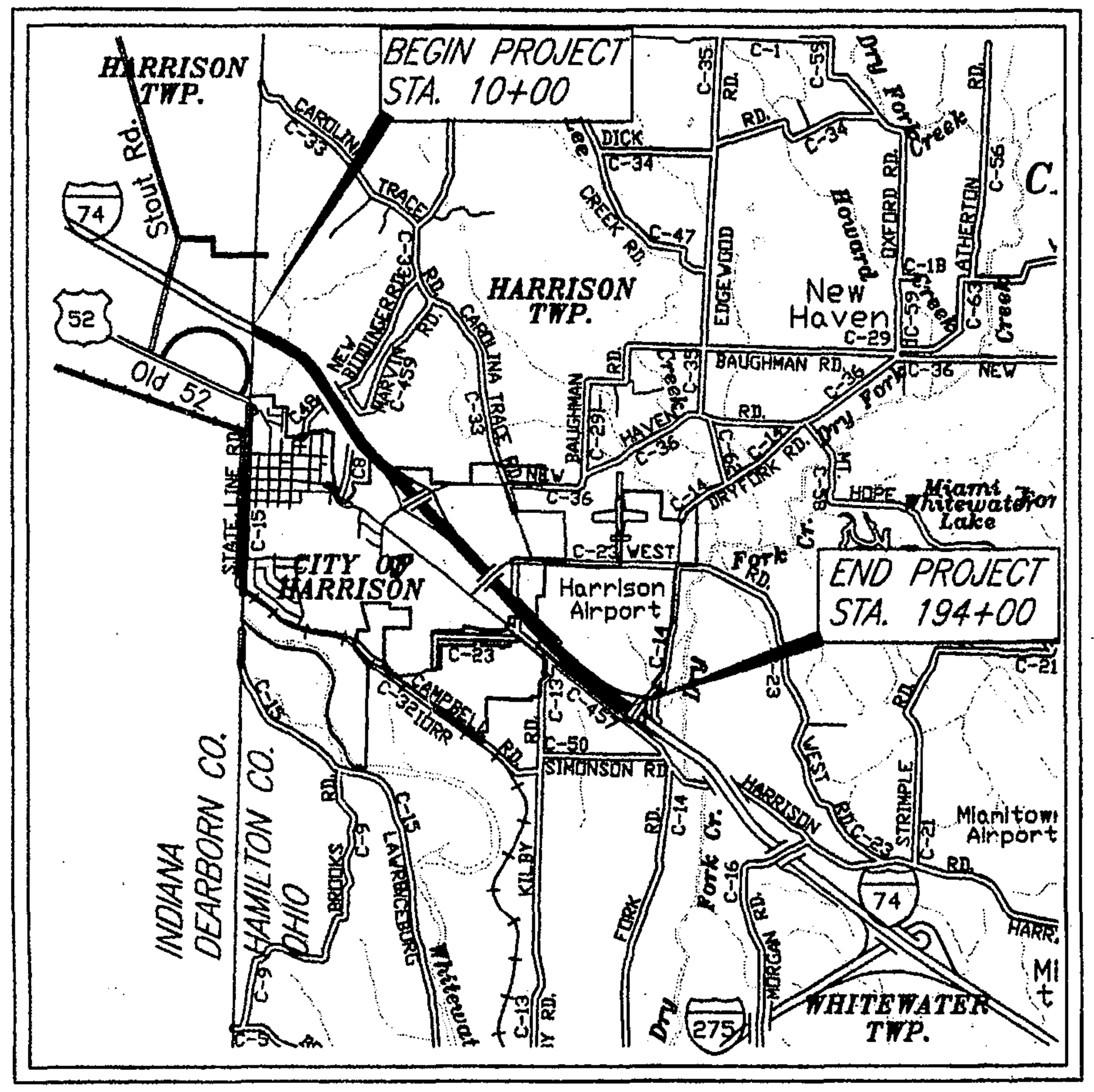


LOCATION MAP

LATITUDE: 39°15'31"N LONGITUDE: 84°47'50"W

SCALE IN MILES

0 1 2 3 4

N

Portion to be improved
Interstate Highway
State & Federal Routes
Other Roads

DESIGN DESIGNATION

See Sheet 2

DESIGN EXCEPTIONS

Design Feature	Approval Dates	Sheet Numbers
None Required		

EARTH DISTURBED AREAS

Project Earth Disturbed Area	45 Acres
Estimated Contractor Earth Disturbed Area	4 Acres
NOI Earth Disturbed Area	49 Acres

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

25862
020

Plans Prepared By
URS
36 East Seventh St.
Suite 2300
Cincinnati, OH 45202

PROJECT
DATE OF LETTING ______________, 19__
CONTRACT NO.

HAM-IR 74-0.00
040581 PID - 21801
DIST 8 11/17/2004

0T001020.DWG 19 AUG 2003

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

HAM-74-0.00

CITY OF HARRISON
HARRISON TOWNSHIP
(HARRISON TOWNSHIP, INDIANA)
HAMILTON COUNTY
(DEARBORN COUNTY, INDIANA)

INDEX OF SHEETS

PROJECT DESCRIPTION

This project will provide 3.48 miles of pavement rehabilitation, interchange lighting upgrade, widening of median shoulders, and upgrading roadway items. Incidental construction includes drainage, lighting, maintenance of traffic, traffic control and replacement of structure over New Biddinger Road, and structure work.

LIMITED ACCESS

This improvement is especially designed for through traffic and has been declared a limited access highway or freeway by action of the Director in accordance with the provisions of Section 5511.02 of the Ohio Revised Code.

2002 SPECIFICATIONS

The Standard Specifications of the State of Ohio, Department of Transportation, including changes and Supplemental Specifications listed in the proposal shall govern this improvement.

I hereby approve these plans and declare that the making of this improvement will not require the closing to traffic of the highway and that provisions for maintenance and safety of traffic will be as set fourth on the plans and estimates.

Under authority of Section 4511.21, Division (I) of the Ohio Revised Code, the revised prima facie speed limits as indicated herein are determined to be reasonable and safe, and are hereby established for the duration of this project. The prima facie speed limit or limits hereby established shall become effective when appropriate signs giving notice thereof are erected.

Project Earth Disturbed Area	45 Acres
Estimated Contractor Earth Disturbed Area	4 Acres
NOI Earth Disturbed Area	49 Acres

STANDARD CONSTRUCTION DRAWINGS (SEE GENERAL NOTES)

BP-2.1	7-28-00	RM-1.1	4-18-03	HL-10.11	4-19-02	MT-35.10	4-20-01	TC-07.65	7-18-03
BP-2.2	7-28-00	RM-4.2	4-18-03	HL-10.12	4-19-02	MT-95.30	4-19-02	TC-21.10	1-19-01
BP-2.3	7-28-00	RM-4.3	4-18-03	HL-10.13	1-17-03	MT-95.40	7-18-03	TC-21.20	1-19-01
BP-2.5	7-28-00	RM-4.4	4-18-03	HL-20.11	4-19-02	MT-96.11	4-19-02	TC-22.10	1-19-01
BP-3.1	7-28-00	RM-4.5	4-18-03	HL-30.11	4-19-02	MT-96.21	4-19-02	TC-22.20	1-19-01
BP-5.1	7-28-00	RM-4.6	4-18-03	HL-30.21	4-19-02	MT-96.25	4-20-01	TC-41.10	1-19-01
BP-6.1	7-28-00	RM-5.1	4-18-03	HL-30.22	4-19-02	MT-97.10	4-19-02	TC-41.20	1-19-01
BP-8.1	7-28-00			HL-40.10	4-19-02	MT-98.12	4-19-02	TC-41.41	1-19-01
BP-9.1	7-28-00	CB-1.1	7-19-02	HL-50.11	07-20-01	MT-98.13	4-19-02	TC-41.50	7-18-03
		CB-3.1	7-19-02	HL-60.11	07-20-01	MT-98.14	4-19-02	TC-42.10	1-19-01
F-2.1	7-28-00	HW-2.1	7-19-02	HL-60.12	07-20-01	MT-98.15	4-19-02	TC-42.20	4-20-01
F-3.1	7-28-00			HL-60.31	07-20-01	MT-98.16	4-19-02	TC-51.11	4-20-01
		DM-1.1	7-18-03			MT-98.17	10-18-02	TC-51.12	4-20-01
GR-1.1	4-18-03	DM-1.2	7-19-02			MT-98.18	10-18-02	TC-52.10	4-20-01
GR-2.1	4-18-03	DM-1.4	7-19-02			MT-99.20M	1-30-95	TC-52.20	4-20-01
GR-3.1	4-18-03	DM-4.1	7-19-02			MT-99.60	10-18-02	TC-61.10	1-19-01
GR-3.2	4-18-03	DM-4.2	7-19-02			MT-101.60	10-18-02	TC-65.10	10-19-01
GR-3.5	4-18-03	DM-4.3	7-19-02			MT-101.70	10-18-02	TC-65.11	10-19-01
GR-4.1	4-18-03	DM-4.4	7-19-02			MT-102.20	10-18-02	TC-65.12	10-19-01
GR-4.2	4-18-03					MT-105.10	10-18-02	TC-71.10	4-19-02
GR-5.1	4-18-03	AS-1-81	7-19-02			MT-105.11	10-18-02	TC-72.20	1-19-01
GR-5.2	4-18-03	BS-1-93	7-19-02					TC-73.10	1-19-01
GR-5.3	4-18-03	EXJ-4-87	7-19-02						
GR-6.1	4-18-03	GSD-1-96	7-19-02						
GR-6.2	4-18-03	ICD-1-82	7-19-02						
		PCB-91	7-19-02						
		SBR-1-99	7-19-02						
		VPF-1-90	7-19-02						

SUPPLEMENTAL SPECIFICATIONS

SS802	7-19-02
SS832	4-17-04
SS833	2-12-03
SS841	4-19-02
SS843	4-18-03
SS846	4-19-02
SS848	2-8-02
SS864	7-11-00
SS880	10-18-02
SS898	7-18-03
SS954	9-9-97
SS1003	4-19-02
SS1008	4-19-02
SS1058	4-13-99
SS1059	4-18-03
SS1063	4-19-02
SS1064	4-19-02

SPECIAL PROVISIONS

NWP #3&13
11-12-03

ENGINEERS SEAL:
SHEETS: 1-338 & 376-388
STATE OF OHIO STEPHEN C. CURLESS 43785 REGISTERED PROFESSIONAL ENGINEER
SIGNED: Stephen C Curless
DATE: 8/29/03

ENGINEERS SEAL:
SHEETS: 389-413
STATE OF OHIO MICHAEL JOHN ZWICK 59572 REGISTERED PROFESSIONAL ENGINEER
SIGNED:
DATE: 08/29/03

ENGINEERS SEAL:
SHEETS: 339-374
STATE OF OHIO MARION ODELL WORLEY, JR. E-37915 REGISTERED PROFESSIONAL ENGINEER
SIGNED: Marion O. Worley Jr.
DATE: 08/21/03

ENGINEERS SEAL:
SHEETS: 414-421
STATE OF OHIO JAMES E. PREVOST E-64055 REGISTERED PROFESSIONAL ENGINEER
SIGNED: James E. Prevost
DATE: 08/21/03

Approved ______________
Date Dec 4th 2003 District Deputy Director

Approved Gordon Proctor Jr.
Date 5-12-04 Director, Department of Transportation

FEDERAL PROJECT NO. E036 (291)

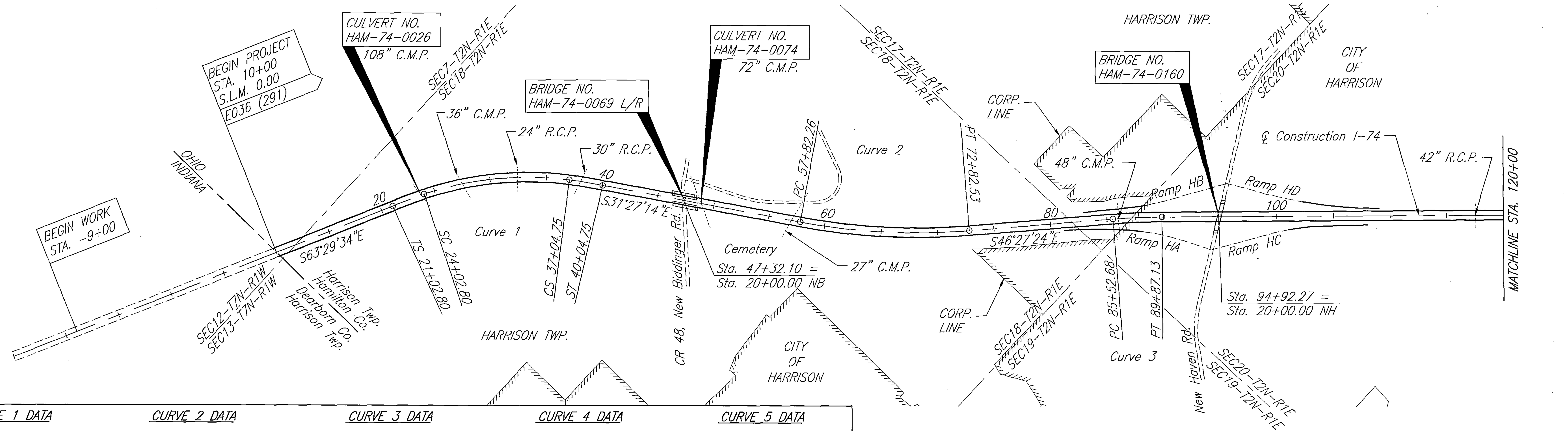
PID NO. 21801

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT NONE

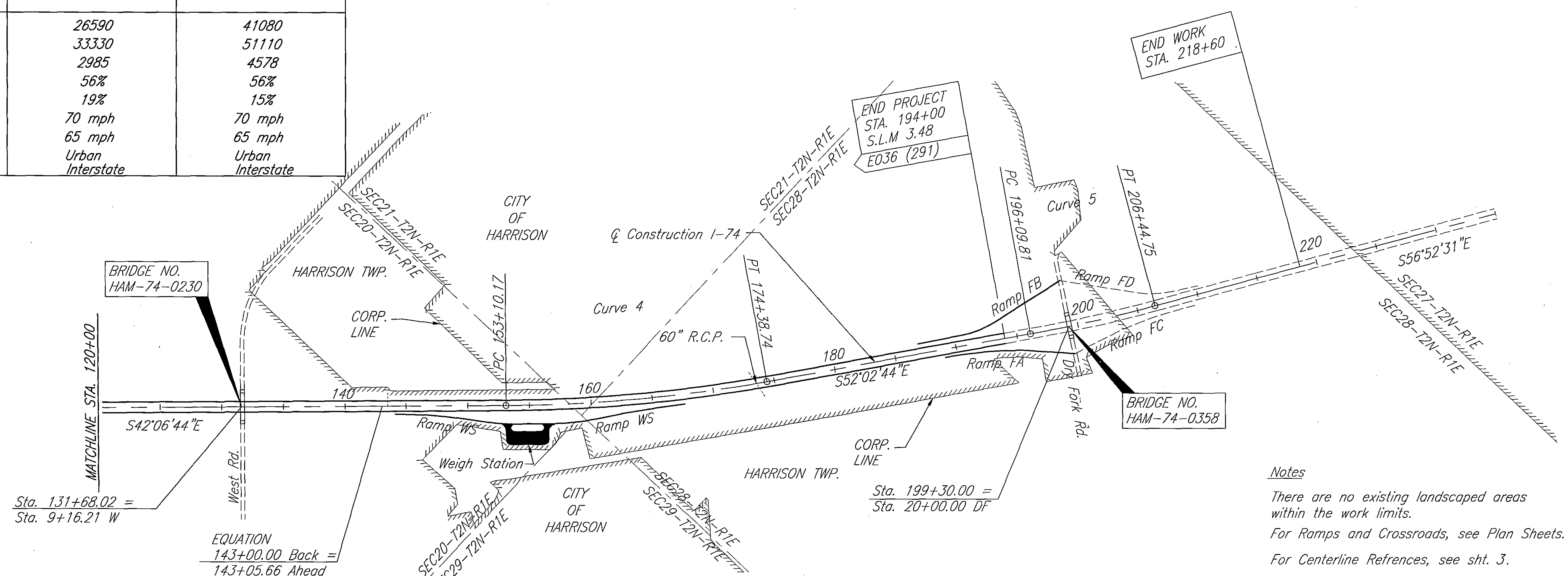
HAM-74-0.00

SCHEMATIC PLAN AND DESIGN DESIGNATION



CURVE 1 DATA	CURVE 2 DATA	CURVE 3 DATA	CURVE 4 DATA	CURVE 5 DATA
P.I. = STA. 30+75.68	P.I. = STA. 65+36.71	P.I. = STA. 87+70.01	P.I. = STA. 163+77.13	P.I. = STA. 201+27.59
Δ = 32°02'20" Rt.	Δ = 15°00'10" Lt.	Δ = 4°20'40" Rt.	Δ = 9°56'00" Lt.	Δ = 4°49'47" Lt.
D_c = 2°00'00"	D = 1°00'00"	D = 1°00'00"	D = 00°28'00"	D = 00°28'00"
R = 2864.79'	R = 5729.58'	R = 5729.58'	R = 12277.67'	R = 12277.67'
T_s = 972.88'	T = 754.45'	T = 217.33'	T = 1066.96'	T = 517.78'
E_s = 117.10'	L = 1500.28'	L = 434.44'	L = 2128.57'	L = 1034.94'
L_s = 300.00'	E = 49.46'	E = 4.12'	E = 46.27'	E = 10.91'
L_c = 1301.95'	e_{max} = 0.032 (NDC 0.033)	e_{max} = 0.032 (NDC 0.033)	e_{max} = NC (NDC 0.016)	e_{max} = NC (NDC 0.016)
e_{max} = 0.064 (NDC 0.055)				

DESIGN DESIGNATION	West of New Haven Rd.	East of New Haven Rd.
Current A.D.T. (2005)	26590	41080
Design Year A.D.T. (2025)	33330	51110
Design Hourly Volume (2025)	2985	4578
Directional Distribution	56%	56%
Trucks (24 hour B&C)	19%	15%
Design Speed	70 mph	70 mph
Legal speed	65 mph	65 mph
Design Functional Classification	Urban Interstate	Urban Interstate



Notes

There are no existing landscaped areas within the work limits.

For Ramps and Crossroads, see Plan Sheets.

For Centerline Refrences, see sht. 3.

HORIZONTAL SCALE IN FEET
0 250 500 1000

CALCULATED GAB
CHECKED REF

HAM-74-0.00

GB101020.DWG 14 AUG 2003

SCALED GROUND COORDINATES IN FEET					OHIO SOUTH STATE PLANE COORDINATE SYSTEM			
(S.P. x P.A.F.) P.A.F. = 1.000089559					HORIZONTAL = NAD83 (1995) VERTICAL = NAVD88			
Station	**Number**	**Northing**	**Easting**	**Elev.**	**Northing**	**Easting**	**Elev.**	**Description**
10+00	301	473381.296083	1312035.674938	573.65	144273.986585	399873.461273	174.85	Concrete Monument
15+00	302	473158.288302	1312483.322705	565.52	144206.019764	400009.892367	172.37	Concrete Monument
21+02.80	1	472889.534867	1313022.594388	557.18	144124.110892	400174.247985	169.83	Concrete Monument
24+02.80	303	472750.649521	1313288.361103	555.64	144081.782344	400255.246586	169.36	Concrete Monument
30+00	2	472405.901959	1313772.071846	567.90	143976.712487	400402.668713	173.10	Concrete Monument
40+04.74	3	471625.161063	1314400.084134	597.27	143738.763496	400594.070100	182.05	Concrete Monument
57+82.25	5	470108.757991	1315327.258787	643.66	143276.604305	400876.648191	196.19	Concrete Monument
70+00	304	469144.949213	1316067.662320	641.91	142982.861108	401102.303430	195.65	Concrete Monument
72+82.52	7	468945.486778	1316267.510371	636.75	142922.070282	401163.211785	194.08	Concrete Monument
80+00	8	468450.914065	1316788.226044	616.25	142771.337718	401321.912025	187.83	Concrete Monument
85+52.68	305	468070.669503	1317188.581877	601.05	142655.449323	401443.929799	183.20	Concrete Monument
89+87.12	9	467759.390273	1317491.932592	590.16	142560.579719	401536.383002	179.88	Concrete Monument
100+00	306	467008.140489	1318171.163126	586.82	142331.618832	401743.394344	178.86	Concrete Monument
105+00	11	466637.310613	1318506.460497	585.41	142218.599781	401845.584034	178.43	Concrete Monument
110+00	307	466266.492420	1318841.706629	583.66	142105.584293	401947.758108	177.90	Concrete Monument
115+00	12	465895.547617	1319177.014944	582.14	141992.530214	402049.951135	177.44	Concrete Monument
120+00	308	465524.737156	1319512.061375	580.91	141879.517082	402152.064347	177.06	Concrete Monument
130+00	309	464782.912329	1320182.778796	583.78	141653.428670	402356.481117	177.94	Concrete Monument
135+00	14	464411.983550	1320518.122153	584.03	141540.379477	402458.684824	178.01	Concrete Monument
140+00	310	464041.061743	1320853.429280	582.86	141427.332408	402560.877488	177.66	Concrete Monument
143+00	15	463817.488932	1321055.592988	582.30	141359.193382	402622.491591	177.49	Concrete Monument
148+00	311	463450.809279	1321387.039435	581.44	141247.439208	402723.507624	177.22	Concrete Monument
153+08.89	16	463073.252496	1321728.330973	580.13	141132.369976	402827.524179	176.82	Concrete Monument
159+00	312	462644.479679	1322134.956566	578.84	141001.691464	402951.452806	176.43	Concrete Monument
164+00	17	462297.278870	1322495.156814	577.43	140895.873924	403061.232232	176.00	Concrete Monument
169+00	313	461964.906119	1322868.692103	576.56	140794.575578	403175.075820	175.74	Concrete Monument
174+38.65	18	461624.166960	1323286.278194	575.03	140690.727374	403302.344915	175.27	Concrete Monument
180+00	314	461279.280168	1323728.813273	573.31	140585.615086	403437.217798	174.75	Concrete Monument
185+00	19	460971.599186	1324122.964028	572.62	140491.842133	403557.344431	174.53	Concrete Monument
190+00	315	460664.081029	1324517.337250	571.01	140398.118804	403677.538863	174.04	Concrete Monument
196+09.15	20	460289.717170	1324997.173760	564.25	140284.022688	403823.780227	171.98	Concrete Monument
201+00	316	459995.907389	1325389.897553	559.36	140194.477308	403943.471960	170.49	Concrete Monument
206+44.09	21	459687.698461	1325840.100522	551.44	140100.543453	404080.681811	168.08	Concrete Monument
210+00	317	459493.308888	1326138.293526	546.78	140041.298697	404171.563081	166.66	Concrete Monument
215+00	22	459220.249862	1326557.438865	540.86	139958.077594	404299.307396	164.85	Concrete Monument
Q 141	350	462846.408549	1321179.261397	583.87	141063.233995	402660.182423	177.96	Concrete Monument

All monument listed herein are "Survey Monuments" and shall not be disturbed
All monument elevations listed herein are based on conventional levelling from NGS Benchmark "Q 141".
Scaled ground coordinates are in U.S. Survey feet (1200/3937).
State Plane coordinate values are in metric as specified in O.R.C. 157.03.

CENTERLINE REFERENCES

HAM-74-0.00

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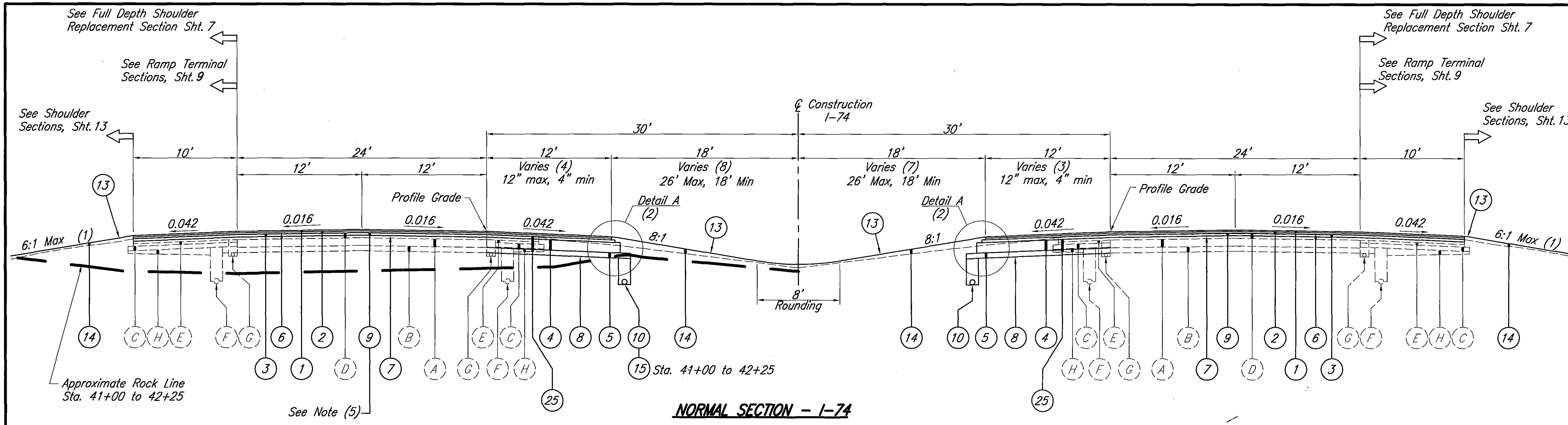

NORMAL SECTION - I-74

WESTBOUND

Sta. 10+00 to Sta. 20+00	=	1000.00 FT.
Sta. 41+00 to Sta. 46+20.74	=	520.74 FT.
Sta. 46+20.74 to Sta. 48+57.80	=	HAM-74-0069L
Sta. 48+57.80 to Sta. 56+75	=	817.20 FT.
Sta. 74+00 to Sta. 84+50	=	1050.00 FT.
Sta. 90+75 to Sta. 91+50	=	75.00 FT.
Sta. 98+70 to Sta. 126+70	=	2800.00 FT.
Sta. 135+80 to Sta. 143+00	=	720.00 FT.
Sta. Equation Sta. 143+00 Back = Sta. 143+05.66 Ahead		
Sta. 143+05.66 to Sta. 194+00	=	5094.34 FT.
Total	=	12,077.28 FT.

EASTBOUND

Sta. 10+00 to Sta. 20+00	=	1000.00 FT.
Sta. 41+00 to Sta. 46+20.74	=	520.74 FT.
Sta. 46+20.74 to Sta. 48+57.80	=	HAM-74-0069R
Sta. 74+00 to Sta. 84+50	=	1050.00 FT.
Sta. 90+75 to Sta. 91+50	=	75.00 FT.
Sta. 98+70 to Sta. 126+70	=	2800.00 FT.
Sta. 135+80 to Sta. 143+00	=	720.00 FT.
Sta. Equation Sta. 143+00 Back = Sta. 143+05.66 Ahead		
Sta. 143+05.66 to Sta. 194+00	=	5094.34 FT.
Total	=	11,260.08 FT.

LEGEND

NO.	ITEM	DESCRIPTION	NO.	ITEM	DESCRIPTION	NO.	ITEM	DESCRIPTION
1	442	1.5" Asphalt concrete surface course,	20		Not Used	A		Existing 9" Reinforced Concrete Pavement
		12.5 mm, Type A (446), with Supplement 1059				B		Existing 6" Aggregate Base
		Warranty Specification	21		Not Used	C		Existing 5" Stabilized Crushed Aggregate
2	442	2" Asphalt concrete intermediate course,	22		Not Used	D		Existing 5.5" Asphalt Concrete
		19 mm, Type A (446)	23		Not Used	E		Existing 3" Waterproofed Aggregate Base
3	301	3" Asphalt concrete base, PG 64-22	24		Not Used	F		Existing 6" Pipe Underdrain, to remain
4	302	12" Asphalt concrete base, PG 64-22	25	203	Excavation	G		Existing Shallow Underdrain, to remain
5	304	6" Aggregate base				H		Existing Variable Thickness Aggregate base
6	407	Tack coat for intermediate course, rate .06 gal/s.y.	26	442	1 5/8" Asphalt concrete surface course,	I		Existing 3" Asphalt Concrete
7	407	Tack coat, rate .075 gal/s.y.			12.5 mm, Type A (446)	J		Existing 5.5" Asphalt Concrete Base
8	204	Subgrade compaction	27	304	8" Aggregate base	K		Existing Approach Slab (T=13")
9	254	Pavement planing, asphalt concrete (Depth 2.5")	28	254	Pavement planing, asphalt concrete (Variable Depth)	L		Existing 2" Asphalt Concrete Surface
10	605	6" Shallow pipe underdrain (18"-30" Deep)				M		Existing Asphalt Concrete Base, Thickness Varies
11	606	Guardrail, Type 5	29	254	Pavement Planing, Asphalt Concrete (Depth 15.5"),	N		Existing 12" Reinforced Concrete Pavement
12	446	1.5" Asphalt concrete surface course,			As Per Plan	O		Existing 12" Non-Reinforced Concrete
		Type 1 , PG 64-28				P		Existing 1.5" Asphalt Concrete Surface
13	659	Seeding and mulching				Q		Existing 1.5" Asphalt Concrete
14	203	Embankment				R		Existing 4" Subbase
15	605	6" Shallow pipe underdrain (12" Deep)				S		Existing Aggregate Drain
16	526	Reinforced concrete approach slab (T=15"),				T		Existing 4" Concrete Walk
		As Per Plan				U		Existing 4" Shallow Pipe Underdrain, to remain
17	254	Pavement planing, asphalt concrete (Depth 1.5")				V		Existing Guardrail
18	452	12" Non-reinforced concrete pavement				W		Existing Engineered Fill (Do Not Disturb)
19		Not Used						

Notes:

(1) Unless otherwise shown on Cross Sections.
(2) See Sheet 13 for Detail A.
(3) Varies from 4' @ 10+00.00 to 12' @ 11+00.00
Varies from 12' @ 194+00.00 to 4' @ 195+00.00
(4) Varies from 4' @ 10+00.00 to 12' @ 15+60.00
Varies from 12' @ 194+00.00 to 4' @ 196+00.00
(5) Pavement Planing depth Varies from 2.5" @ 45+00 to 1.41" @ 46+00, from 1.36" @ 49+00 to 2.5" @ 50+00.

(7) Varies from 26' @ 10+00.00 to 18' @ 11+00.00
Varies from 18' @ 194+00.00 to 26' @ 195+00.00
(8) Varies from 26' @ 10+00.00 to 18' @ 15+60.00
Varies from 18' @ 194+00.00 to 26' @ 196+00.00

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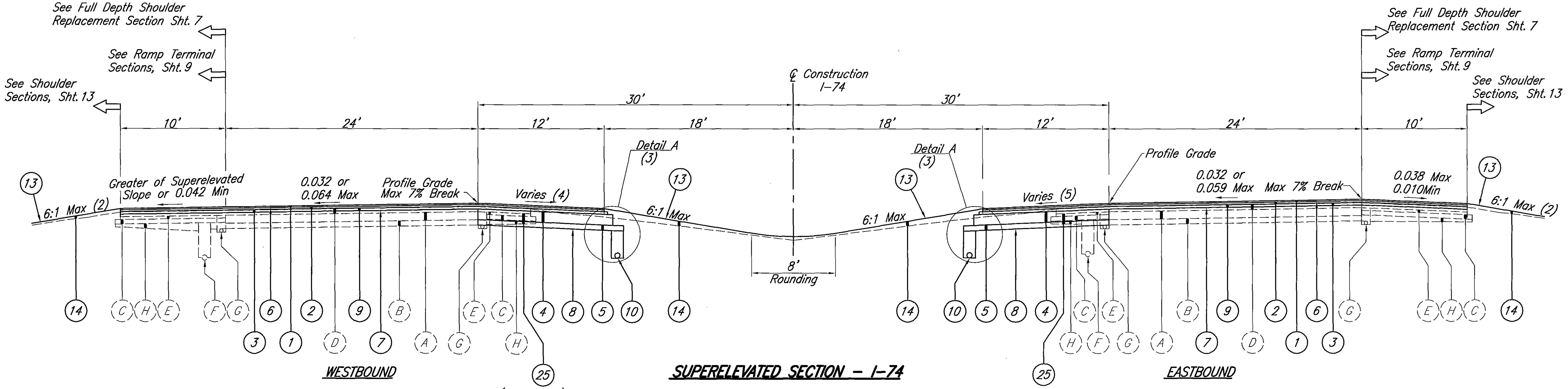
TYPICAL SECTIONS I-74

HAM-74-0.00



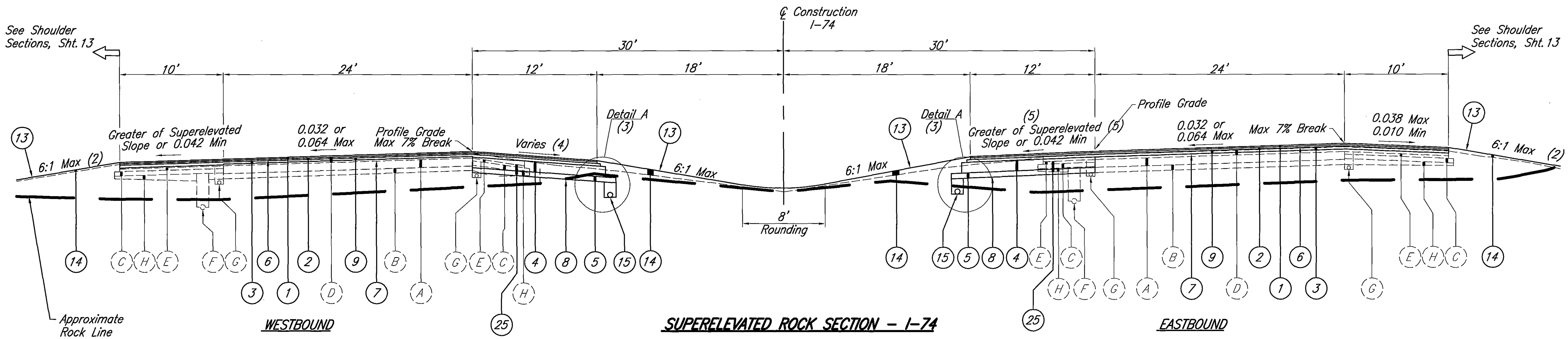
SUPERELEVATED SECTION – I-74

WESTBOUND

Sta. 20+00 to Sta. 28+40 =	840 FT.	(Opp. Hand)
Sta. 56+75 to Sta. 58+50 =	175 FT.	
Sta. 68+00 to Sta. 74+00 =	600 FT.	
Sta. 84+50 to Sta. 90+75 =	625 FT.	(Opp. Hand)
Total =	2240 FT.	

EASTBOUND

Sta. 20+00 to Sta. 29+00 =	900 FT.	(Opp. Hand)
Sta. 36+00 to Sta. 41+00 =	500 FT.	(Opp. Hand)
Sta. 57+75 to Sta. 59+50 =	175 FT.	
Sta. 67+00 to Sta. 74+00 =	700 FT.	
Sta. 84+50 to Sta. 90+75 =	625 FT.	(Opp. Hand)
Total =	2900 FT.	



SUPERELEVATED ROCK SECTION – I-74

WESTBOUND

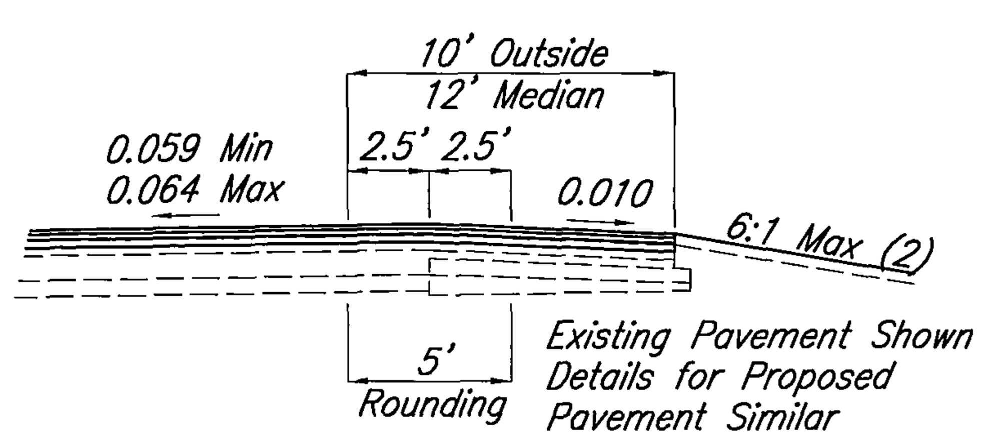
Sta. 28+40 to Sta. 41+00 =	1260 FT.	(Opp. Hand)
Sta. 58+50 to Sta. 68+00 =	950 FT.	
Total =	2210 FT.	

EASTBOUND

Sta. 29+00 to Sta. 36+00 =	700 FT.	(Opp. Hand)
Sta. 59+50 to Sta. 67+00 =	750 FT.	
Total =	1450 FT.	

Notes:

1. See Sheet 4 for Legend.
(2) Unless otherwise shown on Cross Sections.
(3) See Sheet 13 for Detail A.
(4) Shoulder Slope (Slope 0.042 Unless otherwise stated)
Varies from 0.042 @ 22+85.00 to 0.064 @ 24+02.80
Slope = 0.064 from 24+02.80 to 37+00,
Varies from 0.064 @ 37+00 to 0.042 @ 38+20.00
Varies from 0.042 @ 58+20.00 to 0.038 @ 58+50.00
Slope = 0.038 from 58+50.00 to 72+00.00
Varies from 0.038 @ 72+00.00 to 0.042 @ 72+11.00
(5) Shoulder Slope (Slope is 0.042 Unless otherwise stated)
Varies from 0.042 @ 22+30.00 to 0.010 @ 23+80.00
Slope = 0.010 from 23+80 to 37+22
Varies from 0.010 from 37+22 to 0.042 @ 38+90.00
Varies from 0.042 @ 85+90.00 to 0.038 @ 86+25.00
Slope = 0.038 from 86+25.00 to 89+00.00
Varies from 0.038 @ 89+00.00 to 0.042 @ 89+35.00



SHOULDER GRADE BREAK GREATER THAN 7%
HIGH SIDE SUPERELEVATED SECTION

Sta. 23+75 to Sta. 37+22 Westbound
Sta. 23+80 to Sta. 37+22 Eastbound

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TYPICAL SECTIONS I-74

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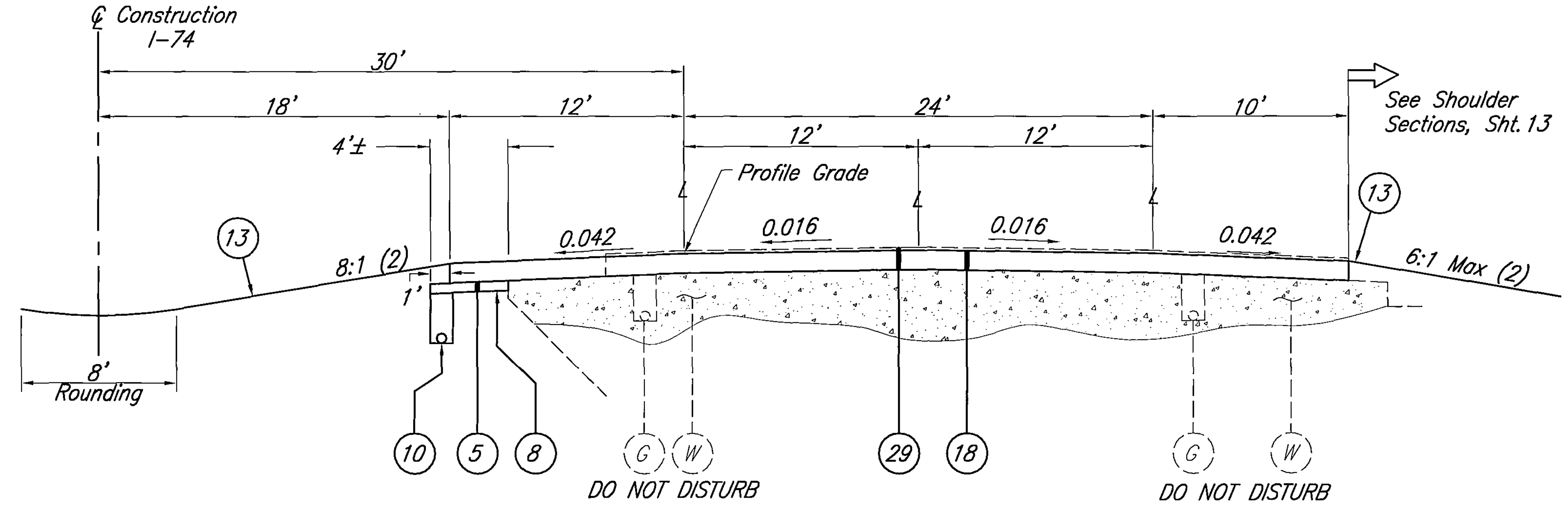
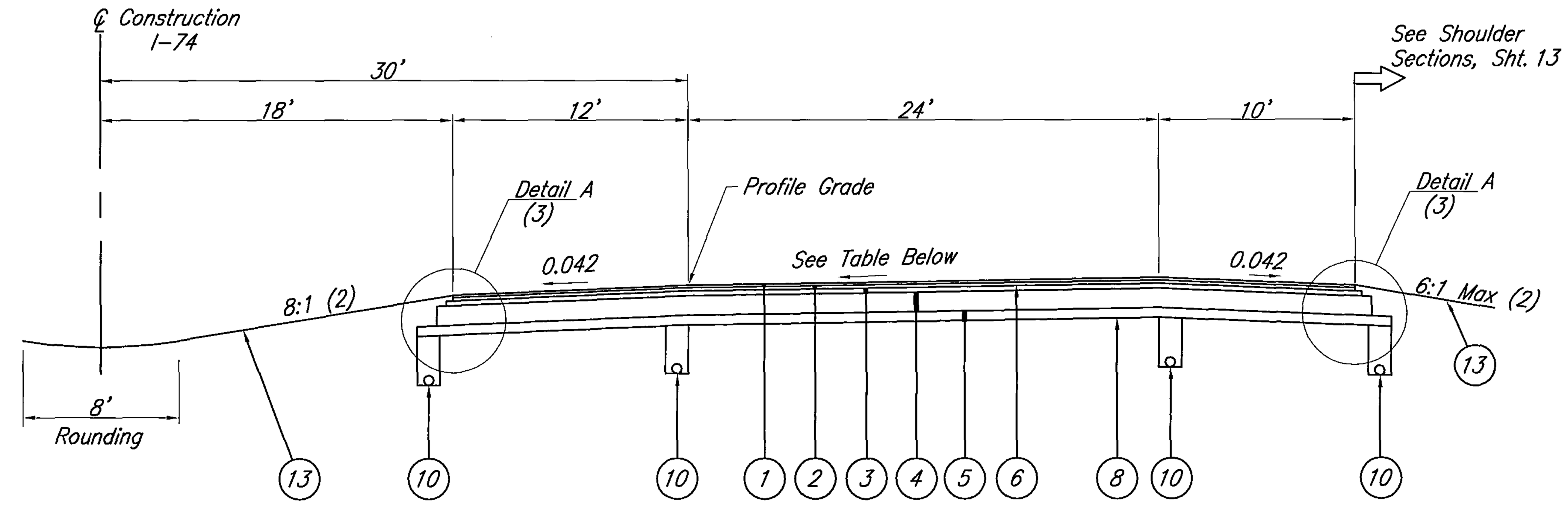


NORMAL SECTION - I-74

EASTBOUND

Sta. 50+02 to Sta. 53+98 = 396 FT.



SUPERELEVATED SECTION - I-74

EASTBOUND

Sta. 56+75 to Sta. 57+75 = 100 FT.

SUPERELEVATION CROSS SLOPES

STATION	LEFT. SHOULDER SLOPE (←)	LEFT LANE SLOPE (←)	RIGHT LANE SLOPE (→)	RIGHT SHOULDER SLOPE (→)
56+75	0.042	0.016	0.016	0.042
57+00	0.042	0.016	0.005	0.042
57+25	0.042	0.016	-0.006	0.042
57+50	0.042	0.016	-0.017	0.042
57+75	0.042	0.018	-0.026	0.042

→ NORMAL SLOPE DIRECTION
NEGATIVE VALUES INDICATE SLOPE IS IN OPPOSITE DIRECTION

Notes:

1. See Sheet 4 for Legend.
(L) Longitudinal Joint

(2) Unless otherwise shown on Cross Section
(3) See Sheet 13 for Detail A.

TYPICAL SECTIONS I-74

HAM-74-0.00

6
421

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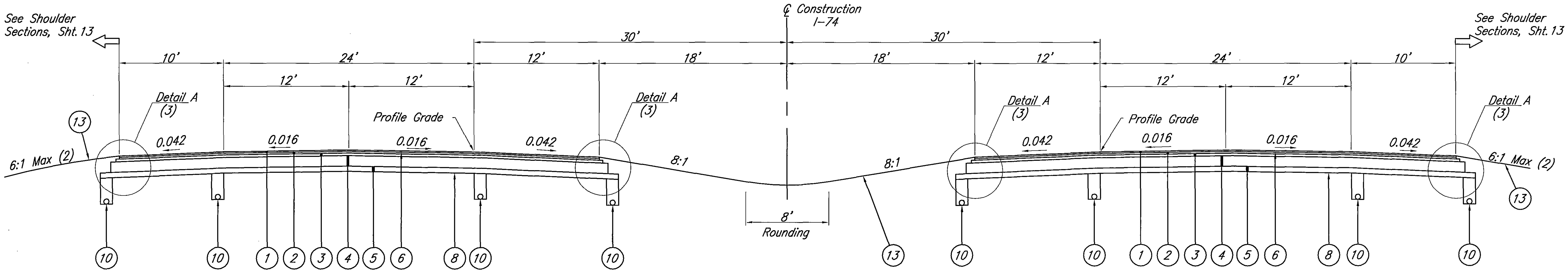


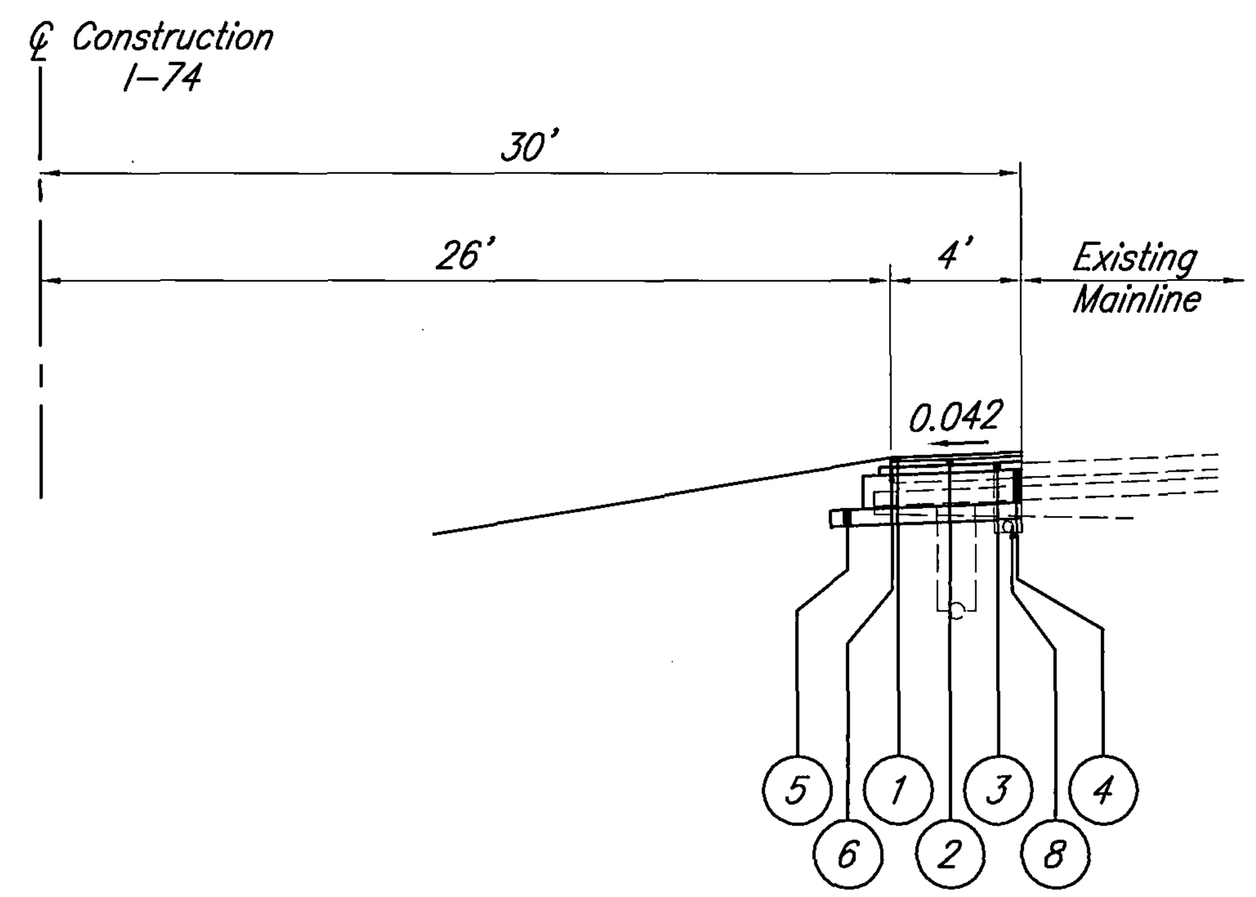
NORMAL SECTION - I-74

WESTBOUND

Sta. 91+50 to Sta. 98+70 = 720 FT.
Sta. 126+70 to Sta. 135+80 = 910 FT.
Total 1630 FT.

EASTBOUND

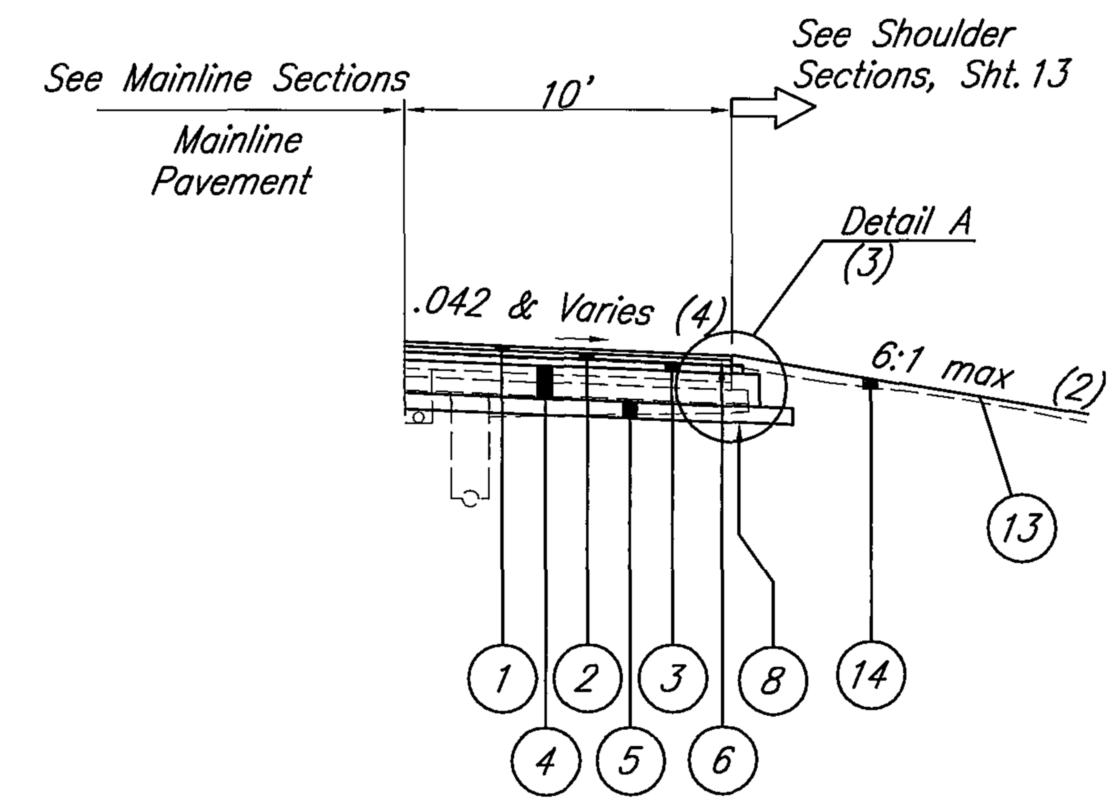
Sta. 48+57.80 to Sta. 50+02 = 144.20 FT.
Sta. 53+98 to Sta. 56+75 = 277.00 FT.
Sta. 91+50 to Sta. 98+70 = 720.00 FT.
Sta. 126+70 to Sta. 135+80 = 910.00 FT.
Total 2051.20 FT.



FULL DEPTH MEDIAN SHOULDER REPLACEMENT

EASTBOUND
Sta. 196+00 to Sta. 206+10 = 1010 FT

WESTBOUND
Sta. 195+00 to Sta. 206+10 = 1110 FT



FULL DEPTH SHOULDER REPLACEMENT

WESTBOUND

Sta. 39+50 to Sta. 46+20.74 = 670.74 FT.
Sta. 46+20.74 to Sta 48+57.80 = HAM-74-0069L
Sta. 48+57.80 to Sta. 55+50 = 692.20 FT.
Sta. 87+45.22 to Sta. 91+50 = 404.78 FT.
Sta. 98+70 to Sta. 104+21.23 = 551.23 FT.
Sta. 120+30 to Sta. 126+70 = 640.00 FT.
Sta. 135+80 to Sta. 142+30 = 650.00 FT.
Sta. 195+00 to Sta. 206+10 = 1110.00 FT.
Total 4718.95 FT.

EASTBOUND

Sta. 39+50 to Sta. 46+20.74 = 670.74 FT.
Sta. 46+20.74 to Sta 48+57.80 = HAM-74-0069R
Sta. 57+75 to Sta 64+25.00 = 650.00 FT.
Sta. 85+97.30 to Sta. 91+50 = 552.70 FT.
Sta. 98+70 to Sta. 102+98.38 = 428.38 FT.
Sta. 120+30 to Sta. 126+70 = 640.00 FT.
Sta. 135+80 to Sta. 142+30 = 650.00 FT.
Sta. 196+00 to Sta. 206+10 = 1010.00 FT.
Total 4601.82 FT.

Notes:

1. See Sheet 4 for Legend.
(2) Unless otherwise shown on Cross Section
(3) See Sheet 13 for Detail A.
(4) Shoulder Slope - Westbound
Slope = 0.038 from 87+45.22 to 89+25
Slope varies from 0.038 @ 89+25 to 0.042 @ 89+60.

TYPICAL SECTIONS I-74

HAM-74-0.00

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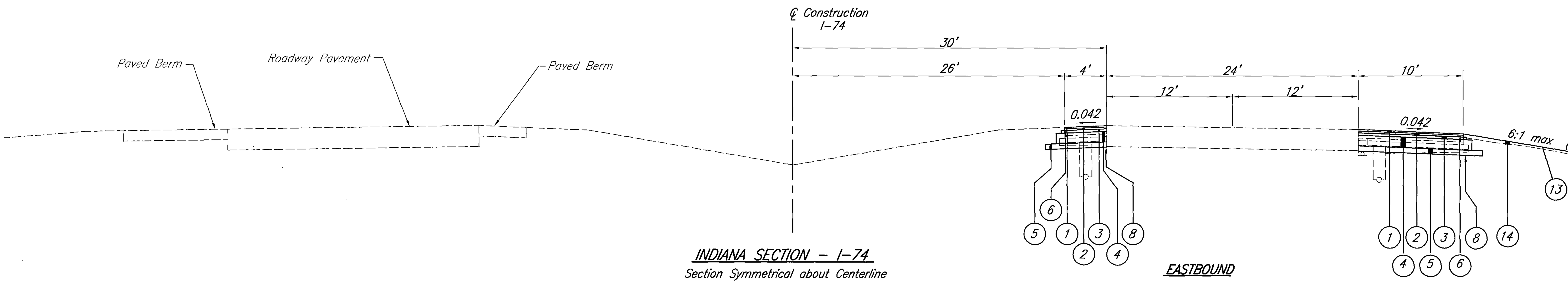


INDIANA SECTION - I-74

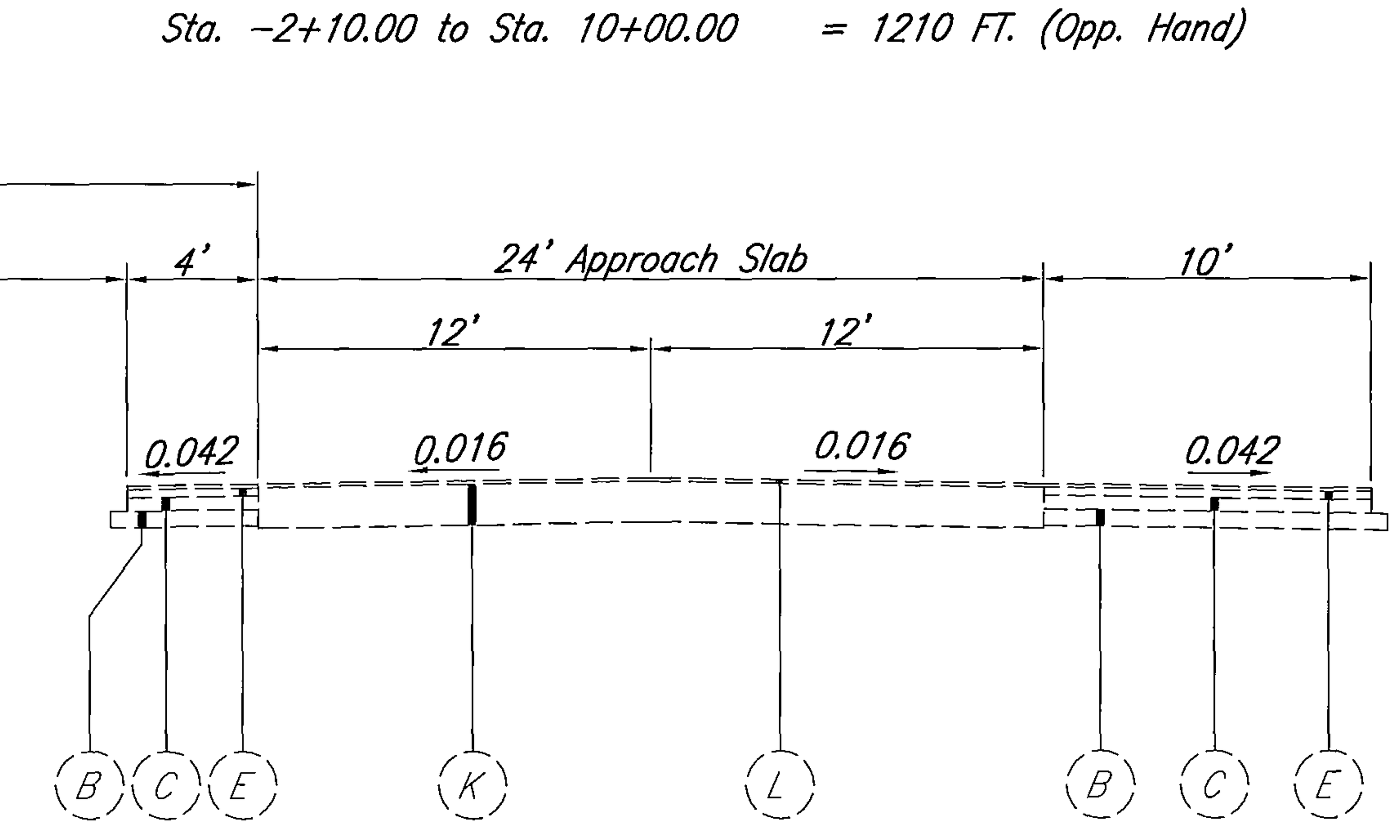
Section Symmetrical about Centerline

EASTBOUND

Sta. -2+10.00 to Sta. 10+00.00 = 1210 FT.

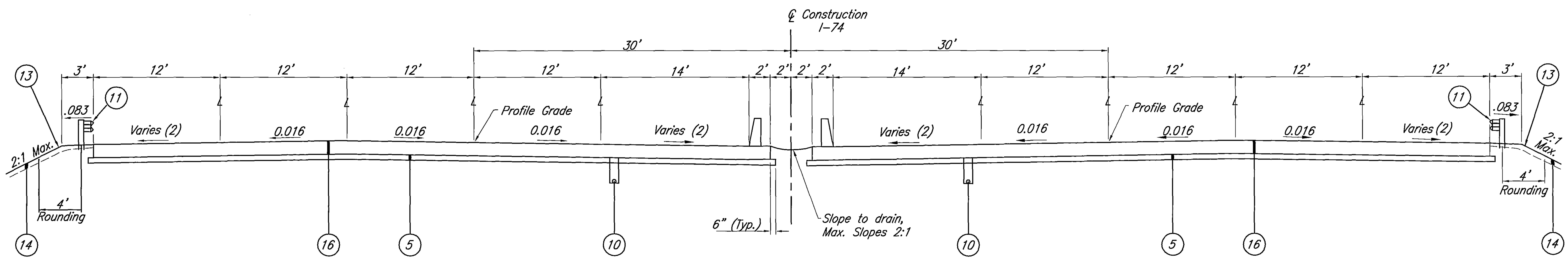
WESTBOUND

Sta. -2+10.00 to Sta. 10+00.00 = 1210 FT. (Opp. Hand)



APPROACH SLAB SECTION - I-74 - EXISTING

Section Symmetrical about Centerline



APPROACH SLAB SECTION - I-74 - PROPOSED

WESTBOUND

Sta. 46+20.74 to Sta. 46+45.74 =	25 FT.
Sta. 48+32.80 to Sta. 48+57.80 =	25 FT.
Total	50 FT.

EASTBOUND

Sta. 46+20.74 to Sta. 46+45.74 =	25 FT.
Sta. 48+32.80 to Sta. 48+57.80 =	25 FT.
Total	50 FT.

Notes

1. See Sheet 4 for Legend

(2) Transition from 0.016 at bridge to 0.042 at approach

(3) For additional details of proposed concrete barriers see structure sheets SD8 & SD9 and Sheet No. 335

(L) Longitudinal Joint

TYPICAL SECTIONS I-74

HAM-74-0.00

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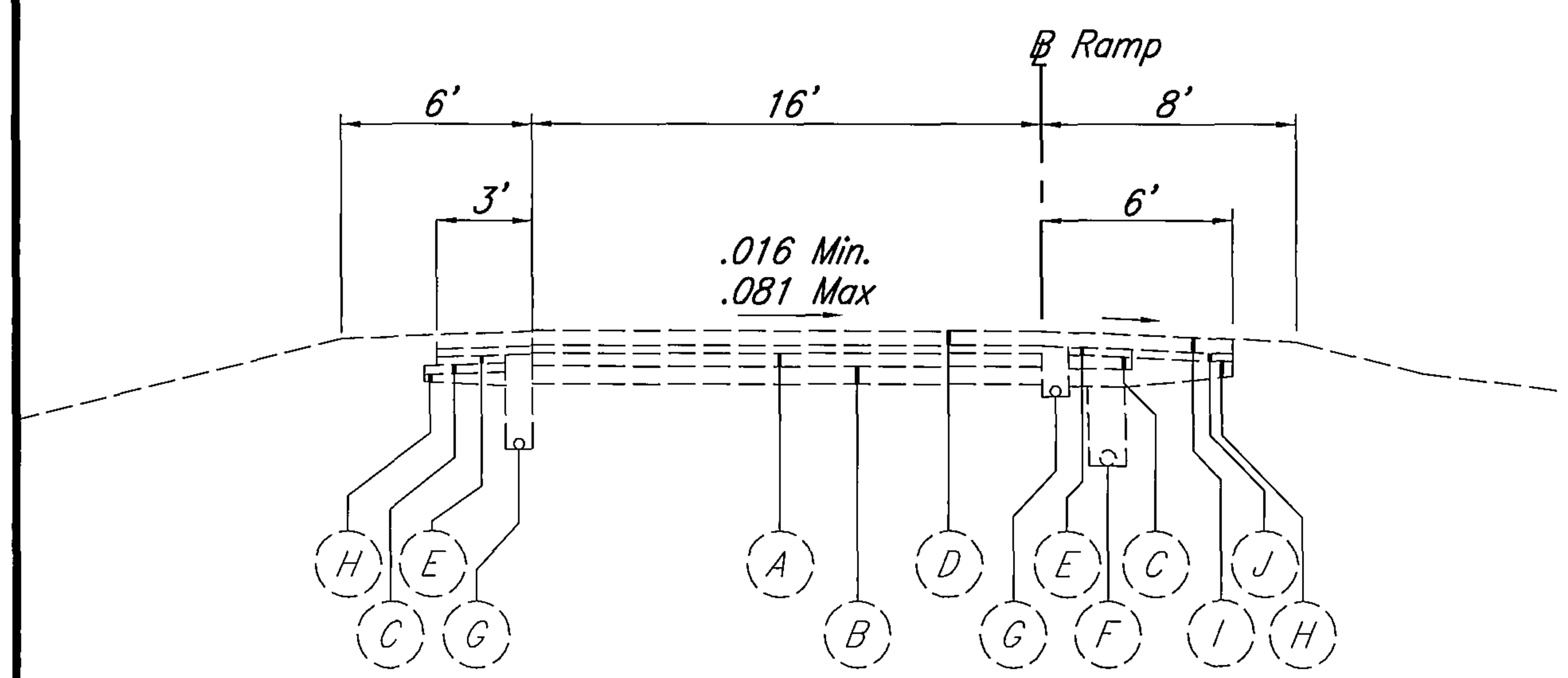
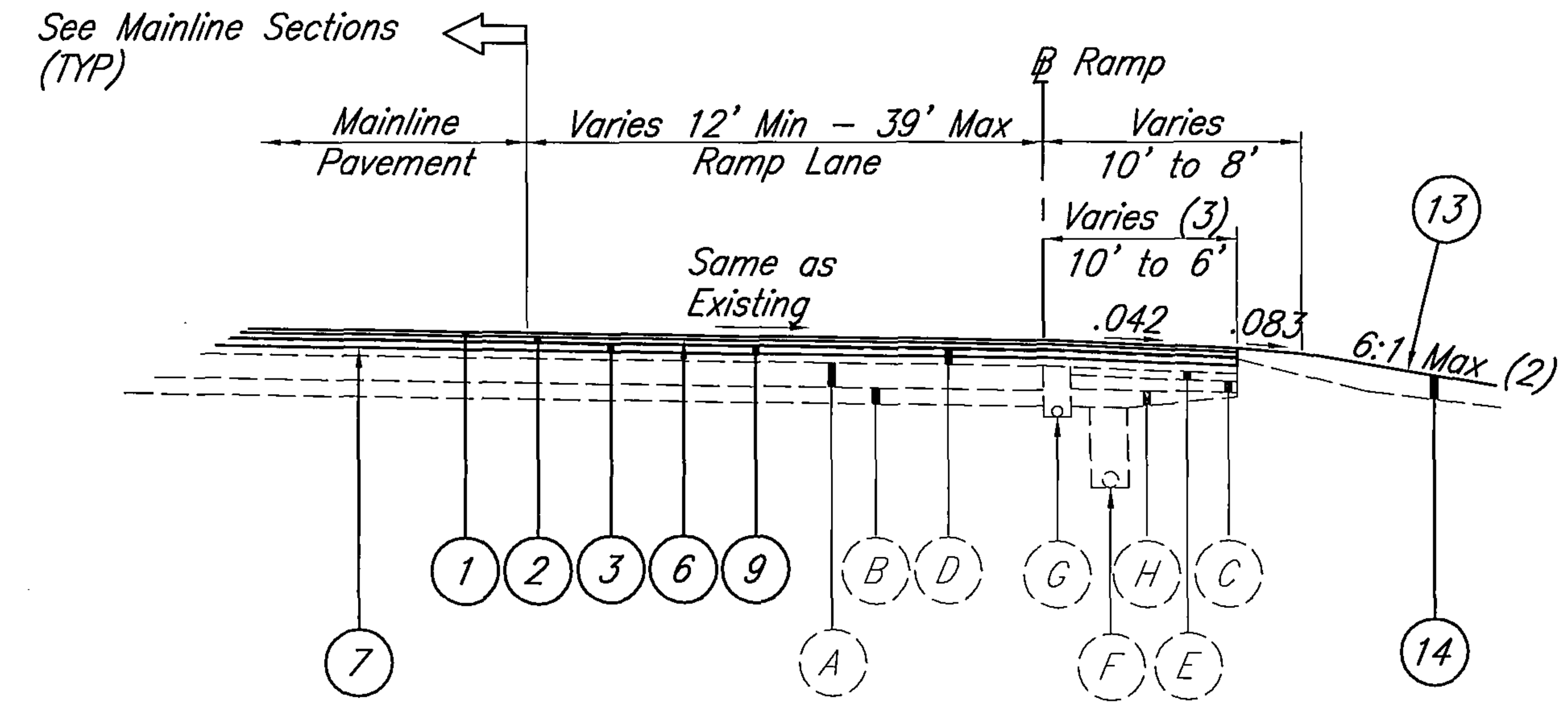


EXISTING RAMP SECTION

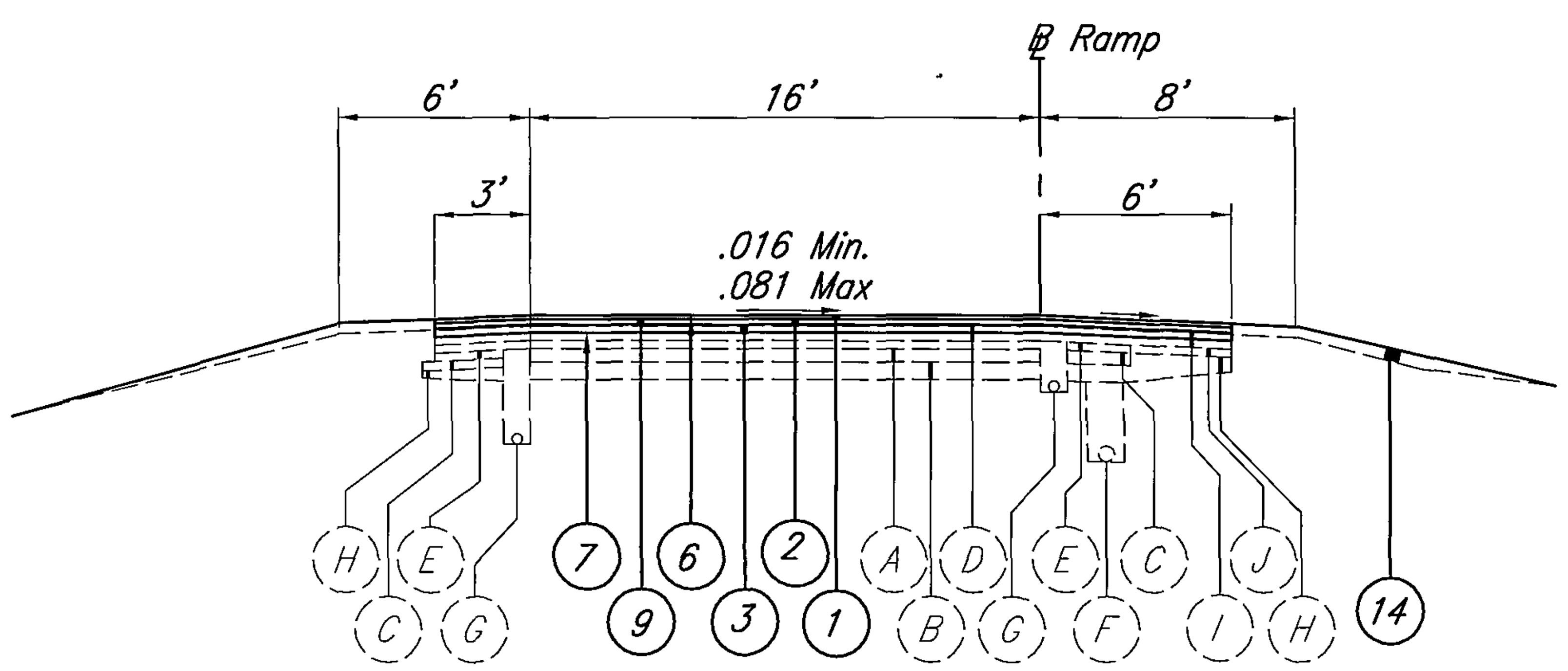
RAMP TO MAINLINE STATION EQUATIONS

Ramp HA Sta. 0+00.00 = Sta. 81+16.56, 66' Rt. I-74
Ramp HB Sta. 0+00.00 = Sta. 83+00.00, 79' Lt. I-74
Ramp HC Sta. 14+01.86 = Sta. 108+00.00, 79' Rt. I-74
Ramp HD Sta. 13+62.03 = Sta. 109+00.00, 66' Lt. I-74
Ramp WS Sta. 0+00.00 = Sta. 144+05.66, 66' Rt. I-74
Ramp WS Sta. 23+67.87 = Sta. 167+50.00, 79' Rt. I-74
Ramp FA Sta. 0+00.00 = Sta. 189+00.00, 66' Rt. I-74
Ramp FB Sta. 0+00.00 = Sta. 187+00.00, 79' Lt. I-74

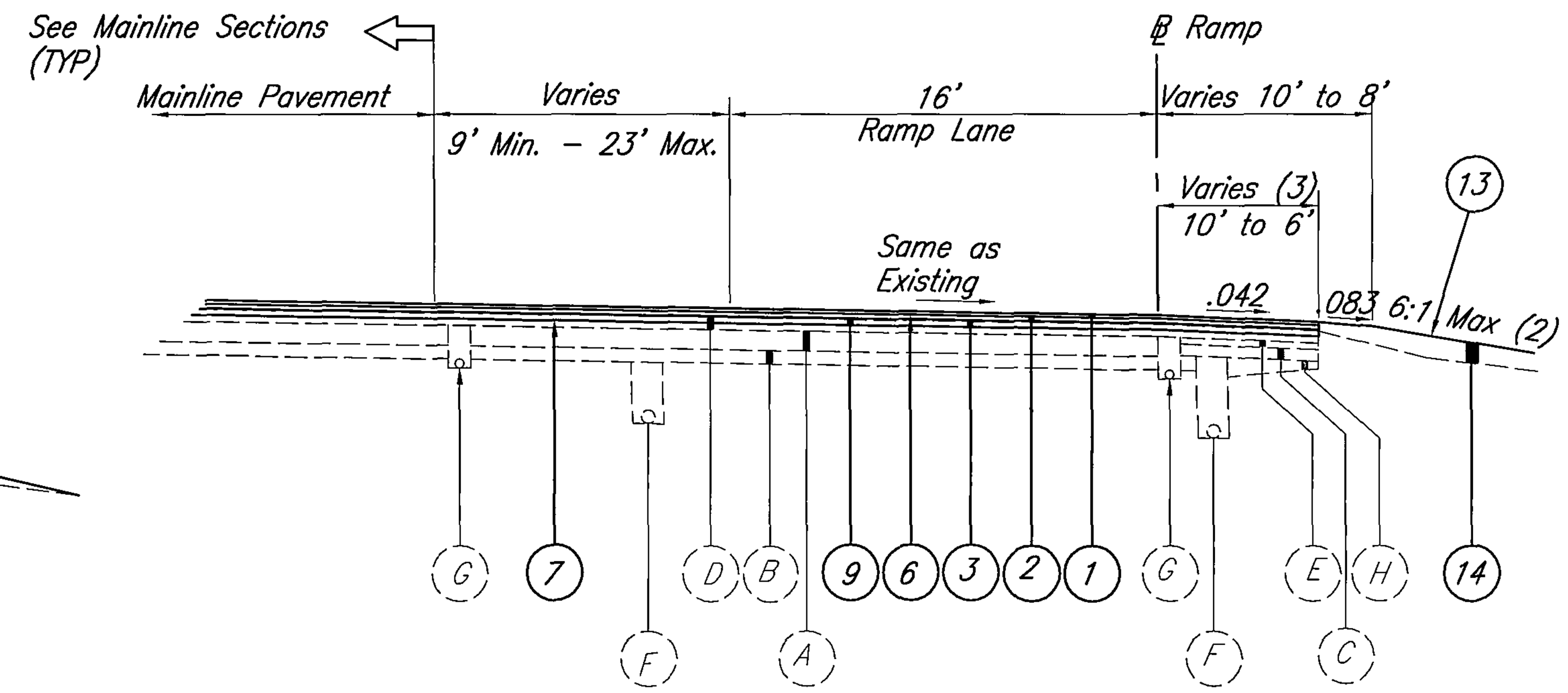


EXIT TERMINAL SECTION – RAMPS

Ramp HA Sta. 0+00.00 to Sta. 4+79.03	= 479.03 FT.	
Ramp HD Sta. 8+84.39 to Sta. 13+62.03	= 477.64 FT.	(Opp. Hand)
Ramp WS Sta. 0+00 to Sta. 4+53.00	= 453.00 FT.	
Ramp FA Sta. 0+00 to Sta. 4+77.33	= 477.33 FT.	
Total	= 1887.00 FT.	

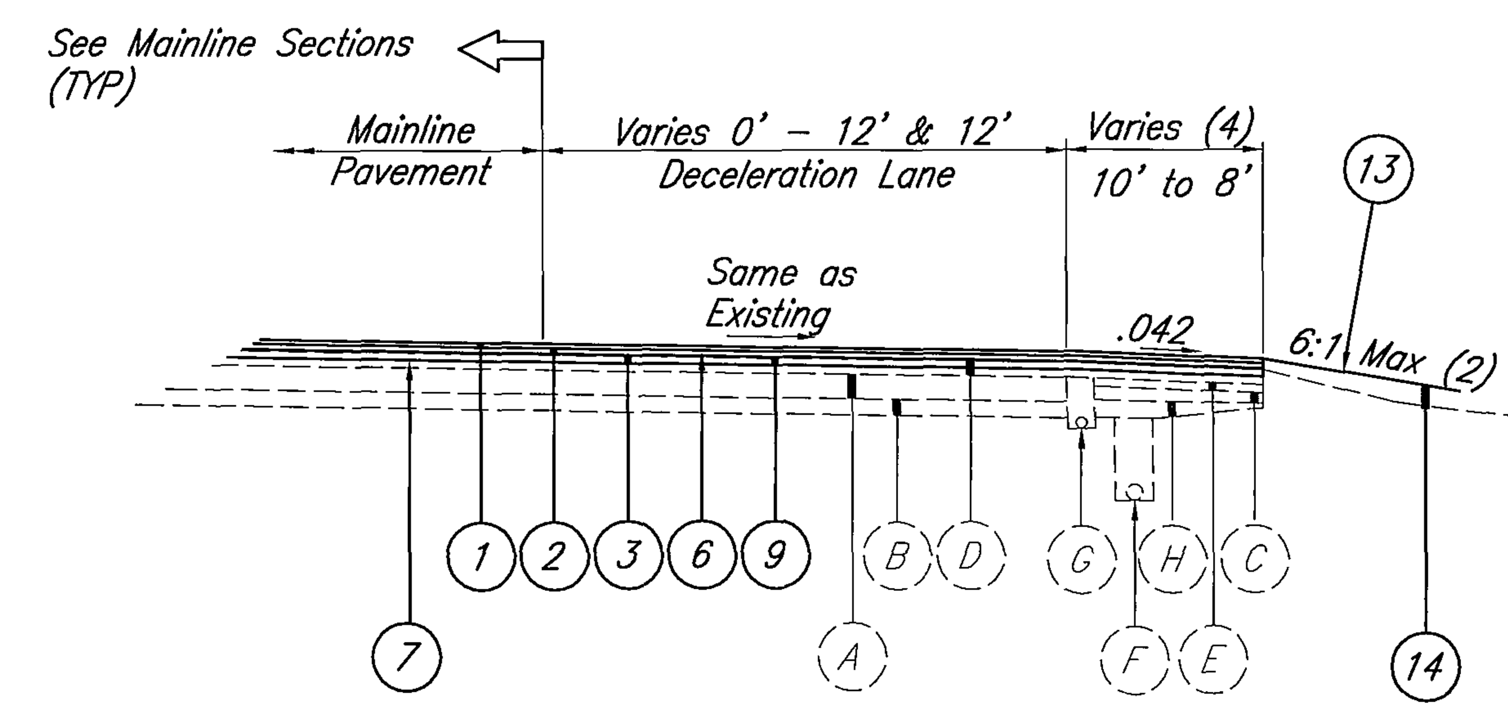


PROPOSED NEW HAVEN RAMP SECTION



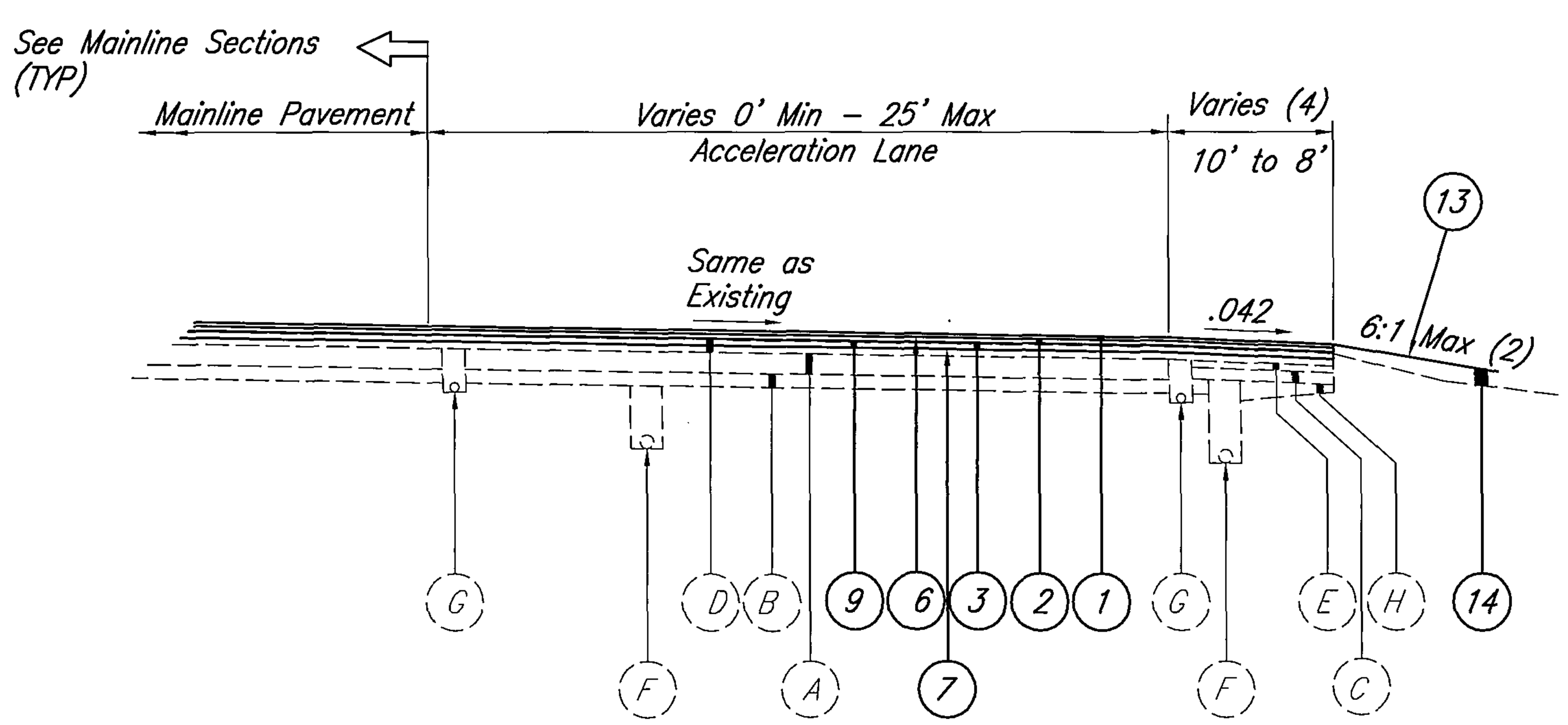
ENTRANCE TERMINAL SECTION – RAMPS

RAMP HB Sta. 0+00.00 to Sta. 4+47.12	= 447.12 FT.	(Opp. Hand)
Ramp HC Sta. 9+01.14 to Sta. 14+01.86	= 500.72 FT.	
Ramp WS Sta. 20+13 to Sta. 23+67.87	= 354.87 FT.	
Ramp FB Sta. 0+00.00 to Sta. 4+44.13	= 444.13 FT.	(Opp. Hand)
Total	= 1746.84 FT.	



EXIT TERMINAL SECTION – I-74

Sta. 72+71.92 to Sta. 81+16.56	= 844.64 FT.	
Sta. 109+00.00 to Sta. 117+50.00	= 850.00 FT.	(Opp. Hand)
Sta. 143+05.66 to Sta. 144+05.66	= 100.00 FT.	
Sta. 181+50 to Sta. 189+00	= 750.00 FT.	
Total	= 2544.64 FT.	



ENTRANCE TERMINAL SECTION – I-74

Sta. 71+00 to Sta. 83+00	= 1200.00 FT.	(Opp. Hand)
Sta. 108+00 to Sta. 120+00	= 1200.00 FT.	
Sta. 167+50 to Sta. 179+00	= 1150.00 FT.	
Sta. 175+00 to Sta. 187+00	= 1200.00 FT.	(Opp. Hand)
Total	= 4750.00 FT.	

Notes:

1. See Sheet 4 for Legend.
(2) Unless otherwise shown on Cross Sections
(3) Shoulder Widths
Ramp HA– Varies from 10' @ 0+00 to 6' @ 3+72.71
Ramp HB– Varies from 10' @ 0+00 to 6' @ 3+81.90
Ramp HC– Varies from 6' @ 10+29.70 to 10' @ 14+01.86
Ramp HD– Varies from 6' @ 9+89.4 to 10' @ 13+62.03
Ramp WS– Varies from 8' @ 0+00 to 6' @ 1+38.4
Varies from 6' @ 19+68.21 to 8' @ 20+68.21
Width = 8' from 20+68.21 to 23+67.87
Ramp FA– Varies from 8' @ 0+00 to 6' @ 2+20
Ramp FB– Width= 8' from 0+00 to 3+00
Varies from 8' @ 3+00 to 6' @ 3+60
(4) Shoulder Widths
Width = 10' unless otherwise shown
Varies from 10' @ 143+05.66 to 8' @ 144+05.66
Varies from 8' @ 178+04 to 10' @ 179+00
Width = 8' from 167+50 to 178+04
Varies from 10' @ 175+00 to 8' @ 175+96 (Opp Hand)
Width = 8' from 175+96 to 187+00 (Opp Hand)
Varies from 10' @ 181+50 to 8' @ 182+50
Width = 8' from 182+50 to 189+00

TYPICAL SECTIONS
RAMPS

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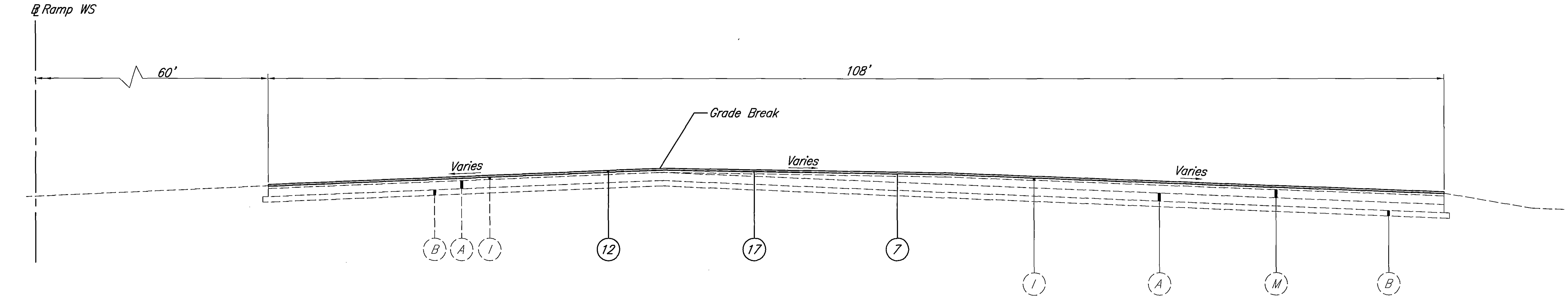
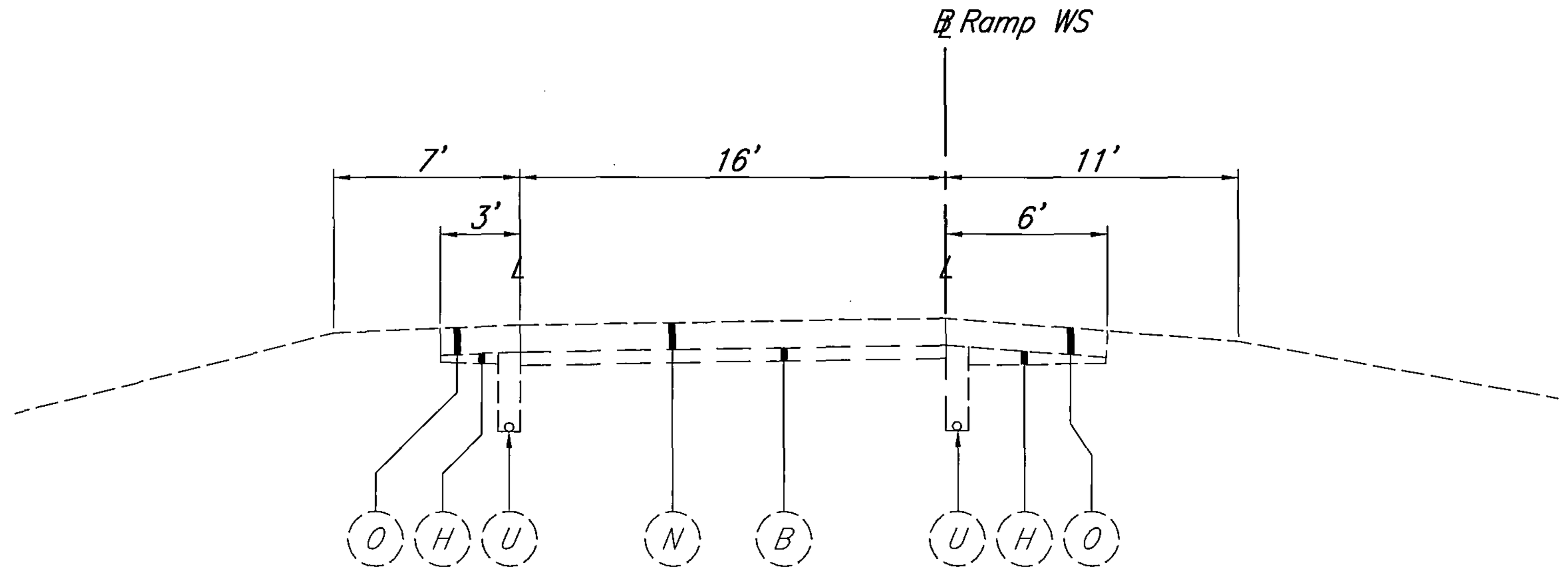
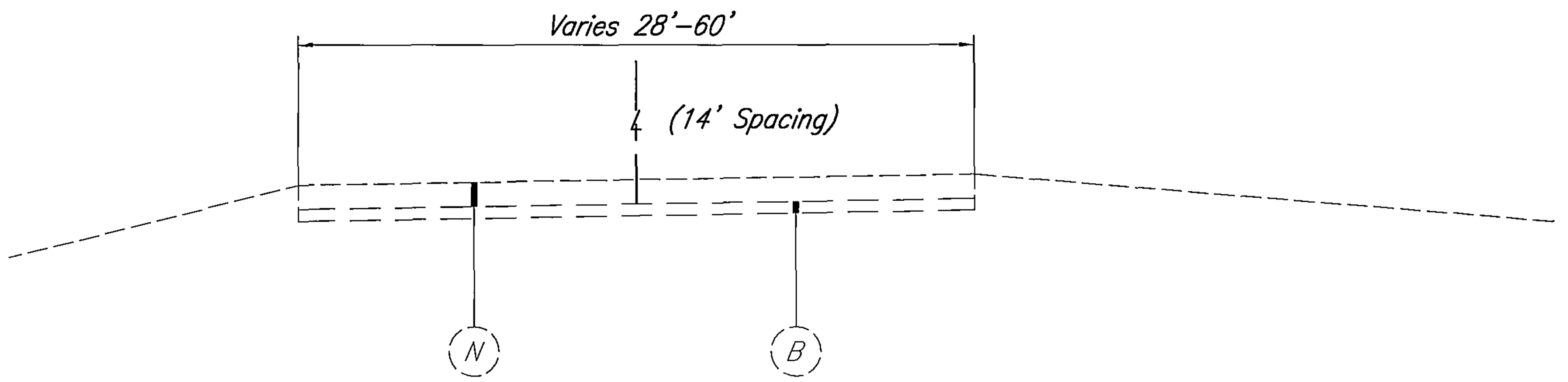


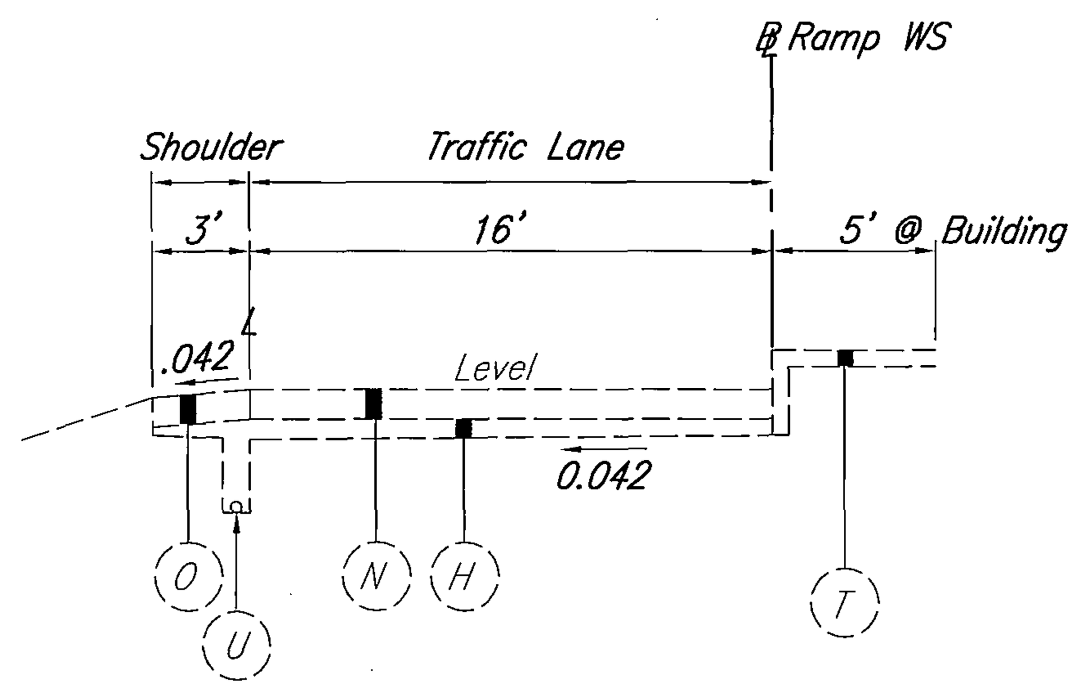
EXISTING SECTION – TRUCK PARKING LOT
Ramp WS Sta 9+08.2 to Sta 12+56.2 = 348.00 FT.



