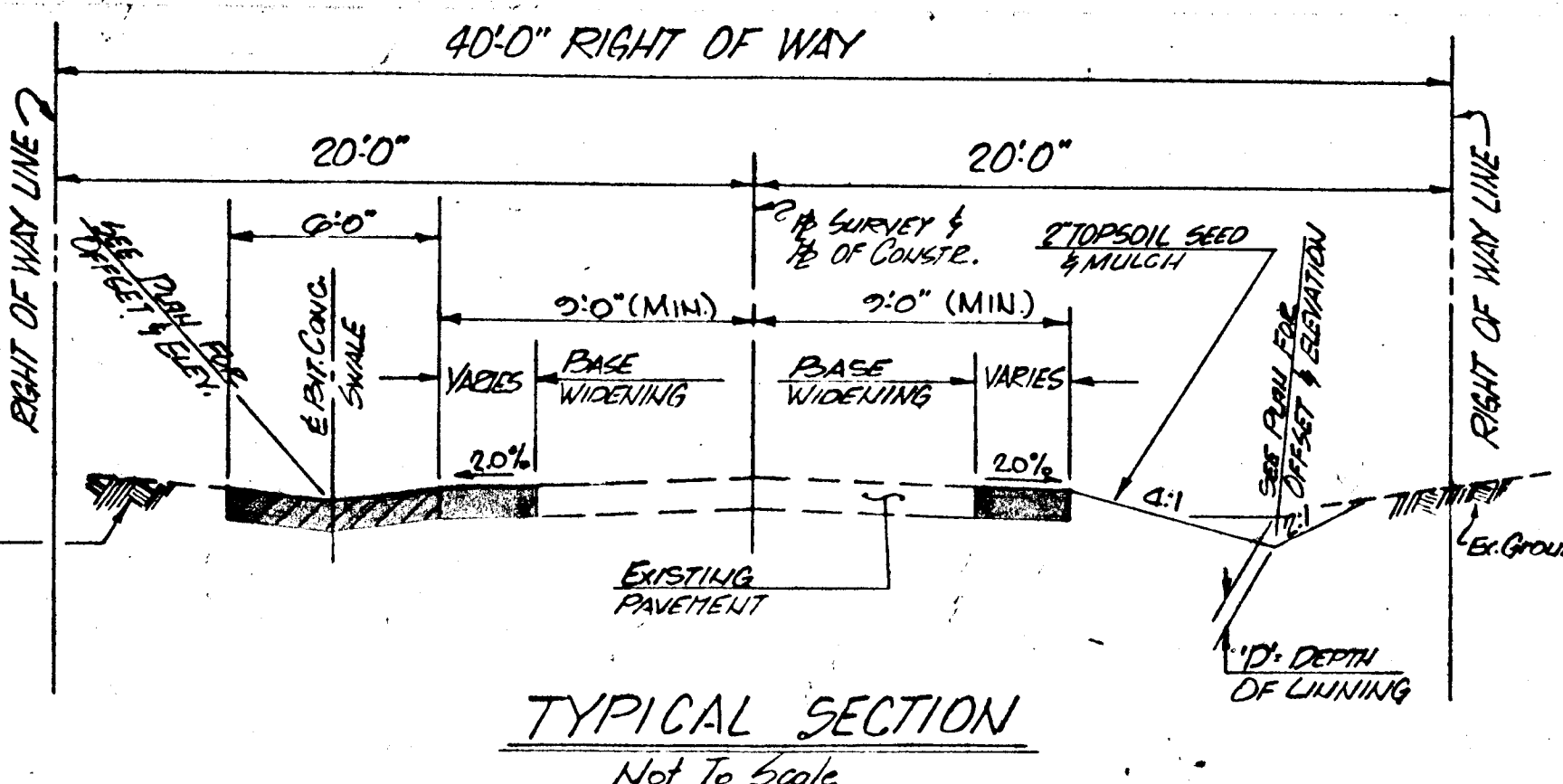
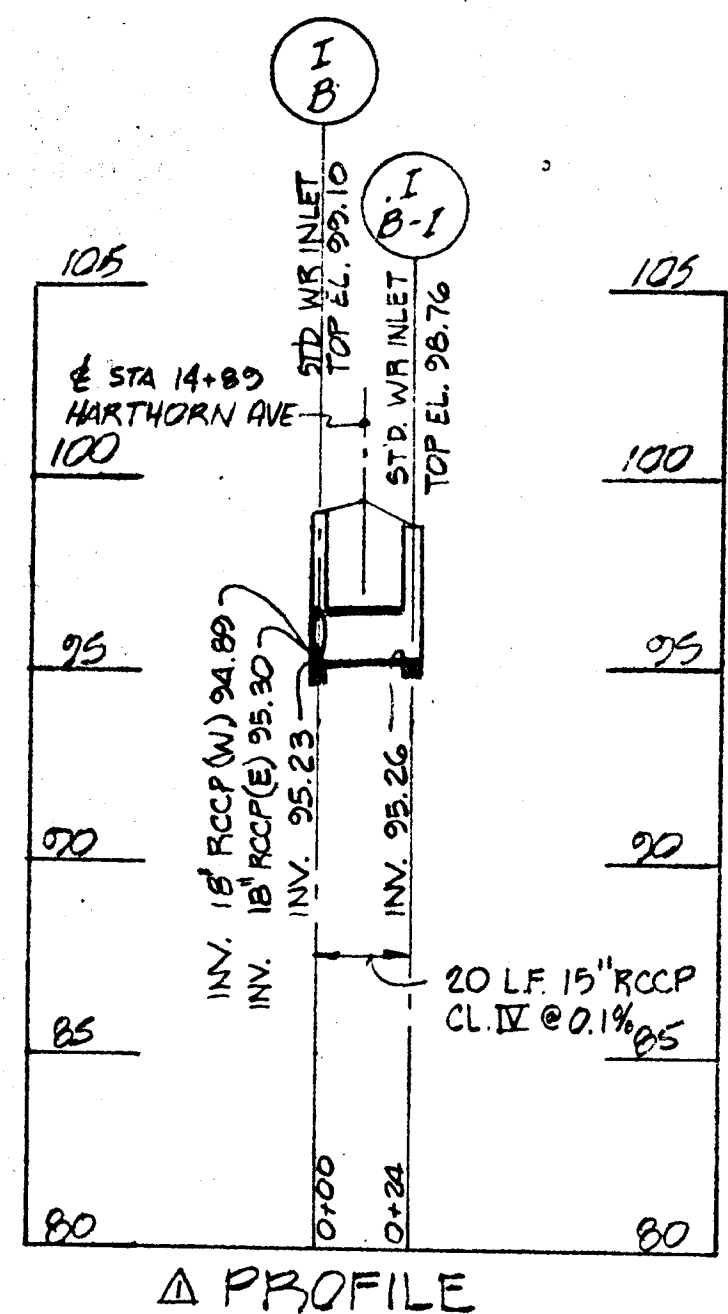
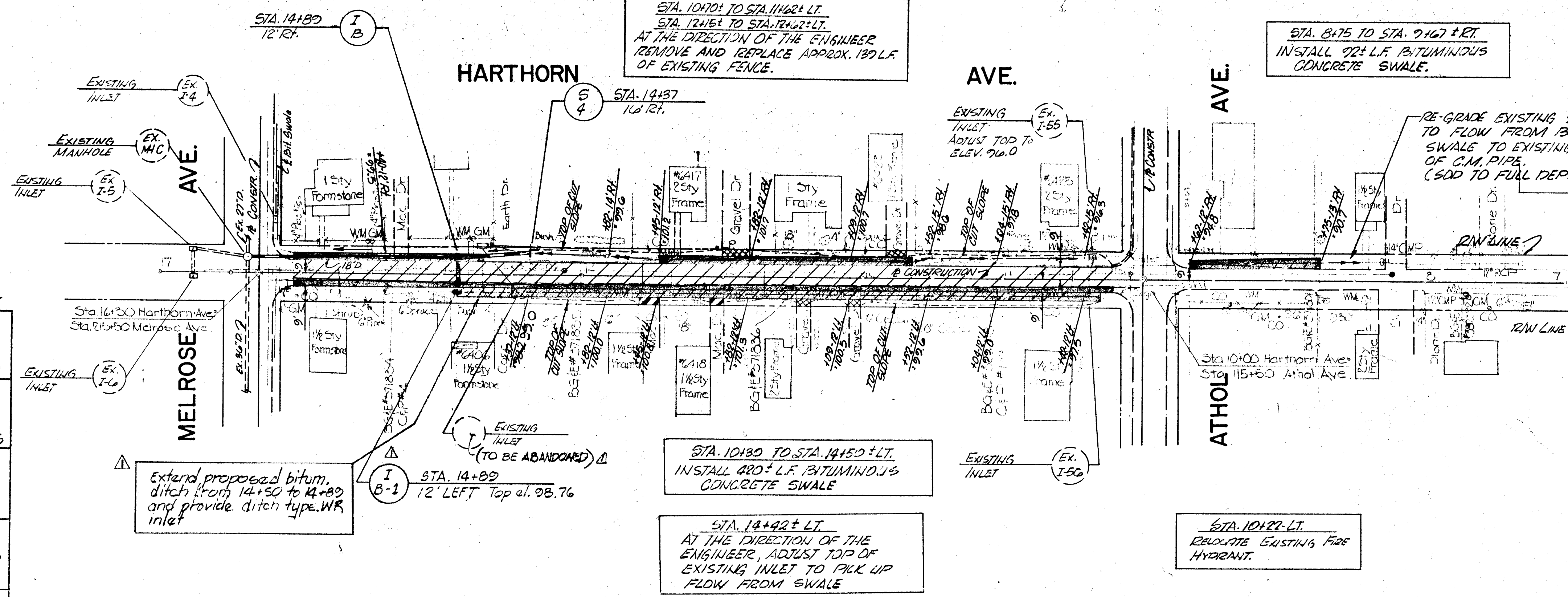
STA. 11+65 TO STA. 13+95-RT.
INSTALL 180' L.F. BITUMINOUS CONCRETE SWALE.

STA. 10+23 TO STA. 11+52-RT.
INSTALL 114' L.F. SOD SIDE DITCH (SOD FULL DEPTH)

NOTE: FOR CONSTRUCTION IN ATHOL AVE. SEE RE-DESIGN PLANS

STA. 8+75 TO STA. 9+67-RT.
INSTALL 92' L.F. BITUMINOUS CONCRETE SWALE.

STA. 10+01 TO STA. 11+62-LT.
STA. 12+64 TO STA. 14+72-LT.
AT THE DIRECTION OF THE ENGINEER REMOVE AND REPLACE APPROX. 130' L.F. OF EXISTING FENCE.



- LEGEND**
- BASE WIDENING (SEE PAVING DETAIL)
 - BITUMINOUS CONCRETE SWALE (SEE SWALE DETAIL)
 - 6" CRUSHER RUN (CR-6) - FOR DRIVEWAYS
 - 1" BITUMINOUS CONCRETE SURFACE COURSE
4" CRUSHER RUN (CR-6)
 - 7" MIX NO. 2 CEMENT CONCRETE - FOR DRIVEWAYS
 - TRIPLE SURFACE TREATMENT

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
DIRECTOR OF PUBLIC WORKS: Elizabeth Anderson Casca
DATE: 4/29/83

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HARWOOD PARK

HARWOOD COMMUNITY ROADS CAPITAL PROJECT J-O-4063
HARWOOD PARK STORM DRAINS CAPITAL PROJECT D-6-1039
ELECTION DISTRICT NO. 1
HOWARD COUNTY, MARYLAND

REVISION: 5-26-83 J. CHEUNG D.P.W.
DRAWING NO. 21
SCALE: HORIZ: 1"=50'
VERT: 1"=5'
DES. DWG. 2
CHK. 51

STA. 14+64 TO STA. 17+05+RT
 STA. 14+64 TO STA. 17+11+LT
 CONSTRUCT 78+ L.F. BITUMINOUS CONCRETE SWALE.
 NOTE: CONSTRUCT SWALE AT EDGE OF EXISTING PAVEMENT.

STA. 15+65 TO STA. 16+05+RT
 INSTALL 40+ L.F. BITUMINOUS CONCRETE SWALE.

STA. 10+52 TO STA. 11+00+RT
 INSTALL 48 L.F. CONCRETE SIDE DITCH (D=0.5')

STA. 10+25 TO STA. 10+52+RT
 CONSTRUCT CONCRETE SIDE DITCH TO TRANSITION FROM NORMAL SIDE DITCH TO MEET I-50.

NOTE: FOR CONSTRUCTION IN MELROSE AVE. SEE RE-DESIGN PLANS

STA. 15+40+RT
 INSTALL 10 L.F. 15" B.C.C.M.P. TYPE 'C', NO. 14 GA.