EXISTING SECTION – RAMP
Ramp WS Sta 4+53.00. to Sta 11+22 = 669.00 FT.
Ramp WS Sta 11+62 to Sta 20+13.00 = 851.00 FT.
Total =1520.00 FT.



EXISTING SECTION – TRUCK PARKING DRIVEWAY



EXISTING SECTION – RAMP
Ramp WS Sta 11+22 to Sta 11+62 = 40.00 FT.

Note
1. See Sheet 4 for Legend.
2. See Sheet 9 for Entrance and Exit Terminal Sections.
(L) Longitudinal Joint

TYPICAL SECTIONS
RAMP WEIGH STATION & WEIGH STATION

HAM-74-0.00

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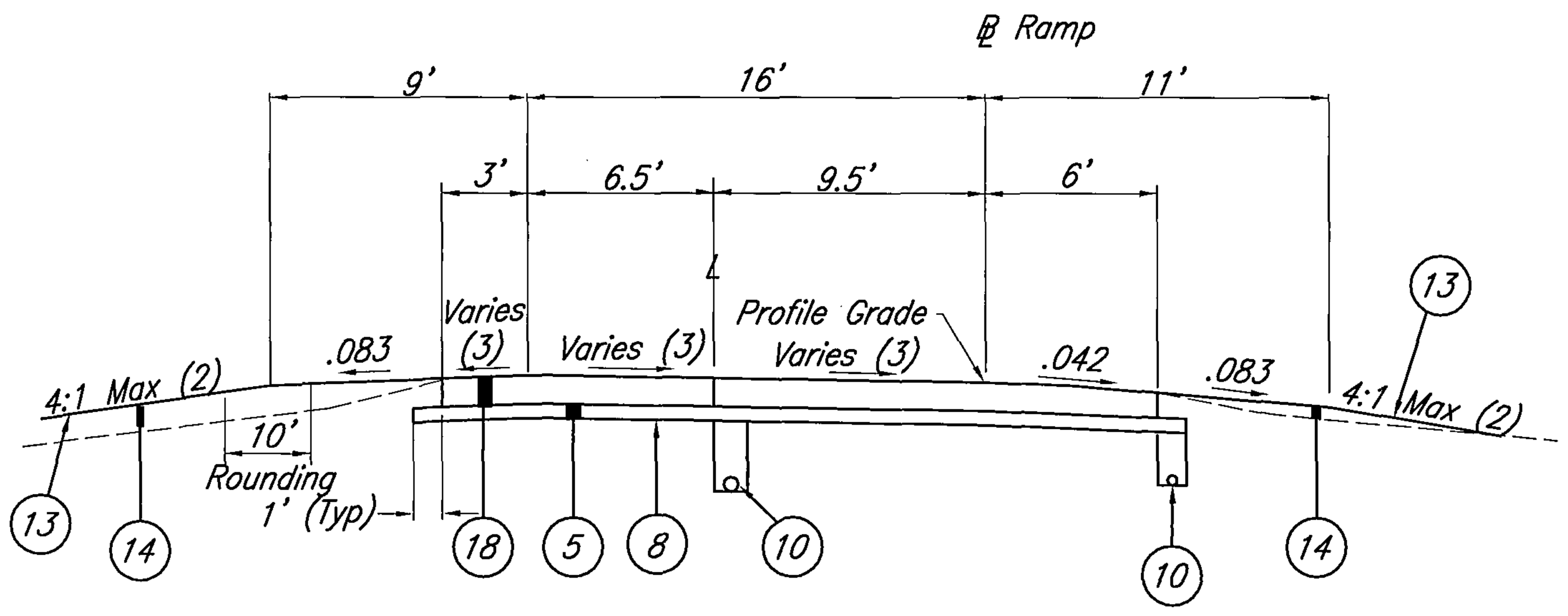
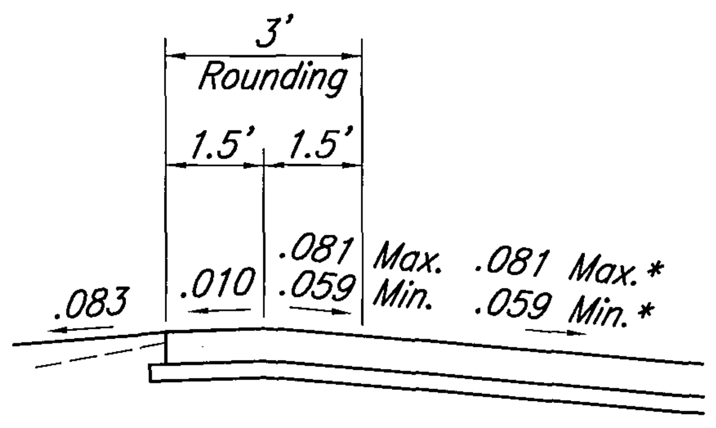


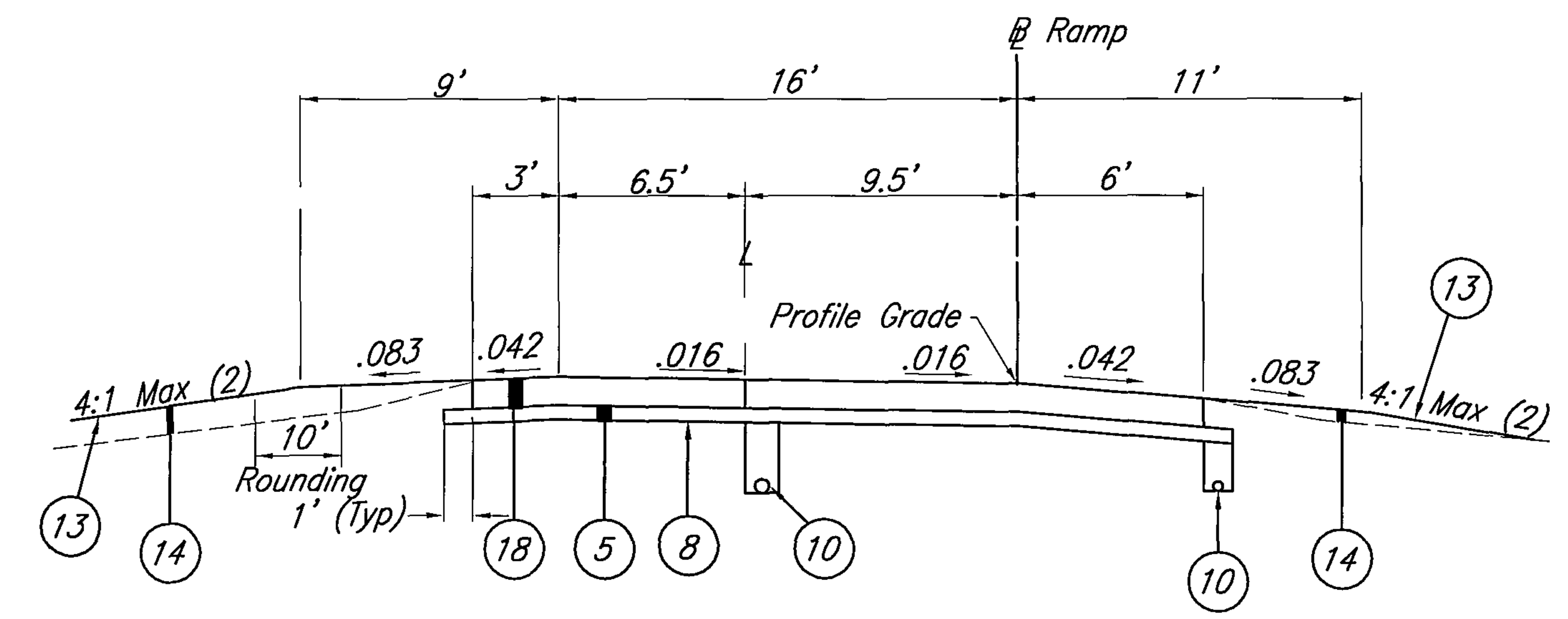
SUPERELEVATED SECTION - DRY FORK RAMPS

Ramp FA Sta. 4+77.33 to Sta. 7+59.97	=	282.64 FT.
Ramp FB Sta. 4+44.13 to Sta. 6+97.48	=	253.35 FT. (Opp. Hand)
Total	=	535.99 FT.



SHOULDER DETAIL - RAMP FB

* Shoulder Detail Applies when Superelevation Exceeds 0.059.



NORMAL SECTION - DRY FORK RAMPS

Ramp FA Sta. 7+59.97 to Sta. 10+39.44	=	279.47 FT.
Ramp FB Sta. 6+97.48 to Sta. 12+58.69	=	561.21 FT. (Opp. Hand)
Total	=	840.68 FT.

RAMP TO MAINLINE STATION EQUATIONS

Ramp WS Sta. 0+00.00 = Sta. 144+05.66, 66' Rt. I-74
Ramp WS Sta. 23+67.87 = Sta. 167+50.00, 79' Rt. I-74
Ramp FA Sta. 0+00.00 = Sta. 189+00.00, 66' Rt. I-74
Ramp FB Sta. 0+00.00 = Sta. 187+00.00, 79' Lt. I-74

RAMP SUPERELEVATION CROSS SLOPES

STATION	LEFT. SHOULDER SLOPE (←)	RAMP LANE SLOPE (→)	RIGHT SHOULDER SLOPE (→)
RAMP FA			
4+77.33	-0.005	0.031	0.042
5+00.00	0.036	0.034	0.042
6+09.97	0.036	0.034	0.042
6+59.97	0.042	0.028	0.042
7+59.97	0.042	0.016	0.042

STATION	LEFT. SHOULDER SLOPE (←)	RAMP LANE SLOPE (←)	RIGHT SHOULDER SLOPE (→)
RAMP FB			
4+44.13	0.094	0.073	-0.034
4+68.00	0.081	0.081	-0.081 *
5+47.48	0.081	0.081	-0.081 *
5+98.25	0.059	0.059	-0.059 *
6+36.48	0.042	0.042	0.028
6+69.79	0.042	0.028	0.042
6+97.48	0.042	0.016	0.042

For Slopes Followed by *, See "Shoulder Detail - Ramp FB" Above

NORMAL SLOPE DIRECTION
NEGATIVE VALUES INDICATE
SLOPE IS IN OPPOSITE DIRECTION

Notes:

1. See Sheet 4 for Legend.
(2) Unless otherwise shown on Cross Sections
(L) Longitudinal Joint
(3) For Ramps Superelevation Cross Slopes See Table
(4) See Sheet 9 for existing Ramp Section

TYPICAL SECTIONS
RAMPS

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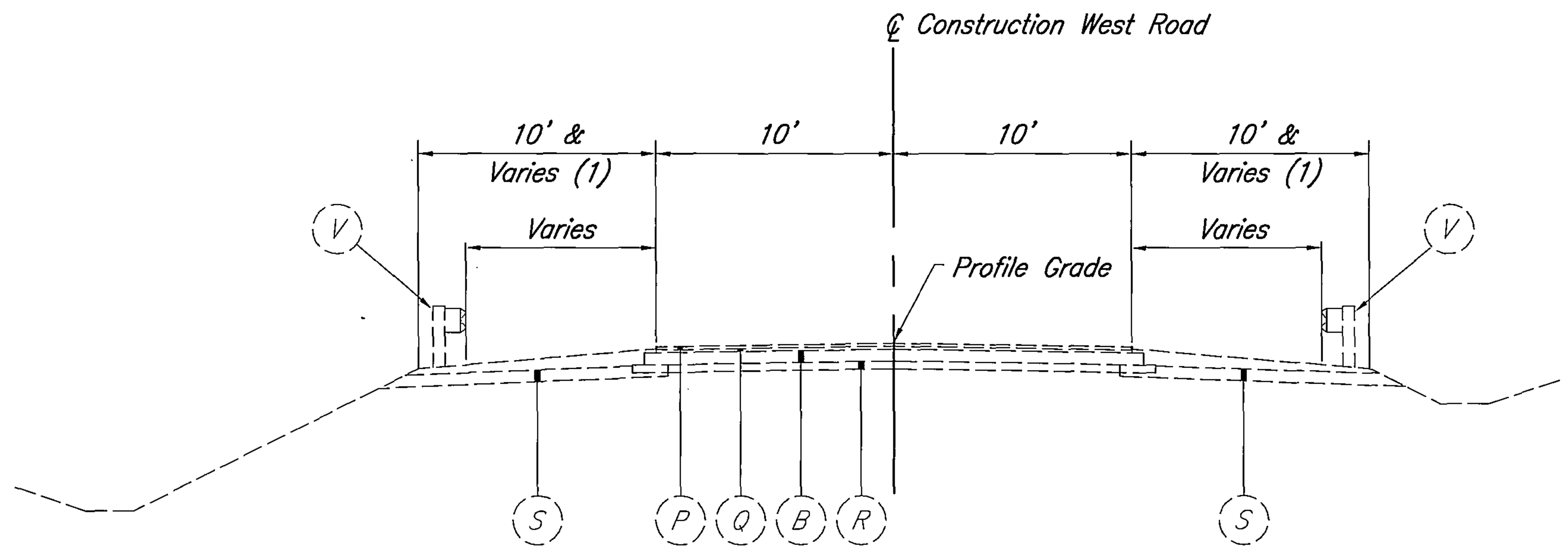
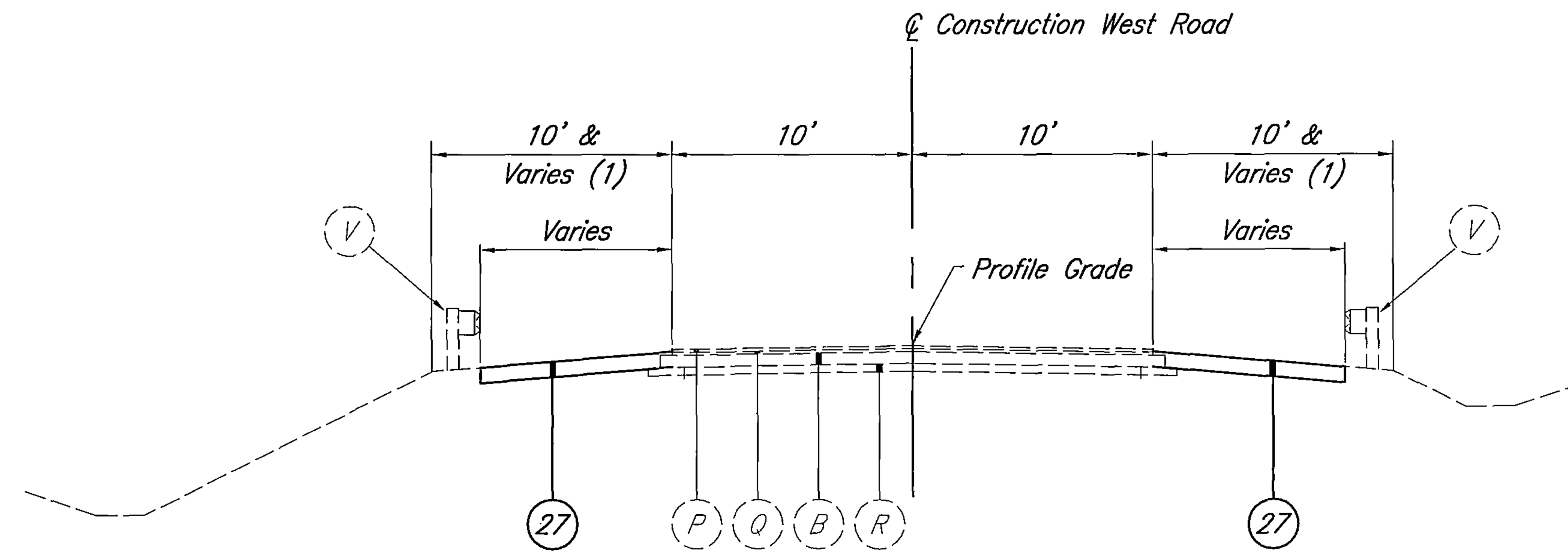


EXISTING NORMAL SECTION - WEST ROAD

Sta. 0+10 to Sta. 7+66.96	=	756.96 FT.
Sta. 10+65.46 to Sta. 13+50.60	=	285.14 FT.
Total	=	1042.10 FT.



NORMAL SECTION - WEST ROAD

Sta. 7+56.71 to Sta. 7+76.96	=	20.25 FT.
Sta. 10+55.46 to Sta. 10+75.71	=	20.25 FT.
Total	=	40.50 FT.

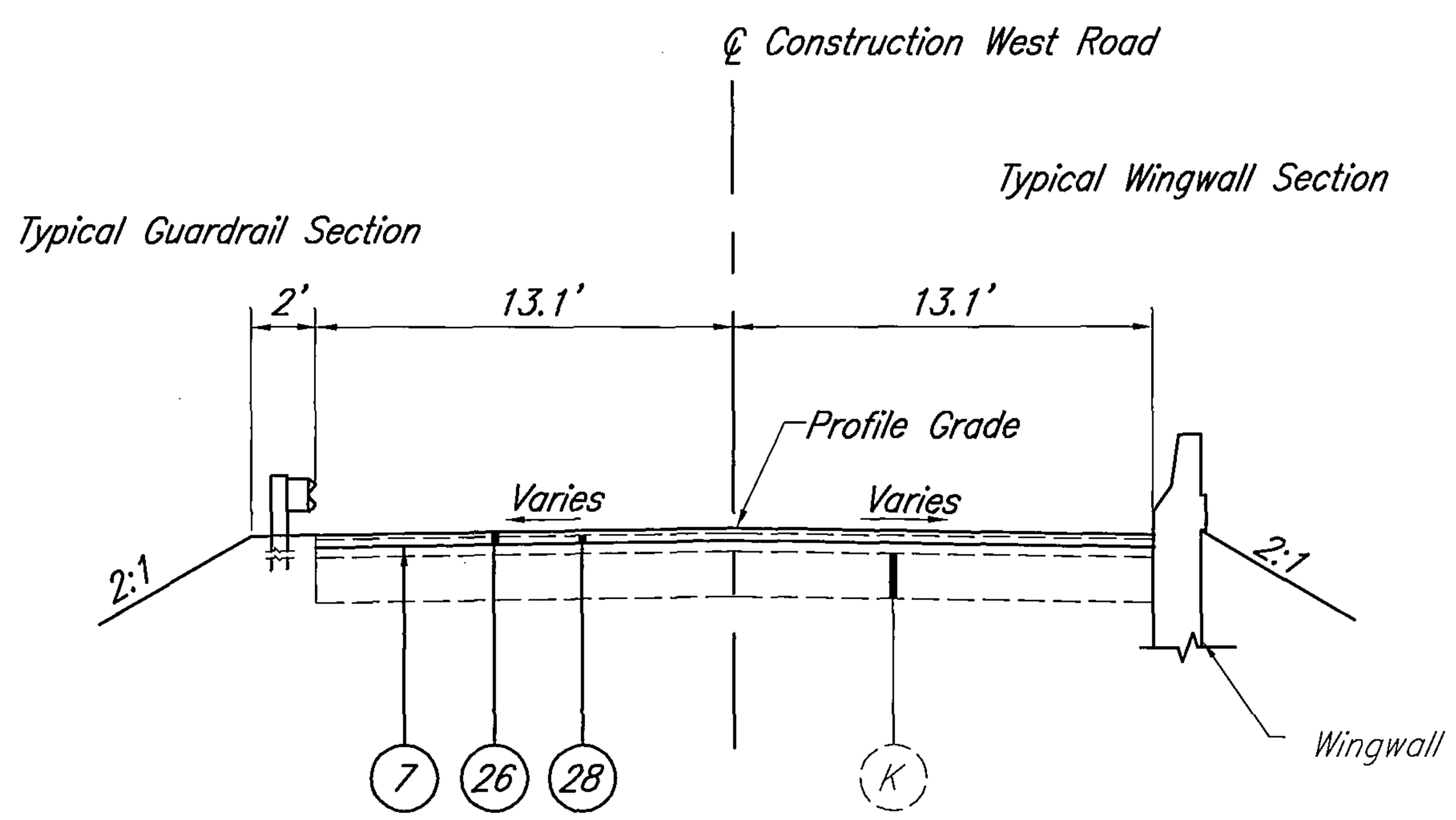
NOTES

For Legend See Sht. 4

(1) Varies 10' Sta. 6+76.96 to 5.5' Sta. 7+66.96
Varies 5.5' Sta. 10+65.46 to 10' Sta. 11+55.46

(2) Varies 3.40' Sta. 7+66.96 to 3.00' Sta. 7+76.96
Varies 3.00' Sta. 10+55.46 to 3.53' Sta. 10+65.46

(3) Varies 3.45' Sta. 7+66.96 to 3.00' Sta. 7+76.96
Varies 3.00' Sta. 10+55.46 to 3.58' Sta 10+65.46

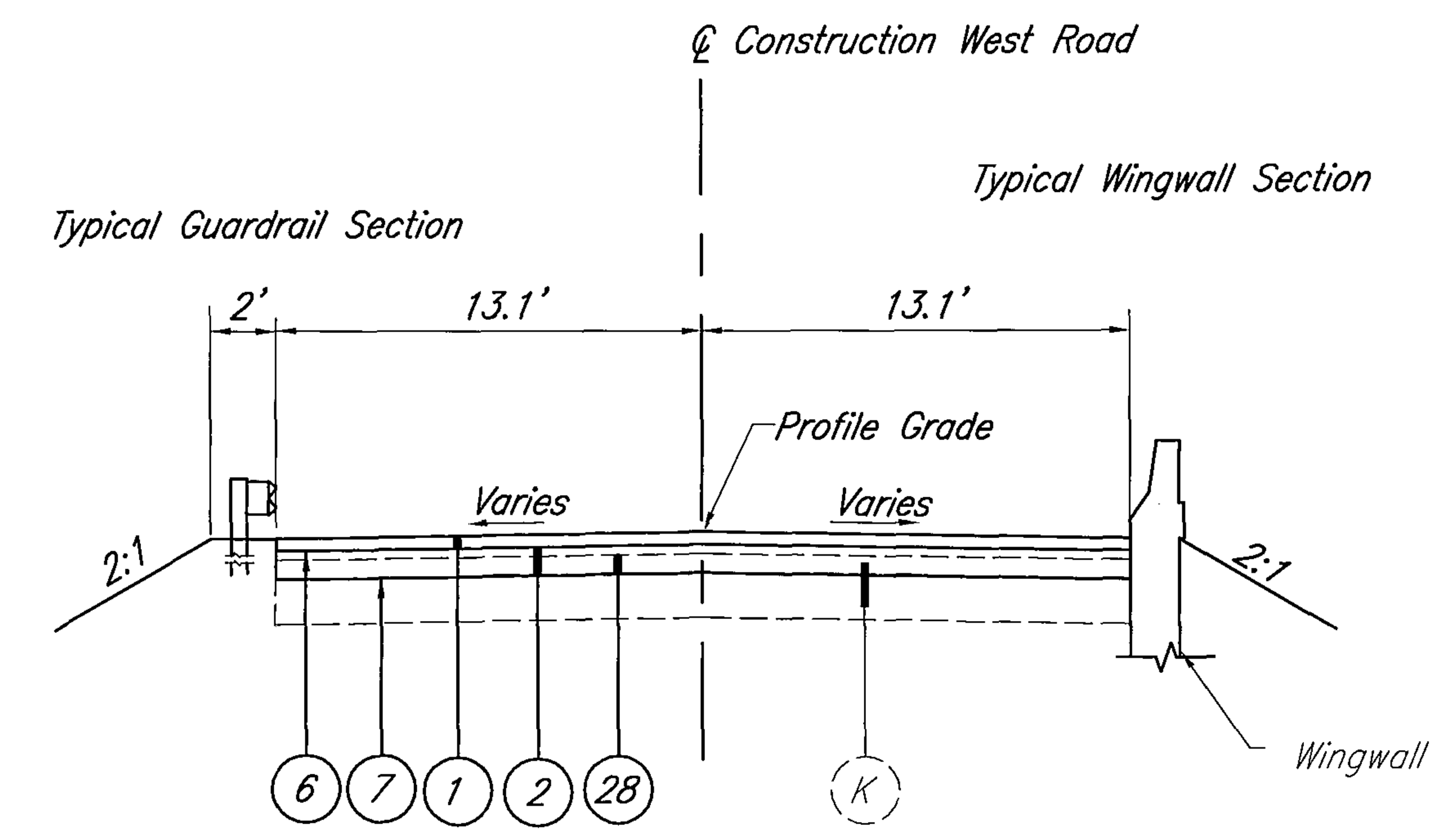


APPROACH SLAB SECTION - WEST ROAD

Sta. 7+76.96 to Sta. 8+01.96 = 25.00 FT.

Note:
Pavement Planing Varies From 0" at 8+01.96 to 1 5/8" at 7+76.96.

Meet existing Pavement with Butt Joint per SCD BP 3.1.



APPROACH SLAB SECTION - WEST ROAD

Sta. 10+30.46 to Sta. 10+55.46 = 25.00 FT.

Note:
Pavement Planing Varies From 0" at 10+30.46 to 1.5" at 10+55.46

Meet existing Pavement with Butt Joint per SCD BP 3.1, With t=1.5", & d=3.5".

TYPICAL SECTIONS
WEST ROAD

HAM-74-0.00

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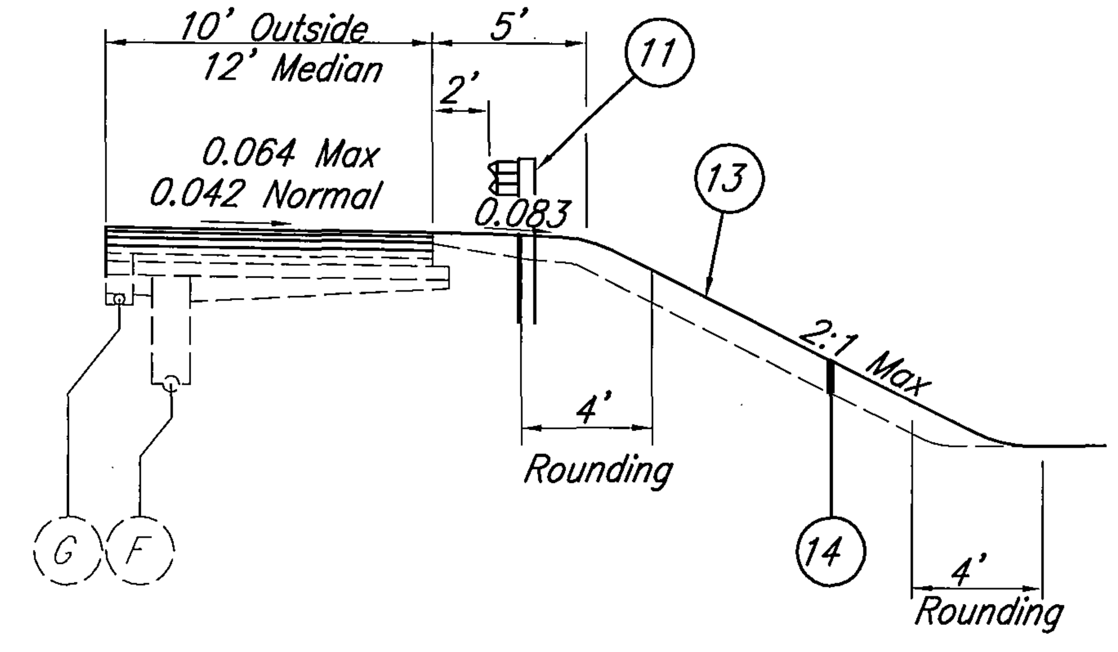
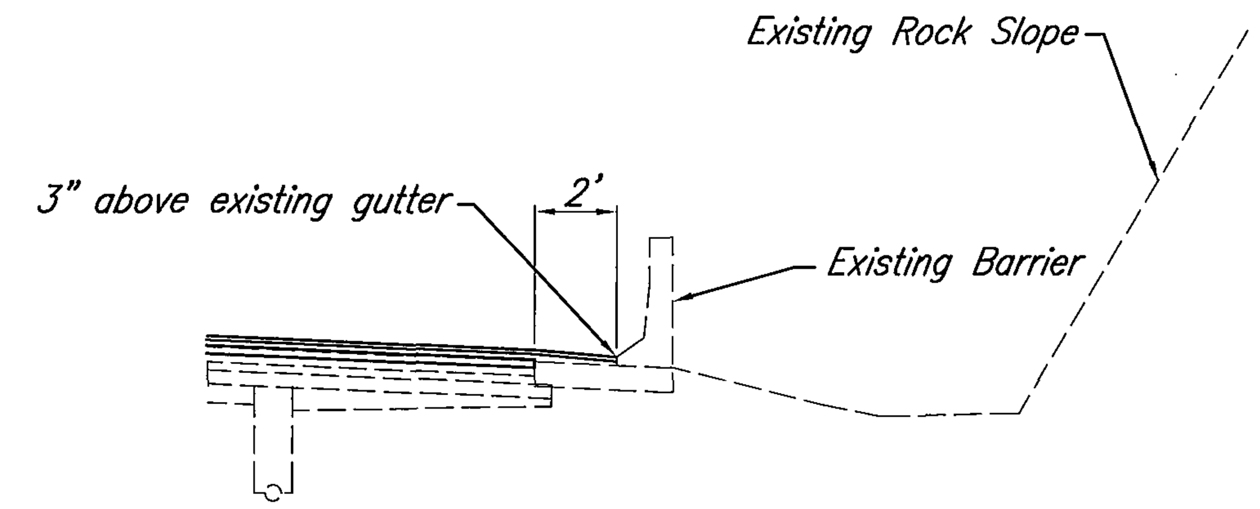
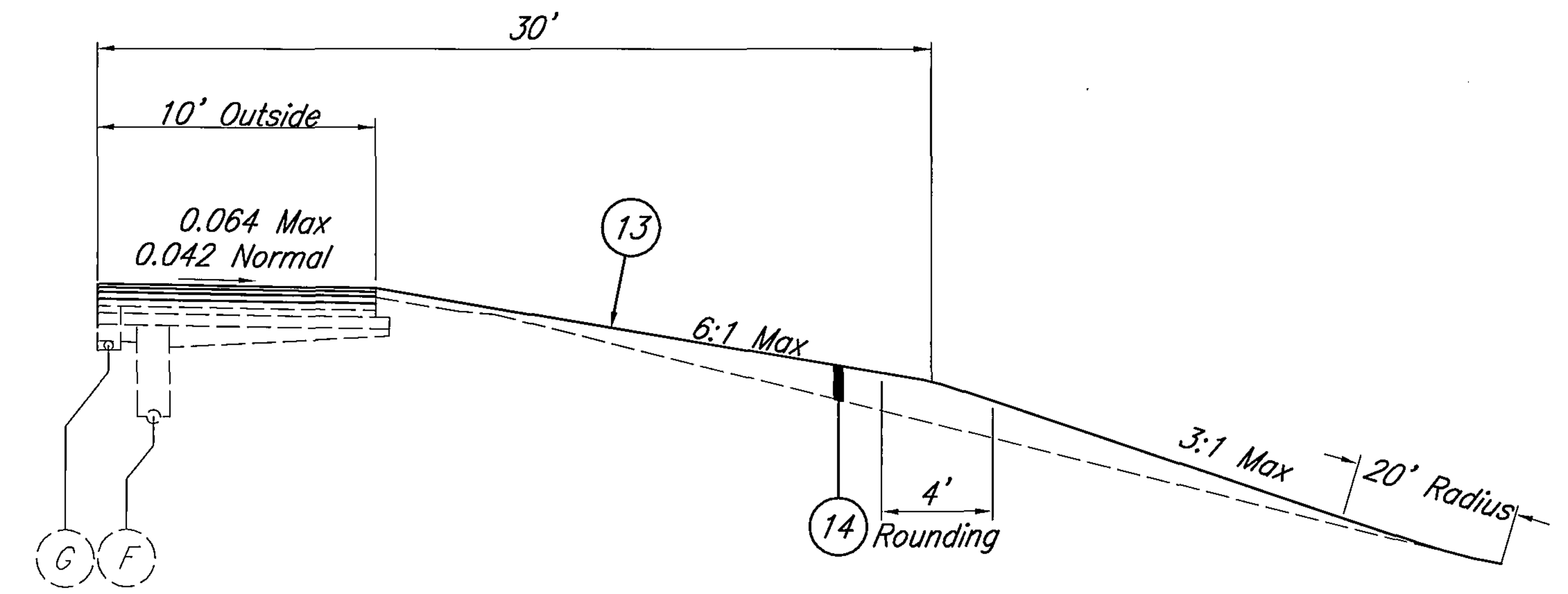


GUARDRAIL SECTION (1) – I-74

Normal Section and Superelevated Section Low Side

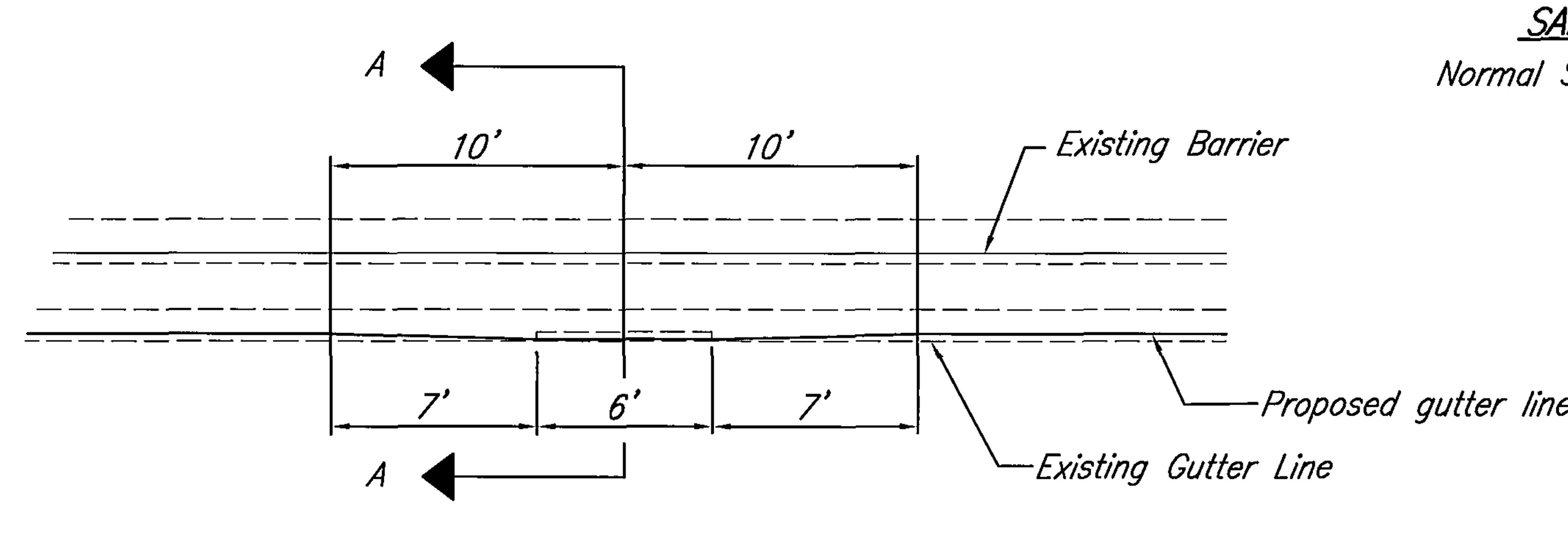


SECTION A-A
Barrier Type D1 without Slots

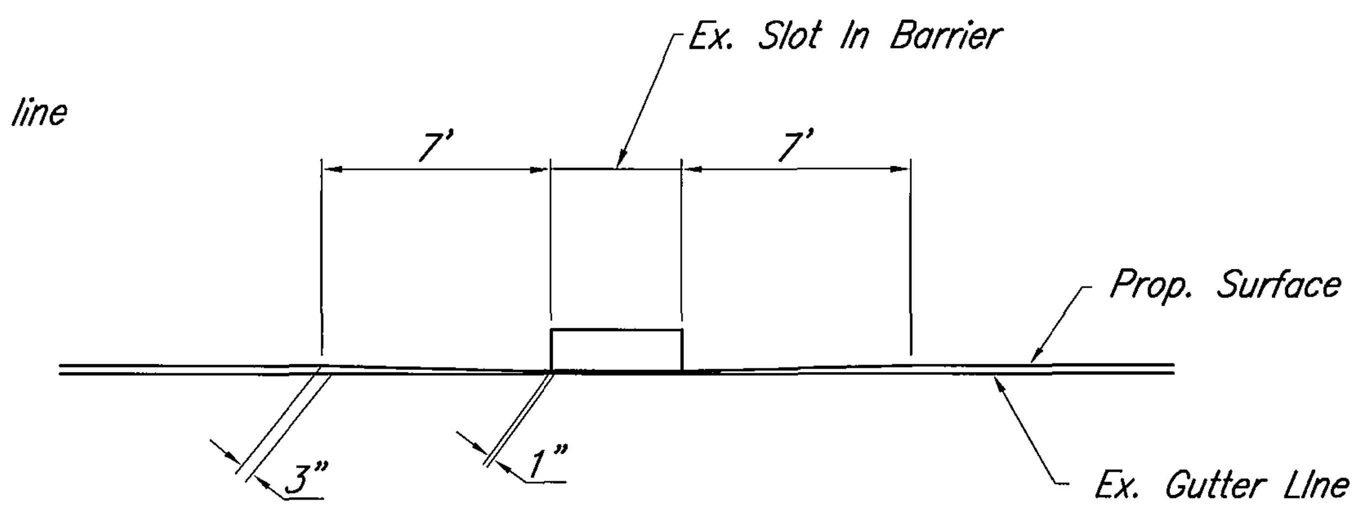


SAFETY GRADING OUTSIDE SHOULDERS

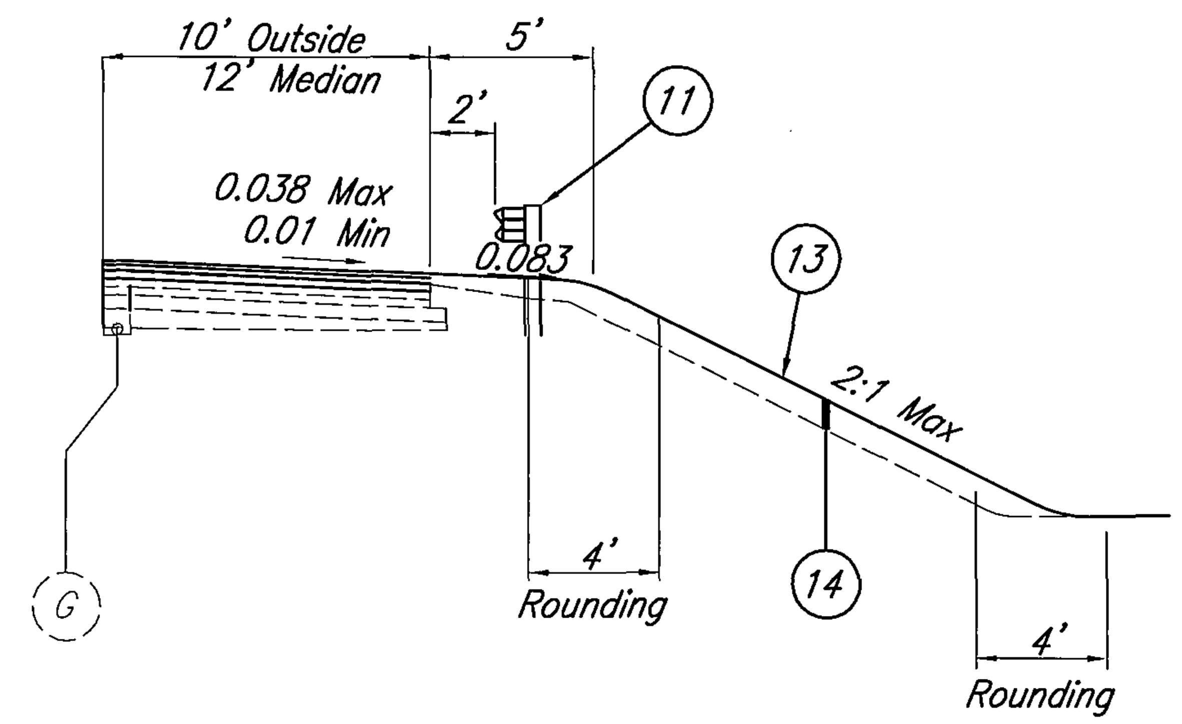
Normal Section and Superelevated Section Low Side



ELEVATION

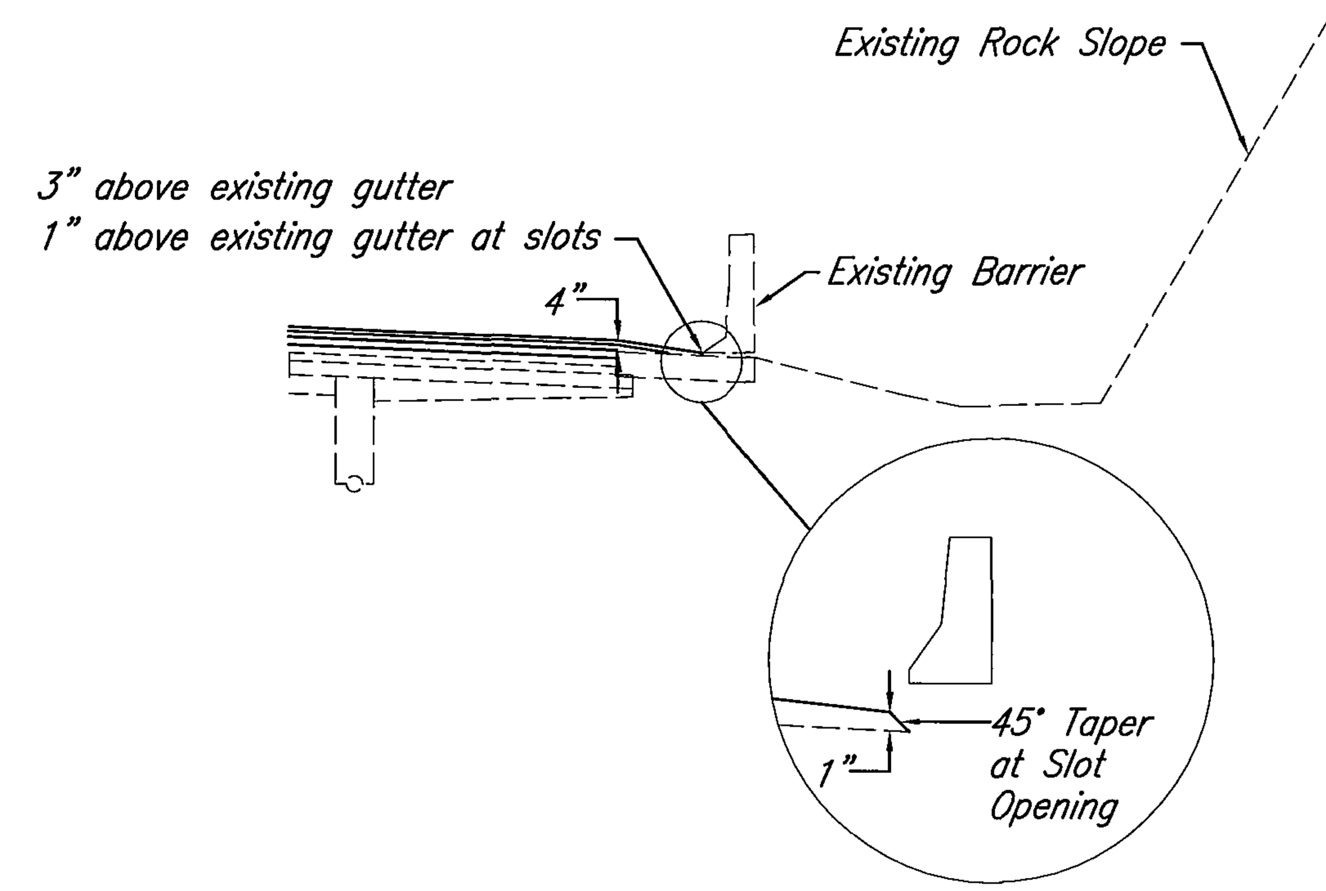


Profile at Toe of Barrier



GUARDRAIL SECTION (1) – I-74

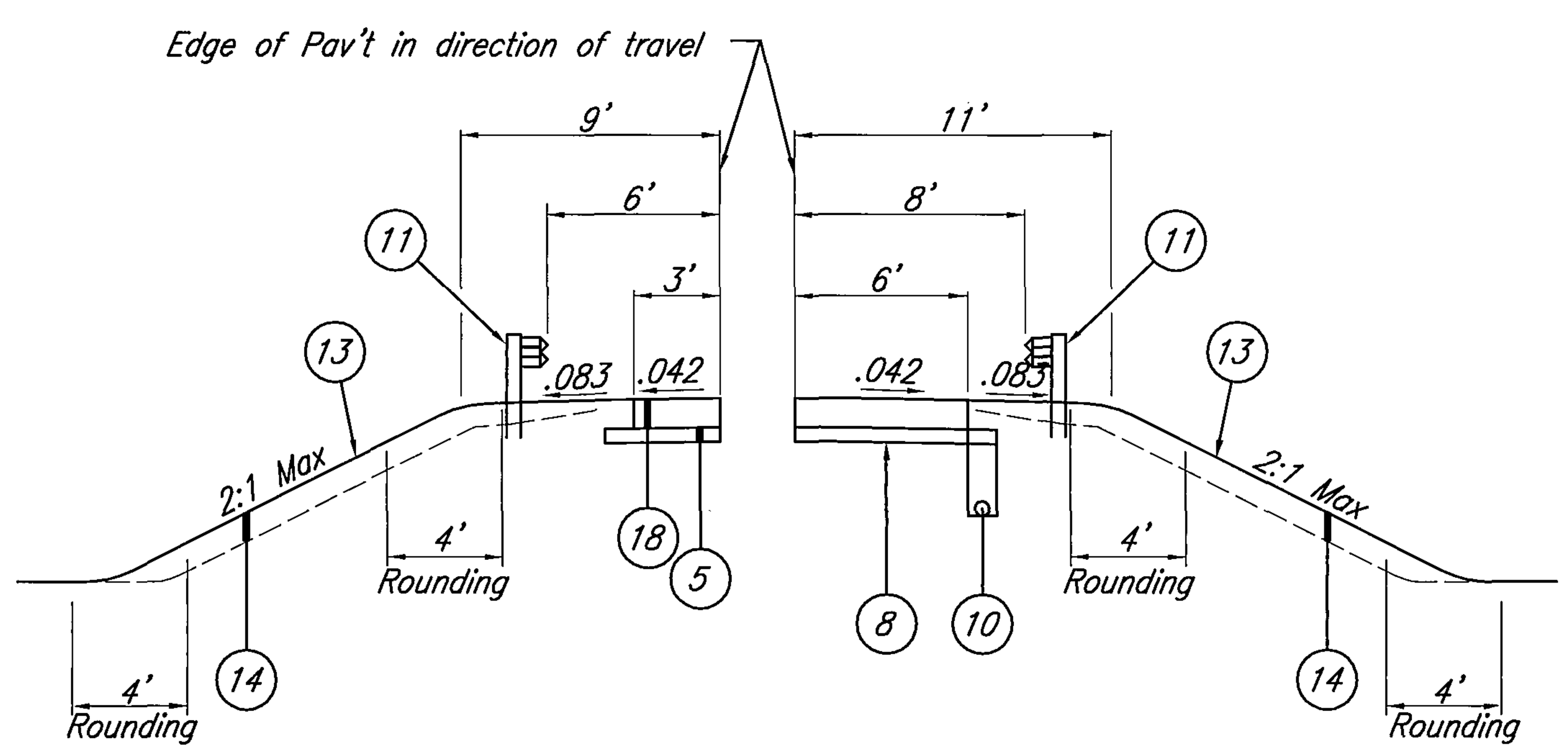
Superelevated Section High Side



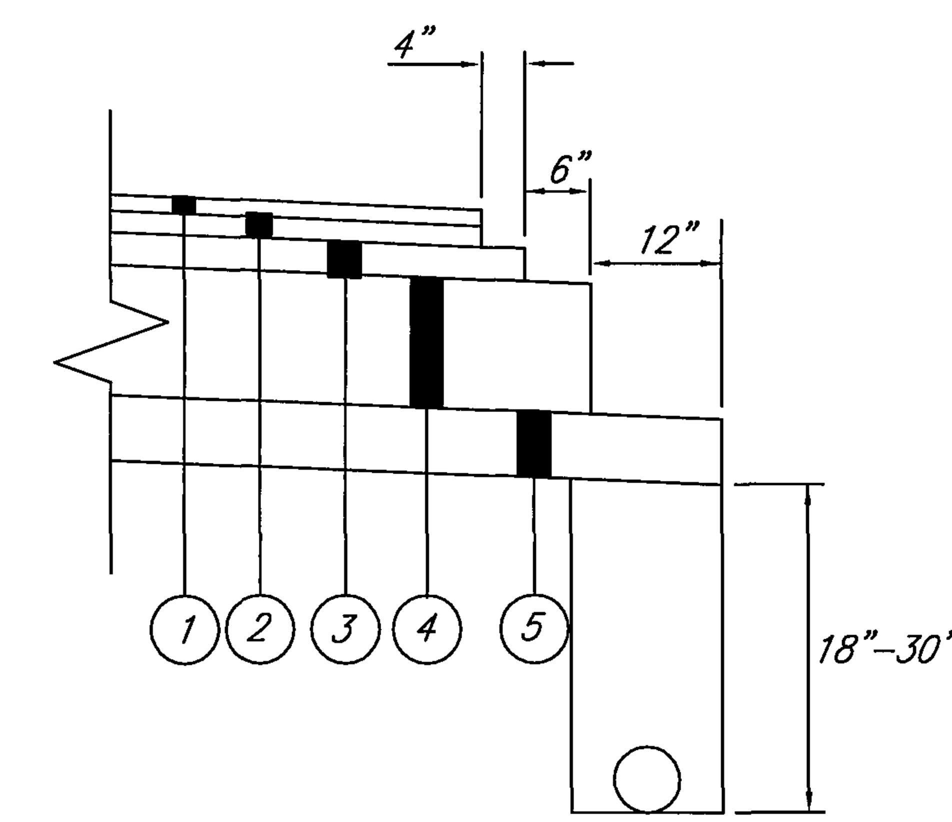
SECTION A-A
Barrier Type D1 with Slots

Sta 59+00 to Sta 66+25 LT

DETAIL D50 BARRIER AT ROCK SLOPES



GUARDRAIL SECTION (1) – RAMPS



DETAIL "A"

NOTES

For Pavement Build-Up Not Shown
See Sheet 4
(1) Unless otherwise shown on cross sections.

TYPICAL SECTIONS
MISCELLANEOUS

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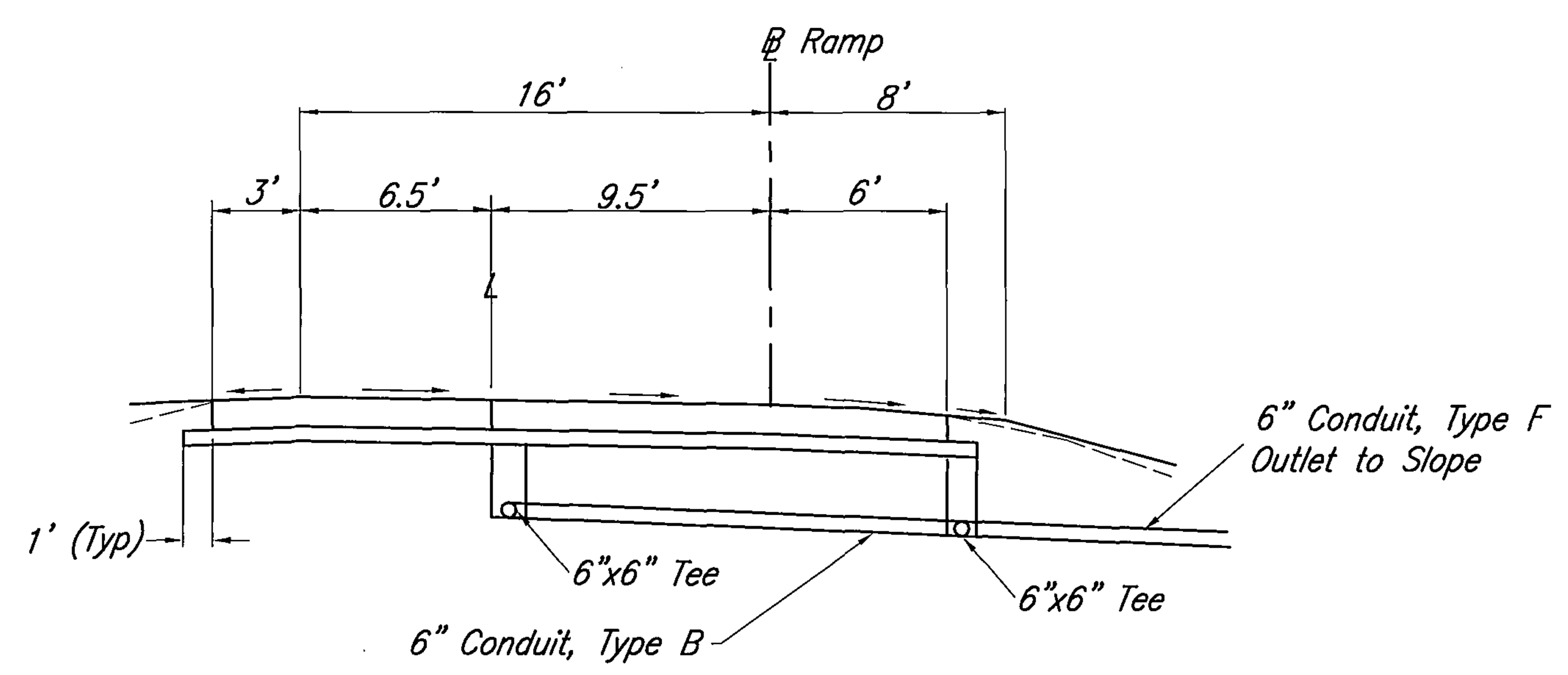
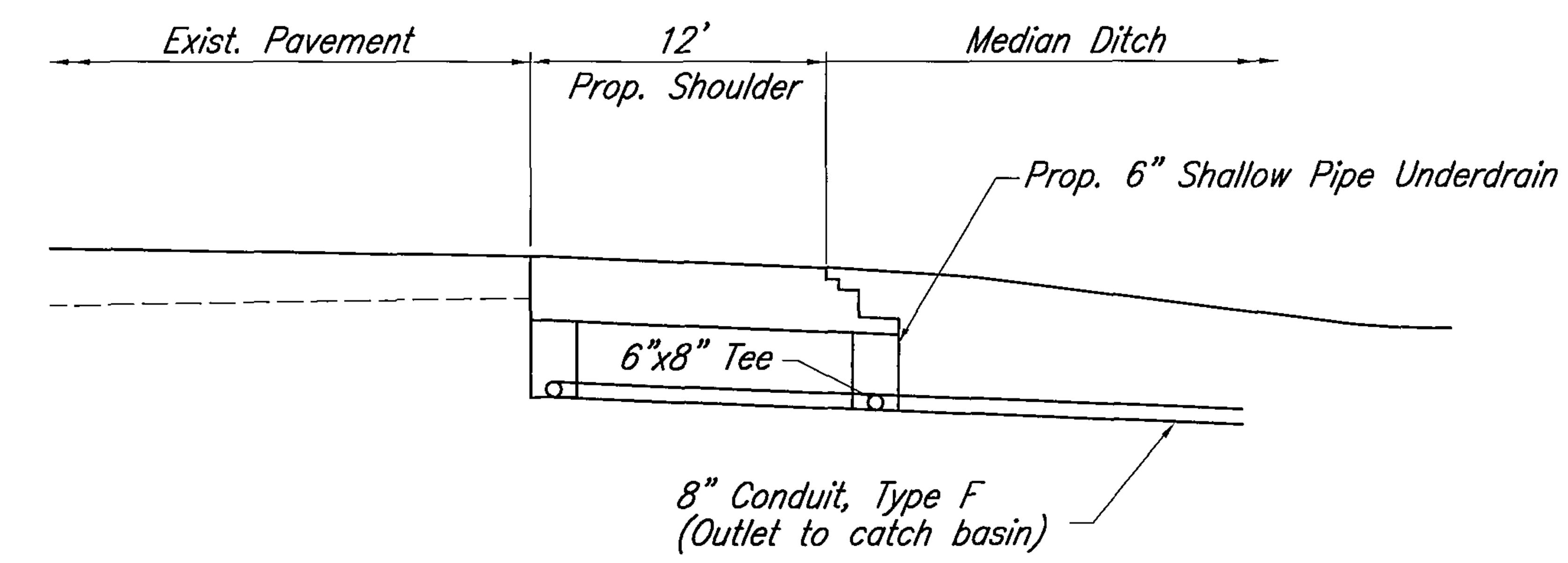
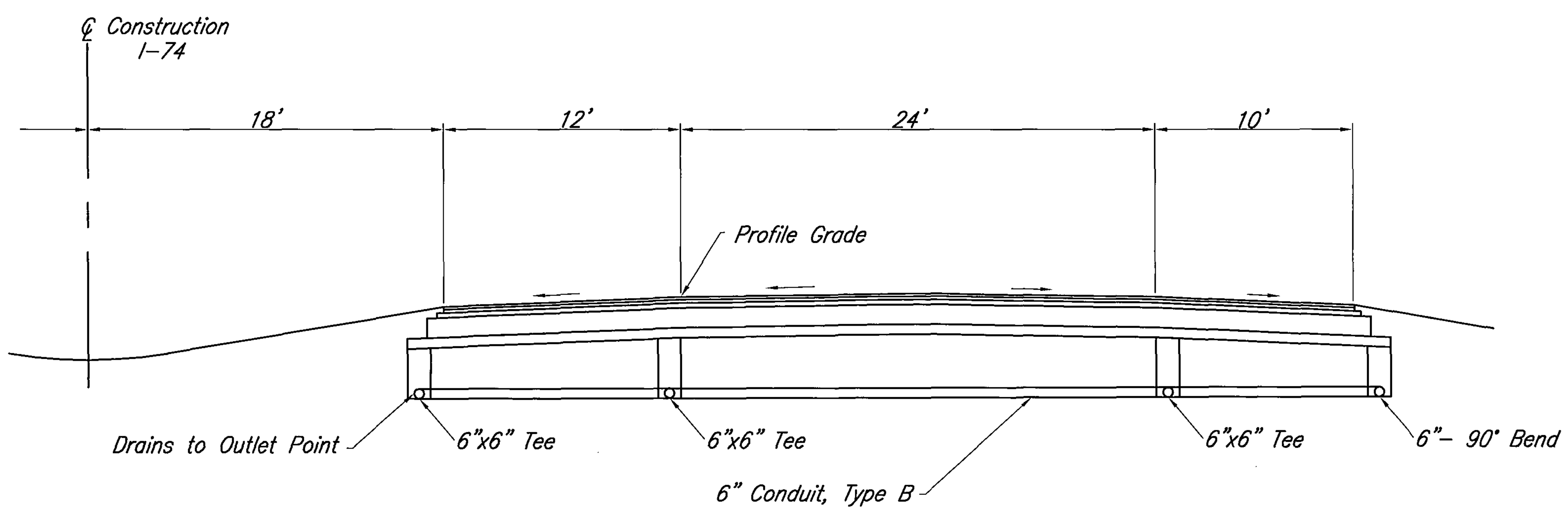


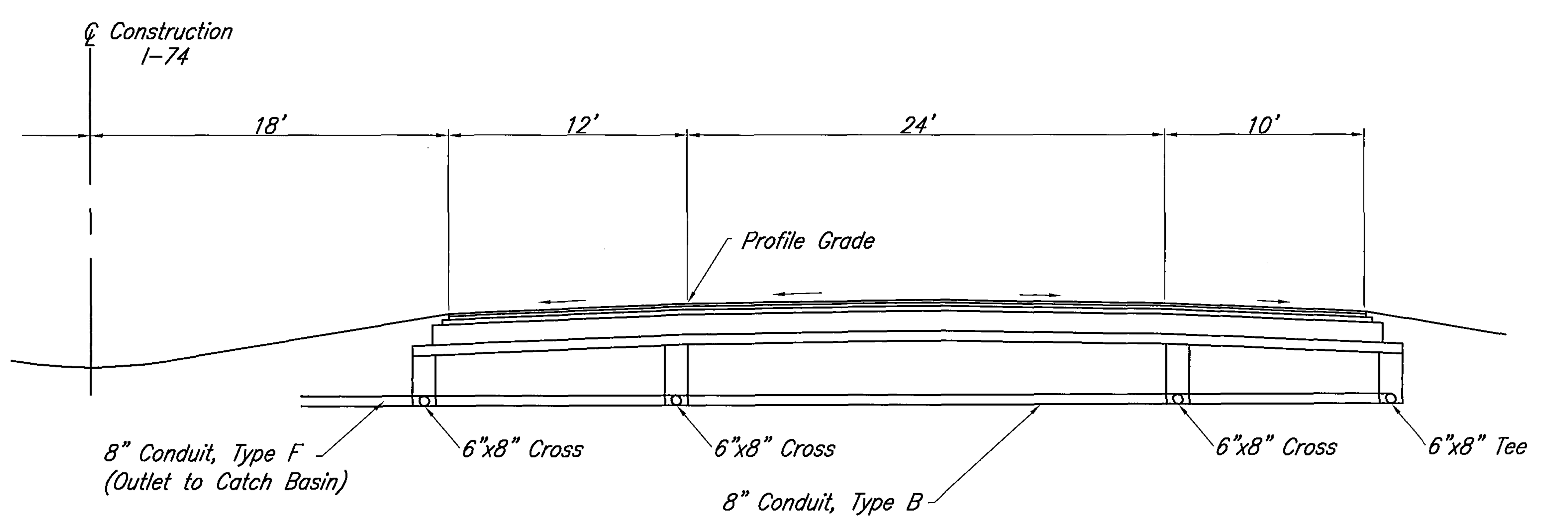
PROPOSED UNDERDRAIN OUTLET FOR RAMPS



PROPOSED UNDERDRAIN OUTLET FOR I-74



PROPOSED UNDERDRAIN OUTLET FOR I-74



PROPOSED UNDERDRAIN OUTLET FOR I-74

TYPICAL SECTIONS
UNDERDRAIN OUTLETS

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GENERAL

CONVERSION OF METRIC STANDARD DRAWINGS
The metric standard drawings referenced in this plan shall be converted to English units using the SI (Metric) to English Conversion Factors provided in Section 109.02 of the 2002 Construction and Materials Specifications. The appendix of ASTM E 380 shall be utilized for any additional conversion factors required. Conversions shall be appropriately precise and shall reflect standard industry English values where suitable.

ROUNDING
The rounding at slope breakpoints shown on the typical sections apply to all cross-sections even though otherwise shown.

CROSS SECTIONS
The end areas for earthwork shown on the cross section sheets in this Project are in square feet. The widths for seeding are shown in feet.

UTILITIES
Listed below are all utilities located within the project construction limits together with their respective owners:

GAS
Texas Eastern Products Pipeline
P.O. Box 426
Seymour, IN 47274
812-522-2569 Dwane Stout

ELECTRIC
Cinergy
139 East Fourth St. Room 467 A
Cincinnati, OH 45201
513-287-1043 Sandi Allen

ELECTRIC (LIGHTING &) (WEIGH STATION)
Ohio Department of Transportation
District 8 Traffic Dept.
P.O. Box 272
Lebanon, OH 45036 Larry Heit

WATER
Harrison Utilities Office
10999 Campbell Road
Harrison, OH 45030
513-367-3725 James M. Lauver

WATER (WEIGH STATION)
Ohio Department of Transportation
District 8 Traffic Dept.
P.O. Box 272
Lebanon, OH 45036 Larry Heit

STORM SEWER
Harrison Utilities Office
10999 Campbell Road
Harrison, OH 45030
513-367-3725 James M. Lauver

Ohio Department of Transportation
District 8 Traffic Dept.
P.O. Box 272
Lebanon, OH 45036 Larry Heit

SANITARY SEWER
Harrison Utilities Office
10999 Campbell Road
Harrison, OH 45030
513-367-3725 James M. Lauver

SANITARY SEWER (WEIGH STATION)
Ohio Department of Transportation
District 8 Traffic Dept.
P.O. Box 272
Lebanon, OH 45036 Larry Heit

TELEPHONE
Cincinnati Bell Telephone
201 East Fourth Street
Mail Location 103-1175
Cincinnati, OH 45202
513-565-7043 Keith Galey

MCI Worldcom
9073 Lytle Serry Road
Waynesville, OH 45068
513-719-4758 Dave Estell

COMMUNICATIONS (WEIGH STATION)
Ohio Department of Transportation
District 8 Traffic Dept.
P.O. Box 272
Lebanon, OH 45036 Larry Heit

CABLE
Time Warner Cable
11252 Cornell Park Drive
Cincinnati, OH 45242
513-469-5483 Gary Napier

The locations of the underground utilities shown on the plans are as obtained from the owners as required by section 153.64 O.R.C.

CONTINGENCY QUANTITIES
The Contractor shall not order materials or perform work for items designated by plan note to be used "as directed by the Engineer" unless authorized by the Engineer. The actual work locations and quantities used for such items shall be incorporated into the final change order governing completion of this project.

ELEVATION DATUM
All elevations are based on NGVD 1988.

WORK LIMITS
The work limits shown on these plans are for physical construction only. The installation and operation of all temporary traffic control and temporary traffic control devices required by these plans shall be provided by the Contractor whether inside or outside these work limits.

PROTECTION OF RIGHT-OF-WAY LANDSCAPING
The Contractor shall constrict all of his/her activities, equipment storage, and staging to within the construction limits. Should the Contractor wish to use any area outside these limits, a request in writing must be submitted to the Project Engineer. The document submitted must clearly identify the area that the Contractor plans to use and explain the proposed use and restoration of the area. The Engineer shall approve the request in writing before the Contractor has permission to use the area. Prior to beginning work, the Contractor Superintendent or his representative, the Project Engineer, and a representative of the maintaining agency shall review and record all landscaping items within the right of way (both within and outside the construction limits). A record of this review will be kept in the Project Engineer's files. Prior to final acceptance, a final review of landscaping items will be made. Any items damaged beyond the Construction limits as defined above will be replaced in kind or as directed by the Project Engineer.

COOPERATION BETWEEN CONTRACTORS
The Contractor's attention is called to the possibility of other future construction projects, which may be awarded adjacent to his work. The Contractor shall be required to coordinate his operations concurrently with these contractors in such a manner that will not result in a combination of adjacent lane restrictions which will exceed the contract limitations. The Contractor shall submit a schedule of proposed operations, in writing, to the Engineer for his approval at least one week prior to any lane restrictions.

NON-USE OF ASBESTOS-CONTAINING MATERIALS
The Contractor shall at no time incorporate any materials which are composed of or contain any amounts of asbestos. The substitution of materials which contain any amounts of asbestos will in no circumstances be acceptable. Upon completion of the project, the Contractor shall submit a written statement of certification asserting that no asbestos-containing materials were used in any portion of the construction.

INTERIM COMPLETION DATE
An interim date of completion for this Contract is set for 45 days prior to the final completion date. All contract items of work must be completed by the interim completion date. The interim date will be subject to liquidated damages as indicated by section 108.07 of the Construction and Materials Specifications book. Request for extensions to the interim date will be processed as per section 108.06 of the Specifications book. The period of time between the interim completion date and the final completion date is strictly to allow for the completion of the "punch list" items and removal of the project field offices. Failure to complete the "punch list" and remove the field offices by the final completion date will result in assessment of liquidated damages as per section 108.07 of the Specifications book.

A granted time extension to the interim completion date will not include a corresponding extension to the final completion date. Extensions of time to the final completion date will only be granted if it can be justified that not enough time exists to complete "punch list" items and remove the project field offices prior to the final completion date.

ITEM 623, CONSTRUCTION LAYOUT STAKES, AS PER PLAN
At the termination of the project, the Contractor shall set all missing or obliterated iron pins shown on the right of way plan. The pins shall be set under the supervision of a Registered Surveyor hired by the Contractor. The pins shall be $\frac{3}{4}$" by 36" reinforcing rod with an aluminum cap stamped with the surveyor's name and registration number.

ROADWAY

CLEARING AND GRUBBING
Although there are no trees or stumps specifically marked for removal within the limits of the project, a lump sum quantity has been included in the General Summary for Item 201, Clearing and Grubbing. All provisions as set forth in the specifications under this item shall be included in the lump sum price bid for Item 201, Clearing and Grubbing.

BENCHING OF FOUNDATION SLOPES
Although cross-sections indicate specific dimensions for proposed benching of the embankment foundations in certain areas, no waiver of the specifications is intended. All other sloped embankment areas shall be benched as set forth in 203.05. No additional payment will be made for benching required under the provisions of 203.05.

MONUMENTS
Any monuments disturbed during construction shall be reset in accordance with the details shown on the Standard Construction Drawings. An estimated quantity of 5 Each for Item 604, Monument Assembly Removed and Reset has been provided in the General Summary to be used as directed by the Engineer.

SPECIAL REQUIREMENTS FOR PROTECTION OF ENDANGERED SPECIES HABITAT - INDIANA BAT
Specific dead trees, snags, and live trees or tree clusters with exfoliating bark (such as shagbark hickory and sycamore) within the project limits are potential summer roost trees for the Indiana bat, a federal endangered species. These trees have special requirements for timing of removal and protection during roosting season.

All potential roost trees shall be cut and removed from the project area before April 15. If the roost trees cannot be removed by April 15, then they shall remain protected and undisturbed for a period between April 15 and September 15, per the requirements below and subsequently removed after September 15.

Additionally, prior to any bridge removal work, the underside of the bridge must be fully examined for the presence of bats. If bats are found roosting on the underside of the bridge, the United States Fish and Wildlife Service must be contacted.

If the trees described above are not removed prior to the next bat roosting season (April 15), they shall be protected by installing work limit fencing around each tree or tree group at a radius of not less than 50 feet from the nearest point of each roost tree trunk. If such protection is required due to the timing of construction, it shall not be cause for time delay or extra compensation claims by the contractor, and the work shall be performed per bid for ITEM 201, CLEARING AND GRUBBING.

ITEM 204, PROOF ROLLING
An estimated quantity for this item has been provided in the General Summary for use as directed by the Engineer.

Item 204, Proof Rolling 50 Hours

ADDITIONAL SOIL INFORMATION
Rock and/or shale may be encountered on this project.

The soil profile and/or structure foundation investigation sheets contain all available soil and bedrock information which can be conveniently shown. Additional subsurface investigations may have been made to study some aspect of the project. More information, if any, may be obtained in District 8, the Office of Materials Management, or the Office of Structural Engineering.

ITEM SPECIAL 690 98400 MISC.: SOILS CONSULTANT FOR FIELD TESTING & INSPECTION LUMP SUM
All testing and inspection for the embankment, subgrade compaction, granular bases and subbases and trench backfill shall be the responsibility of the Contractor. All compaction and or density tests shall meet provisions of Item No's. 202, 203, 304, 503, or 603. Inspection shall assure compliance to the appropriate bid item of work.

The Contractor shall provide a Soils Consultant pre-qualified by ODOT who shall, through the Contractor, be responsible for ensuring the construction including inspection and or density of the embankment, backfill or base materials are in compliance with the specifications. This work shall be in accordance with the Specifications and ODOT Manual of Procedures for Earthwork.

The Soils Consultant shall provide a Soils Technician who has a background in embankment, base construction, structure backfill and pipe installation and is familiar with ODOT Specifications.

Also, the Soils Consultant shall provide necessary trained operators and equipment and furnish the Project Engineer with two (2) copies of acceptable test results within 24 hours after the test is taken. The Soils Consultant Technicians shall demonstrate their competence to the Engineer before work begins. The Engineer will order the Contractor to replace the Soils Consultant if they are not fully versed in the required testing and inspection procedures. The Consultant's Operator shall immediately notify the ODOT Inspector or Engineer of any failing test, identify the remedial action proposed and provide documentation of acceptable retest of the failed area. Compaction tests shall be taken for each 500 cu.yds. of embankment, every 1000 sq.yds. of subgrade prepared and each 1000 sq.yds of subbase placed. The Engineer may require more frequent testing if conditions warrant. Upon completion of the item, the Soils Consultant shall also provide the Engineer with two (2) copies of an inspection report by a Registered Professional Engineer, which contains the testing results and the Consultant's conclusions as to specification compliance for all contract compaction or density work. The Soils Consultant shall provide the Project Engineer with a daily inspection report, which will include compaction/density tests taken, items of work inspected, pay items completed and final pay quantities.

The Engineer will make unannounced quality control tests periodically to verify procedures used and result being obtained by the Contractor.

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The Soils Consultant's field representative shall work under the direction of a Registered Professional Engineer, who will monitor the embankment construction, base placement, structure backfill and pipe installation. The Registered Professional Engineer shall be available to discuss questions and problems which may arise relative to the embankment, base construction and inspection services and shall also attend the monthly progress meetings for the project. The final inspection report shall be signed by a Registered Professional Engineer and certify that all compaction and density tests provided by the Consultant meet all applicable contract requirements.

Payment for this work shall be bid as a lump sum and paid for as follows:

Upon approval of Consultant	20%
Upon completion of the field testing & inspection	60%
Upon submission of final report	20%

ITEM 606 - ANCHOR ASSEMBLY, TYPE B-98
This item shall consist of furnishing and installing either of the following guardrail end terminals.

1. The SRT-350, Guardrail End Terminal as manufactured by Trinity Industry, 1170 N. State Street, Girard, Ohio 44420 (Telephone: 330-545-4373).

The length of the SRT-350 system is considered to be 37'-6", inclusive of three 12'-6" long rail elements. Installation shall be at the locations specified in the plans, in accordance with the manufacturer's specifications as detailed on the following pre-approved shop drawings:

DWG. #	DRAWING NAME	DWG./REV. DATE	ODOT APPROVAL DATE
SS444 SS444M	Slotted Rail Terminal Post Layout and Erection Details SRT-350 (12.5, 8 Post)	7/12/99 Rev. 1 7/12/99	8/27/99
SS425M	Slotted Rail Terminal SRT-350 Post Layout and Erection Details (12.5, 9 Post)	6/21/97 Rev. 1	3/6/98

2. The FLEAT-350 Manufactured by Road Systems, Inc., 2516 Mallory Lane, Stow, OH 44224 (Telephone: 330-346-0721).

The length of the FLEAT-350 is considered to be 37'-6", inclusive of three 12'-6" long rail elements. Installation shall be at the locations specified in the plans, in accordance with the Manufacturer's specifications as detailed on the following pre-approved shop drawings:

DWG. #	DRAWING NAME	DWG. /REV. DATE	ODOT APPROVAL DATE
FLT-M	Flared Energy Absorbing Terminal (FLEAT-350) Assembly	4/16/98	7/31/98

Refer to the manufacturer's instruction regarding the installation of, and the grading around, the foundation tubes and ground strut. The top of any foundation tube should be less than 4-inches above the ground. The placement of the foundation tubes should be an appropriate depth below the level line in order to maintain the finished guardrail height of 27-3/4-inches from the edge of the shoulder.

On-site grading is required if the top of the foundation tubes or top of the ground strut does project more than 4-inches above the ground line.

The face of the Type B-98 Impact Head shall be covered with Type G Reflective Sheeting, per CMS 730.19: approximately 36" W X 12" H for the SRT-350 and 14" W X 20" H for the FLEAT.

Payment for the above work shall be made at the unit price bid for Item 606, Anchor Assembly, Type B-98, Each, and shall include all labor, tools, equipment and materials necessary to construct a complete and functional anchor assembly system, including reflective sheeting and all related hardware, grading, embankment and excavation not separately specified, as required by the Manufacturer.

ITEM 606, ANCHOR ASSEMBLY, TYPE E-98
This item shall consist of furnishing and installing either of the following guardrail end terminals.

1) The ET-2000 (1997) manufactured by Trinity Industry, 1170 N. State Street, Girard, Ohio 44420 (Telephone: 330-545-4373).

The length of the ET-2000 (1997) system is considered to be 50'-0" inclusive of two 25'-0" long rail elements. Installation shall be the locations specified in the plans, in accordance with the Manufacturer's specifications as detailed on the following pre-approved shop drawings:

DWG. #	DRAWING NAME	DWG./REV. DATE	ODOT APPROVAL DATE
SS265M	ET-2000 (1997) Plan, Elevation & Sections	6/20/97	3/6/98
SS142	ET-2000 Plus 50'-0" Plan, Elevation & Section, 25'-0" Rail, Sleeve w/PL Posts 1-4	4/12/00	7/31/00
SS141	ET-2000 Plus Plan, Elevation & Section, 25'-0" Rail, HBA Posts 1-4	2/29/00	7/31/00
SS158	ET-2000 Plus 50'-0" With 12'-6" Panels & HBA Posts 1-4, Plan, Elevation & Section	2/29/00	7/31/00

2) The SKT-350 manufactured by Road Systems, Inc., 2516 Mallory Lane, Stow, Ohio, 44224, (Telephone: 330-346-0721).

The length of the SKT-350 System is considered to be 50'-0", inclusive of four 12'-6" long rail elements. Installation shall be at the locations specified in the plans, in accordance with the manufacturer's specifications as detailed on the following pre-approved shop drawings:

DWG. #	DRAWING NAME	DWG./REV. DATE	ODOT APPROVAL DATE
SKT-4M	Sequential Kinking Terminal (SKT-350) Assembly with 4 Foundation Tubes	12/11/97	3/6/98

The face of the Type E-98 impact head shall be covered with a sheet of Type G reflective sheeting, per CMS 730.19, approximately 18" x 18".

Refer to the manufacturer's instruction regarding the installation of, and the grading around, the foundation tubes and ground strut. The top of any foundation tube should be less than 4-inches above the ground. The placement of the foundation tubes should be an appropriate depth below the level line in order to maintain the finished guardrail height of 27-3/4-inches from the edge of the shoulder.

On-site grading is required if the top of the foundation tubes or top of the ground strut does project more than 4-inches above the ground line.

Payment for the above work shall be made at the unit bid price for Item 606, Each, Anchor Assembly, Type E-98 and shall include all labor, tools, equipment and materials necessary to construct a complete and functional anchor assembly system, including all related transitions, reflective sheeting, hardware, grading, emankment and excavation not separately specified, as required by the Manufacturer.

CONNECTION BETWEEN EXISTING & PROPOSED GUARDRAIL
When it is necessary to splice proposed guardrail to existing guardrail, only the existing guardrail shall be cut, drilled, or punched. The connection shall be made using a "W-Beam Rail Splice" as shown in AASHTO M 180. Payment shall be included in the contract price for the respective guardrail items.

ITEM 607, FENCE TYPE 47
Fence, Type 47, shall be replaced at the bridge abutments as directed by the Engineer.

The following estimated quantities have been included in the General Summary for use as directed by the Engineer for the work noted above:

202, Fence Removed	400 LF
607, Fence, Type 47	400 LF

ITEM 606 - IMPACT ATTENUATOR, TYPE 1-98 (UNIDIRECTIONAL OR BIDIRECTIONAL)
This item shall consist of furnishing and installing either of the following impact attenuators:

1. The C-A-T Manufactured by Trinity Industry, 1170 N. State Street, Girard, Ohio 44420 (Telephone: 330-545-4373).

The length of the C-A-T system is considered to be 31'-3" long. Installation shall be at the locations specified in the plans, in accordance with the Manufacturer's specifications as detailed on the following pre-approved shop drawings:

DWG. #	DRAWING NAME	DWG./REV. DATE	ODOT APPROVAL DATE
SS245M	Crash-Cushion Attenuating Terminal Plan, Elevation & Sections for use as a longitudinal median barrier terminal or crash cushion attenuator	4/10/97 Rev. 4	3/6/98
SS224M	C-A-T transition to median barrier guardrail plan, elevation & sections	4/26/96	3/6/98
SS226M	C-A-T transition to vertical wall or pier plan, elevation & sections	4/26/96	3/6/98

2. The Brakemaster manufactured by Energy Absorption Systems, Inc., One East Wacker Drive, Chicago, IL 60601 (Telephone: 312-467-6750).

The length of the Brakemaster system is considered to be 32'-8" long. Installation shall be at the locations specified in the plans, in accordance with the Manufacturer's specifications as detailed on the following pre-approved shop drawings:

DWG. #	DRAWING NAME	DWG./REV. DATE	ODOT APPROVAL DATE
92-00-01	Brakemaster General Assembly (Unidirectional System)	3/6/97 Rev. K	3/6/98
92-00-81	Brakemaster (Unidirectional) With Foundation Tubes	2/9/98	3/6/98
92-00-02	Brakemaster General Assembly (Bidirectional System)	3/10/97 Rev. K	3/6/98
92-00-82	Brakemaster (Bidirectional) With Foundation Tubes	2/9/98	3/6/98
9202024	Anchor Assembly, Foundation Tube, 6 1/2 Ft., BRS	6/12/97 Rev. D	3/6/98

The face of the Type 1-98 impact head shall be covered with a sheet of Type G reflective sheeting, per CMS 730.19, approximately 36" W X 12" H. Payment for the above work shall be made at the unit price bid for Item 606, Impact Attenuator, Type 1-98 (Unidirectional or Bidirectional), Each, and shall include all labor, tools, equipment and materials necessary to construct a complete and functional anchor assembly system, including all related transitions, hardware, reflective sheeting and grading, not separately specified, as required by the Manufacturer.

AIRWAY/HIGHWAY CLEARANCE FOR AIRPORTS AND HELIPORTS
This project has been identified as being within the influence area of a public use airport or heliport. The Contractor is advised that no temporary structures or construction equipment at maximum operating height shall exceed a height of 80 ft. If any temporary structures or construction equipment will exceed this height, the Contractor is advised that coordination with the Federal Aviation Administration (FAA) will be necessary prior to erecting such temporary structures or operating such equipment on the project. The Contractor will be required to submit form 7460-1 to the FAA. A copy of the submission and two copies of form 7460-1 shall be forwarded to the ODOT Office of Aviation. The Contractor is advised that no temporary structures or construction equipment shall exceed the permissible height, until a copy of the FAA approval and ODOT Office of Aviation permit has been furnished to the Project Engineer.

The Federal Aviation Administration Great Lakes Regional Office
Air Traffic Division AGL-530 2300 East Devon Avenue Des Plaines, Illinois 60018 847-294-7566

Ohio Department of Transportation
Office of Aviation
2829 West Dublin-Granville Road
Columbus, Ohio 43235
614-793-5046

HAZARDOUS MATERIALS:

Prior to the demolition and/or removal of any structure, they shall be tested by an ODOT pre-qualified environmental consultant for the presence of hazardous materials, which includes, but is not limited to , asbestos, lead, chromium, etc.. If any hazardous materials are present, then a contractor certified in handling, removal, and disposal of those hazardous materials, according to the Ohio Environmental Protection Agency (OEPA) guidelines, must perform that work. Payment will be made for third party billing to perform this work.

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EROSION CONTROL

SEEDING AND MULCHING

The following quantities are provided to promote growth and care of permanent seeded areas:

659, Soil Analysis Test	2	Each
659, Topsoil	17,100	CuYd
659, Commercial Fertilizer	21	Ton
659, Agricultural Lime	64	Ton
659, Inter-seeding	7,700	SqYd
659, Water	830	M Gal
659, Mowing	39	M SqFt

Seeding and mulching shall be applied to all areas of exposed soil within the construction limits. Quantity calculations for Seeding and Mulching are based on these limits.

SODDING

The following estimated quantities are provided to promote the growth and care of permanent sodded areas:

659, Commercial Fertilizer	1	Ton
659, Agricultural Lime	4	Ton
659, Water	216	M Gal

PROJECT SITE PLAN

The Project Site Plan has been prepared by the Engineer and provided as part of the plans. The Contractor is responsible for modifying the Project Site Plan plan to prepare a Storm Water Pollution Prevention Plan (SWPPP) meeting Ohio EPA and NPDES (National Pollutant Discharge Elimination System) requirements. The following quantities have been included in the General Summary for this work.

Item 832, Storm Water Pollution Prevention Plan	1 Each
Item 832, Erosion Control	Lump

DRAINAGE

ITEM-SPECIAL FILL AND PLUG EXISTING CONDUIT

This item shall consist of the construction of bulkheads in an existing conduit and filling the area thus sealed off with lean grout, Item 613, sand or other material approved by the engineer. Bulkheads shall be located at the limits of the area to be filled as indicated on the plans. The bulkheads shall consist of brick or concrete masonry with a minimum thickness of 12 inches. The fill material shall be pumped into place, or placed by other means approved by the engineer, so that, after settlement, at least 90 percent of the cross-sectional area of the conduit, for its entire length, shall be filled. The length of filled and plugged conduit to be paid for shall be the actual number of feet (measured along the centerline of each conduit from outer face to outer face of bulkheads) filled and plugged as described above.

In lieu of filling and plugging the existing conduit, the pipe may be crushed and backfilled in accordance with the provisions of 203, or it may be removed. The length, measured as provided above, shall be paid for at the contract price per foot for, Item Special, Fill and Plug Existing Conduit.

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

Where plans provide for a proposed conduit to be connected to, or cross over or under an existing sewer or underground utility, the Contractor shall locate the existing pipes or utilities both as to line and grade before starting to lay the proposed conduit.

If it is determined that the elevation of the existing conduit, or existing appurtenance to be connected, differs from the plan elevation or results in a change in the plan conduit slope, the Engineer shall be notified before starting construction of any portion of the proposed conduit which will be affected by the variance in the existing elevations.

If it is determined that the proposed conduit will intersect an existing sewer or underground utility if constructed as shown on the plan, the Engineer shall be notified before starting construction of any portion of the proposed conduit which would be affected by the interference with an existing facility.

Payment for all the operations described above shall be included in the contract price for the pertinent 603 conduit item.

UNTREATED SEPTIC CONNECTIONS

This plan makes no provision for connecting, nor shall the Engineer or Contractor connect, any untreated septic drainage into the highway drainage system. Any pipe carrying untreated septic flow shall be plugged with class C concrete at the right-of-way line. Payment for plugging shall be included in the contract price for Item 203 excavation.

REVIEW OF DRAINAGE FACILITIES

Before any work is started on the project and again before final acceptance by the State, representatives of the State and the Contractor, along with local representatives, shall make an inspection of all existing sewers which are to remain in service and which may be affected by the work. The condition of the existing conduits and their appurtenances shall be determined from field observations. Records of the inspection shall be kept in writing by the State.

All new conduits, inlets, catch basins, and manholes constructed as a part of the project shall be free of all foreign matter and in a clean condition before the project will be accepted by the State.

All existing sewers inspected initially by the above mentioned parties shall be maintained and left in a condition reasonably comparable to that determined by the original inspection. Any change in the condition resulting from the Contractor's operations shall be corrected by the Contractor to the satisfaction of the Engineer.

Payment for all operations described above shall be included in the contract price for the pertinent 603 conduit items.

ITEM 209, DITCH CLEANOUT, AS PER PLAN

Ditch cleanout shall be in accordance with the specifications of Item 209 and with the details shown on Sheets 124, 337 & 338.

ITEM 604, CATCH BASIN, NO. 2-2B, AS PER PLAN

This item shall consist of constructing a Catch Basin, No. 2-2B in accordance with Standard Construction Drawing CB-1.1 and shall also include constructing two twenty foot sections of Concrete Barrier, Single Slope, Type D, Reinforced, with a drainage slot as detailed on Sheet 343.

PAVEMENT

CONTRACTION AND/OR EXPANSION JOINTS

Although specific locations of certain contraction and expansion joints have been detailed on this plan, no waiver of the specifications is intended. Provision of expansion joints at all major structures and the maximum spacing between contraction joints shall, in all cases, be in accordance with Standard Construction Drawing BP-2.2M and the specifications.

CONTRACTION JOINTS IN CONCRETE PAVEMENT OR BASE WIDENING

Where new concrete is placed adjacent to existing concrete, contraction joints shall be provided in the new concrete so as to form continuous joints with those in the existing concrete.

The maximum distance between the joints in the new concrete shall be in accordance with Standard Construction Drawing BP-2.2M. If necessary, additional joints shall be provided in the new concrete at approximately equal intervals between existing joints that exceed the maximum spacing.

PART-WIDTH CONSTRUCTION

Because of the necessity to build this project under traffic and to construct the full pavement width in stages, extreme care shall be taken to prevent the construction of a butt joint in the base courses. Longitudinal joints shall be lapped as shown on Standard Construction Drawing BP-3.1M.

ITEM 618, RUMBLE STRIPS, TYPE 2 (ASPHALT CONCRETE)

Rumble strips shall be placed along the median and outside shoulders of I-74 in accordance with Standard Construction Drawing BP-9.1.

An estimated quantity of 14 Miles of Rumble Strips, Type 2 (Asphalt Concrete), has been carried to the General Summary.

ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS FS

Where directed by the Engineer, the Contractor shall repair existing concrete pavement transverse joints. Joints shall be repaired as detailed in Section Type Y or Section Type T in Standard Construction Drawing BP-2.5. Work shall also be performed in accordance with Item 255 Full Depth Pavement Removal and Rigid Replacement. Thickness of concrete replacement shall match existing thickness. See Miscellaneous Detail Sheet 334 for additional information. The following estimated quantities have been included in the General Summary to be used as directed by the Engineer:

MAINLINE I-74

Item 255, Full Depth Pavement Removal and Rigid Replacement, Class FS	8,000	Sq Yd
Item 255, Full Depth Pavement Sawing	21,000	FT

SUPPLEMENTAL SPECIFICATION 819, DOWEL BAR RETROFIT

Where directed by the Engineer, the Contractor shall repair existing concrete pavement transverse cracks. Work shall also be performed in accordance with Supplemental Specification 819, Dowel Bar Retrofit.
See Sheet 336, SS 819 - Dowel Bar Retrofit Details, for additional information. The following estimated quantities have been included in the General Summary to be used as directed by the Engineer:

WEIGH STATION RAMPS

SS 819, Retrofit Dowell Bars	500	Each

SUPPLEMENTAL SPECIFICATION 850, DIAMOND GRINDING

Where directed by the Engineer, the Contractor shall diamond grind and texture portland cement concrete pavement longitudinally to substantially eliminate joint and crack faulting and to restore proper riding characteristics to the pavement surface. Limits of work shall be on the weigh station ramps between stations 4+53 to 11+03, and 11+83 to 20+13. Work shall be performed in accordance with Supplemental Specification 850, Diamond Grinding Portland Cement Concrete Pavement. The following estimated quantities have been included in the General Summary to be used as directed by the Engineer:

WEIGH STATION RAMPS

SS 850, Diamond Grinding Portland Cement Concrete	2,632	Sq Yd

WALK REPAIR

Where directed by the Engineer, the Contractor shall remove sections of existing walk at the weigh station building and replace it with a new 5" walk to eliminate vertical separations at joints. Work shall be performed in accordance with Item 202, Walk Removed and Item 608, 5" Concrete Walk. The following estimated quantities have been included in the General Summary to be used as directed by the Engineer:

WEIGH STATION

Item 202, Walk Removed	100	Sq Ft
Item 608, 5" Concrete Walk	100	Sq Ft

ITEM 254, PAVEMENT PLANING, ASPHALT CONCRETE (DEPTH 15.5"±), AS PER PLAN

The Contractor shall plane the existing pavement to the top of existing engineered fill. The thickness of existing asphalt has been estimated from existing plans to be 15.5". The Contractor shall take special care to not disturb the existing engineered fill. Plans of the existing engineered fill are available at ODOT's District 8 office. The limits of this work shall be between 50+02 and 53+98, and shall be performed in accordance with Item 254, Pavement Planing, Asphalt Concrete

MAINTENANCE OF TRAFFIC

ITEM 614, MAINTAINING TRAFFIC

A minimum of 2 lanes of traffic in each direction shall be maintained on I-74 between the hours of 6 AM & 7 PM Monday through Thursday and 6 AM through 8 PM Friday through Sunday by use of the existing pavement, the completed pavement, Item 615 Pavement for Maintaining Traffic, Item 615 Roads for Maintaining Traffic and Temporary Surfaces using Items 410 and 614. Failure to maintain the specified number of lanes will result in liquidated damages being assessed in the amount of $1000.00 per half hour a lane remains closed to traffic.

In addition to the time restrictions above, no work shall be performed and 2 lanes per direction shall be maintained during the following designated holidays or events:

Christmas	New Years
Memorial Day	Fourth of July
Labor Day	Thanksgiving

The period of time that the lanes are to be open depends on the day of the week on which the holiday or event falls. The following schedule shall be used to determine this period:

Day of the week	Time all lanes must be open to traffic
Sunday	6:00 AM Friday through 8:00 PM Monday
Monday	6:00 AM Friday through 8:00 PM Tuesday
Tuesday	6:00 AM Monday through 8:00 PM Wednesday
Wednesday	6:00 AM Tuesday through 8:00 PM Thursday
Thursday	6:00 AM Wednesday through 8:00 PM Monday
Friday	6:00 AM Thursday through 8:00 PM Monday
Saturday	6:00 AM Friday through 8:00 PM Monday

No extensions of time shall be granted for delays in material deliveries, unless such delays are industry-wide, or for labor strikes, unless such strikes are area-wide. Should the Contractor fail to meet any of these requirements, the Contractor shall be assessed liquidated damages in the amount of $1,000 per half hour a lane remains closed to traffic outside the 8:00 PM to 6:00 AM timeframe.

Length and duration of lane closures and restrictions shall be at the approval of the Engineer. It is the intent to minimize the impact to the traveling public. Lane closures or restrictions over segments of the project in which no work is anticipated within a reasonable time frame, as determined by the Engineer, shall not be permitted. The level of utilization of Maintenance of Traffic devices shall be commensurate with the work in progress.

WORK IN INDIANA

Before erecting signs in Indiana, the Contractor shall contact the Indiana Department of Transportation. All work in Indiana shall be coordinated with the Aurora Sub-District Manager, Phone: 812-926-0376.

PAVEMENT MARKINGS

The maintaining traffic plan for installation of long line pavement markings shall be in accordance with ODOT SCD MT-99.20M "Traffic Control For Long Line Pavement Marking Operations". The maintaining traffic plan for installation of auxiliary markings (e.g. channelizing lines, transverse lines, exit and entrance gores etc.) at/near interchanges/intersections shall be in accordance with maintaining traffic plan details prescribed herein. Normal directional traffic shall be maintained on the roadway at all times during the installation period in accordance with ODOT Standard Construction Drawings and the Ohio Manual of Uniform Traffic Control Devices as approved by the Engineer.

MAINTAINING TRAFFIC ALTERNATE METHODS

If the contractor so elects, he may submit detailed traffic control plans including written descriptions of the alternate methods for the maintenance of traffic, provided the intent of the above provisions is followed and no additional inconvenience to the traveling public results therefrom. No alternate plan shall be placed into effect until prior approval has been granted in writing, by the director.

SEQUENCE OF OPERATIONS

There are four major phases to this work:
1. Shift traffic slightly to the right and construct new median shoulder.
2. Shift traffic to the left onto the new median shoulder and left lane. Plane and resurface right lane and shoulder except for the surface course.
3. Shift traffic onto the right lane and shoulder. Plane the left lane and overlay the left lane and median shoulder including the surface course.
4. Shift traffic onto the left lane and median shoulder. Apply the surface course to the right lane and shoulder.

(In these sequence of construction notes, "left" and "right" are used with respect to the direction of traffic.)

PRE-PHASE I

Remove and replace the existing outside shoulder 650' before and after New Biddinger Road Bridge, 650' before and after New Haven Road Bridge, 650' before and after West Road bridge. Phase I traffic will need to use the shoulder in these locations but the existing shoulder is not strong enough to support traffic.

PHASE 1

Work to be completed in this phase: Construct new median shoulder up to and including Item 301, 3" Asphalt Concrete Base. Remove median portions of bridge over New Biddinger Road and construct new piers and bridge deck in the median. Construct temporary pavement that will be needed for Phase II.

MAINLINE

1) Using concrete barrier, narrow two twelve foot lanes of traffic to two ten foot lanes by shifting traffic to the right.
2) At New Biddinger Bridge, and beneath New Haven Road Bridge and West Road Bridge, shift two lanes of traffic further to the right onto the outside lane and shoulder to permit bridge work and full depth pavement replacement.
3) Remove existing median shoulder and excavate for proposed shoulder.
4) Prepare subgrade.
5) Construct pavement up to and including Item 301, 3" Asphalt Concrete Base.

RAMPS

1) After completing all Mainline work, remove inside ramp shoulder to the limits shown on the plans and construct temporary pavement to be used in Phase II.

STRUCTURES

Median bridge work at New Biddinger Road shall be in progress during the entire phase.

PHASE II

Work to be completed in this phase: Plane and resurface the right lane up to and including the Intermediate Course. Perform joint repair on the right lane where required. Remove outside portions of New Biddinger Bridge and construct new deck. Lower pavement below New Haven Road and West Road.

MAINLINE

1) Using drums, shift two lanes of traffic to the new median shoulder and left lane (there will be a ½" elevation difference between the traffic lanes).
2) Beneath New Haven and West Roads' Bridges, shift lanes further to the left using temporary pavement constructed at the end of Phase I. This is to accommodate the pavement lowering activities.
3) Plane 2.5" from right lane and shoulder. Close one lane of traffic at permitted times when work requires the drum to be moved closer than 2' to the traveled lane.
4) Perform joint repair on the right lane where required.
5) Overlay right lane and shoulder with 3" of Item 301 and 2" of Item 442, Intermediate Course. Close one lane of traffic at permitted times when work requires the drum to be moved closer than 2' to the traveled lane.
6) Pavement lowering beneath New Haven and West Roads shall be in progress during the entire phase.

RAMPS - NEW HAVEN (200' Length)

Phase IIA

1) Route traffic onto temporary pavement constructed in Phase I.
2) Plane the right shoulder and 9.5' of the ramp lane.
3) Overlay the right shoulder and 9.5' of the ramp lane with 3" of Item 301 and 2" of Item 442, Intermediate Course.

Phase IIB

1) Route traffic onto the portion of pavement completed in Phase IIA.
2) Plane the left 6.5' of the ramp lane.
3) Overlay the left 6.5' of the ramp lane with 3" of Item 301 and 2" of Item 442, Intermediate Course.
4) Overlay the temporary pavement constructed in Phase I with 2.5" of Item 448.

RAMPS - DRY FORK

Phase IIA

1) Route ramp traffic onto temporary pavement constructed in Phase I using drums and concrete barrier.
2) Remove 9.5' of existing ramp lane and all of 6' shoulder.
3) Replace with 6" Aggregate Base and 12" Non-Reinforced Concrete Pavement.
4) Construct 2' of temporary pavement on outside edge for pavement stability in Phase IIB.

Phase IIB

1) Route ramp traffic onto completed pavement from Phase IIA using drums and concrete barrier.
2) Remove remaining old pavement and temporary pavement used in Phase IIA.
3) Construct 6.5' of ramp pavement and 3' shoulder with 6" Aggregate Base and 12" Non-Reinforced Concrete Pavement.

Phase IIC

1) Complete ramp pavement at intersections.

WEIGH STATION

Weigh Station acceleration and deceleration lanes shall be planed and resurfaced in Phase IIB. This work shall be performed when the weigh station is closed and shall not be longer than 2 days.

STRUCTURES

The right side of New Biddinger Bridge shall be removed and replaced during this phase.

PHASE III

Work to be completed during this phase: Plane the left lane and pave the left lane and median shoulder up to and including the Surface Course. Perform joint repair in the left lane where required. Bridge work at New Biddinger Road and pavement lowering beneath New Haven and West Roads shall be complete before the beginning of this phase.

MAINLINE

1) Using drums, shift two lanes of traffic to the outside lane and shoulder.
2) Plane 2.5" of existing asphalt from the left lane. Perform work at night when traffic can be reduced to one lane.
3) Perform joint repair in the left lane where required.
4) Resurface the left lane with 3" of Item 301, Asphalt Concrete Base.
5) Overlay both the left lane and new median shoulder with 2" of Item 442, Intermediate Course and 1-½" of Item 442, Surface Course.

PHASE IV

Work to be completed during this phase: Apply surface course to the outside lane and shoulder.

MAINLINE

1) Using drums, shift two lanes of traffic to the left lane and median shoulder.
2) Apply 1-½" of Item 442, Surface Course, to the right lane and shoulder. Close one lane of traffic at permitted times when work requires the drum to be moved closer than 2' to the traveled lane.

RAMPS - NEW HAVEN ROAD

Phase IVA

1) Route traffic onto temporary pavement constructed in Phase I.
2) Overlay the right shoulder and 9.5' of the ramp lane with 1.5" of Item 442, Surface Course.

Phase IVB

1) Route traffic onto the portion of pavement completed in Phase IVA.
2) Overlay the left 6.5' of the ramp lane and 3' of the temporary pavement with 1.5" of Item 442, Surface Course.
3) Sawcut the temporary pavement leaving 3' for the left shoulder.

NEW BIDDINGER ROAD

No work is being performed on this road. However, traffic will be affected by the construction of new piers and the new superstructure on the Interstate Bridge above.

Place portable concrete barriers on the graded shoulder, 2' from the existing edge of pavement. The back of the concrete barrier will be 12.5' from the face of the closest pier. Traffic will continue to use the normal travel lanes. However, since there may not be enough room to accommodate all the construction vehicles and equipment, closures using flaggers will be required for loading and unloading trucks, concrete delivery, and other construction activities

Overnight closures between the hours of 11 pm and 5 am shall be permitted for removing the existing steel and erecting the superstructure. Coordinate all closures with the Hamilton County Engineer's Office. A Portable Changeable Message Sign shall be placed on New Biddinger Road at the bridge site a minimum of 5 calendar days in advance of the closure displaying the time and date the road will be closed to traffic. The road shall be closed to traffic per SCD MT101.60 and the applicable figure in the OMUTCD.

WEST ROAD

Traffic will be maintained using a temporary signal. One lane of traffic will be open on the bridge.

Overnight closures between the hours of 11 pm and 5 am shall be permitted on West Road to trim the beam ends, jack, support and shim the rear and forward abutment bearings and reset pier bearings as described in Item 516 - Refurbish Bearing Devices, As Per Plan on sheet 416. Coordinate all closures with the Hamilton County Engineer's Office. Before re-opening the road, the contractor shall install an asphalt concrete wedge to meet the new bridge height.

(CONTINUED - NEXT SHEET)

WEST ROAD – PHASE I

1. Install a temporary signal and close the left side of the bridge using PCB as shown in the Maintenance of Traffic plans.
2. Remove the existing SDC overlay by hydro-demolition on the left side of the bridge.
3. Remove the aluminum railing, posts, fence, curb, bulb angle, backwall, joint armor as detailed on sheet 417 and bridge terminal assembly on the left side of the bridge.
4. Plug scuppers, construct backwall with strip seal armor.
5. Reface railing, install vandal protection fence and bridge terminal assemblies on the left side of the bridge.
6. Place 2 1/2" MSC overlay, seal concrete surfaces and complete guardrail connections as shown on the roadway plans for the left side of the bridge.

WEST ROAD – PHASE II

7. Relocate the PCB as shown on the Maintenance of Traffic plans and switch traffic to the portion of the bridge completed in Phase I.
8. Perform Sequence of Construction Steps no. 2-6 for the right side of the bridge.
9. Remove PCB and temporary Signal.
10. Place permanent traffic control devices.

The one-lane two-way operation using a temporary signal shall be in effect a maximum of 75 consecutive calendar days. The Contractor shall be subject to liquidated damages per 108.07 if the one-lane two-way operation remains in effect longer than 75 days. The one-lane two-way operation shall be prohibited between the months of November and April.

All work and traffic control devices shall be in accordance with Item 614 and other applicable portions of the specifications, as well as the Ohio Manual of Uniform Traffic Control Devices. Payment for all labor, equipment and materials shall be included in the lump sum contract price for Item 614, Maintaining Traffic, unless separately itemized in the plan.

ITEM 614, MAINTAINING TRAFFIC (CONTINGENCY QUANTITES)

The following estimated quantities have been included in the General Summary for use as directed by the Engineer for the maintenance of traffic.

410, Traffic Compacted Surface, Type B	50 Cu. Yd.
614, Asphalt Concrete For Maintaining Traffic	200 Cu. Yd.
615, Pavement For Maintaining Traffic, As Per Plan	4,000 Sq. Yd.
616, Water	4 M. Gal

GUARDRAIL REPLACEMENT

No hazard shall be left unprotected except for the actual time necessary to remove the existing guardrail, prepare the site, and install new guardrail in a continuous operation. The removal of all guardrail shall at all times be as directed by the Engineer. No guardrail shall be removed until the replacement material is on the site, ready for installation. Failure to comply with this requirement shall be deemed sufficient cause to order work suspended until such time as the Engineer is assured of compliance.

In situations where the guardrail cannot be replaced in a continuous operation, such as near bridge piers, Item 622 – Portable Concrete Barrier, 32", shall be installed. The following estimated quantity has been provided in the General Summary to be used as directed by the Engineer:

Item 622 – Portable Concrete Barrier, 32" 1,000 FT

FLOODLIGHTING

Floodlighting of the work site for operations conducted during nighttime periods shall be accomplished so that the lights do not cause glare to the drivers on the roadway. To ensure the adequacy of the floodlight placement, the Contractor and the Engineer shall drive through the work site each night when the lighting is in place and operative prior to commencing any work. If glare is detected the light placement and shielding shall be adjusted to the satisfaction of the Engineer before work proceeds.

Payment for all labor, equipment and materials shall be included in the lump sum contract price for Item 614 – Maintaining Traffic.

WORK ZONE MARKINGS AND SIGNS

The following estimated quantities have been included in the General Summary for use at locations identified by the Engineer for work zone pavement markings and signs per the requirements of 614.04 and 614.11.

614, Work Zone Lane Line, Class I	2 Miles
614, Work Zone Lane Line, Class II, 740.06, Type I	1 Mile
614, Work Zone Edge Line, Class I	4 Miles
614, Work Zone Edge Line, Class I, 740.06, Type I	2 Miles
614, Work Zone Channelizing Line, Class I	1,200 Ft.
614, Work Zone Channelizing Line, Class I 740.06, Type I	800 Ft.
614, Work Zone Stop Line, Class I	20 Ft.
614, Work Zone Stop Line, Class I, 740.06, Type I	50 Ft.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR

In addition to the requirements of 614 and the Ohio Manual of Uniform Traffic Control Devices (OMUTCD), a uniformed law enforcement officer and official patrol car with working top mounted emergency flashing lights shall be provided for controlling traffic for the following tasks:

- For lane closures: during initial set-up periods, tear down periods, substantial shifts of a closure point or when new lane closure arrangements are initiated.
- During the entire advance preparation and closure sequence where complete blockage of traffic is required.
- During a traffic signal installation.

Law enforcement officers (L.E.O.'s) should not be used where the OMUTCD intends that flaggers be used. The LEO's are considered to be employed by the Contractor and the Contractor shall be responsible for their actions. Although they are employed by the Contractor, the Project Engineer shall have control over their placement. The official patrol car shall be a public safety vehicle as required by the Ohio Revised Code.

The Contractor shall make arrangements for these services with:

Ohio Highway Patrol
Hamilton Patrol Post
4751 Hamilton-Middletown Road
Hamilton, OH 45011
Phone (513) 863-4606

Hamilton County Sheriff's Office
Patrol Division
11021 Hamilton Avenue
Cincinnati, OH 45231
Phone (513) 825-1500

Law enforcement officers with patrol car required by the traffic maintenance tasks above shall be paid for on an hourly basis under Item 614, Law Enforcement Officer with patrol car. The following estimated quantity has been carried to the General Summary:

Item 614, Law Enforcement Officer With Patrol Car 420 Hours

The hours paid shall include minimum show-up time required by the law enforcement agency involved.

If Contractors wish to utilize LEO's for flagging and traffic control other than for that required in these plans, they may do so at their own expense. Payment for the excess above the contract requirements will be included under Item 614 Maintaining Traffic.

DUST CONTROL

The Contractor shall furnish and apply water for dust control as directed by the Engineer. The following contingency quantity has been included for dust control purposes:

616, Water 300 M.Gal.

ITEM 614, REPLACEMENT SIGN

Flat sheet signs furnished by the Contractor in accordance with the requirements of the plans, specifications and proposal which become damaged by traffic for reasons beyond the control of the Contractor shall be replaced in kind when ordered by the Engineer. Replacement signs shall be new. Other materials may be used but in good condition subject to approval by the Engineer.

Payment for the new signs shall be made at the contract price per square foot for Item 614, Replacement Sign, and shall include the cost of removing and disposing of damaged signs, hardware and supports, and providing the necessary replacement hardware, supports, etc.

An estimated quantity of 1000 square feet has been provided in the General Summary.

ITEM 614, REPLACEMENT DRUM

Drums furnished by the Contractor in accordance with the requirements of the plans, specifications and proposal, which become damaged by traffic for reasons beyond the control of the Contractor, shall be replaced in kind when ordered by the Engineer. Replacement drums shall be new.

Payment for the new drums shall be made at the contract price per each for Item 614, Replacement Drum, and shall include the cost of removing and disposing of the damaged drum, and providing and maintaining the replacement drum in accordance with the contract requirements for the original drum.

An estimated quantity of 300 each has been provided in the General Summary.

ITEM 614, WORK ZONE SPEED LIMIT SIGN

The Contractor shall furnish, install, maintain, cover during suspension of work, and subsequently remove work zone speed limit (R-10-48) (SPEED LIMIT 55) signs and supports within the work limits in accordance with the following requirements.

The Contractor shall cover or remove any existing speed limit or minimum speed (R-7A) signs within the reduced speed zone. These signs shall be restored during suspension or termination of the reduced speed limit. The expense of covering or removal and restoration of existing speed limit or minimum speed signs shall be included in the pay item for the work zone speed limit signs.

The work zone speed limit signs may be erected or uncovered no more than 4 hours before the actual start of work. The signs shall be removed or covered no later than 4 hours following restoration of all lanes to traffic with no restrictions, or sooner as directed by the Engineer.

The Contractor shall erect a work zone speed limit sign in advance of any lane restriction expected to last at least 30 consecutive calendar days, or as directed by the Engineer. The sign shall be mounted on both sides of divided highways, 500 feet in advance of the lane reduction taper. The sign shall be mounted on the right side, 250 feet in advance of the lane reduction taper on undivided highways. The sign shall be repeated, on the side nearest traffic, every 1 mile for 55 MPH zones and every 1/2 mile for 45 MPH zones. These signs shall also be erected immediately after each open entrance ramp within the zone.

A sign(s) to indicate the resumption of the statutory speed limit shall be erected at the end of any reduced speed zone. R-10 signs (SPEED LIMIT 55) shall be used on undivided roadway. R-10 (SPEED LIMIT 65) and R-9A signs (SPEED LIMIT 55) shall be used on divided roadways. When used the R-10 and R-9A signs shall be mounted side-by-side on separate supports.

The Contractor may use signs and supports in used but good condition provided the signs meet current ODOT specifications. Sign faces shall be reflectorized with Type G sheeting complying with the requirements of 614.03.

Work zone speed limit signs shall be mounted on two (2) Item 630 Ground Mounted Supports, No. 3 posts.

Work zone speed limit signs and supports will be measured as the number of sign installations, including the signs and necessary supports. If a sign and support combination is removed and reerected at another location within the project due to changes in the speed zone directed by the Engineer, it shall be considered another unit.

Payment for accepted quantities, complete in place, will be made at the contract unit price. Payment shall be full compensation for all materials, labor, incidentals and equipment for furnishing, erecting, maintaining, covering during suspension of work, and removing the signs and supports.

614, Work Zone Speed Limit Sign 80 Ea.

The signs will be placed along I-74 at the beginning of the project and at one-mile intervals (each side of appropriate direction), and at each entrance ramp terminal to I-74.

ITEM 614 – MAINTAINING TRAFFIC FOR INSTALLATION OF RPMs

Directional traffic shall be maintained on the roadway at all times during the RPM installation periods in accordance with the ODOT SCD 95.30 as approved by the Engineer. During lane closures, the traffic control required by MT-35.10 shall include a Type C Flashing Arrow Panel.

Provisions shall be made to safely stabilize the cones to prevent from blowing over. If this cannot be achieved, drums shall be used.

At the completion of each working day, all signs and channelizing devices shall be removed from the roadway and the roadway opened to the normal flow of traffic.

The required lane closure shall remain in effect until the "casting-to-pavement" epoxy is dry and all foreign matter or debris created by the installation of the RPM castings is removed from the roadway.

In addition to the requirements for maintaining traffic described above in the plans, the Contractor shall provide flaggers at all public streets and highway intersections within the limits of the work area for use in accordance with Figure C-10 of the OMUTCD. The Contractor shall also be required to provide flaggers at other points of access as determined by the Engineer.

The installation of RPMs that supplement auxiliary pavement markings, such as but not limited to, stop lines, arrows, etc. shall require the Contractor to provide maintaining traffic setups in accordance with Figure C-18 of the OMUTCD.

CONSTRUCTION ZONE / FINES DOUBLED SIGNS
R-180-48 signs shall be furnished, erected, and maintained in good condition and/or replaced as necessary and subsequently removed by the Contractor. Signs shall be mounted at the appropriate offsets and elevations as prescribed by the Ohio Manual of Uniform Traffic Control Devices. They shall be maintained on supports meeting current safety criteria.

The signs may be erected or uncovered no more than four hours before the actual start of work. The signs shall be removed or covered no later than four hours following restoration of all lanes to traffic with no restrictions, or sooner as directed by the Engineer. Temporary sign covering and uncovering due to temporary lane restorations shall be guided by the four-hour limitations stated above. Such lane restorations should be expected to remain in effect for 30 or more consecutive calendar days, such as during winter shut-downs.

The signs shall be dual mounted. The first sign shall be placed between the "ROAD CONSTRUCTION AHEAD" (OW-128) sign and the next sign in the sequence. Signs shall be erected on each entrance ramp and every two miles through the construction work limits.

The Contractor may use signs and supports in used but good condition provided the signs meet current ODOT specifications. Sign faces shall be reflectorized with Type G sheeting complying with the requirements of 614.03.

Construction Zone / Fines Doubled signs and supports will be measured as the number of sign installations, including the sign and necessary supports. If a sign and support combination is removed and reerected at another location as directed by the Engineer, it shall be considered another unit.

Payment for accepted quantities, complete in place will be made at the contract unit price. Payment shall be full compensation for all materials, labor, incidentals and equipment for furnishing, erecting, maintaining, covering during suspension of work, and removal of the sign and support.

Item 614, Construction Zone / Fines Doubled Signs 58 Each

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN
The Contractor shall furnish, install, maintain and remove, when no longer needed, a Portable Changeable Message Sign(s), Class 1, on site, for the duration of the project. The sign shall be of a type shown on a list of approved PCMS units maintained by the Director (Office of Materials Management). This list is available on the ODOT website at:

http://www.dot.state.oh.us/testlab/applists/misc/pcms.htm.

The Class I units have a minimum legibility distance of 1250 ft.

Each sign shall be trailer-mounted and equipped with a functional dimming mechanism, to dim the sign during darkness, and a tamper and vandal proof enclosure. Each sign shall be provided with appropriate training and operation instructions to enable on-site personnel to operate and troubleshoot the unit. The sign shall also be capable of being powered by an electrical service drop from a local utility company. PCMS trailers should be delineated on a permanent basis by affixing retroreflective material, in a continuous line on the face of the trailer as seen by oncoming road users.

Placement, operation, maintenance and all activation of the signs by the Contractor shall be as directed by the Engineer. The PCMS shall be located in a highly visible position yet protected from traffic. The Contractor shall, at the direction of the Engineer, relocate the PCMS to improve visibility or accommodate changed conditions. When not in use, the PCMS shall be turned off. Additionally, when not in use for extended periods of time, the PCMS shall be turned, facing away from all traffic, and shall display one or more high-intensity yellow reflective sheeting surfaces of 9-inch by 15-inch minimum size facing traffic.

The Engineer shall be provided access to each sign unit and shall be provided with appropriate training and operation instructions to enable ODOT personnel to operate and troubleshoot the unit, and to revise sign messages, if necessary.

All messages to be displayed on the sign will be provided by the Engineer. A list of all required pre-programmed messages will be given to the Contractor at the project preconstruction conference. The sign shall have the capability to store up to 99 messages. Message memory or pre-programmed displays shall not be lost as a result of power failures to the on-board computer. The sign legend shall be capable of being changed in the field. Three-line presentation formats with up to six message phases shall be supported. PCMS format shall permit the complete message for each phase to be read at least once.

The PCMS shall contain a cellular telephone data link which will allow remote sign activation, message changes, message additions and revisions to time of day programs. The system shall also permit verification of current and programmed messages. One remote data input device (laptop computer plus modem or equivalent) shall be furnished for use by the District Traffic Engineer, or equivalent, and shall be insured against theft.

The PCMS shall contain an accurate clock and programming logic which will allow the sign to be activated, deactivated or messages changed automatically at different times of the day for different days of the week.

The PCMS unit shall be maintained in good working order by the Contractor in accordance with the provisions of CMS 614.07. The Contractor shall, prior to activating the unit, make arrangements, with an authorized service agent for the PCMS, to assure prompt service in the event of failure. Any failure shall not result in the sign being out of service for more than 12 hours, including weekends. Failure to comply may result in an order to stop work and open all traffic lanes and/or in the Department taking appropriate action to safely control traffic. The entire cost to control traffic, accrued by the Department due to the Contractor's noncompliance, will be deducted from moneys due, or to become due the Contractor on his contract.

The Contractor shall be responsible for 24-hour-per day operation and maintenance of these signs on the project for the duration of the phases when the plan requires their use.

Payment for the above described item shall be at the contract unit price. Payment shall include all labor, materials, equipment, fuels, lubricating oils, software, hardware and incidentals to perform the above described work.

Item 614, Portable Changeable Message Sign, as per plan, 30 Sign-Months.

ITEM 614 - WORK ZONE IMPACT ATTENUATOR, (UNIDIRECTIONAL OR BIDIRECTIONAL)
This item shall consist of furnishing and installing either of the following impact attenuators:

1. The Quadguard CZ, (24" wide 6-bay) Work Zone Impact Attenuator manufactured by Energy Absorption Systems, Inc., One East Wacker Drive, Chicago, IL 60601 (Telephone: 312-467-6750). The length of the 6-bay Quadguard CZ is 20'-9". Installation shall be at the locations specified in the plans, in accordance with the Manufacturer's specifications as detailed on the following pre-approved shop drawings:

DWG. #	DRAWING NAME	DWG. /REV. DATE	ODOT APPROVAL DATE
QSCZCVR-T4	Quadguard CZ System for Construction Zones	5/13/99 Rev. J	8/27/99
35-40-10	Quadguard System Concrete Pad, CZ, QG	11/19/97 Rev. D	8/27/99
35-40-16	Quadguard System Backup Assembly, CZ, QG	7/30/99 Rev. F	8/27/99
354051Z	Quadguard CZ System Nose Assembly, CZ, QG, 24, 30, 36	5/17/99	8/27/99
35-40-18	Transition Assembly, 4 Offset, QG	6/25/99 Rev. F	8/27/99
3540260	Quadguard System PCMB Anchor Assembly	11/19/97 Rev. C	8/27/99

2. The TRACC (Trinity Attenuating Crash Cushion) manufactured by Trinity Industry, 1170 N. State Street, Girard, Ohio 44420 (Telephone: 330-545-4373).

The TRACC is 21'-0" long and 2'-7" wide. Installation shall be at the locations specified in the plans, in accordance with the Manufacturer's specifications as detailed on the following pre-approved shop drawings:

DWG. #	DRAWING NAME	DWG. /REV. DATE	ODOT APPROVAL DATE
SS450 SS450M	Crash-Cushion Attenuating Terminal Plan, Elevation & Sections	3/12/99 Rev. 1	8/27/99
SS455	TRACC Transition to W-beam Median Barrier Plan, Elevation & Sections	2/18/99	8/27/99
SS461	TRACC Transition to Concrete Safety Shape Barrier Plan, Elevation & Sections	6/30/99 Rev. 1	8/27/99
SS462	TRACC Transition to Concrete Barrier Single Slope Plan, Elevation & Sections	6/30/99	8/27/99

3. The Great CZ Impact Attenuator manufactured by Energy Absorption Systems, Inc. This attenuator may be used until January 1, 2007, if the item was purchased before October 1, 1998 and is in the Contractor's inventory.

The Contractor shall provide a replacement unit when an impact is severe enough to require complete replacement of the attenuator. The Contractor shall have a spare parts package available on the project site at all times when an attenuator is in place. The Contractor shall provide a minimum of one complete spare parts package for every 1 to 6 units installed on the project site. For example, 5 installed units require 1 spare parts package and 7 installed units require 2 spare parts packages.

When bi-directional designs are specified, the Contractor shall supply appropriate transitions. Payment for the above work shall be made at the unit price bid for Item 614, Work Zone Impact Attenuator, (Unidirectional or Bidirectional), Each, and shall include all labor, tools, equipment and materials necessary to construct, maintain, repair, replace or relocate a complete and functional impact attenuator system, including all related backups, transitions, leveling pads, hardware and grading, not separately specified, as required by the Manufacturer.

RUMBLE STRIPS
Rumble strips shall not be installed until the end of the project work so that traffic is not routed onto them.

WORKSITE TRAFFIC SUPERVISOR
The contractor shall employ (other than the superintendent) and subject to the approval of the Engineer, a certified Worksite Traffic Supervisor (WTS). The WTS may be certified from one of the following organizations:

1). American Traffic Safety Service Association A.T.S.S.A., phone number 1-800-272-8772, certified Worksite Traffic Supervisor (WTS)

2). The National Safety Council, Traffic Control Zones Supervisors course, phone number 1-800-441-5103

3). National Highway Institute, Design and Operation of Work Zone Traffic Control, phone number 1-703-235-0528

A certified WTS shall be present when the contractor or subcontractor installs a traffic restriction, lane closure, etc. The contractor or subcontractor must present a copy of certificates for all WTS to the Engineer. A WTS must be present when the work zone is being set up or removed.

The WTS position is established for the purpose of monitoring the Traffic Control Plan (TCP) and correcting any traffic control deficiencies in the work zone. The WTS must also coordinate with ALL law enforcing agencies responsible for the roadway under construction and retrieve all crash reports (OH-1) that occur when Temporary Traffic Control Devices are in place. The WTS shall oversee all operations that affect the movement of vehicular and pedestrian traffic through the work zone. Traffic control and crash data evaluation will be the WTS main responsibility when a work zone is in place.

Daily, including weekends and holidays, the WTS shall spend a minimum of one hour reviewing the work zone and/or crash data for deficiencies and maintaining the work zone.

Weekly, the WTS must retrieve/collect ALL crash reports (OH-1) from ALL law enforcing agencies, evaluate the crashes, and recommend solutions to address any issues with the TCP that are potentially creating crashes within the work zone. The WTS must present these solutions to the Engineer for approval weekly. Upon approval by the Engineer and the District Work Zone Traffic Manager (DWZTM), the contractor must implement the recommended solutions to the work zone within one week - additional cost to be paid under Construction and Materials Specifications - 109. The WTS must inspect the work zone at the beginning and the end of each work day and one time per week during the hours of darkness. The following items shall be included, but not restricted to, in each review: Traffic Control Device condition; placement; visibility; traffic flow conditions; incidents; congestion points; delays; adequacy of advanced informational signs beyond project limits; interaction of work vehicles and traffic; accidents; proper storage of materials and equipment; conformance with TCP; adequacy of TCP; conflicting or non-conforming pavement markings. The WTS shall have the necessary authority to immediately perform any corrective work.
A record of each day's review shall be given to the Engineer the following workday in writing and shall include all deficiencies and resolutions to the deficiencies. The inspection will be documented on the Long/Short Term Work Zone Review form provided by

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ODOT. Weekly, the inspection form must be accompanied by ALL of the OH-1 crash reports and the proposed solutions to any identified crash problems.

If the restrictions are short term, the WTS shall monitor the zone for compliance, during lane closures; he shall make sure all traffic control items are functioning properly. Traffic control and crash data evaluation will be the WTS main responsibility during implementation of zones or short term zones. The WTS shall provide the DWZTM a sketch of the traffic control plan (TCP) every day there is to be a short term traffic restriction, lane closure, etc. This TCP shall show how the work zones are to be implemented.

The WTS shall be on standby 24-hour basis to repair and/or replace damaged or missing traffic control devices. A 24-hour contact number(s) shall be made available to the Engineer to contact the WTS.

Failure of the contractor to comply with any of the above, shall constitute cause for the project engineer to deduct $500.00 per day from money due to the contractor not as a penalty, but as a liquidation damage.

Payment for the WTS shall be included under the Item 614 – WORKSITE TRAFFIC SUPERVISOR by month.

An estimated quantity of 12 months has been included in the General Summary for Item 614 – WORKSITE TRAFFIC SUPERVISOR.

LOGO SIGNS

Logo signs (which indicate Gas, Food Lodging, Camping and/or Attraction establishments) are not to be removed or relocated unless the plans require such work.
The logo signs located at the interchanges were installed and are maintained by:

Ohio Logos, Inc.
4384 Tuller Rd.
Dublin, Ohio
Phone: 1-800-860-5646 or 614-717-0833

Removal or relocation of any logo signs, shall be performed by Ohio Logos, Inc.
Ohio Logos, Inc. shall be notified 60 days prior to the date of the required work.
Coordination of the removal or relocation of the logo signs shall be managed by the Project Engineer.

ITEM 614 – BARRIER REFLECTORS AND/OR OBJECT MARKERS

Barrier Reflectors and/or Object Markers shall be installed on all portable concrete barrier used for traffic control. Barrier Reflectors, Object Markers and their installation shall conform to Item 626 except that the spacing shall be 50 feet. For quantities, see the Maintenance of Traffic Sub-Summaries.

CONSTRUCTION NOTIFICATION

The Contractor will advise the Project Engineer a minimum of fourteen (14) days prior to the start of construction activities. The Contractor must also provide notification fourteen (14) days prior to any ramp closures, lane closures or road closures. The Project Engineer will forward the information to the District Public Information Officer by FAX 513-932-7651 or e-mail Ron.Mosby@dot.state.oh.us.

ITEM 614, WORK ZONE LIGHTING SYSTEM, AS PER PLAN

This work shall consist of designing, furnishing, erecting, operating, maintaining and removing a Work Zone Lighting System for an area involving use of the shoulder for through traffic, as well as the areas leading into and out of this section. The system shall be as shown on Standard Construction Drawings MT-102.20.

Prior to installing the Work Zone Lighting required by SCD MT-102.20, the Contractor shall prepare and submit four (4) sets of the Work Zone Lighting plan to the Engineer for review and approval. This plan shall show location of poles, length of bracket arms, style of luminaires, mounting height, wiring methods, and other pertinent information. The plan shall be submitted a minimum of 21 calendar days prior to installation for review and approval. The Contractor shall arrange for and pay for power and any costs of providing service along with the cost to design and supply plans to ODOT.

All materials and construction shall comply with applicable portions of CMS 625 and 725 except: the performance test of CMS 625.19F, and certified drawing requirement of CMS 625.04 are waived and used materials in good condition are acceptable.

A photocell shall turn on the lighting when ambient light is below 3 foot candles. All overhead wiring shall be #4 AWG minimum. Down guy anchors shall be provided at both ends of overhead spans. All wires crossing the roadway shall have a minimum height of 20 feet.

One Work Zone Lighting System shall be provided per transition. The departure transition is counted separately from the return transition and the East Bound transition is counted separately from the West Bound transition. The following estimated quantities are provided per phase:

<u>Phase 1</u>	
New Biddinger Bridge	4 Each
Lowering under New Haven Road	4 Each
Lowering under West Road	4 Each
<u>Phase 2</u>	
Beginning of Project	2 Each
New Biddinger Bridge	4 Each
Lowering under New Haven Road	4 Each
Lowering under West Road	4 Each
End of Project	2 Each
<u>Phase 3</u>	
Beginning of Project	2 Each
End of Project	2 Each
<u>Phase 4</u>	
Beginning of Project	2 Each
End of Project	2 Each
TOTAL (Carried to General Summary)	36 Each

Payment will be made at the unit price per Each Item 614, Work Zone Lighting System, As Per Plan, which will include design, erection, operation, maintenance, removal and power for all lighting required by SCD MT-102.20.

Note: Should the median width be too narrow to place the work zone lights required by Standard Construction Drawing MT-102.20, the Designer shall provide additional lighting, if needed, on the outside of the roadway so the minimum lighting requirements are met.

SHORT DURATION CLOSING OF THE HIGHWAY

Short duration closing of I-74 shall conform to SCD MT-99.60.

The following additional notes shall apply for the removal/erection of the overhead sign trusses:

1. Five calendar days prior to implementing the short duration closing of the highway the contractor shall place a Portable Changeable Message sign at the truss in the direction the road is to be closed with the message:

I 74	time
CLOSED	date

For example, the PCMS might read

I 74	12 AM	JULY 20
CLOSED	TO	TO
	5 AM	JULY 25

Closures for removal and erection of the trusses will be permitted between the hours of 12:00 midnight and 5:00 AM. The maximum duration of the closure shall not exceed 15 minutes subject to liquidated damages in the amount of $500.00 for each 15 minutes of additional closure time.

The contractor shall furnish and install two(2) "WATCH FOR STOPPED TRAFFIC" signs (OW-166-48) 1500 feet upstream from the anticipated backup on I-74. The contractor shall install additional "WATCH FOR STOPPED TRAFFIC" signs every 2000 feet upstream from the "WATCH FOR STOPPED TRAFFIC" signs on I-74 if traffic backups reach the first set of signs. The need for these signs shall be constantly monitored by the contractor.

A minimum of one law enforcement officer with patrol car per lane to be closed shall be used to pace the motorists to a stop. After traffic has been stopped, the patrol cars shall move to the positions shown in SCD MT-99.60.

Patrol vehicles shall have flashing beacons to provide adequate visibility to approaching traffic. Payment shall be included under Item 614 Law Enforcement Officer with Patrol Car.

During the closure a Portable Changeable Message sign shall be placed on the shoulder ½ mile prior to the last interchange upstream of the closure with the message:

I-74	PREPARE	30 MIN
CLOSED	TO	DELAYS
__ MILES	STOP	

The location and message on the PCMS will be as directed by the Engineer.

In the event of an inclement weather forecast (rain or snow forecast at 50% or greater the day the event will occur is defined as an inclement forecast) the closure shall not take place. The Engineer will make the determination based upon the weather forecast predicted by the National Weather Service.

ITEM 615 PAVEMENT FOR MAINTAINING TRAFFIC, AS PER PLAN

This item shall conform to the specifications of Item 615 except as noted herein.
The pavement width shall be as shown on the maintenance of traffic plans.
The pavement buildup shall be as follows:
Item 448, 1-½" Asphalt Concrete Surface Course
Item 302, 10" Asphalt Concrete Base

For Quantities, See the Maintenance of Traffic Sub-Summaries.

ASPHALT CONCRETE FOR MAINTAINING TRAFFIC

Asphalt concrete for maintaining traffic shall be placed as directed by the Engineer. In areas where a wedge is required to adjust elevation of the driving surface, the maximum rate of transverse break-over is 120:1, and the maximum rate of longitudinal grade adjustment is 3:1.

ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC, AS PER PLAN

All requirements of 614.13 shall apply except that the buildup shall be 8" of Item 301, Asphalt Concrete Base. This pavement may be left in place at the completion of the project.

For Quantities, See the Maintenance of Traffic Sub-Summaries.

ITEM 614 TRAFFIC SIGNAL MODIFICATIONS

The Contractor shall maintain and keep operational the existing traffic signal until all new equipment has been installed and is functional. Work shall include any modifications to existing or temporary traffic signal installations as required by changes in construction or operational conditions in the project area throughout the contract period. This shall include relocations, removals, and covering of vehicular/pedestrian signal heads; covering of illuminated/reflectorized signs; timing adjustments; and the installation of any temporary signal equipment to satisfy safety and operational conditions throughout the project. The use of existing signal poles or installation of temporary or proposed signal poles will be permitted to maintain the signal. Any necessary pole guys shall be installed. This work shall be performed as shown in the plans or as directed by the Engineer. This work shall be included in the lump sum payment for Item 614 Maintaining Traffic.

ITEM 614 TRANSITION AREA DELINEATION

In transition areas of lane shifts (defined as any lateral shift of traffic equal to or greater than 4 feet) and crossovers, the Contractor shall provide delineation by one of the following methods:

1. Full pavement markings using wet reflective removable tape (Method A on Plan Insert Sheet 209930)

or

2. Full pavement markings using 740.06 Type I work zone pavement marking material supplemented with work zone raised pavement markers (Method B on Plan Insert Sheet 209930).

All materials furnished shall be listed on the Department's Prequalified Lists. The installation of all materials shall meet or exceed the manufacturers' recommendations.

After removable pavement markings have been installed, they shall be cut at 10 foot or less intervals.

Payment for ITEM 614 – TRANSITION AREA DELINEATION shall be made at the contract bid price per foot of transition length and includes the cost of furnishing, installing, maintaining and removing, if necessary, one of the delineation schemes specified above. The length provided in the summaries represents the length of the transition area and not the length of individual pavement marking lines.

Payment shall also include replacement, as per 614.11.A or 614.115.D, of any part of the delineation system which, in the judgment of the Engineer, fails. Lane closures required to repair or replace missing tape or work zone raised pavement markers will be at the Engineer's approval and at the Contractor's cost.

TRAFFIC LEGEND

ED	Edge line, 4 in. wide, Solid
LA	Lane line, 4 in. wide, White
CH	Channelizing line, 8 in. wide, Solid
TR	Transverse Line, 8 in. wide, Solid
TA	Temporary arrow
SLA	Solid Lane Line
E__	Existing markings
T__	Work Zone Pavement Markings
TAD	Transition Area Delineation
TAD-CH	Transition Area Delineation, 8 in. Channelizing Line
(W)	White
(Y)	Yellow
PFMT	Pavement for Maintaining Traffic
ACFMT	Asphalt Concrete for Maintaining Traffic

Sign face (Existing)

Sign face (For Construction Only, Current Phase)

Sign face (For Construction Only, Previous Phase)

Overhead single arm support

Overhead truss support

Pavement markings (Existing)

Work Zone Pavement Markings (Proposed)

Direction of traffic

Drums (spacing as noted)

Cone (spacing as noted)

Existing Concrete Barrier

Proposed Concrete Barrier

Tapered End Section

Work Zone Impact Attenuator

Portable Concrete Barrier

GROUND MOUNTED SUPPORT

or Single direction

PORTABLE SIGN SUPPORT

Single direction

I-74 MAINLINE MAINTENANCE OF TRAFFIC HATCHING

Construction of Permanent Pavement

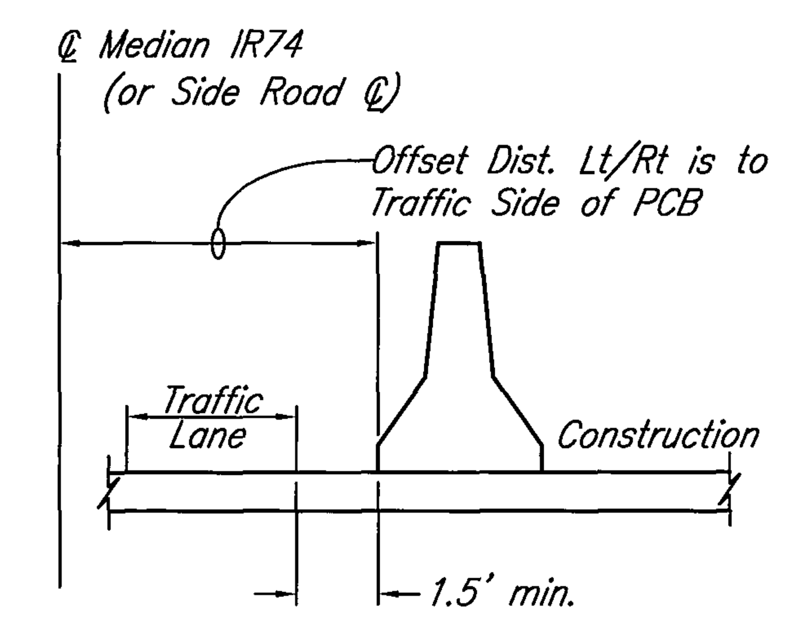
Temporary Pavement

Construction of Temporary Pavement (for use in next phase)

Shoulder Replacement (completed in Pre-Phase 1)

Full Depth Pavement Replacement

SPEED LIMIT 65 MPH 55 Sign Covered or Removed



Portable Concrete Barrier,
Offset Location Call-Out

MAINTENANCE OF TRAFFIC TYPICAL SECTION LEGEND

NO.	ITEM	DESCRIPTION	NO.	ITEM	DESCRIPTION
1	442	1.5" Asphalt concrete surface course, 12.5 mm,	10	448	2.5" Asphalt Concrete Surface Course
		Type A (446), with Supp. 1059 Warranty Spec.	18	452	12" Non-reinforced concrete pavement
2	442	2" Asphalt concrete intermediate course,			
		19 mm, Type A (446)	A		Existing 9" Reinforced Concrete Pavement
3	301	3" Asphalt concrete base, PG 64-22	B		Existing 6" Aggregate Base
4	302	12" Asphalt concrete base, PG 64-22	C		Existing 6.5" Asphalt Concrete
5	304	6" Aggregate base	D		Existing 5.5" Asphalt Concrete
6	254	Pavement planing, asphalt concrete (Depth 2.5")	E		Existing 13"± Aggregate Base
7	301	8" Asphalt concrete base	F		Existing 3" Asphalt Concrete (after planing)
8	448	1.5" Asphalt concrete surface course	G		Existing 4" Asphalt Concrete (after planing)
9	302	10" Asphalt concrete base	H		Existing 15.5" Asphalt Concrete

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MAINTENANCE OF TRAFFIC LEGENDS

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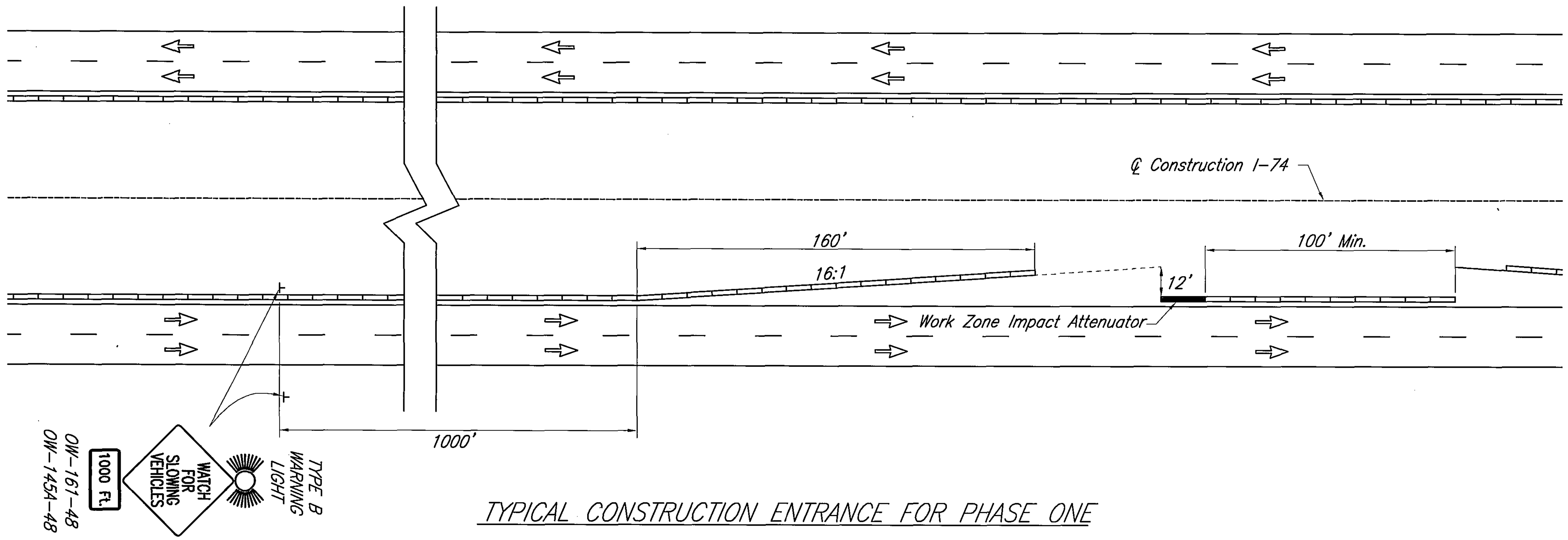
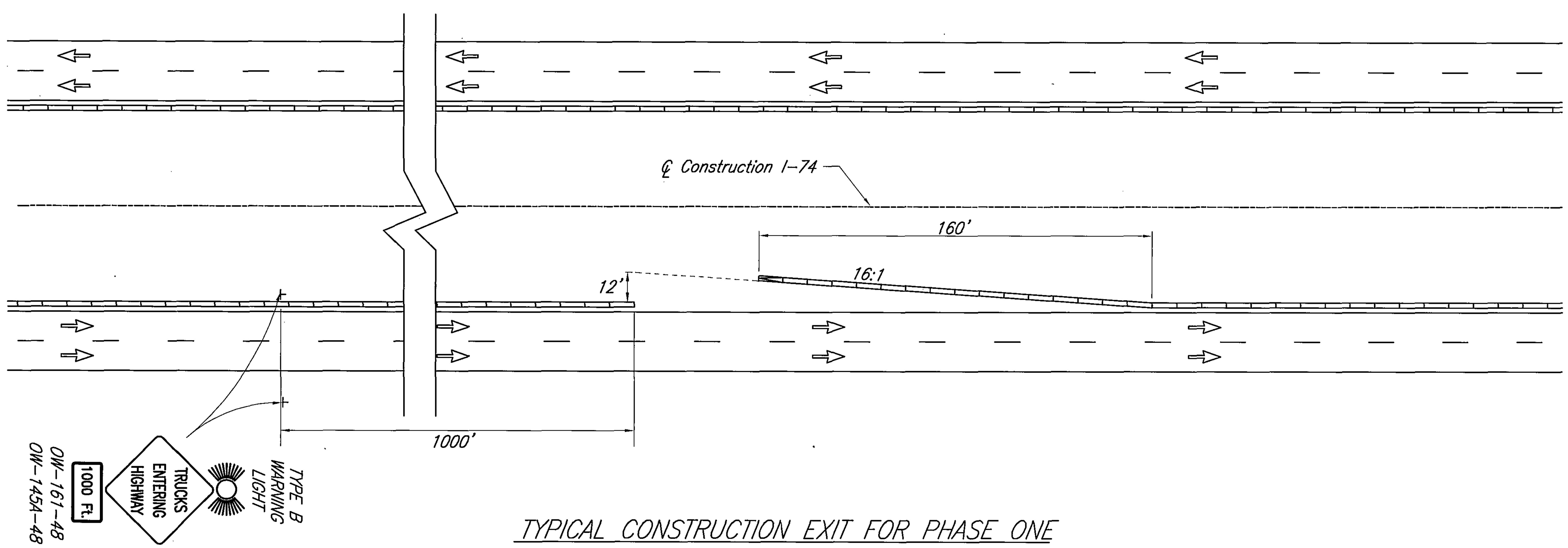


TYPICAL CONSTRUCTION ENTRANCE FOR PHASE ONE



TYPICAL CONSTRUCTION EXIT FOR PHASE ONE

0 15 30 60
HORIZONTAL SCALE IN FEET

TYPICAL CONSTRUCTION ENTRANCE AND EXIT DETAIL

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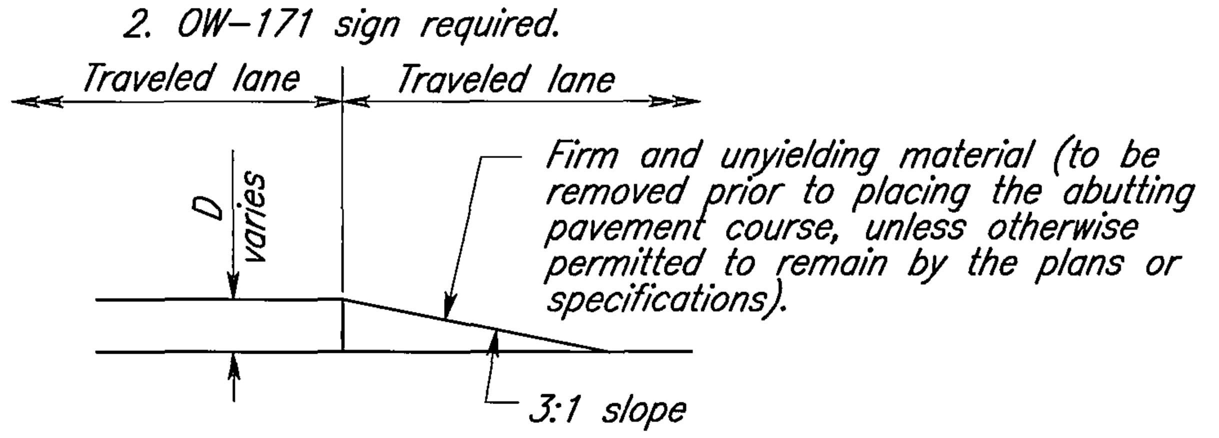
GENERAL NOTES

1. It is intended that this drawing be used for treatment of drop-offs that develop during construction operations, and that are not otherwise provided for in the construction plans. The suggested treatments are intended for high volume projects that will last at least seven days and have an active work zone 1 mile or less in length. For guidance on the use of this sheet, see L&D Manual Volume One, Section 500. Where the plans do not provide specific items for labor, equipment, or materials to implement the drop-off treatments specified hereon, they shall be included for payment in the lump sum bid for Item 614 – Maintaining Traffic.
2. While the need for certain advisory signing is noted hereon, it is not intended that this be indicative of all signing that may be required to advise or warn motorists, and all requirements of the Ohio Manual of Uniform Traffic Control Devices (OMUTCD) must be fulfilled.
3. In urban or otherwise heavily developed areas where pedestrians and/or bicyclists may be present in significant numbers, additional signing and protective measures other than those shown hereon may be required.
4. The drop-off treatment selected for use at any given location shall be as appropriate for the prevailing conditions at the site.
5. Where concrete barrier is specified, it shall be in accordance with SCD RM-4.2 and Item 622.
6. When drums are specified for a drop-off condition, a minimum number of four drums shall be used. Spacing shall be as indicated in the plans or as specified in the OMUTCD.
7. When OW-151 (Low Shoulder) signs or OW-155 (Shdr. Drop-Off) signs or OW-171 (Uneven Lanes) signs are required, they shall be placed 750' in advance of the condition, on all intersecting entrance ramps within the limits of the condition and immediately beyond all inter secting roadways within the limits of the condition. When the drop-off condition extends more than 0.5 mile, additional signs should be erected at intervals of 1.0 mile or less.
8. For locations, such as at ramps, lane shifts, lane closures, etc., where traffic is required to negotiate a difference in elevation between pavements, a 3:1 slope treatment similar to the Optional Wedge Treatment shall be provided.
9. Portable concrete barrier shall be placed on the same level as the traffic surface and shall not encroach on lane width(s) designated as the minimum required for traffic use. Where drums are used, and their presence would reduce traveled lane widths to less than 10', drums may be placed on the opposite level from that of traffic provided the dropoff depth does not exceed 5" and approval is granted by the Project Engineer.
10. Pavement Repairs (or similar work):
    a. Lengths greater than 60' – utilize appropriate treatment from Condition I.
    b. Lengths of 60' or less – repairs shall be effected in accordance with CMS 255.08. Drums may be used as a separator adjacent to the traveled lane.

OPTIONAL WEDGE TREATMENT

(MILLING OR RESURFACING)

1. This treatment may be used when permitted for Condition I only.
2. OW-171 sign required.



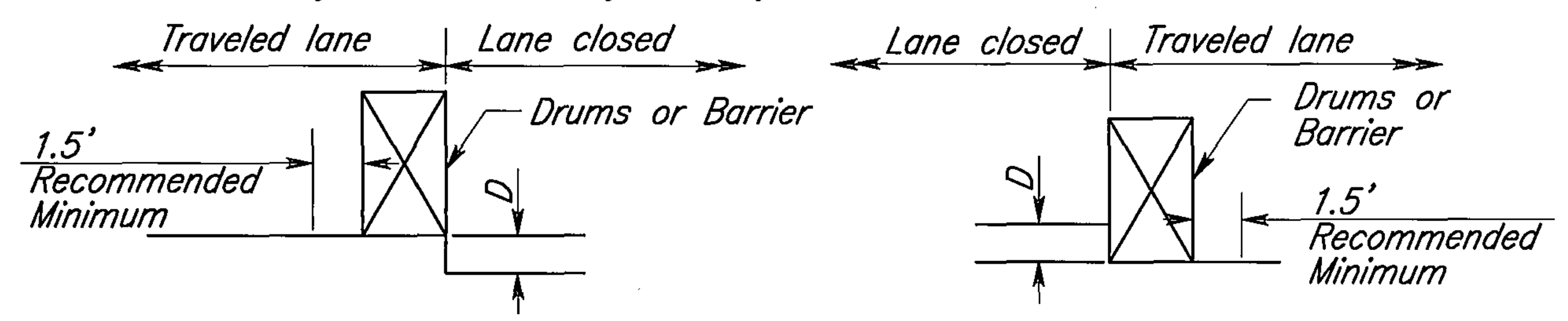
CONDITION I

DROP-OFFS BETWEEN TRAVELED LANES

1. These treatments are to be used for resurfacing, pavement planing, excavation, etc. between or within traveled lanes.

D	Treatment
≤1½"	Erect OW-171 sign.
1½"–3"	1) Lane closure utilizing drums* as shown below OR 2) Optional Wedge Treatment
>3"–5"	Lane closure utilizing drums as shown below.
>5"	Lane closure utilizing portable concrete barrier as shown below.

* Cones may be used for daytime only conditions.



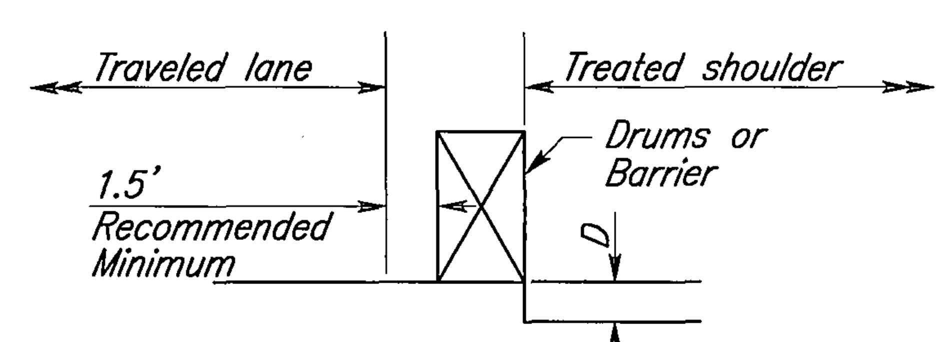
CONDITION II

DROP-OFFS WITHIN GRADED SHOULDER AREA

1. The treatments indicated below are for use in conjunction with resurfacing, planing, or excavations within the graded shoulder area.
2. The graded shoulder area is that flat or gradually sloping area between the edge of a normally traveled lane and the more steeply sloping ditch foreslope or embankment slope. Its surface may be soil or turf, and/or it may be inclusive of a "treated" area (improved with aggregates, asphaltic materials or concrete). For the purpose herein, its maximum width shall be considered to be 12'.

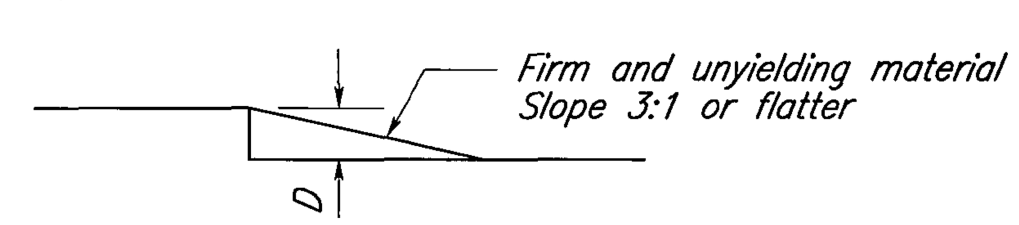
D	Treatment
≤1½"	1) Erect OW-155 signs.
>1½"–5"	1) If minimum lane width* requirements can be met, maintain lanes utilizing drums as shown below OR 2) If minimum. lane width* requirements cannot be met, close adjacent lane utilizing drums OR 3) Optional Shoulder Treatment.
>5"–12" Daylight only	If minimum lane width* requirements can be met, maintain lanes utilizing drums as shown below.
>5"–24"	1) If minimum lane width* requirements can be met, maintain lanes utilizing portable concrete barrier as shown below. OR 2) If minimum lane width* requirements cannot be met, close adjacent lane utilizing drums.
>24"	Lane closure utilizing portable concrete barrier as shown below.

* Minimum lane widths shall be 10' unless otherwise specified in the plans.



OPTIONAL SHOULDER TREATMENT

1. This treatment may not be used within a bitumunos shoulder where a hot longitudnal joint per CMS 401.15 is required.
2. OW-151 signs required.



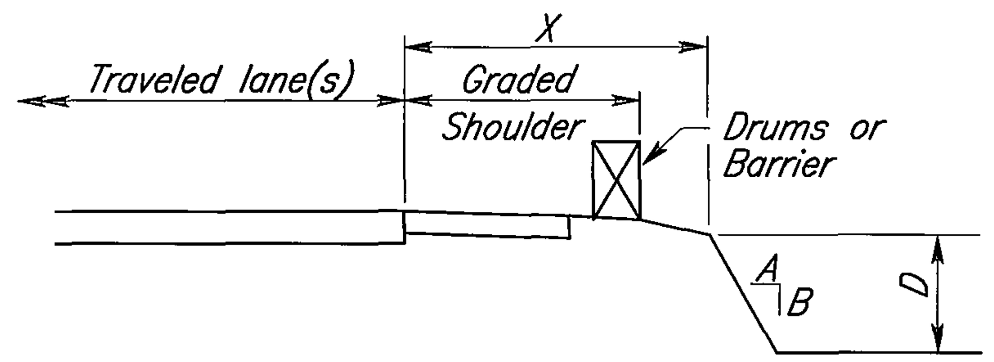
CONDITION III

DROP-OFFS BEYOND GRADED SHOULDER OR BACK OF CURB

1. See Note 2 under Condition II.
2. Use Chart A or B below, as applicable.

CHART A

USE FOR:
1. Uncurbed Facilities.
2. Curbed Facilities, where:
   a. Curbs are less than 6" in height.
   b. Curbs are 6" or greater in height and the legal speed is greater than 40 mph.

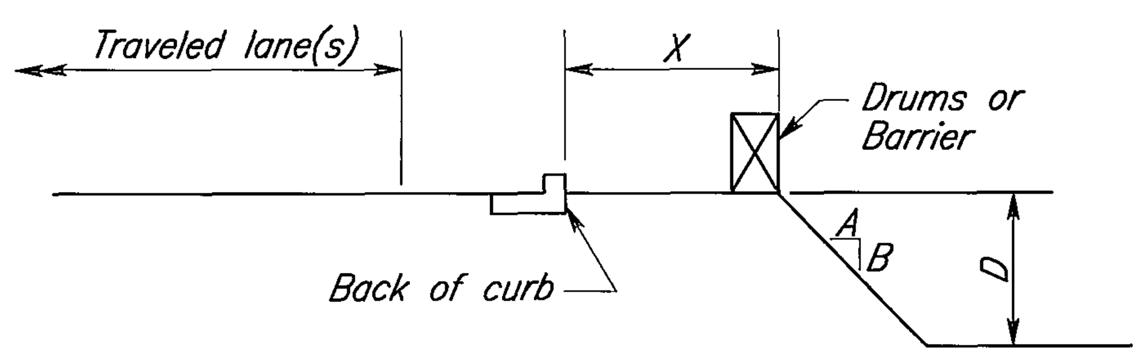


X	D	A/B	Treatment Required	
			Day	Night
0–4'	Any	Any	(a)	(a)
4'–30'	Any	3:1 or Flatter	None	None
4'–12'	≤3"	Steeper than 3:1	None	None
4'–12'	>3"–≤12"	Steeper than 3:1	Drums	Drums
4'–12'	>12"	Steeper than 3:1	Drums	Barrier
>12'–20'	<12"	Steeper than 3:1	None	None
>12'–20'	>12"–≤24"	Steeper than 3:1	Drums	Drums
>12'–20'	>24"	Steeper than 3:1	Drums	Barrier
>20'–30'	<24"	Steeper than 3:1	None	None
>20'–30'	>24"	Steeper than 3:1	Drums	Barrier
>30'	Any	Any	None	None

(a) Use treatment specified under Condition II.

CHART B

USE FOR: Curbed facilities, where the curb is 6" [150] or greater in height and the legal speed is 40 mph [70 km/h] or less.



X	D	A/B	Treatment Required	
			Day	Night
0–10'	<12"	Any	None	Drums
0–10'	>12"	Any	Drums	Drums
>10'	Any	Any	None	None

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DROPOFFS IN WORKZONES

OFFICE OF TRAFFIC ENGINEERING

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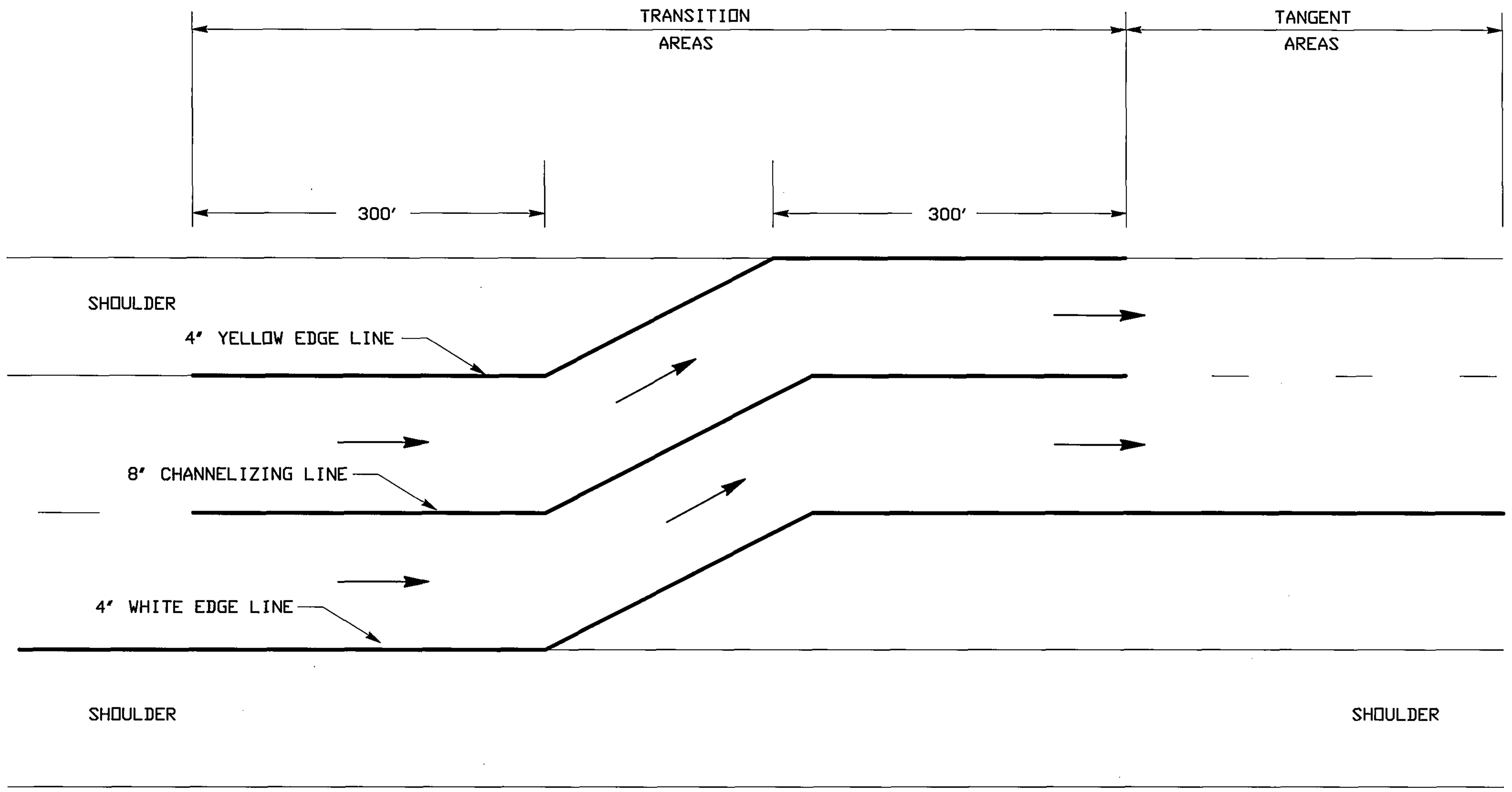
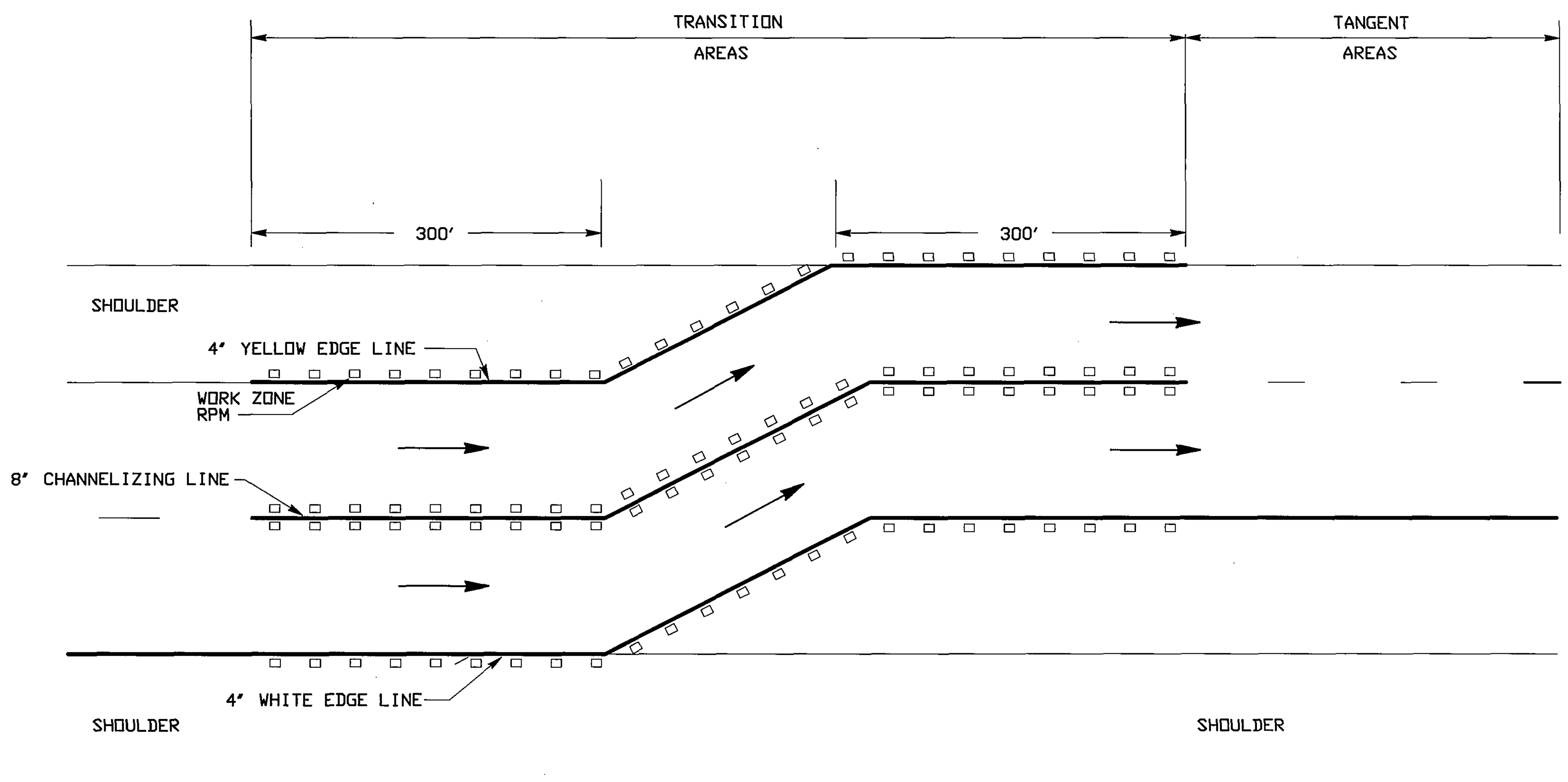
SHIFT



METHOD A
MATERIAL - WET REFLECTIVE REMOVABLE TAPE
(See Note 2)



METHOD B
MATERIAL - 740.06 TYPE I
(See Note 3)

NOTES

1. All material furnished shall be listed on the Department's Prequalified Lists.
2. Pavement marking material shall be wet reflective removable tape.
3. Pavement marking material shall be 740.06 Type I.
4. Work zone raised pavement markers shall be spaced at 20' (6 m) center to center.
5. The work zone raised pavement markers on the edge lines shall be 1- way white or yellow and match the edge line.
6. The work zone raised pavement markers on the channelizing line shall be 1- way white facing oncoming traffic.
7. The basic method of delineation depicted shall apply regardless of the number of lanes.
8. The geometrics of the crossover shall be as shown in the plans.
9. See Standard Construction Drawings MT-102.10 and MT-102.20 for more details concerning lane shifts.
10. Work zone raised pavement marker installation shall conform to 614.115C.

→ DIRECTION OF TRAVEL

□ WORK ZONE RPM

07-07-03

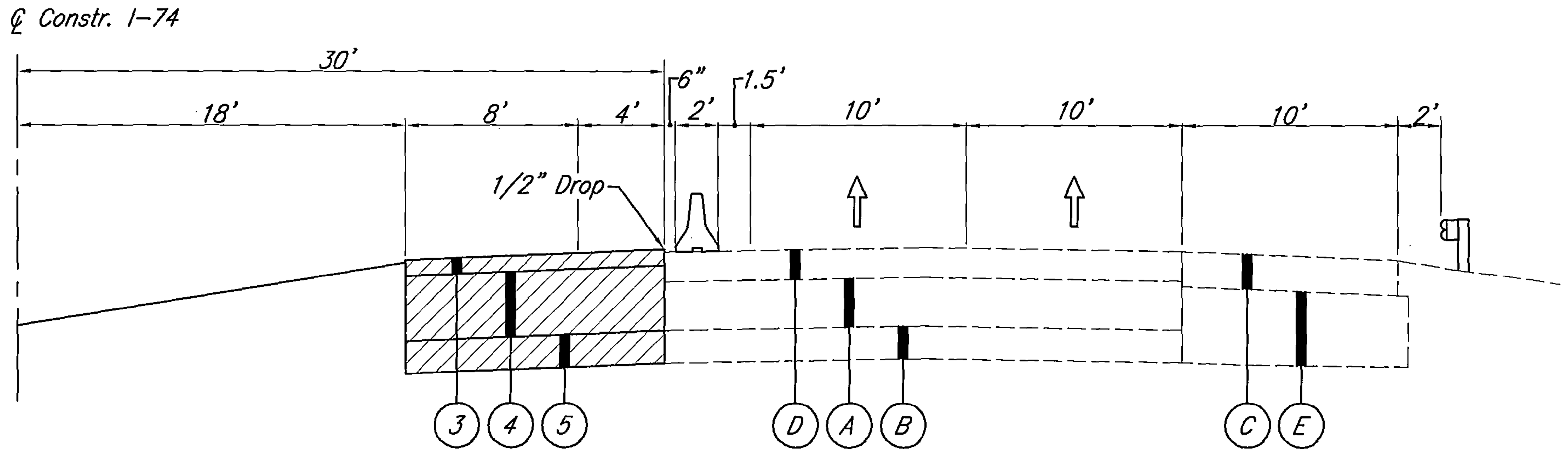
TRANSITION AREA DELINEATION

OFFICE OF TRAFFIC ENGINEERING

PLAN INSERT 209930

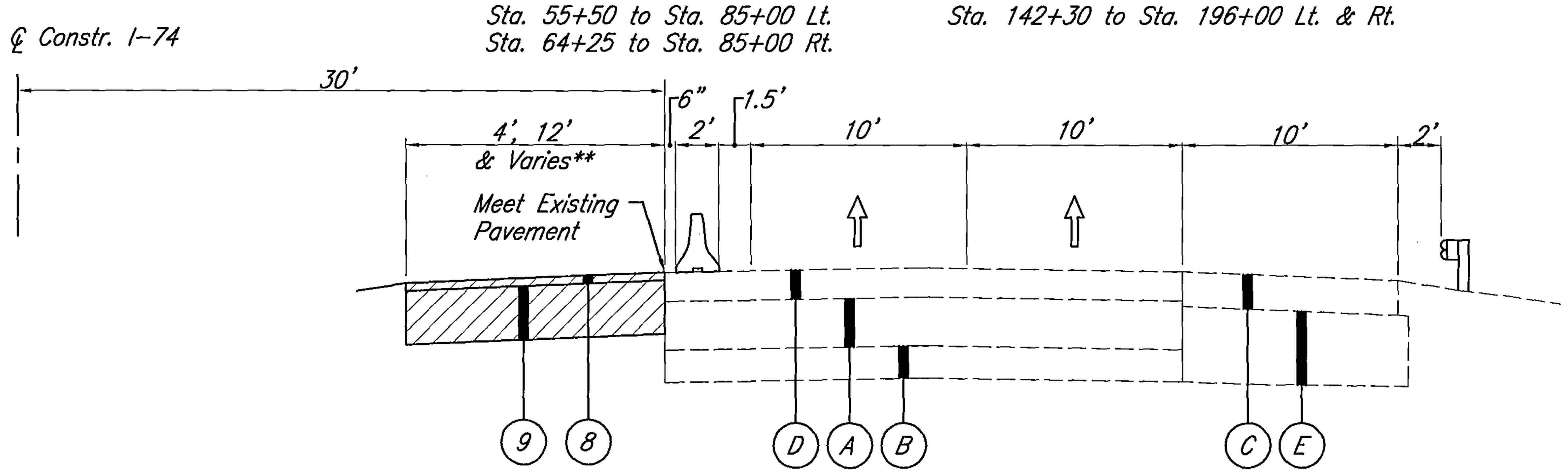
24A
421

MM001020.DWG 14 AUG 2003



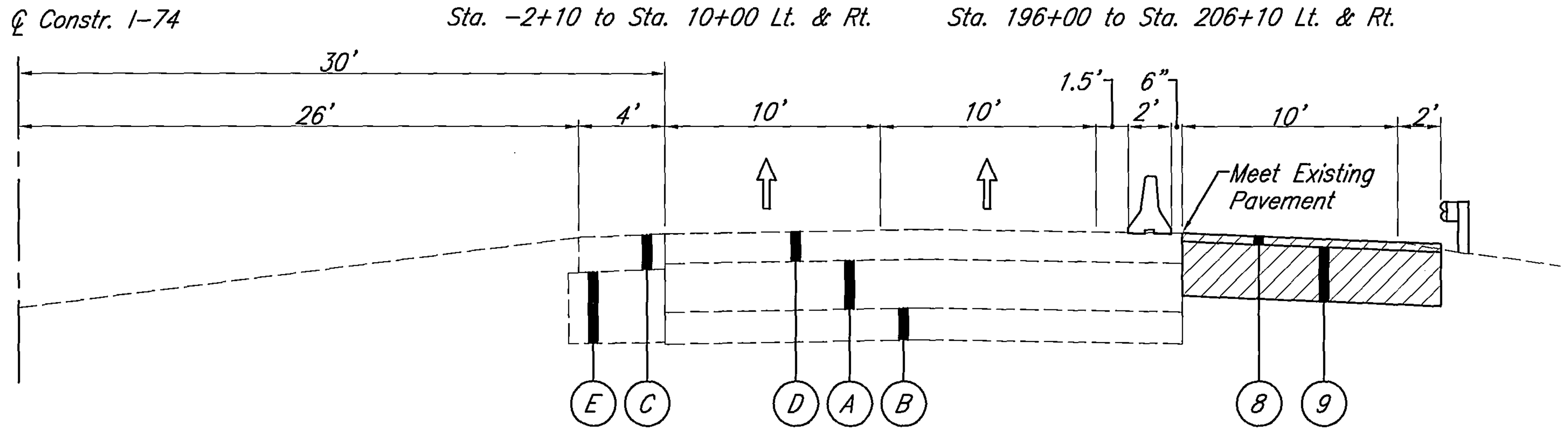
PHASE 1

Sta. 10+00 to Sta. 39+50 Lt. & Rt.
Sta. 55+50 to Sta. 85+00 Lt.
Sta. 64+25 to Sta. 85+00 Rt.
Sta. 105+20 to Sta. 120+30 Lt. & Rt.
Sta. 142+30 to Sta. 196+00 Lt. & Rt.



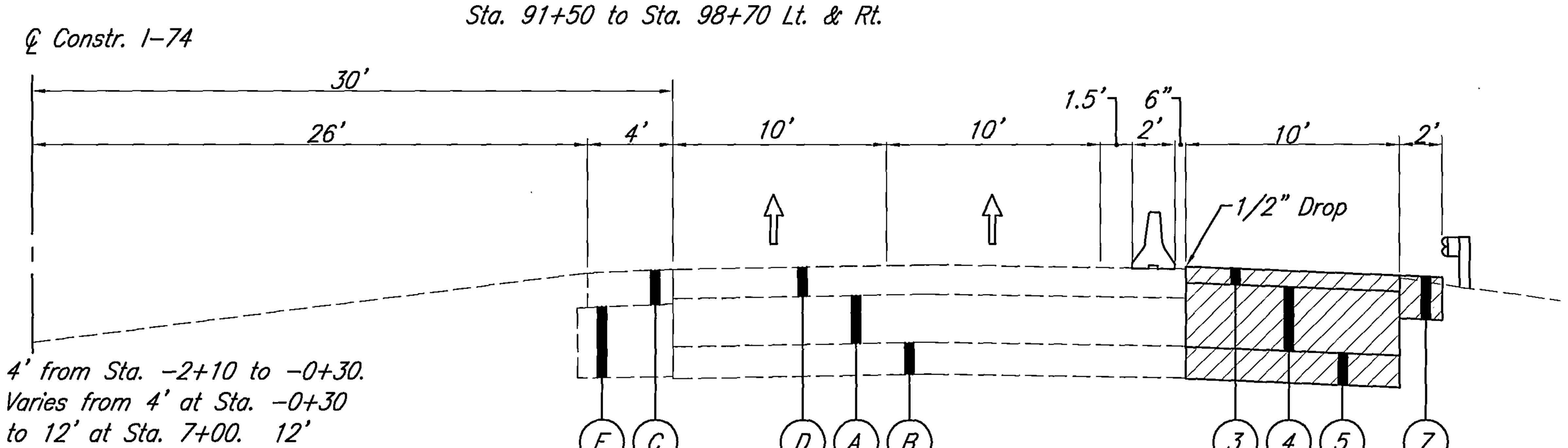
PHASE 1

Sta. −2+10 to Sta. 10+00 Lt. & Rt.
Sta. 196+00 to Sta. 206+10 Lt. & Rt.



PRE-PHASE 1

Sta. 48+71 to Sta. 57+75 Rt.
Sta. 91+50 to Sta. 98+70 Lt. & Rt.
Sta. 126+80 to Sta. 135+80 Lt. & Rt.



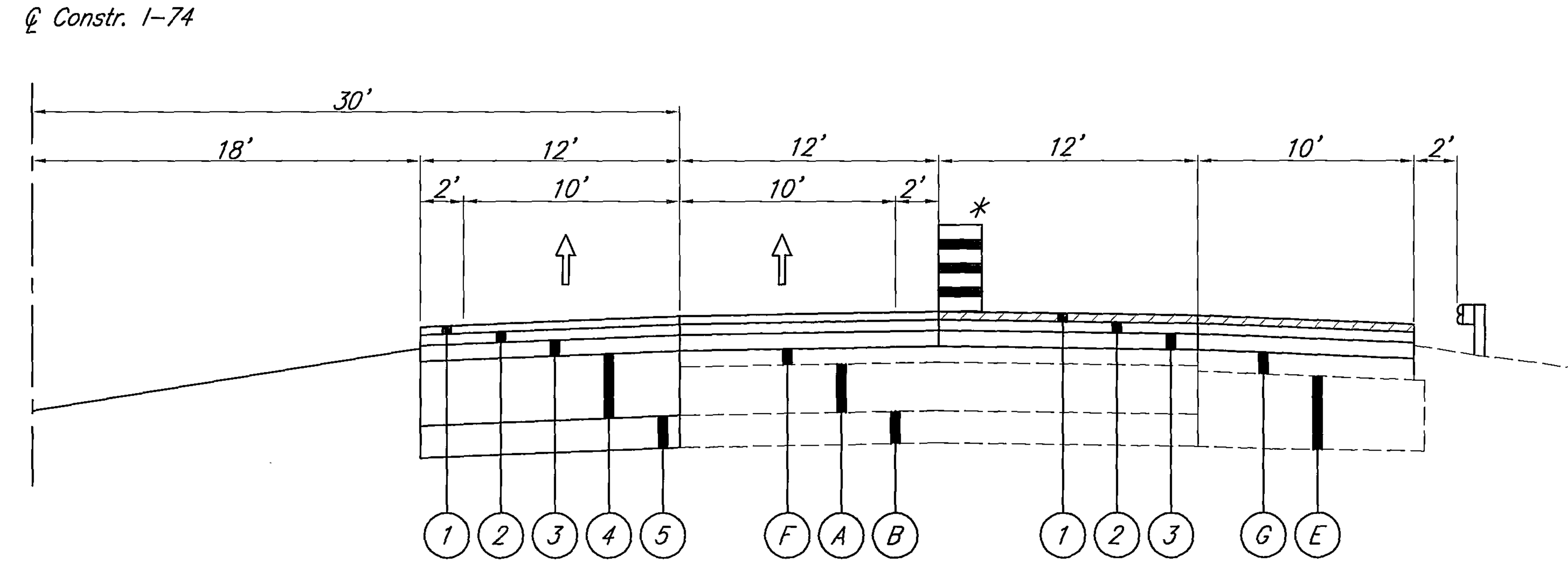
** 4' from Sta. −2+10 to −0+30. Varies from 4' at Sta. −0+30 to 12' at Sta. 7+00. 12' from Sta. 7+00 to 10+00.