STA. 14+55 TO STA. 14+75+RT
 STA. 15+45 TO STA. 15+65+RT
 CONSTRUCT 800 TRANSITION'S (S/D TO FULL DEPTH)

STA. 12+34 TO STA. 15+11+RT
 CONSTRUCT 98 L.F. S/D SIDE DITCH (S/D TO FULL DEPTH)

STA. 12+11 TO STA. 12+34+RT
 CONST. CONCRETE TRANSITION FROM BITUMINOUS CONCRETE SWALE TO 15" G.M. PIPE (D=0.6 TO FULL DEPTH)

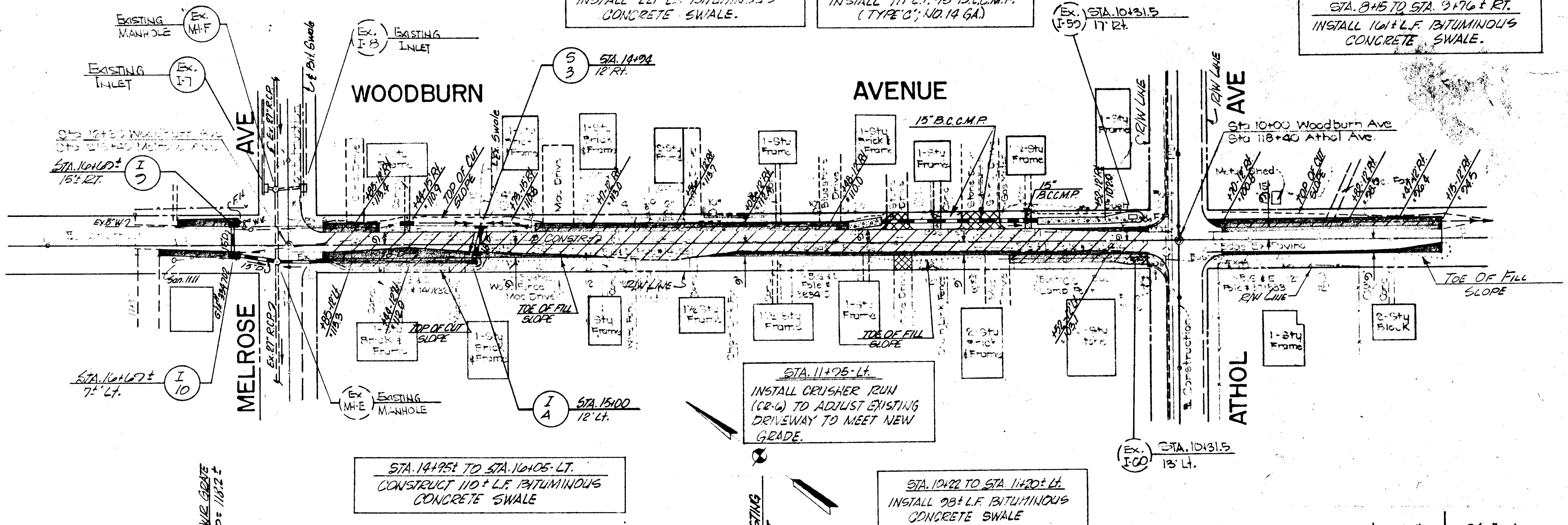
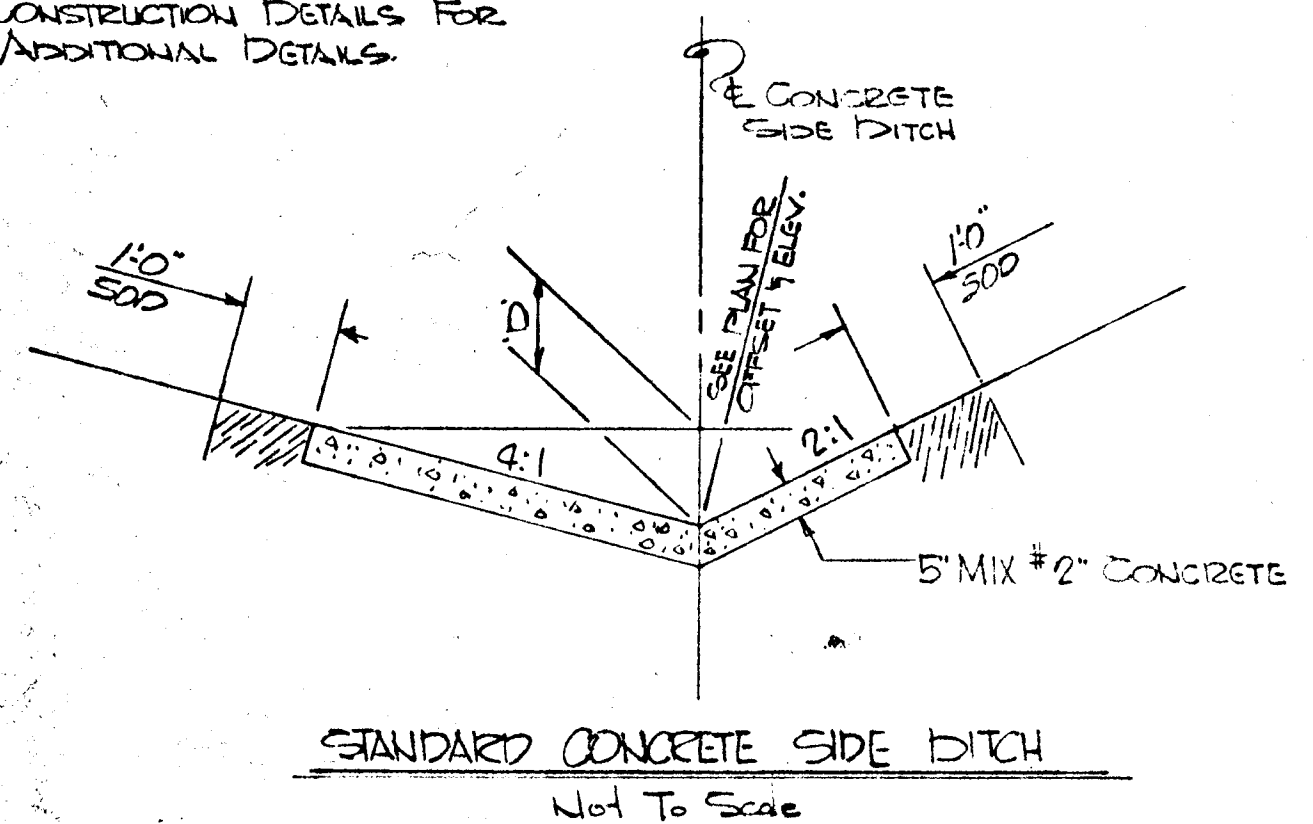
NOTE: FOR CONSTRUCTION IN ATHOL AVE. SEE RE-DESIGN PLANS

STA. 12+34 TO STA. 14+52+RT
 INSTALL 221 L.F. BITUMINOUS CONCRETE SWALE.

STA. 11+00 TO STA. 12+11+RT
 INSTALL 111 L.F. 15" B.C.C.M.P. (TYPE 'C', NO. 14 GA.)

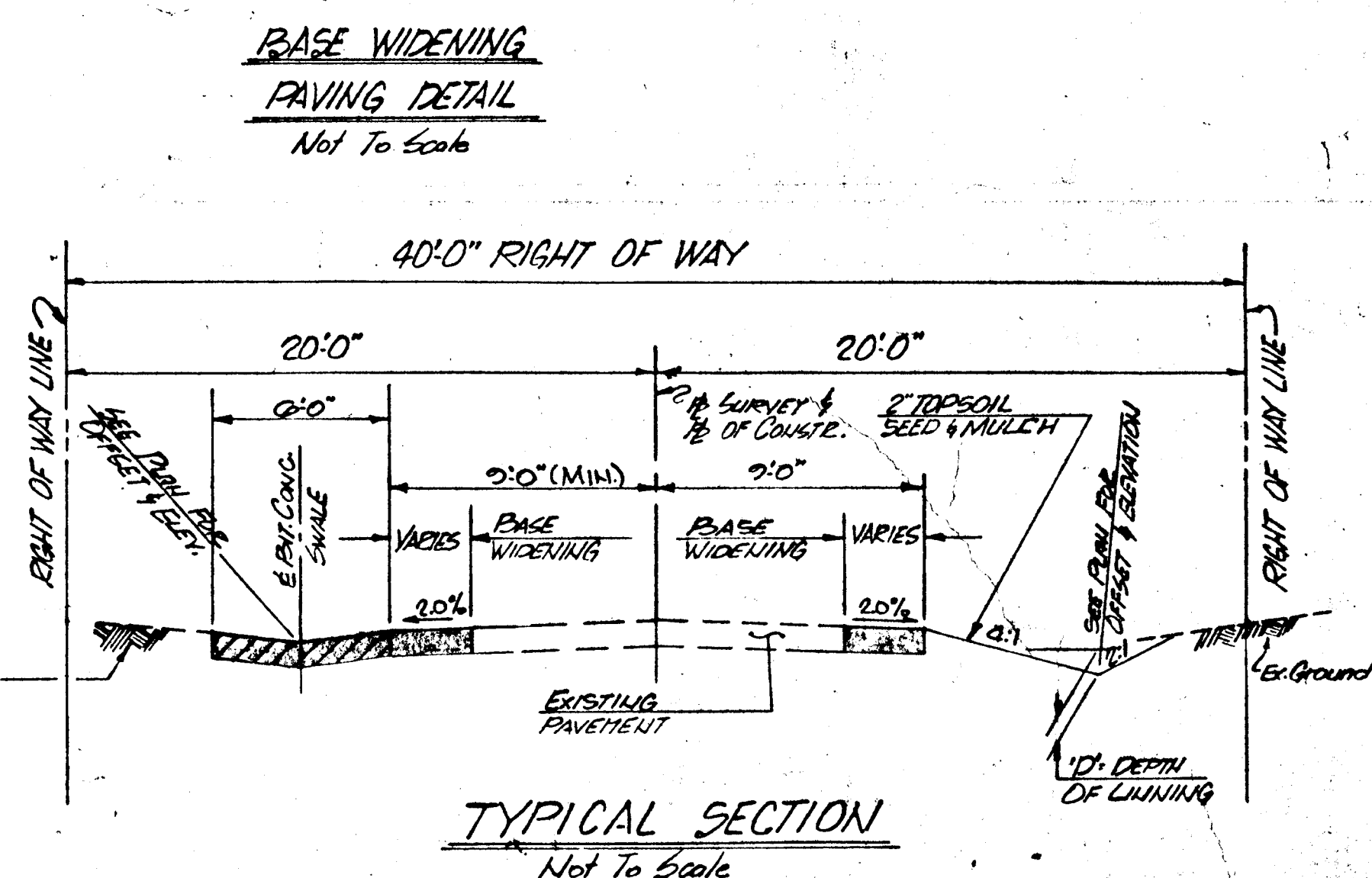
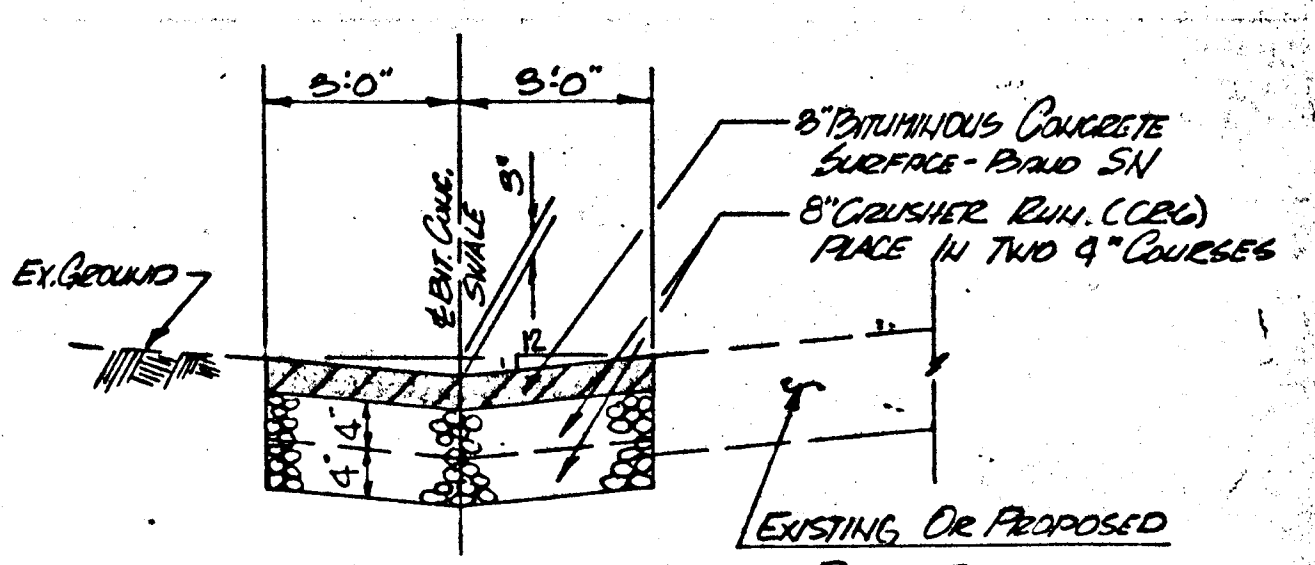
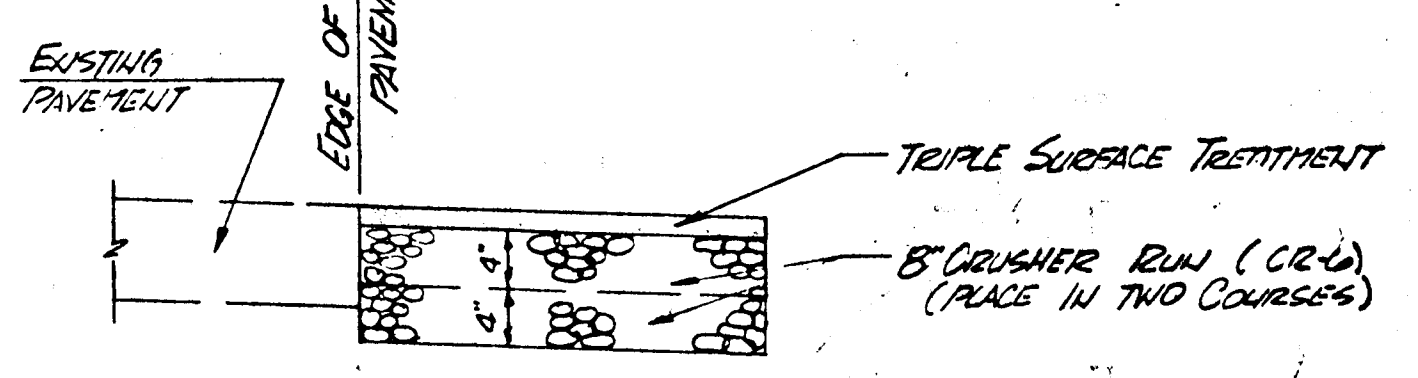
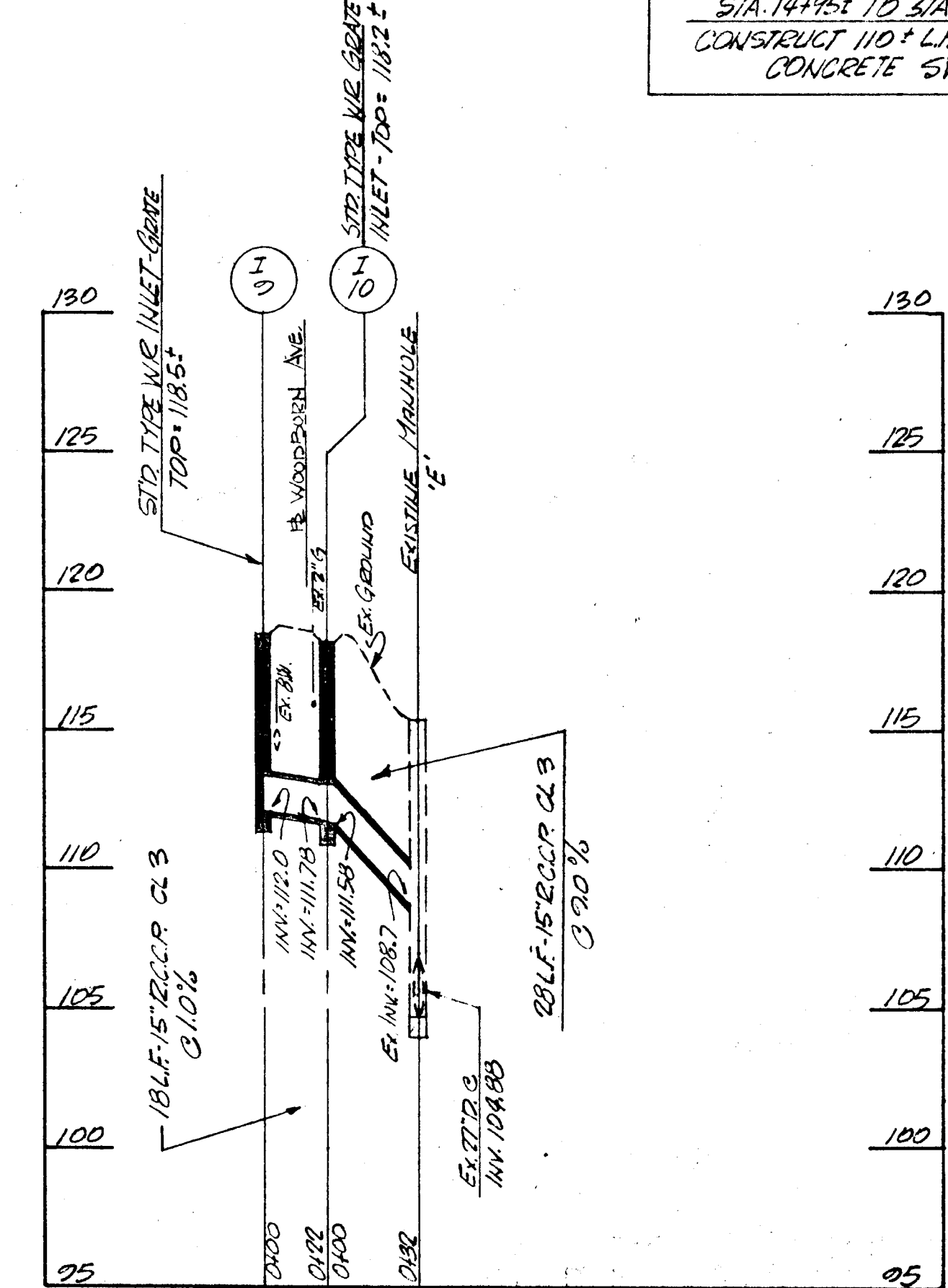
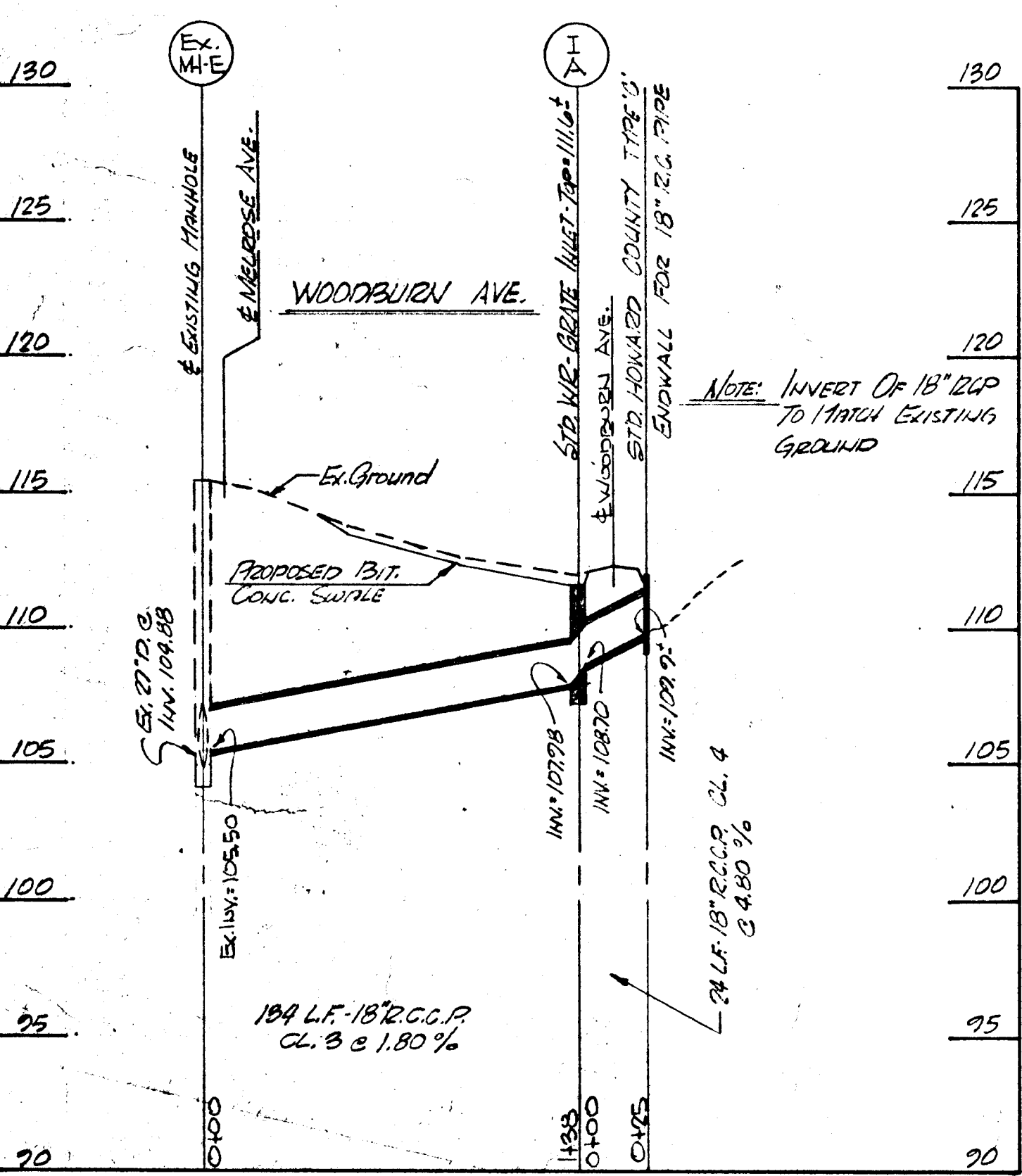
STA. 9+45 TO STA. 9+76+RT
 INSTALL 101 L.F. BITUMINOUS CONCRETE SWALE.

NOTE: SEE HOWARD COUNTY CONSTRUCTION DETAILS FOR ADDITIONAL DETAILS



STA. 14+95 TO STA. 16+05+LT
 CONSTRUCT 110+ L.F. BITUMINOUS CONCRETE SWALE

STA. 10+25 TO STA. 11+00+LT
 INSTALL 98+ L.F. BITUMINOUS CONCRETE SWALE



- LEGEND**
- BASE WIDENING (SEE PAVING DETAIL)
 - BITUMINOUS CONCRETE SWALE (SEE SWALE DETAIL)
 - 6" CRUSHER RUN (CR-6) FOR DRIVEWAYS
 - 1" BITUMINOUS CONCRETE SURFACE COURSE
 - 4" CRUSHER RUN (CR-4)
 - 7" MIX NO. 2 CEMENT CONCRETE - FOR DRIVEWAYS
 - TRIPLE SURFACE TREATMENT

DEPARTMENT OF PUBLIC WORKS
 HOWARD COUNTY, MARYLAND
 Director of Public Works: *John F. Neenan* 4-29-83
 Chief, Bureau of Engineering: *Richard S. Reed* 4-29-83

Johnson, Mirmiran & Thompson, P. A.
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STORM DRAIN & ROADWAY PLAN
 HARWOOD PARK

HARWOOD COMMUNITY ROADS CAPITAL PROJECT J-0-4063
 HARWOOD PARK STORM DRAINS CAPITAL PROJECT D-6-1039
 ELECTION DISTRICT NO. 1
 HARWOOD COUNTY, MARYLAND

DRAWING NO. 22
 SCALE: HORIZ. 1"=50'
 VERT. 1"=5'
 DES. P.W.Z. DRW. T.L.S.

STA. 1745 TO STA. 2245+RT.
INSTALL 270' L.F. BITUMINOUS CONCRETE SWALE.

STA. 1832 TO STA. 1745-RT.
INSTALL 113' L.F. BITUMINOUS CONCRETE SWALE.

STA. 1824 TO STA. 1832+RT.
CONSTRUCT CONCRETE TRANSITION FROM BITUMINOUS CONCRETE SWALE TO CONCRETE SIDE DITCH.

STA. 1824 TO STA. 1824+RT.
INSTALL 112' L.F. CONCRETE SIDE DITCH (D=10)

STA. 1840+RT.
INSTALL 20' L.F. 22" 18" B.C.C.M.P.A. (TYPE 'C'; No. 14 GA.)

STA. 1847 TO STA. 1847+RT.
REMOVE AND RE-SET EXISTING CURB BLOCK RESTAINING WALL TO THE RIGHT OF THE PROPOSED SIDE DITCH.

STA. 1848 TO STA. 1849+RT.
CONSTRUCT 197' L.F. CONCRETE SIDE DITCH (D=10)

STA. 1849+RT.
INSTALL 48' L.F. 25" 18" B.C.C.M.P.A. (TYPE 'C'; No. 14 GA.)

STA. 1849+RT.
INSTALL 14' L.F. 18" 11" B.C.C.M.P.A. (TYPE 'C'; No. 14 GA.)

STA. 1849+RT.
INSTALL 33' L.F. 18" 11" B.C.C.M.P.A. (TYPE 'C'; No. 14 GA.)

STA. 1848 TO STA. 1840+RT.
INSTALL 255' L.F. BITUMINOUS CONCRETE SWALE.

STA. 1849 TO STA. 1845+RT.
CONSTRUCT 14' L.F. CONCRETE TRANSITION FROM BITUMINOUS CONCRETE SWALE TO CONCRETE SIDE DITCH.

NOTE: FOR CONSTRUCTION IN ATHOL AVE. SEE RE-DESIGN PLANS.

NOTE: FOR CONSTRUCTION IN MELROSE AVE. SEE RE-DESIGN PLANS.