** 12' from Sta. 196+00 to 197+00, Varies from 12' at Sta. 197+00 to 4' at Sta. 204+30. 4' from Sta. 204+30 to 206+10.

PRE-PHASE 1

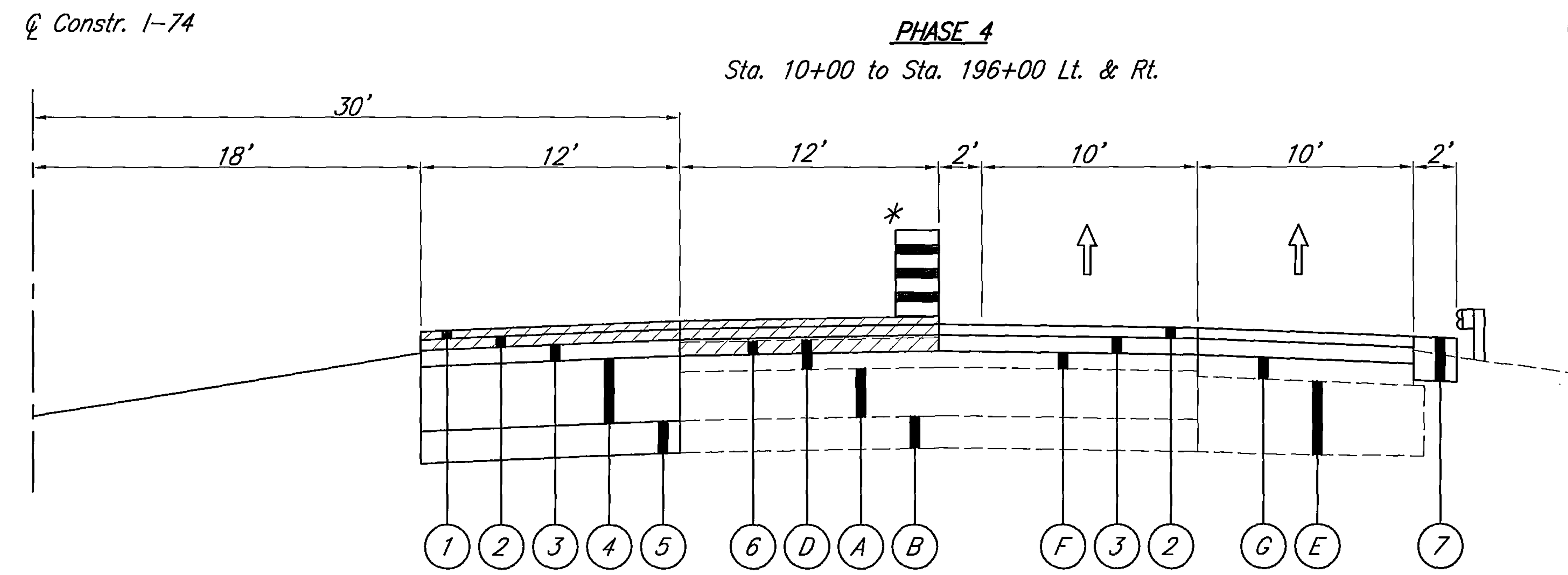
Sta. −2+10 to Sta. 10+00 Lt. & Rt.
Sta. 39+50 to Sta. 46+34 Rt.
Sta. 39+50 to Sta. 55+50 Lt.*
Sta. 57+75 to Sta. 64+25 Rt.
Sta. 85+00 to Sta. 91+50 Lt. & Rt.
Sta. 98+70 to Sta. 105+20 Lt. & Rt.
Sta. 120+30 to Sta. 126+80 Lt. & Rt.
Sta. 135+80 to Sta. 142+30 Lt. & Rt.
Sta. 196+00 to Sta. 206+10 Lt. & Rt.

* Subtract 237.06' for New Biddinger Bridge



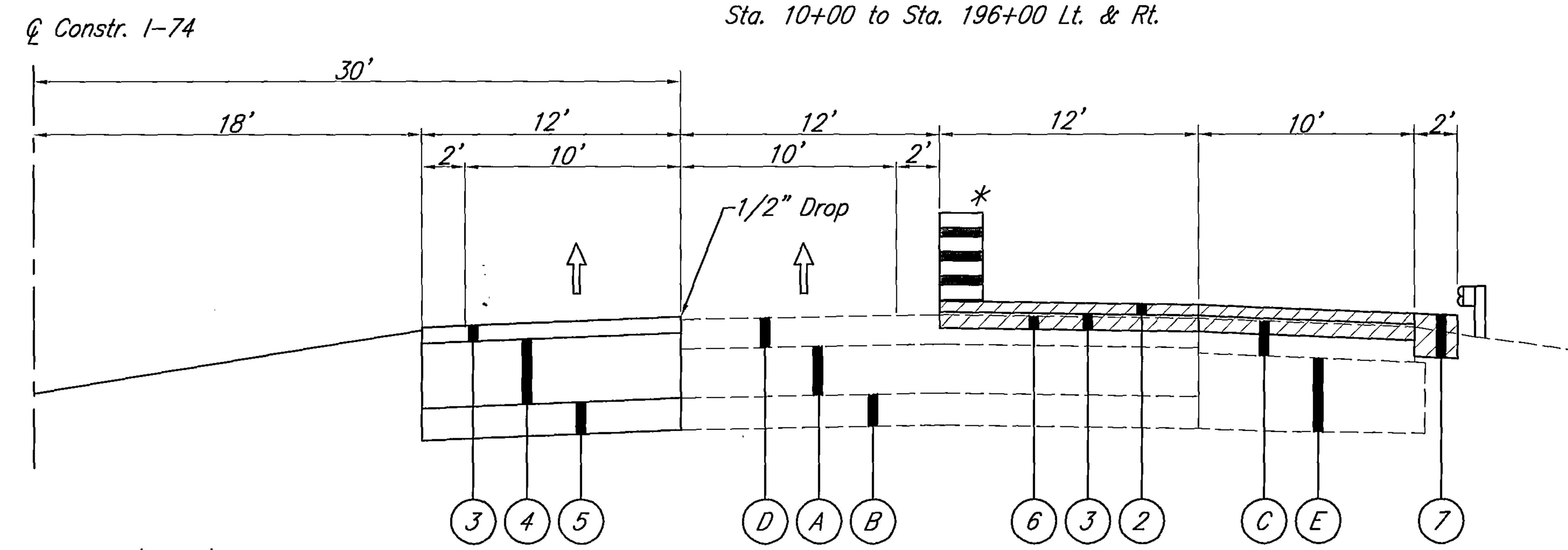
PHASE 4

Sta. 10+00 to Sta. 196+00 Lt. & Rt.



PHASE 3

Sta. 10+00 to Sta. 196+00 Lt. & Rt.



PHASE 2

Sta. 10+00 to Sta. 34+00 Lt. & Rt.
Sta. 60+79 to Sta. 83+15 Lt.
Sta. 65+45 to Sta. 79+25 Rt.
Sta. 107+05 to Sta. 114+45 Rt.
Sta. 110+95 to Sta. 118+35 Lt.
Sta. 144+20 to Sta. 196+00 Rt.
Sta. 148+10 to Sta. 196+00 Lt.

Legend

Traffic Lane

Drum

Portable Concrete Barrier

Work to be performed during phase

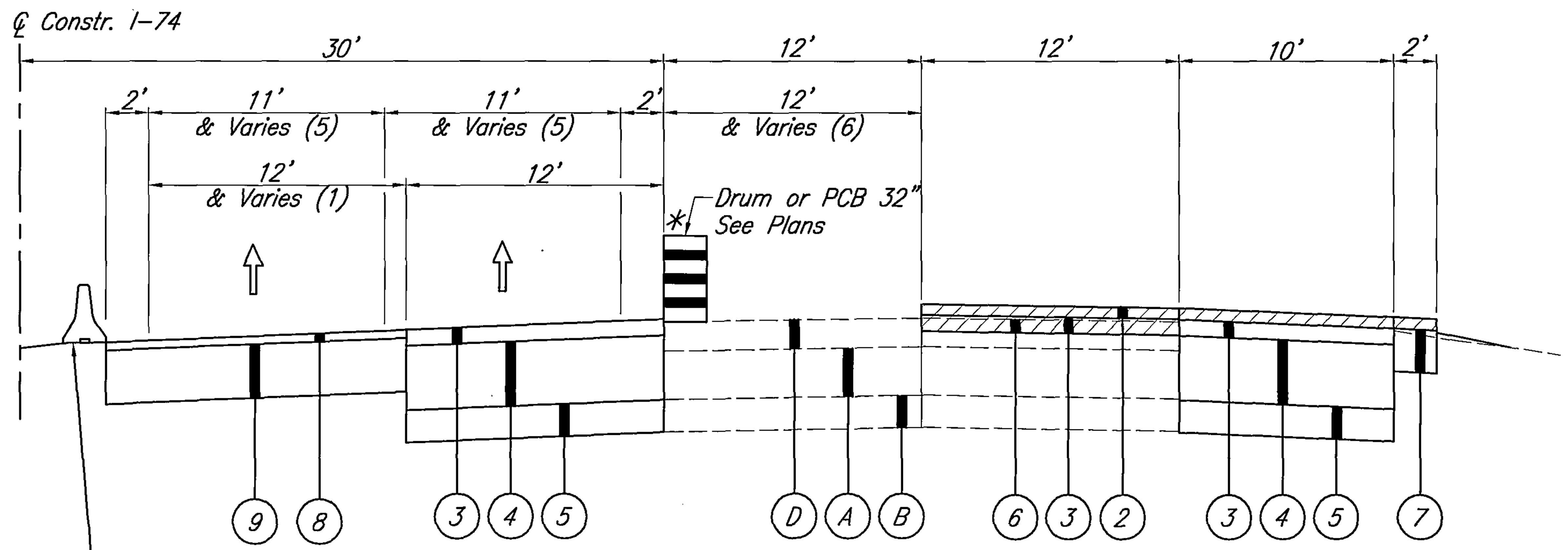
* Note: Any work requiring the relocation of the drum closer to traffic than 2' shall be done at night by closing the adjacent lane between 8PM and 6AM and in compliance with the holiday note on Sheet 18.

MAINTENANCE OF TRAFFIC TYPICAL SECTIONS
MAINLINE I-74

HAM-74-0.00

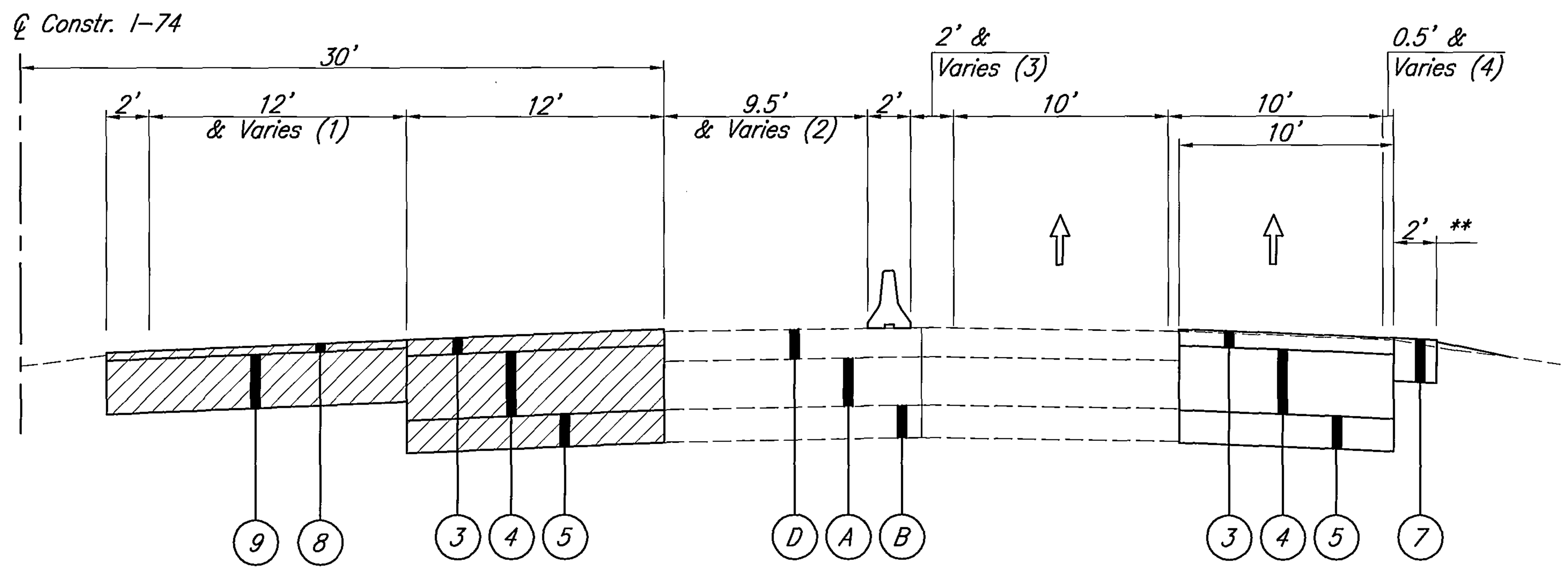
MY101020.DWG 14 AUG 2003

For Phase 3 & 4, See Sheet 25



Phase 2
Sta. 34+00 to Sta. 46+20.74 Lt. & Rt.
Sta. 48+57.80 to Sta. 60+79 Lt.
Sta. 57+75 to Sta. 65+45 Rt.

* Note: Any work requiring the relocation of the drum closer to traffic than 2' shall be done at night by closing the adjacent lane between 8PM and 6AM and in compliance with the holiday note on Sheet 18.



Phase 1
Sta. 39+50 to Sta. 46+20.74 Lt. & Rt.
Sta. 48+57.80 to Sta. 55+50 Lt.
Sta. 57+75 to Sta. 64+25 Rt.

** Sta. 45+00 to bridge, Lt. & Rt.
Bridge to 50+00, Lt.
57+75 to 58+85, Rt.

NOTES

(1) Varies from 0' at Sta. 35+10 Lt. & Rt. to 12' at Sta. 41+70 Lt. & Rt. and varies from 12' at Sta. 53+09 Lt., 57+75 Rt., to 0' at Sta. 59+69 Lt., 64+35 Rt.

(2) Varies from 6" at Sta. 39+50 Lt. & Rt. to 9.5' at Sta. 46+00 Lt. & Rt. and varies from 9.5' at Sta. 49+00 Lt., 57+75 Rt., to 6" at Sta. 55+50 Lt., 64+25 Rt.

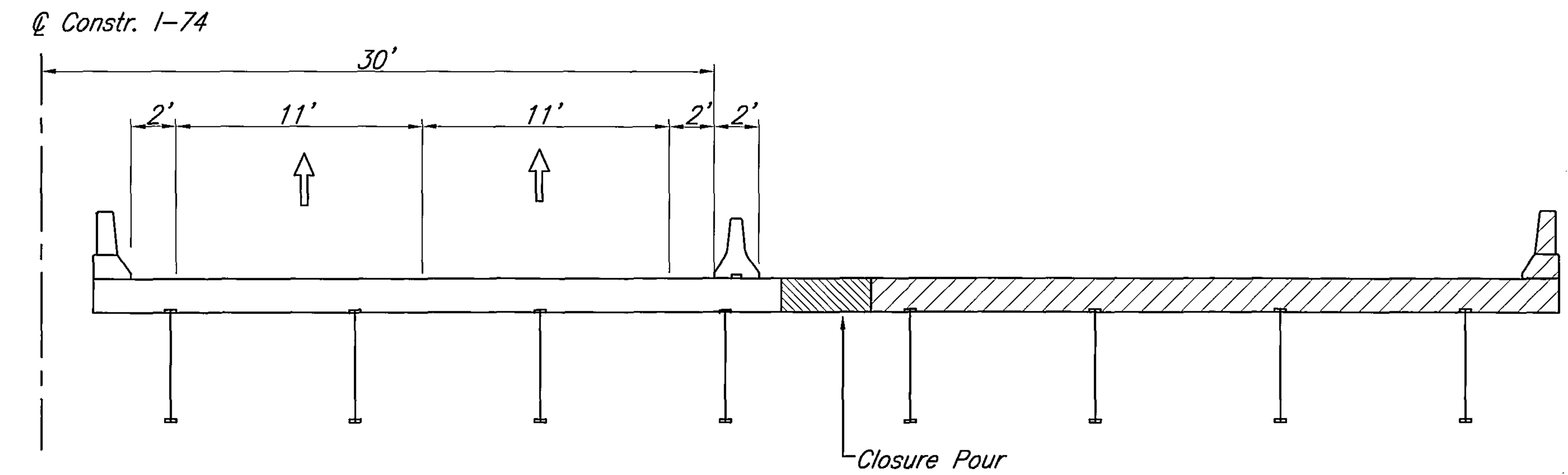
(3) Varies from 1.5' at Sta. 39+50 Lt. & Rt. to 2' at Sta. 46+00 Lt. & Rt. and varies from 2' at Sta. 49+00 Lt., 57+75 Rt., to 1.5' at Sta. 55+50 Lt., 64+25 Rt.

(4) Varies from 10' at Sta. 39+50 Lt. & Rt. to 0.5' at Sta. 46+00 Lt. & Rt., and varies from 0.5' at Sta. 49+00 Lt., 57+75 Rt., to 10' at Sta. 55+50 Lt., 64+25 Rt.

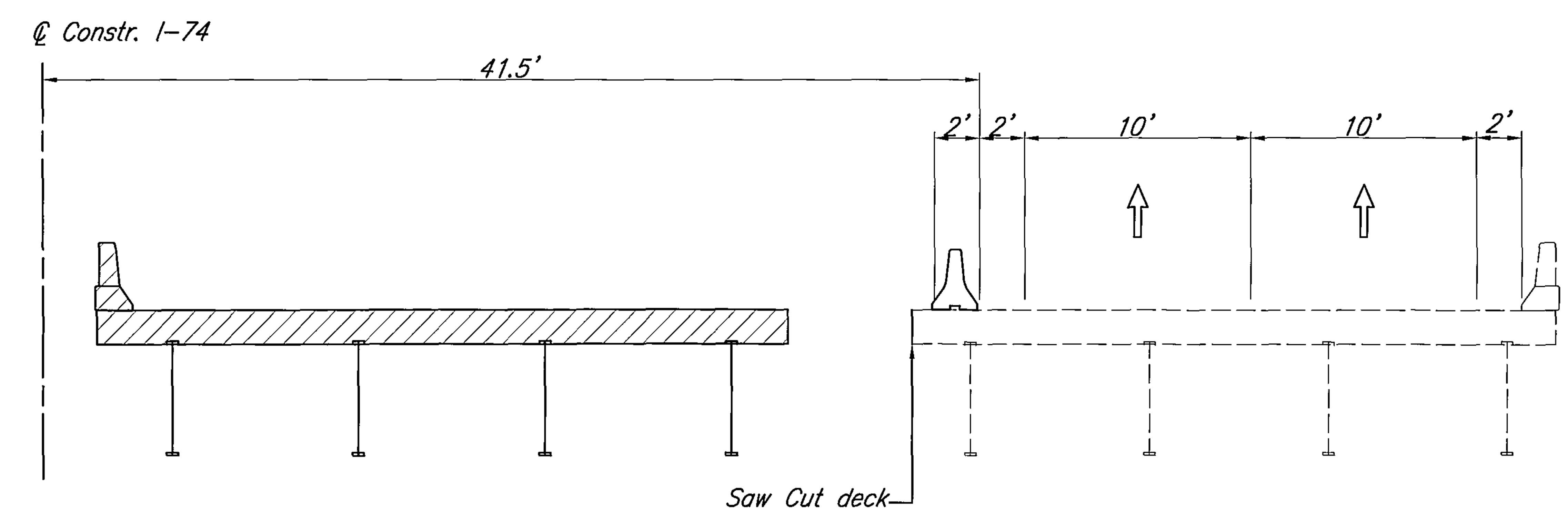
(5) Varies from 10' at Sta. 34+00 Lt. & Rt. to 11' at Sta. 41+70 Lt. & Rt. and varies from 11' at Sta. 53+09 Lt., 57+75 Rt., to 10' at Sta. 60+79 Lt., 65+45 Rt.

(6) Varies from 0' at Sta. 34+00 Lt. & Rt. to 12' at Sta. 41+70 Lt. & Rt. and varies from 12' at Sta. 53+09 Lt., 57+75 Rt., to 0' at Sta. 60+79 Lt., 65+45 Rt.

For Phase 3 & 4, See Sheet 25



Phase 2
New Biddinger Bridge



Phase 1
New Biddinger Bridge

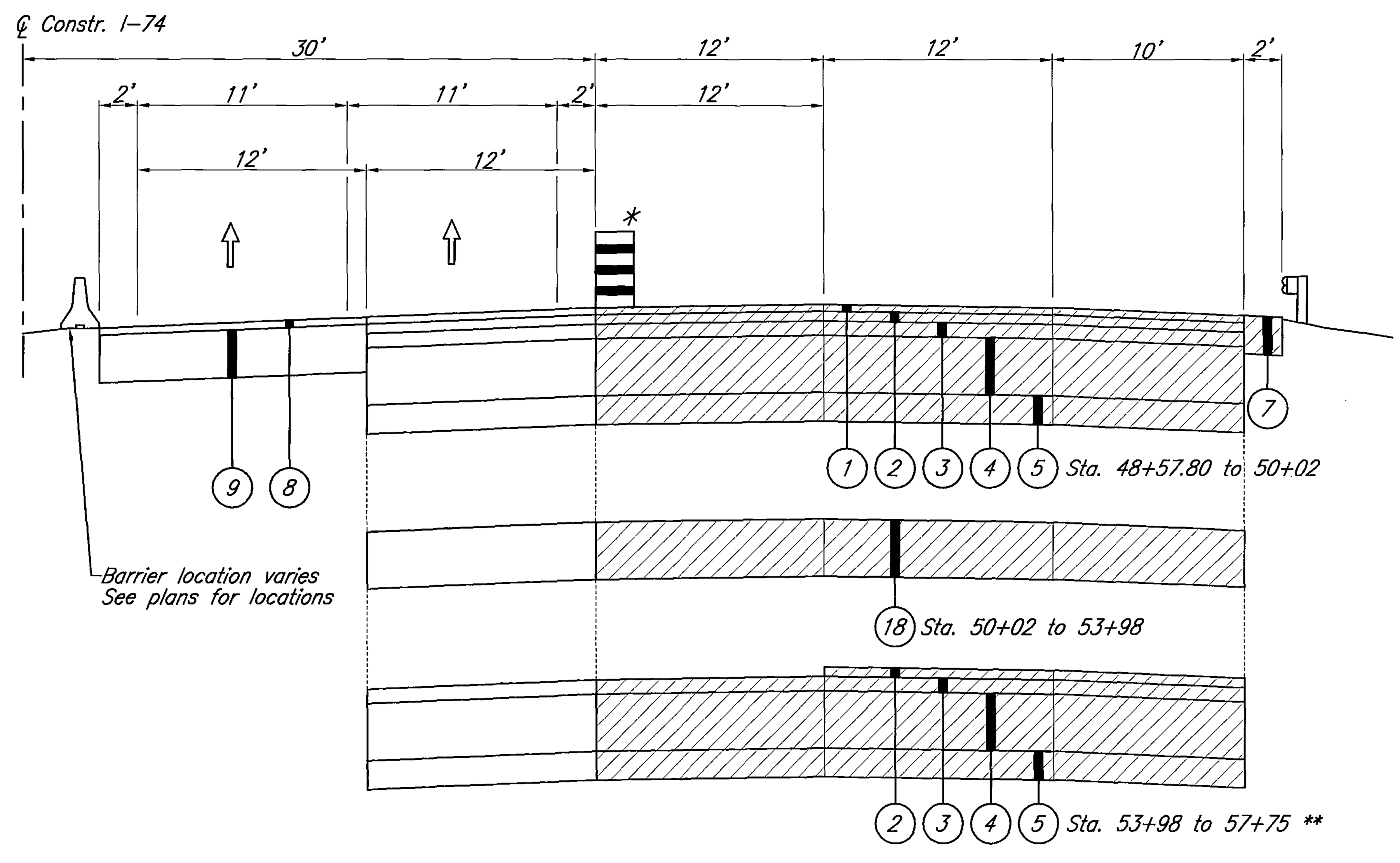
Legend

- Traffic Lane
- Portable Concrete Barrier
- Drum
- Work to be performed during phase

MAINTENANCE OF TRAFFIC TYPICAL SECTIONS
NEW BIDDINGER BRIDGE & APPROACHES

HAM-74-0.00

MYT03020.DWG 14 AUG 2003

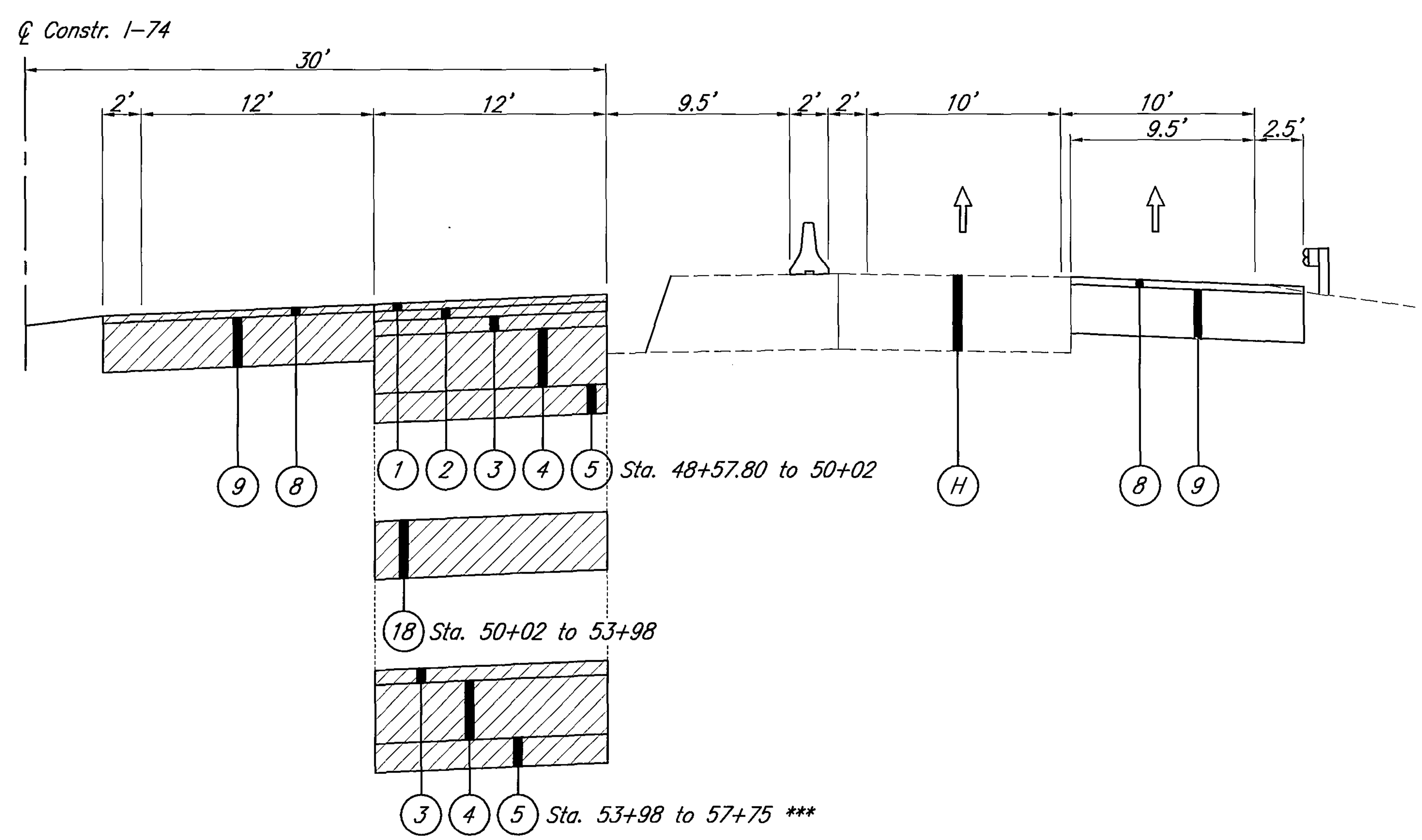


For Phase 3 & 4, See Sheet 25

∗ Note: Any work requiring the relocation of the drum closer to traffic than 2' shall be done at night by closing the adjacent lane between 8PM and 6AM and in compliance with the holiday note on Sheet 18.

** Provide 1.5" asphalt wedge from Sta. 53+98 to Sta. 54+35.5.

Phase 2
Sta. 48+57.80 to Sta. 57+75 Rt.



*** Provide 3.5" asphalt wedge from Sta. 53+98 to Sta. 54+85.5.

Phase 1
Sta. 48+57.80 to Sta. 57+75 Rt.

Legend

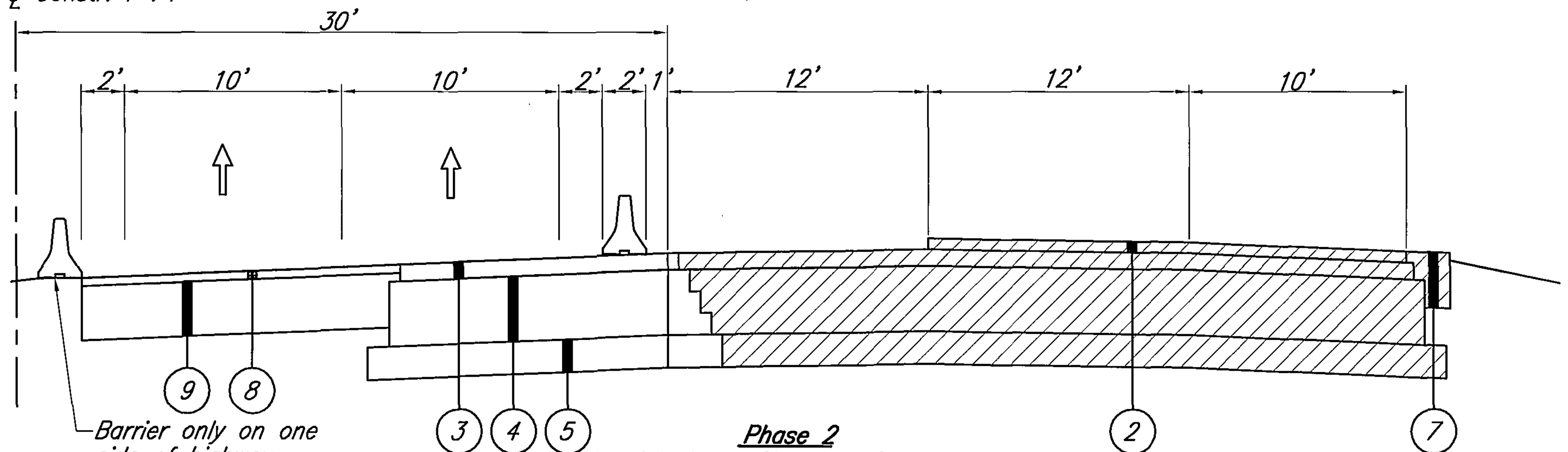
- Traffic Lane
- Portable Concrete Barrier
- Drum
- Work to be performed during phase

MY102020.DWG 14 AUG 2003

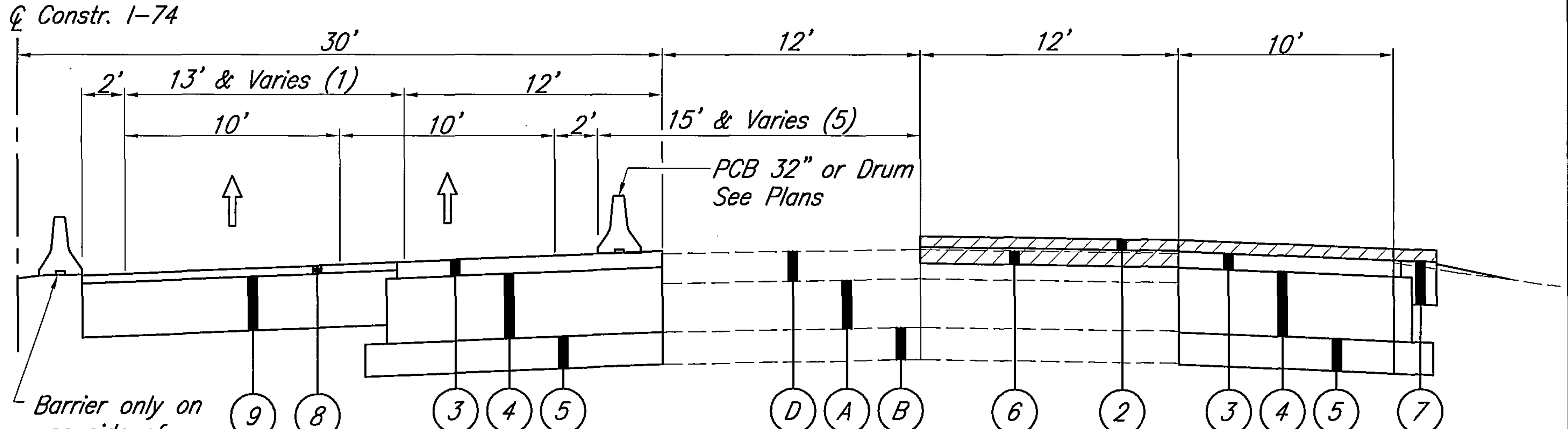
MAINTENANCE OF TRAFFIC TYPICAL SECTIONS
LANDSLIDE AREA 48+57.80 TO 57+75

HAM-74-0.00

For Phase 3 & 4, See Sheet 25

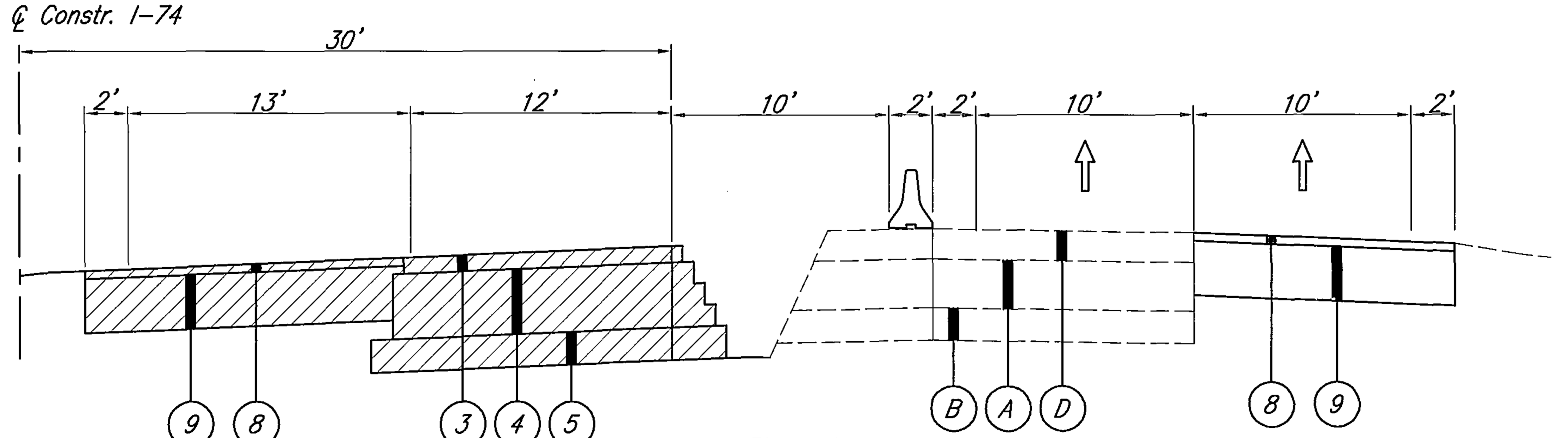


Phase 2
Sta. 91+50 to Sta. 98+70 Lt. + Rt.
Sta. 126+70 to Sta. 135+80 Lt. + Rt.

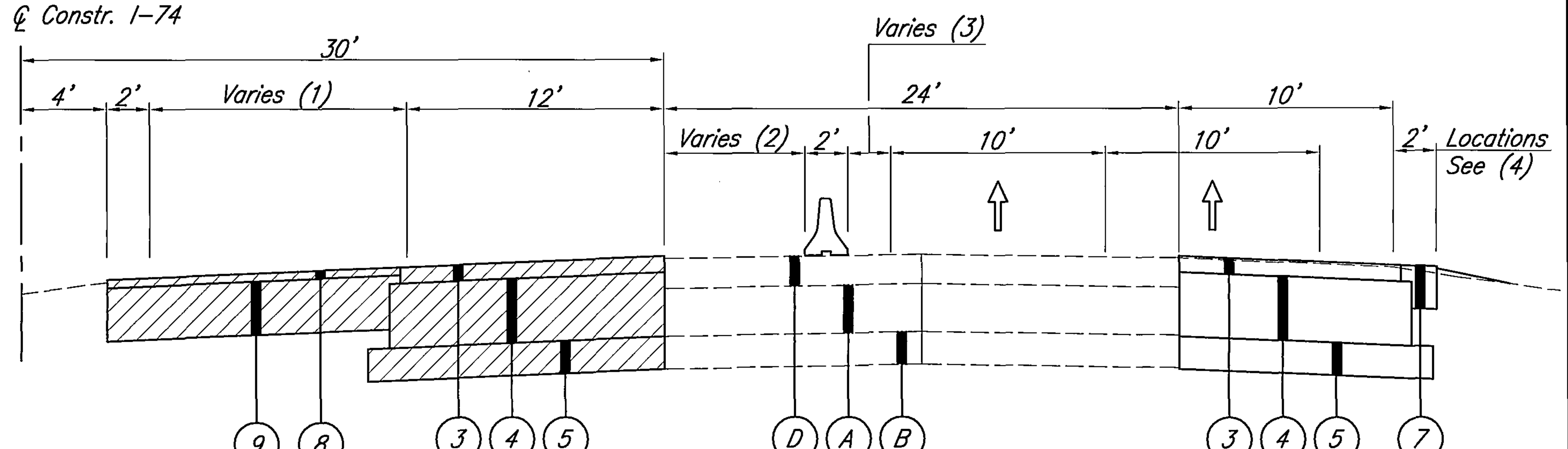


Phase 2

Sta. 79+25 to Sta. 91+50 Rt.	Sta. 114+45 to Sta. 126+70 Rt.
Sta. 83+15 to Sta. 91+50 Lt.	Sta. 118+35 to Sta. 126+70 Lt.
Sta. 98+70 to Sta. 107+05 Rt.	Sta. 135+80 to Sta. 144+20 Rt.
Sta. 98+70 to Sta. 110+95 Lt.	Sta. 135+80 to Sta. 148+10 Lt.



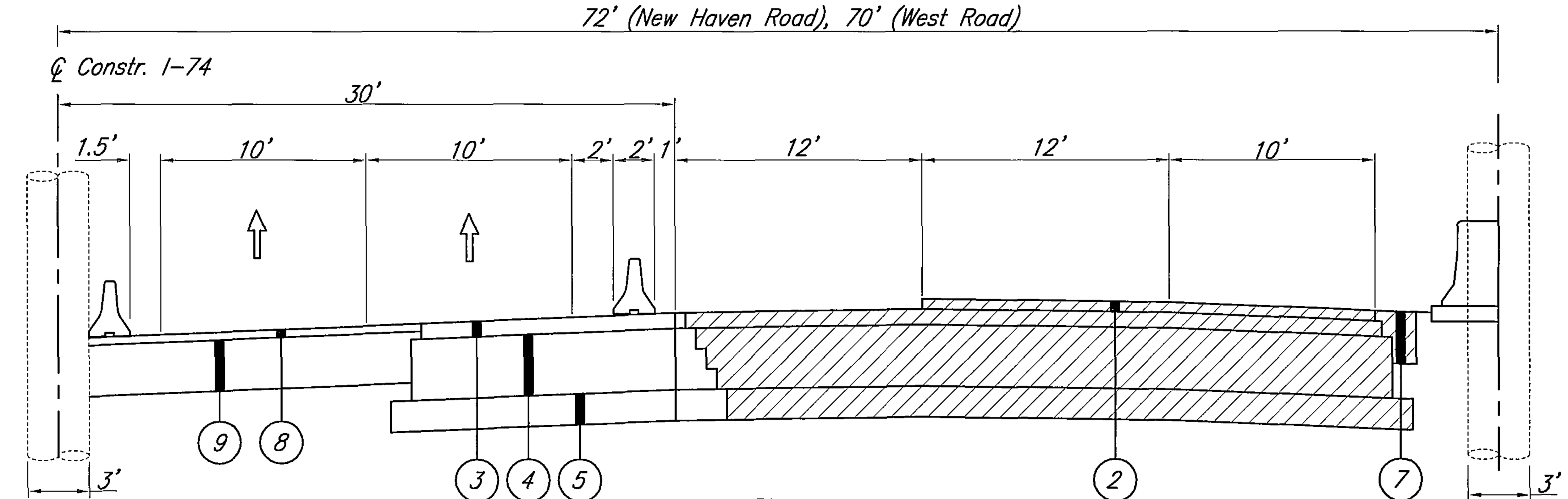
Phase 1
Sta. 91+50 to Sta. 98+70 Lt. & Rt.
Sta. 126+80 to Sta. 135+80 Lt. & Rt.



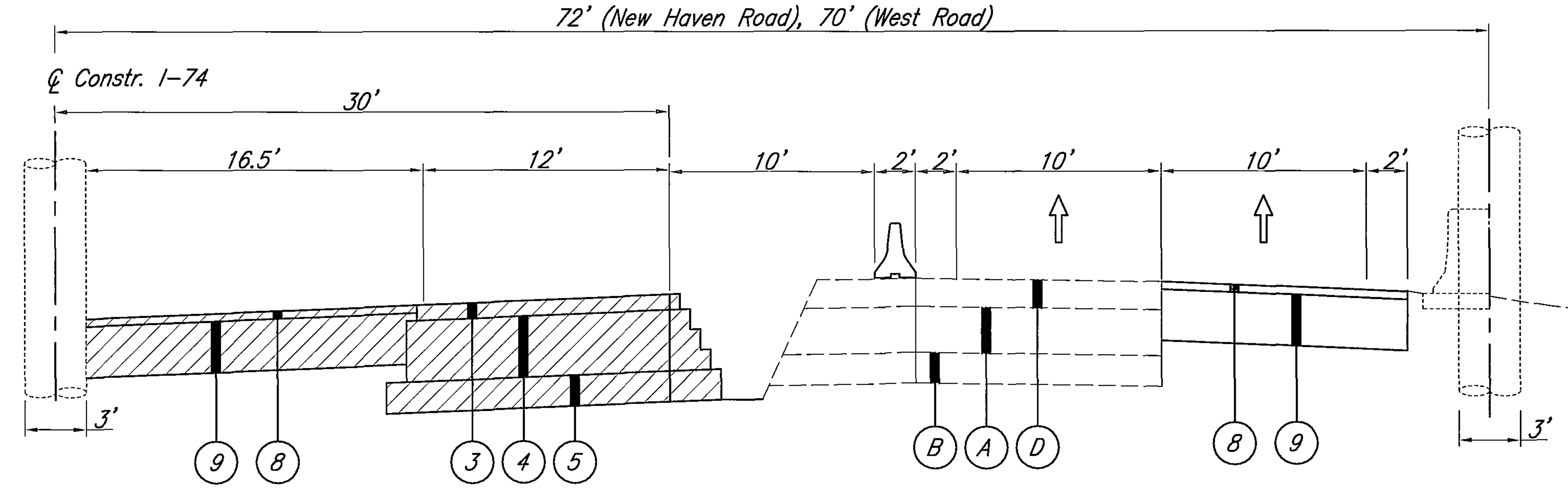
Phase 1

Sta. 85+00 to Sta. 91+50 Lt. & Rt.	Sta. 120+30 to Sta. 126+80 Lt. & Rt.
Sta. 98+70 to Sta. 105+20 Lt. & Rt.	Sta. 135+80 to Sta. 142+30 Lt. & Rt.

For Phase 3 & 4, See Sheet 25



Phase 2
Beneath New Haven and West Road Bridges



Phase 1
Beneath New Haven and West Road Bridges

NOTES

(1) Varies from 0' Sta. 80+35 Rt. & Sta. 84+25 Lt. to 13' Sta. 87+50 Rt. & Sta. 91+40 Lt. and varies from 13' Sta. 98+80 Rt. and Sta. 102+70 Lt. to 0' Sta. 105+95 Rt. and Sta. 109+85 Lt.
Varies from 0' Sta. 115+55 Rt. & Sta. 119+45 Lt. to 13' Sta. 122+70 Rt. & Sta. 126+60 Lt. and varies from 13' Sta. 135+90 Rt. & 139+80 Lt. to 0' Sta. 143+10 Rt. & Sta. 147+00 Lt.

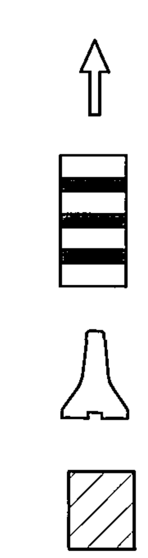
(2) Varies from 6" Sta. 85+00 Rt. & Lt. to 10' Sta. 91+50 Rt. & Lt. and varies from 10' Sta. 98+70 Rt. & Lt. to 6" Sta. 105+20 Rt. & Lt. Varies from 6" Sta. 120+30 Rt. & Lt. to 10' Sta. 126+80 Rt. & Lt. and varies from 10' Sta. 135+80 Rt. & Lt. to 6" Sta. 142+30 Rt. & Lt.

(3) Varies from 1.5' Sta. 85+00 Rt. & Lt. to 2' Sta. 91+50 Rt. & Lt. and varies from 2' Sta. 98+70 Rt. & Lt. to 1.5' Sta. 105+20 Rt. & Lt. Varies from 1.5' Sta. 120+30 Rt. & Lt. to 2' Sta. 126+80 Rt. & Lt. and varies from 2' Sta. 135+80 Rt. & Lt. to 1.5' Sta. 142+30 Rt. & Lt.

(4) Applies (Rt. & Lt.) from Sta. 90+20 to Sta. 91+50, Sta. 98+70 to Sta. 100+00, Sta. 125+50 to Sta. 126+80, Sta. 135+80 to Sta. 137+10.

(5) Varies from 0' Sta. 79+25 Rt. & Sta. 83+15 Lt. to 15' Sta. 87+50 Rt. & Sta. 91+40 Lt. and varies from 15' Sta. 98+80 Rt. & Sta. 102+70 Lt. to 0' Sta. 107+05 Rt. & Sta. 110+95 Lt.
Varies from 0' Sta. 114+45 Rt. & Sta. 118+35 Lt. to 15' Sta. 122+70 Rt. & Sta. 126+60 Lt. and varies from 15' Sta. 135+90 Rt. & Sta. 139+80 Lt. to 0' Sta. 144+20 Rt. & Sta. 148+10 Lt.

Legend



Traffic Lane

Drum

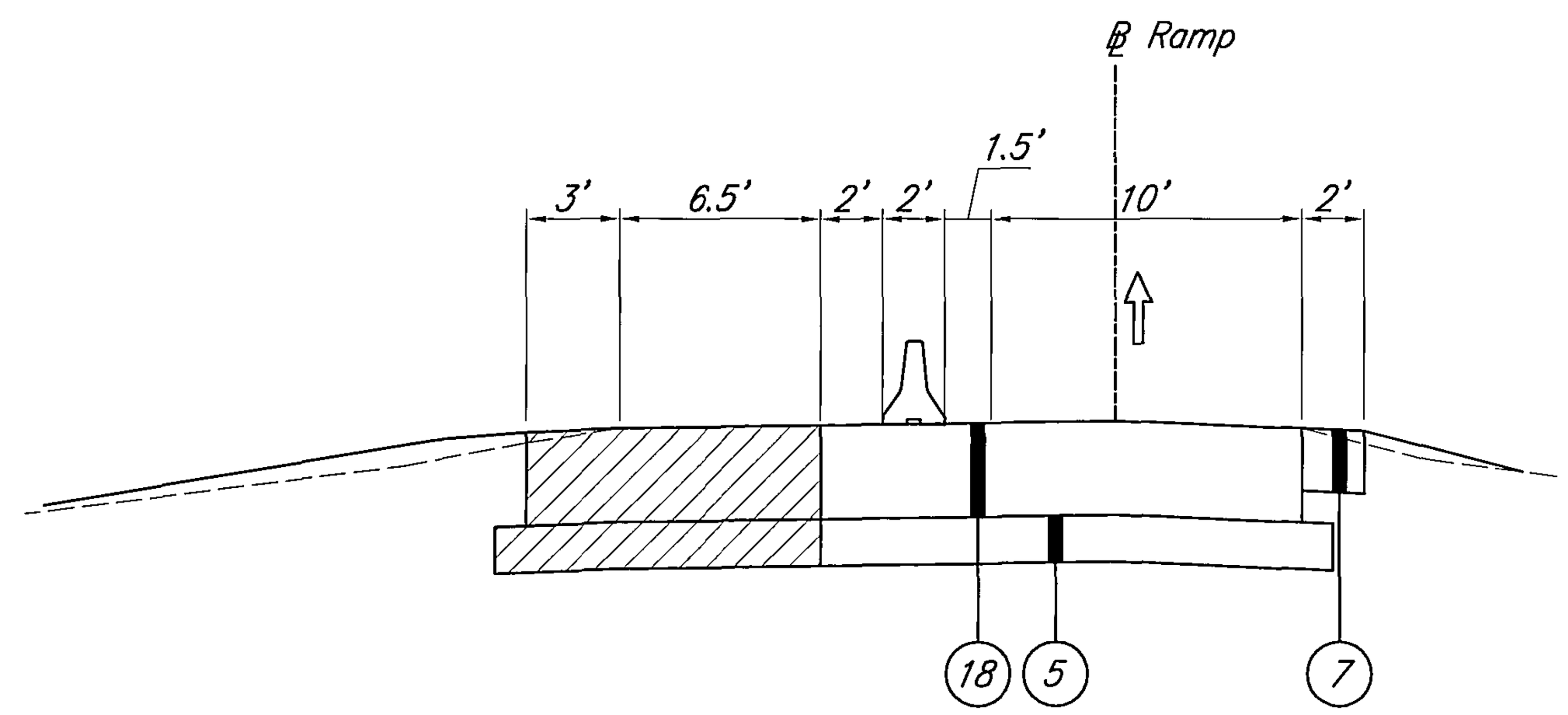
Portable Concrete Barrier

Work to be performed during phase

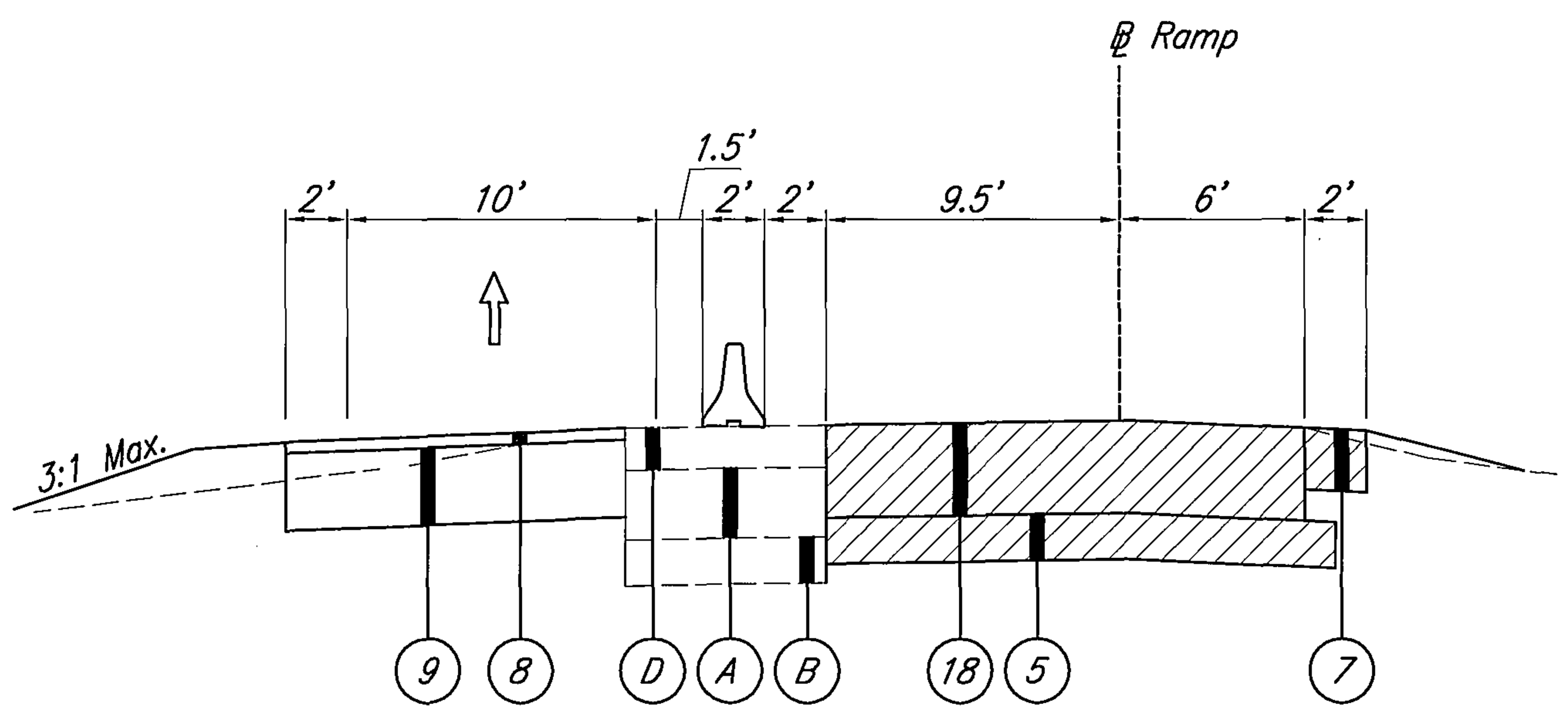
MAINTENANCE OF TRAFFIC TYPICAL SECTIONS
I-74 UNDER NEW HAVEN & WEST RD

HAM-74-0.00

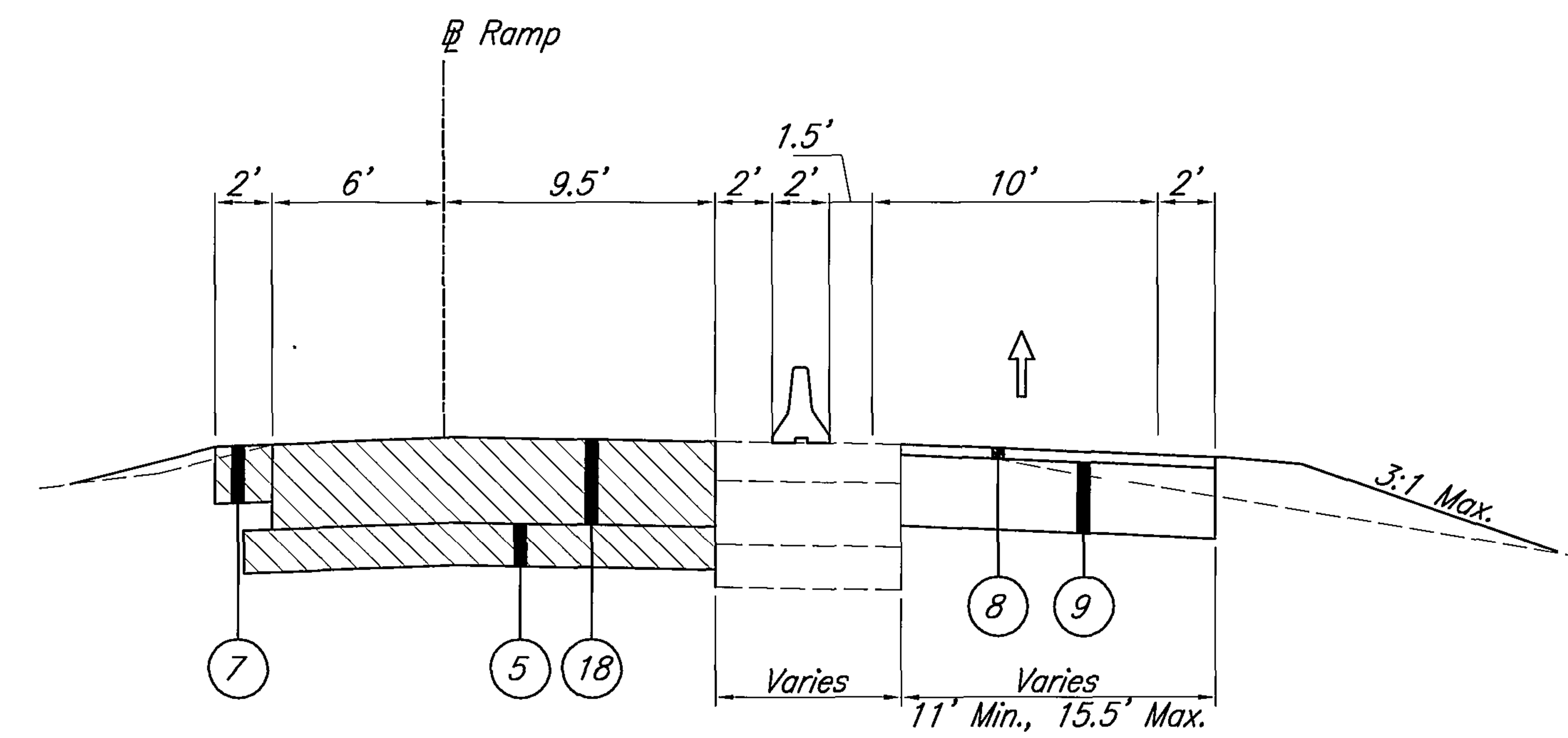
MY104020.DWG 14 AUG 2003



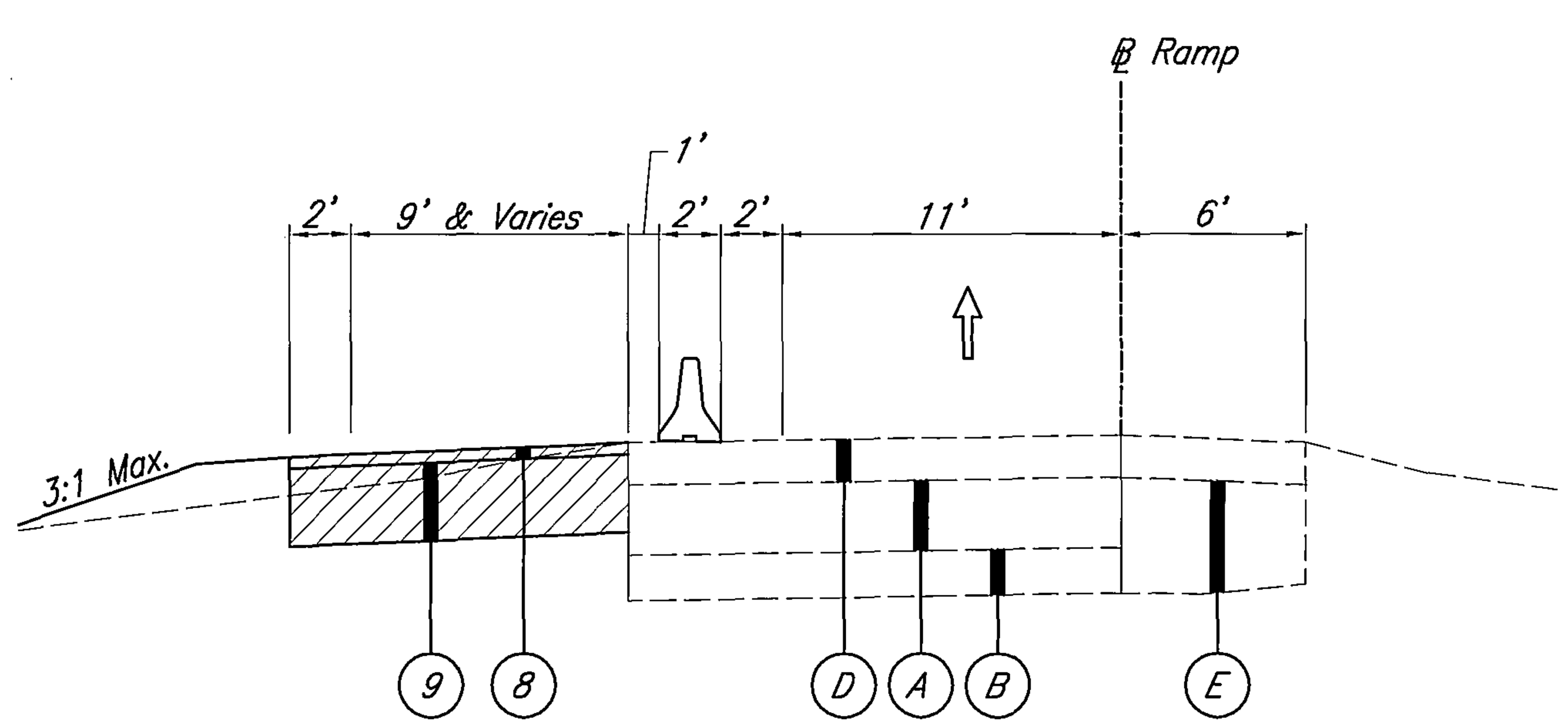
Phase 2B
Ramps FA & FB (Opposite Hand)
Dry Fork Road



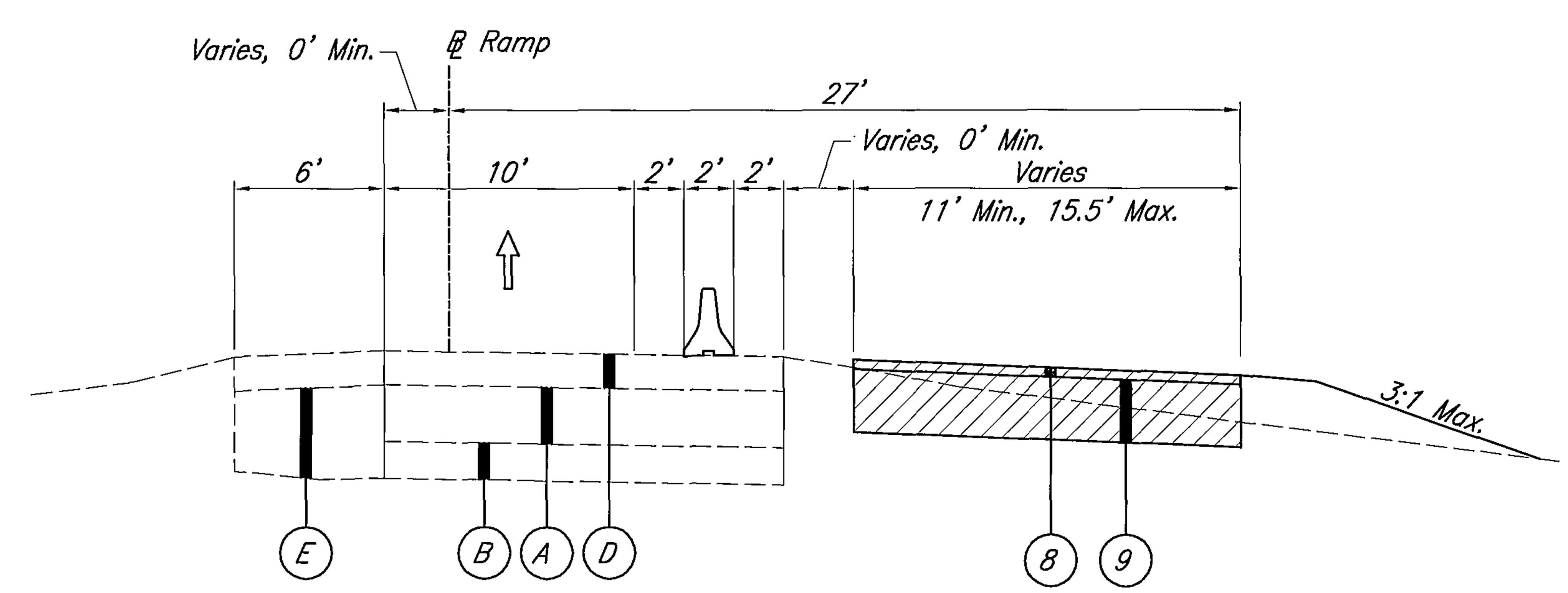
Phase 2A
Ramp FA
Dry Fork Road



Phase 2A
Ramp FB
Dry Fork Road



Phase 1 – Construction of Temporary Pavement
Ramp HA & HC, HB & HD (opposite hand) – New Haven Road
Ramp FA – Dry Fork Road



Phase 1 – Construction of Temporary Pavement
Ramp FB
Dry Fork Road

Legend

Traffic Lane

Drum

Portable Concrete Barrier

Work to be performed during phase

MY105020.DWG 14 AUG 2003

MAINTENANCE OF TRAFFIC TYPICAL SECTIONS
RAMPS

HAM-74-0.00

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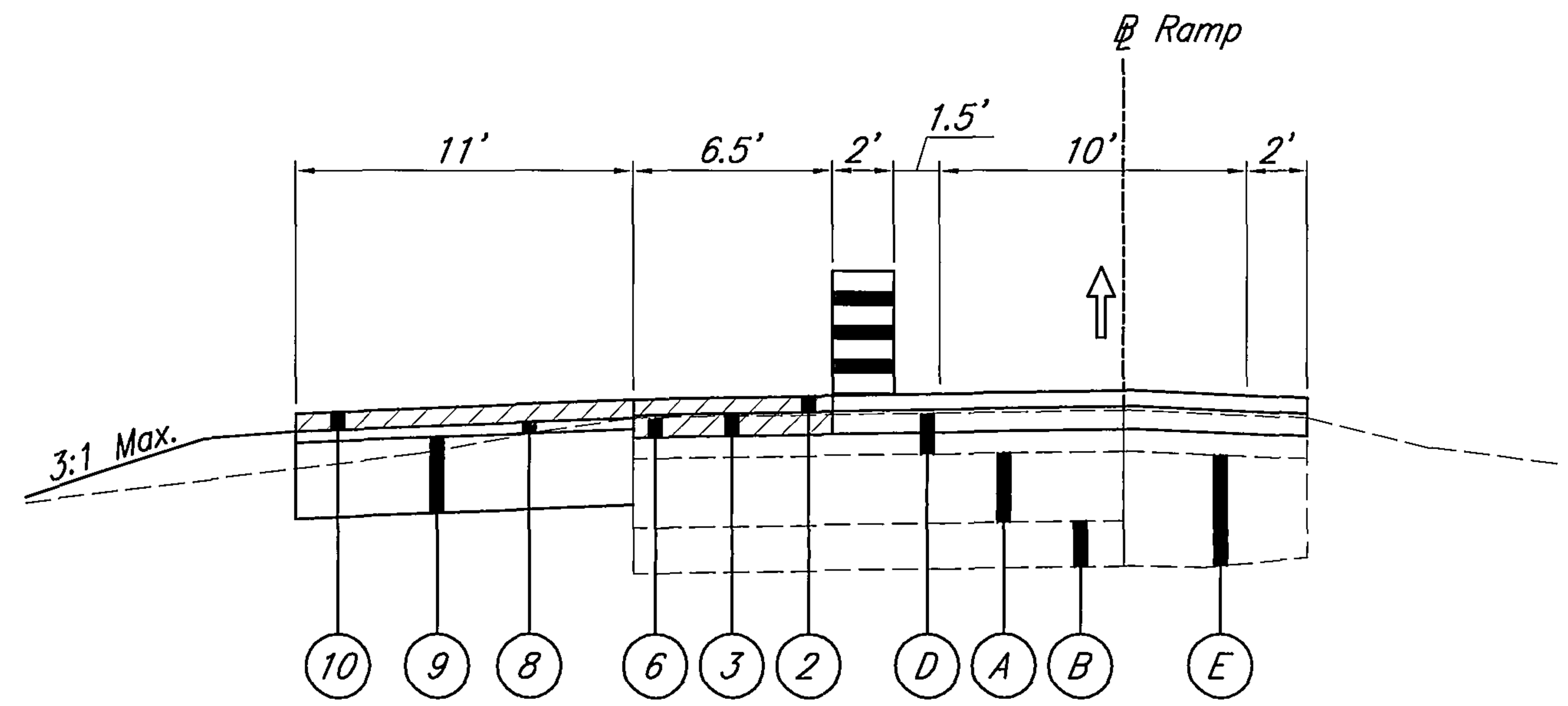
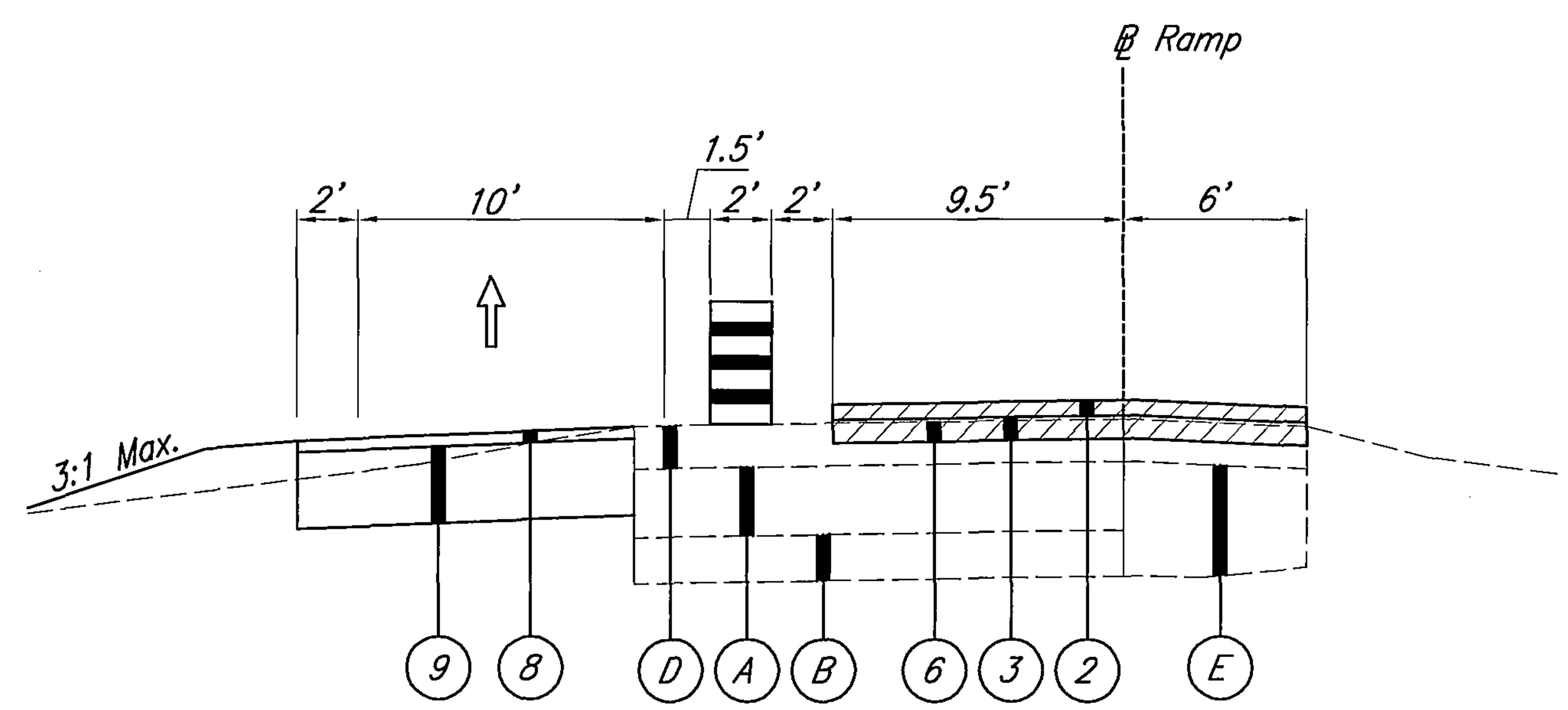
No ramp work in Phase 3.

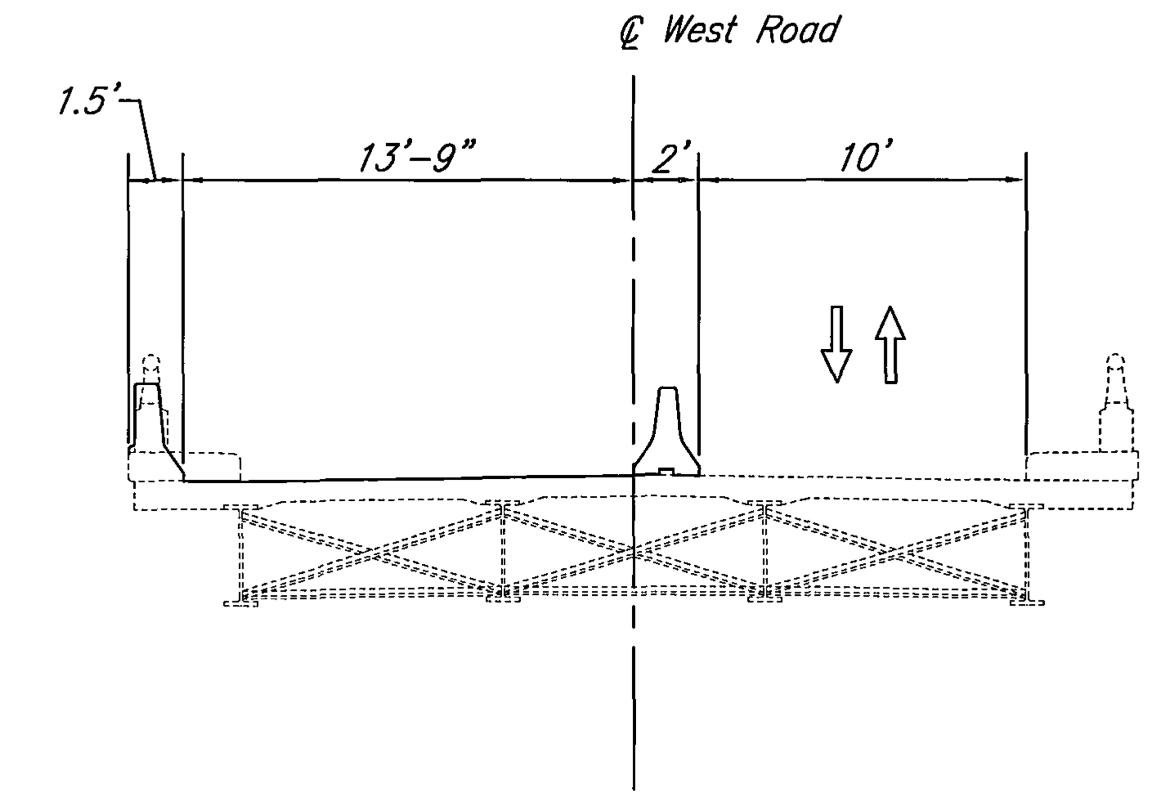
New Haven Ramps Phase 4A and 4B are similar to Phase 2A and 2B respectively.



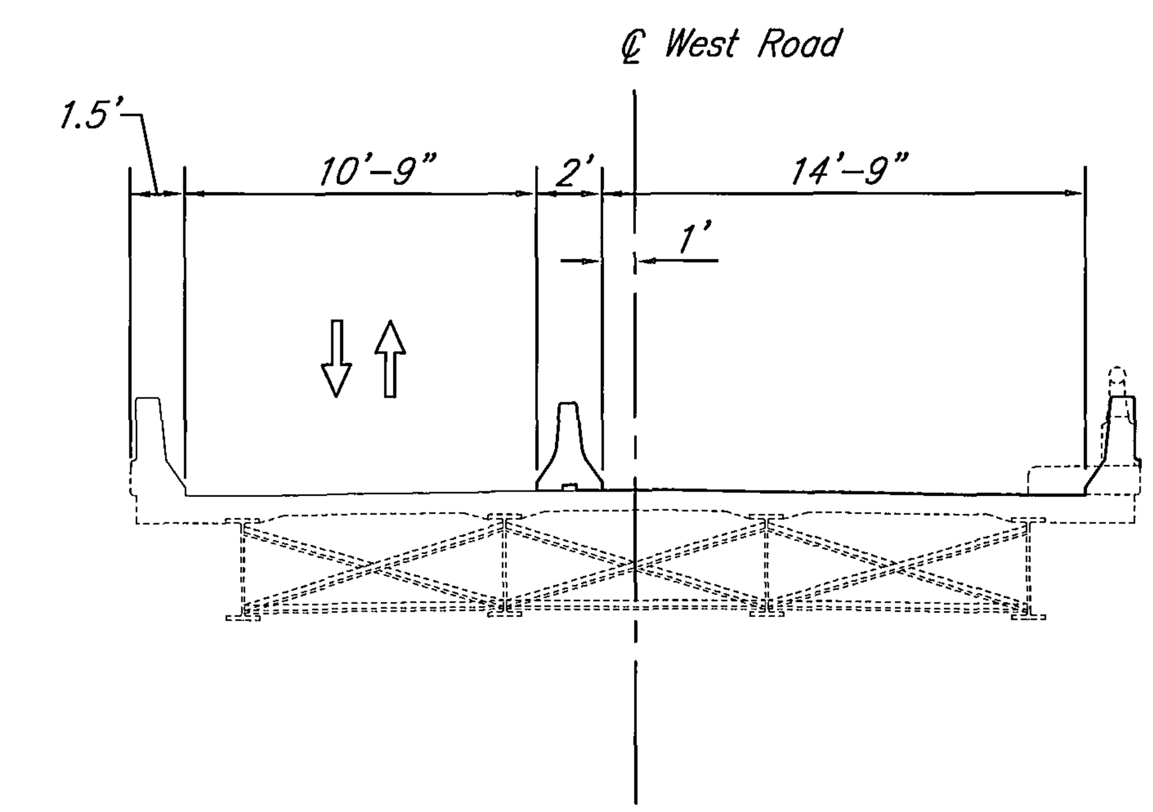
Phase 2B
Ramp HA & HC, HB & HD (opposite hand) – New Haven Road



Phase 2A
Ramp HA & HC, HB & HD (opposite hand) – New Haven Road



WEST ROAD BRIDGE (Phase 1)



WEST ROAD BRIDGE (Phase 2)

Legend

Traffic Lane

Drum

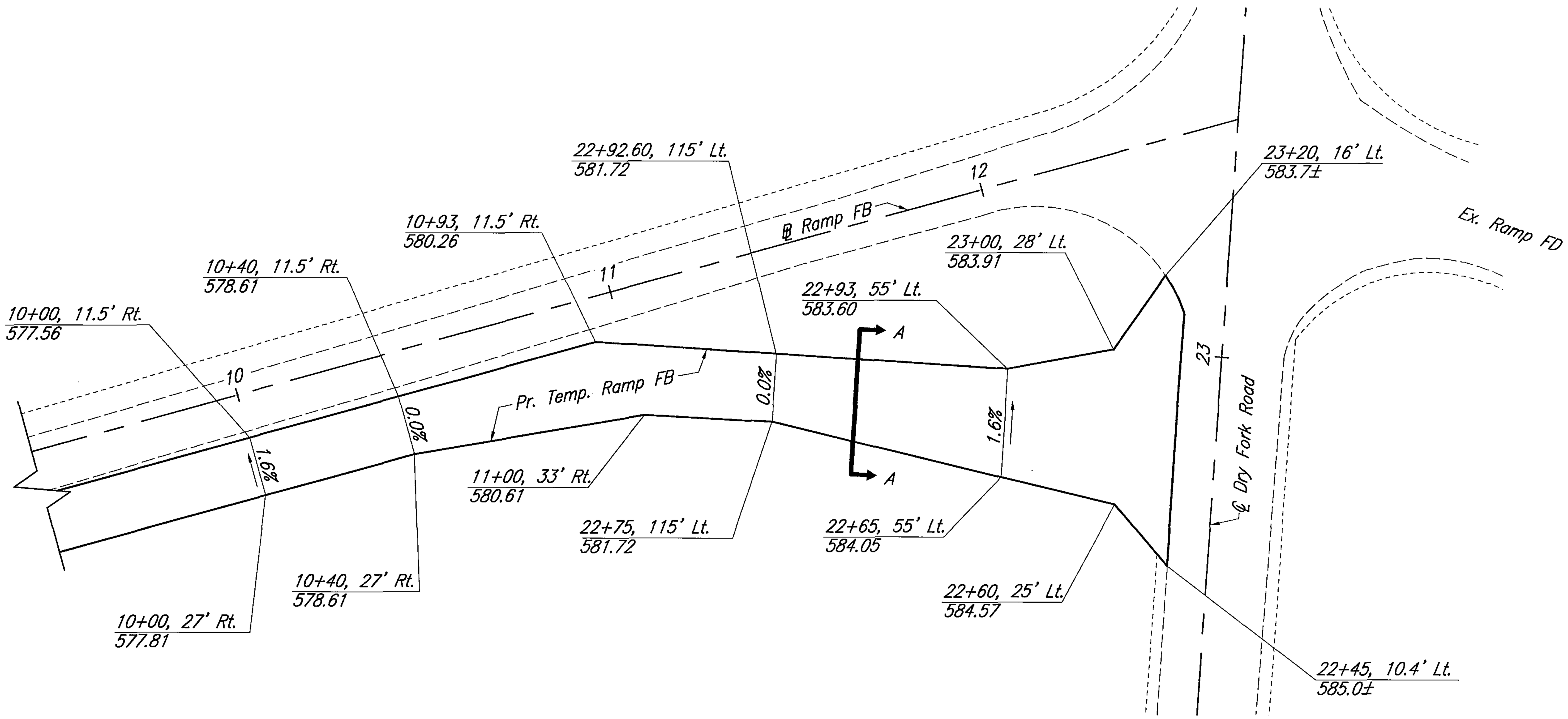
Portable Concrete Barrier

Work to be performed during phase

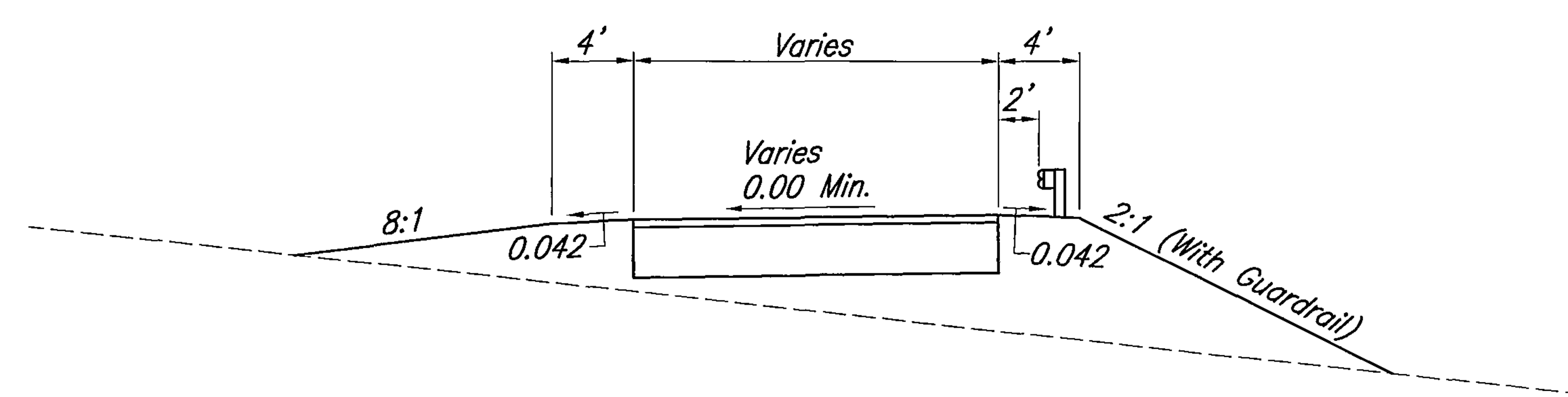
MY500020.DWG 14 AUG 2003

MAINTENANCE OF TRAFFIC TYPICAL SECTIONS
RAMPS AND WEST ROAD

HAM-74-0.00



RAMP FB TEMPORARY PAVEMENT



SECTION A-A

DRY FORK ROAD RAMP FB
PAVEMENT FOR MAINTAINING TRAFFIC DETAILS

HAM-74-0.00

HORIZONTAL SCALE IN FEET 0 10 20 40

CALCULATED JNR
CHECKED REF

31
421

MD101020.DWG 14 AUG 2003

NOTES

1. For Legend, See Sheet 22.
2. PFMT for Phase II shall be constructed at the end of Phase I. See Phase II for dimensions and quantities.

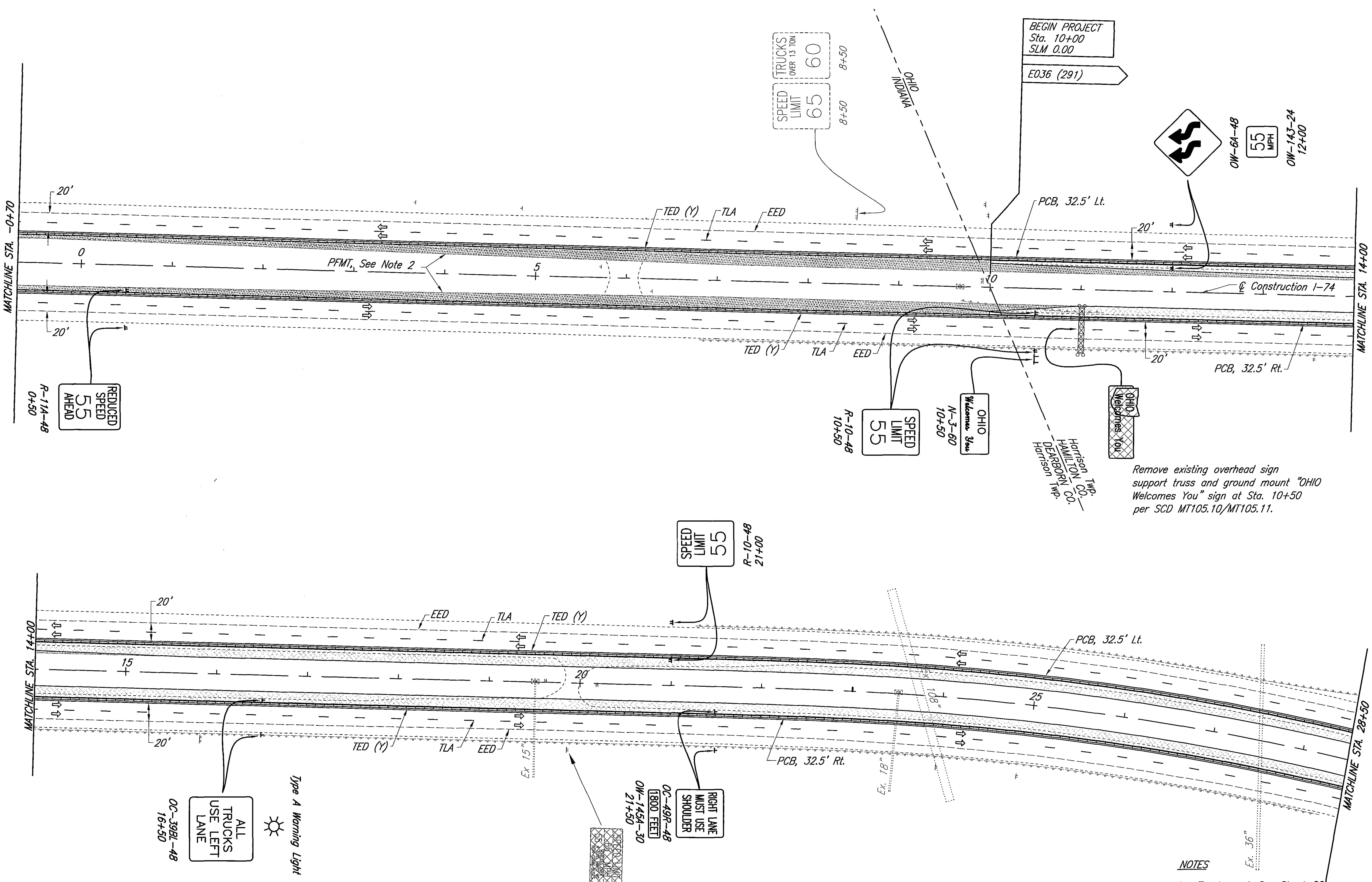
CALCULATED JNR
CHECKED REF

MAINTENANCE OF TRAFFIC PLAN – PHASE I
STA. -110+00 TO STA -0+70

HAM-74-0.00

MP100020-I.DWG 14 AUG 2003

MAINTENANCE OF TRAFFIC PLAN- PHASE I
STA. -0+70 TO STA. 28+50



NOTES

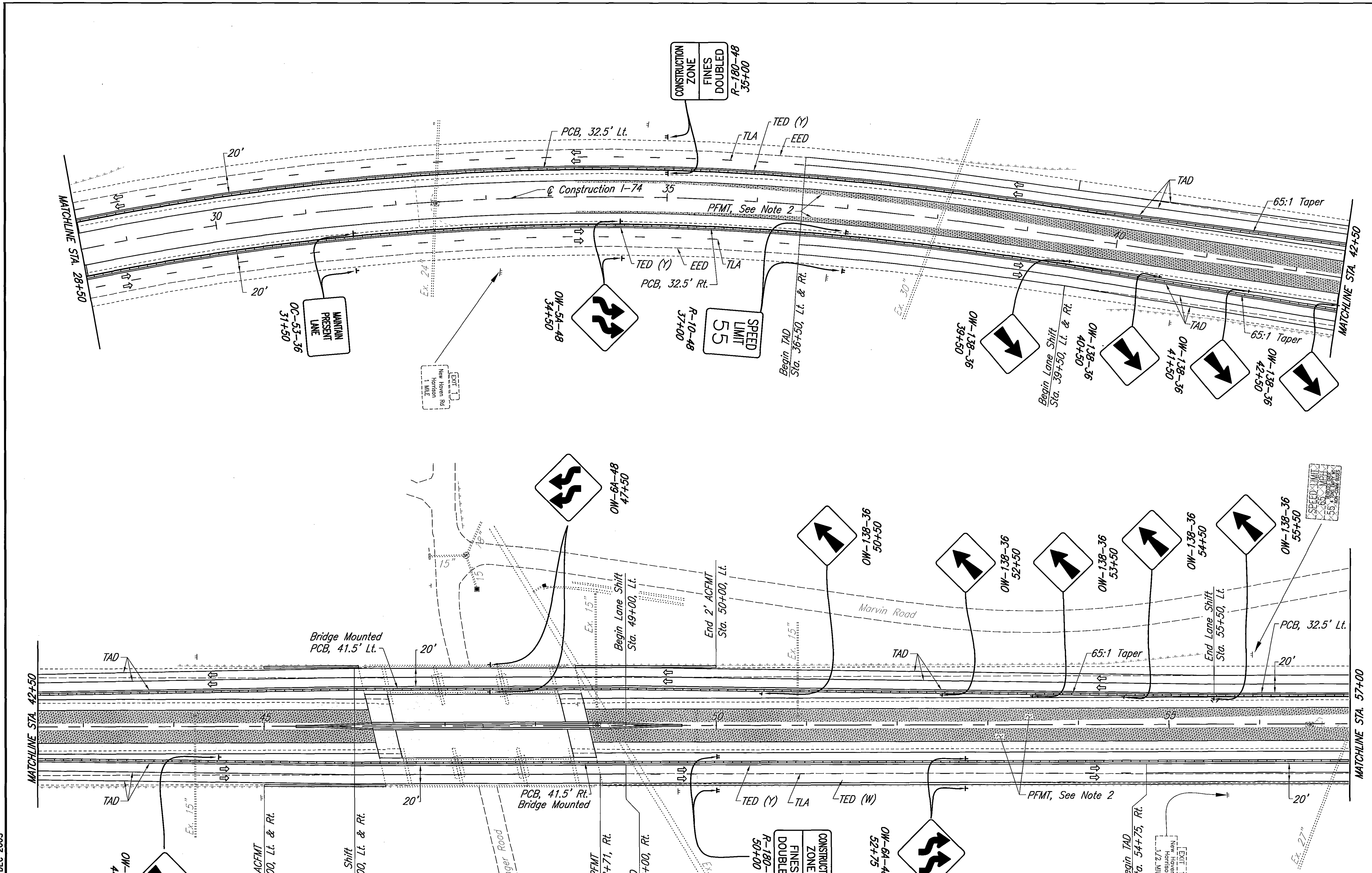
1. For Legend, See Sheet 22.
2. PFMT for Phase II shall be constructed at the end of Phase I. See Phase II for dimensions and quantities.