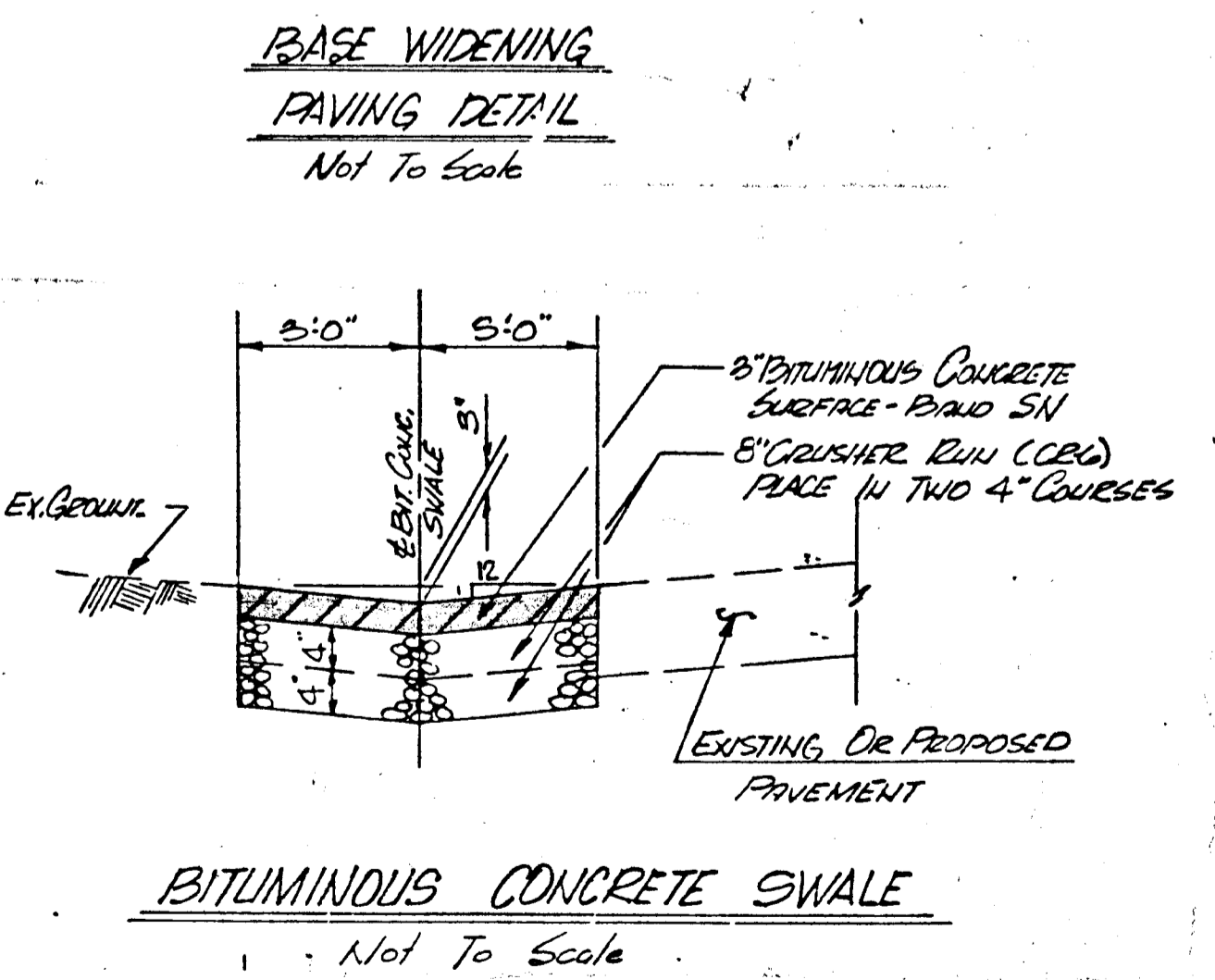
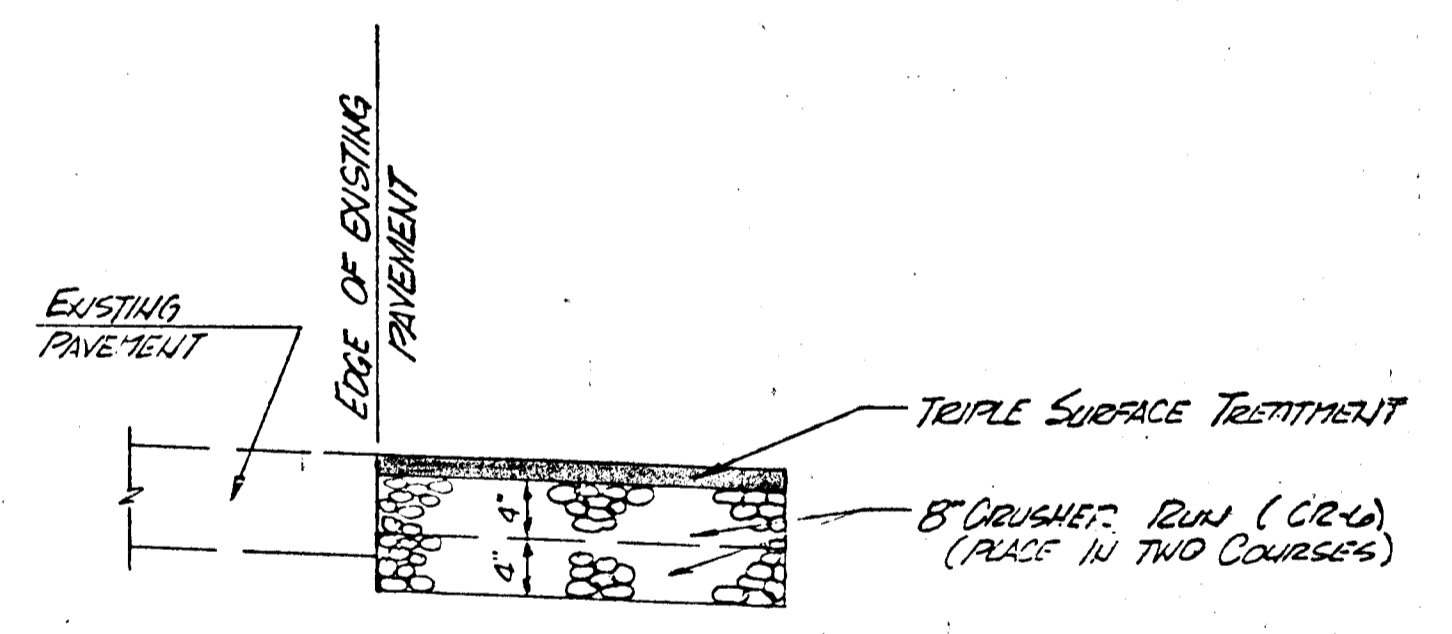
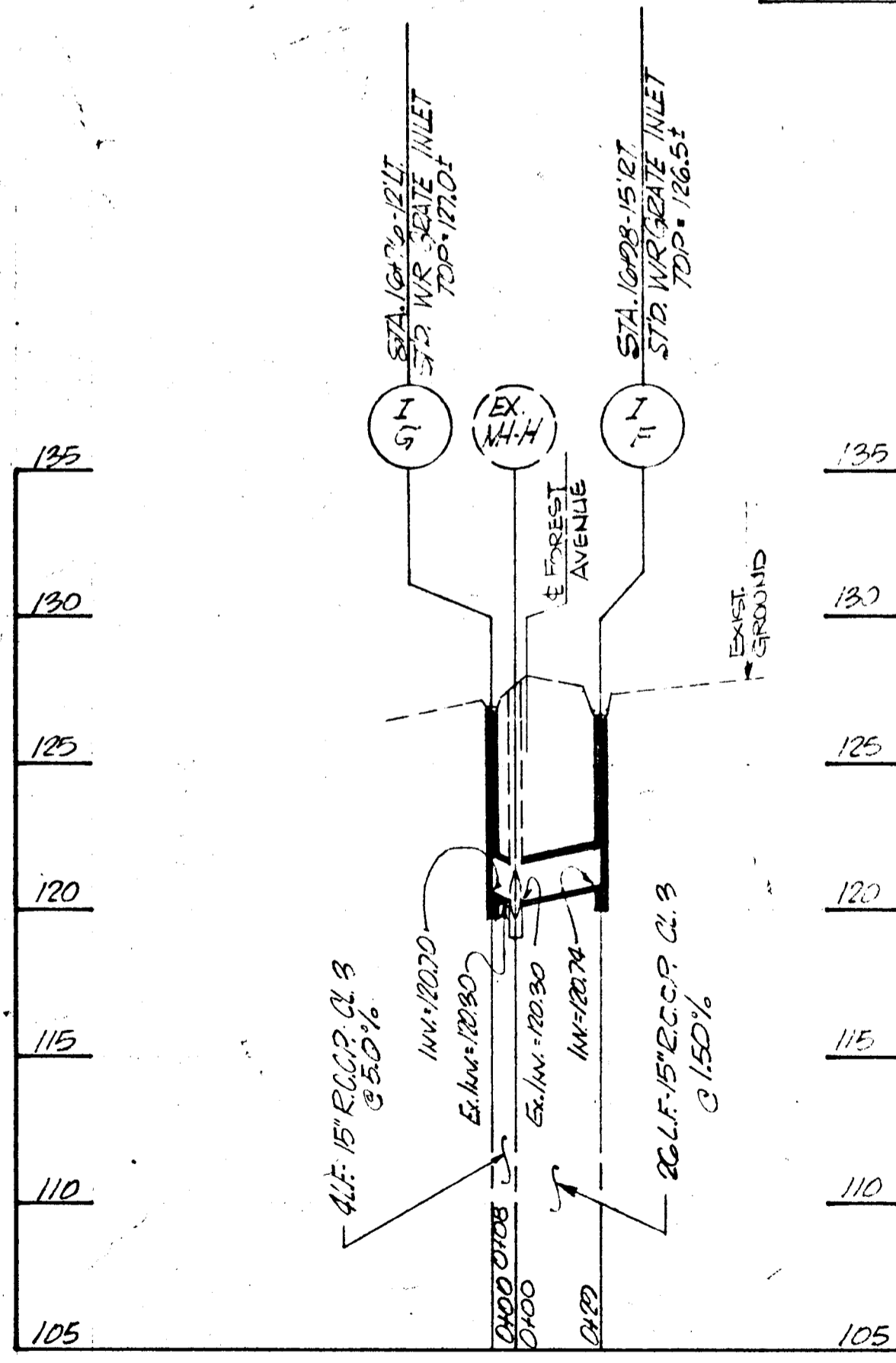
HIGHLAND AVENUE

FOREST AVENUE

AVENUE

MELROSE AVENUE

ATHOL AVENUE

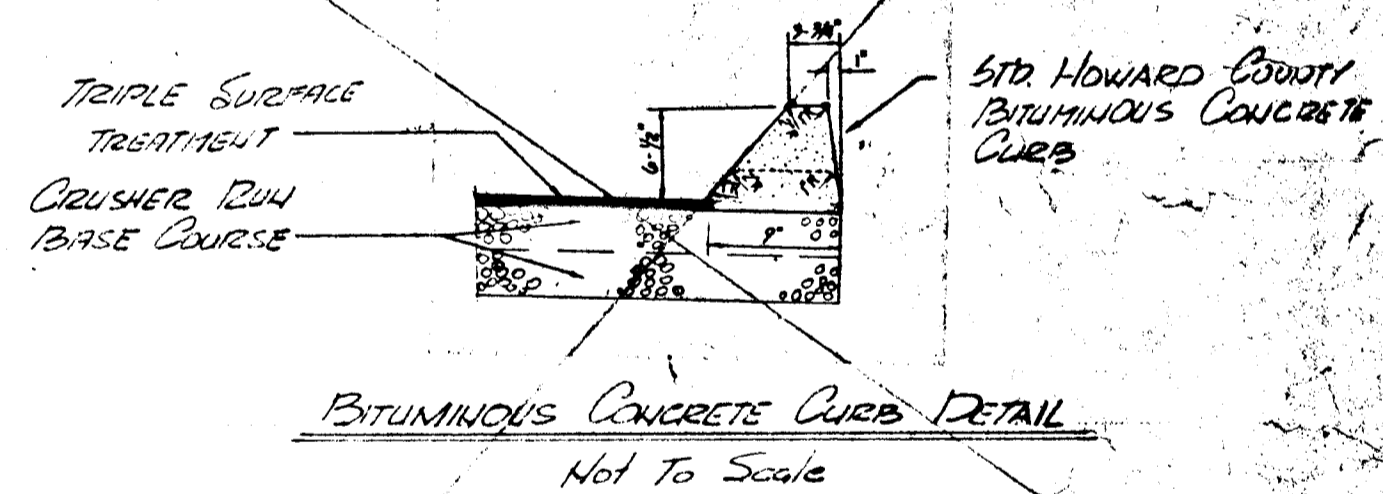
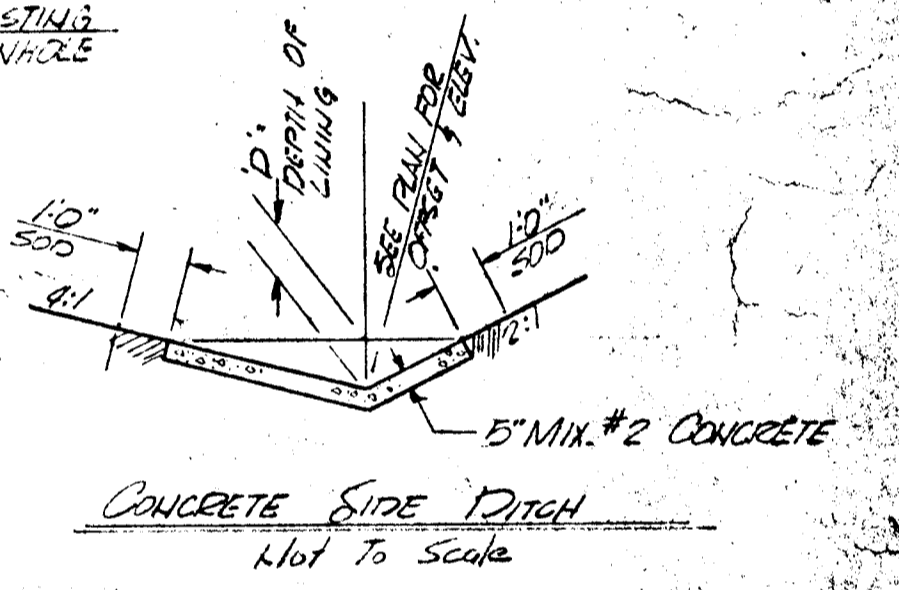
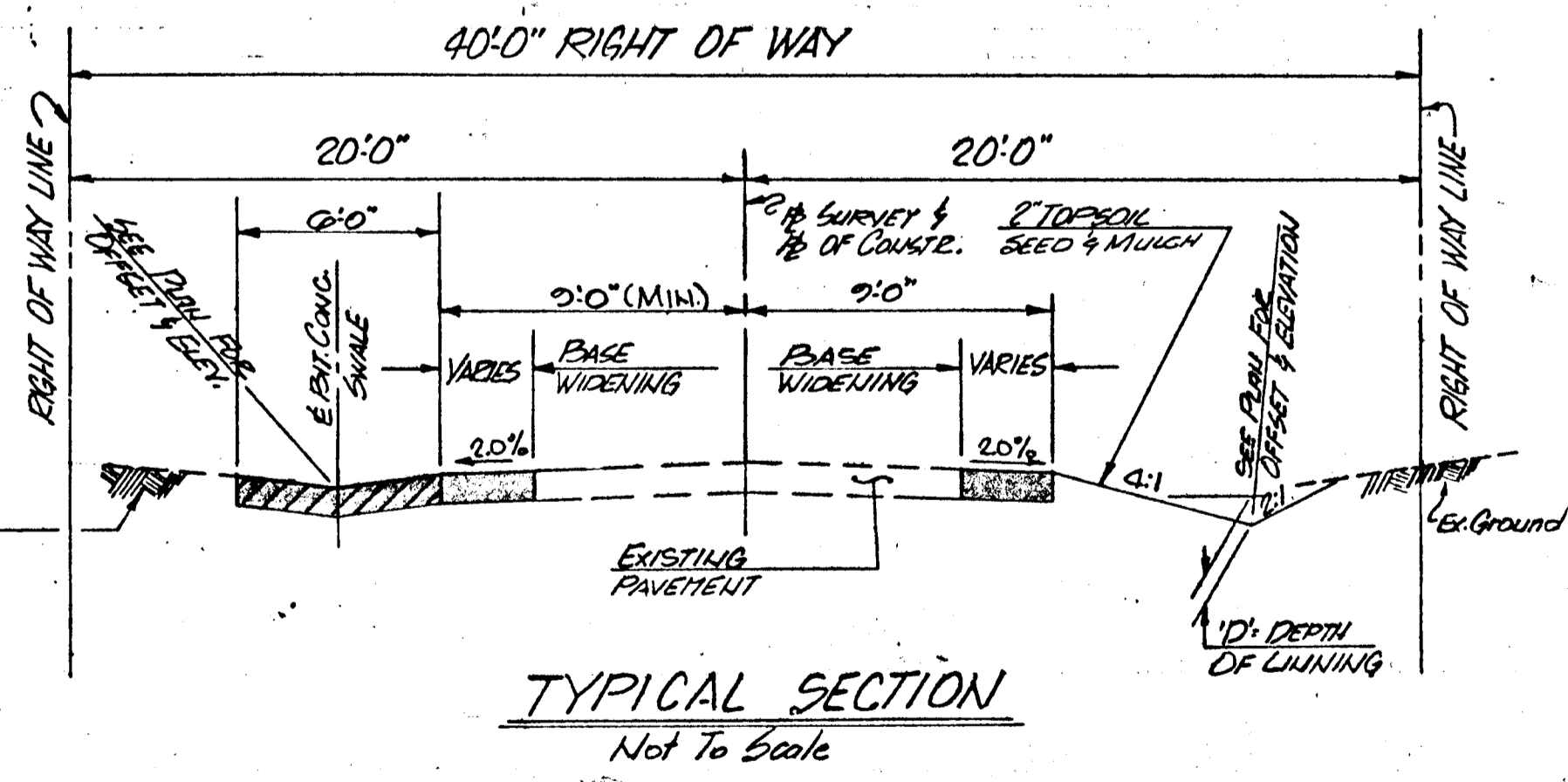


STA. 1840 TO STA. 2405+RT.
CONSTRUCT 1051' L.F. BITUMINOUS CONCRETE SWALE.

STA. 1840 TO STA. 1840+RT.
CONSTRUCT 20' L.F. TRANSITION FROM BITUMINOUS CONCRETE SWALE TO SIDE DITCH.
NOTE: AT THE DISCRETION OF THE ENGINEER, CONSTRUCT CONCRETE DRIVEWAY WITH SWALE TO INSURE FLOW.

STA. 1842 TO STA. 1847+RT.
CONSTRUCT 48' L.F. SIDE DITCH (D=10)

STA. 1840 TO STA. 1840+RT.
INSTALL 20' L.F. BITUMINOUS CONCRETE SWALE.



LEGEND

- BASE WIDENING (SEE PAVING DETAIL)
- BITUMINOUS CONCRETE SWALE (SEE SWALE DETAIL)
- 6" CRUSHER RUN (CR-G) FOR DRIVEWAYS
- 1" BITUMINOUS CONCRET. SURFACE COURSE
- 7" MIX NO. 2 CEMENT CONCRETE - FOR DRIVEWAYS
- TRIPLE SURFACE TREATMENT

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Works: *Mark N. ...*
Date: *1-29-13*

Chief, Bureau of Engineering: *...*
Date: *...*

Chief, Roads, Bridges, & Storm Drainage Division: *...*
Date: *...*

Johnson, Mirmiran & Thompson, P. A.
ENGINEERS • PLANNERS • SURVEYORS • LANDSCAPE ARCHITECTS
810 GLENAGLES COURT • BALTIMORE, MARYLAND 21204 • (301) 821-6500

STORM DRAIN & ROADWAY PLAN
HARWOOD PARK

HARWOOD COMMUNITY ROADS CAPITAL PROJECT J-O-4063
HARWOOD PARK STORM DRAINS CAPITAL PROJECT D-6-1039
ELECTION DISTRICT NO. 1
HOWARD COUNTY, MARYLAND

DRAWING NO. 23
SCALE: HORIZ. 1"=50'
VERT. 1"=5'

DES. RWZ
CHK. JLS

STA. 19+70 TO STA. 14+05-RT.
INSTALL 295 L.F. BITUMINOUS
CONCRETE SWALE

STA. 12+71-RT.
INSTALL 12 L.F. 18"x11" B.C.C.M.P.A.
TYPE 'C'; NO. 14 GA.

STA. 10+24 TO STA. 13+40-RT.
INSTALL 212 L.F. CONCRETE SIDE
DITCH (D=1.0)

NOTE: FOR CONSTRUCTION IN
MELROSE AVE. SEE RE-DESIGN
PLANS.

STA. 13+05-RT.
INSTALL 26 L.F. 18"x11" B.C.C.M.P.A.
TYPE 'C'; NO. 14 GA.

STA. 11+50-RT.
INSTALL 38 L.F. 25"x16" B.C.C.M.P.A.
TYPE 'S'; NO. 14 GA.

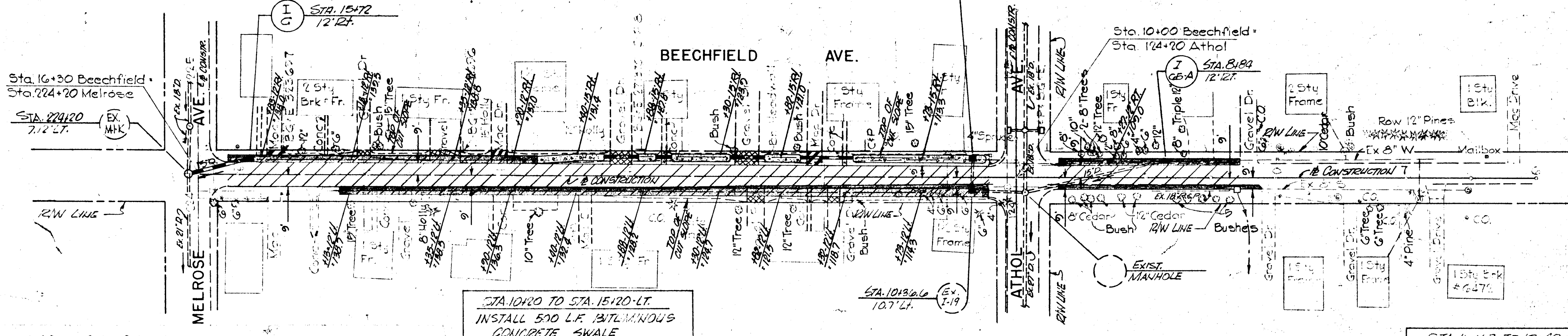
NOTE: FOR CONSTRUCTION IN
ATHOL AVE. SEE RE-DESIGN
PLANS.

NOTE: IF NECESSARY ADJUST TAPS OF
INLETS I-19 AND I-20 TO CORRECT
TO DITCH AND SWALE SECTIONS.

STA. 8+21 TO STA. 2+67-RT.
INSTALL 140 L.F. BITUMINOUS
CONCRETE SWALE.

STA. 8+21-RT.
1. REMOVE EXISTING BRICK JUNCTION CHAMBER
2. CONSTRUCT NEW JUNCTION CHAMBER
AS FOLLOWS:
a. CONSTRUCT INVERT OF JUNCTION CHAMBER TO
MATCH INVERT OF LOWEST INCOMING PIPE.
b. CONNECT ALL EXISTING DRAINS TO NEW
JUNCTION CHAMBER.
c. INSTALL 18" D.C.C. PIPE; CLASS 4 OUTFALL
PIPE TO MATCH GRADE OF EXISTING
OUTLET DITCH.
d. INSTALL WIR TYPE GRATE AND GROUND
CHAMBER AS DIRECTED BY THE ENGINEER.

NOTE: THE CONTRACTOR SHALL TAKE
CAUTION IN GRADING THE
SWALE NEAR THE EXISTING
CEDAR TREES LEFT OF
STATION 10+60.



STA. 17+22 TO STA. 17+05-RT.
INSTALL 133 L.F. 22"x13" B.C.C.M.P.A.
(TYPE 'C'; NO. 14 GA.)

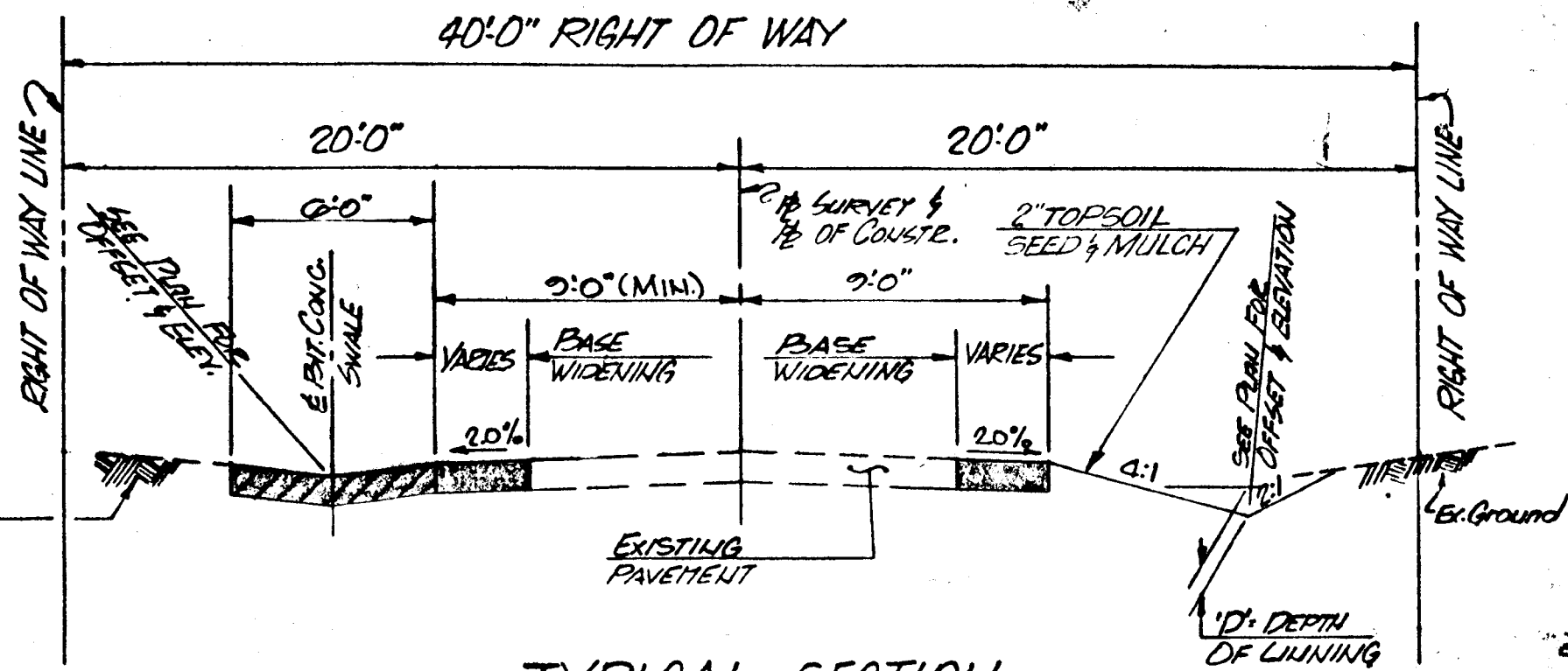
STA. 17+25 TO STA. 18+92-RT.
INSTALL 167 BITUMINOUS
CONCRETE CURB

STA. 10+67 TO 17+40-RT.
INSTALL 90 L.F. CONCRETE SIDE
DITCH (D=1.0)

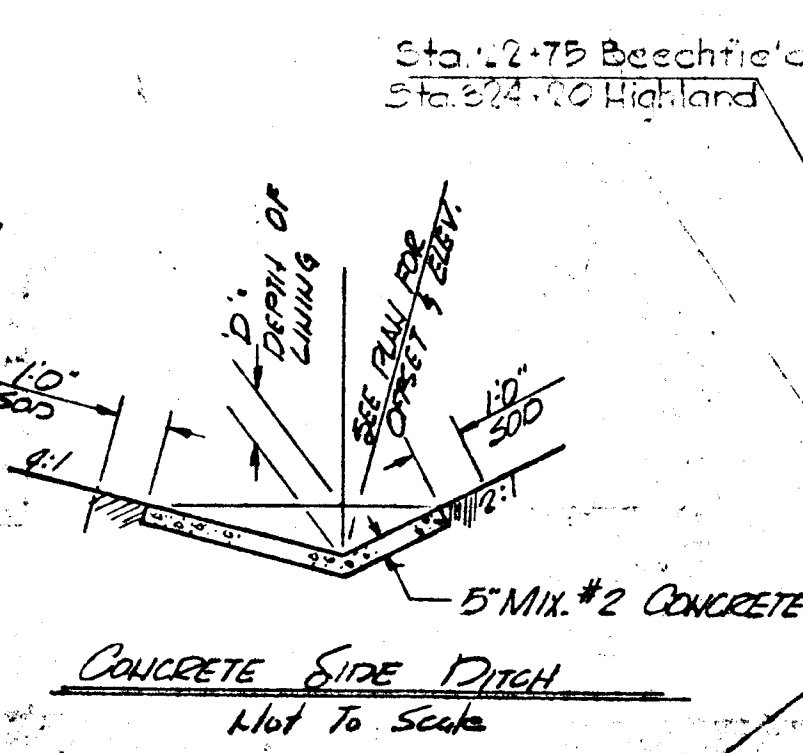
STA. 17+40 TO STA. 17+60-RT.
CONSTRUCT 20 L.F. CONCRETE
TRANSITION FROM BITUMINOUS
CONCRETE SWALE TO CONCRETE
SIDE DITCH.