CALCULATED JNR
CHECKED REF

HORIZONTAL SCALE IN FEET 0 25 50 100

HAM-74-0.00

MP101020-I.DWG 14 AUG 2003



NOTES

1. For Legend, See Sheet 22.
2. PFMT for Phase II shall be constructed at the end of Phase I. See Phase II for dimensions and quantities.

HORIZONTAL SCALE IN FEET 0 25 50 100

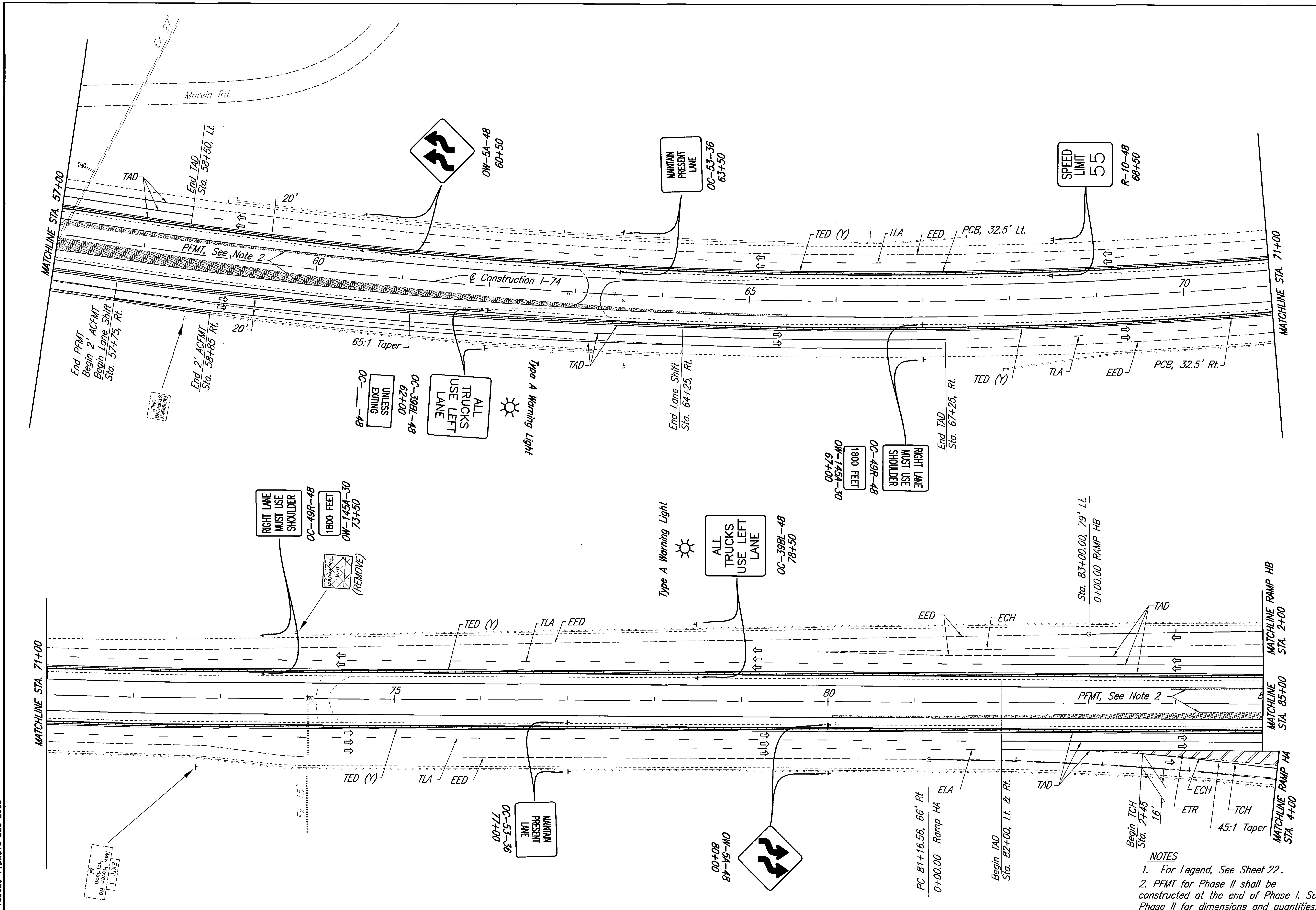
CALCULATED JNR | CHECKED REF

MAINTENANCE OF TRAFFIC PLAN - PHASE I
STA. 28+50 TO STA. 57+00

HAM-74-0.00

34
421

MP102020-I.DWG10 DEC 2003



NOTES
1. For Legend, See Sheet 22.
2. PFMT for Phase II shall be constructed at the end of Phase I. See Phase II for dimensions and quantities.

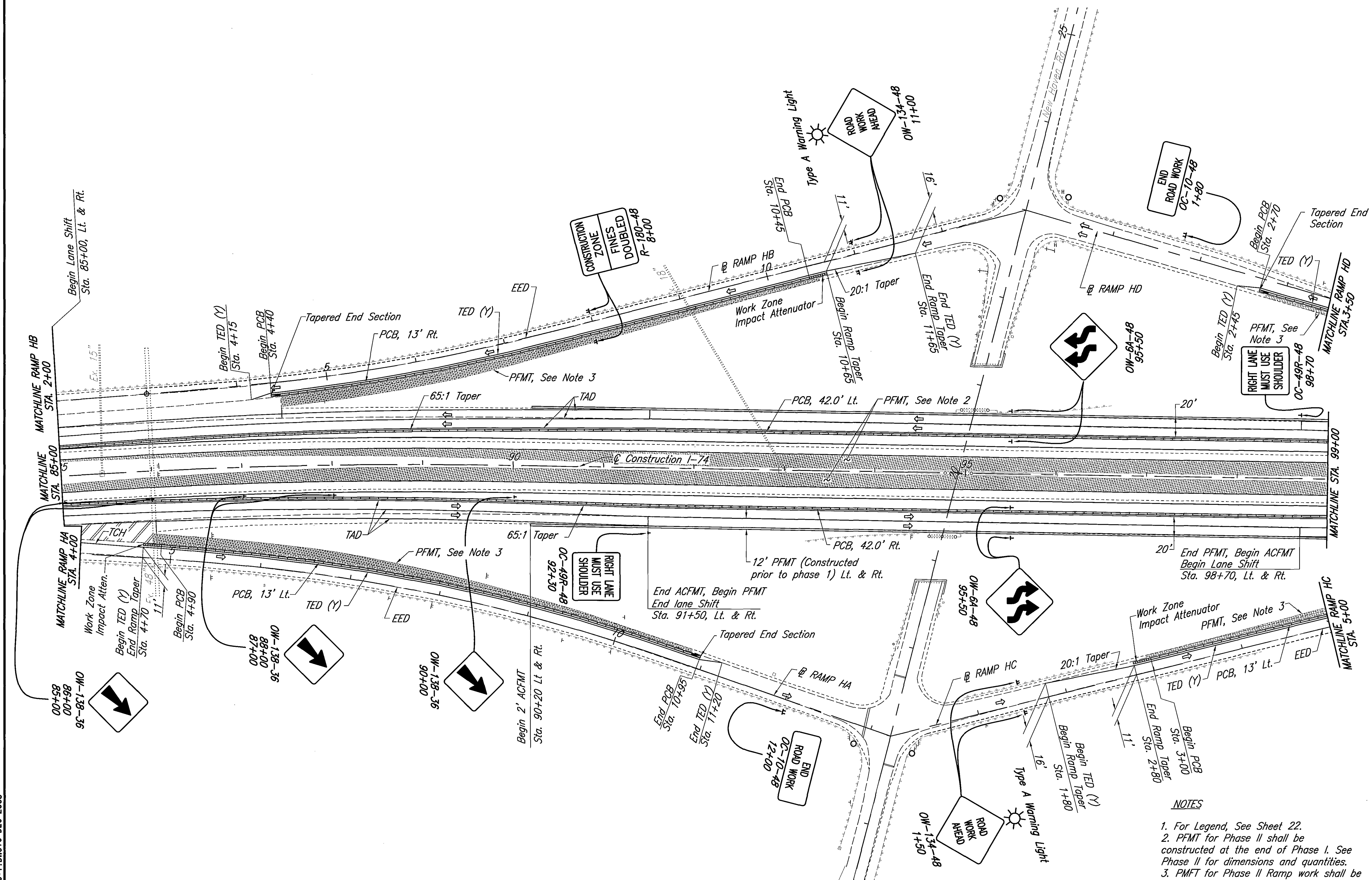
HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JNR
CHECKED REF

MAINTENANCE OF TRAFFIC PLAN – PHASE I
STA. 57+00 TO STA 85+00

HAM-74-0.00

MP103020-I.DWG10 DEC 2003



NOTES

1. For Legend, See Sheet 22.
2. PFMT for Phase II shall be constructed at the end of Phase I. See Phase II for dimensions and quantities.
3. PMFT for Phase II Ramp work shall be constructed after all mainline work has been completed. See Phase II for dimensions and quantities.

HORIZONTAL SCALE IN FEET 0 25 50 100

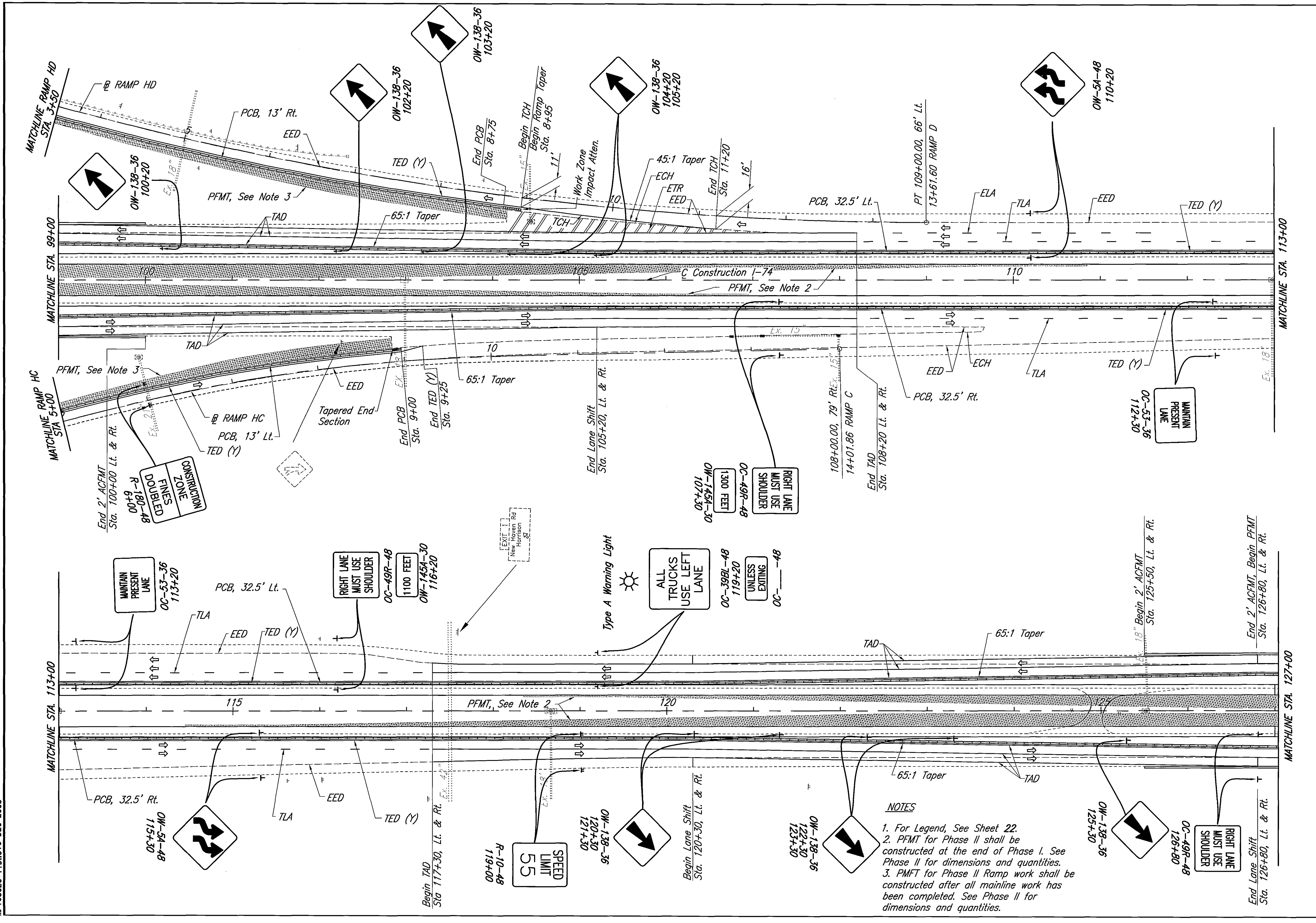
CALCULATED JNR
CHECKED REF

MAINTENANCE OF TRAFFIC PLAN - PHASE I
STA. 85+00 TO STA 99+00

HAM-74-0.00

36
421

MP104020-1.DWG10 DEC 2003



NOTES

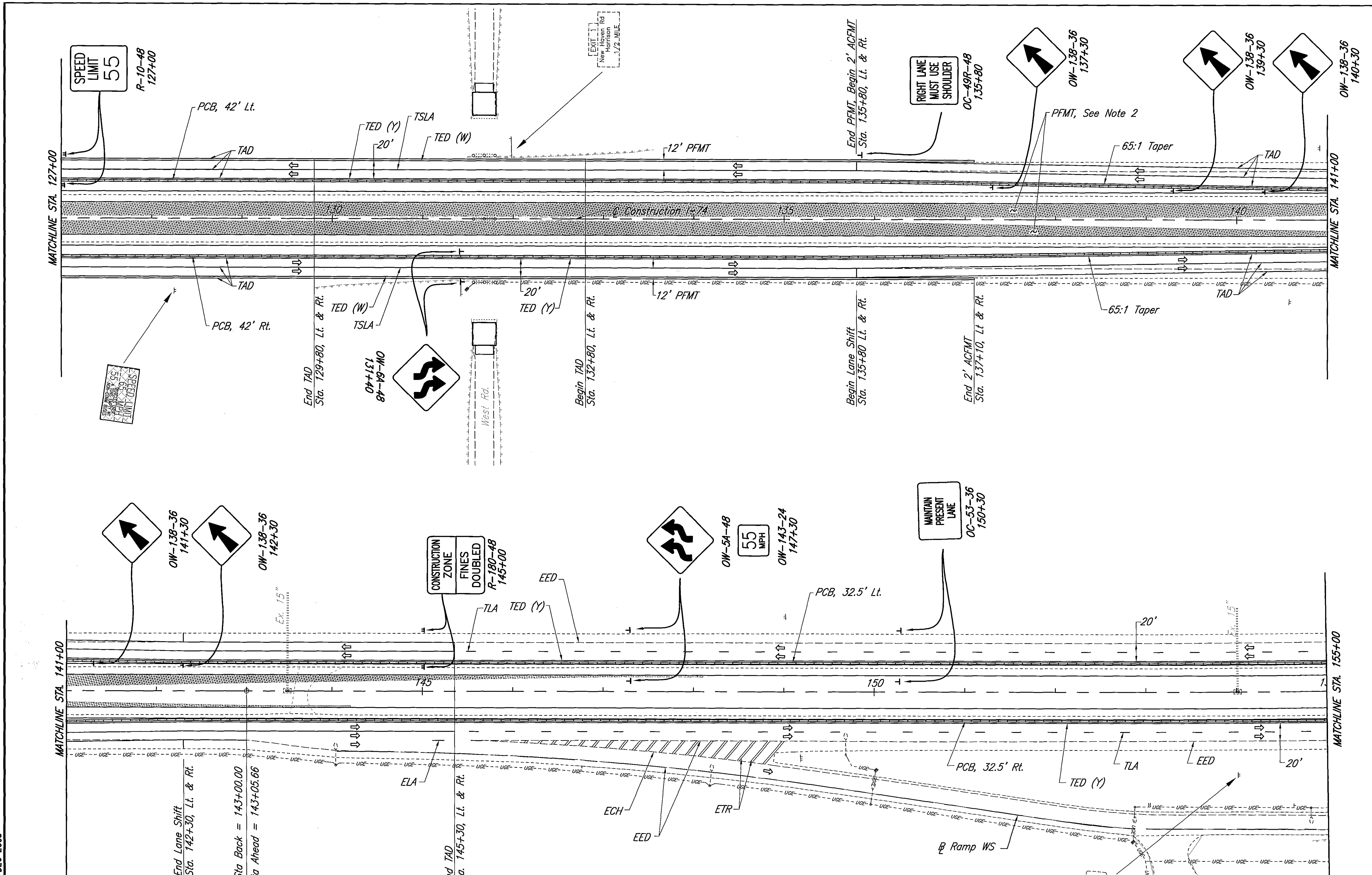
1. For Legend, See Sheet 22.
2. PFMT for Phase II shall be constructed at the end of Phase I. See Phase II for dimensions and quantities.
3. PMFT for Phase II Ramp work shall be constructed after all mainline work has been completed. See Phase II for dimensions and quantities.

CALCULATED JNR
CHECKED REF

MAINTENANCE OF TRAFFIC PLAN – PHASE I
STA. 99+00 TO STA 127+00

HAM-74-0.00

MP105020-I.DWG10 DEC 2003



NOTES

1. For Legend, See Sheet 22.
2. PFMT for Phase II shall be constructed at the end of Phase I. See Phase II for dimensions and quantities.

HORIZONTAL SCALE IN FEET 0 25 50 100

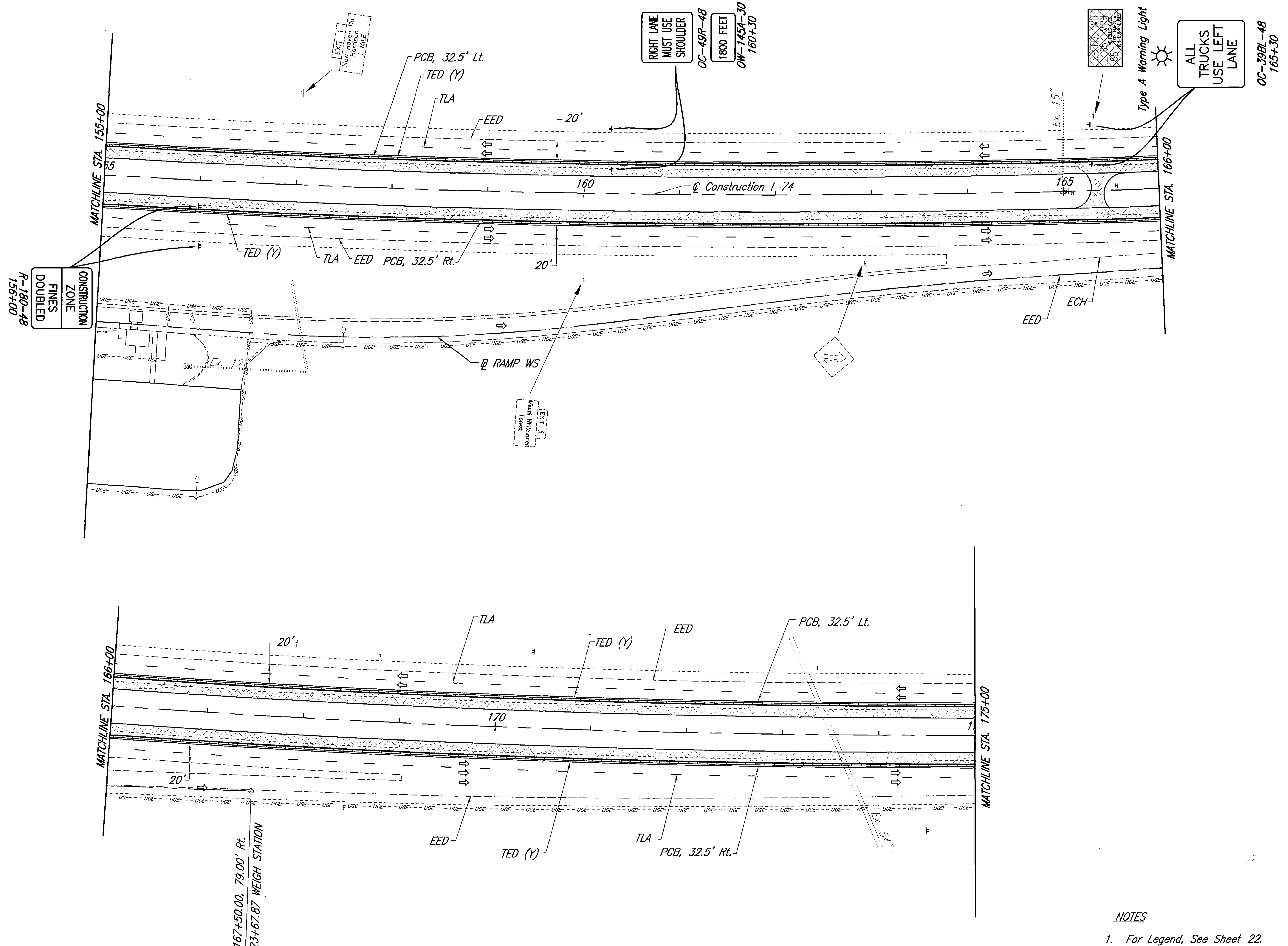
CALCULATED JNR
CHECKED REF

MAINTENANCE OF TRAFFIC PLAN – PHASE I
STA. 127+00 TO STA 155+00

HAM-74-0.00

38
421

MP106020-I.DWG 10 DEC 2003



NOTES

1. For Legend, See Sheet 22.
2. PFMT for Phase II shall be constructed at the end of Phase I. See Phase II for dimensions and quantities.

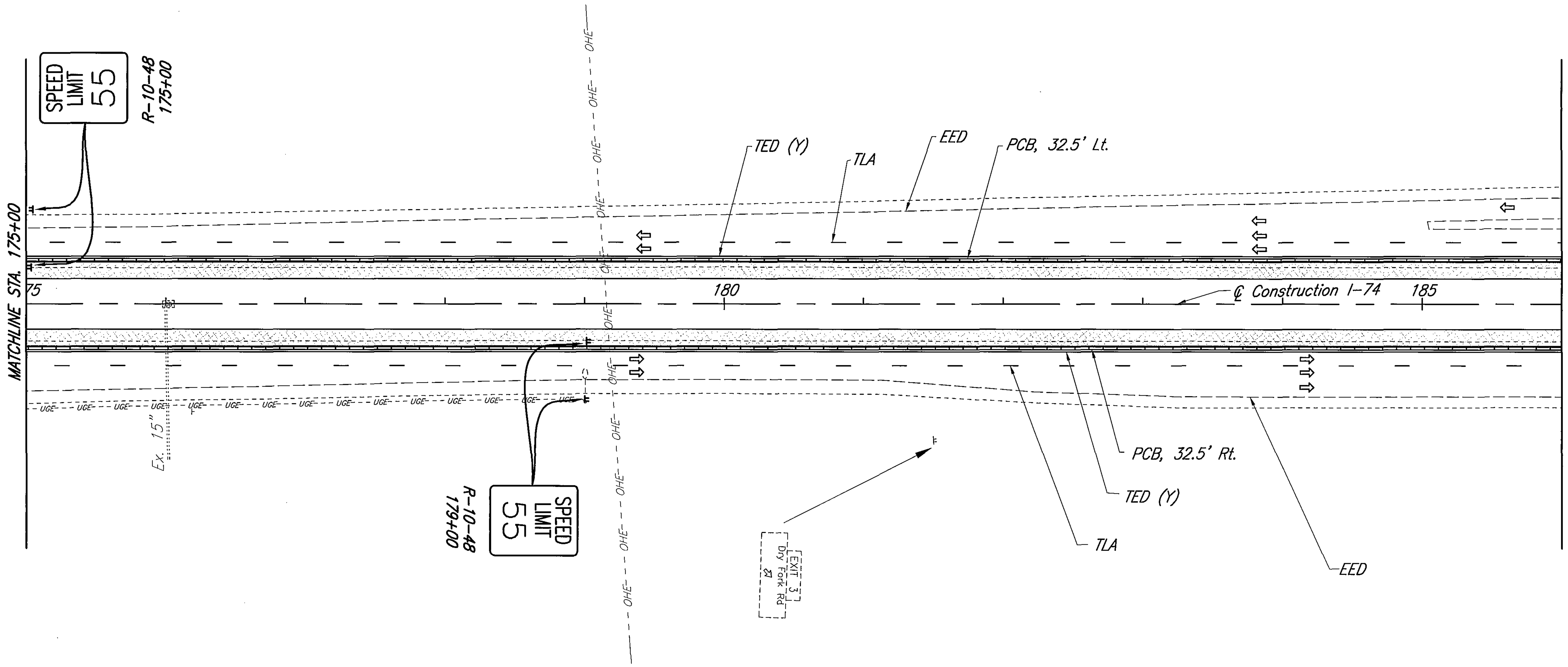
HORIZONTAL SCALE IN FEET

CALCULATED JNR
CHECKED REF

MAINTENANCE OF TRAFFIC PLAN – PHASE I
STA. 155+00 TO STA 175+00

HAM-74-0.00

MP107020-I.DWG 14 AUG 2003



NOTES

1. For Legend, See Sheet 22.
2. PFMT for Phase II shall be constructed at the end of Phase I. See Phase II for dimensions and quantities.

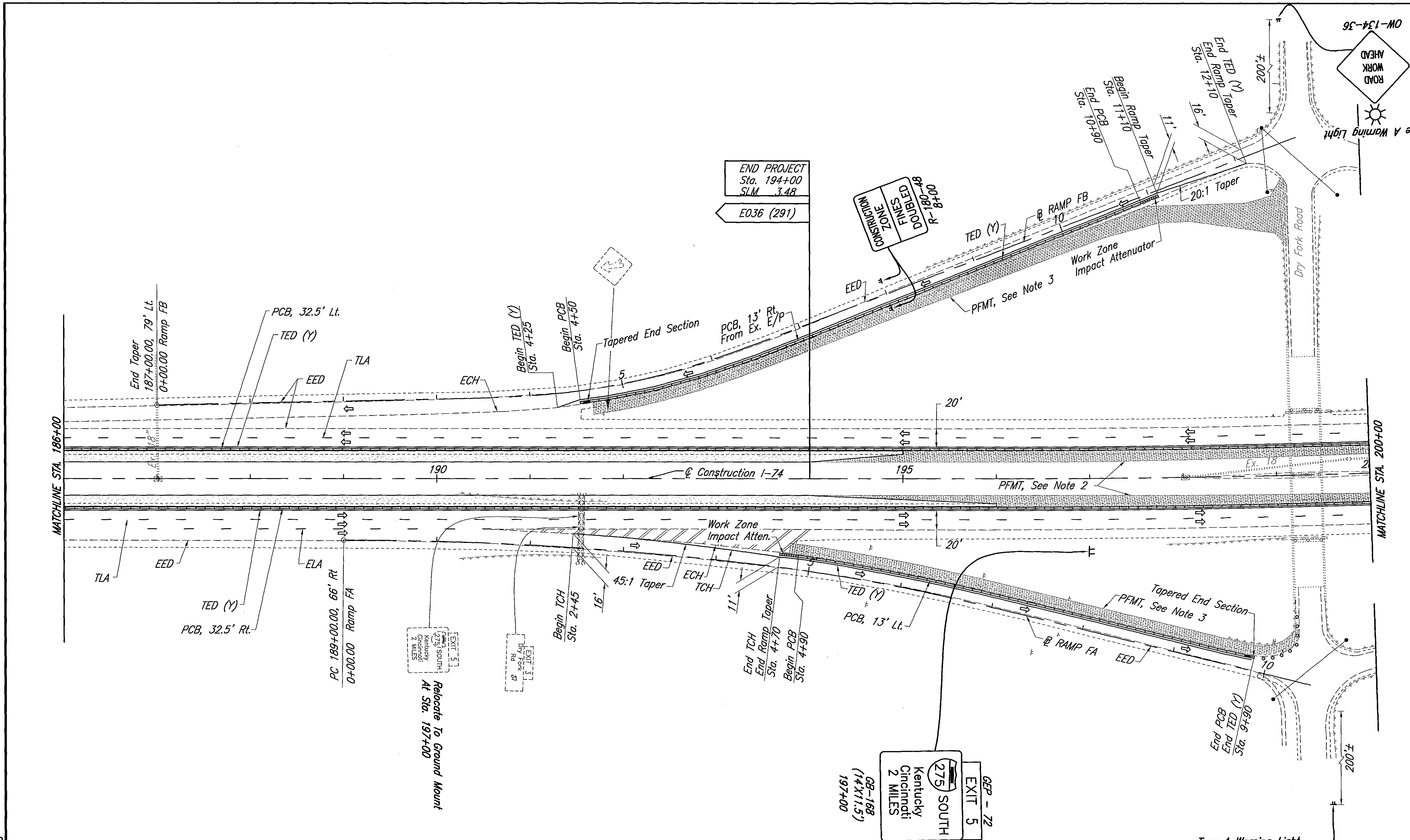
0 25 50 100
HORIZONTAL SCALE IN FEET

CALCULATED JNR
CHECKED REF

MAINTENANCE OF TRAFFIC PLAN – PHASE I
STA. 175+00 TO STA 186+00

HAM-74-0.00

MP108020-1.DWG 14 AUG 2003



NOTES

1. For Legend, See Sheet 22.
2. PFMT for Phase II shall be constructed at the end of Phase I. See Phase II for dimensions and quantities.
3. PMFT for Phase II Ramp work shall be constructed after all mainline work has been completed.
See Phase II for dimensions and quantities.

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JNR
CHECKED REF

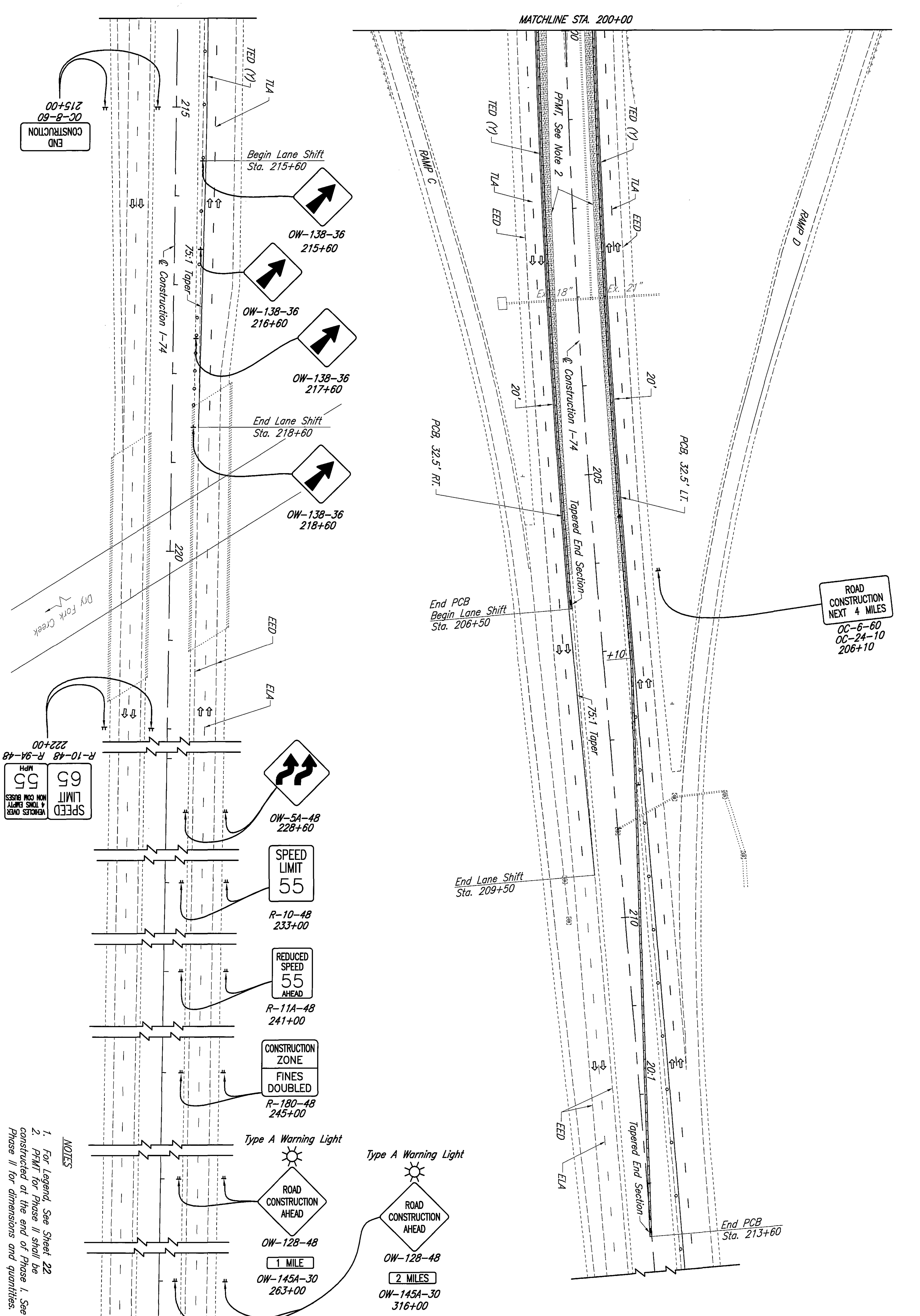
MAINTENANCE OF TRAFFIC PLAN – PHASE I
STA. 186+00 TO STA. 200+00

HAM-74-0.00

41
421

MP109020-1.DWG 14 AUG 2003

MP110020-1.DWG 15 AUG 2003



NOTES

1. For Legend, See Sheet 22.
2. PFMT for Phase II shall be constructed at the end of Phase I. See Phase II for dimensions and quantities.

42 / 421	HAM-74-0.00	MAINTENANCE OF TRAFFIC PLAN - PHASE I STA. 200+00 TO 316+00	CALCULATED JNR CHECKED REF	0 25 50 100 HORIZONTAL SCALE IN FEET

MAINTENANCE OF TRAFFIC SUBSUMMARY

CALC'D JNR
CHK'D REF

SHEET NUMBER	FROM STATION	TO STATION	SIDE	PHASE	TRANSITION AREA DELINEATION	WORK ZONE LANE LINE, CLASS I	WORK ZONE LANE LINE, CLASS I , SOLID	WORK ZONE LANE LINE, CLASS I, 740.06, TYPE I	WORK ZONE EDGE LINE, CLASS I YELLOW	WORK ZONE EDGE LINE, CLASS I WHITE	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I , YELLOW	WORK ZONE CHANNELIZING LINE, CLASS I	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC, AS PER PLAN	PAVEMENT FOR MAINTAINING TRAFFIC, AS PER PLAN	OBJECT MARKER, ONE WAY	BARRIER REFLECTOR, TYPE B	PORTABLE CONCRETE BARRIER, 32"	PORTABLE CONCRETE BARRIER, 32", BRIDGE MOUNTED	REMARKS
			ITEM		614	614	614	614	614	614	614	614	614	615	614	614	622	622	
			UNIT		FT	MILE	MILE	MILE	MILE	MILE	MILE	FT	CU YD	SQ YD	EACH	EACH	FT	FT	
32	-9+00.00	-0+70.00	RT	1				0.16			0.16								
32	-5+20.00	-0+70.00	LT	1				0.09			0.09								
32	-3+75.00	-0+70.00	RT	1											7	7	305		
32	-2+20.00	-0+70.00	LT	1											4	4	150		
33	-0+70.00	10+00.00	RT	1				0.20			0.20								
33	-0+70.00	10+00.00	LT	1				0.20			0.20								
33	10+00.00	28+50.00	RT	1		0.35			0.35										
33	10+00.00	28+50.00	LT	1		0.35			0.35										
33	-0+70.00	28+50.00	RT	1											59	59	2920		
33	-0+70.00	28+50.00	LT	1											59	59	2920		
34	28+50.00	36+50.00	RT	1		0.15			0.15										
34	28+50.00	36+50.00	LT	1		0.15			0.15										
34	36+50.00	49+00.00	RT	1	1,250														
34	36+50.00	57+00.00	LT	1	2,050														
34	49+00.00	54+75.00	RT	1		0.11				0.11									
34	54+75.00	57+00.00	RT	1	225														
34	28+50.00	57+00.00	RT	1											58	58	2660	190	
34	28+50.00	57+00.00	LT	1											58	58	2660	190	
34	48+71.00	57+00.00	RT	1										1,105					
34	45+00.00	46+20.74	L&R	1									11.9						
34	48+57.80	50+00.00	LT	1									7.0						
35	57+00.00	67+25.00	RT	1	1,025														
35	67+25.00	82+00.00	RT	1		0.28			0.28										
35	82+00.00	85+00.00	RT	1	300														
35	57+00.00	58+50.00	LT	1	150														
35	58+50.00	82+00.00	LT	1		0.45			0.45										
35	82+00.00	85+00.00	LT	1	300														
35	57+00.00	85+00.00	RT	1											57	57	2800		
35	57+00.00	85+00.00	LT	1											57	57	2800		
35	57+00.00	57+75.00	RT	1										100					
35	57+75.00	58+85.00	RT	1									5.4						
35	2+45.00 HA	4+00.00 HA	LT	1								155							
	TOTALS TO GENERAL SUMMARY				5,300	1.84		0.65	1.84		0.65	155	24.3	1,205	359	359	17,215	380	

HAM-74-0.00

10-Dec-03 Ph1-1

SHEET NUMBER	FROM STATION	TO STATION	SIDE	PHASE	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)	TRANSITION AREA DELINEATION	WORK ZONE LANE LINE, CLASS I	WORK ZONE LANE LINE, CLASS I, SOLID	WORK ZONE EDGE LINE, CLASS I YELLOW	WORK ZONE EDGE LINE, CLASS I WHITE	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I, YELLOW	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I, WHITE	WORK ZONE CHANNELIZING LINE, CLASS I	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC, AS PER PLAN	PAVEMENT FOR MAINTAINING TRAFFIC, AS PER PLAN	OBJECT MARKER, ONE WAY	BARRIER REFLECTOR, TYPE B	PORTABLE CONCRETE BARRIER, 32"	REMARKS
			ITEM		614	614	614	614	614	614	614	614	614	614	615	614	614	622	
			UNIT		EACH	FT	MILE	MILE	MILE	MILE	MILE	MILE	FT	CU YD	SQ YD	EACH	EACH	FT	
36	85+00.00	99+00.00	RT	1		1,400													
36	85+00.00	99+00.00	LT	1		1,400													
36	85+00.00	99+00.00	RT	1												29	29	1400	
36	85+00.00	99+00.00	LT	1												29	29	1400	
36	90+20.00	91+50.00	RT	1										6.4					
36	90+20.00	91+50.00	LT	1										6.4					
36	91+50.00	98+70.00	RT	1											960				
36	91+50.00	98+70.00	LT	1											960				
36	98+70.00	99+00.00	RT	1										1.5					
36	98+70.00	99+00.00	LT	1										1.5					
36	4+00.00 HA	4+70.00 HA	LT	1									70						
36	4+70.00 HA	11+20.00 HA	LT	1							0.12								
36	4+90.00 HA	10+95.00 HA	LT	1	1											13	13	605	
36	4+15.00 HB	11+65.00 HB	RT	1							0.14								
36	4+40.00 HB	10+45.00 HB	RT	1	1											13	13	605	
36	1+80.00 HC	5+00.00 HC	LT	1							0.06								
36	3+00.00 HC	5+00.00 HC	LT	1	1											5	5	200	
36	2+45.00 HD	3+50.00 HD	RT	1							0.02								
36	2+70.00 HD	3+50.00 HD	RT	1												3	3	80	
37	99+00.00	108+20.00	RT	1		920													
37	108+20.00	117+30.00	RT	1			0.17		0.17										
37	117+30.00	127+00.00	RT	1		970													
37	99+00.00	108+20.00	LT	1		920													
37	108+20.00	117+30.00	LT	1			0.17		0.17										
37	117+30.00	127+00.00	LT	1		970													
37	99+00.00	127+00.00	RT	1												57	57	2800	
37	99+00.00	127+00.00	LT	1												57	57	2800	
37	99+00.00	100+00.00	RT	1										4.9					
37	99+00.00	100+00.00	LT	1										4.9					
37	125+50.00	126+80.00	RT	1										6.4					
37	125+50.00	126+80.00	LT	1										6.4					
37	126+80.00	127+00.00	RT	1											27				
37	126+80.00	127+00.00	LT	1											27				
37	5+00.00 HC	9+25.00 HC	LT	1							0.08								
37	5+00.00 HC	9+00.00 HC	LT	1												9	9	400	
37	3+50.00 HD	8+95.00 HD	RT	1							0.10								
37	8+95.00 HD	11+20.00 HD	RT	1									225						
37	3+50.00 HD	8+75.00 HD	RT	1	1											12	12	525	
TOTALS TO GENERAL SUMMARY					4	6,580	0.34		0.34		0.52		295	38.4	1,974	227	227	10,815	

MAINTENANCE OF TRAFFIC SUBSUMMARY

HAM-74-0.00

CALC'D JNR
CHK'D REF

10-Dec-03 Ph1-2

SHEET NUMBER	FROM STATION	TO STATION	SIDE	PHASE		WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)		TRANSITION AREA DELINEATION		WORK ZONE LANE LINE, CLASS I	WORK ZONE LANE LINE, CLASS I, SOLID		WORK ZONE LANE LINE, CLASS I, 740.06, TYPE I		WORK ZONE EDGE LINE, CLASS I YELLOW	WORK ZONE EDGE LINE, CLASS I WHITE		WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I, YELLOW	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I, WHITE			WORK ZONE CHANNELIZING LINE, CLASS I			ASPHALT CONCRETE FOR MAINTAINING TRAFFIC, AS PER PLAN	PAVEMENT FOR MAINTAINING TRAFFIC, AS PER PLAN			OBJECT MARKER, ONE WAY	BARRIER REFLECTOR, TYPE B	PORTABLE CONCRETE BARRIER, 32"		REMARKS
			ITEM			614		614		614	614		614		614	614		614	614			614			614	615			614	614	622		
			UNIT			EACH		FT		MILE	MILE		MILE		MILE	MILE		MILE	MILE			FT			CU YD	SQ YD			EACH	EACH	FT		
38	127+00.00	129+80.00	RT	1				280																									
38	129+80.00	132+80.00	RT	1							0.06				0.06	0.06																	
38	132+80.00	145+30.00	RT	1				1,250																									
38	127+00.00	129+80.00	LT	1				280																									
38	129+80.00	132+80.00	LT	1							0.06				0.06	0.06																	
38	132+80.00	145+30.00	LT	1				1,250																									
38	145+30.00	155+00.00	RT	1						0.18					0.18																		
38	145+30.00	155+00.00	LT	1						0.18					0.18																		
38	127+00.00	155+00.00	RT	1																									57	57	2800		
38	127+00.00	155+00.00	LT	1																									57	57	2800		
38	127+00.00	135+80.00	RT	1																						1173							
38	127+00.00	135+80.00	LT	1																						1173							
38	135+80.00	137+10.00	RT	1																					6.4								
38	135+80.00	137+10.00	LT	1																					6.4								
39	155+00.00	175+00.00	RT	1						0.38																							
39	155+00.00	175+00.00	LT	1						0.38					0.38																		
39	155+00.00	175+00.00	RT	1											0.38														41	41	2000		
39	155+00.00	175+00.00	LT	1																									41	41	2000		
40	175+00.00	186+00.00	RT	1						0.21																							
40	175+00.00	186+00.00	LT	1						0.21					0.21																		
40	175+00.00	186+00.00	RT	1											0.21														23	23	1100		
40	175+00.00	186+00.00	LT	1																									23	23	1100		
41	186+00.00	196+00.00	RT	1						0.19					0.19																		
41	186+00.00	196+00.00	LT	1						0.19					0.19																		
41	196+00.00	200+00.00	RT	1									0.08					0.08															
41	196+00.00	200+00.00	LT	1									0.08					0.08															
41	186+00.00	200+00.00	RT	1																									29	29	1400		
41	186+00.00	200+00.00	LT	1																									29	29	1400		
41	2+45.00 FA	4+70.00 FA	LT	1																		225											
41	4+70.00 FA	9+90.00 FA	LT	1											0.10																		
41	4+90.00 FA	9+90.00 FA	LT	1		1																							11	11	500		
41	4+25.00 FB	12+10.00 FB	RT	1											0.15																		
41	4+50.00 FB	10+90.00 FB	RT	1		1																							14	14	640		
42	200+00.00	209+50.00	RT	1									0.18					0.18															
42	200+00.00	218+60.00	LT	1									0.35					0.35															
42	200+00.00	206+50.00	RT	1																									13	13	650		
42	200+00.00	213+60.00	LT	1																									27	27	1360		
TOTALS TO GENERAL SUMMARY						2		3,060		2.04			0.69		2.41			0.69				225			12.8	2,346			365	365	17,750		

MAINTENANCE OF TRAFFIC SUBSUMMARY

HAM-74-0.00

CALC'D JNR
CHK'D REF

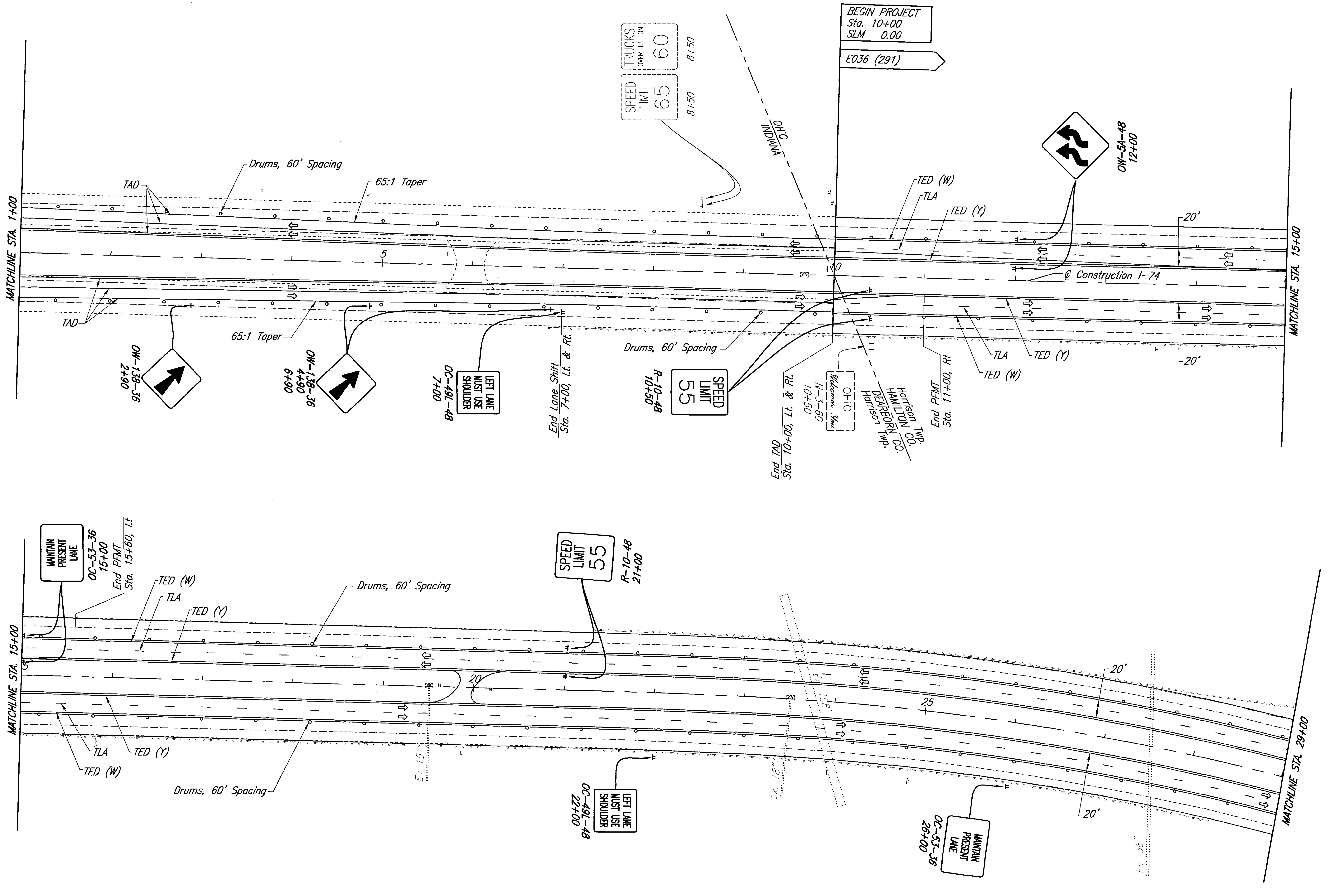
10-Dec-03 Ph1-3

MP100020-2.DWG 10 DEC 2003

NOTES

1. For Legend, See Sheet 22.

46 / 421	HAM-74-0.00	MAINTENANCE OF TRAFFIC PLAN - PHASE II STA. -110+00 TO STA 1+00	CALCULATED JNR CHECKED REF	HORIZONTAL SCALE IN FEET (0, 25, 50, 100)



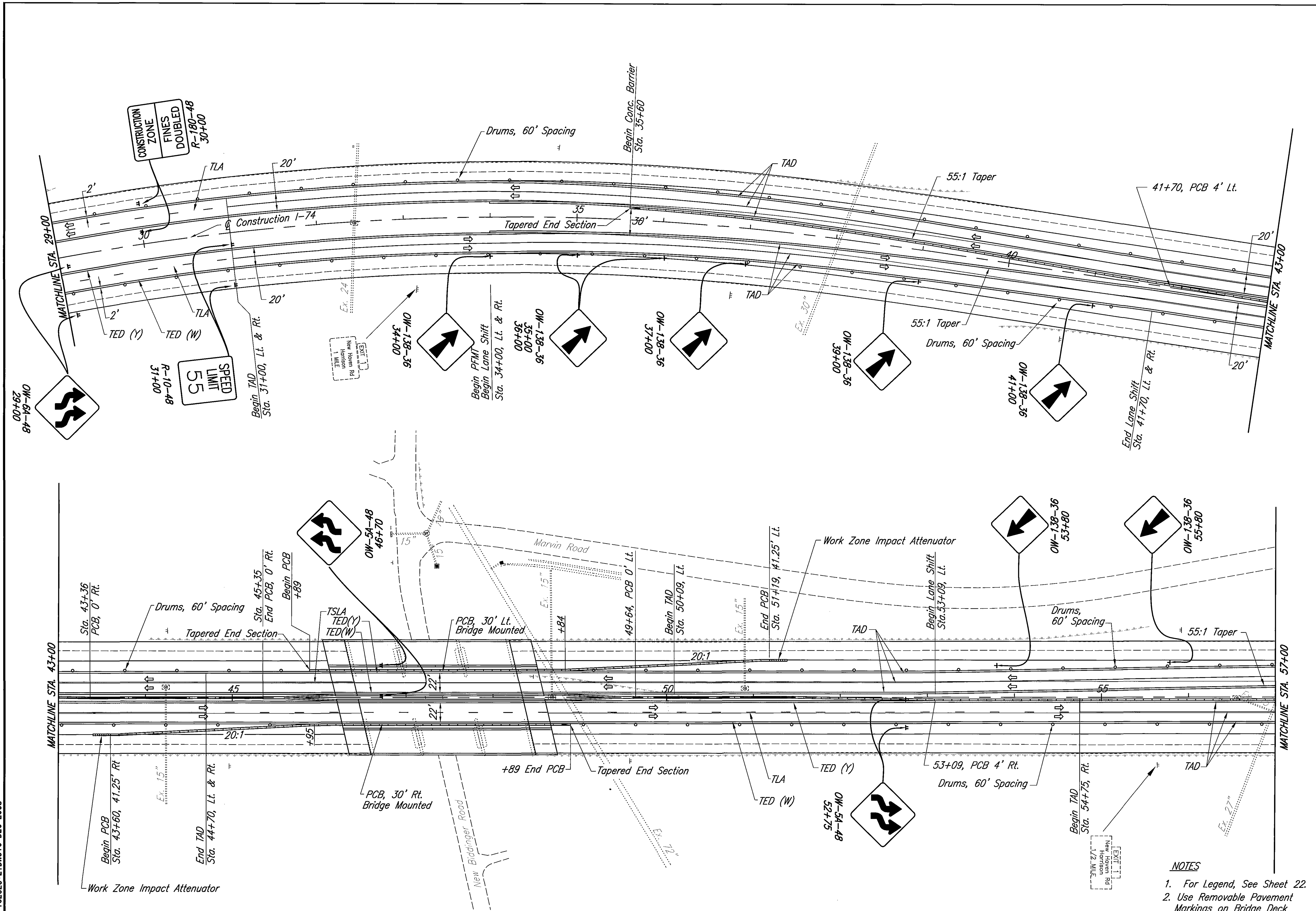
NOTES

1. For Legend, See Sheet 22.

MAINTENANCE OF TRAFFIC PLAN – PHASE II
STA. 1+00 TO STA 29+00

HAM-74-0.00

MP101020-2.DWG 10 DEC 2003



NOTES

1. For Legend, See Sheet 22.
2. Use Removable Pavement Markings on Bridge Deck

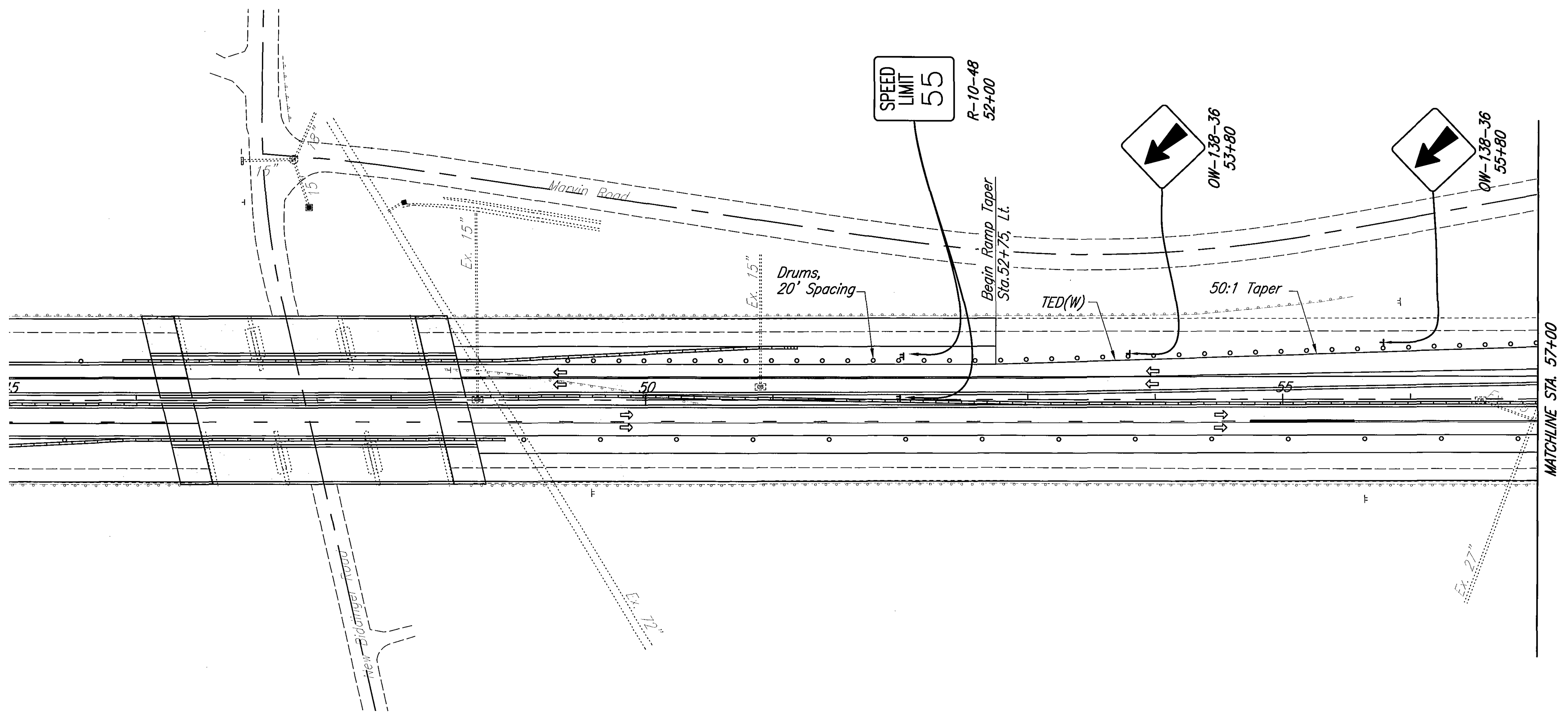
MP102020-2.DWG10 DEC 2003

HORIZONTAL SCALE IN FEET 0 25 50 100

CALCULATED JNR CHECKED REF

MAINTENANCE OF TRAFFIC PLAN - PHASE II A
STA. 29+00 TO STA 57+00

HAM-74-0.00



NOTES

1. For Legend, See Sheet 22.
2. For Details not shown, see Phase II A.

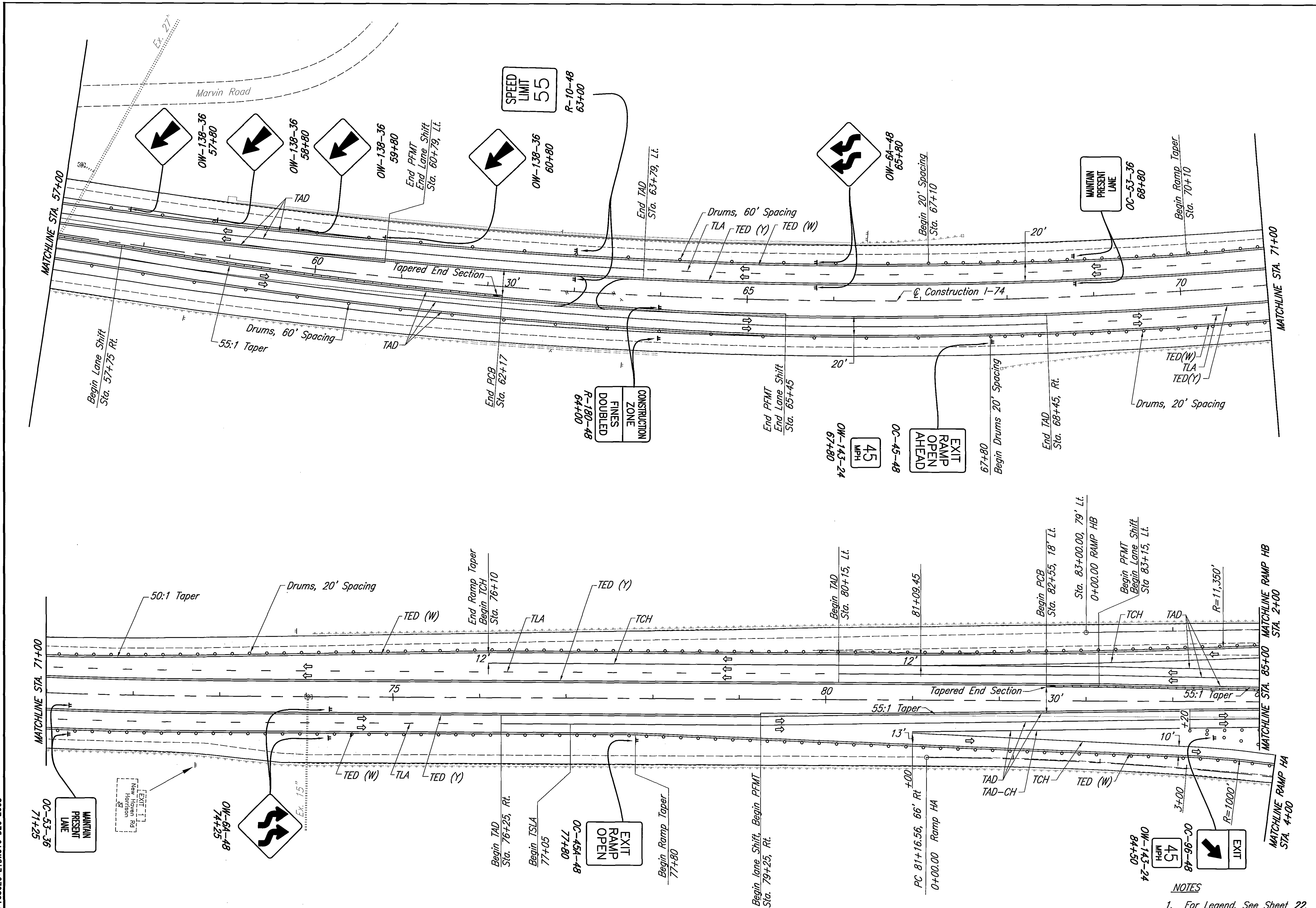
HORIZONTAL SCALE IN FEET 0 25 50 100

CALCULATED JNR
CHECKED REF

MAINTENANCE OF TRAFFIC PLAN - PHASE II B
STA. 45+00 TO STA 57+00

HAM-74-0.00

MP102020-2B.DWG0 DEC 2003



MAINTENANCE OF TRAFFIC PLAN – PHASE II A

STA. 57+00 TO STA 85+00

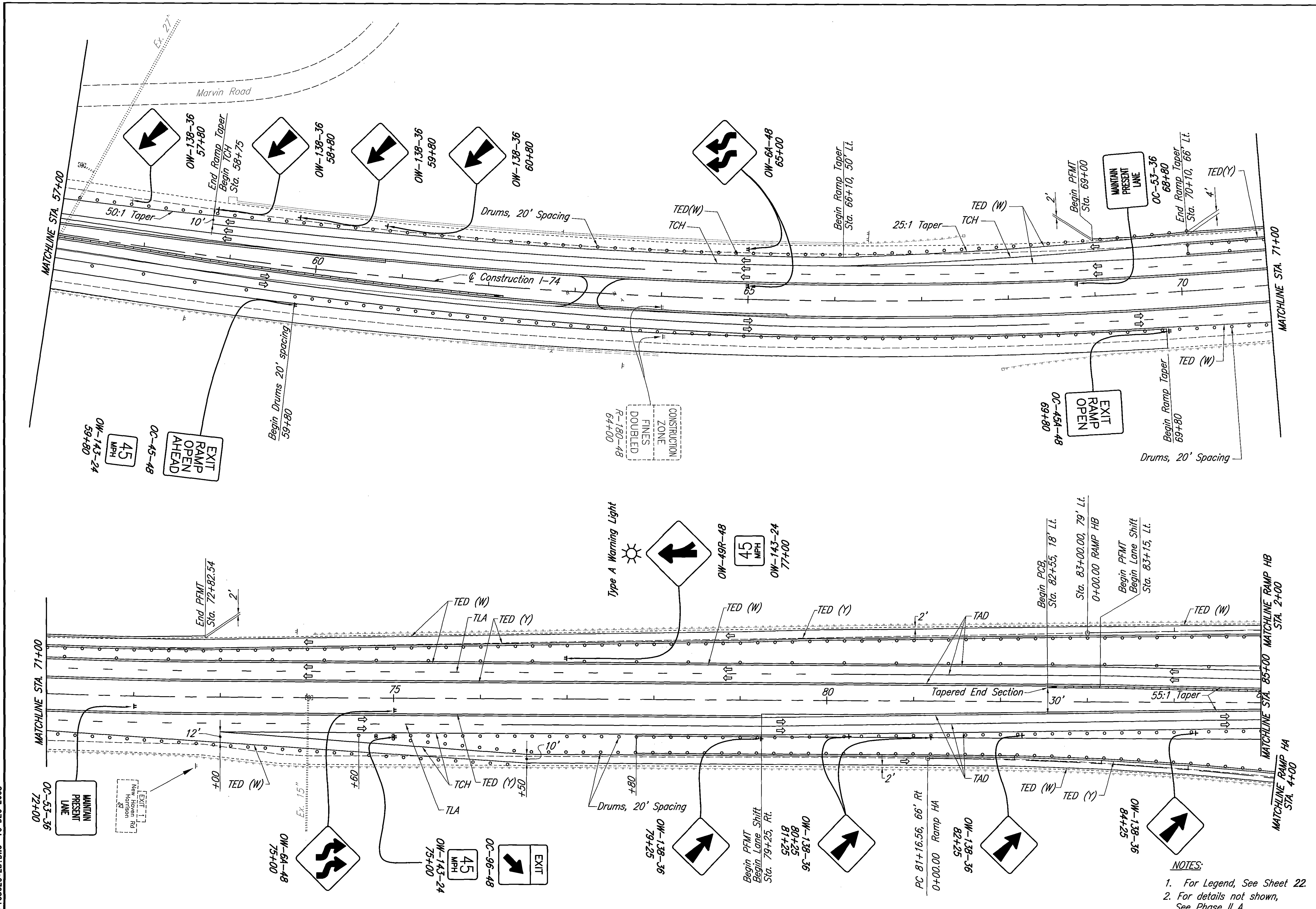
HAM-74-0.00

0 25 50 100 HORIZONTAL SCALE IN FEET

CALCULATED JNR CHECKED REF

49
421

MP103020-2.DWG 10 DEC 2003



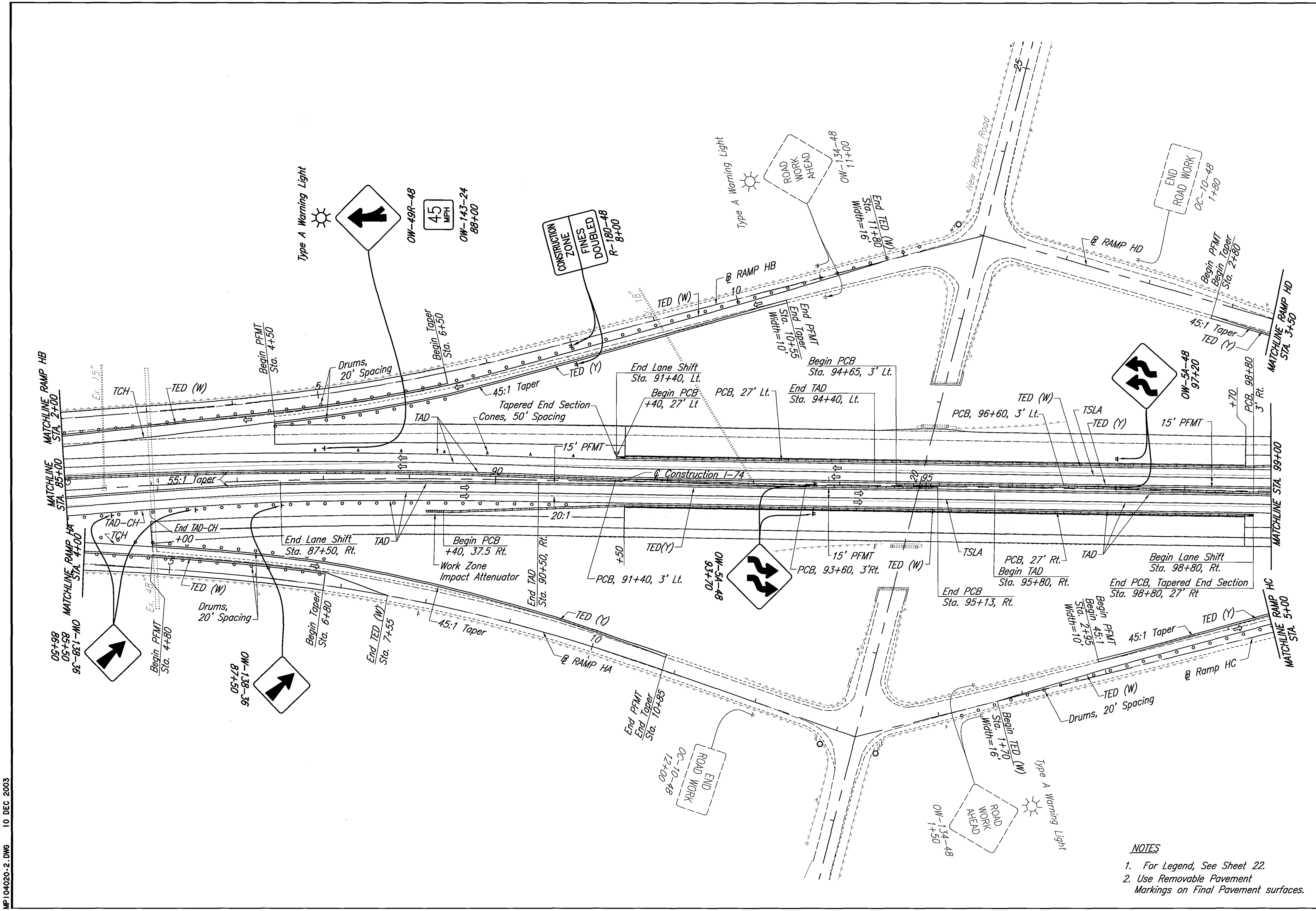
MAINTENANCE OF TRAFFIC PLAN – PHASE II B

STA. 57+00 TO STA 85+00

HAM-74-0.00

CALCULATED JNR
CHECKED REF

MP103020-2B.DWG 10 DEC 2003



NOTES

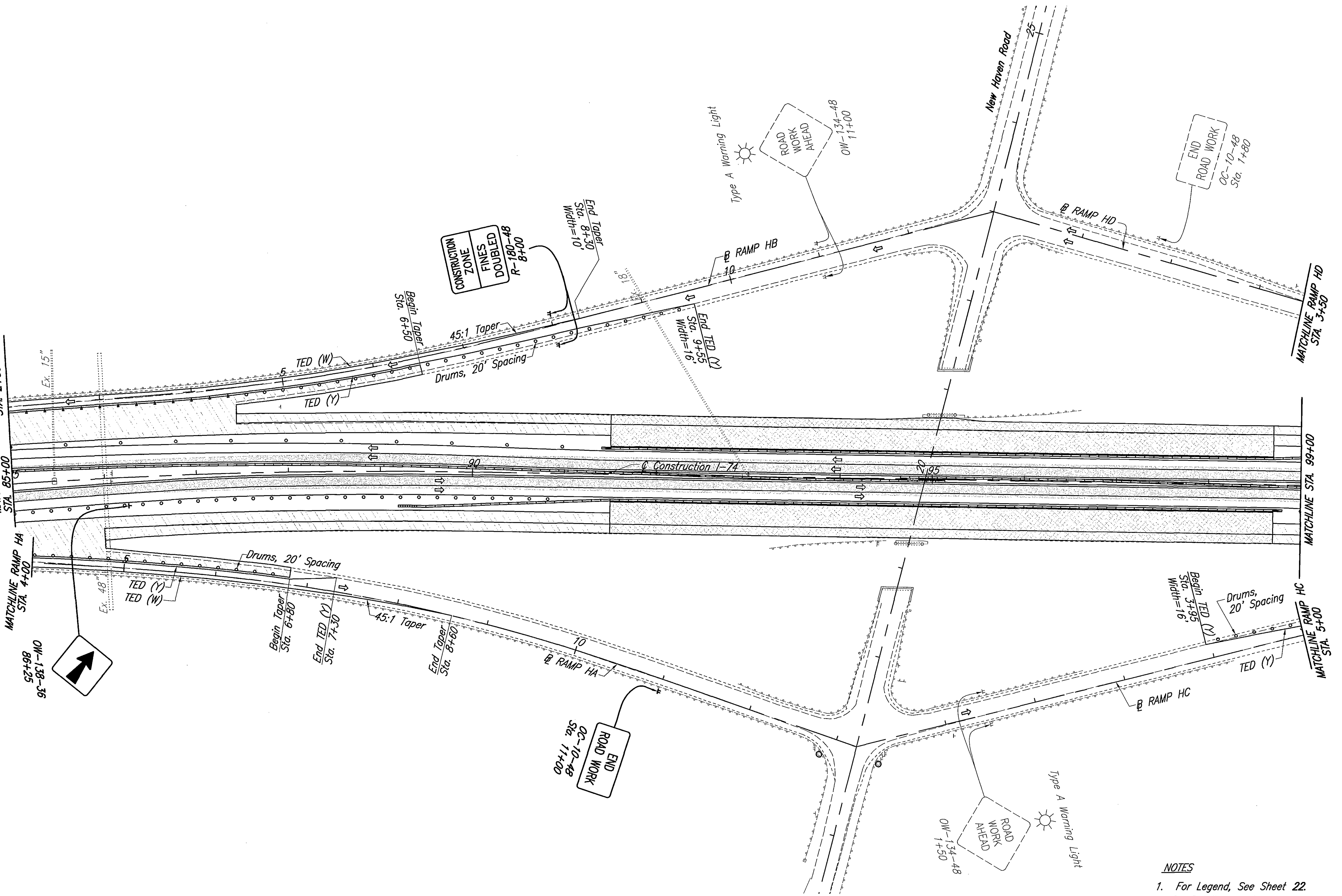
1. For Legend, See Sheet 22.
2. Use Removable Pavement Markings on Final Pavement surfaces.

CALCULATED JNR
CHECKED REF

MAINTENANCE OF TRAFFIC PLAN – PHASE II A
STA. 85+00 TO STA 99+00

HAM-74-0.00

MP104020-2.DWG 10 DEC 2003



NOTES

1. For Legend, See Sheet 22.
2. For Details not shown, See Phase IIA

HORIZONTAL SCALE IN FEET

0 25 50 100

CALCULATED JNR

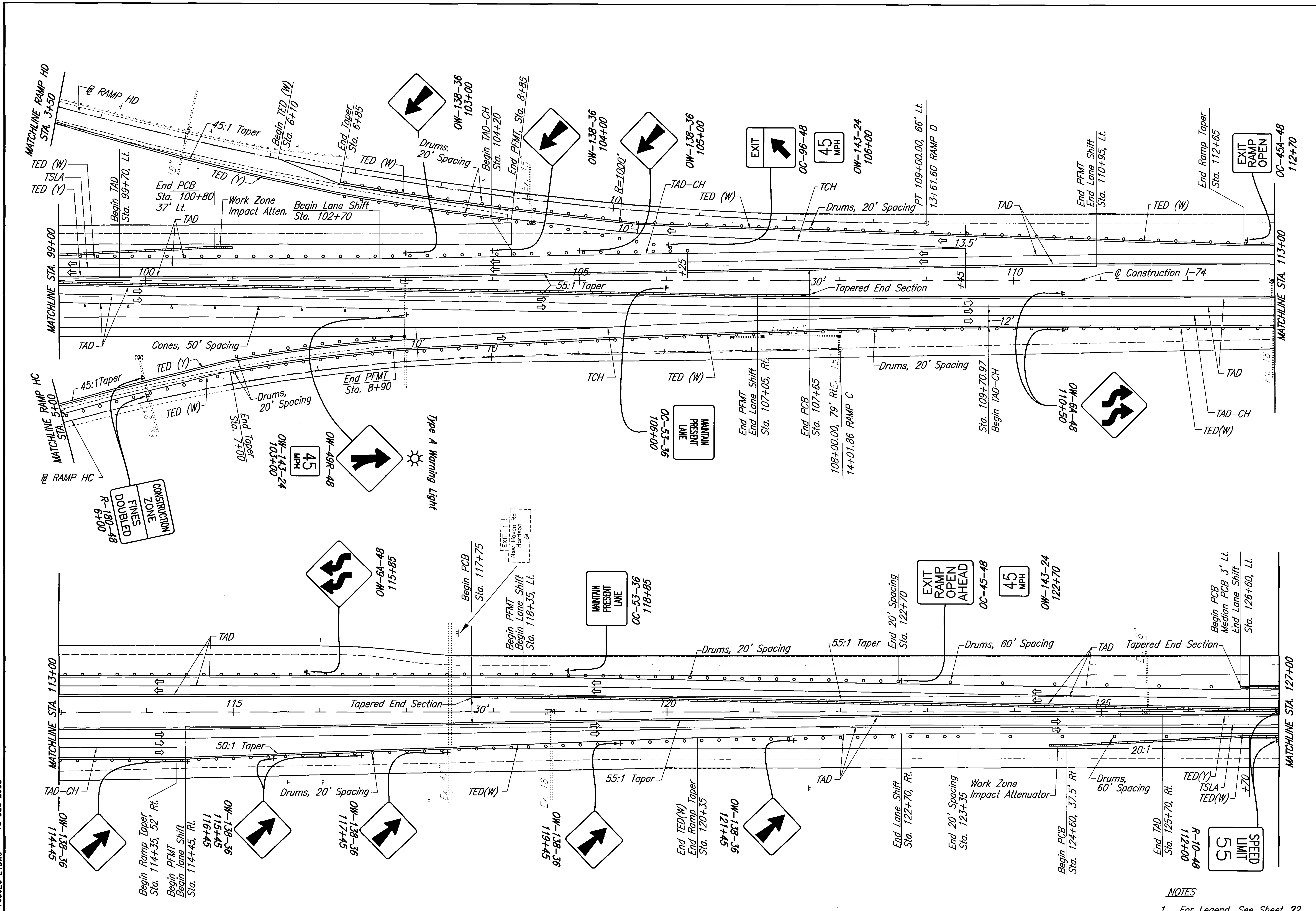
CHECKED REF

MAINTENANCE OF TRAFFIC PLAN – PHASE II B

STA. 85+00 TO STA 99+00

HAM–74–0.00

MP104020-2B.DW35 AUG 2003



NOTES

1. For Legend, See Sheet 22.

MAINTENANCE OF TRAFFIC PLAN – PHASE II A

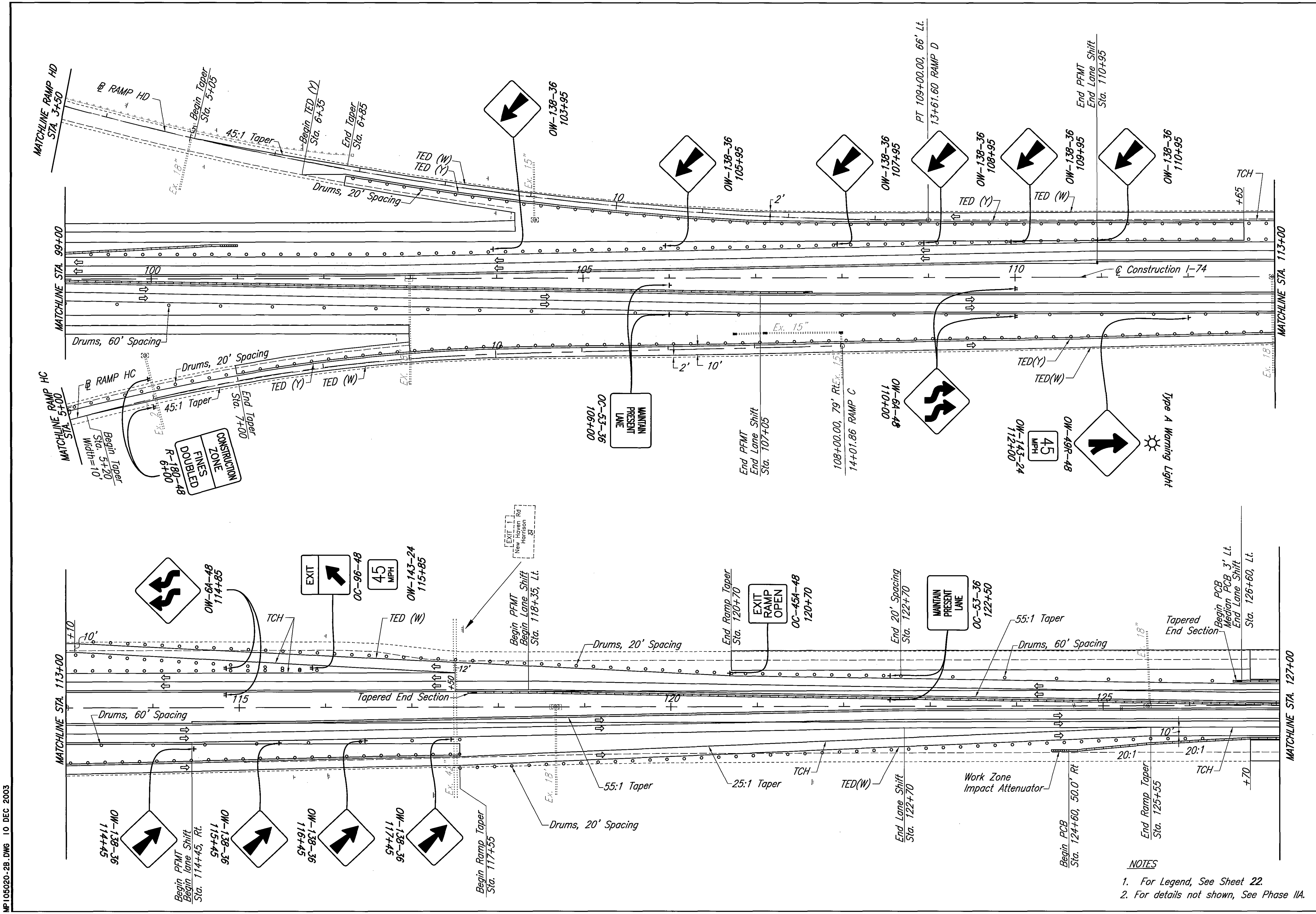
STA. 99+00 TO STA 127+00

CALCULATED JNR

CHECKED REF

HAM-74-0.00

MP105020-2.DWG 10 DEC 2003



NOTES
1. For Legend, See Sheet 22.
2. For details not shown, See Phase IIA.

MAINTENANCE OF TRAFFIC PLAN – PHASE II B
STA. 99+00 TO STA 127+00

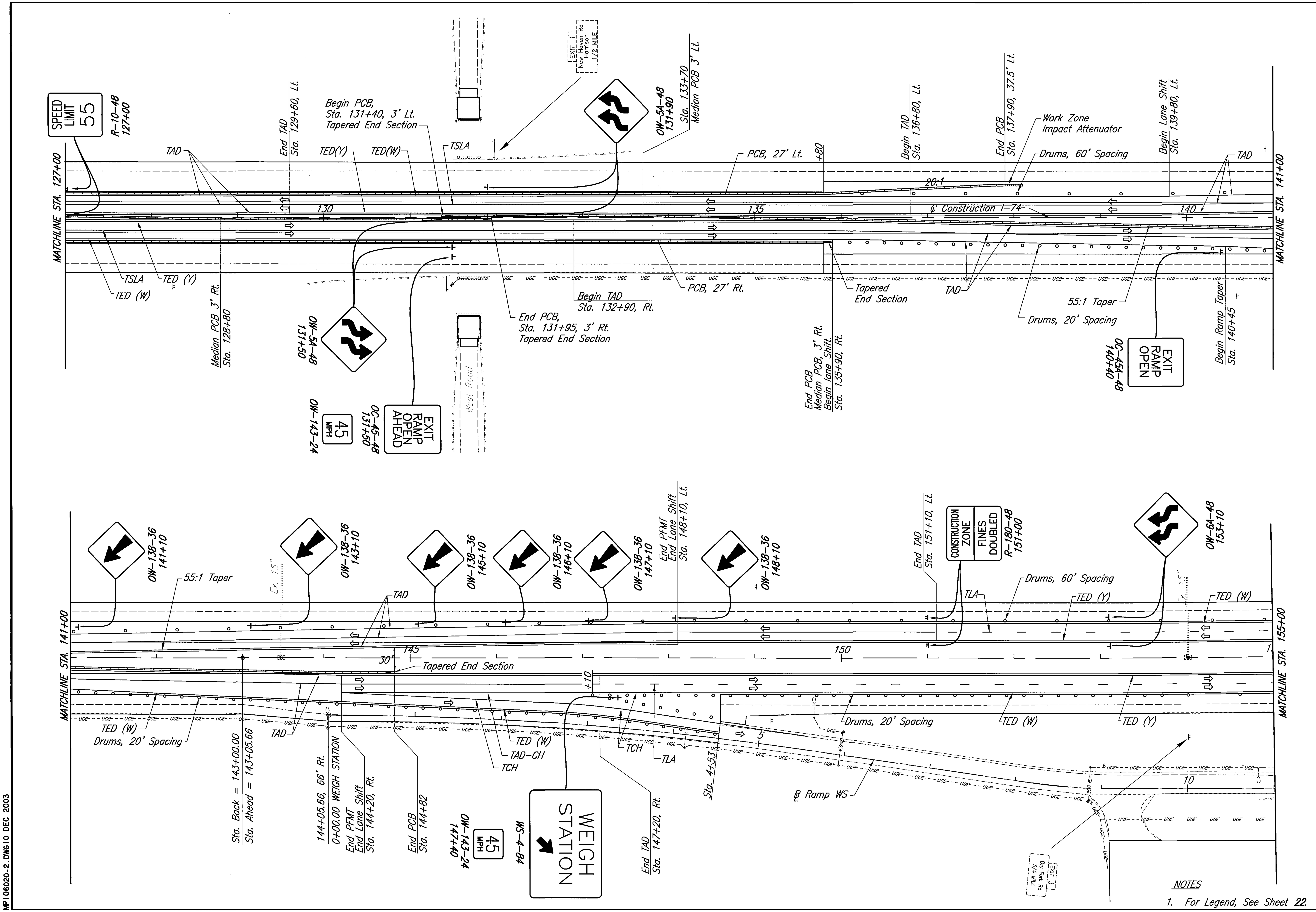
HORIZONTAL SCALE IN FEET 0 25 50 100

CALCULATED JNR
CHECKED REF

HAM-74-0.00

54
421

MP105020-2B.DWG 10 DEC 2003



NOTES

1. For Legend, See Sheet 22.

MP106020-2.DWG10 DEC 2003

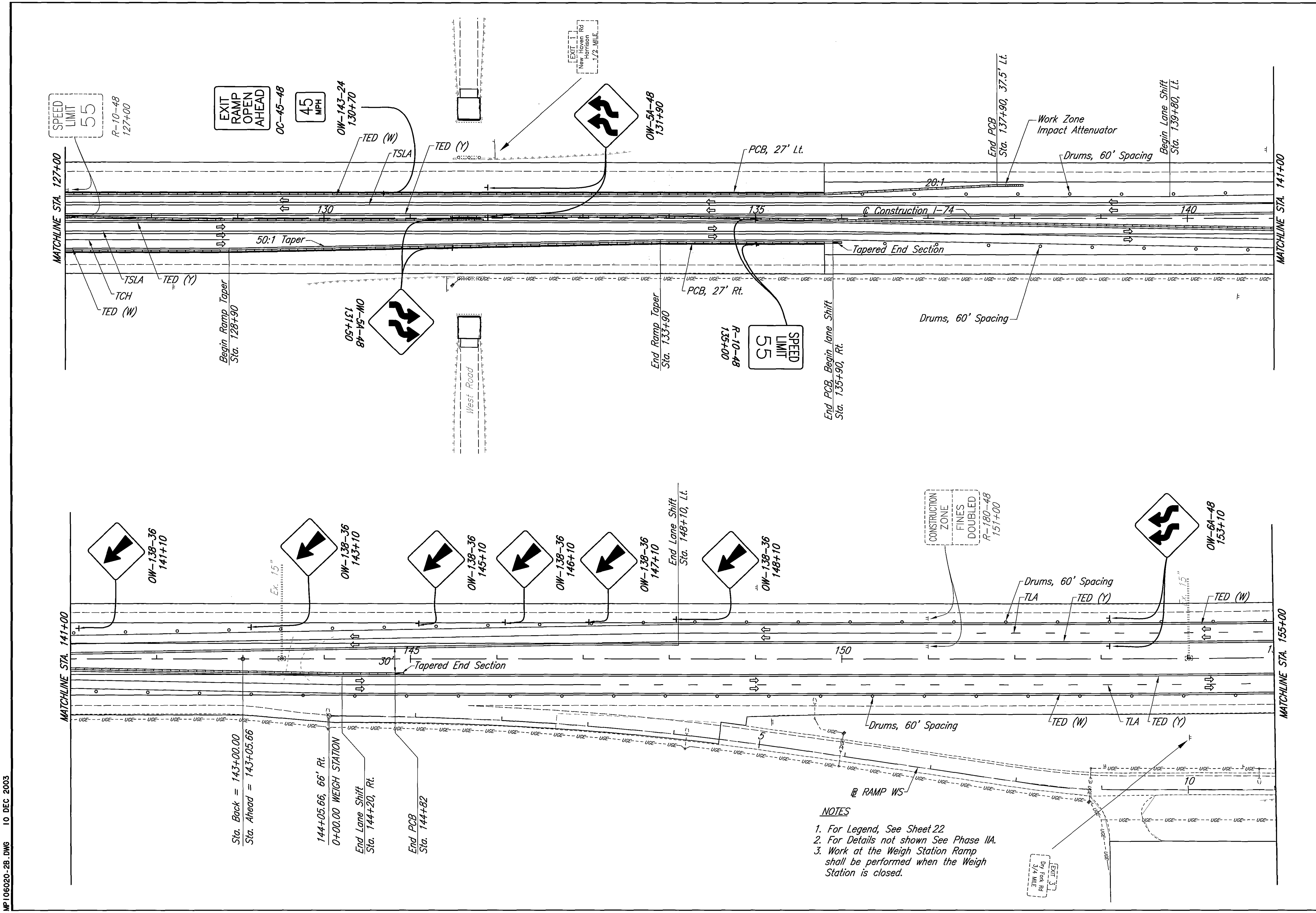
HORIZONTAL SCALE IN FEET 0 25 50 100

CALCULATED JNR
CHECKED REF

MAINTENANCE OF TRAFFIC PLAN – PHASE II A
STA. 127+00 TO STA 155+00

HAM-74-0.00

MAINTENANCE OF TRAFFIC PLAN – PHASE II B
STA. 127+00 TO STA 155+00



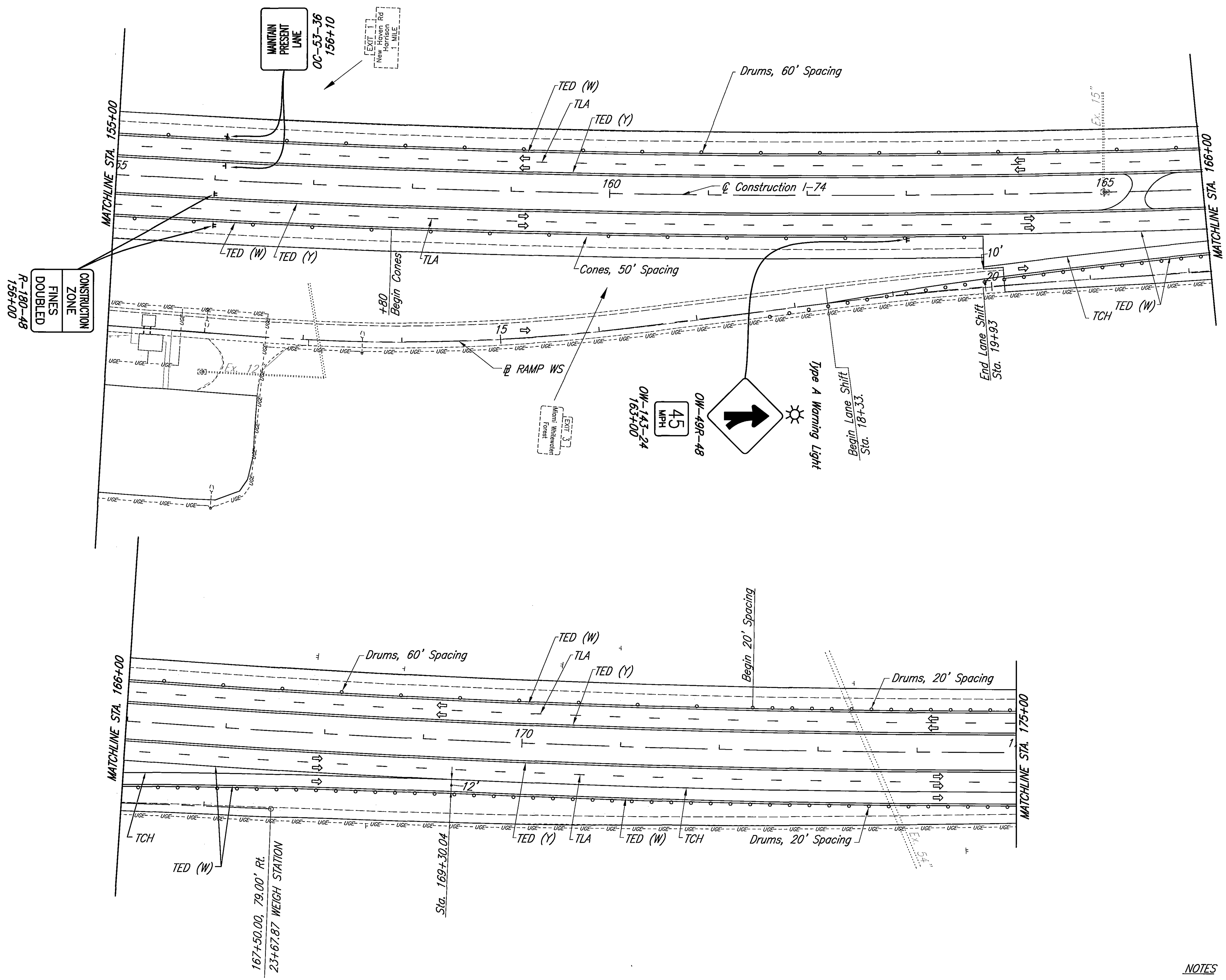
NOTES

1. For Legend, See Sheet 22
2. For Details not shown See Phase IIA.
3. Work at the Weigh Station Ramp shall be performed when the Weigh Station is closed.