STA. 17+60 TO STA. 22+45-RT.
CONSTRUCT 295 L.F. BITUMINOUS
CONCRETE SWALE

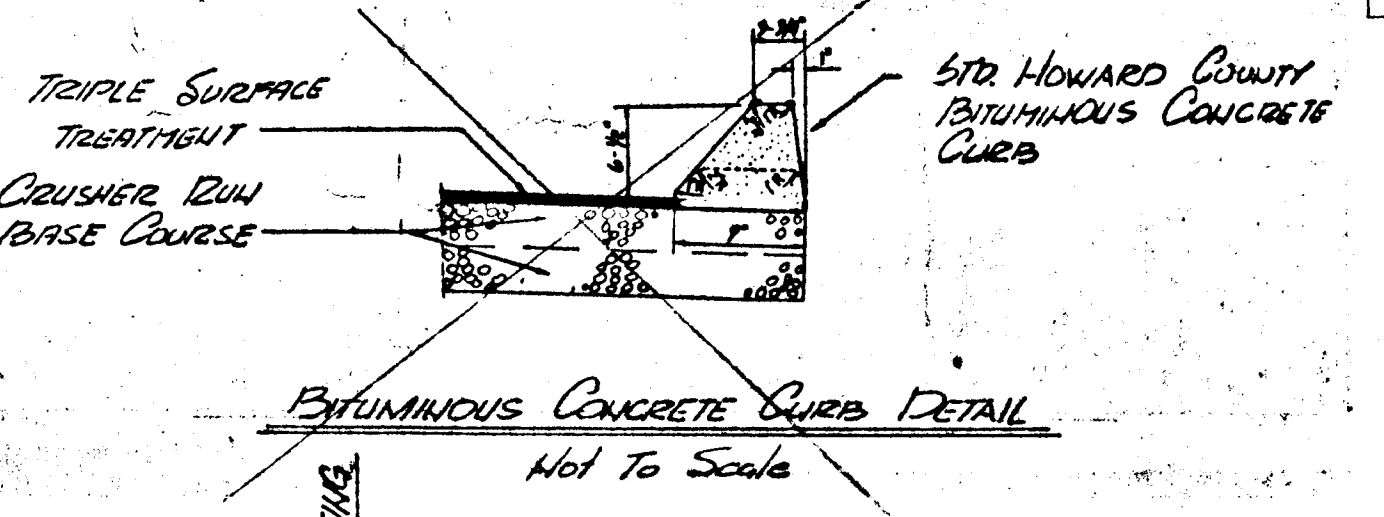
STA. 10+20 TO STA. 15+20-LT.
INSTALL 500 L.F. BITUMINOUS
CONCRETE SWALE



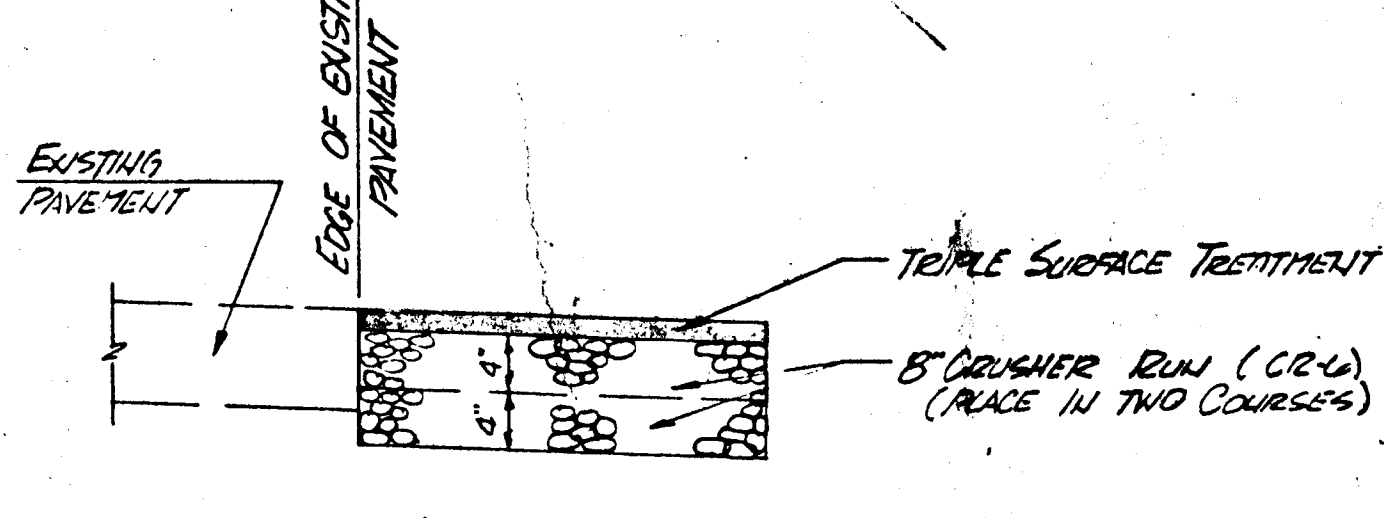
TYPICAL SECTION
Not To Scale



CONCRETE SIDE DITCH
Not To Scale



BITUMINOUS CONCRETE CURB DETAIL
Not To Scale

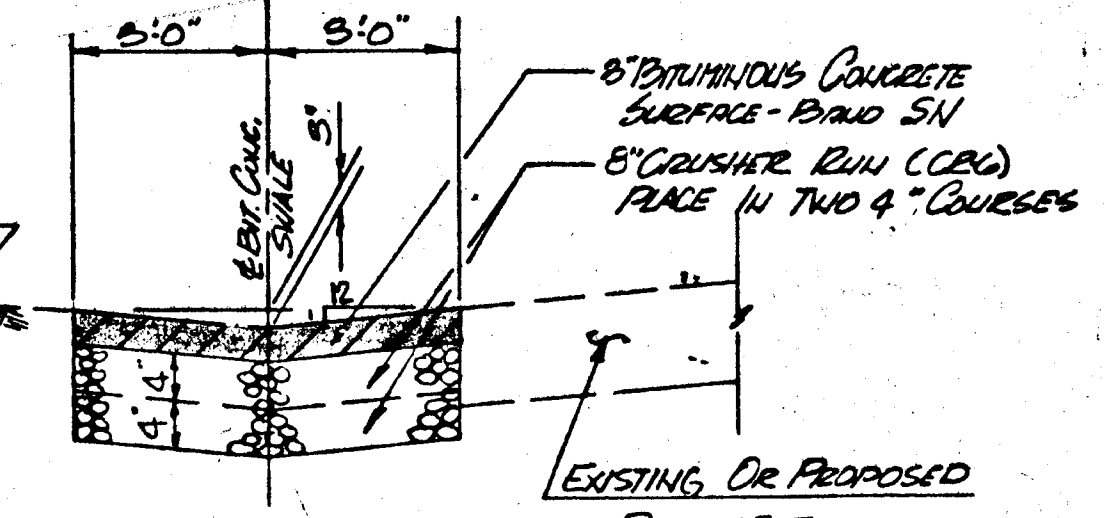


BASE WIDENING
PAVING DETAIL
Not To Scale

STA. 18+00 TO STA. 22+45-LT.
CONSTRUCT 355 L.F. BITUMINOUS
CONCRETE SWALE

STA. 10+67 TO STA. 18+70-LT.
INSTALL 123 L.F. CONCRETE SIDE
DITCH (D=0.6)

STA. 18+70 TO STA. 18+70-LT.
CONSTRUCT 20 L.F. CONCRETE
TRANSITION FROM BITUMINOUS
CONCRETE SWALE TO CONCRETE
SIDE DITCH.



BITUMINOUS CONCRETE SWALE
Not To Scale

- LEGEND**
- BASE WIDENING
(SEE PAVING DETAIL)
 - BITUMINOUS CONCRETE SWALE
(SEE SWALE DETAIL)
 - 6" CRUSHER RUN (CR-6) FOR DRIVEWAYS
 - 1" BITUMINOUS CONCRETE SURFACE COURSE
4" CRUSHER RUN (CR-4)
 - 7" MIX NO. 2 CEMENT CONCRETE - FOR DRIVEWAYS
 - TRIPLE SURFACE TREATMENT

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
John F. Norman, 4/29/83, Director of Public Works
W. Sweeney, 4/29/83, Chief, Bureau of Engineering
Shea Beth Anderson-Police, 4/29/83, Chief, Roads, Bridges, & Storm Drainage Division

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HARWOOD COMMUNITY ROADS CAPITAL PROJECT J-O-4063
HARWOOD PARK STORM DRAINS CAPITAL PROJECT D-6-1039
ELECTION DISTRICT NO. 1
HOWARD COUNTY, MARYLAND
DRAWING: SCALE: DES: PACE
NO. 22: SCALE: 1/4"=1'-0"
REVISIONS: 1/4"=1'-0"
SHEET 8 OF 7: DATE: 4/29/83
OF 25: DRW: PACE
CHK: G.L.

STA 16+45 TO 19+65 ± 13 RT.
CONSTRUCT 320 L.F. BITUM.
CONCRETE CURB.

NOTE: FOR CONSTRUCTION IN
MELROSE AVENUE SEE RE-DESIGN PLANS

NOTE: FOR CONSTRUCTION IN
ATHOL AVENUE SEE RE-DESIGN PLANS

STA 7+80 ± RT
AT THE DIRECTION OF THE
ENGINEER, ADJUST TOP OF
EXISTING INLET TO PICK UP
FLOW FROM DITCH.

STA 7+80 ± TO STA 9+75 ± RT
CONSTRUCT 195 LF SOD SIDE DITCH
(SOD FULL DEPTH)

STA 10+35 TO STA 12+35 ± 9 RT
CONTRACTOR SHALL TEST PIT TO
DETERMINE EXACT LOCATION OF
EXIST. 8" WATER BEFORE CONSTR.
PROP. 15" STORM DRAIN

STA 16+80 ± 7.5 ± RT
CONTRACTOR SHALL TEST
PIT TO DETERMINE EXACT
LOCATION OF EXIST. 8"
WATER BEFORE CONSTR.
PROP. 15" STORM DRAIN

STA 10+25 ± TO STA 16+05 ± RT
CONSTRUCT 580 L.F. BITUMINOUS
CONCRETE CURB. CENTERLINE ELEVATIONS
ARE 0.2' FT LOWER THAN TOP OF
CURB ELEVATIONS

STA 18+65 15' RT
INSTALL 32 LF 22" x 13" BCCMPA
TYPE C, NO. 14 GA.

STA 16+75 ± TO STA 20+95 ± RT
CONSTRUCT 320 LF CONCRETE
SIDE DITCH (1 FT. DEPTH)

STA 19+48 15' RT
INSTALL 26 LF 22" x 13" BCCMPA
TYPE C, NO. 14 GA.

STA 18+35
14' RT.

STA 19+65
14' FT.

ADJUST DITCH TO
MEET PROP. HEADWALL

MATCH LINE THIS SHEET

MATCH LINE THIS SHEET

MELROSE AVENUE

EUCLID AVENUE

ATHOL AVENUE

Sta. 10+00 Euclid Ave.
Sta. 12+10 Athol Ave.

STA 16+65 TO STA 21+65 ± LT
INSTALL 500 ± L.F. BITUMINOUS
CONCRETE SWALE

STA 18+12 15' RT
INSTALL 26 LF 22" x 13" BCCMPA
TYPE C, NO. 14 GA.

STA 17+00 13' RT
INSTALL 35 LF 25" x 16" BCCMPA
TYPE C, NO. 14 GA.

STA 17+60 15' RT
INSTALL 26 LF 22" x 13" BCCMPA
TYPE C, NO. 14 GA.