CALCULATED JNR
CHECKED REF

HAM-74-0.00

MP106020-2B.DWG 10 DEC 2003



NOTES

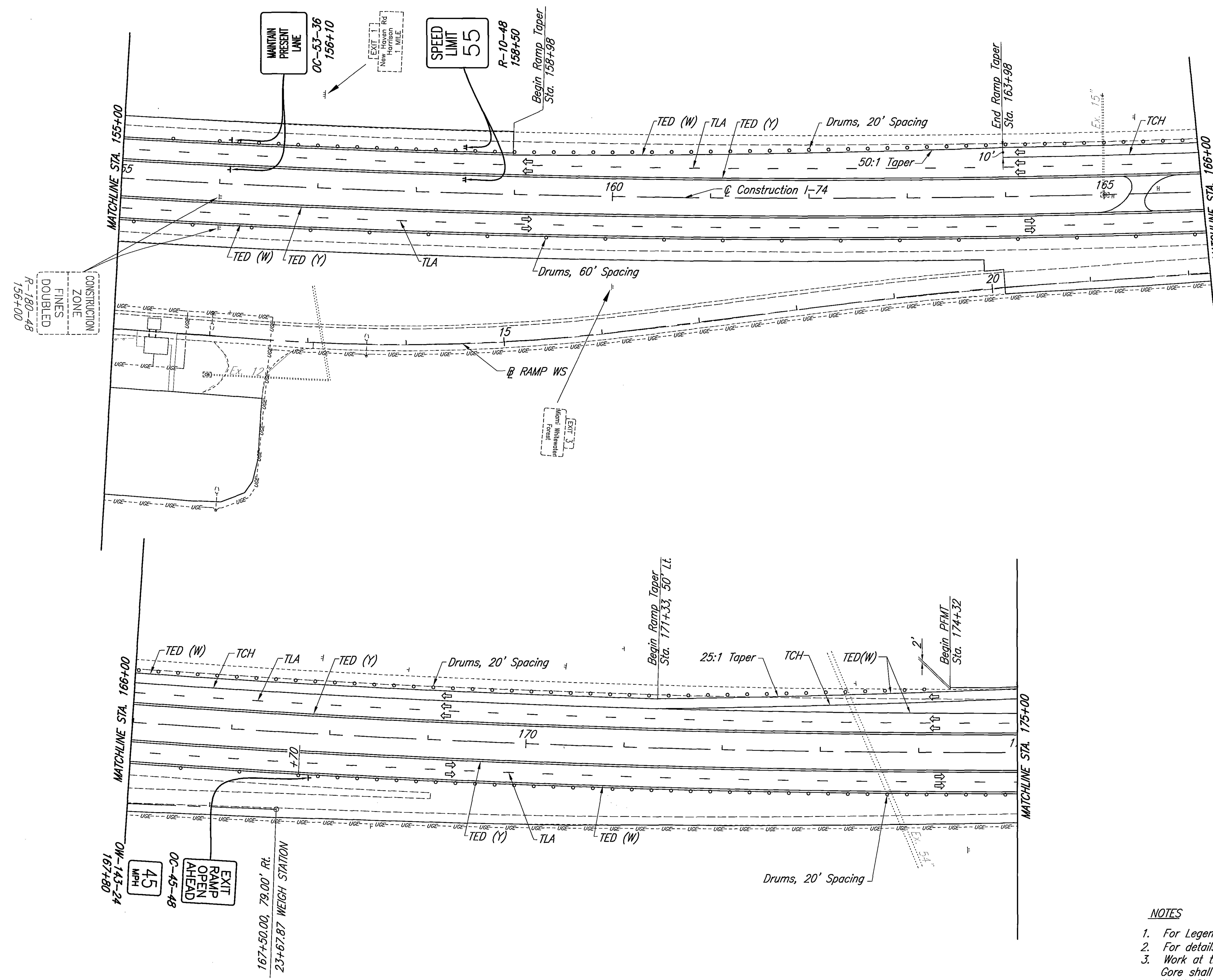
1. For Legend, See Sheet 22.

CALCULATED JNR
CHECKED REF

MAINTENANCE OF TRAFFIC PLAN - PHASE II A
STA. 155+00 TO STA 175+00

HAM-74-0.00

MP107020-2.DWG10 DEC 2003



NOTES

1. For Legend, See Sheet 22.
2. For details not shown, See Phase II A.
3. Work at the Weigh Station Ramp Gore shall be performed when the Weigh Station is closed.

MAINTENANCE OF TRAFFIC PLAN - PHASE II B
STA. 155+00 TO STA 175+00

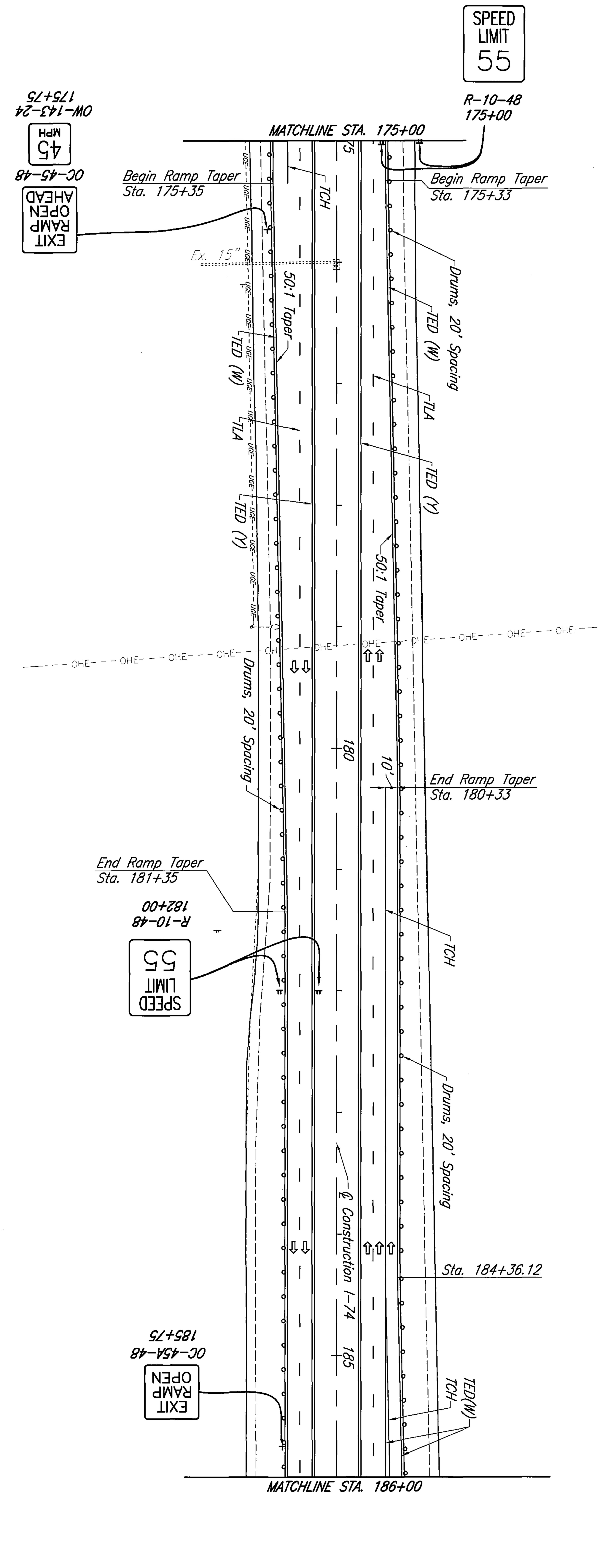
HAM-74-0.00

HORIZONTAL SCALE IN FEET 0 25 50 100

CALCULATED JNR
CHECKED REF

MP107020-2B.DWG0 DEC 2003

MP108020-2.DWG 10 DEC 2003



NOTES

1. For Legend, See Sheet 22.

HAM-74-0.00

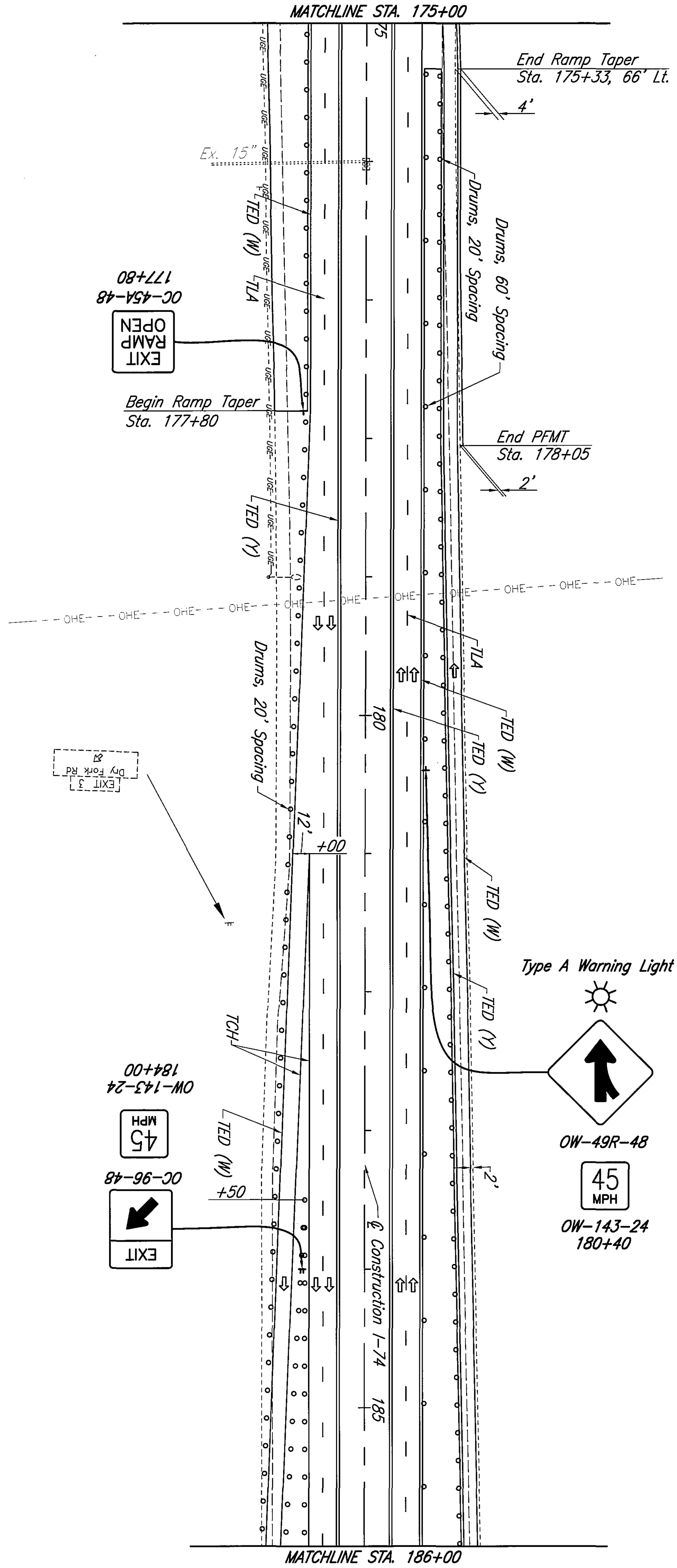
MAINTENANCE OF TRAFFIC PLAN – PHASE II A

STA. 175+00 TO STA 186+00

CALCULATED JNR

CHECKED REF

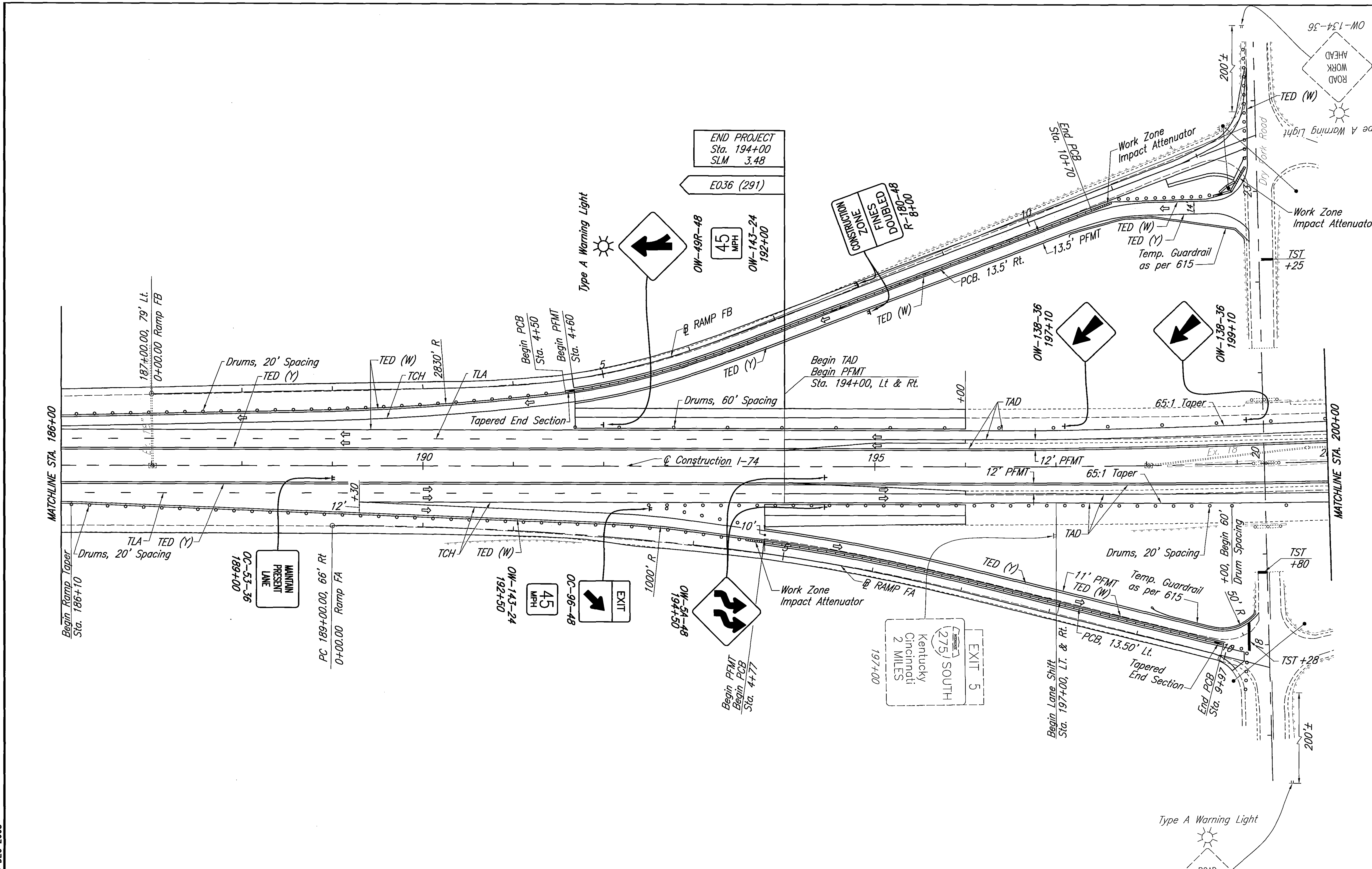
0 25 50 100 HORIZONTAL SCALE IN FEET



NOTES

1. For Legend, See Sheet 22.

60 / 421	HAM-74-0.00	MAINTENANCE OF TRAFFIC PLAN – PHASE II B STA. 175+00 TO STA 186+00	CALCULATED JNR CHECKED REF	0 25 50 100 HORIZONTAL SCALE IN FEET



NOTES

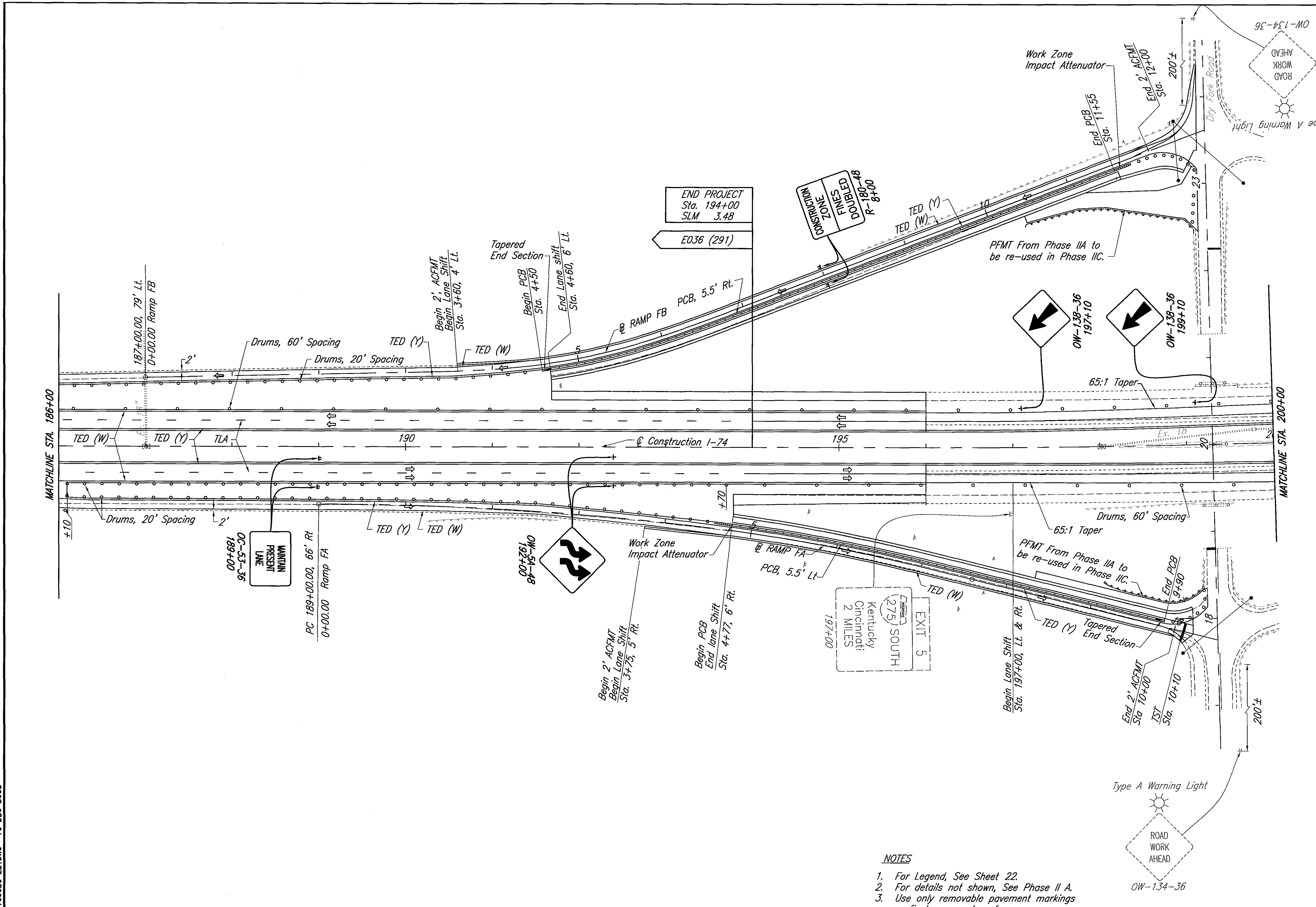
1. For Legend, See Sheet 22.
2. Use only removable pavement markings on final pavement surfaces.
3. For PFMT details at Dry Fork Road. See Sheet 31

CALCULATED JNR
CHECKED REF

MAINTENANCE OF TRAFFIC PLAN – PHASE II A
STA. 186+00 TO STA 200+00

HAM-74-0.00

MP109020-2.DWG 10 DEC 2003



NOTES

1. For Legend, See Sheet 22.
2. For details not shown, See Phase II A.
3. Use only removable pavement markings on final pavement surfaces.

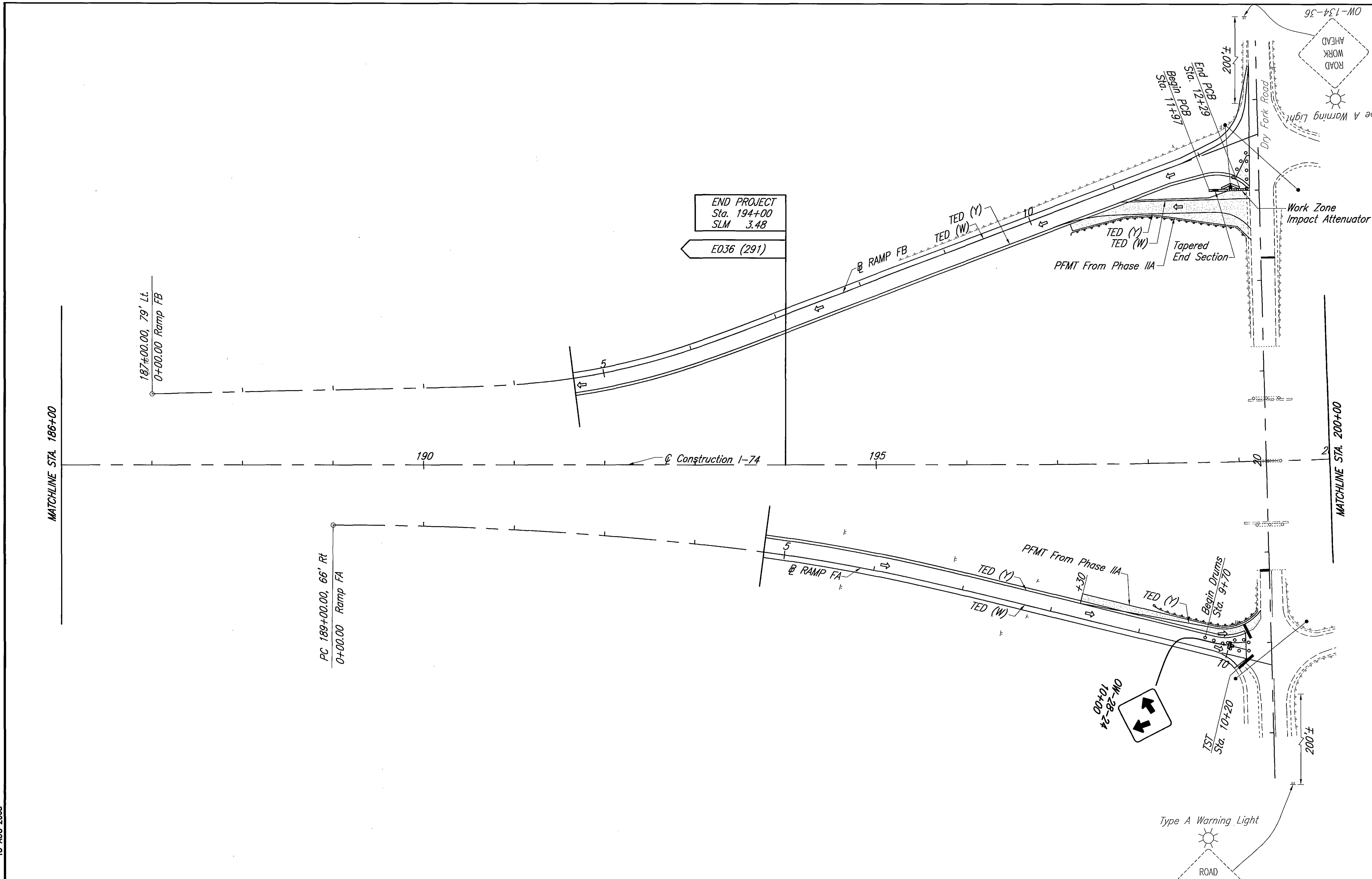
HORIZONTAL SCALE IN FEET

CALCULATED JNR
CHECKED REF

MAINTENANCE OF TRAFFIC PLAN – PHASE II B
STA. 186+00 TO STA 200+00

HAM-74-0.00

MP109020-2B.DWG 10 DEC 2003



NOTES

1. For Legend, See Sheet 22.
2. For details not shown, See Phase II A
3. Use only removeable pavement markings on final pavement surfaces.

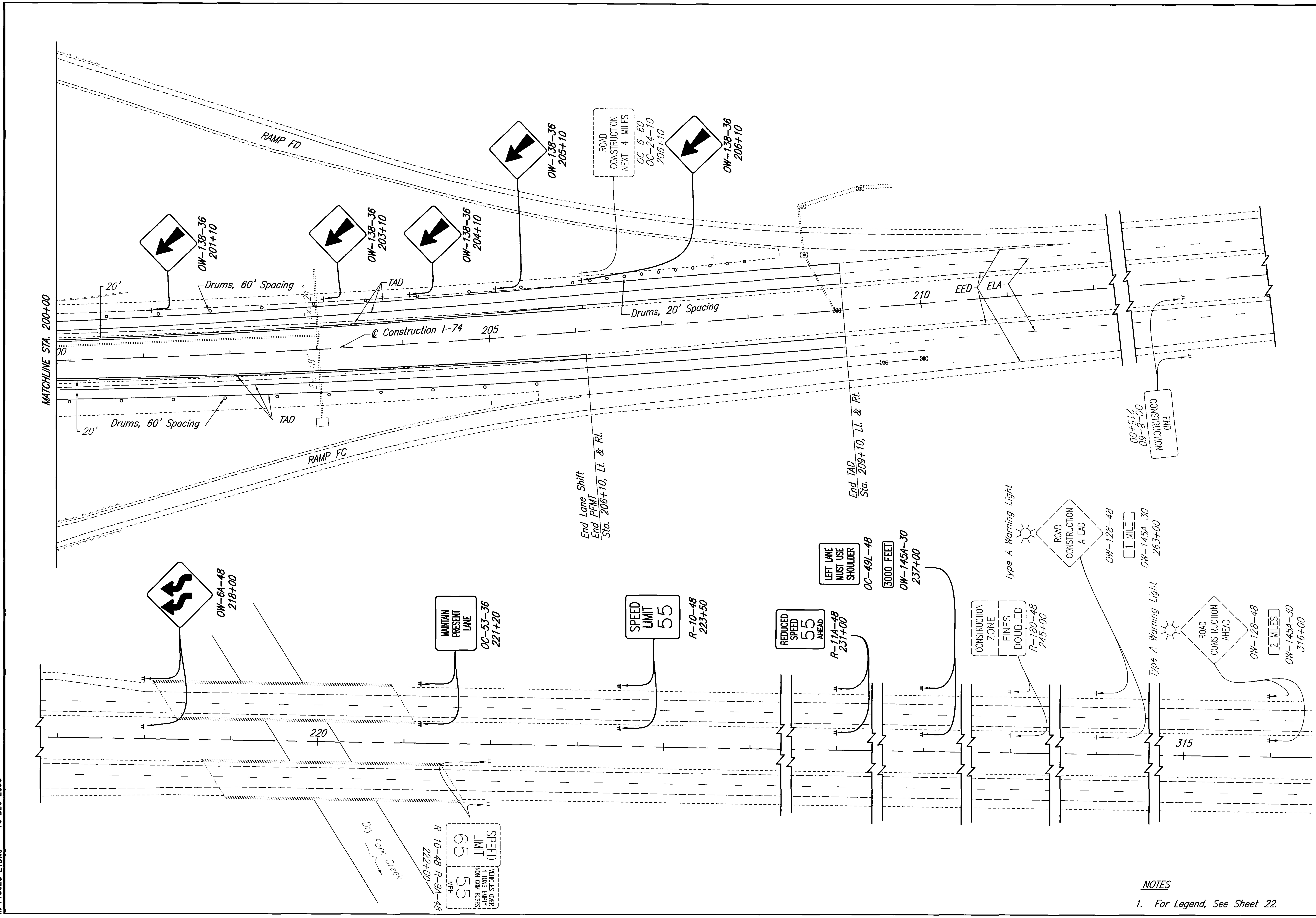
HORIZONTAL SCALE IN FEET 0 25 50 100

CALCULATED JNR
CHECKED REF

MAINTENANCE OF TRAFFIC PLAN – PHASE II C
STA. 186+00 TO STA 200+00

HAM-74-0.00

MP109020-2C.DWG 15 AUG 2003



NOTES

1. For Legend, See Sheet 22.

HORIZONTAL SCALE IN FEET

0 25 50 100

CALCULATED JNR

CHECKED REF

MAINTENANCE OF TRAFFIC PLAN - PHASE II

STA. 200+00 TO STA. 316+00

HAM-74-0.00

64

421

MP110020-2.DWG 10 DEC 2003

CALC'D JNR
CHK'D REF

MAINTENANCE OF TRAFFIC SUBSUMMARY

SHEET NUMBER	FROM STATION	TO STATION	SIDE	PHASE	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)	TRANSITION AREA DELINEATION	WORK ZONE LANE LINE, CLASS I	WORK ZONE LANE LINE, CLASS I , SOLID	WORK ZONE LANE LINE, CLASS I, 740.06, TYPE I	WORK ZONE LANE LINE, CLASS I, 740.06, TYPE I , SOLID	WORK ZONE EDGE LINE, CLASS I YELLOW	WORK ZONE EDGE LINE, CLASS I WHITE	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I , YELLOW	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I , WHITE	PAVEMENT FOR MAINTAINING TRAFFIC, AS PER PLAN	OBJECT MARKER, ONE WAY	OBJECT MARKER, TWO WAY	BARRIER REFLECTOR, TYPE B	PORTABLE CONCRETE BARRIER, 32"	PORTABLE CONCRETE BARRIER, 32", BRIDGE MOUNTED	REMARKS
			ITEM		614	614	614	614	614	614	614	614	614	614	615	614	614	614	622	622	
			UNIT		EACH	FT	MILE	MILE	MILE	MILE	MILE	MILE	MILE	MILE	SQ YD	EACH	EACH	EACH	FT	FT	
46	-5+10.00	1+00.00	RT	2		610															
46	-5+10.00	1+00.00	LT	2		610															
46	-2+10.00	1+00.00	RT	2											148						
46	-2+10.00	1+00.00	LT	2											148						
47	1+00.00	10+00.00	RT	2		900															
47	1+00.00	10+00.00	LT	2		900															
47	10+00.00	29+00.00	RT	2			0.36				0.36	0.36									
47	10+00.00	29+00.00	LT	2			0.36				0.36	0.36									
47	1+00.00	11+00.00	RT	2											1,025						
47	1+00.00	15+60.00	LT	2											1,230						
48	29+00.00	31+00.00	RT	2A			0.04				0.04	0.04									
48	31+00.00	44+70.00	RT	2A		1,370															
48	29+00.00	31+00.00	LT	2A			0.04				0.04	0.04									
48	31+00.00	44+70.00	LT	2A		1,370															
48	44+70.00	48+70.00	RT	2A					0.08				0.08	0.08							
48	44+70.00	48+70.00	LT	2A						0.08			0.08	0.08							
48	48+70.00	54+75.00	RT	2A			0.11				0.11	0.11									
48	48+70.00	50+09.00	LT	2A				0.03			0.03	0.03									
48	54+75.00	57+00.00	RT	2A		225															
48	50+09.00	57+00.00	LT	2A		691															
48	34+00.00	46+20.74	RT	2A											1,312						
48	34+00.00	46+20.74	LT	2A											1,312						
48	35+60.00	45+35.00	L&R	2A													39	39	980		BARRIER REFLECTORS BOTH SIDES
48	43+60.00	48+89.00	RT	2A	1											11		11	340	190	
48	45+89.00	51+19.00	LT	2A	1											11		11	340	190	
48	49+64.00	57+00.00	L&R	2A													30	30	740		BARRIER REFLECTORS BOTH SIDES
48	48+57.80	57+00.00	RT	2A											1,310						
48	48+57.80	57+00.00	LT	2A											1,156						
48A	52+75.00	57+00.00	LT	2B								0.08									
49	68+45.00	76+25.00	RT	2A			0.15				0.15	0.15									
49	57+00.00	68+45.00	RT	2A		1,145															
49	63+79.00	80+15.00	LT	2A			0.31				0.31										
49	57+00.00	63+79.00	LT	2A		679															
49	63+79.00	70+10.00	LT	2A								0.12									
49	76+25.00	85+00.00	RT	2A		875															
49	80+15.00	85+00.00	LT	2A		485															
	TOTALS TO GENERAL SUMMARY				2	9,860	1.40		0.16		2.69		0.32		7,641	22	69	91	2,400	380	

HAM-74-0.00

10-Dec-03 Ph2-1

SHEET NUMBER	FROM STATION	TO STATION	SIDE	PHASE				TRANSITION AREA DELINEATION		WORK ZONE LANE LINE, CLASS I	WORK ZONE LANE LINE, CLASS I , SOLID				WORK ZONE EDGE LINE, CLASS I YELLOW	WORK ZONE EDGE LINE, CLASS I WHITE		WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I , YELLOW	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I , WHITE		WORK ZONE CHANNELIZING LINE, CLASS I							PAVEMENT FOR MAINTAINING TRAFFIC, AS PER PLAN	OBJECT MARKER, TWO WAY	BARRIER REFLECTOR, TYPE B	PORTABLE CONCRETE BARRIER, 32"		REMARKS
			ITEM					614		614	614				614	614		614	614		614							615	614	614	622		
			UNIT					FT		MILE	MILE				MILE	MILE		MILE	MILE		FT							SQ YD	EACH	EACH	FT		
49	77+80.00	4+00.00 HA	R/L	2A												0.14																	
49	81+00.00	4+00.00 HA	R/L	2A																	417												
49	70+10.00	2+00.00 HB	L/R	2A												0.28																	
49	76+10.00	2+00.00 HB	L/R	2A																	890												
49	57+00.00	62+17.00	RT	2A																									11	21	520		BARRIER REFLECTORS BOTH SIDES
49	82+55.00	85+00.00	LT	2A																									5	10	245		BARRIER REFLECTORS BOTH SIDES
49	57+00.00	65+45.00	RT	2A																								728					
49	57+00.00	60+79.00	LT	2A																								157					
49	79+25.00	85+00.00	RT	2A																								278					
49	83+15.00	85+00.00	LT	2A																								41					
50	57+00.00	2+00.00 HB	LT	2B												0.53																	
50	69+80.00	4+00.00 HA	RT	2B												0.29																	
50	58+75.00	70+10.00	LT	2B																	2,270												
50	73+00.00	77+80.00	RT	2B																	960												
50	70+10.00	81+09.45	LT	2B												0.21																	
50	70+10.00	2+00.00 HB	L/R	2B											0.28																		
50	77+80.00	85+00.00	RT	2B												0.14																	
50	77+80.00	4+00.00 HA	R/L	2B											0.14																		
50	69+00.00	72+82.54	LT	2B																								122					
51	90+50.00	95+80.00	RT	2A							0.10				0.10	0.10																	
51	85+00.00	90+50.00	RT	2A				550																									
51	85+00.00	94+40.00	LT	2A				940																									
51	94+40.00	99+00.00	LT	2A							0.09				0.09	0.09																	
51	4+00.00 HA	4+80.00 HA	LT	2A																	80												
51	4+80.00 HA	10+85.00 HA	LT	2A											0.11																		
51	4+00.00 HA	6+80.00 HA	LT	2A												0.05																	
51	6+80.00 HA	7+55.00 HA	LT	2A															0.01														
51	2+00.00 HB	6+50.00 HB	RT	2A												0.09																	
51	6+50.00 HB	11+80.00 HB	RT	2A															0.10														
51	2+00.00 HB	4+50.00 HB	RT	2A																	250												
51	4+50.00 HB	10+55.00 HB	RT	2A											0.11																		
51	1+70.00 HC	5+00.00 HC	LT	2A															0.06														
51	2+95.00 HC	5+00.00 HC	LT	2A											0.04																		
51	2+80.00 HD	3+50.00 HD	RT	2A											0.01																		
	TOTALS TO GENERAL SUMMARY							1,490		0.19					2.80			0.17			4,867							1,326	16	31	765		

CALC'D JNR
CHK'D REF

MAINTENANCE OF TRAFFIC SUBSUMMARY

HAM-74-0.00

10-Dec-03 Ph2-2

MAINTENANCE OF TRAFFIC SUBSUMMARY

HAM-74-0.00

CALC'D JNR
CHK'D REF

SHEET NUMBER	FROM STATION	TO STATION	SIDE	PHASE	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)	WORK ZONE EDGE LINE, CLASS I YELLOW	WORK ZONE EDGE LINE, CLASS I WHITE	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I, YELLOW	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I, WHITE	PAVEMENT FOR MAINTAINING TRAFFIC, AS PER PLAN	OBJECT MARKER, ONE WAY	OBJECT MARKER, TWO WAY	BARRIER REFLECTOR, TYPE B	PORTABLE CONCRETE BARRIER, 32"	REMARKS
			ITEM		614	614	614	614	614	615	614	614	614	622	
			UNIT		EACH	MILE	MILE	MILE	MILE	SQ YD	EACH	EACH	EACH	FT	
51	85+00.00	95+13.00	L&R	2A								21	41	1015	BARRIER REFLECTORS BOTH SIDES
51	89+40.00	98+80.00	RT	2A	1						19		19	940	
51	91+40.00	99+00.00	LT	2A							15		15	760	
51	94+65.00	99+00.00	L&R	2A								9	17	435	BARRIER REFLECTORS BOTH SIDES
51	85+00.00	99+00.00	RT	2A						2268					
51	85+00.00	99+00.00	LT	2A						1789					
51	4+80.00 HA	10+85.00 HA	LT	2A						544					
51	4+50.00 HB	10+55.00 HB	RT	2A						564					
51	2+95.00 HC	5+00.00 HC	LT	2A						100					
51	2+80.00 HD	3+50.00 HD	RT	2A						27					
52	85+00.00	86+00.00	RT	2B			0.02								
52	4+00.00 HA	6+80.00 HA	L&R	2B		0.05	0.05								
52	6+80.00 HA	8+60.00 HA	RT	2B					0.03						
52	6+80.00 HA	7+30.00 HA	LT	2B				0.01							
52	2+00.00 HB	6+50.00 HB	L&R	2B		0.09	0.09								
52	6+50.00 HB	9+55.00 HB	RT	2B				0.06							
52	6+50.00 HB	8+30.00 HB	LT	2B					0.03						
52	3+95.00 HC	5+00.00 HC	LT	2B				0.02							
TOTALS TO GENERAL SUMMARY					1	0.30		0.15		5,292	34	30	92	3,150	

22-Aug-03 Ph2-3

CALC'D JNR
CHK'D REF

MAINTENANCE OF TRAFFIC SUBSUMMARY

SHEET NUMBER	FROM STATION	TO STATION	SIDE	PHASE	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)	TRANSITION AREA DELINEATION	WORK ZONE LANE LINE, CLASS I	WORK ZONE LANE LINE, CLASS I, SOLID	WORK ZONE EDGE LINE, CLASS I YELLOW	WORK ZONE EDGE LINE, CLASS I WHITE	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I, YELLOW	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I, WHITE	WORK ZONE CHANNELIZING LINE, CLASS I	PAVEMENT FOR MAINTAINING TRAFFIC, AS PER PLAN	OBJECT MARKER, ONE WAY	OBJECT MARKER, TWO WAY	BARRIER REFLECTOR, TYPE B	PORTABLE CONCRETE BARRIER, 32"	REMARKS
			ITEM		614	614	614	614	614	614	614	614	614	615	614	614	614	622	
			UNIT		EACH	FT	MILE	MILE	MILE	MILE	MILE	MILE	FT	SQ YD	EACH	EACH	EACH	FT	
53	125+70.00	127+00.00	RT	2A				0.02	0.02	0.02									
53	99+00.00	125+70.00	RT	2A		2,670													
53	99+00.00	99+70.00	LT	2A				0.01	0.01	0.01									
53	99+70.00	127+00.00	LT	2A		2,730													
53	5+00.00 HC	7+00.00 HC	LT	2A								0.04							
53	7+00.00 HC	120+35.00	L/R	2A						0.37									
53	5+00.00 HC	9+00.00 HC	LT	2A					0.08										
53	9+00.00 HC	109+70.97	L/R	2A									673						
53	6+10.00 HD	6+85.00 HD	RT	2A								0.01							
53	6+85.00 HD	109+45.00	R/L	2A						0.14									
53	3+50.00 HD	8+85.00 HD	RT	2A					0.10										
53	8+85.00 HD	109+45.00	R/L	2A									522						
53	109+45.00	112+65.00	LT	2A						0.06									
53	99+00.00	100+80.00	LT	2A	1										4		4	180	
53	99+00.00	107+65.00	RT	2A												18	35	865	BARRIER REFLECTORS BOTH SIDES
53	117+75.00	127+00.00	LT	2A												20	39	925	BARRIER REFLECTORS BOTH SIDES
53	124+60.00	127+00.00	RT	2A	1										6		6	240	
53	126+60.00	127+00.00	LT	2A											2		2	40	
53	99+00.00	107+05.00	RT	2A										655					
53	99+00.00	110+95.00	LT	2A										1302					
53	5+00.00 HC	8+90.00 HC	LT	2A										449					
53	3+50.00 HD	8+85.00 HD	RT	2A										495					
53	114+45.00	127+00.00	RT	2A										1416					
53	118+35.00	127+00.00	LT	2A										766					
54	5+00.00 HC	7+00.00 HC	LT	2B							0.04								
54	5+20.00 HC	7+00.00 HC	RT	2B								0.03							
54	7+00.00 HC	117+55.00	R&L	2B					0.31	0.31									
54	117+55.00	127+00.00	RT	2B						0.18			945						
54	109+70.97	120+35.00	RT	2B						0.20									
54	5+05.00 HD	6+85.00 HD	LT	2B								0.03							
54	6+35.00 HD	6+85.00 HD	RT	2B							0.01								
54	6+85.00 HD	112+65.00	R&L	2B					0.20	0.20									
54	104+20.00	112+65.00	LT	2B						0.16									
54	112+65.00	117+50.00	LT	2B									970						
54	112+65.00	120+70.00	LT	2B						0.15									
54	124+60.00	127+00.00	RT	2B	1										6		6	240	
TOTALS TO GENERAL SUMMARY					3	5,400	0.03		2.52		0.16		3,110	5,083	18	38	92	2,490	

HAM-74-0.00

10-Dec-03 Ph2-4

MAINTENANCE OF TRAFFIC SUBSUMMARY

CALC'D JNR
CHK'D REF

SHEET NUMBER	FROM STATION	TO STATION	SIDE	PHASE	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)	TRANSITION AREA DELINEATION	WORK ZONE LANE LINE, CLASS I	WORK ZONE LANE LINE, CLASS I , SOLID	WORK ZONE EDGE LINE, CLASS I YELLOW	WORK ZONE EDGE LINE, CLASS I WHITE	WORK ZONE CHANNELIZING LINE, CLASS I	PAVEMENT FOR MAINTAINING TRAFFIC, AS PER PLAN	OBJECT MARKER, ONE WAY	OBJECT MARKER, TWO WAY	BARRIER REFLECTOR, TYPE B	PORTABLE CONCRETE BARRIER, 32"	REMARKS
			ITEM		614	614	614	614	614	614	614	615	614	614	614	622	
			UNIT		EACH	FT	MILE	MILE	MILE	MILE	FT	SQ YD	EACH	EACH	EACH	FT	
55	127+00.00	132+90.00	RT	2A				0.11	0.11	0.11							
55	132+90.00	147+20.00	RT	2A		1,424											
55	147+20.00	155+00.00	RT	2A			0.15		0.15								
55	127+00.00	129+60.00	LT	2A		260											
55	129+60.00	136+80.00	LT	2A				0.14	0.14	0.14							
55	136+80.00	151+10.00	LT	2A		1,424											
55	151+10.00	155+00.00	LT	2A			0.07		0.07	0.07							
55	140+45.00	4+53.00 WS	R/L	2A						0.15							
55	144+20.00	4+53.00 WS	R/L	2A							439						
55	147+20.00	148+60.00	RT	2A							140						
55	148+60.00	155+00.00	RT	2A						0.12							
55	127+00.00	131+95.00	R&L	2A										10	20	495	BARRIER REFLECTORS BOTH SIDES
55	127+00.00	135+90.00	RT	2A									18		18	890	
55	127+00.00	137+90.00	LT	2A	1								22		22	1090	
55	131+40.00	144+82.00	R&L	2A										27	54	1340	BARRIER REFLECTORS BOTH SIDES
55	127+00.00	144+20.00	RT	2A								2182					
55	127+00.00	148+10.00	LT	2A								2832					
56	127+00.00	133+90.00	RT	2B						0.13			14		14	690	
56	127+00.00	128+90.00	RT	2B							190						
56	140+45.00	148+60.00	RT	2B						0.15							
57	155+00.00	175+00.00	RT	2A			0.38		0.38								
57	155+00.00	169+30.04	RT	2A						0.27							
57	155+00.00	175+00.00	LT	2A			0.38		0.38	0.38							
57	18+33.00 WS	175+00.00	L/R	2A						0.24							
57	19+93.00 WS	175+00.00	L/R	2A							1,125						
58	163+98.00	175+00.00	LT	2B							1,102						
58	168+20.00	174+91.00	RT	2B						0.13							
58	158+98.00	175+00.00	LT	2B						0.30							
58	174+32.00	175+00.00	LT	2B								16					
59	175+00.00	186+00.00	RT	2A			0.21		0.21								
59	175+00.00	186+00.00	LT	2A			0.21		0.21								
59	175+00.00	175+33.00	LT	2A						0.01							
59	175+33.00	186+00.00	LT	2A						0.20							
59	180+33.00	186+00.00	LT	2A							567						
59	184+36.12	186+00.00	LT	2A						0.03							
59	175+00.00	181+35.00	RT	2A						0.12							
59	181+35.00	186+00.00	RT	2A						0.09							
59	175+00.00	175+35.00	RT	2A							35						
60	177+80.00	186+00.00	RT	2B						0.16							
60	181+00.00	186+00.00	RT	2B							1,000						
60	175+00.00	186+00.00	LT	2B						0.21							
60	175+00.00	175+33.00	LT	2B							33						
60	175+33.00	186+00.00	LT	2B					0.20								
60	175+00.00	178+05.00	LT	2B								93					
60	175+33.00	184+36.12	LT	2B						0.17							
TOTALS TO GENERAL SUMMARY					1	3,108	1.65		5.03		4,631	5,123	54	37	128	4,505	

HAM-74-0.00

10-Dec-03 Ph2-5

MAINTENANCE OF TRAFFIC SUBSUMMARY

HAM-74-0.00

CALC'D JNR
CHK'D REF

SHEET NUMBER	FROM STATION	TO STATION	SIDE	PHASE	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)	TRANSITION AREA DELINEATION	WORK ZONE LANE LINE, CLASS I	WORK ZONE LANE LINE, CLASS I, SOLID	WORK ZONE LANE LINE, CLASS I, 740.06, TYPE I	WORK ZONE LANE LINE, CLASS I, 740.06, TYPE I, SOLID	WORK ZONE EDGE LINE, CLASS I YELLOW	WORK ZONE EDGE LINE, CLASS I WHITE	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I, YELLOW	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I, WHITE	WORK ZONE CHANNELIZING LINE, CLASS I	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC, AS PER PLAN	PAVEMENT FOR MAINTAINING TRAFFIC, AS PER PLAN	OBJECT MARKER, ONE WAY	BARRIER REFLECTOR, TYPE B	PORTABLE CONCRETE BARRIER, 32"	REMARKS
			ITEM		614	614	614	614	614	614	614	614	614	614	614	614	614	615	614	614	622	
			UNIT		EACH	FT	MILE	MILE	MILE	MILE	MILE	MILE	MILE	MILE	FT	FT	CU YD	SQ YD	EACH	EACH	FT	
61	186+00.00	194+00.00	RT	2A			0.15				0.15											
61	186+00.00	194+00.00	LT	2A			0.15				0.15	0.15										
61	189+30.00	194+00.00	RT	2A											470							
61	194+00.00	200+00.00	RT	2A		600																
61	194+00.00	200+00.00	LT	2A		600																
61	186+00.00	4+77.00 FA	R/L	2A								0.15										
61	0+30.00 FA	4+77.00 FA	LT	2A											447							
61	4+77.00 FA	10+00.00 FA	LT	2A								0.10										
61	4+77.00 FA	18+35.00 DF	LT	2A							0.11											
61	10+28.00 FA		LT	2A												32						
61	18+80.00 DF		LT	2A												10						
61	22+25.00 DF		RT	2A												13						
61	186+00.00	4+60.00 FB	L/R	2A								0.11										
61	186+00.00	4+60.00 FB	L/R	2A											560							
61	4+60.00 FB	22+45.00 DF	RT	2A							0.15											
61	4+60.00 FB	24+37.00 DF	R/L	2A								0.17										
61	4+77.00 FA	9+97.00 FA	LT	2A	1														11	11	520	
61	4+50.00 FB	10+70.00 FB	RT	2A	1														13	13	620	
61	12+00.00 FB	12+30.00 FB	RT	2A	1														3	3	50	
61	4+77.00 FA	10+27.00 FA	LT	2A														696				
61	4+60.00 FB	12+42.00 FB	RT	2A														1410				
61	194+00.00	200+00.00	RT	2A														633				
61	194+00.00	200+00.00	LT	2A														622				
62	186+00.00	4+77.00 FA	R/L&R	2B							0.15	0.15										
62	4+77.00 FA	10+10.00 FA	RT	2B										0.10								
62	4+77.00 FA	18+35.00 DF	LT	2B									0.11									
62	186+00.00	4+60.00 FB	L/L&R	2B							0.11	0.11										
62	4+60.00 FB	23+17.00 DF	R/L	2B									0.15									
62	4+60.00 FB	24+37.00 DF	LT	2B										0.16								
62	4+77.00 FA	9+90.00 FA	LT	2B	1														11	11	510	
62	4+50.00 FB	11+55.00 FB	RT	2B	1														15	15	710	
62	3+75.00 FA	10+00.00 FA	RT	2B													30.9					
62	3+60.00 FB	12+00.00 FB	LT	2B													41.5					
63	8+30.00 FA	18+35.00 DF	LT	2C							0.04											
63	10+20.00 FA		L&R	2C												40						
63	11+97.00 FB	12+29.00 FB	RT	2C	1														6	6	40	BARRIER REFLECTORS BOTH SIDES
TOTALS TO GENERAL SUMMARY					6	1,200	0.30		0.00		1.80		0.52		1,477	95	72.4	3,361	59	59	2,450	

10-Dec-03 Ph2-6

MAINTENANCE OF TRAFFIC SUBSUMMARY

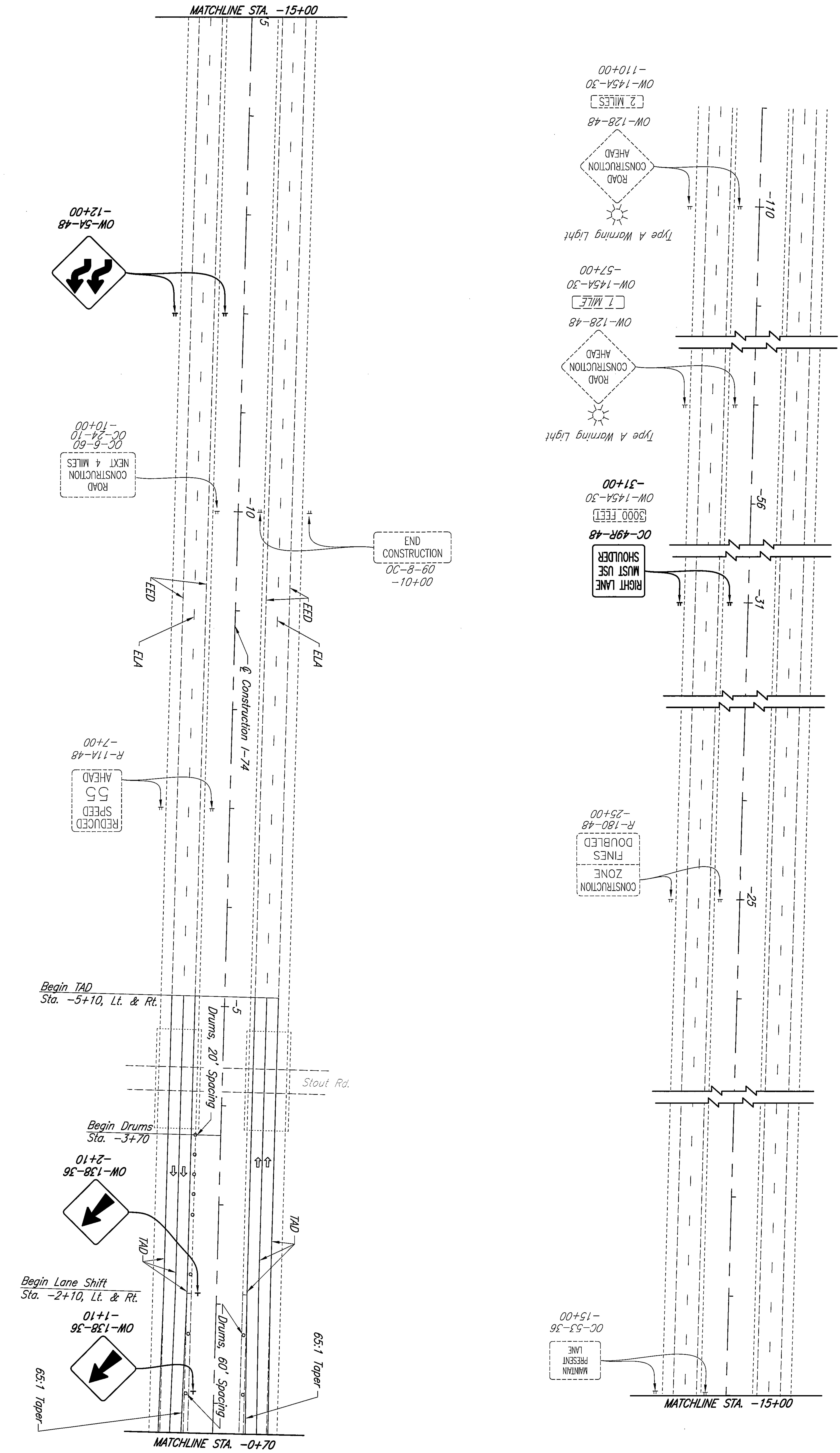
SHEET NUMBER	FROM STATION	TO STATION	SIDE	PHASE	TRANSITION AREA DELINEATION	PAVEMENT FOR MAINTAINING TRAFFIC, AS PER PLAN	REMARKS
			ITEM		614	615	
			UNIT		FT	SQ YD	
64	200+00.00	209+10.00	RT	2	910		
64	200+00.00	209+10.00	LT	2	910		
64	200+00.00	206+10.00	RT	2		461	
64	200+00.00	206+10.00	LT	2		393	
TOTALS TO GENERAL SUMMARY					1,820	854	

CALC'D JNR
CHK'D REF

HAM-74-0.00

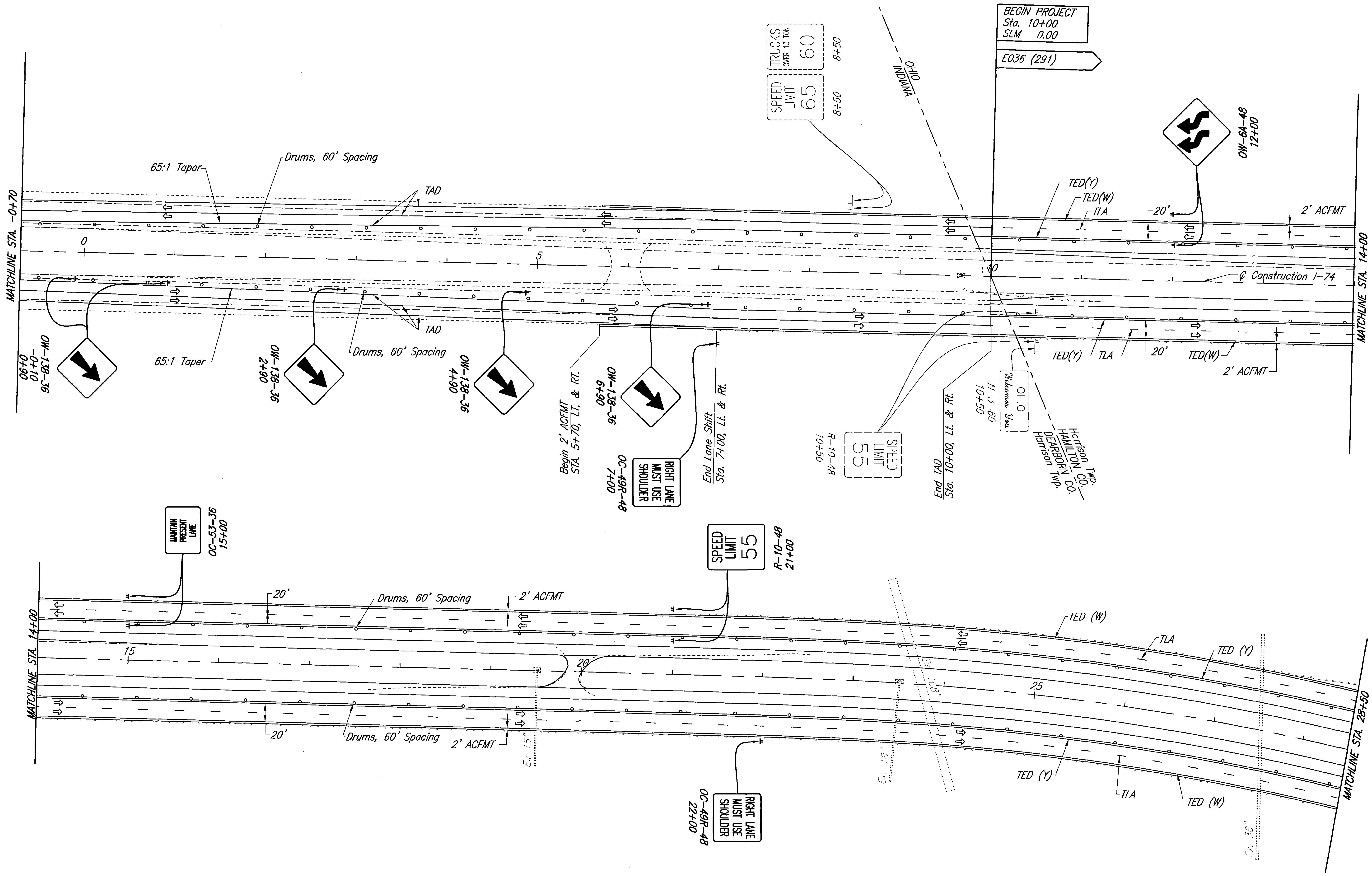
10-Dec-03 Ph2-7

MP100020-3.DWG 10 DEC 2003



Notes:
1. For Legend, See Sheet 22.

72 / 421	HAM-74-0.00	MAINTENANCE OF TRAFFIC PLAN - PHASE III STA. -110+00 TO STA -0+70	CALCULATED JNR CHECKED REF	0 25 50 100 HORIZONTAL SCALE IN FEET



Notes

1. For Legend, See Sheet 22.

HORIZONTAL SCALE IN FEET
0 25 50 100

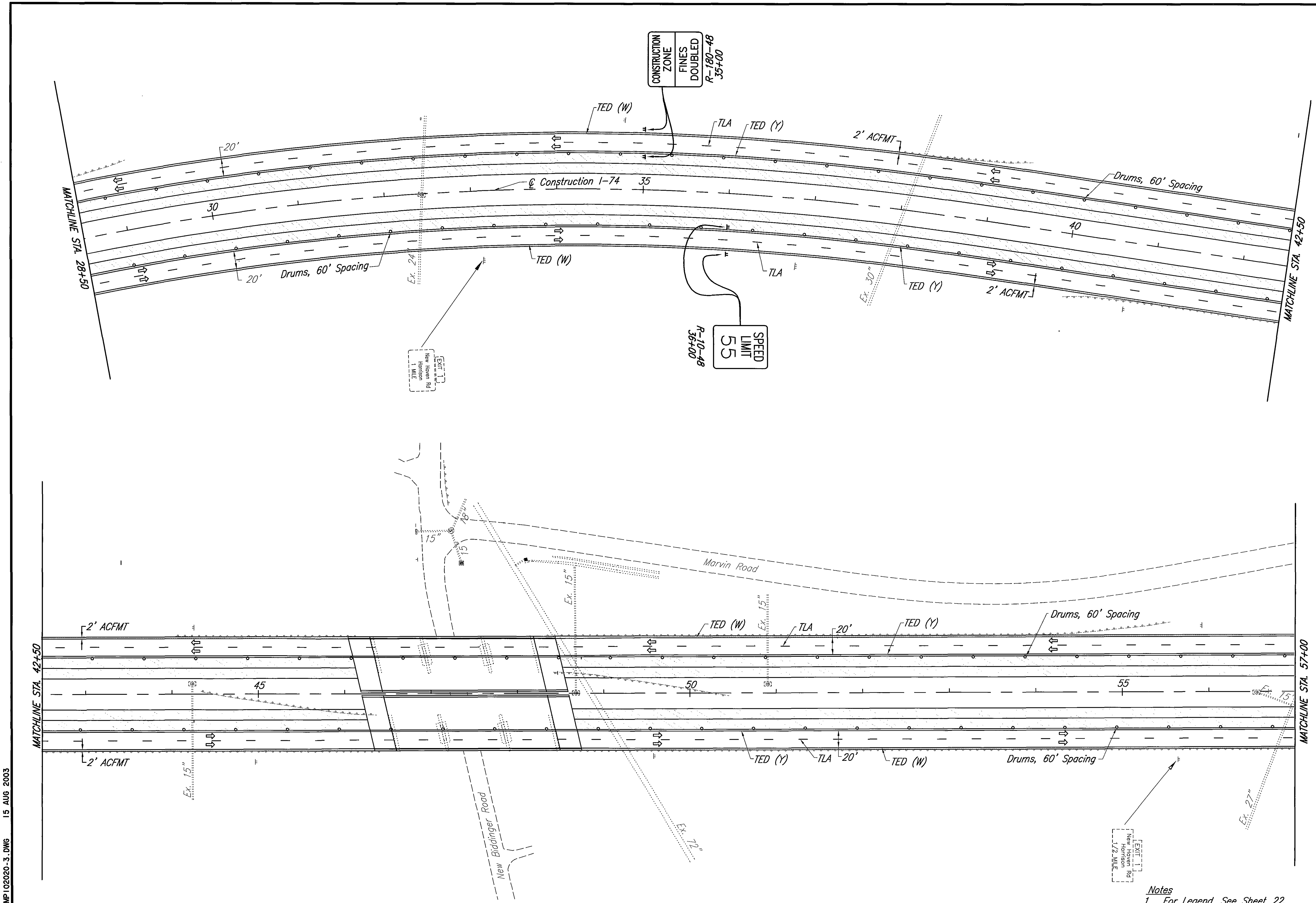
CALCULATED JNR
CHECKED REF

MAINTENANCE OF TRAFFIC PLAN– PHASE III
STA. -0+70 TO STA. 28+50

HAM-74-0.00

73
421

MP101020-3.DWG 10 DEC 2003



Notes
1. For Legend, See Sheet 22.

MAINTENANCE OF TRAFFIC PLAN – PHASE III
STA. 28+50 TO STA. 57+00

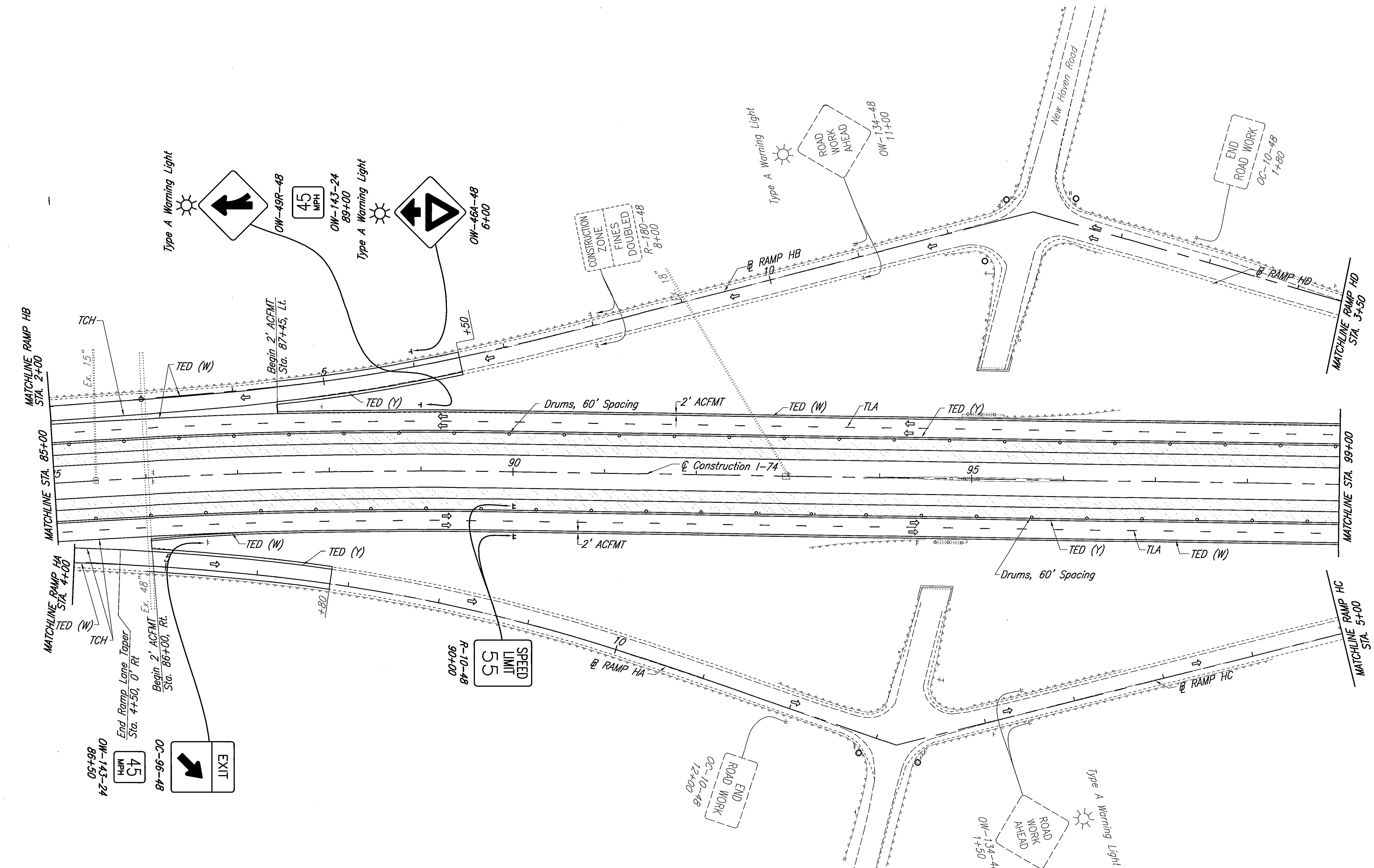
HAM-74-0.00

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JNR
CHECKED REF

MP102020-3.DWG 15 AUG 2003

MAINTENANCE OF TRAFFIC PLAN – PHASE III
STA. 57+00 TO STA. 85+00
HAM-74-0.00
75
421
CALCULATED JNR
CHECKED REF
HORIZONTAL SCALE IN FEET
0 25 50 100
Marvin Road
Ex. 27"
MATCHLINE STA. 57+00
MATCHLINE STA. 71+00
Drums, 60' Spacing
TED (W)
TLA
TED (Y)
20'
2' ACFMT
60
65
70
℄ Construction I-74
EXIT RAMP OPEN AHEAD
OC-45-48
45 MPH
OW-143-24
61+00
CONSTRUCTION ZONE
FINES DOUBLED
R-180-48
64+00
SPEED LIMIT 55
R-10-48
74+00
Begin Ramp Taper
Sta. 75+80
RIGHT LANE MUST USE SHOULDER
OC-49R-48
76+50
End 2' ACFMT
Sta. 72+00, Lt.
48:1 Taper
End Ramp Taper
Sta. 83+00.00, 79' Lt.
0+00.00 RAMP HB
YIELD
R-2-60
84+00
+00
16'
TCH
MATCHLINE RAMP HB STA. 2+00
MATCHLINE STA. 85+00
75
80
2'
30'
+70
+83
EXIT RAMP OPEN
OC-45A-48
72+70
EXIT 1
New Haven Rd
Harrison
End 2' ACFMT
Sta. 73+70, Rt.
Ex. 15"
PC 81+16.56, 66' Rt
0+00.00 Ramp HA
Begin Ramp Lane Taper
Sta. 0+00, 8' Rt.
MATCHLINE RAMP HA STA. 4+00
Notes
1. For Legend, See Sheet 22.
MP103020-3.DWG 15 AUG 2003



Notes

1. For Legend, See Sheet 22.
2. Apply Permanent Pavement Markings to ramps prior to Phase III.

MAINTENANCE OF TRAFFIC PLAN – PHASE III
STA. 85+00 TO STA. 99+00

HORIZONTAL SCALE IN FEET: 0 25 50 100

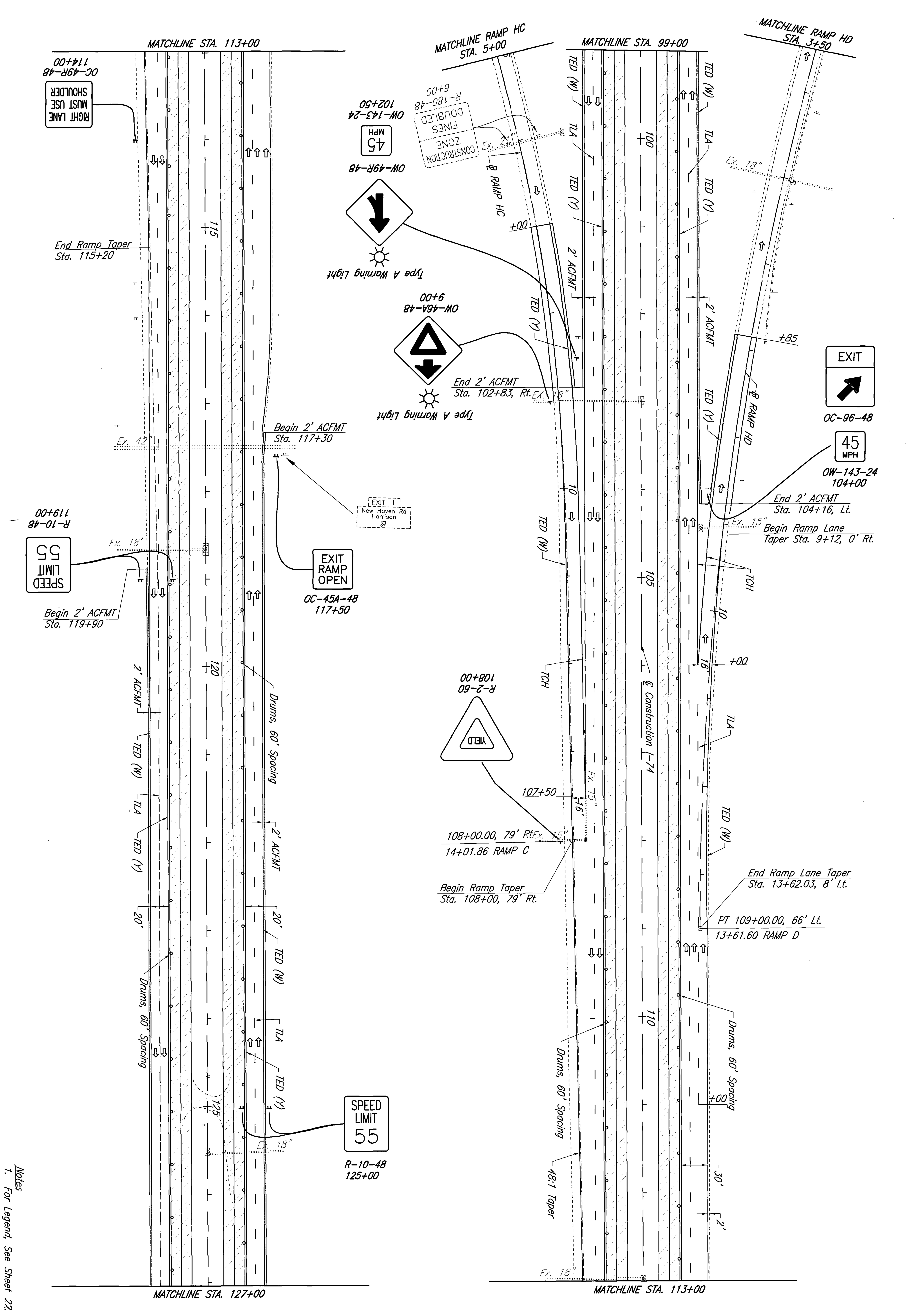
CALCULATED JNR
CHECKED REF

HAM-74-0.00

76
421

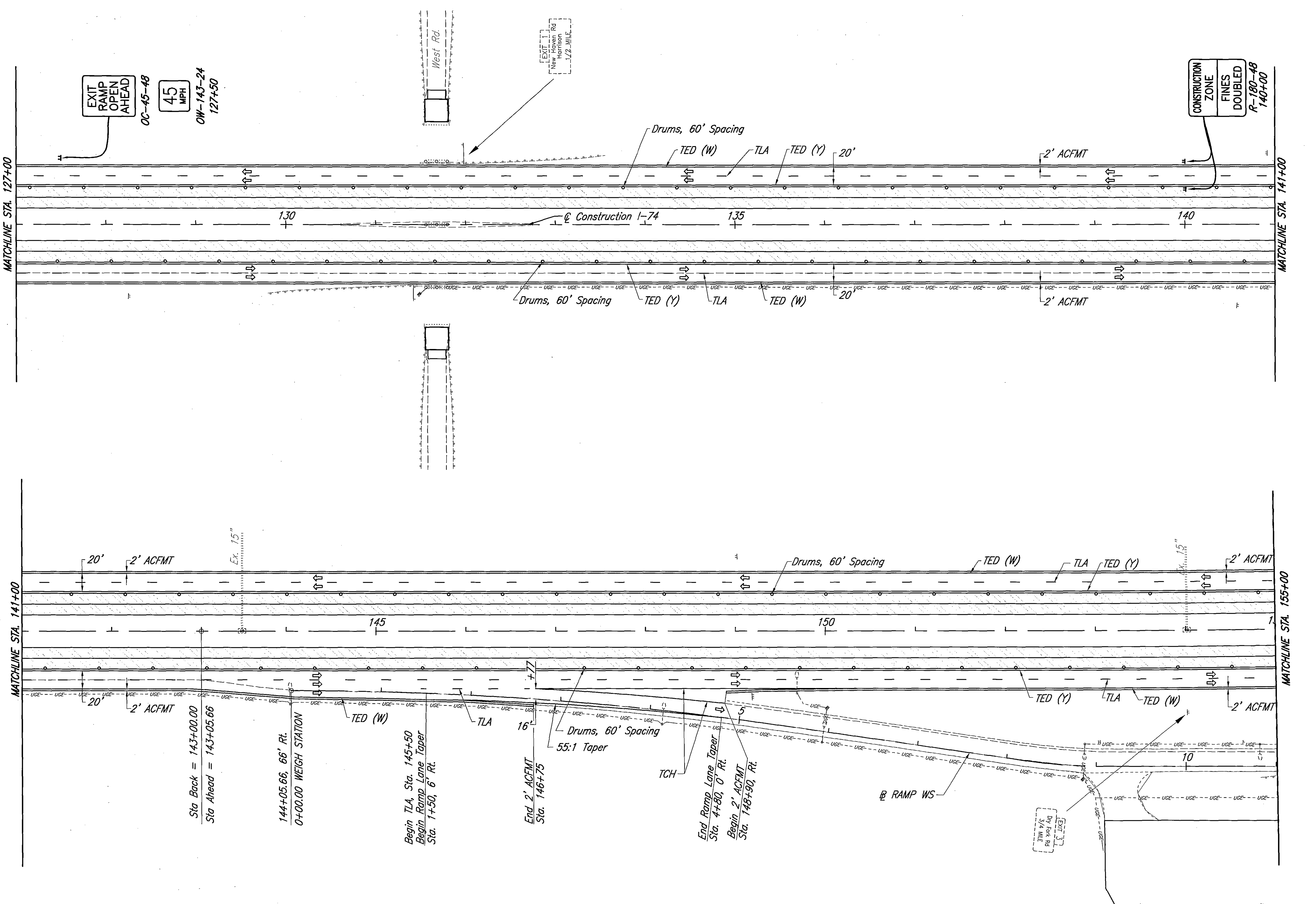
MP104020-3.DWG 15 AUG 2003

MP105020-3.DWG 15 AUG 2003



Notes
1. For Legend, See Sheet 22.

77 / 421	HAM-74-0.00	MAINTENANCE OF TRAFFIC PLAN – PHASE III STA. 99+00 TO STA. 127+00	CALCULATED JNR CHECKED REF	HORIZONTAL SCALE IN FEET (0, 25, 50, 100)



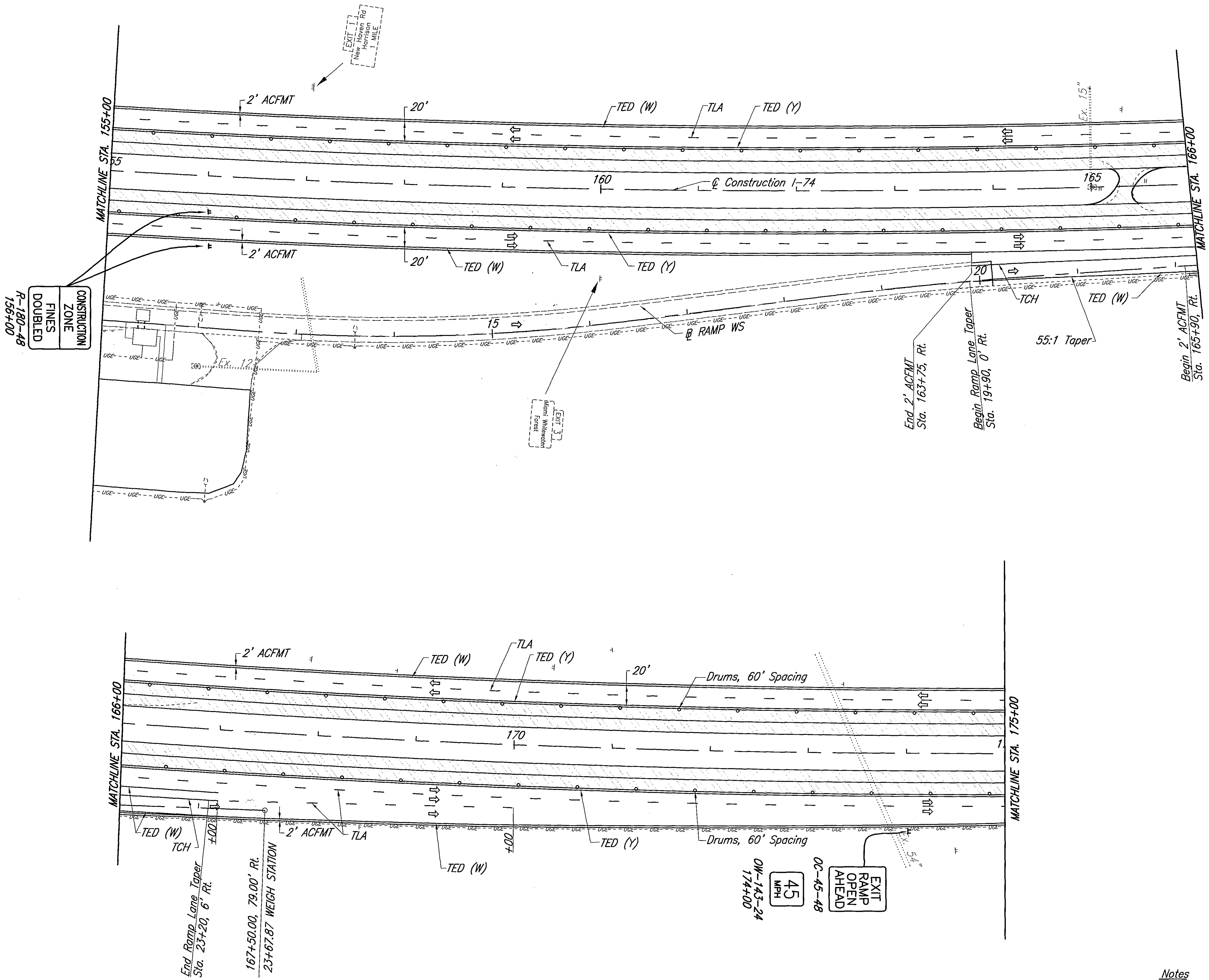
Notes
1. For Legend, See Sheet 385

MP106020-3.DWG 15 AUG 2003

CALCULATED JNR
CHECKED REF

MAINTENANCE OF TRAFFIC PLAN - PHASE III
STA. 127+00 TO STA. 155+00

HAM-74-0.00



Notes
1. For Legend, See Sheet 385

HORIZONTAL SCALE IN FEET
0 25 50 100

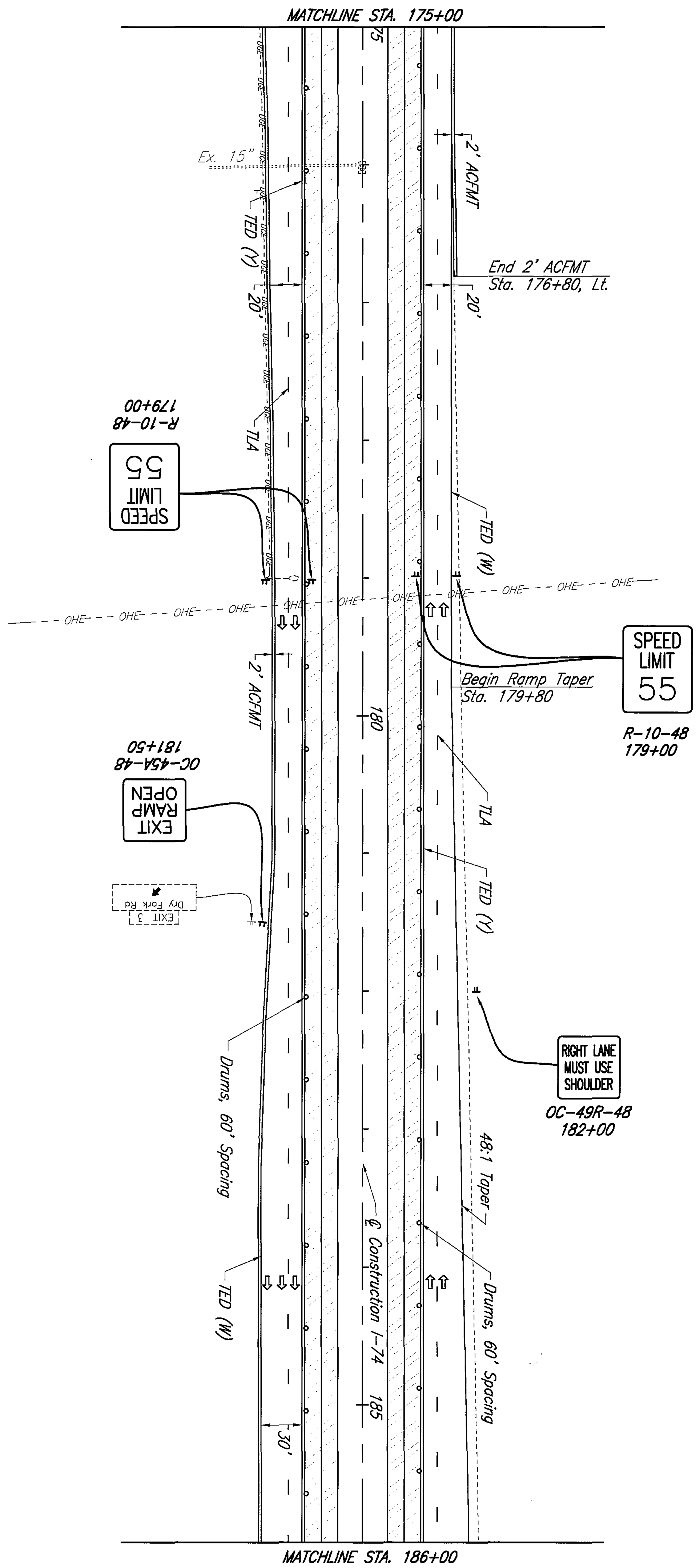
CALCULATED JNR
CHECKED REF

MAINTENANCE OF TRAFFIC PLAN - PHASE III
STA. 155+00 TO STA. 175+00

HAM-74-0.00

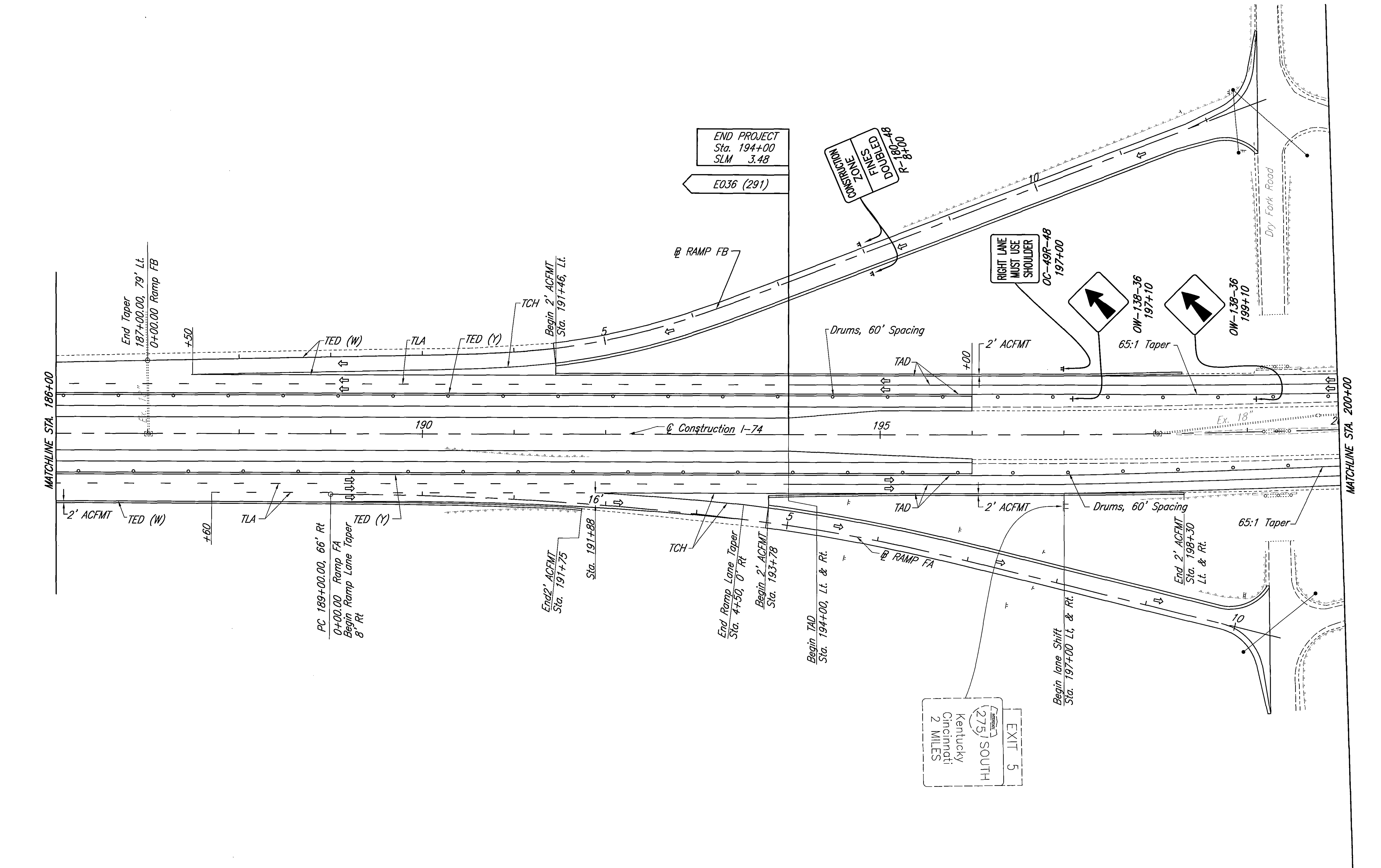
MP107020-3.DWG 15 AUG 2003

MP108020-3.DWG 15 AUG 2003



Notes
1. For Legend, See Sheet 22.

80 / 421	HAM-74-0.00	MAINTENANCE OF TRAFFIC PLAN – PHASE III STA. 175+00 TO STA. 186+00	CALCULATED JNR CHECKED REF	0 25 50 100 HORIZONTAL SCALE IN FEET



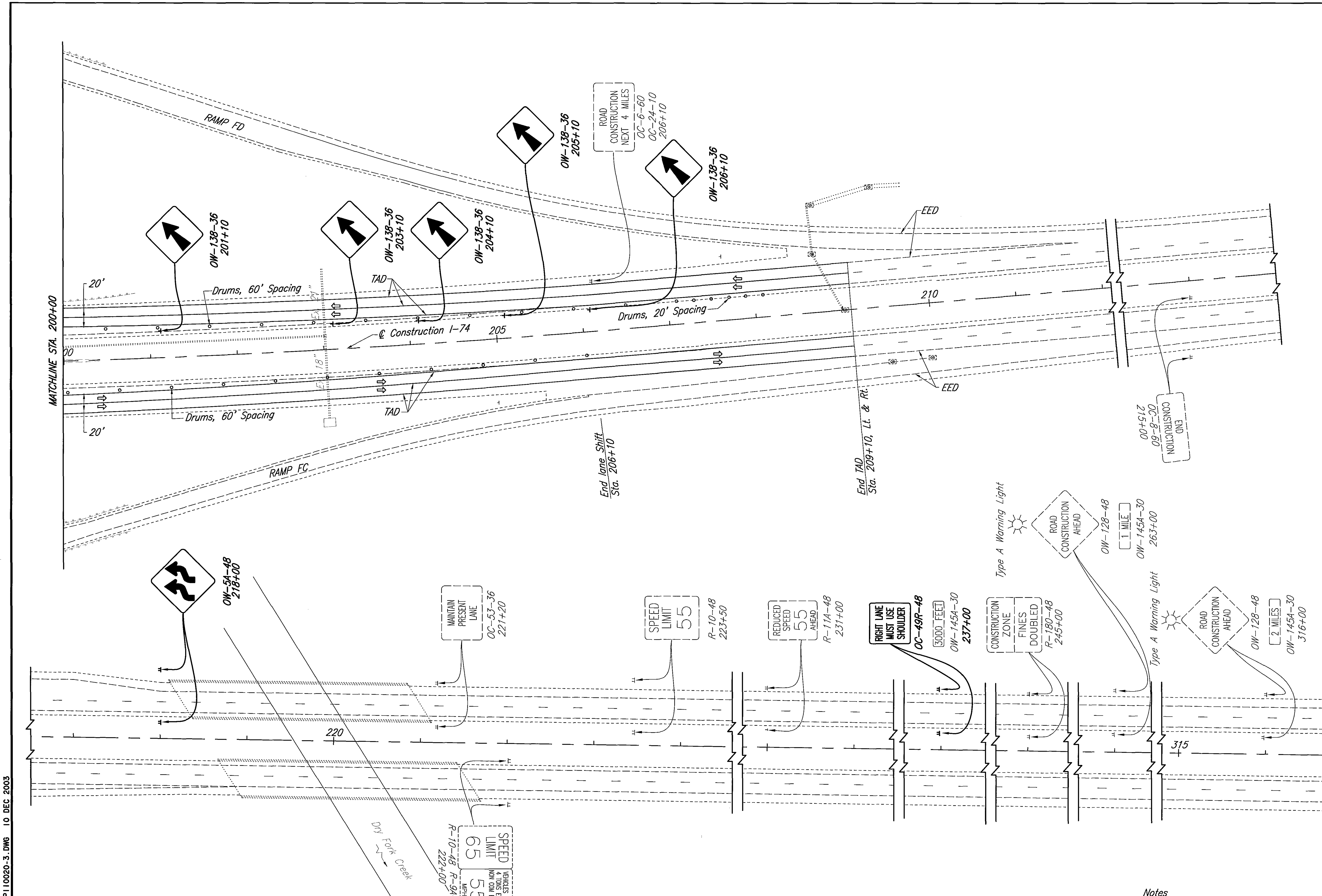
Notes
1. For Legend, See Sheet 22.
2. Apply permanent Pavement Markings to ramps prior to Phase III.

CALCULATED JNR
CHECKED REF
HORIZONTAL SCALE IN FEET

MAINTENANCE OF TRAFFIC PLAN - PHASE III
STA. 186+00 TO STA. 200+00

HAM-74-0.00

MP109020-3.DWG 10 DEC 2003



Notes
1. For Legend, See Sheet 22.

MP110020-3.DWG 10 DEC 2003

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JNR
CHECKED REF

MAINTENANCE OF TRAFFIC PLAN – PHASE III
STA. 200+00 TO STA. 316+00

HAM-74-0.00

82
421

CALC'D JNR
CHK'D REF

MAINTENANCE OF TRAFFIC SUBSUMMARY

SHEET NUMBER	FROM STATION	TO STATION	SIDE	PHASE	TRANSITION AREA DELINEATION	WORK ZONE LANE LINE, CLASS I	WORK ZONE LANE LINE, CLASS I , SOLID	WORK ZONE LANE LINE, CLASS I, 740.06, TYPE I	WORK ZONE LANE LINE, CLASS I, 740.06, TYPE I , SOLID	WORK ZONE EDGE LINE, CLASS I YELLOW	WORK ZONE EDGE LINE, CLASS I WHITE	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I , YELLOW	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I , WHITE	WORK ZONE CHANNELIZING LINE, CLASS I	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC, AS PER PLAN	REMARKS
			ITEM		614	614	614	614	614	614	614	614	614	614	614	
			UNIT		FT	MILE	MILE	MILE	MILE	MILE	MILE	MILE	MILE	FT	CU YD	
72	-5+10.00	-0+70.00	RT	3	440											
72	-5+10.00	-0+70.00	LT	3	440											
73	-0+70.00	10+00.00	RT	3	1,070											
73	-0+70.00	10+00.00	LT	3	1,070											
73	10+00.00	28+50.00	RT	3		0.35				0.35	0.35					
73	10+00.00	28+50.00	LT	3		0.35				0.3504	0.35					
73	5+70.00	28+50.00	RT	3											112.6	
73	5+70.00	28+50.00	LT	3											112.6	
74	28+50.00	46+00.00	RT	3		0.33				0.33	0.33					
74	28+50.00	46+00.00	LT	3		0.33				0.33	0.33					
74	46+00.00	48+70.00	RT	3				0.05				0.05	0.05			
74	46+00.00	48+70.00	LT	3				0.05				0.05	0.05			
74	48+70.00	57+00.00	RT	3		0.16				0.16	0.16					
74	48+70.00	57+00.00	LT	3		0.16				0.16	0.16					
74	28+50.00	46+35.00	RT	3											88.1	
74	28+50.00	46+05.00	LT	3											86.7	
74	48+74.00	57+00.00	RT	3											40.8	
74	48+44.00	57+00.00	LT	3											42.3	
75	57+00.00	85+00.00	RT	3		0.53				0.53						
75	57+00.00	81+16.56	RT	3							0.46					
75	57+00.00	85+00.00	LT	3		0.53				0.53						
75	57+00.00	83+00.00	LT	3							0.49					
75	77+70.00	84+00.00	RT	3		0.12										
75	0+00.00 HA	4+00.00 HA	RT	3							0.08					
75	2+83.00 HA	4+00.00 HA	LT	3										117		
75	84+00.00	85+00.00	RT	3										100		
75	0+00.00 HB	2+00.00 HB	RT	3							0.04					
75	1+00.00 HB	2+00.00 HB	RT	3										100		
75	84+00.00	85+00.00	LT	3							0.02					
75	57+00.00	73+70.00	RT	3											82.5	
75	57+00.00	72+00.00	LT	3											74.1	
TOTALS TO GENERAL SUMMARY					3,020	2.86		0.10		5.51		0.20		317	639.7	

HAM-74-0.00

10-Dec-03 Ph3-1

SHEET NUMBER	FROM STATION	TO STATION	SIDE	PHASE	WORK ZONE LANE LINE, CLASS I	WORK ZONE LANE LINE, CLASS I, SOLID	WORK ZONE EDGE LINE, CLASS I YELLOW	WORK ZONE EDGE LINE, CLASS I WHITE	WORK ZONE CHANNELIZING LINE, CLASS I	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC, AS PER PLAN	REMARKS
			ITEM		614	614	614	614	614	614	
			UNIT		MILE	MILE	MILE	MILE	FT	CU YD	
76	85+00.00	99+00.00	RT	3	0.27		0.27				
76	85+00.00	86+00.00	RT	3					100		
76	86+00.00	99+00.00	RT	3				0.25			
76	85+00.00	99+00.00	LT	3	0.27		0.27	0.27			
76	4+00.00 HA	4+80.00 HA	LT	3				0.02	80		
76	2+00.00 HB	4+40.00 HB	RT	3				0.05	240		
76	86+00.00	99+00.00	RT	3						64.2	
76	87+45.00	99+00.00	LT	3						57.0	
76	4+80.00 HA	6+80.00 HA	R&L	3			0.04	0.04			
76	4+40.00 HB	6+50.00 HB	R&L	3			0.04	0.04			
77	99+00.00	127+00.00	RT	3	0.53		0.53				
77	99+00.00	107+50.00	RT	3				0.16			
77	99+00.00	127+00.00	LT	3	0.53		0.53				
77	99+00.00	104+16.00	LT	3				0.10			
77	104+16.00	106+00.00	LT	3					184		
77	9+00.00 HC	13+50.00 HC	LT	3				0.09	450		
77	8+85.00 HD	13+62.03 HD	LT	3				0.09			
77	8+85.00 HD	10+63.00 HD	RT	3					178		
77	107+50.00	127+00.00	RT	3				0.37			
77	109+00.00	127+00.00	LT	3				0.34			
77	106+00.00	111+00.00	LT	3	0.09						
77	99+00.00	102+83.00	RT	3						18.9	
77	99+00.00	104+16.00	LT	3						25.5	
77	117+30.00	127+00.00	LT	3						47.9	
77	119+90.00	127+00.00	RT	3						35.1	
77	7+00.00	9+00.00	R&L	3			0.04	0.04			
77	6+85.00	8+85.00	R&L	3			0.04	0.04			
78	127+00.00	155+00.00	RT	3	0.53		0.53				
78	127+00.00	144+05.66	RT	3				0.32			
78	127+00.00	155+00.00	LT	3	0.53		0.53	0.53			
78	0+00.00 WS	4+80.00 WS	RT	3				0.09			
78	145+50.00	146+77.00	RT	3	0.02						
78	2+71.00 WS	4+80.00 WS	LT	3					209		
78	146+77.00	148+90.00	RT	3					213		
78	148+90.00	155+00.00	RT	3				0.12			
78	127+00.00	146+75.00	RT	3						97.5	
78	127+00.00	155+00.00	LT	3						138.3	
78	148+90.00	155+00.00	RT	3						30.1	
TOTALS TO GENERAL SUMMARY					2.77		5.78		1,654	514.5	

CALC'D JNR
CHK'D REF

MAINTENANCE OF TRAFFIC SUBSUMMARY

HAM-74-0.00

22-Aug-03 Ph3-2

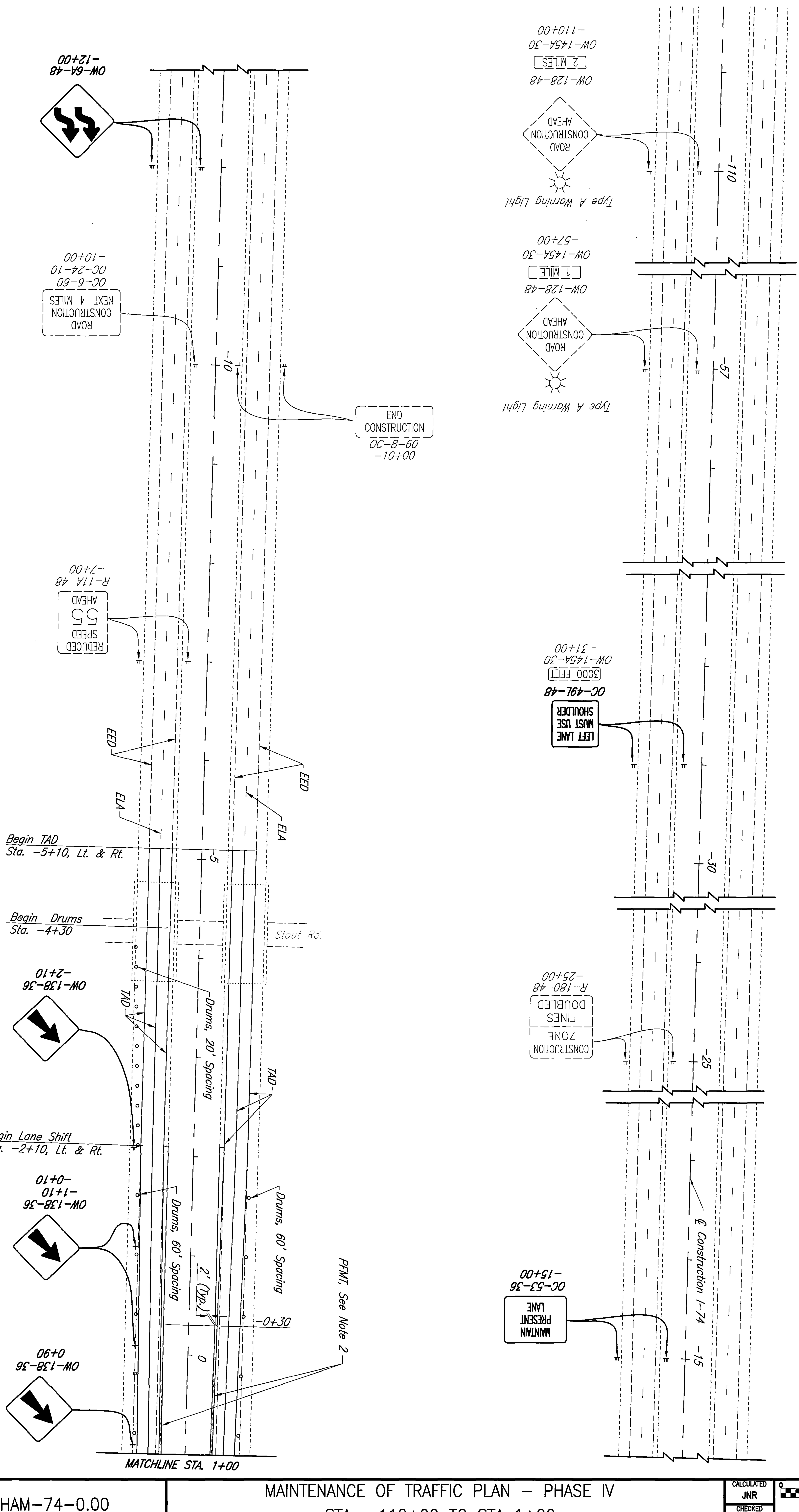
CALC'D JNR
CHK'D REF

MAINTENANCE OF TRAFFIC SUBSUMMARY

SHEET NUMBER	FROM STATION	TO STATION	SIDE	PHASE	TRANSITION AREA DELINEATION	WORK ZONE LANE LINE, CLASS I	WORK ZONE LANE LINE, CLASS I, SOLID	WORK ZONE EDGE LINE, CLASS I YELLOW	WORK ZONE EDGE LINE, CLASS I WHITE	WORK ZONE CHANNELIZING LINE, CLASS I	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC, AS PER PLAN	REMARKS
			ITEM		614	614	614	614	614	614	614	
			UNIT		FT	MILE	MILE	MILE	MILE	FT	CU YD	
79	155+00.00	175+00.00	RT	3		0.38		0.38				
79	155+00.00	167+00.00	RT	3					0.23			
79	155+00.00	175+00.00	LT	3		0.38		0.38	0.38			
79	19+90.00 WS	23+67.87 WS	RT	3					0.07			
79	19+90.00 WS	23+20.00 WS	LT	3						330		
79	167+50.00	175+00.00	RT	3					0.14			
79	167+00.00	170+00.00	RT	3		0.06						
79	155+00.00	163+75.00	RT	3							43.2	
79	155+00.00	175+00.00	LT	3							98.8	
79	165+90.00	175+00.00	RT	3							44.9	
80	175+00.00	186+00.00	RT	3		0.21		0.21	0.21			
80	175+00.00	186+00.00	LT	3		0.21		0.21	0.21			
80	175+00.00	186+00.00	RT	3							54.3	
80	175+00.00	176+80.00	LT	3							8.9	
81	186+00.00	194+00.00	RT	3		0.15		0.15				
81	186+00.00	189+00.00	RT	3					0.06			
81	186+00.00	194+00.00	LT	3		0.15		0.15				
81	186+00.00	187+00.00	LT	3					0.02			
81	0+00.00 FB	4+44.00 FB	RT	3					0.08			
81	0+50.00 FB	4+44.00 FB	RT	3						394		
81	187+50.00	194+00.00	LT	3					0.12			
81	187+60.00	191+88.00	RT	3		0.08						
81	0+00.00 FA	4+77.00 FA	RT	3					0.09			
81	2+88.00 FA	4+77.00 FA	LT	3						189		
81	191+88.00	194+00.00	RT	3						212		
81	194+00.00	200+00.00	RT	3	600							
81	194+00.00	200+00.00	LT	3	600							
81	186+00.00	191+75.00	RT	3							28.4	
81	191+46.00	198+30.00	LT	3							33.8	
81	193+78.00	198+30.00	RT	3							22.3	
82	200+00.00	209+10.00	RT	3	910							
82	200+00.00	209+10.00	LT	3	910							
TOTALS TO GENERAL SUMMARY					3,020	1.62		3.09		1,125	334.6	

HAM-74-0.00

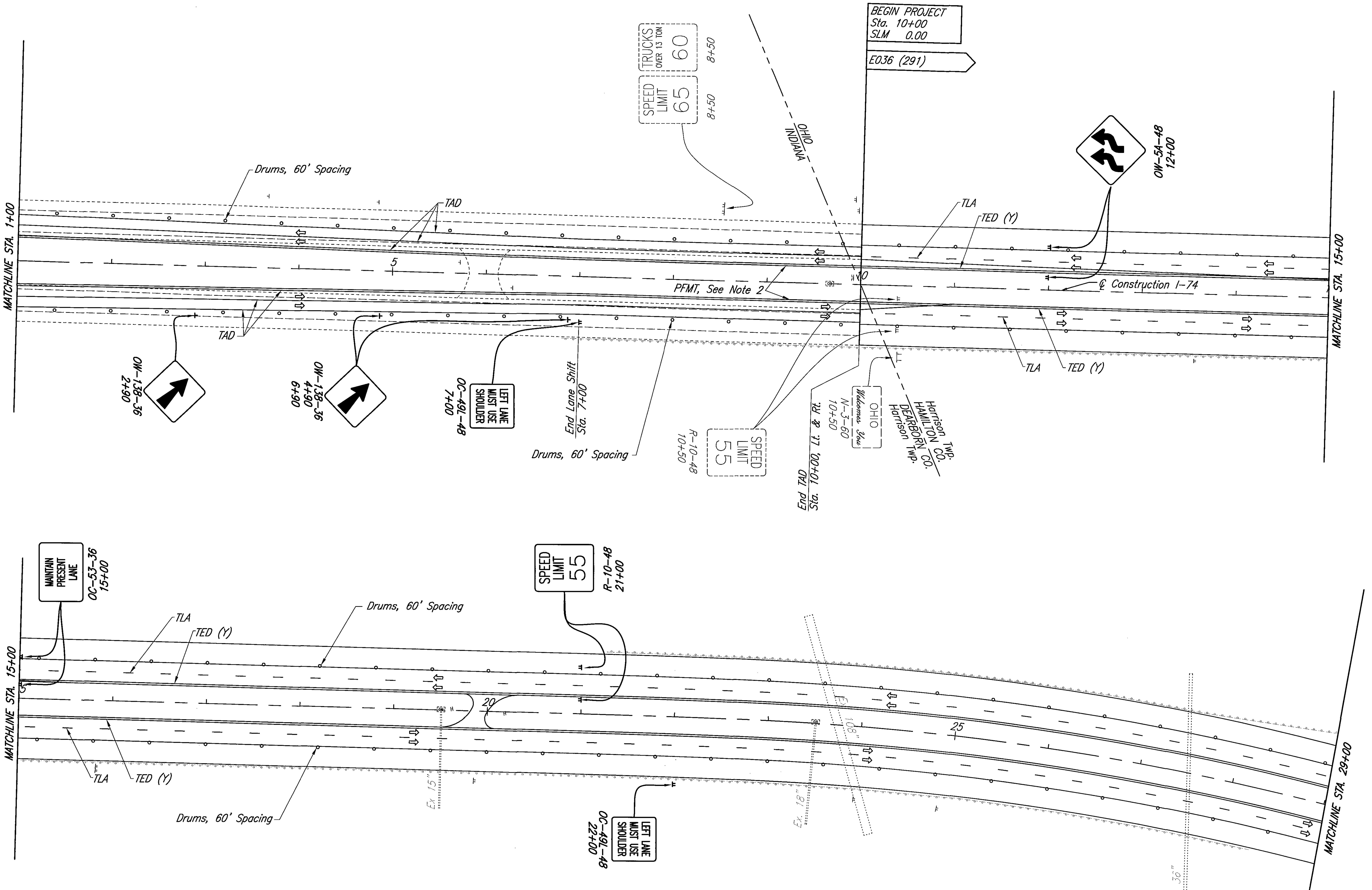
10-Dec-03 Ph3-3



NOTES

1. For Legend, See Sheet 22.
2. PFMT left in place from Phase II. See Phase II for Dimensions.

86 / 421	HAM-74-0.00	MAINTENANCE OF TRAFFIC PLAN - PHASE IV STA. -110+00 TO STA 1+00	CALCULATED JNR CHECKED REF	0 25 50 100 HORIZONTAL SCALE IN FEET



NOTES

1. For Legend, See Sheet 22.
2. PFMT left in place from Phase II. See Phase II for Dimensions.

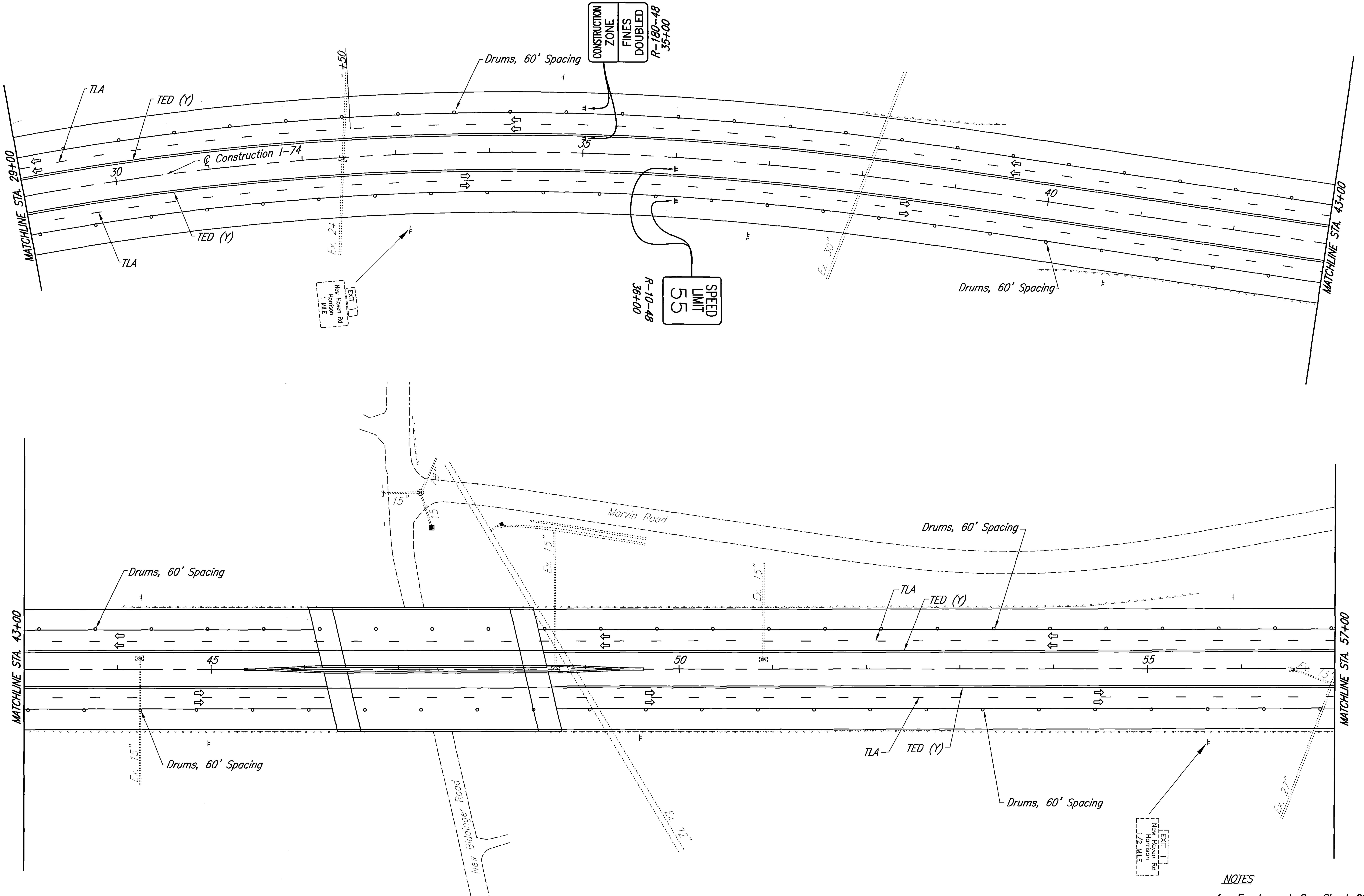
MAINTENANCE OF TRAFFIC PLAN – PHASE IV
STA. 1+00 TO STA 29+00

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JNR
CHECKED REF

HAM-74-0.00

MP101020-4.DWG 10 DEC 2003



NOTES

1. For Legend, See Sheet 22.

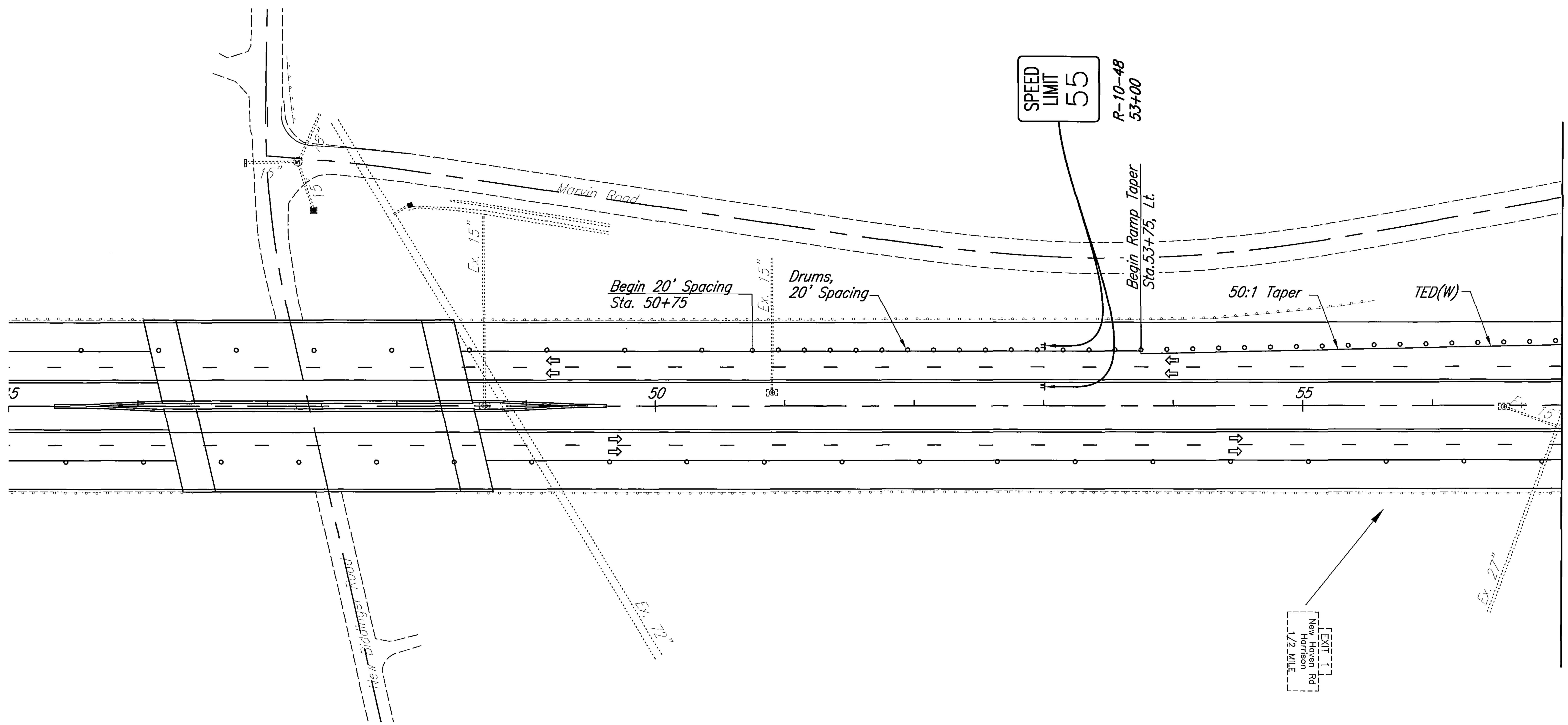
CALCULATED JNR
CHECKED REF

HORIZONTAL SCALE IN FEET

MAINTENANCE OF TRAFFIC PLAN - PHASE IV A
STA. 29+00 TO STA 57+00

HAM-74-0.00

MP10020-4-A.DWG O DEC 2003



NOTES

1. For Legend, See Sheet 22.
2. For Details not shown, see Phase II A.

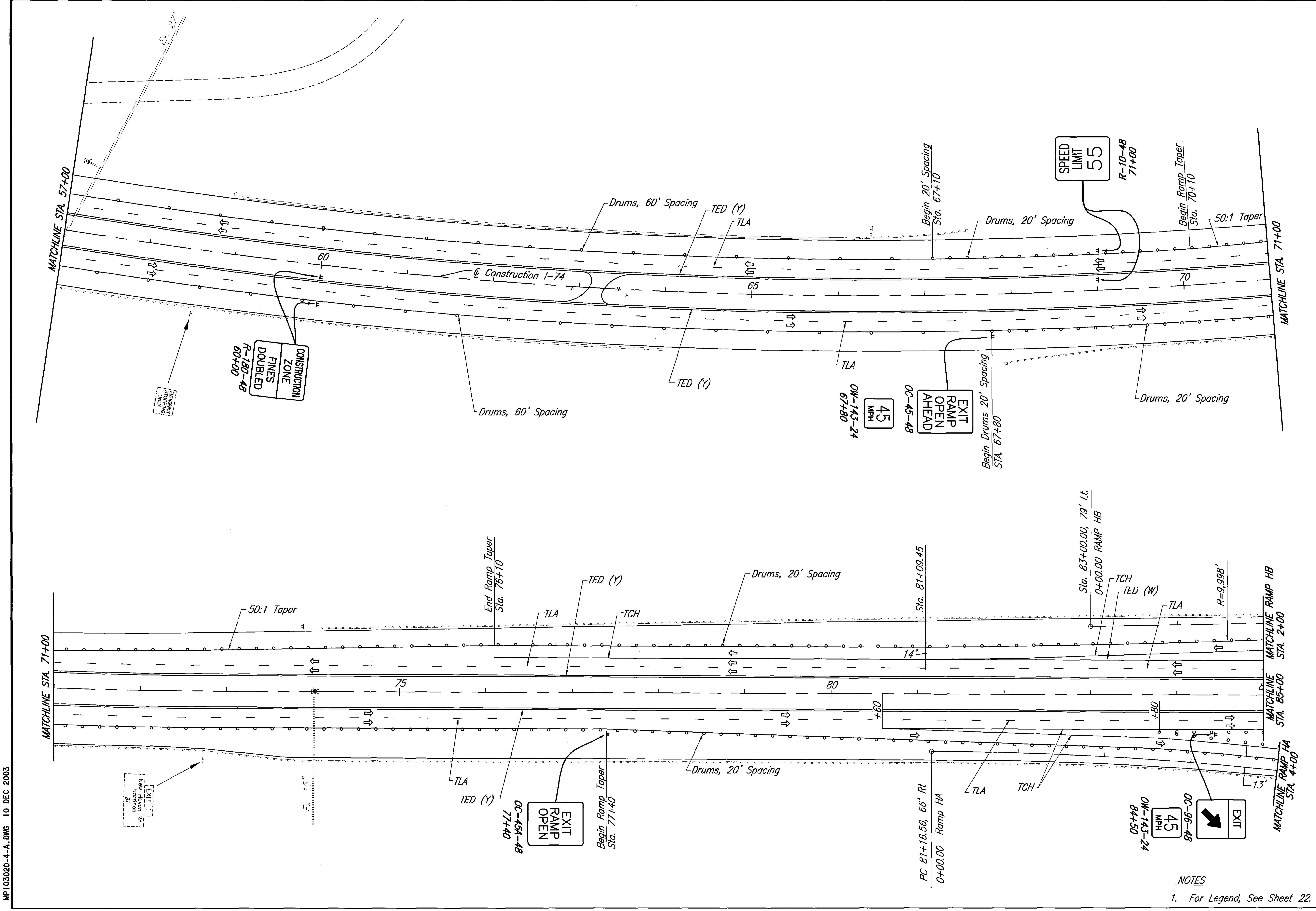
HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JNR
CHECKED REF

MAINTENANCE OF TRAFFIC PLAN - PHASE IV B
STA. 45+00 TO STA 57+00

HAM-74-0.00

MP102020-4-B.DWG DEC 2003



HORIZONTAL SCALE IN FEET

0 25 50 100

CALCULATED JNR

CHECKED REF

MAINTENANCE OF TRAFFIC PLAN – PHASE IV A

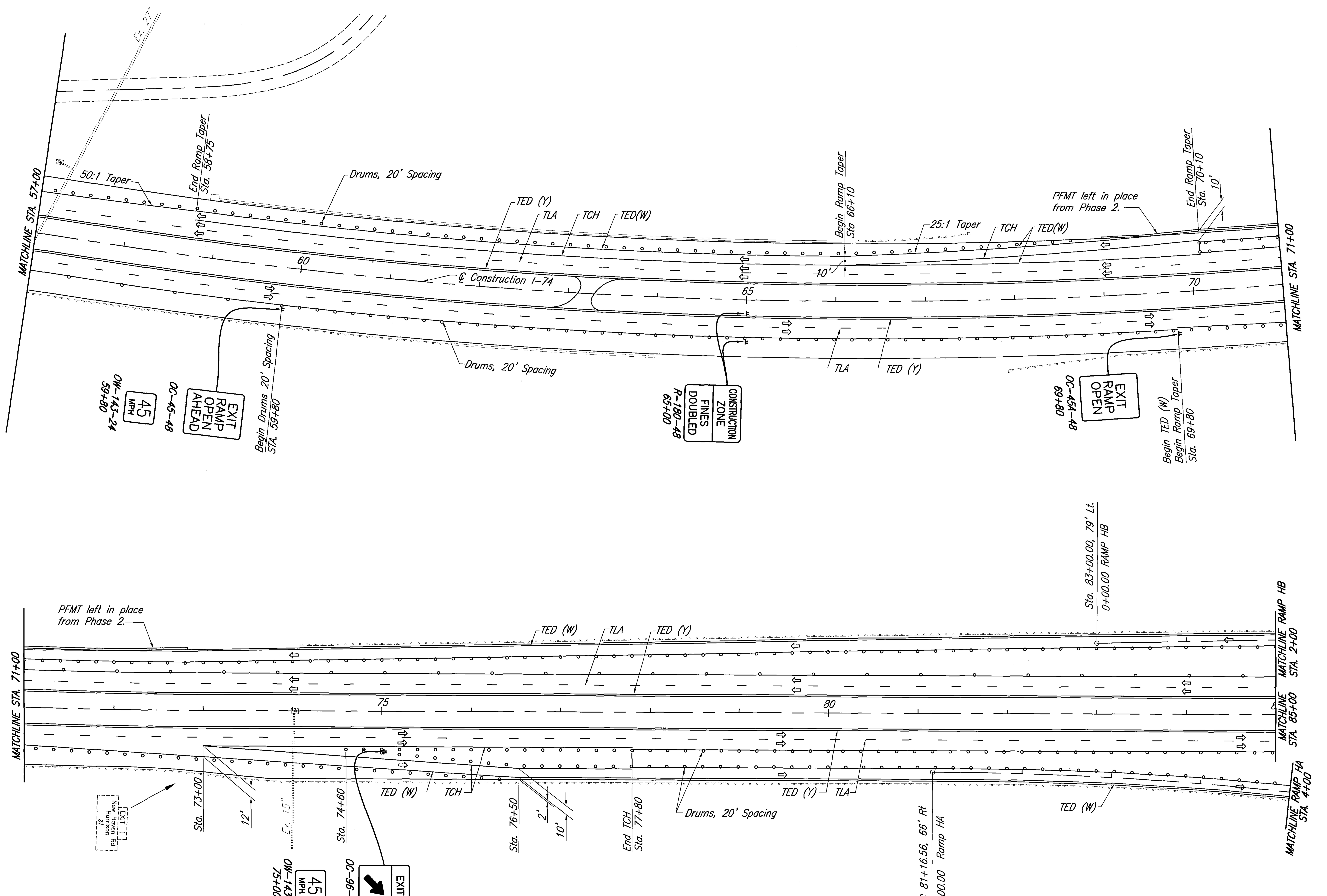
STA. 57+00 TO STA 85+00

HAM-74-0.00

NOTES

1. For Legend, See Sheet 22.

MP103020-4-A.DWG 10 DEC 2003



NOTES

1. For Legend, See Sheet 22.

MAINTENANCE OF TRAFFIC PLAN – PHASE IV B
STA. 57+00 TO STA 85+00

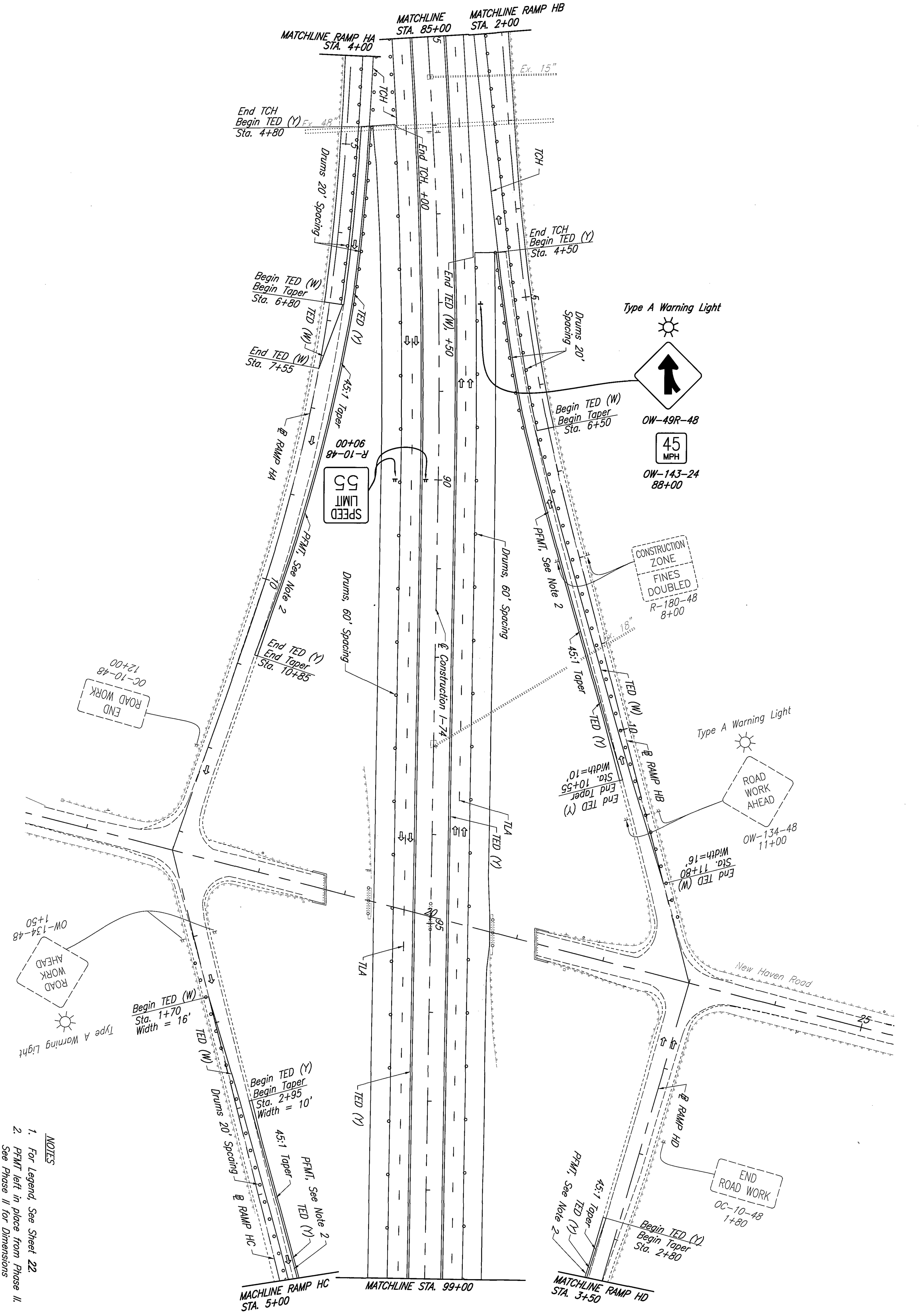
HAM-74-0.00

CALCULATED JNR
CHECKED REF

HORIZONTAL SCALE IN FEET
0 25 50 100

MP103020-4-B.DWG 10 DEC 2003

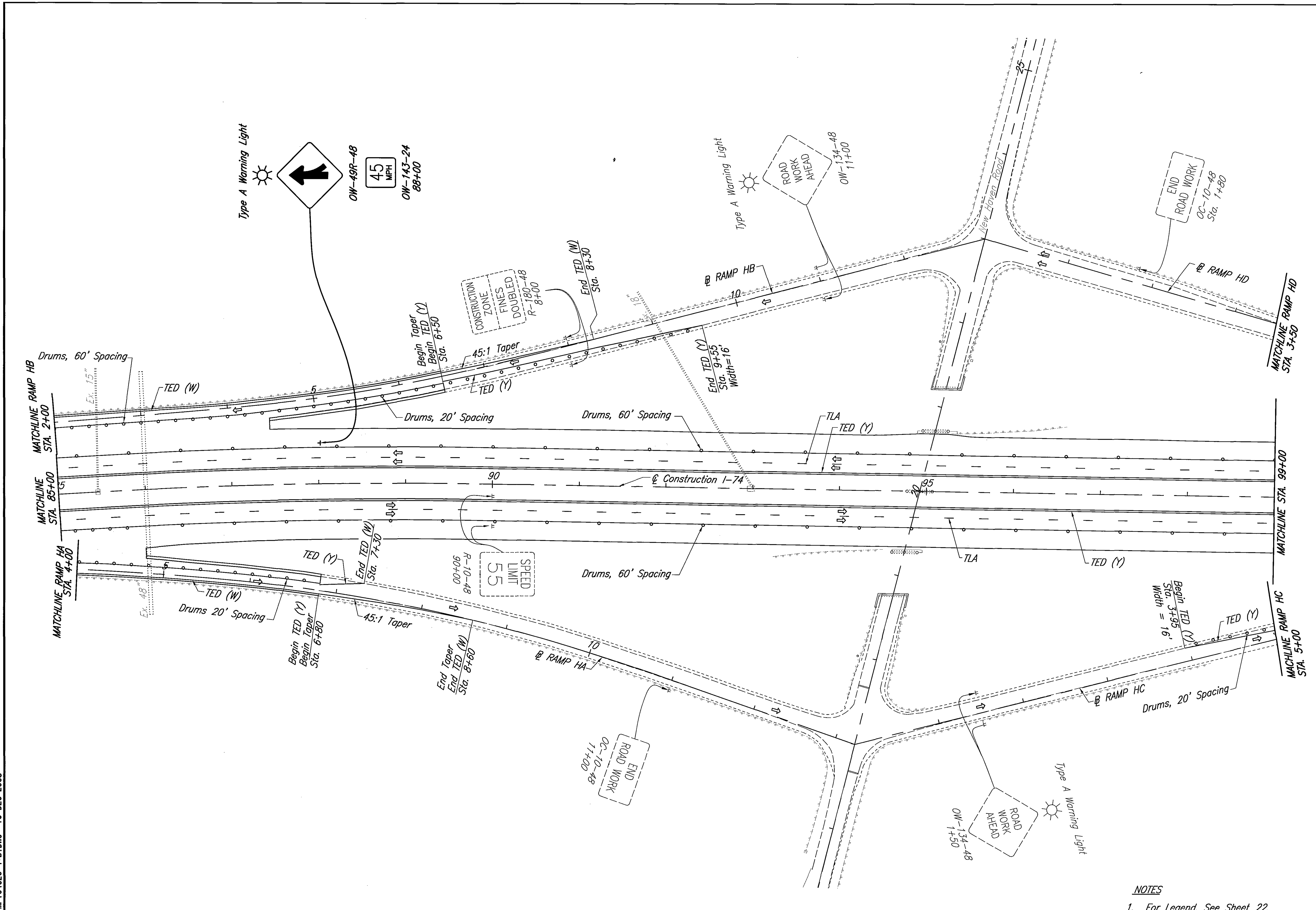
MP104020-4-A.DWG 10 DEC 2003



NOTES

1. For Legend, See Sheet 22.
2. PFMT left in place from Phase II. See Phase II for Dimensions

91 / 421	HAM-74-0.00	MAINTENANCE OF TRAFFIC PLAN – PHASE IV A STA. 85+00 TO STA 99+00	CALCULATED JNR CHECKED REF	0 25 50 100 HORIZONTAL SCALE IN FEET



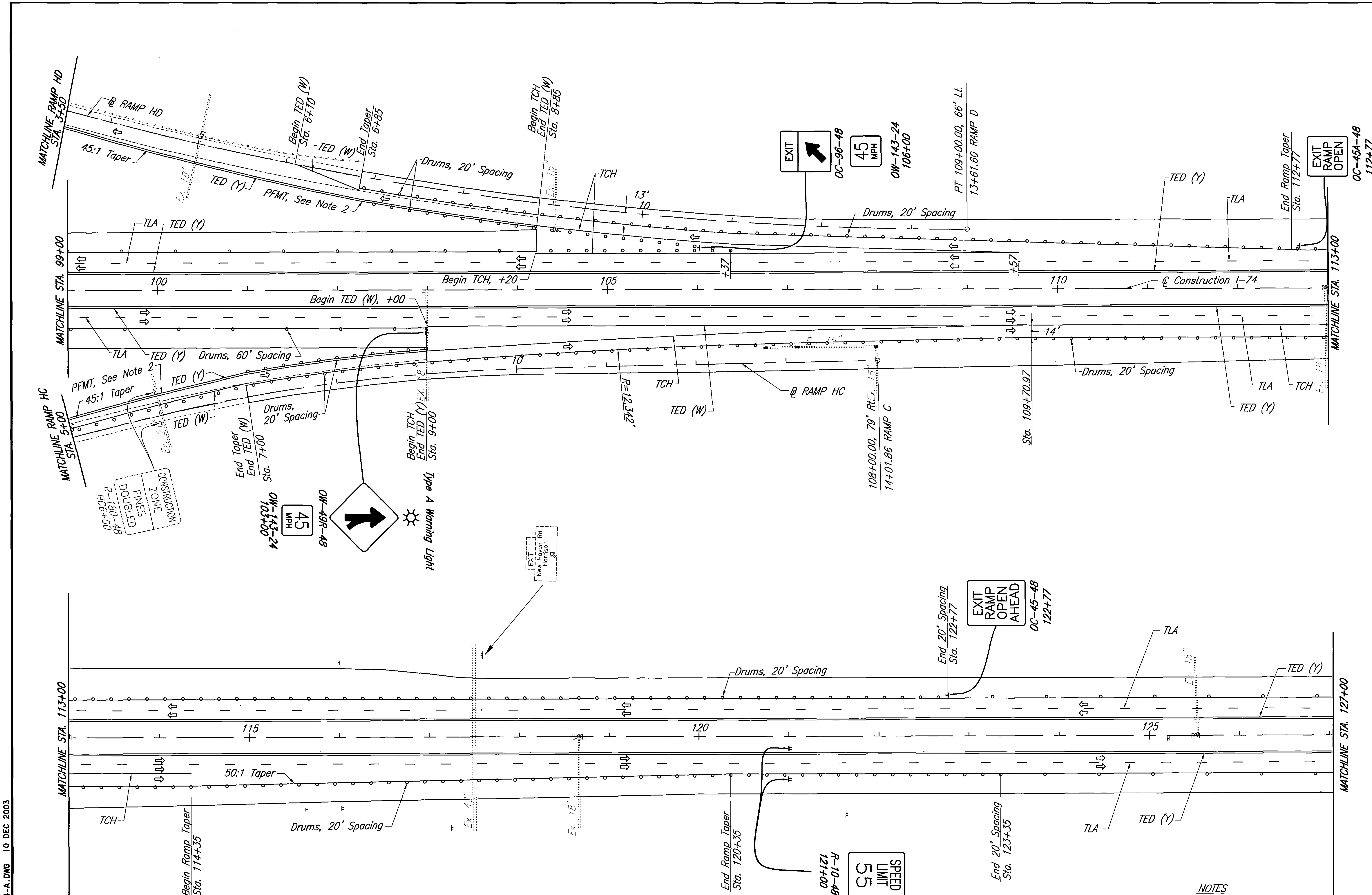
HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JNR
CHECKED REF

MAINTENANCE OF TRAFFIC PLAN - PHASE IV B
STA. 85+00 TO STA 99+00

HAM-74-0.00

MP104020-4-B.DWG 10 DEC 2003



NOTES

1. For Legend, See Sheet 22.
2. PFMT left in place from Phase II. See Phase II for Dimensions.

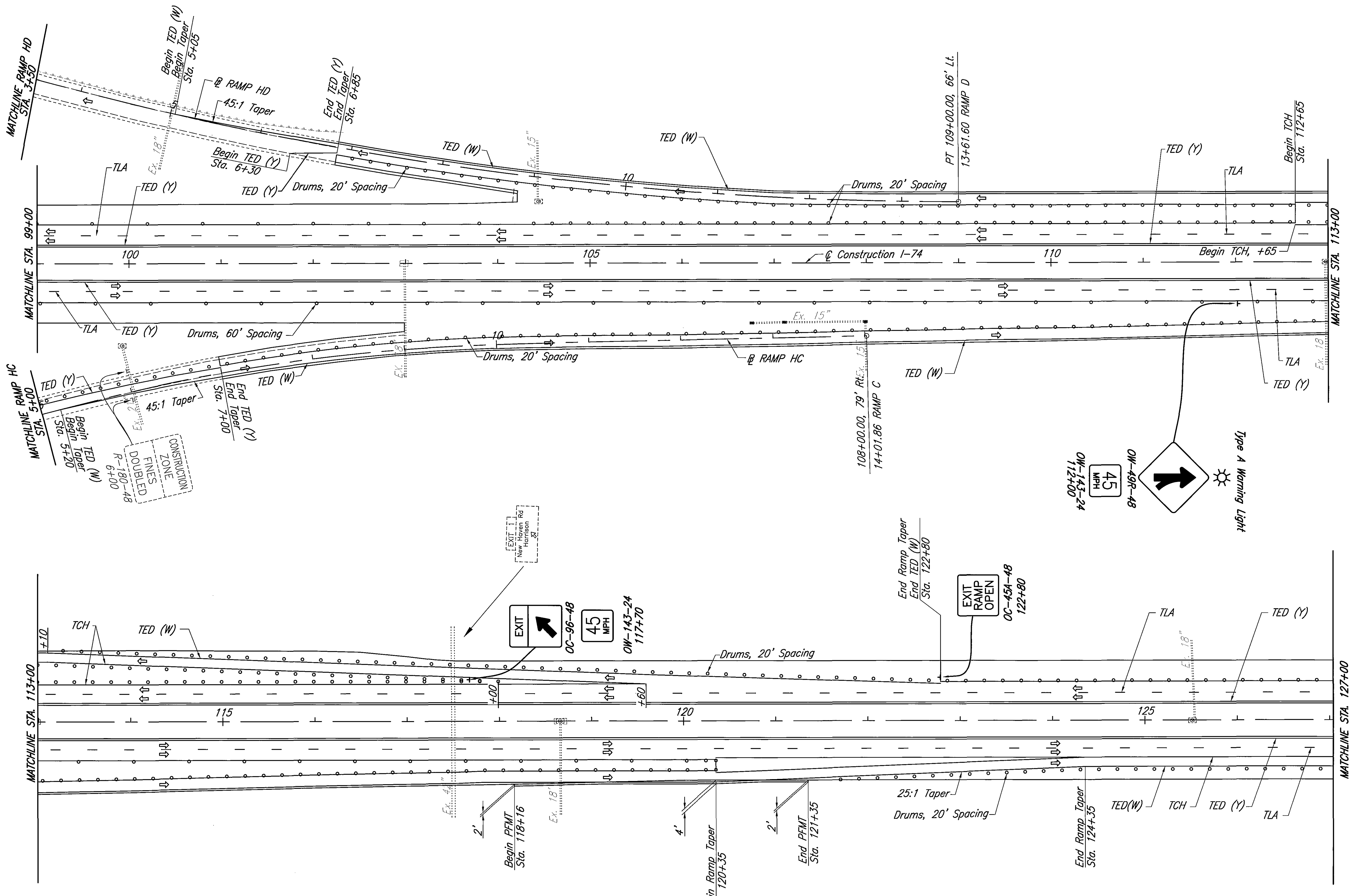
HORIZONTAL SCALE IN FEET 0 25 50 100

CALCULATED JNR
CHECKED REF

MAINTENANCE OF TRAFFIC PLAN – PHASE IV A
STA. 99+00 TO STA 127+00

HAM-74-0.00

MP105020-4-A.DWG 10 DEC 2003



NOTES

1. For Legend, See Sheet 22.

0 25 50 100
HORIZONTAL SCALE IN FEET

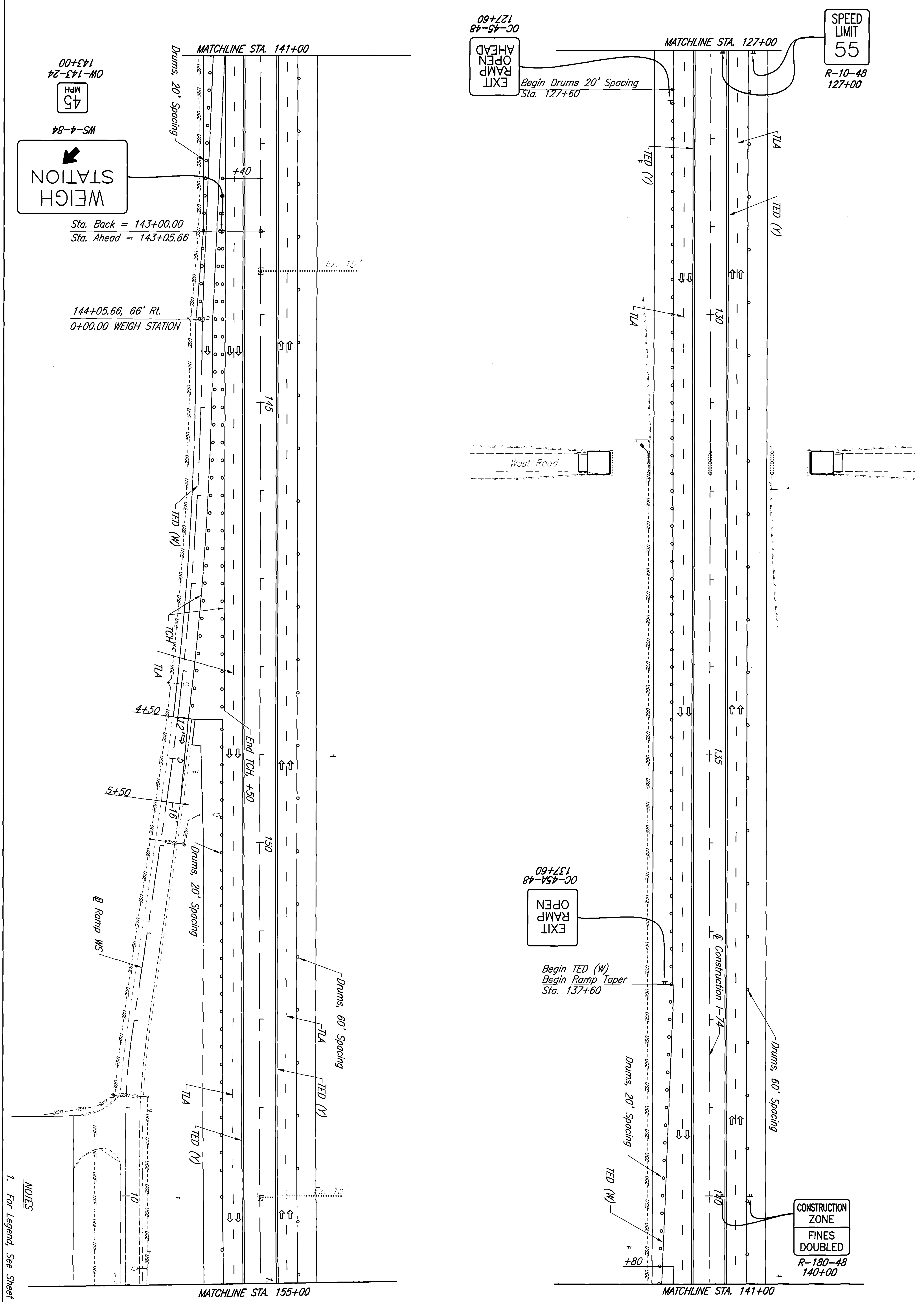
CALCULATED JNR
CHECKED REF

MAINTENANCE OF TRAFFIC PLAN – PHASE IV B
STA. 99+00 TO STA 127+00

HAM-74-0.00

MP105020-4-B.DWG 10 DEC 2003

MP106020-4-A.DWG 0 DEC 2003



NOTES

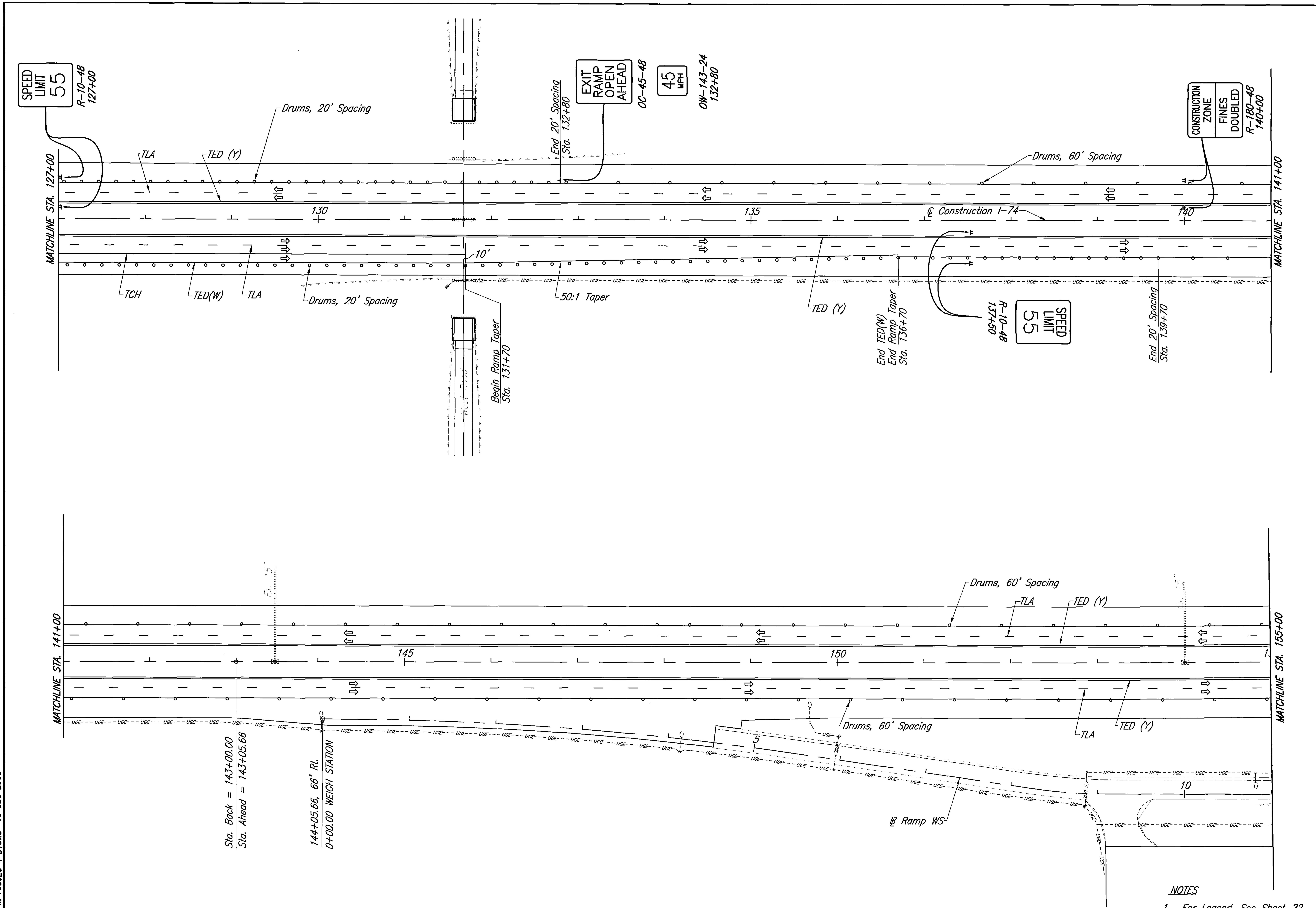
1. For Legend, See Sheet 22.

MAINTENANCE OF TRAFFIC PLAN – PHASE IV A
STA. 127+00 TO STA 155+00

HAM-74-0.00

CALCULATED	JNR
CHECKED	REF

HORIZONTAL SCALE IN FEET (0, 25, 50, 100)



NOTES

1. For Legend, See Sheet 22.

MAINTENANCE OF TRAFFIC PLAN – PHASE IV B
STA. 127+00 TO STA 155+00

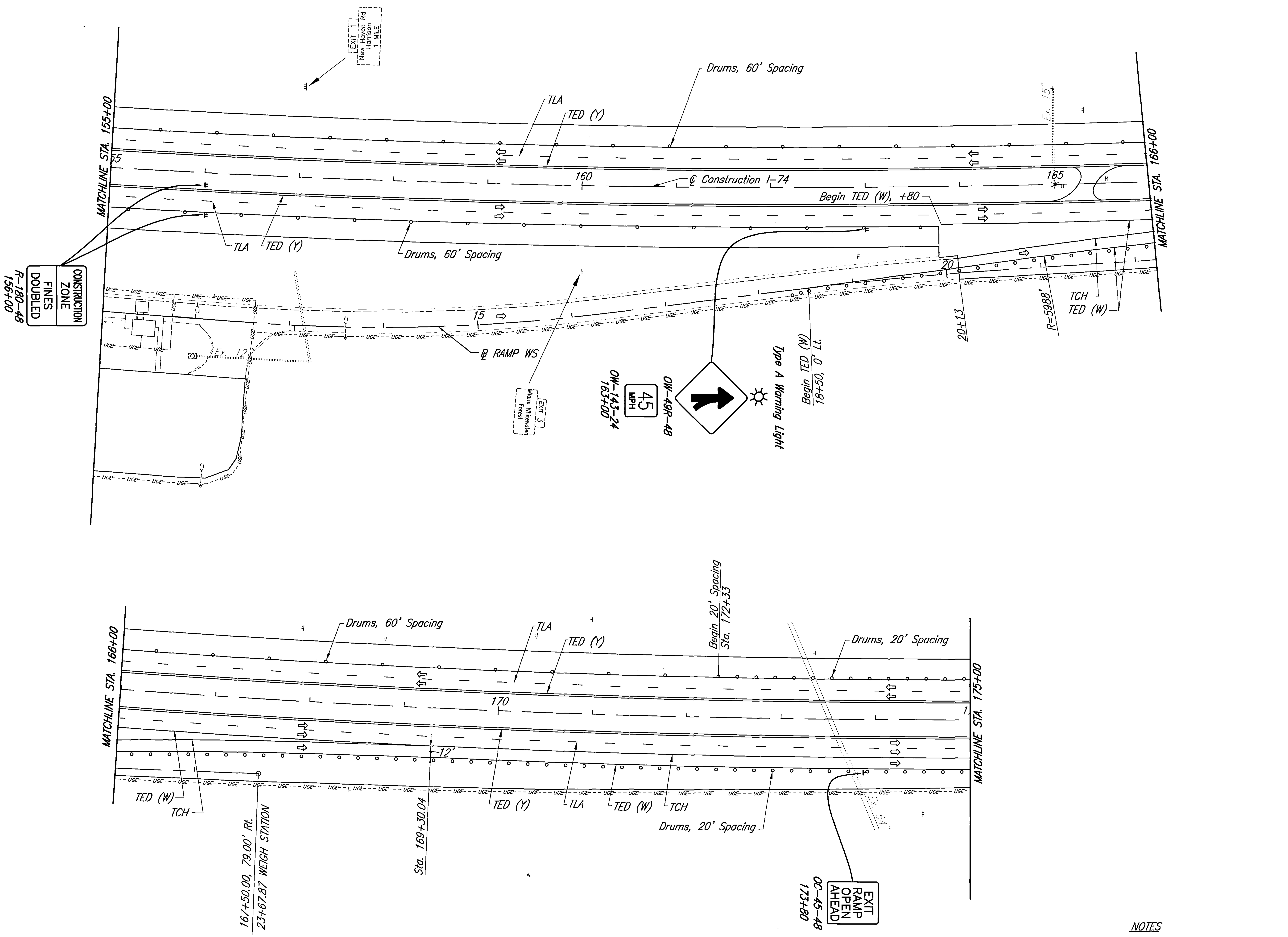
HORIZONTAL SCALE IN FEET

CALCULATED JNR
CHECKED REF

HAM-74-0.00

95A
421

MP106020-4-B.DWG 10 DEC 2003



NOTES

1. For Legend, See Sheet 22.

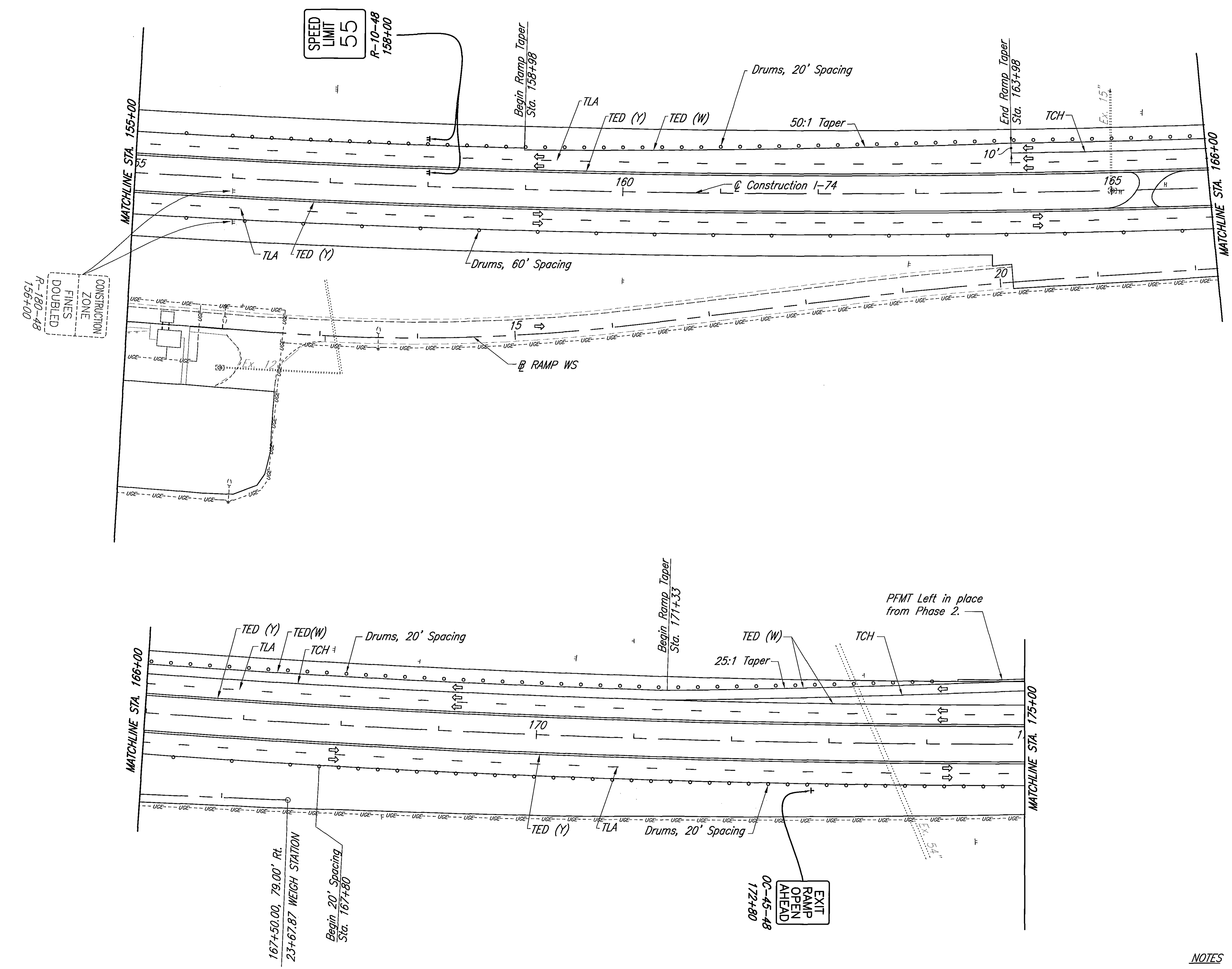
CALCULATED JNR
CHECKED REF

HORIZONTAL SCALE IN FEET 0 25 50 100

MAINTENANCE OF TRAFFIC PLAN - PHASE IV A
STA. 155+00 TO STA 175+00

HAM-74-0.00

MP107020-4-A.DWG 10 DEC 2003



NOTES

1. For Legend, See Sheet 22.

MP107020-4-B.DWG 10 DEC 2003

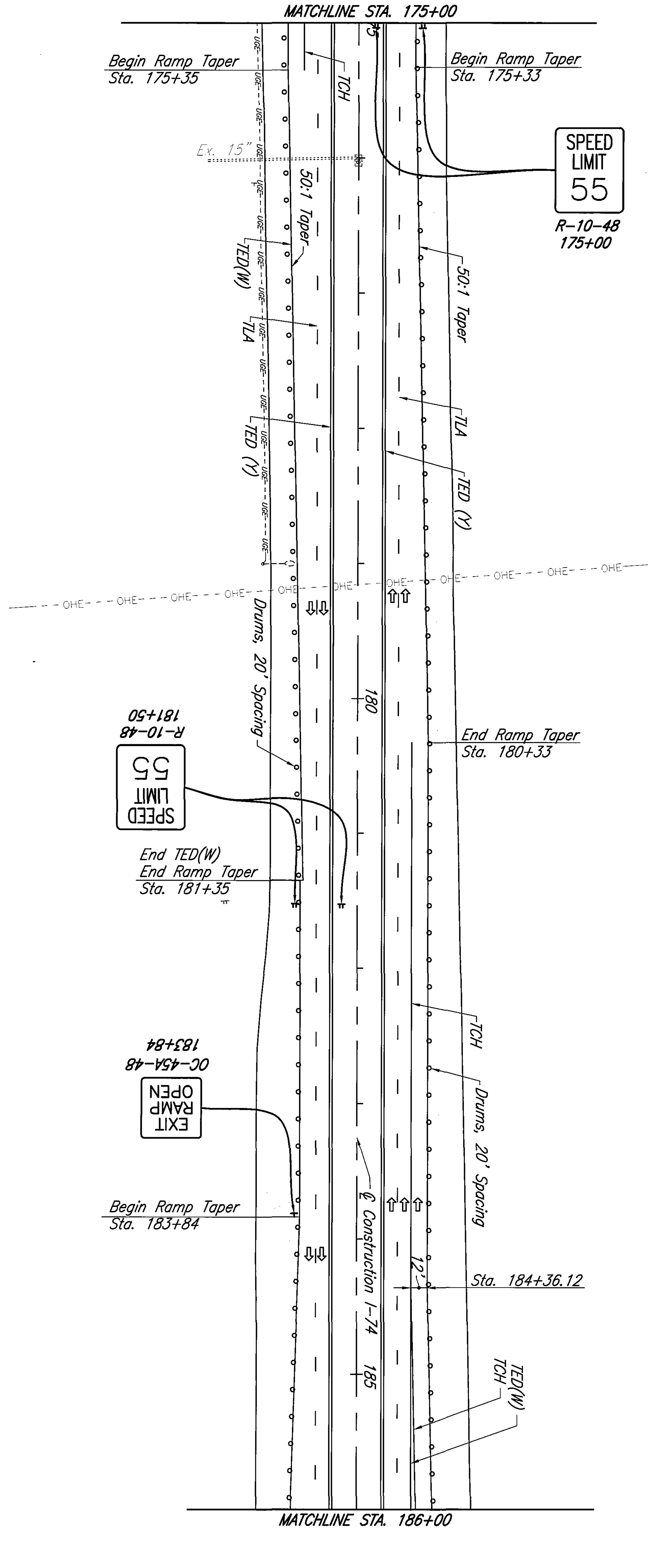
HORIZONTAL SCALE IN FEET 0 25 50 100

CALCULATED JNR CHECKED REF

MAINTENANCE OF TRAFFIC PLAN - PHASE IV B
STA. 155+00 TO STA 175+00

HAM-74-0.00

MP108020-4-A.DWG 10 DEC 2003

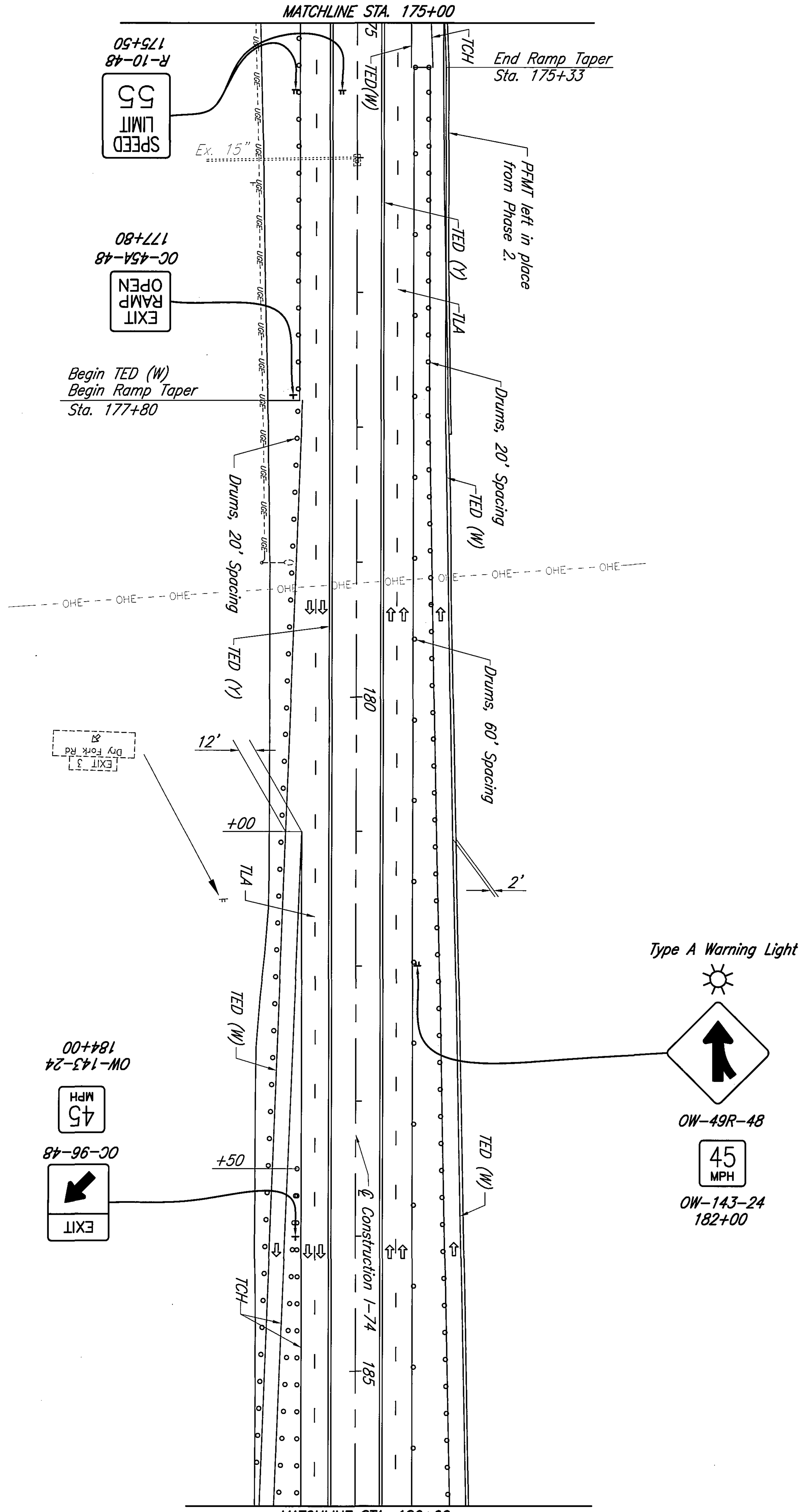


NOTES

1. For Legend, See Sheet 22.

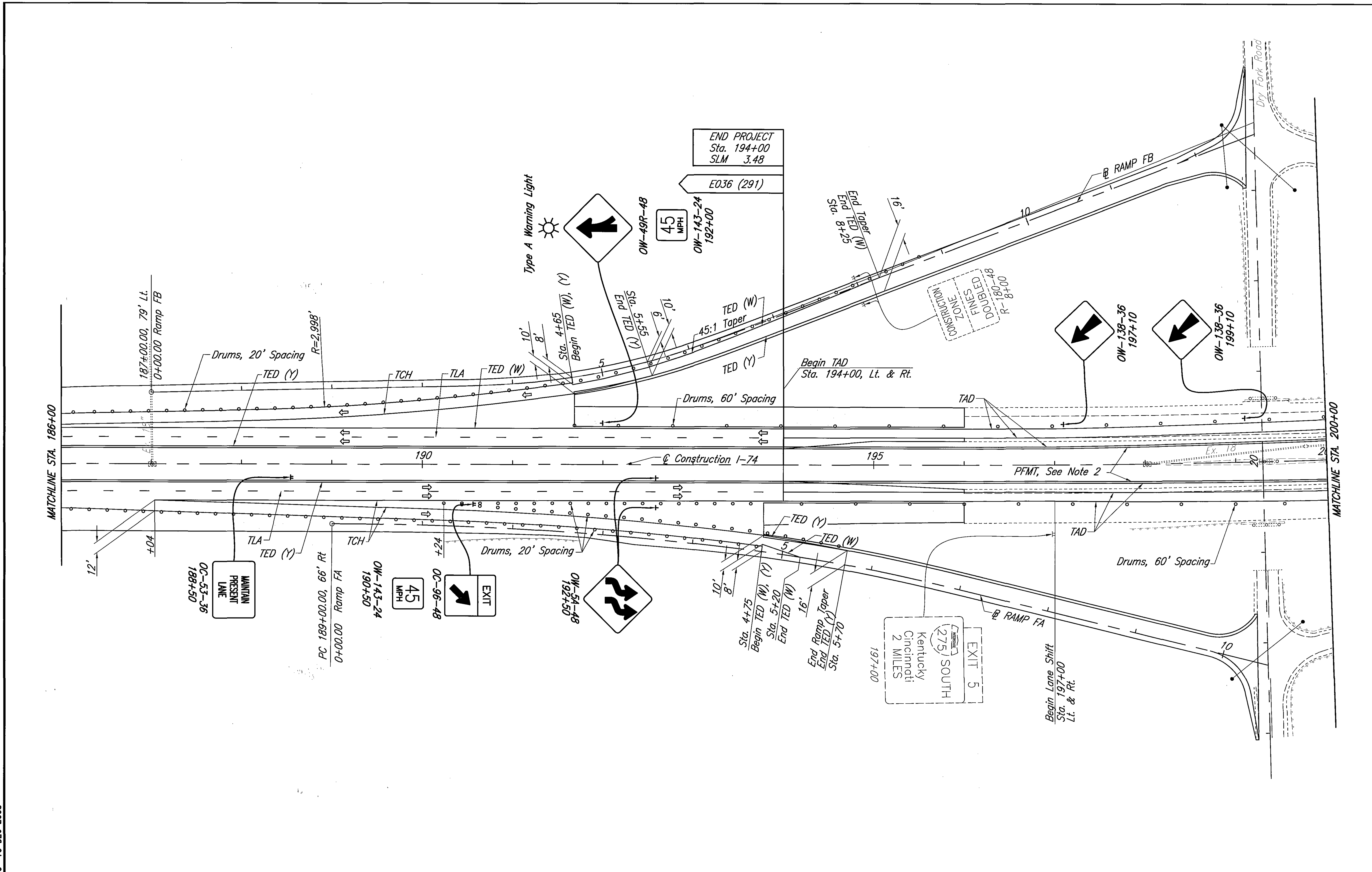
98 / 421	HAM-74-0.00	MAINTENANCE OF TRAFFIC PLAN - PHASE IV A STA. 175+00 TO STA 186+00	CALCULATED JNR CHECKED REF	0 25 50 100 HORIZONTAL SCALE IN FEET

MP108020-4-B.DWG 10 DEC 2003



NOTES
1. For Legend, See Sheet 22.