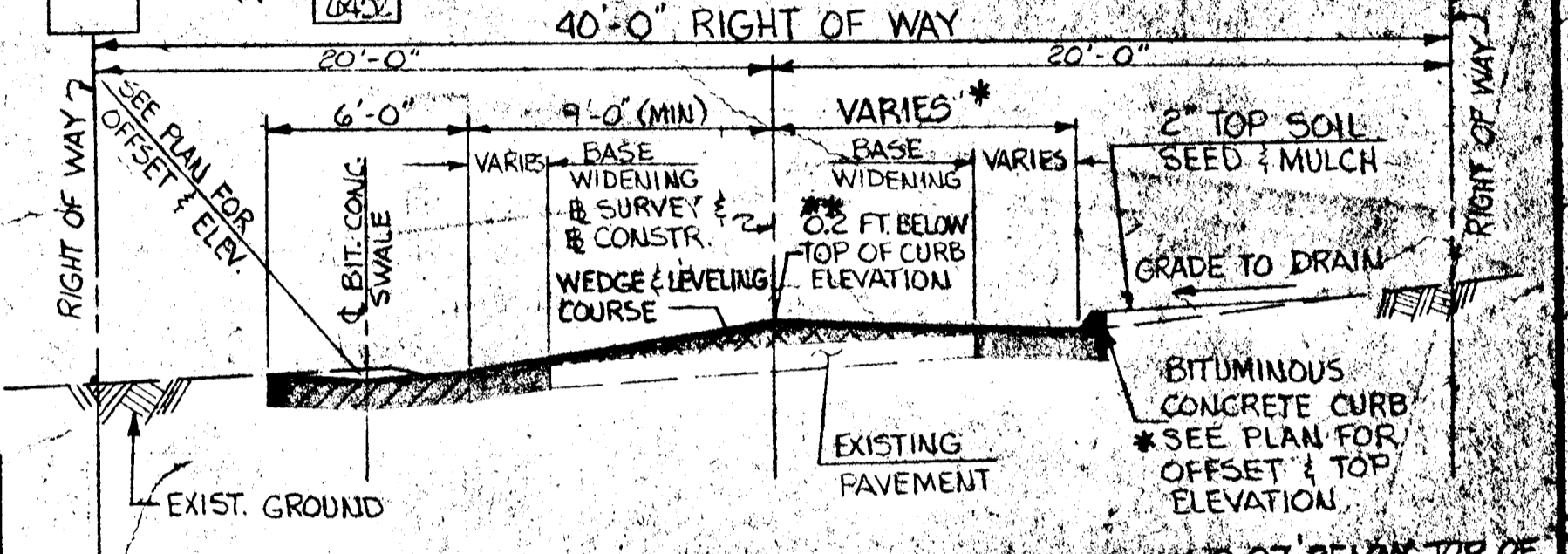
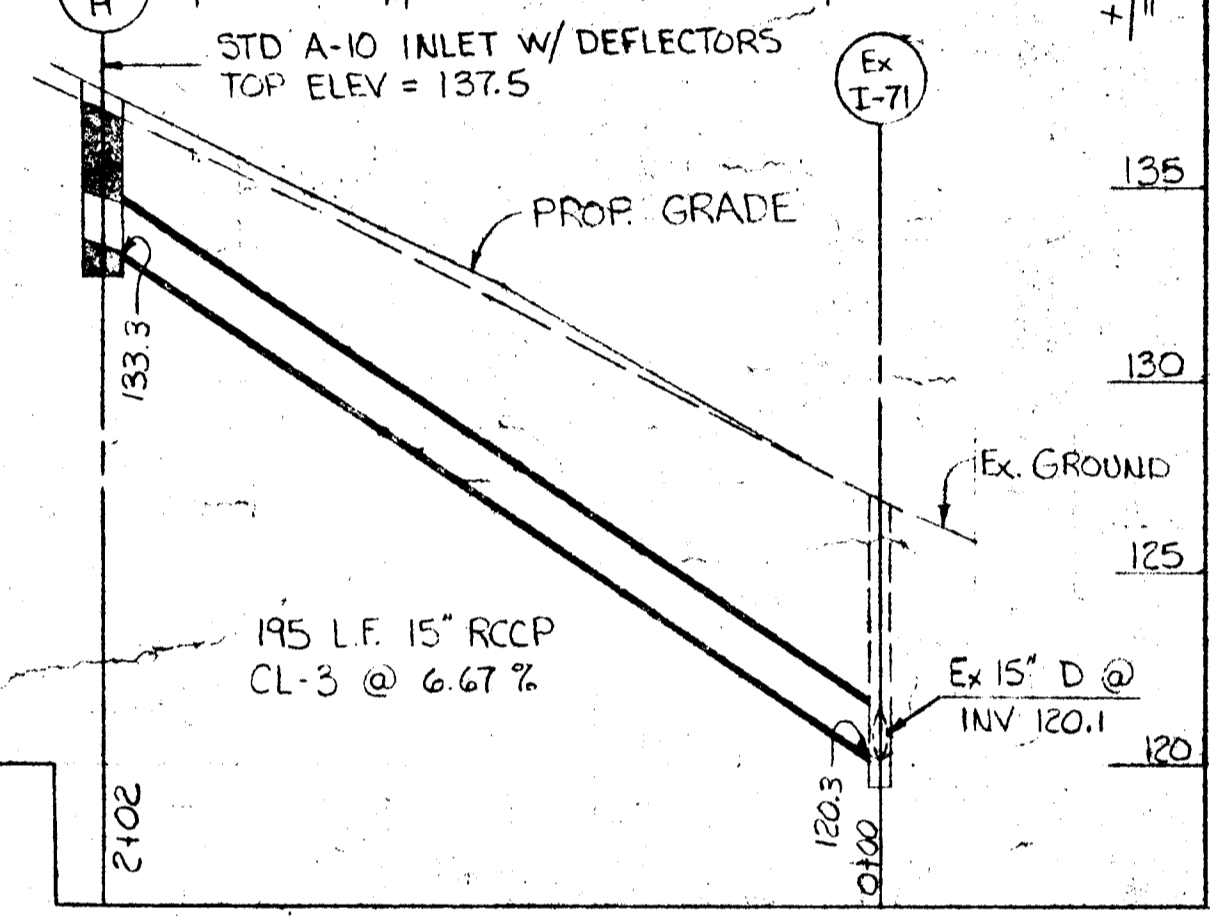
STA 21+20 TO STA 22+50 RT
INSTALL 130 L.F. BITUMINOUS
CONCRETE SWALE

STA 10+25 TO STA 14+00 ± LT
INSTALL 375 ± L.F. BITUMINOUS
CONCRETE SWALE

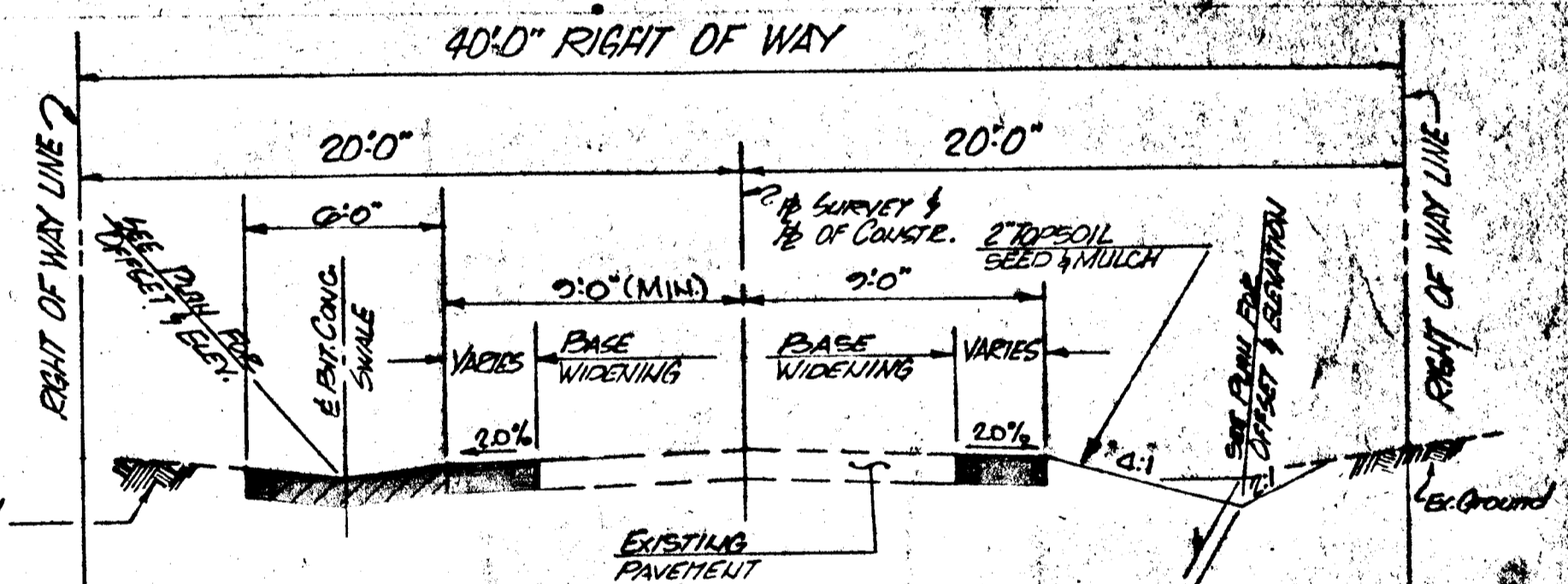
STA 18+15 ± TO STA 18+55 ± LT
AT THE DIRECTION OF THE ENGINEER,
REMOVE AND REPLACE APPROX.
40 LF OF EXISTING FENCE.

STA 10+10 ± LT
RELOCATE EXISTING
FIRE HYDRANT

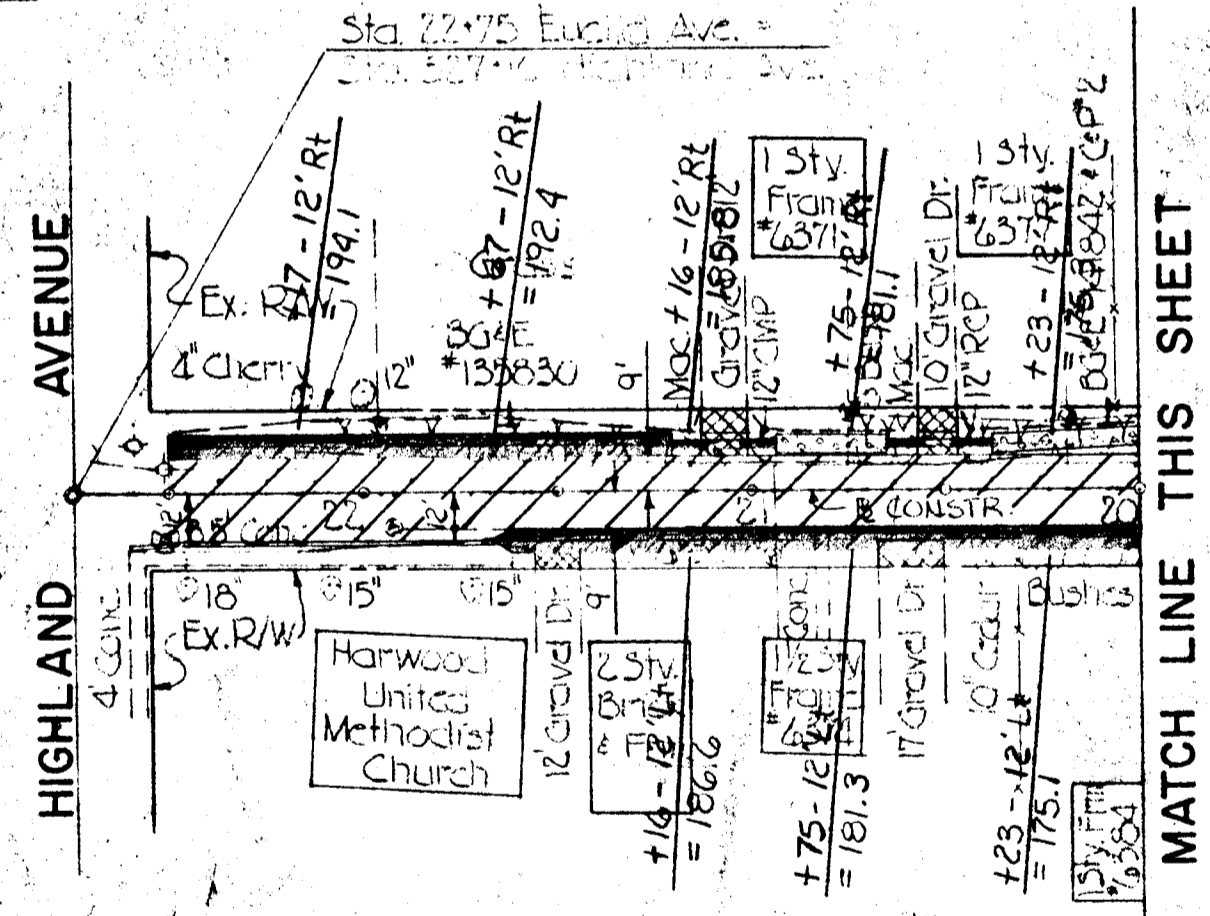
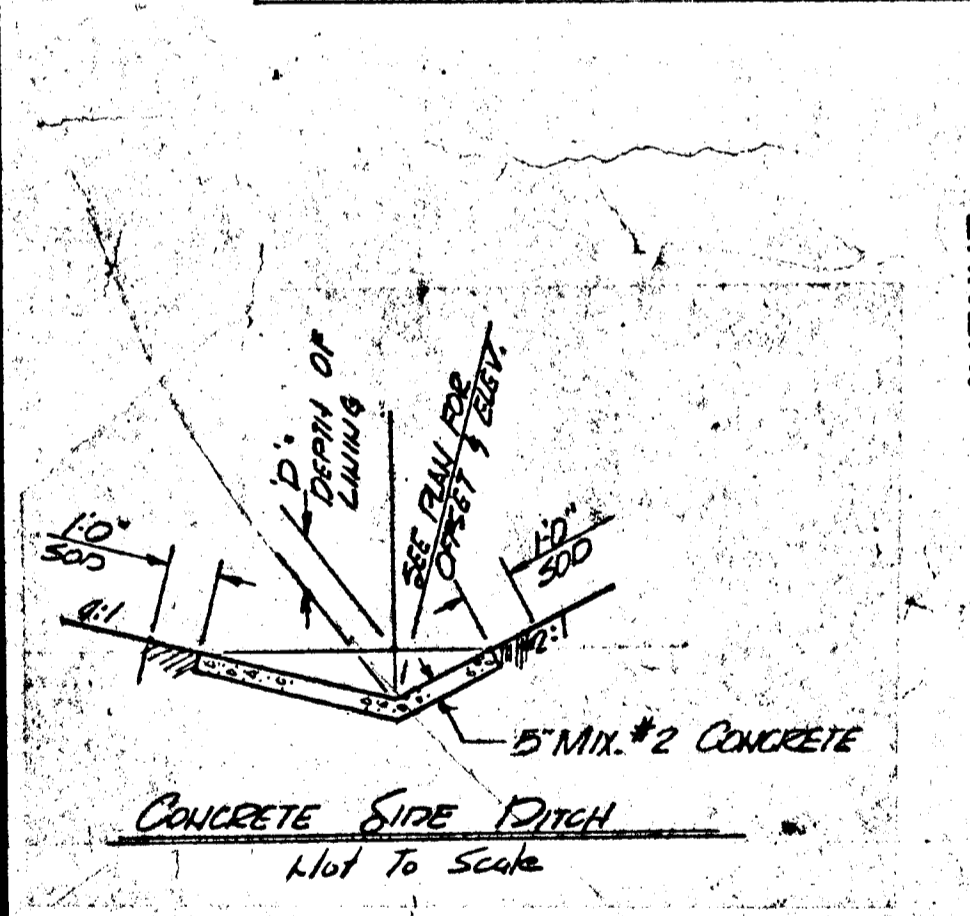
STA 8+50 12' RT
INSTALL 32 LF 18" x 11" BCCMPA
TYPE C, NO. 14 GA.



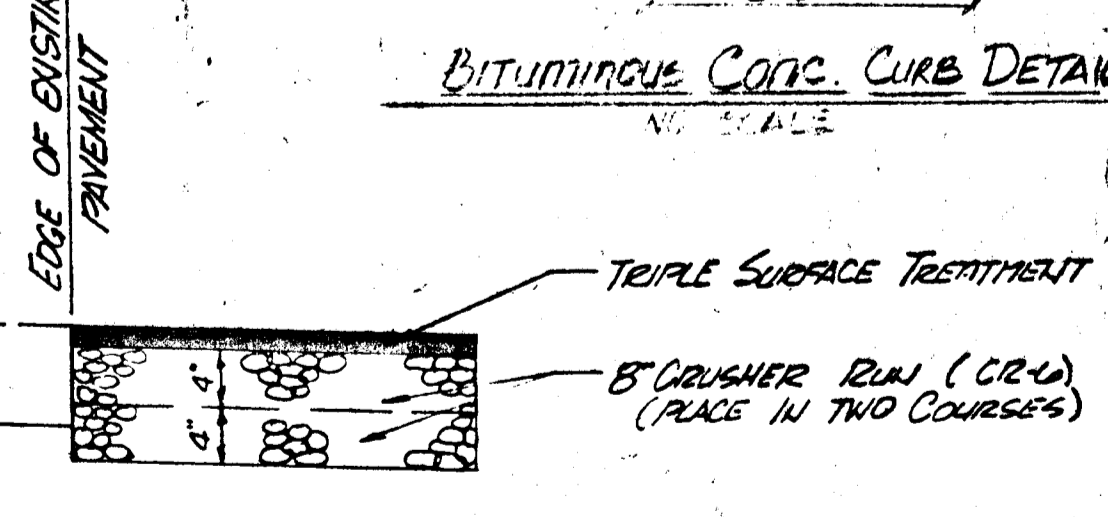
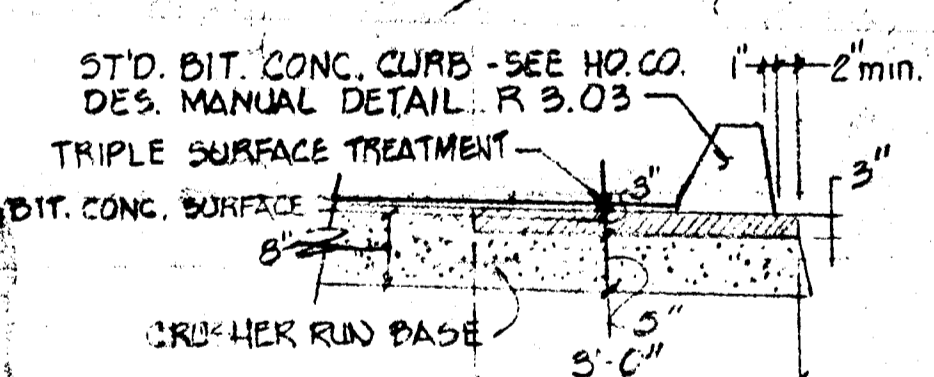
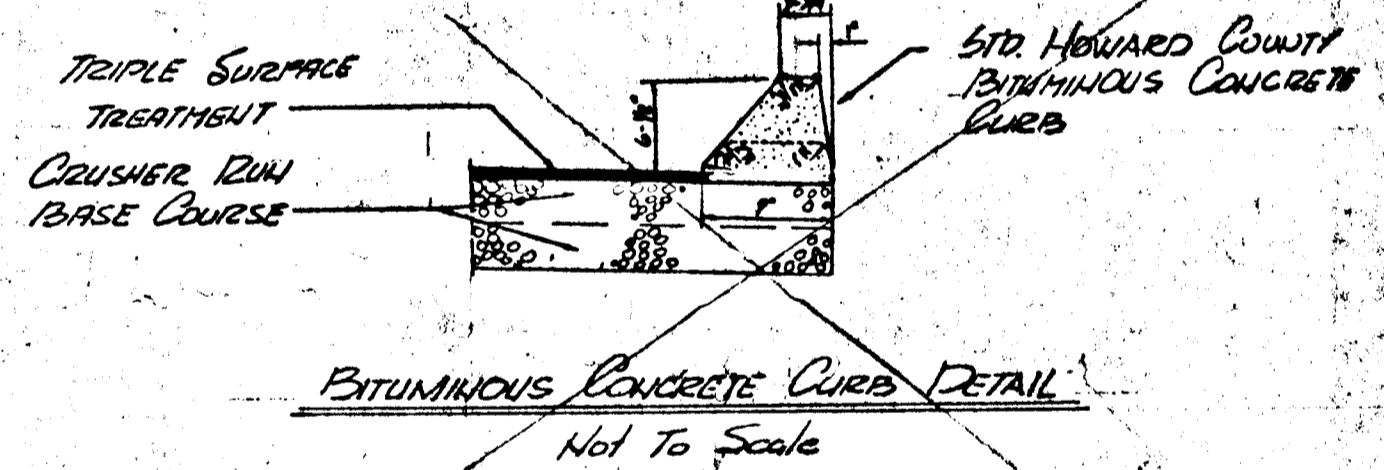
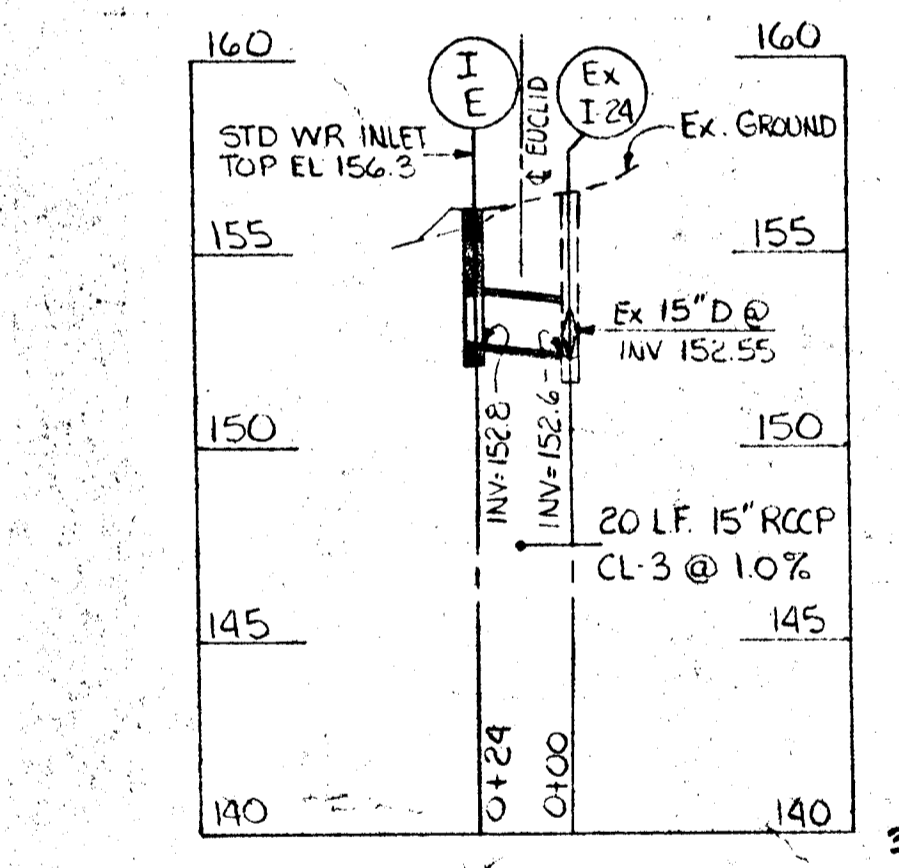
TYPICAL SECTION
STA 10+20 TO STA 19+35
NOT TO SCALE



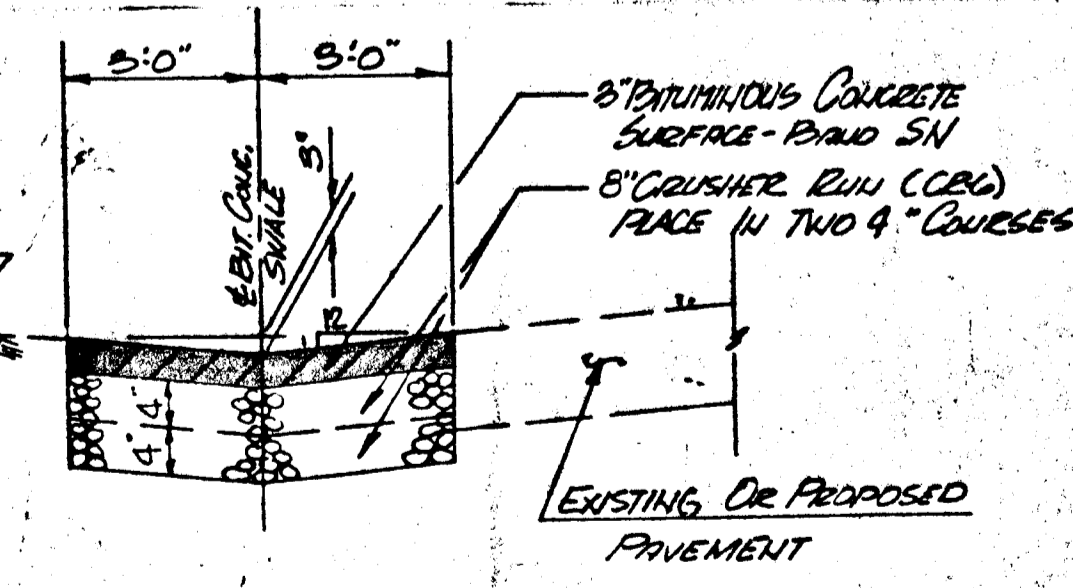
TYPICAL SECTION
NOT TO SCALE



MATCH LINE THIS SHEET



BASE WIDENING
PAVING DETAIL
NOT TO SCALE



BITUMINOUS CONCRETE SWALE
NOT TO SCALE

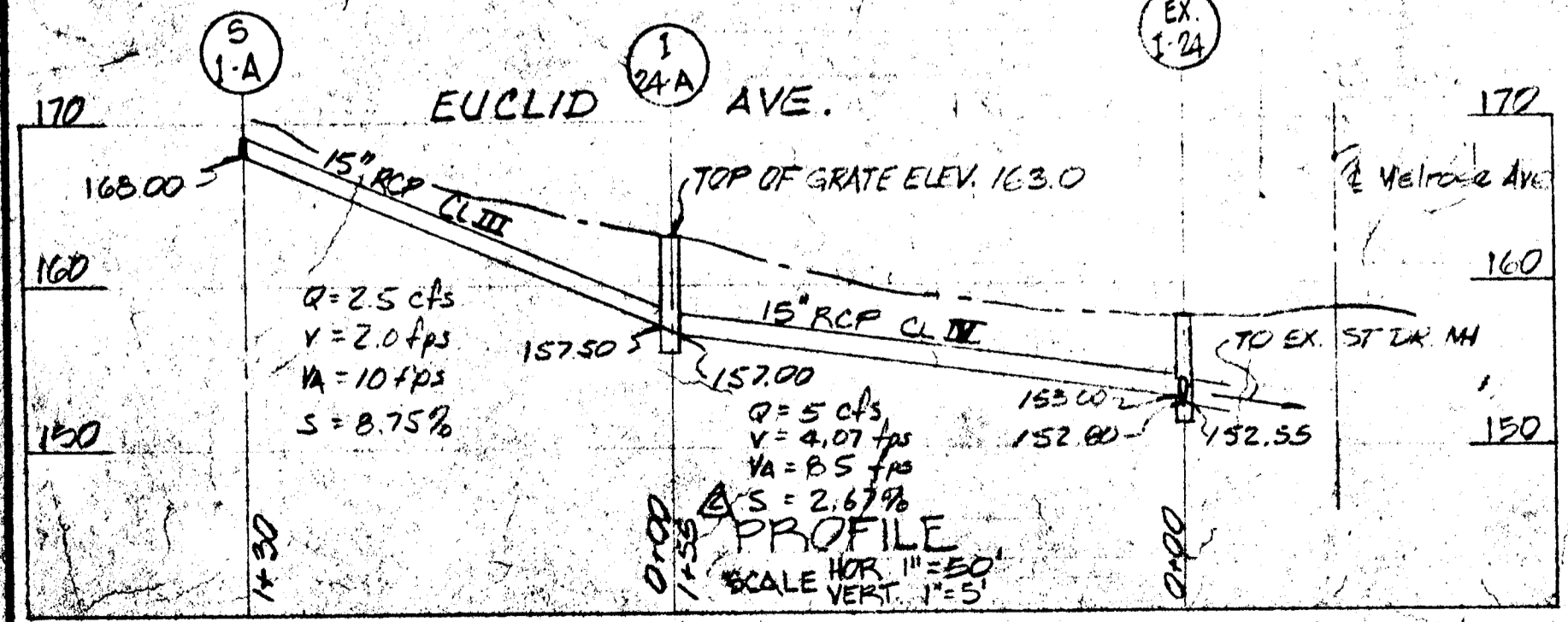
LEGEND

- BASE WIDENING
(SEE PAVING DETAIL)
- BITUMINOUS CONCRETE SWALE
(SEE SWALE DETAIL)
- 6" CRUSHER RUN (CR-6) FOR DRIVEWAYS
- 1" BITUMINOUS CONCRETE SURFACE COURSE
6" CRUSHER RUN (CR-6)
- 7" MIX NO. 2 CEMENT CONCRETE - FOR DRIVEWAYS
- TRIPLE SURFACE TREATMENT

STA 21+65 ± TO 22+60 LT.
CONSTRUCT 95 LF BITUM.
CONCRETE CURB.

STA 20+51 12' RT
INSTALL 26 LF 18" x 11" BCCMPA
TYPE C, NO. 14 GA.

STA 21+06 12' RT.
INSTALL 26 LF 18" x 11" BCCMPA
TYPE C, NO. 14 GA.



DEPARTMENT OF PUBLIC WORKS
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REV. NO.	REV. DATE	REVISION DESCRIPTION
2	6-6-83	ADDED BIT CONC CURB 16+45-17+65 RT.

HARWOOD PARK

HARWOOD COMMUNITY ROADS CAPITAL PROJECT J-0-4063
HARWOOD PARK STORM DRAINS CAPITAL PROJECT D-6-1039

ELECTION DISTRICT NO. 1
HOWARD COUNTY, MARYLAND

DRAWING	SCALE
NO. 25 (REVISION ON SHEETS 6A-7) OF 25	HORIZ: 1"=50' VERT: 1"=5'