99 / 421	HAM-74-0.00	MAINTENANCE OF TRAFFIC PLAN - PHASE IV B STA. 175+00 TO STA 186+00	CALCULATED JNR CHECKED REF	HORIZONTAL SCALE IN FEET (0, 25, 50, 100)



NOTES

1. For Legend, See Sheet 22.
2. PFMT left in place from Phase II.

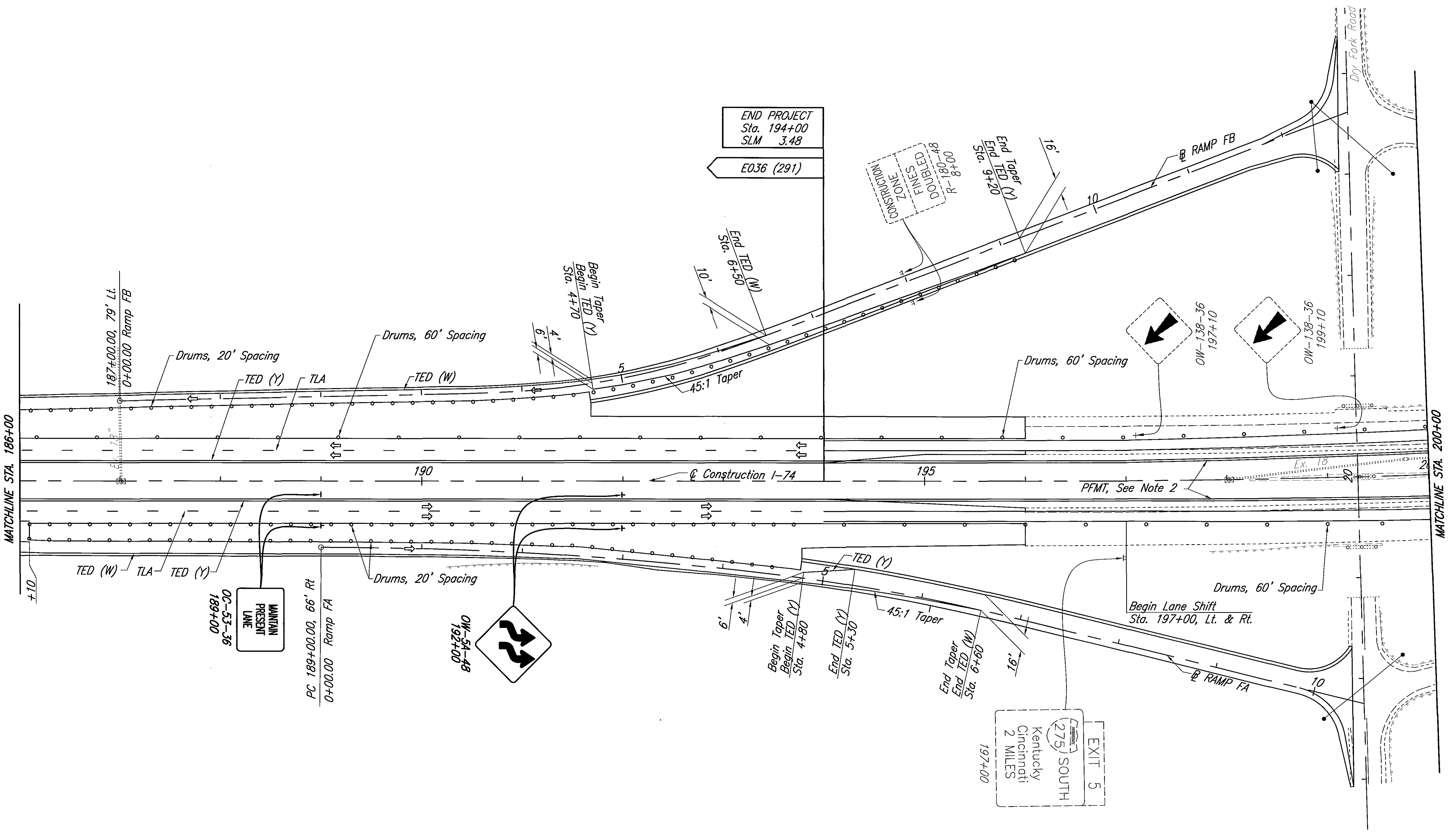
MAINTENANCE OF TRAFFIC PLAN – PHASE IV A
STA. 186+00 TO STA 200+00

HAM–74–0.00

CALCULATED JNR
CHECKED REF

HORIZONTAL SCALE IN FEET

MP109020-4-A.DWG 10 DEC 2003



NOTES

1. For Legend, See Sheet 22.
2. PFMT left in place from Phase II.

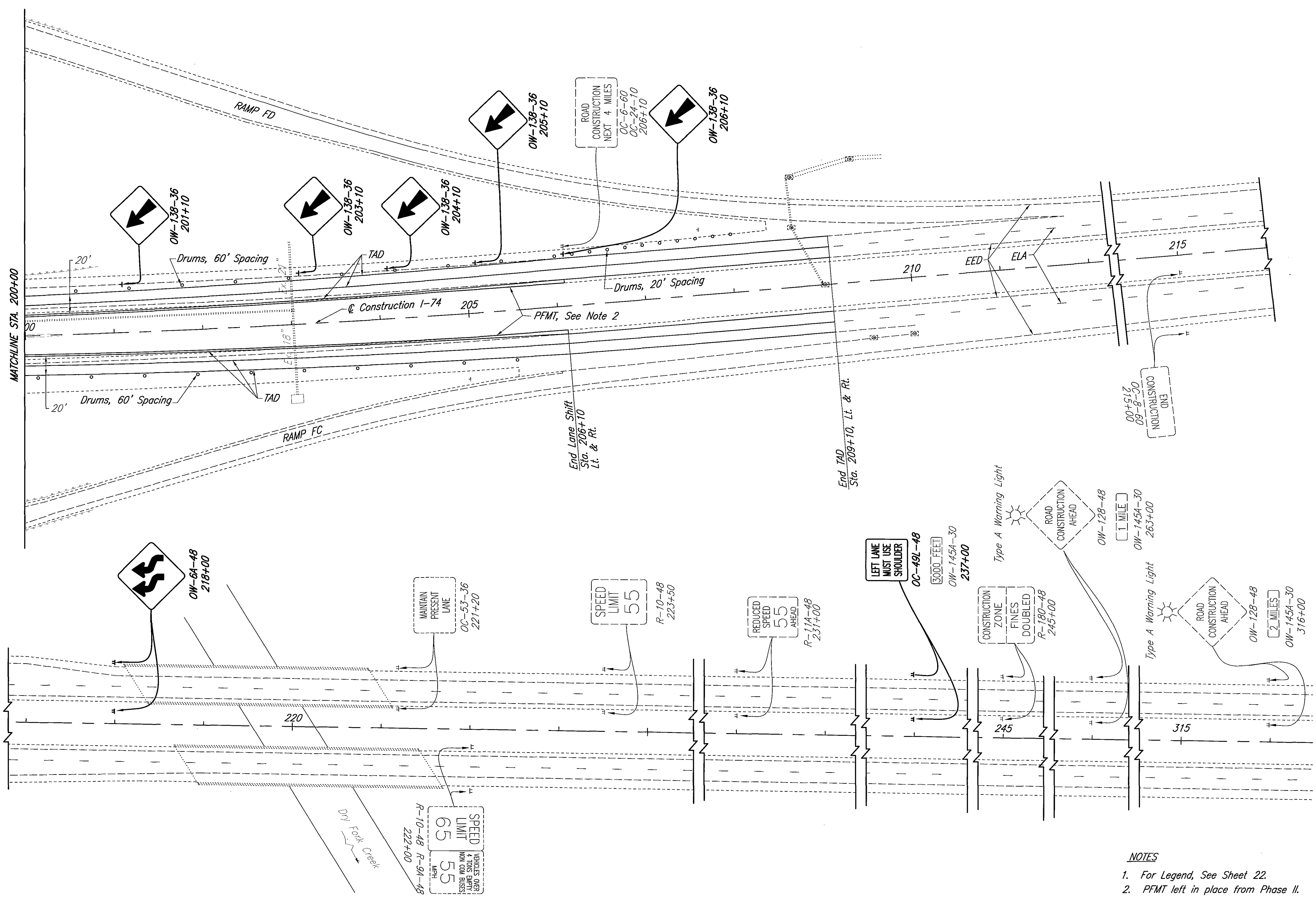
MP109020-4-B.DWG 10 DEC 2003

HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED JNR
CHECKED REF

MAINTENANCE OF TRAFFIC PLAN – PHASE IV B
STA. 186+00 TO STA 200+00

HAM-74-0.00



NOTES

1. For Legend, See Sheet 22.
2. PFMT left in place from Phase II.

MAINTENANCE OF TRAFFIC PLAN – PHASE IV
STA. 200+00 TO STA. 316+00

HAM-74-0.00

HORIZONTAL SCALE IN FEET 0 25 50 100

CALCULATED JNR
CHECKED REF

MP110020-4.DWG 10 DEC 2003

CALC'D JNR
CHK'D REF

MAINTENANCE OF TRAFFIC SUBSUMMARY

SHEET NUMBER	FROM STATION	TO STATION	SIDE	PHASE	TRANSITION AREA DELINEATION	WORK ZONE LANE LINE, CLASS I, 740.06, TYPE I	WORK ZONE LANE LINE, CLASS I, 740.06, TYPE I , SOLID	WORK ZONE EDGE LINE, CLASS I YELLOW	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I , YELLOW	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I , WHITE	WORK ZONE CHANNELIZING LINE, CLASS I, 740.06, TYPE I	REMARKS
			ITEM		614	614	614	614	614	614	614	
			UNIT		FT	MILE	MILE	MILE	MILE	MILE	FT	
86	-5+10.00	1+00.00	RT	4	610							
86	-5+10.00	1+00.00	LT	4	610							
87	10+00.00	29+00.00	RT	4		0.36			0.36			
87	1+00.00	10+00.00	RT	4	900							
87	10+00.00	29+00.00	LT	4		0.36			0.36			
87	1+00.00	10+00.00	LT	4	900							
88	29+00.00	57+00.00	RT	4A		0.53			0.53			
88	29+00.00	57+00.00	LT	4A		0.53			0.53			
88A	53+75.00	57+00.00	LT	4B						0.06		
89	57+00.00	85+00.00	RT	4A		0.53			0.53			
89	57+00.00	85+00.00	LT	4A		0.53			0.53			
89	80+60.00	4+00.00 HA	R/L	4A							457	
89	80+60.00	85+00.00	RT	4A							440	
89	76+10.00	2+00.00 HB	L/R	4A							890	
89	81+09.45	85+00.00	LT	4A						0.07		
90	57+00.00	2+00.00 HB	LT	4B						0.53		
90	69+80.00	4+00.00 HA	RT	4B						0.29		
90	58+75.00	70+10.00	LT	4B							1,135	
90	73+00.00	77+80.00	RT	4B							960	
90	66+10.00	70+10.00	LT	4B						0.08		
91	85+00.00	99+00.00	RT	4A		0.27			0.27			
91	85+00.00	86+00.00	RT	4A							100	
91	85+00.00	87+50.00	LT	4A						0.05		
91	85+00.00	99+00.00	LT	4A		0.27			0.27			
91	4+00.00 HA	4+80.00 HA	LT	4A							80	
91	4+80.00 HA	10+85.00 HA	LT	4A				0.11				
91	2+00.00 HB	4+50.00 HB	RT	4A							250	
91	6+80.00 HA	7+55.00 HA	LT	4A						0.01		
91	4+50.00 HB	10+55.00 HB	RT	4A				0.11				
91	6+50.00 HB	11+80.00 HB	RT	4A						0.10		
91	1+70.00 HC	5+00.00 HC	LT	4A						0.06		
91	2+95.00 HC	5+00.00 HC	LT	4A				0.04				
91	2+80.00 HD	3+50.00 HD	RT	4A				0.01				
92	4+00.00 HA	8+60.00 HA	RT	4B						0.09		
92	6+80.00 HA	7+30.00 HA	LT	4B					0.01			
92	2+00.00 HB	8+30.00 HB	LT	4B						0.12		
92	6+50.00 HB	9+55.00 HB	RT	4B					0.06			
92	3+95.00 HC	5+00.00 HC	LT	4B					0.02			
TOTALS TO GENERAL SUMMARY					3,020	3.38		0.27	4.93		4,312	

HAM-74-0.00

10-Dec-03 Ph4-1

MAINTENANCE OF TRAFFIC SUBSUMMARY

HAM-74-0.00

CALC'D JNR
CHK'D REF

SHEET NUMBER	FROM STATION	TO STATION	SIDE	PHASE	WORK ZONE LANE LINE, CLASS I, 740.06, TYPE I	WORK ZONE LANE LINE, CLASS I, 740.06, TYPE I, SOLID	WORK ZONE EDGE LINE, CLASS I YELLOW	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I, YELLOW	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I, WHITE	WORK ZONE CHANNELIZING LINE, CLASS I, 740.06, TYPE I	PAVEMENT FOR MAINTAINING TRAFFIC, AS PER PLAN	REMARKS
			ITEM		614	614	614	614	614	614	615	
			UNIT		MILE	MILE	MILE	MILE	MILE	FT	SQ YD	
93	99+00.00	127+00.00	RT	4A	0.53			0.53				
93	103+00.00	109+70.97	RT	4A					0.13			
93	99+00.00	127+00.00	LT	4A	0.53			0.53				
93	104+20.00	109+57.00	LT	4A						537		
93	5+00.00 HC	9+00.00 HC	LT	4A			0.08					
93	5+00.00 HC	7+00.00 HC	LT	4A					0.04			
93	9+00.00 HC	114+35.00	L/R	4A						1,137		
93	3+50.00 HD	8+85.00 HD	RT	4A			0.10					
93	6+10.00 HD	6+85.00 HD	RT	4A					0.01			
93	8+85.00 HD	109+57.00	R/L	4A						534		
94	5+20.00 HC	127+00.00	RT	4B					0.53			
94	5+00.00 HC	7+00.00 HC	LT	4B				0.04				
94	5+05.00 HD	122+80.00	LT	4B					0.42			
94	6+30.00 HD	6+85.00 HD	RT	4B				0.01				
94	112+65.00	119+60.00	LT	4B						1,390		
94	120+35.00	124+35.00	RT	4B					0.08			
94	120+35.00	127+00.00	RT	4B						665		
94	118+16.00	121+35.00	RT	4B							94	
95	127+00.00	155+00.00	RT	4A	0.53			0.53				
95	127+00.00	155+00.00	LT	4A	0.53			0.53				
95	137+60.00	4+50.00 WS	RT	4A					0.21			
95	140+80.00	4+50.00 WS	R/L	4A						770		
95	4+50.00 WS	5+50.00 WS	LT	4A				0.02				
95	140+80.00	148+50.00	RT	4A						770		
95A	127+00.00	136+70.00	RT	4B					0.18			
95A	127+00.00	131+70.00	RT	4B						470		
96	155+00.00	175+00.00	RT	4A	0.38			0.38				
96	163+80.00	169+30.04	RT	4A					0.10			
96	155+00.00	175+00.00	LT	4A	0.38			0.38				
96	18+50.00 WS	175+00.00	L/R	4A					0.24			
96	20+13.00 WS	175+00.00	L/R	4A						1,105		
97	158+98.00	175+00.00	LT	4B					0.30			
97	163+98.00	175+00.00	LT	4B						1,102		
97	171+33.00	175+00.00	LT	4B					0.07			
98	175+00.00	186+00.00	RT	4A	0.21			0.21				
98	175+00.00	186+00.00	LT	4A	0.21			0.21				
98	175+00.00	181+35.00	RT	4A					0.12			
98	175+00.00	175+35.00	RT	4A						35		
98	180+33.00	186+00.00	LT	4A						567		
98	184+36.12	186+00.00	LT	4A					0.03			
99	177+80.00	186+00.00	RT	4B					0.16			
99	181+00.00	186+00.00	RT	4B						1,000		
99	175+00.00	186+00.00	LT	4B					0.21			
99	175+00.00	175+33.00	LT	4B					0.01	33		
TOTALS TO GENERAL SUMMARY					3.30		0.18	6.21		10,115	94	

10-Dec-03 Ph4-2

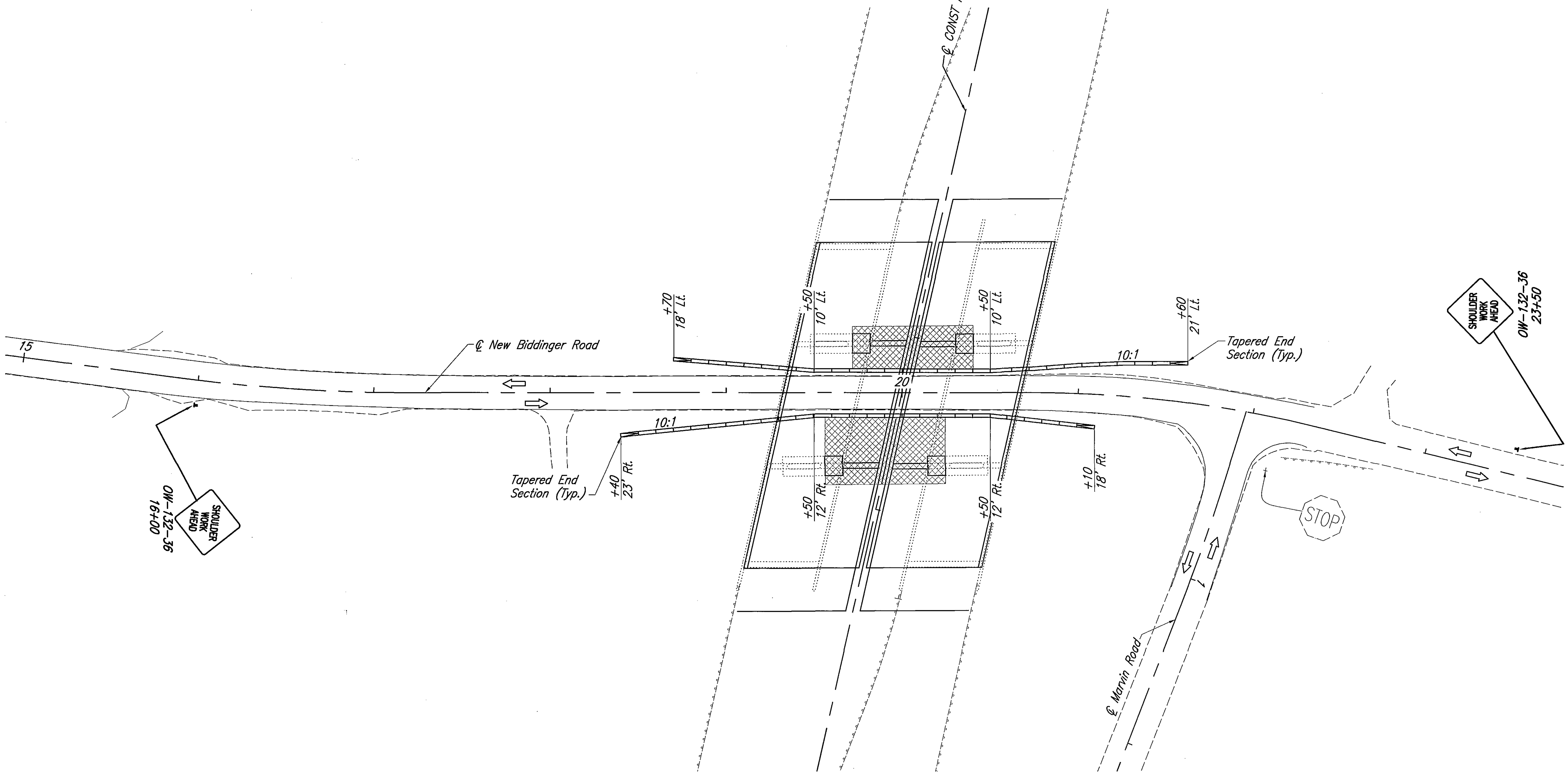
CALC'D JNR
CHK'D REF

SHEET NUMBER	FROM STATION	TO STATION	SIDE	PHASE	TRANSITION AREA DELINEATION	WORK ZONE LANE LINE, CLASS I, 740.06, TYPE I	WORK ZONE LANE LINE, CLASS I, 740.06, TYPE I, SOLID	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I, YELLOW	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I, WHITE	WORK ZONE CHANNELIZING LINE, CLASS I, 740.06, TYPE I	REMARKS
			ITEM		614	614	614	614	614	614	
			UNIT		FT	MILE	MILE	MILE	MILE	FT	
100	186+00.00	194+00.00	RT	4A		0.15		0.15			
100	187+04.00	194+00.00	RT	4A						696	
100	194+00.00	200+00.00	RT	4A	600						
100	186+00.00	194+00.00	LT	4A		0.15		0.15	0.15		
100	194+00.00	200+00.00	LT	4A	600						
100	187+04.00	4+75.00 FA	R/L	4A						671	
100	4+75.00 FA	5+70.00 FA	LT	4A				0.02			
100	4+75.00 FA	5+20.00 FA	LT	4A					0.01		
100	186+00.00	4+65.00 FB	L/R	4A						565	
100	4+65.00 FB	8+25.00 FB	RT	4A					0.07		
100	4+65.00 FB	5+55.00 FB	RT	4A				0.02			
101	186+00.00	186+10.00	RT	4B						20	
101	186+00.00	6+60.00 FA	RT	4B					0.18		
101	4+80.00 FA	5+30.00 FA	LT	4B				0.01			
101	186+00.00	6+50.00 FB	LT	4B					0.14		
101	4+70.00 FB	9+20.00 FB	RT	4B				0.09			
102	200+00.00	209+10.00	RT	4	910						
102	200+00.00	209+10.00	LT	4	910						
TOTALS TO GENERAL SUMMARY					3,020	0.30		0.99		1,952	

MAINTENANCE OF TRAFFIC SUBSUMMARY

HAM-74-0.00

10-Dec-03 Ph4-3



NOTES

1. *For Legend, See Sheet 22.*
2. *Offsets are to toe of barrier nearest traffic.*

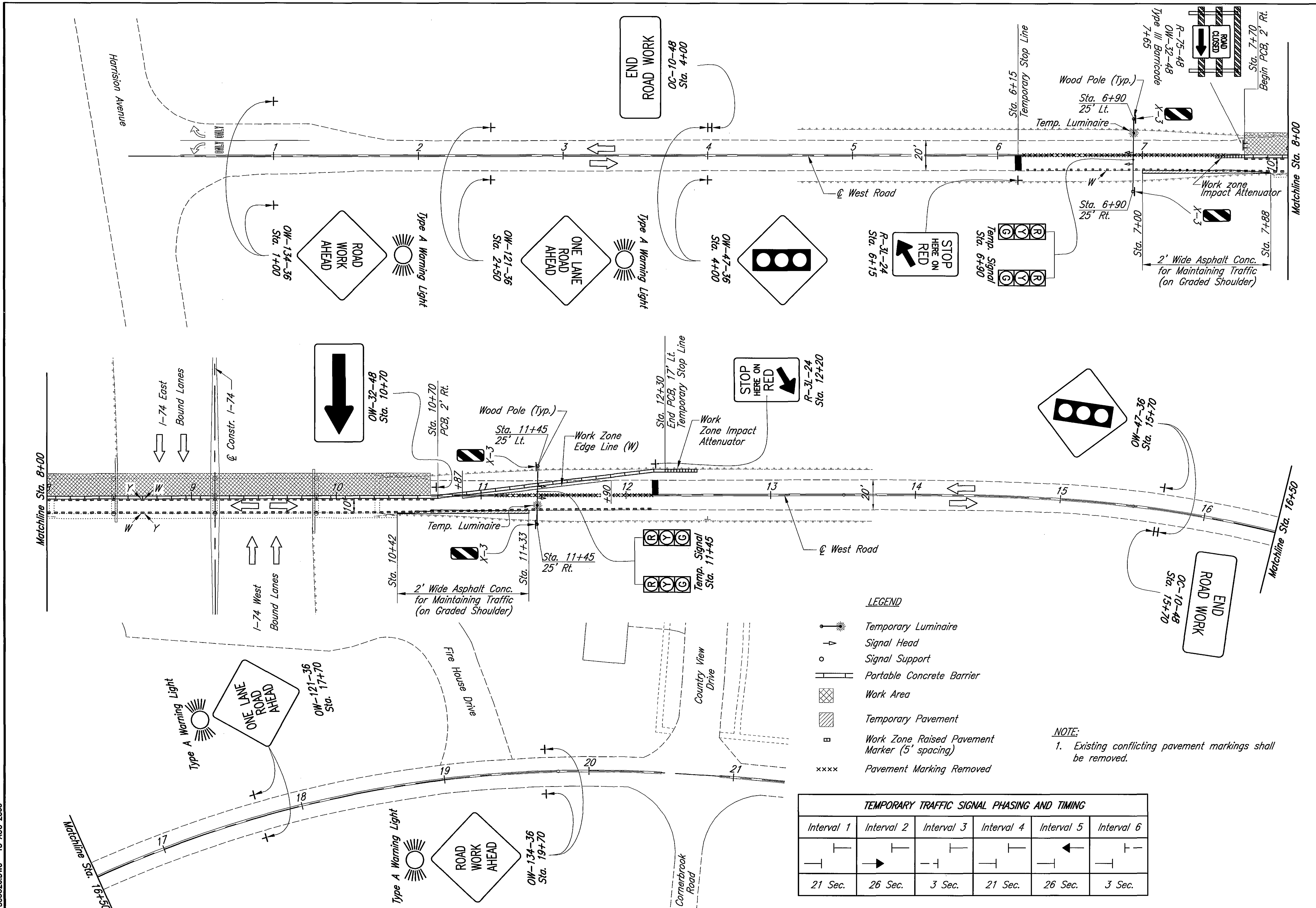
0 15 30 60
HORIZONTAL SCALE IN FEET

CALCULATED JNR
CHECKED REF

MAINTENANCE OF TRAFFIC PLAN - NEW BIDDINGER ROAD

HAM-74-0.00

MP501020.DWG 15 AUG 2003



LEGEND

- Temporary Luminaire
- Signal Head
- Signal Support
- Portable Concrete Barrier
- Work Area
- Temporary Pavement
- Work Zone Raised Pavement Marker (5' spacing)
- ×××× Pavement Marking Removed

NOTE:

1. Existing conflicting pavement markings shall be removed.

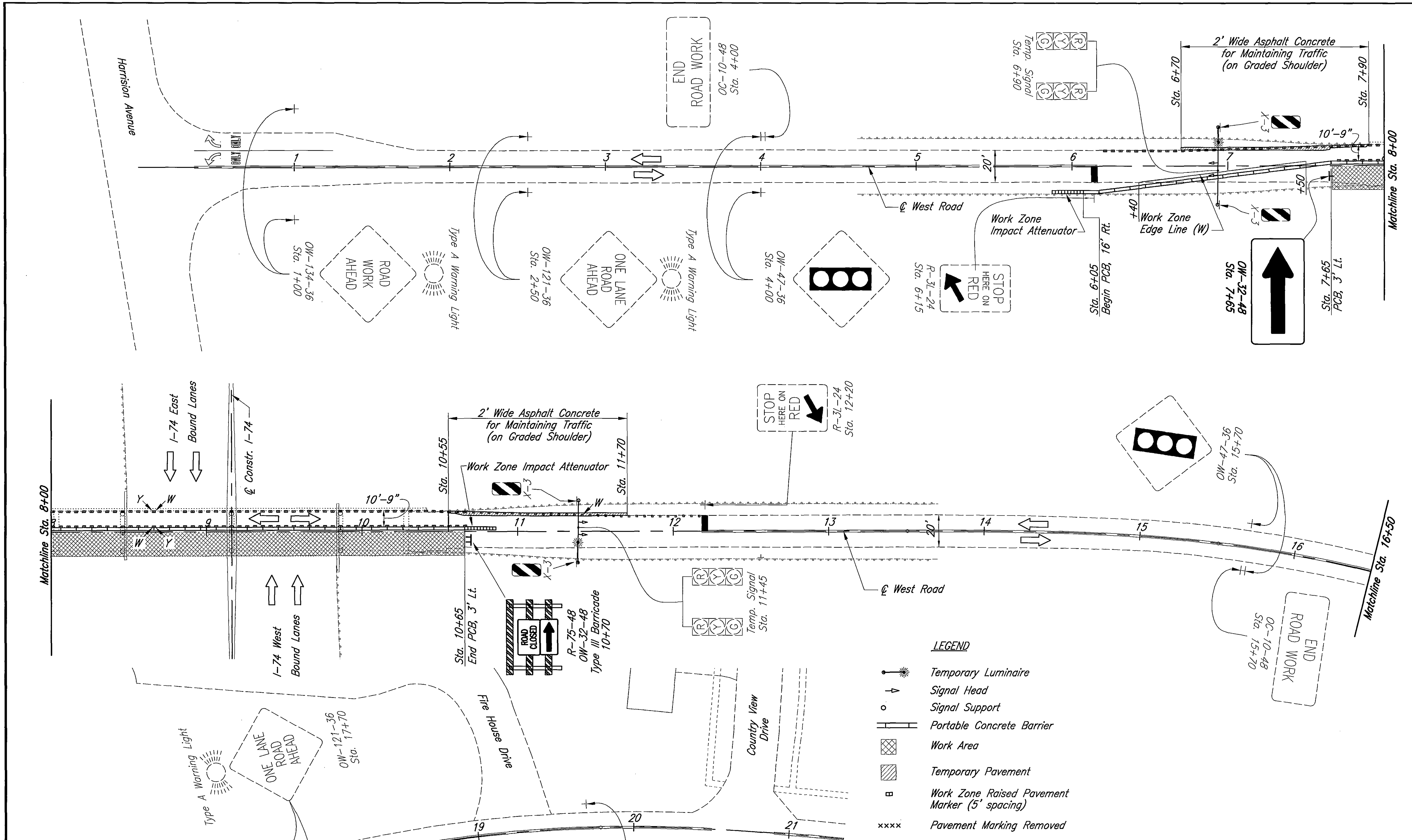
TEMPORARY TRAFFIC SIGNAL PHASING AND TIMING

Interval 1	Interval 2	Interval 3	Interval 4	Interval 5	Interval 6
21 Sec.	26 Sec.	3 Sec.	21 Sec.	26 Sec.	3 Sec.

MOT PLAN - WEST ROAD PHASE 1

HAM-74-0.00

MP503020.DWG 15 AUG 2003



TEMPORARY TRAFFIC SIGNAL PHASING AND TIMING

Interval 1	Interval 2	Interval 3	Interval 4	Interval 5	Interval 6
21 Sec.	26 Sec.	3 Sec.	21 Sec.	26 Sec.	3 Sec.

MOT PLAN – WEST ROAD
PHASE 2

HAM-74-0.00

HORIZONTAL SCALE IN FEET

CALCULATED JNR
CHECKED REF

MP504020.DWG 15 AUG 2003

CALC'D JNR
CHK'D REF

MAINTENANCE OF TRAFFIC SUBSUMMARY

SHEET NUMBER	FROM STATION	TO STATION	SIDE	PHASE	SPECIAL - WORK ZONE TRAFFIC SIGNAL	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)	WORK ZONE RAISED PAVEMENT MARKER, WHITE	WORK ZONE RAISED PAVEMENT MARKER, YELLOW	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I, YELLOW	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I, WHITE	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC, AS PER PLAN	OBJECT MARKER, TWO WAY	BARRIER REFLECTOR, TYPE B	PORTABLE CONCRETE BARRIER, 32"	REMARKS
			ITEM		614	614	614	614	614	614	614	614	614	614	622	
			UNIT		EACH	EACH	EACH	EACH	MILE	MILE	FT	CU YD	EACH	EACH	FT	
	NEW BIDDINGER ROAD															
106	18+40.00	21+10.00	RT	1-3									6	6	270	
106	18+70.00	21+60.00	LT	1-3									7	7	290	
	WEST ROAD															
107	6+15.00	6+15.00	RT	1							10					
107	6+15.00	7+65.00	RT	1			31									
107	7+65.00	10+70.00	RT	1			122	122								
107	10+70.00	12+20.00	RT	1			30	30								
107	6+90.00	11+45.00	R&L	1	1											
107	7+00.00	7+88.00	RT	1								4.3				
107	10+42.00	11+33.00	RT	1								4.5				
107	7+70.00	12+30.00	R&L	1		2							10	10	460	
107	10+87.00	11+90.00	R&L	1						0.02						
107	12+20.00	12+20.00	LT	1							10					
108	6+05.00	10+65.00	R&L	2		2							10	10	460	
108	6+15.00	7+65.00	LT	2			30	30								
108	7+65.00	10+70.00	LT	2			122	122								
108	10+70.00	12+20.00	LT	2			31									
108	6+40.00	7+50.00	R&L	2						0.02						
108	6+70.00	7+90.00	LT	2								5.9				
108	10+55.00	11+70.00	LT	2								5.7				
	TOTALS TO GENERAL SUMMARY				1	4	670		0.04		20	20.4	33	33	1,480	

HAM-74-0.00

22-Aug-03 Ph-side

CALC'D JNR
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GENERAL NOTES			PAVEMENT CALCS				MAINLINE PLAN & PROFILE				EARTH		WEST	DRAINAGE			PARTICIPATION		ITEM	ITEM EXTEN.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
15	16	17	116	117	118		146	147	148	149	114 & 115		330	337	338									
																							ROADWAY	
LUMP														LUMP					201	11000	LUMP	LUMP	CLEARING AND GRUBBING	
			4,840	4,853	2,455														202	23000	12,148	SQ YD	PAVEMENT REMOVED	
		100																	202	30000	100	SQ FT	WALK REMOVED	
							439												202	30700	439	FT	CONCRETE BARRIER REMOVED	
							23												202	35100	23	FT	PIPE REMOVED, 24" AND UNDER	
								10,955					128						202	38000	11,083	FT	GUARDRAIL REMOVED	
							7												202	58300	7	EACH	CATCH BASIN OR INLET REMOVED	
							244												SPEC	20270000	244	FT	FILL AND PLUG EXISTING CONDUIT	17
	400																		202	75000	400	FT	FENCE REMOVED	
			3,233		2,743						45,359			463					203	10000	51,798	CU YD	EXCAVATION	
											29,938								203	20000	29,938	CU YD	EMBANKMENT	
			53,315	31,571	8,667														204	10000	93,553	SQ YD	SUBGRADE COMPACTION	
50																			204	45000	50	HOUR	PROOF ROLLING	15
							550							300	25				209	10001	875	FT	DITCH CLEANOUT, AS PER PLAN	17
5																			604	40000	5	EACH	MONUMENT ASSEMBLY, REMOVED AND RESET	
								10,975.22					125.00						606	13000	11,100.22	FT	GUARDRAIL, TYPE 5	
							187.50												606	15500	188	FT	GUARDRAIL, BARRIER DESIGN, TYPE 5	
								4											606	22000	4	EACH	ANCHOR ASSEMBLY, TYPE B-98	
								10											606	22010	10	EACH	ANCHOR ASSEMBLY, TYPE E-98	
								9											606	26500	9	EACH	ANCHOR ASSEMBLY, TYPE T	
								9					4						606	35000	13	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 1	
							6												606	35004	6	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 1, BARRIER DESIGN	
								2											606	35100	2	EACH	BRIDGE TERMINAL ASSEMBLY, TYPE 2	
							6												606	60010	6	EACH	IMPACT ATTENUATOR, TYPE I-98, BIDIRECTIONAL	
	400																		607	15000	400	FT	FENCE, TYPE 47	
		100																	608	12000	100	SQ FT	5" CONCRETE WALK	
							38						49						609	24510	87	FT	CURB, TYPE 4-C	
							233												622	10060	233	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE B	
							158												622	10080	158	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE B, REINFORCED	
							280	210											622	10160	490	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D	
								117					4						626	00100	121	EACH	BARRIER REFLECTOR, TYPE A	
								12											626	00200	12	EACH	BARRIER REFLECTOR, TYPE B	
LUMP																			SPEC	69098400	LUMP	LUMP	MISC.: SOILS CONSULTANT FOR FIELD TESTING AND INSPECTION	15

GENERAL SUMMARY 1

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GENERAL NOTES						MAINLINE PLAN & PROFILE				EARTH		WEST	DRAINAGE			PARTICIPATION		ITEM	ITEM EXTEN.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
15	16	17				146	147	148	149	114 & 115		330	337	338									
																						EROSION CONTROL	
													10					601	11000	10	SQ YD	RIPRAP USING 6" REINFORCED CONCRETE SLAB	
													104					601	32000	104	CU YD	ROCK CHANNEL PROTECTION TYPE A WITH FILTER	
						4.4							142.0					601	32200	146.4	CU YD	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	
		2																659	00100	2	EACH	SOIL ANALYSIS TEST	
		17,100																659	00300	17,100	CU YD	TOPSOIL	
		22																659	20000	22	TON	COMMERCIAL FERTILIZER	
		68																659	30000	68	TON	AGRICULTURAL LIME	
										151,299								659	10000	151,299	SQ YD	SEEDING AND MULCHING	
		7,700																659	15000	7,700	SQ YD	INTER-SEEDING	
		1,046																659	35000	1,046	M GAL	WATER	
		39																659	40000	39	M SQ FT	MOWING	
						142						210						660	20000	352	SQ YD	SODDING REINFORCED	
						612							622					670	00500	1,234	SQ YD	SLOPE EROSION PROTECTION	
						8,004												670	00700	8,004	SQ YD	DITCH EROSION PROTECTION	
		1																832	10000	1	EACH	STORM WATER POLLUTION PREVENTION PLAN	
		LUMP																832	20000	10,000	EACH	EROSION CONTROL	17
																						DRAINAGE	
						0.81												602	20000	0.81	CU YD	CONCRETE MASONRY	
								343	30									603	00900	373	FT	6" CONDUIT, TYPE B	
								17	88									603	01500	105	FT	6" CONDUIT, TYPE F	
								196										603	01800	196	FT	8" CONDUIT, TYPE B	
								595	85									603	02600	680	FT	8" CONDUIT, TYPE F	
						91												603	05900	91	FT	15" CONDUIT, TYPE B	
						46												603	06100	46	FT	15" CONDUIT, TYPE C	
						14												603	07600	14	FT	18" CONDUIT, TYPE C	
														15				603	96550	15	FT	FIELD PAVING OF EXISTING PIPE, 15" CMP	
														482				603	96550	482	FT	FIELD PAVING OF EXISTING PIPE, 72" CMP	
													240					603	96550	240	FT	FIELD PAVING OF EXISTING PIPE, 108" CMP	
						2												604	01200	2	EACH	CATCH BASIN, NO. 4	
						1												604	04500	1	EACH	CATCH BASIN, NO. 2-2B	
						1												604	04501	1	EACH	CATCH BASIN, NO. 2-2B, AS PER PLAN.	17
						15												604	09000	15	EACH	CATCH BASIN ADJUSTED TO GRADE	
									4									604	36600	4	EACH	PRECAST REINFORCED CONCRETE OUTLET	
								19,403	8,509									605	11100	27,912	FT	6" SHALLOW PIPE UNDERDRAINS	
								18,971	1,496									605	13300	20,467	FT	6" UNCLASSIFIED PIPE UNDERDRAINS	
								2,485										605	13500	2,485	FT	6" ROCK CUT UNDERDRAINS	

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GENERAL SUMMARY 2

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GENERAL NOTES			PAVEMENT CALCS				MAINLINE PLAN & PROFILE							SIGNAL		PARTICIPATION		ITEM	ITEM EXTEN.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
15	16	17	116	117	118		146	147	148	149				378									
																						PAVEMENT	
			64,570	71,377	4,940			4,730										254	01000	145,617	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE	
			2,024															254	01001	2,024	SQ YD	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN	17
		8,000																255	10100	8,000	SQ YD	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS FS	
		21,000																255	20000	21,000	FT	FULL DEPTH PAVEMENT SAWING	
			8,850	8,327	427													301	46000	17,604	CU YD	ASPHALT CONCRETE BASE, PG64-22	
			16,401	9,794	1,288													302	46000	27,483	CU YD	ASPHALT CONCRETE BASE, PG64-22	
			8,847	5,196	1,450													304	20000	15,493	CU YD	AGGREGATE BASE	
			4,505	5,353	370			355										407	10000	10,583	GALLON	TACK COAT	
			5,953	5,956	499													407	14000	12,408	GALLON	TACK COAT FOR INTERMEDIATE COURSE	
					7													442	10000	7	CU YD	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446)	
			4,427	4,136	347													442	10002	8,910	CU YD	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446) WITH SUPPLEMENT 1059 WARRANTY	
			5,903	5,515	462													442	10100	11,880	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (446)	
								197										446	47010	197	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-28	
							70											452	09000	70	SQ YD	4" NON-REINFORCED CONCRETE PAVEMENT	
			675		1,330													452	15000	2,005	SQ YD	12" NON-REINFORCED CONCRETE PAVEMENT	
							53											516	13400	53	SQ FT	3/4" PREFORMED EXPANSION JOINT FILLER	
							46											518	21100	46	CU YD	POROUS BACKFILL	
		14																618	40600	14	MILE	RUMBLE STRIPS, TYPE 2 (ASPHALT CONCRETE)	
		500																819	10000	500	EACH	RETROFIT DOWEL BARS	
		2,632																850	00500	2,632	SQ YD	DIAMOND GRINDING PORTLAND CEMENT CONCRETE PAVEMENT	
																						TRAFFIC SIGNAL	
														2				632	26500	2	EACH	DETECTOR LOOP	

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GENERAL SUMMARY 3

HAM-74-0.00

CALC'D JNR
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GENERAL NOTES		PHASE 1			PHASE 2							PHASE 3			PHASE 4			SIDE	ITEM	ITEM EXTEN.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
19 & 20	21	43	44	45	65	66	67	68	69	70	71	83	84	85	103	104	105	109						
																							MAINTENANCE OF TRAFFIC	
																		1	SPEC	61411300	1	EACH	WORK ZONE TRAFFIC SIGNAL	
50																			410	11000	50	CU YD	TRAFFIC COMPACTED SURFACE, TYPE B	
420																			614	11100	420	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR	
		5,300	6,580	3,060	9,860	1,490		5,400	3,108	1,200	1,820	3,020		3,020	3,020		3,020		614	11600	49,898	FT	TRANSITION AREA DELINEATION	21
			4	2	2		1	3	1	6								4	614	12336	23	EACH	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)	
80																			614	12470	80	EACH	WORK ZONE SPEED LIMIT SIGN	
58																			614	12480	58	EACH	CONSTRUCTION ZONE/FINES DOUBLED SIGN	
	36																		614	12741	36	EACH	WORK ZONE LIGHTING SYSTEM, AS PER PLAN	21
																		670	614	12800	670	EACH	WORK ZONE RAISED PAVEMENT MARKER	
200																			614	13000	200	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
		24.3	38.4	12.8						72.4		639.7	514.5	334.6				20.4	614	13001	1,657	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC, AS PER PLAN	21
		359	227	365	91	31	92	92	128	59								33	614	13300	1,477	EACH	BARRIER REFLECTOR, TYPE B	
		359	227	365	22		34	18	54	59									614	13350	1,138	EACH	OBJECT MARKER, ONE WAY	
					69	16	30	38	37									33	614	13360	223	EACH	OBJECT MARKER, TWO WAY	
30																			614	18601	30	SGN MNTH	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	20
2.00		1.84	0.34	2.04	1.40	0.19		0.03	1.65	0.30		2.86	2.77	1.62					614	20000	17.04	MILE	WORK ZONE LANE LINE, CLASS I	
1.00		0.65		0.69	0.16							0.10			3.38	3.30	0.30		614	20200	9.58	MILE	WORK ZONE LANE LINE, CLASS I, 740.06, TYPE I	
4.00		1.84	0.34	2.41	2.69	2.80	0.30	2.52	5.03	1.80		5.51	5.78	3.09	0.27	0.18			614	22000	38.56	MILE	WORK ZONE EDGE LINE, CLASS I	
2.00		0.65	0.52	0.69	0.32	0.17	0.15	0.16		0.52		0.20			4.93	6.21	0.99	0.04	614	22200	17.55	MILE	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I	
1,200		155	295	225		4,867		3,110	4,631	1,477		317	1,654	1,125					614	23000	19,056	FT	WORK ZONE CHANNELIZING LINE, CLASS I	
800															4,312	10,115	1,952		614	23400	17,179	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 740.06, TYPE I	
20																			614	26000	20	FT	WORK ZONE STOP LINE, CLASS I	
50										95								20	614	26400	165	FT	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I	
																			615	10000	LUMP		ROADS FOR MAINTAINING TRAFFIC	
4,000		1,205	1,974	2,346	7,641	1,326	5,292	5,083	5,123	3,361	854					94			615	35001	38,299	SQ YD	PAVEMENT FOR MAINTAINING TRAFFIC, AS PER PLAN	21
304																			616	10000	304	M GAL	WATER	
1,000		17,215	10,815	17,750	2,400	765	3,150	2,490	4,505	2,450								1,480	622	40020	64,020	FT	PORTABLE CONCRETE BARRIER, 32"	
		380			380														622	40040	760	FT	PORTABLE CONCRETE BARRIER, 32", BRIDGE MOUNTED	
1,000																			614	12510	1000	SQ FT	REPLACEMENT SIGN	
300																			614	12600	300	EACH	REPLACEMENT DRUM	
12																			614	11500	12	MONTH	WORKSITE TRAFFIC SUPERVISOR	20
																							FOR TRAFFIC CONTROL GENERAL SUMMARY SEE SHEETS 340.	
																							FOR WEIGH IN MOTION GENERAL SUMMARY, SEE SHEET 380.	
																							FOR LIGHTING GENERAL SUMMARY SEE SHEET 382.	
																							FOR STRUCTURE HAM-74-0069 L/R GEN. SUMMARY SEE SHEET 391 & 392.	
																							FOR STRUCTURE HAM-74-0230 GEN. SUMMARY SEE SHEET 416.	
																			614	11000	LUMP	LUMP	MAINTAINING TRAFFIC	
																			619	16020	12	MONTH	FIELD OFFICE, TYPE C	
																			623	10001	LUMP	LUMP	CONSTRUCTION LAYOUT STAKES, AS PER PLAN	15
																			624	10000	LUMP	LUMP	MOBILIZATION	

GENERAL SUMMARY 4

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CALC'D GB
CHK'D JR

EARTHWORK SUBSUMMARY
MAINLINE I-74

SHEET NUMBER	FROM STATION	TO STATION	EXCAVATION 203 CU YD	EMBANKMENT 203 CU YD	SEEDING AND MULCHING 659 SQ YD
WESTBOUND					
150	9+50	12+00	116	117	1,027
151	12+50	14+50	147	460	1,666
152	15+00	17+00	155	397	1,458
153	17+50	19+50	166	353	1,482
154	20+00	22+50	253	398	1,559
155	23+00	24+00	108	147	598
156	24+50	27+00	215	277	1,041
157	27+50	29+00	132	237	741
158	29+50	31+50	167	292	667
159	32+00	34+00	199	167	784
160	34+50	36+50	299	159	1,451
161	37+00	39+00	186	247	1,000
162	39+50	41+50	175	328	942
163	42+00	44+00	184	232	1,158
164	44+50	46+20	200	194	799
165	48+50	49+50	81	191	528
166	50+00	51+00	213	154	1,124
167	52+00	53+50	161	98	717
168	54+00	56+00	185	203	823
169	56+50	58+50	182	240	1,189
170	59+00	60+50	153	128	573
171	61+00	62+50	172	81	512
172	63+00	64+50	227	56	512
173	65+00	66+50	165	139	531
174	67+00	68+00	117	138	556
175	68+50	70+00	167	153	775
176	70+50	72+00	165	139	628
177	72+50	74+50	234	151	1,077
178	75+00	76+00	134	110	589
179	76+50	77+00	86	95	806
180	77+50	78+50	130	128	1,030
181	79+00	80+00	130	133	728
182	80+50	81+50	132	129	567
183	82+00	83+00	131	146	528
184	83+50	84+50	132	148	581
185	85+00	86+50	183	144	719
186	87+00	89+00	214	257	916
187	89+50	91+50	277	202	1,109
188	92+00	94+50	1,657	64	1,559
189	95+00	97+00	1,954	35	1,315
190	97+50	100+00	874	39	1,595
191	100+50	103+00	281	100	1,398
192	103+50	105+50	238	107	1,094
193	106+00	108+00	236	163	1,353
194	108+50	111+00	303	270	2,086
195	111+50	113+50	261	315	1,769
196	114+00	116+00	235	297	1,784
SUBTOTAL 1			12,512	8,758	47,444

SHEET NUMBER	FROM STATION	TO STATION	EXCAVATION 203 CU YD	EMBANKMENT 203 CU YD	SEEDING AND MULCHING 659 SQ YD
197	116+50	118+00	158	485	1,614
198	118+50	120+00	148	392	1,264
199	120+50	122+00	148	400	1,289
200	122+50	124+00	156	442	1,476
201	124+50	126+50	215	469	1,504
202	127+50	129+50	976	185	1,398
203	130+00	132+00	1,527	35	1,161
204	132+50	134+50	950	220	1,280
205	135+00	136+00	402	310	1,090
206	136+50	137+50	114	318	1,078
207	138+00	139+00	121	288	1,053
208	139+50	141+00	139	390	1,322
209	141+50	143+00	143	387	1,333
210	143+50	145+00	174	303	1,325
211	145+50	147+00	136	385	1,384
212	147+50	149+00	140	378	1,391
213	149+50	151+00	139	465	1,497
214	151+50	153+00	133	618	1,523
215	153+50	155+00	145	562	1,455
216	155+50	157+00	151	252	1,183
217	157+50	159+00	149	370	1,470
218	159+50	161+00	154	369	1,486
219	161+50	163+00	150	280	1,334
220	163+50	165+00	150	236	1,138
221	165+50	167+50	210	202	1,519
222	168+00	170+00	190	255	1,569
223	170+50	172+00	161	183	1,261
224	172+50	174+00	151	449	1,509
225	174+50	176+00	149	242	1,262
226	176+50	179+00	299	280	1,973
227	179+50	182+00	222	200	1,028
228	182+50	185+00	222	182	1,070
229	185+50	187+50	181	160	780
230	188+00	190+00	185	150	735
231	190+50	192+50	192	136	857
232	193+00	195+50	193	207	1,092
233	196+00	196+50	22	15	106
SUBTOTAL 2			9,195	11,200	46,809
SUBTOTAL 1			12,512	8,758	47,444
MAINLINE TOTAL* (WB)			**21,707**	**19,958**	**94,253**

SHEET NUMBER	FROM STATION	TO STATION	EXCAVATION 203 CU YD	EMBANKMENT 203 CU YD	SEEDING AND MULCHING 659 SQ YD
EASTBOUND					
234	9+50	11+50	111	135	647
235	12+00	14+00	181	272	891
236	14+50	16+50	175	232	942
237	17+00	19+00	173	147	697
238	19+50	21+50	196	104	572
239	22+00	23+50	160	100	494
240	24+00	25+00	117	72	369
241	25+50	27+50	195	116	586
242	28+00	30+00	188	142	659
243	30+50	32+50	201	111	765
244	33+00	35+00	192	117	689
245	35+50	37+50	196	85	582
246	38+00	40+00	199	133	558
247	40+50	42+50	179	248	759
248	43+00	44+50	153	212	938
249	45+00	46+20	132	131	736
250	48+50	50+00	553	22	275
251	50+50	51+50	434	1	287
252	52+00	52+50	237	0	186
253	53+00	53+50	225	6	188
254	54+00	55+00	524	47	300
255	55+00	56+50	492	55	318
256	57+00	58+00	401	88	314
257	58+50	60+00	145	97	477
258	60+50	62+00	150	81	486
259	62+50	64+00	183	33	288
260	64+50	65+50	122	71	564
261	66+00	67+00	106	111	647
262	67+50	69+00	147	124	655
263	69+50	71+50	183	145	675
264	72+00	73+00	112	86	397
265	73+50	74+00	85	53	264
266	74+50	76+50	223	100	591
267	77+00	79+00	219	107	579
268	79+50	81+50	211	136	567
269	82+00	83+50	175	122	661
270	84+00	85+00	132	93	489
271	85+50	87+00	187	83	461
272	87+50	89+50	215	160	844
273	90+00	92+00	243	95	903
274	92+50	94+50	1,306	45	1,060
275	95+00	97+50	1,952	43	1,250
276	98+00	100+50	705	46	1,319
277	101+00	103+00	231	69	670
278	103+50	105+50	236	53	473
279	106+00	01+08	230	70	459
280	108+50	111+00	276	92	555
SUBTOTAL 3			12,275	3,629	23,474

SHEET NUMBER	FROM STATION	TO STATION	EXCAVATION 203 CU YD	EMBANKMENT 203 CU YD	SEEDING AND MULCHING 203 SQ YD
281	111+50	113+00	185	72	441
282	113+50	115+00	179	84	555
283	115+50	117+00	180	130	761
284	117+50	119+00	134	204	889
285	119+50	121+50	175	202	909
286	122+00	124+50	240	121	550
287	125+00	127+50	379	155	573
288	128+00	130+00	952	143	937
289	130+50	132+00	1,181	28	622
290	132+50	134+00	784	115	770
291	134+50	135+50	458	220	797
292	136+00	137+00	162	210	764
293	137+50	138+50	111	191	762
294	139+00	140+00	108	211	789
295	140+00	142+00	138	343	1,126
296	142+50	144+00	150	323	1,144
297	144+50	146+00	144	219	1,056
298	146+50	148+50	165	133	708
299	149+00	151+50	198	144	592
300	152+00	154+00	172	116	509
301	154+50	156+50	173	103	569
302	157+00	159+50	214	134	787
303	160+00	162+00	217	155	946
304	163+00	165+50	242	109	556
305	166+00	168+50	216	110	561
306	169+00	171+00	190	181	902
307	171+50	173+00	156	268	1,061
308	173+50	175+00	156	153	800
309	175+50	177+00	155	206	913
310	177+50	180+00	300	288	1,622
311	180+50	183+00	223	156	900
312	183+50	186+00	233	106	683
313	186+50	189+00	226	114	678
314	189+50	191+50	189	103	558
315	192+00	194+50	227	125	671
316	195+00	196+00	85	40	375
SUBTOTAL 4			9,397	5,715	27,836
SUBTOTAL 3			12,275	3,629	23,474
MAINLINE TOTAL* (EB)			**21,672**	**9,344**	**51,310**
MAINLINE TOTAL* (WB)			**21,707**	**19,958**	**94,253**
MAINLINE TOTAL*			**43,379**	**29,302**	**145,563**

*Note: Totals carried to General Summary

HAM-74-0.00

CALC'D GB
CHK'D JR

EARTHWORK SUBSUMMARY
I-74 RAMPS

SHEET NUMBER	FROM STATION	TO STATION	EXCAVATION 203 CU YD	EMBANKMENT 203 CU YD	SEEDING AND MULCHING 659 SQ YD	
		RAMP HA				
317	4+50	5+50		11	88	
318	6+00	6+80		19	226	
		RAMP HB				
319	4+47.12	6+50		29	302	
		RAMP HC				
320	7+00	9+01.14		38	348	
		RAMP HD				
321	6+83	8+83.96		55	398	
		RAMP FA				
322	4+77.33	6+50	205	113	664	
323	7+00	9+00	384	171	1094	
324	9+50	10+39.44	240	20	304	
SUBTOTAL			829	456	3424	

SHEET NUMBER	FROM STATION	TO STATION	EXCAVATION 203 CU YD	EMBANKMENT 203 CU YD	SEEDING AND MULCHING 659 SQ YD	
		RAMP FB				
325	4+44.13	6+50	190	79	524	
326	6+97.48	9+50	423	44	1015	
327	10+00	12+00	408	51	689	
328	12+50	12+58.69	130	6	84	
SUBTOTAL			1151	180	2312	

SHEET NUMBER	FROM STATION	TO STATION	EXCAVATION 203 CU YD	EMBANKMENT 203 CU YD	SEEDING AND MULCHING 659 SQ YD	
SUBTOTAL			0	0	0	

SHEET NUMBER	FROM STATION	TO STATION	EXCAVATION 203 CU YD	EMBANKMENT 203 CU YD	SEEDING AND MULCHING 203 SQ YD
SUBTOTAL			829	456	3424
SUBTOTAL			1151	180	2312
RAMP TOTAL*			1980	636	5736

*Note: Totals carried to General Summary

HAM-74-0.00

STATION TO STATION	SIDE	DISTANCE D	AVERAGE WIDTH W	SURFACE AREA A A=DxW	(1) 442 (1.5") 1.5A/12x27	(2) 442 (2") 2A/12x27	(3) 301 (3") 3A/12x27	(4) 302 (12") 12A/12x27	(5) 304 (6") 6A/12x27	(6) 407 0.06A/9	(7) 407 0.075A/9	(8) 204 SUBGRADE COMPACT. A/9	(9) 254 (2.5") A/9	203 EXCAVATION (SEE NOTE) 24.5A/12x27	202 PAVEMENT REMOVED Dx24/9	(18) 452 (12") 12A/12x27	(29) 254 (15.5") A/9
		FT	FT	SQ FT	CU YD	CU YD	CU YD	CU YD	CU YD	GAL	GAL	SQ YD	SQ YD	CU YD	SQ YD	CU YD	SQ YD
-2+10.00 TO 10+00.00	LT	1,210.00	10.00	12,100.00	56.02	74.69	115.77	485.49	265.15	1.23		1,590.93		1,082.71			
-2+10.00 TO 10+00.00	RT	1,210.00	10.00	12,100.00	56.02	74.69	115.77	485.49	265.15	1.23		1,590.93		1,082.71			
-2+10.00 TO 10+00.00	LT	1,210.00	4.00	4,840.00	22.41	29.88	48.55	216.60	130.71	0.61		784.26		533.73			
-2+10.00 TO 10+00.00	RT	1,210.00	4.00	4,840.00	22.41	29.88	48.55	216.60	130.71	0.61		784.26		533.73			
10+00.00 TO 11+75.00	LT	175.00	24.00	4,200.00	19.44	25.93				28.00	35.00		466.67				
10+00.00 TO 11+75.00	RT	175.00	24.00	4,200.00	19.44	25.93				28.00	35.00		466.67				
11+75.00 TO 71+00.00 *	LT	5,687.94	24.00	136,510.56	631.99	842.66	1,263.99			910.07	1,137.59		15,167.84				
11+75.00 TO 46+20.74	RT	3,445.74	24.00	82,697.76	382.86	510.48	765.72			551.32	689.15		9,188.64				
10+00.00 TO 11+00.00	RT	100.00	8.00	800.00	3.70	4.94	7.72	32.72	18.21	5.33		109.26					
10+00.00 TO 15+60.00	LT	560.00	8.00	4,480.00	20.74	27.65	43.21	183.21	101.98	29.87		611.85					
10+00.00 TO 11+75.00	LT	175.00	10.00	1,750.00	8.10	10.80				11.67	14.58		194.44				
10+00.00 TO 11+75.00	RT	175.00	10.00	1,750.00	8.10	10.80				11.67	14.58		194.44				
11+75.00 TO 39+50.00	LT	2,775.00	10.00	27,750.00	128.47	171.30	256.94			185.00	231.25		3,083.33				
11+75.00 TO 39+50.00	RT	2,775.00	10.00	27,750.00	128.47	171.30	256.94			185.00	231.25		3,083.33				
11+00.00 TO 46+20.74	RT	3,520.74	12.00	42,248.88	195.60	260.80	402.06	1,673.44	901.92	281.66		5,411.51					
15+60.00 TO 91+50.00 *	LT	7,352.94	12.00	88,235.28	408.50	544.66	839.69	3,494.92	1,883.62	588.24		11,301.74					
19+91.00 U-TURN	LT & RT	CAD AREA		954.90	4.42	5.89	9.04	37.32	19.83	6.37		130.66					
39+50.00 TO 46+20.74	RT	670.74	10.00	6,707.40	31.05	41.40	64.18	269.12	146.98	44.72		881.90					
39+50.00 TO 55+50.00 *	LT	1,362.94	10.00	13,629.40	63.10	84.13	130.40	546.86	298.67	90.86		1,792.01					
64+25.00 TO 81+16.56	RT	1,691.56	10.00	16,915.60	78.31	104.42	156.63			112.77	140.96		1,879.51				
57+75.00 TO 64+25.00	RT	650.00	10.00	6,500.00	30.09	40.12	62.19	260.80	142.44	0.66		854.63					
48+57.80 TO 50+02.00	RT	144.20	46.00	6,633.20	30.71	40.95	62.31	254.58	132.63	0.61		795.77					
50+02.00 TO 53+98.00	RT	396.00	46.00	18,216.00												674.67	2024.00
50+02.00 TO 53+98.00	RT	396.00	4.00	1,584.00					42.78			176.00					
53+98.00 TO 57+75.00	RT	377.00	46.00	17,342.00	80.29	107.05	162.90	665.57	346.75	1.61		2,080.48			1,000.00		
55+50.00 TO 83+00.00	LT	2,750.00	10.00	27,500.00	127.31	169.75	254.63			183.33	229.17		3,055.56				
57+75.00 TO 91+50.00	RT	3,375.00	12.00	40,500.00	187.50	250.00	385.42	1,604.17	864.58	270.00		5,187.50	4,500.00				
57+75 TO 72+71.92	RT	1,496.92	24.00	35,926.08	166.32	221.77	332.65			239.51	299.38		3,991.79				
63+20.00 U-TURN	LT & RT	CAD AREA		954.90	4.42	5.89	9.04	37.32	19.83	6.37		130.66					
71+00.00 TO 83+00.00	LT	1,200.00	36.50	43,800.00	202.78	270.37	405.56			292.00	365.00		4,866.67				
72+71.92 TO 73+71.92	RT	100.00	30.00	3,000.00	13.89	18.52	27.78			20.00	25.00		333.33				
73+71.92 TO 81+16.56	RT	744.64	36.00	26,807.04	124.11	165.48	248.21			178.71	223.39		2,978.56				
81+16.56 TO 85+97.30	RT	CAD AREA		22,133.22	102.47	136.62	204.94			147.55	184.44		2,459.25				
81+16.56 TO 85+97.30	RT	CAD AREA		3,882.94	17.98	23.97	35.95			25.89	32.36		431.44				
83+00.00 TO 87+45.22	LT	CAD AREA		24,263.49	112.33	149.77	224.66			161.76	202.20		2,695.94				
83+00.00 TO 87+45.22	LT	CAD AREA		3,305.89	15.31	20.41	30.61			22.04	27.55		367.32				
85+97.30 TO 91+50.00	RT	552.70	10.00	5,527.00	25.59	34.12	52.88	221.76	121.12	36.85		726.70					
87+45.22 TO 91+50.00	LT	404.78	10.00	4,047.80	18.74	24.99	38.73	162.41	88.70	26.99		532.21					
85+97.30 TO 91+50.00	RT	552.70	24.00	13,264.80	61.41	81.88	122.82			88.43	110.54		1,473.87				
87+45.22 TO 91+50.00	LT	404.78	24.00	9,714.72	44.98	59.97	89.95			64.76	80.96		1,079.41				
91+50.00 TO 98+70.00	RT	720.00	46.00	33,120.00	153.33	204.44	311.11	1,248.89	637.78	220.80		3,973.33			1,920.00		
91+50.00 TO 98+70.00	LT	720.00	46.00	33,120.00	153.33	204.44	311.11	1,248.89	637.78	220.80		3,973.33			1,920.00		
98+70.00 TO 102+98.38	RT	428.38	24.00	10,281.12	47.60	63.46	95.20			68.54	85.68		1,142.35				
98+70.00 TO 104+21.23	LT	551.23	24.00	13,229.52	61.25	81.66	122.50			88.20	110.25		1,469.95				
98+70.00 TO 102+98.38	RT	428.38	10.00	4,283.80	19.83	26.44	40.99	171.88	93.87	28.56		563.24					
98+70.00 TO 104+21.23	LT	551.23	10.00	5,512.30	25.52	34.03	52.74	221.17	120.79	36.75		724.77					
98+70.00 TO 126+70.00	RT	2,800.00	12.00	33,600.00	155.56	207.41	319.75	1,330.86	717.28	224.00		4,303.70					
98+70.00 TO 126+70.00	LT	2,800.00	12.00	33,600.00	155.56	207.41	319.75	1,330.86	717.28	224.00		4,303.70					
TOTALS (THIS SHEET)					4,427.36	5,903.15	8,849.53	16,400.94	8,846.55	5,952.91	4,505.27	53,315.34	64,570.30	3,232.89	4,840.00	674.67	2,024.00
TOTALS TO GENERAL SUMMARY					**4,427**	**5,903**	**8,850**	**16,401**	**8,847**	**5,953**	**4,505**	**53,315**	**64,570**	**3,233**	**4,840**	**675**	**2,024**

NOTE:
* SUBTRACT 237.06' FOR NEW BIDDINGER BRIDGE.
EXCAVATION QUANTITY IS FOR REMOVAL OF EXISTING SHOULDER

SHADED QUANTITIES HAVE ADDITIONAL VOLUME ADDED TO ACCOUNT FOR STEPPING AT PAVEMENT EDGE. SEE DETAIL "A" SHEET 13 FOR DIMENSIONS.

CALCULATED DAS
CHECKED JNR

PAVEMENT CALCULATIONS
SHEET 1 OF 3

HAM-74-0.00

STATION TO STATION	SIDE	DISTANCE D	AVERAGE WIDTH W	SURFACE AREA A A=DxW	① 442 (1.5") 1.5A / 12x27	② 442 (2") 2A / 12x27	③ 301 (3") 3A / 12x27	④ 302 (12") 12A / 12x27	⑤ 304 (6") 6A / 12x27	⑥ 407 0.06A / 9	⑦ 407 0.075A / 9	⑧ 204 SUBGRADE COMPACT. A / 9	⑨ 254 (2.5") A / 9	203 EXCAVATION (SEE NOTE) 24.5A / 12x27	202 PAVEMENT REMOVED Dx24 / 9
		FT	FT	SQ FT	CU YD	CU YD	CU YD	CU YD	CU YD	GAL	GAL	SQ YD	SQ YD	CU YD	SQ YD
102+98.38 TO 108+00.00	RT	CAD AREA		27,381.67	126.77	169.02	253.53			182.54	228.18		3,042.41		
102+98.38 TO 108+00.00	RT	CAD AREA		3,885.89	17.99	23.99	35.98			25.91	32.38		431.77		
104+21.23 TO 109+00.00	LT	CAD AREA		22,036.91	102.02	136.03	204.05			146.91	183.64		2,448.55		
104+21.23 TO 109+00.00	LT	CAD AREA		3,620.14	16.76	22.35	33.52			24.13	30.17		402.24		
108+00.00 TO 120+00.00	RT	1,200.00	36.50	43,800.00	202.78	270.37	405.56			292.00	365.00		4,866.67		
109+00.00 TO 116+50.00	LT	750.00	36.00	27,000.00	125.00	166.67	250.00			180.00	225.00		3,000.00		
116+50.00 TO 117+50.00	LT	100.00	30.00	3,000.00	13.89	18.52	27.78			20.00	25.00		333.33		
108+00.00 TO 120+30.00	RT	1,230.00	10.00	12,300.00	56.94	75.93	113.89			82.00	102.50		1,366.67		
109+00.00 TO 120+30.00	LT	1,130.00	10.00	11,300.00	52.31	69.75	104.63			75.33	94.17		1,255.56		
117+50.00 TO 126+70.00	LT	920.00	24.00	22,080.00	102.22	136.30	204.44			147.20	184.00		2,453.33		
120+00.00 TO 126+70.00	RT	670.00	24.00	16,080.00	74.44	99.26	148.89			107.20	134.00		1,786.67		
120+30.00 TO 126+70.00	RT	640.00	10.00	6,400.00	29.63	39.51	61.23	256.79	140.25	42.67		841.48			
120+30.00 TO 126+70.00	LT	640.00	10.00	6,400.00	29.63	39.51	61.23	256.79	140.25	42.67		841.48			
124+95.00 U-TURN	LT & RT	CAD AREA		954.90	4.42	5.89	9.04	37.32	19.83	6.37		130.66			
126+70.00 TO 135+80.00	RT	910.00	46.00	41,860.00	193.80	258.40	393.21	1,578.46	806.08	279.07		5,021.85			2,426.67
126+70.00 TO 135+80.00	LT	910.00	46.00	41,860.00	193.80	258.40	393.21	1,578.46	806.08	279.07		5,021.85			2,426.67
135+80.00 TO 194+00.00**	RT	5,814.34	12.00	69,772.08	323.02	430.69	663.98	2,763.61	1,489.48	465.15		8,936.86			
135+80.00 TO 194+00.00**	LT	5,814.34	12.00	69,772.08	323.02	430.69	663.98	2,763.61	1,489.48	465.15		8,936.86			
135+80.00 TO 143+00.00 **	RT	720.00	24.00	17,280.00	80.00	106.67	160.00			115.20	144.00		1,920.00		
135+80.00 TO 175+00.00 **	LT	3,914.34	24.00	93,944.16	434.93	579.90	869.85			626.29	782.87		10,438.24		
143+05.66 TO 144+05.66	RT	100.00	30.00	3,000.00	13.89	18.52	27.78			20.00	25.00		333.33		
135+80.00 TO 142+30.00	RT	650.00	10.00	6,500.00	30.09	40.12	62.19	260.80	142.44	43.33		854.63			
135+80.00 TO 142+30.00	LT	650.00	10.00	6,500.00	30.09	40.12	62.19	260.80	142.44	43.33		854.63			
142+30.00 TO 144+05.66**	RT	170.00	10.00	1,700.00	7.87	10.49	15.74			11.33	14.17		188.89		
142+30.00 TO 175+00.00**	LT	3,264.34	10.00	32,643.40	151.13	201.50	302.25			217.62	272.03		3,627.04		
144+05.66 TO 148+90.14	RT	CAD AREA		21,786.16	100.86	134.48	201.72			145.24	181.55		2,420.68		
144+05.66 TO 148+90.14	RT	CAD AREA		2,716.74	12.58	16.77	25.16			18.11	22.64		301.86		
148+90.14 TO 163+77.03	RT	1,486.89	24.00	35,685.36	165.21	220.28	330.42			237.90	297.38		3,965.04		
148+90.14 TO 163+77.03	RT	1,486.89	10.00	14,868.90	68.84	91.78	137.68			99.13	123.91		1,652.10		
163+77.03 TO 167+50.00	RT	CAD AREA		20,181.57	93.43	124.58	186.87			134.54	168.18		2,242.40		
163+77.03 TO 167+50.00	RT	CAD AREA		2,768.74	12.82	17.09	25.64			18.46	23.07		307.64		
165+35.00 U-TURN	LT & RT	CAD AREA		954.90	4.42	5.89	9.04	37.32	19.83	6.37		130.66			
167+50.00 TO 179+00.00	RT	1,150.00	36.50	41,975.00	194.33	259.10	388.66			279.83	349.79		4,663.89		
175+00.00 TO 187+00.00	LT	1,200.00	36.50	43,800.00	202.78	270.37	405.56			292.00	365.00		4,866.67		
175+00.00 TO 175+96.00	LT	96.00	9.00	864.00	4.00	5.33	8.00			5.76	7.20		96.00		
175+96.00 TO 187+00.00	LT	1,104.00	8.00	8,832.00	40.89	54.52	81.78			58.88	73.60		981.33		
179+00.00 TO 181+50.00	RT	250.00	24.00	6,000.00	27.78	37.04	55.56			40.00	50.00		666.67		
181+50.00 TO 182+50.00	RT	100.00	30.00	3,000.00	13.89	18.52	27.78			20.00	25.00		333.33		
167+50.00 TO 178+04.00	RT	1,054.00	8.00	8,432.00	39.04	52.05	78.07			56.21	70.27		936.89		
178+04.00 TO 179+00.00	RT	96.00	9.00	864.00	4.00	5.33	8.00			5.76	7.20		96.00		
179+00.00 TO 181+50.00	RT	250.00	10.00	2,500.00	11.57	15.43	23.15			16.67	20.83		277.78		
181+50.00 TO 182+50.00	RT	650.00	9.00	5,850.00	27.08	36.11	54.17			39.00	48.75		650.00		
182+50.00 TO 189+00.00	RT	650.00	8.00	5,200.00	24.07	32.10	48.15			34.67	43.33		577.78		
182+50.00 TO 189+00.00	RT	650.00	36.00	23,400.00	108.33	144.44	216.67			156.00	195.00		2,600.00		
187+00.00 TO 191+45.68	LT	CAD AREA		24,083.07	111.50	148.66	222.99			160.55	200.69		2,675.90		
187+00.00 TO 191+45.68	LT	CAD AREA		3,287.87	15.22	20.30	30.44			21.92	27.40		365.32		
189+00.00 TO 193+78.17	RT	CAD AREA		21,996.78	101.84	135.78	203.67			146.65	183.31		2,444.09		
189+00.00 TO 193+78.17	RT	CAD AREA		3,248.42	15.04	20.05	30.08			21.66	27.07		360.94		
TOTALS (THIS SHEET)					4,135.96	5,514.61	8,327.39	9,793.95	5,196.14	5,955.78	5,353.27	31,570.97	71,376.98		4,853.33
TOTALS TO GENERAL SUMMARY					**4,136**	**5,515**	**8,327**	**9,794**	**5,196**	**5,956**	**5,353**	**31,571**	**71,377**		**4,853**

NOTE:
EXCAVATION QUANTITY IS FOR REMOVAL OF EXISTING SHOULDER
** STATION EQUATION 143+00.00 BACK / 143+05.66 AHEAD

SHADED QUANTITIES HAVE ADDITIONAL VOLUME ADDED TO ACCOUNT FOR STEPPING AT PAVEMENT EDGE. SEE DETAIL "A" SHEET 13 FOR DIMENSIONS.

CALCULATED DAS
CHECKED JNR

PAVEMENT CALCULATIONS
SHEET 2 OF 3

HAM-74-0.00

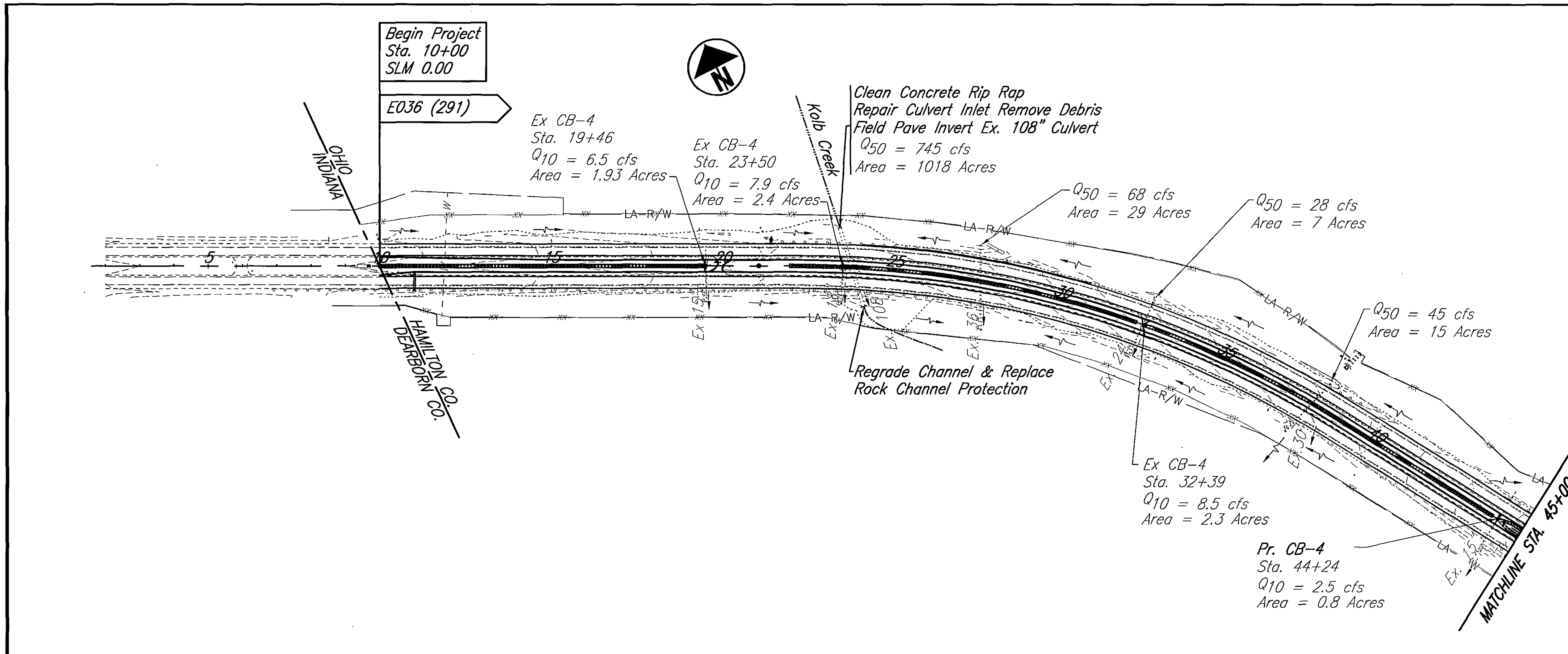
STATION TO STATION	SIDE	DISTANCE D	AVERAGE WIDTH W	SURFACE AREA A A=DxW	(1) 442 (1.5") 1.5A/12x27	(2) 442 (2") 2A/12x27	(3) 301 (3") 3A/12x27	(4) 302 (12") 12A/12x27	(5) 304 (6") 6A/12x27	(6) 407 0.06A/9	(7) 407 0.075A/9	(8) 204 SUBGRADE COMPACT. A/9	(9) 254 (2.5") A/9	203 EXCAVATION (SEE NOTE) 24.5A/12x27	(18) 452 (12") 12A/12x27	(26) 442 (1.625") 1.625A/12x27	(27) 304 (8") 8A/12x27	(28) 254 (Var.) A/9	202 PAVEMENT REMOVED Dx16/9
		FT	FT	SQ FT	CU YD	CU YD	CU YD	CU YD	CU YD	GAL	GAL	SQ YD	SQ YD	CU YD	CU YD	CU YD	CU YD	SQ YD	SQ YD
193+78.17 TO 194+00.00	RT	21.83	10.00	218.30	1.01	1.35	2.02			1.46	1.82		24.26						
191+45.68 TO 194+00.00	LT	254.32	10.00	2,543.20	11.77	15.70	23.55			16.95	21.19		282.58						
193+78.17 TO 194+00.00	RT	21.83	24.00	523.92	2.43	3.23	4.85			3.49	4.37		58.21						
191+45.68 TO 194+00.00	LT	254.32	24.00	6,103.68	28.26	37.68	56.52			40.69	50.86		678.19						
194+00.00 TO 194+25.00	LT	25.00	24.00	600.00	2.78	3.70	5.56			4.00	5.00		66.67						
194+00.00 TO 194+25.00	LT	25.00	10.00	250.00	1.16	1.54	2.31			1.67	2.08		27.78						
194+00.00 TO 194+25.00	RT	25.00	24.00	600.00	2.78	3.70	5.56			4.00	5.00		66.67						
194+00.00 TO 194+25.00	RT	25.00	10.00	250.00	1.16	1.54	2.31			1.67	2.08		27.78						
194+00.00 TO 195+00.00	LT	100.00	8.00	800.00	3.70	4.94	7.72	32.72	18.21	5.33		109.26							
194+00.00 TO 196+00.00	RT	200.00	8.00	1,600.00	7.41	9.88	15.43	65.43	36.42	10.67		218.52							
194+25.00 TO 196+00.00	LT	175.00	10.00	1,750.00	8.10	10.80				11.67	14.58		194.44						
194+25.00 TO 196+00.00	LT	175.00	24.00	4,200.00	19.44	25.93				28.00	35.00		466.67						
194+25.00 TO 196+00.00	RT	175.00	10.00	1,750.00	8.10	10.80				11.67	14.58		194.44						
194+25.00 TO 196+00.00	RT	175.00	24.00	4,200.00	19.44	25.93				28.00	35.00		466.67						
196+00.00 TO 206+10.00	RT	1,010.00	4.00	4,040.00	18.70	24.94	40.52	180.80	109.10	26.93		654.63		445.51					
196+00.00 TO 206+10.00	RT	1,010.00	10.00	10,100.00	46.76	62.35	96.64	405.25	221.33	67.33		1,327.96		903.75					
195+00.00 TO 206+10.00	LT	1,110.00	4.00	4,440.00	20.56	27.41	44.54	198.70	119.91	29.60		719.44		489.62					
196+00.00 TO 206+10.00	LT	1,010.00	10.00	10,100.00	46.76	62.35	96.64	405.25	221.33	67.33		1,327.96		903.75					
RAMP HA																			
4+79.03 TO 6+80.00	LT & RT	200.97	25.00	5,024.25	23.26	31.01				33.50	41.87		558.25						
4+79.03 TO 5+05.00	LT & RT	25.97	25.00	649.25			5.51												
RAMP HB																			
4+47.12 TO 6+50.00	LT & RT	202.88	25.00	5,072.00	23.48	31.31				33.81	42.27		563.56						
4+47.12 TO 4+75.00	LT & RT	27.88	25.00	697.00			5.92												
RAMP HC																			
7+00.00 TO 9+01.14	LT & RT	201.14	25.00	5,028.50	23.28	31.04				33.52	41.90		558.72						
8+75.00 TO 9+01.14	LT & RT	26.14	25.00	653.50			5.55												
RAMP HD																			
6+83.00 TO 8+84.39	LT & RT	201.39	25.00	5,034.75	23.31	31.08				33.57	41.96		559.42						
8+58.00 TO 8+84.39	LT & RT	26.39	25.00	659.75			5.60												
RAMP FA																			
4+77.33 TO 9+83.14	LT & RT	505.81	25.00	12,645.25					252.91			1,517.43			468.34				899.22
9+83.14 TO 10+22.19	LT & RT	CAD AREA		1,112.96					23.79			142.76			41.22				107.40
RAMP FB																			
4+44.13 TO 11+58.91	LT & RT	714.78	25.00	17,869.50					357.39			2,144.34			661.83				1270.72
11+58.91 TO 12+58.69	LT & RT	CAD AREA		4,291.23					84.13			504.77			158.93				177.39
WEST ROAD																			
7+56.71 TO 7+76.96	LT & RT	CAD AREA		97.95													2.42		
7+76.96 to 8+01.96	LT & RT	25.00	26.20	655.00							5.46					3.29		72.78	
10+55.46 TO 10+75.71	LT & RT	CAD AREA		114.30													2.82		
10+30.46 TO 10+55.46	LT & RT	25.00	26.20	655.00	3.03	4.04				4.37	5.46					3.29		72.78	
TOTALS (THIS SHEET)					346.68	462.24	426.73	1,288.15	1,444.51	499.22	370.49	8,667.08	4,794.29	2,742.64	1,330.33	6.57	5.24	145.56	2,454.72
TOTALS TO GENERAL SUMMARY					**347**	**462**	**427**	**1,288**	**1,445**	**499**	**370**	**8,667**	**4,794**	**2,743**	**1,330**	**7**	**5**	**146**	**2,455**

NOTE:
EXCAVATION QUANTITY IS FOR REMOVAL OF EXISTING SHOULDER.
SHADED QUANTITIES HAVE ADDITIONAL VOLUME ADDED TO ACCOUNT FOR STEPPING AT PAVEMENT EDGE. SEE DETAIL "A" SHEET 13 FOR DIMENSIONS.
FOR RAMPS FA & FB 1' OF ADDITIONAL ITEM 304, 6" AGGREGATE BASE WAS ADDED TO EACH EDGE.

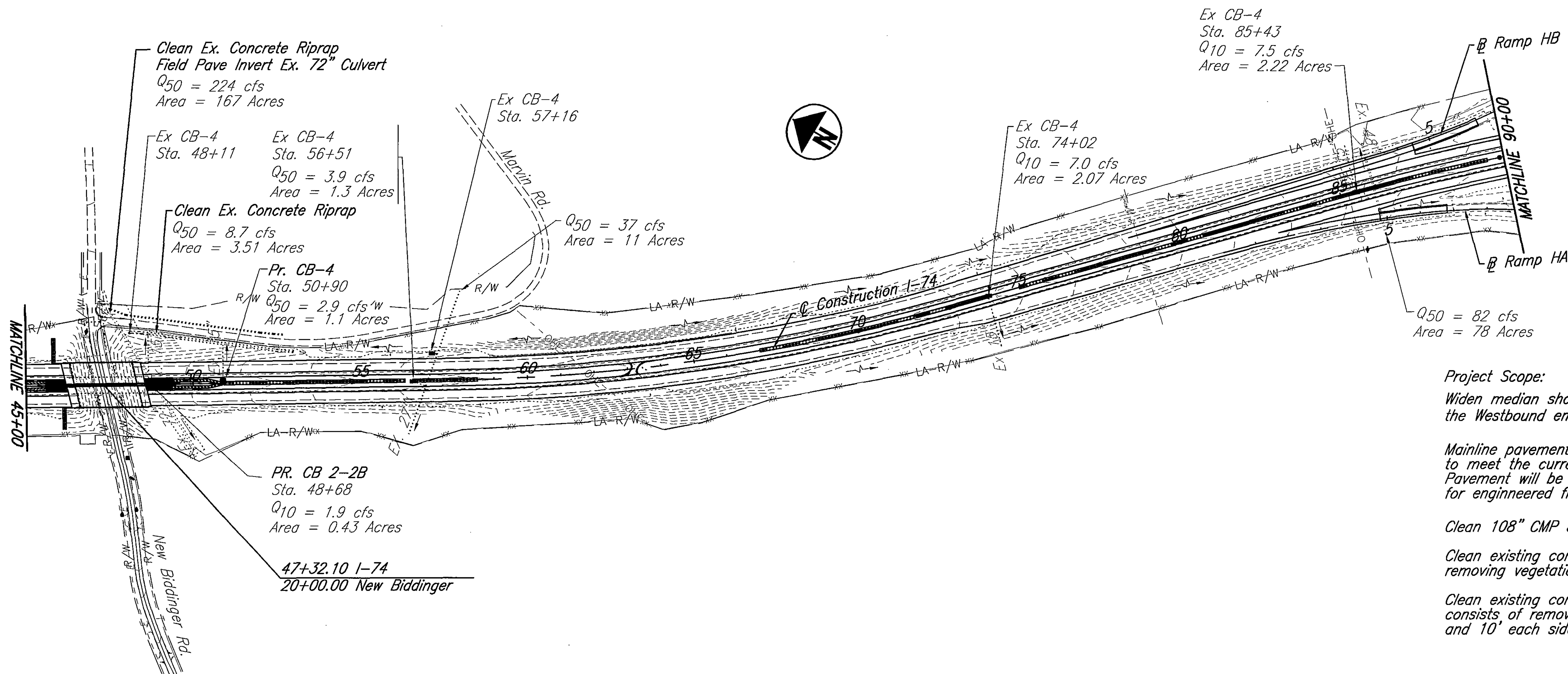
CALCULATED DAS
CHECKED JNR

PAVEMENT CALCULATIONS
SHEET 3 OF 3

HAM-74-0.00



PROJECT DATA	
Total Area of Project (Right-of-Way)	154 Acres
Project Earth Disturbed Area	45 Acres
Estimated Contractor Earth Disturbed Area	4 Acres
NOI Earth Disturbed Area	49 Acres
Runoff Coefficient for Pre-Construction Site	0.45
Runoff Coefficient for Post Construction Site	0.48
Impervious (paved) Area Pre-Construction Site	37 Acres
Impervious (paved) Area Post Construction Site	44 Acres
Soil Data	Soil Survey of Hamilton County Ohio — Photomaps 9 & 17
Immediate Receiving Waters	Kolb Creek and unnamed Trib. of Kolb Creek
Subsequent Receiving Waters	Whitewater River, Dry Fork White Water River
Latitude & Longitude	Latitude: N39°15'31" Longitude: W84°47'50"
USGS Quadrangle Maps	4062 IV SE Harrison 4062 III NE Hooven



LEGEND

- size — Existing Storm Water Conduit
- size — New Storm Water Conduit
- Construction Limit

Project Scope:

Widen median shoulder and resurface I-74 pavement, reconstruct the Westbound entrance and Eastbound exit Ramp at Dry Fork Rd.

Mainline pavement will be lowered at New Haven Road and West Road to meet the current clearance standard for Interstate highways, 16.5 feet. Pavement will be lowered eastbound from New Biddinger bridge to 57+75 for enginneered fill.

Clean 108" CMP & 72" CMP inlet & approach and field pave invert.

Clean existing concrete riprap along Marvin Road. Cleaning consists of removing vegetation, brush and trees within the riprap, and 5' each side.

Clean existing concrete riprap Sta. 21+00 to 24+00 Left. Cleaning consists of removing vegetation, brush and trees within the riprap, and 10' each side.

NOTE:
1) Existing culvert discharges were taken from previous plans.

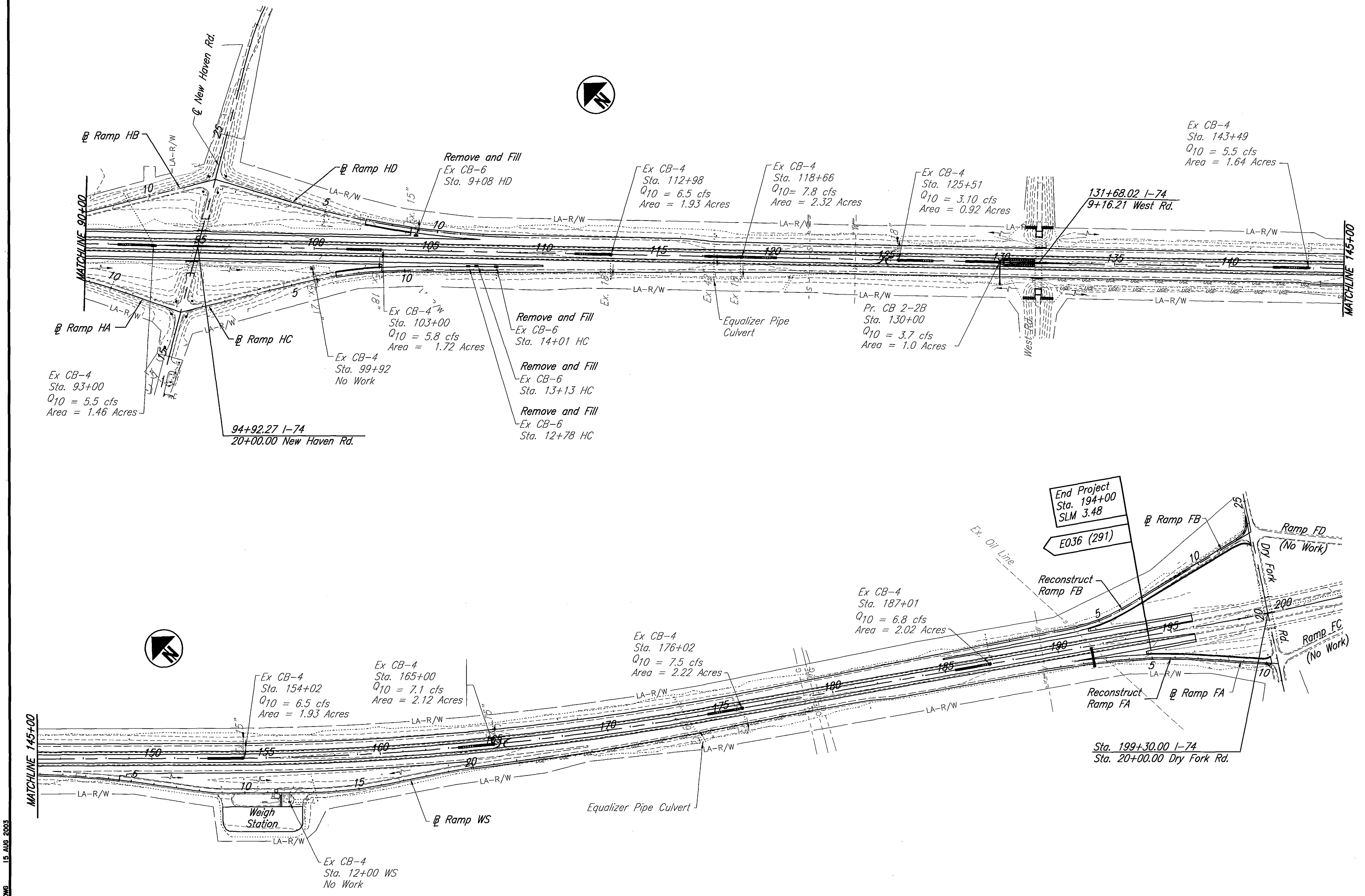
0 100 200 400 HORIZONTAL SCALE IN FEET

CALCULATED DAS CHECKED JNR

PROJECT SITE PLAN BEGINNING TO STA. 90+00

HAM-74-0.00

DE100020.DWG 15 AUG 2003



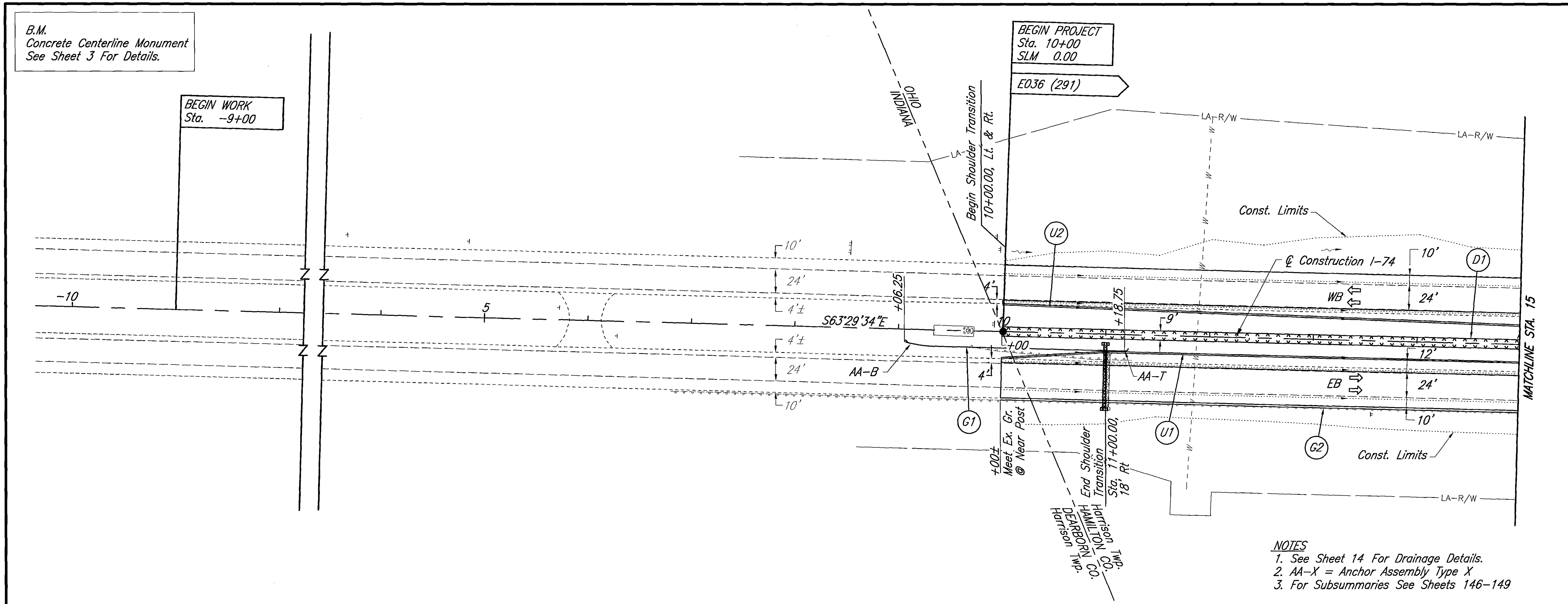
0 100 200 400
HORIZONTAL SCALE IN FEET

CALCULATED DAS
CHECKED JNR

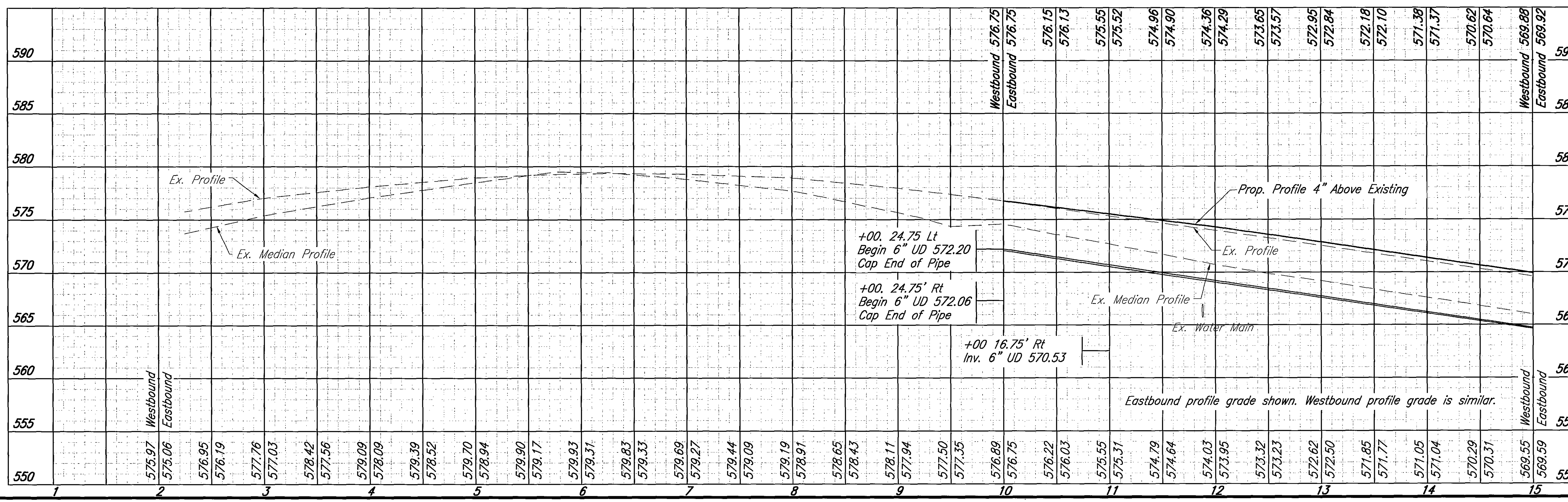
PROJECT SITE PLAN
STA. 90+00 TO STA. END

HAM-74-0.00

DE101020.DWG 15 AUG 2003



NOTES
1. See Sheet 14 For Drainage Details.
2. AA-X = Anchor Assembly Type X
3. For Subsummaries See Sheets 146-149



HORIZONTAL SCALE IN FEET 0 25 50 100

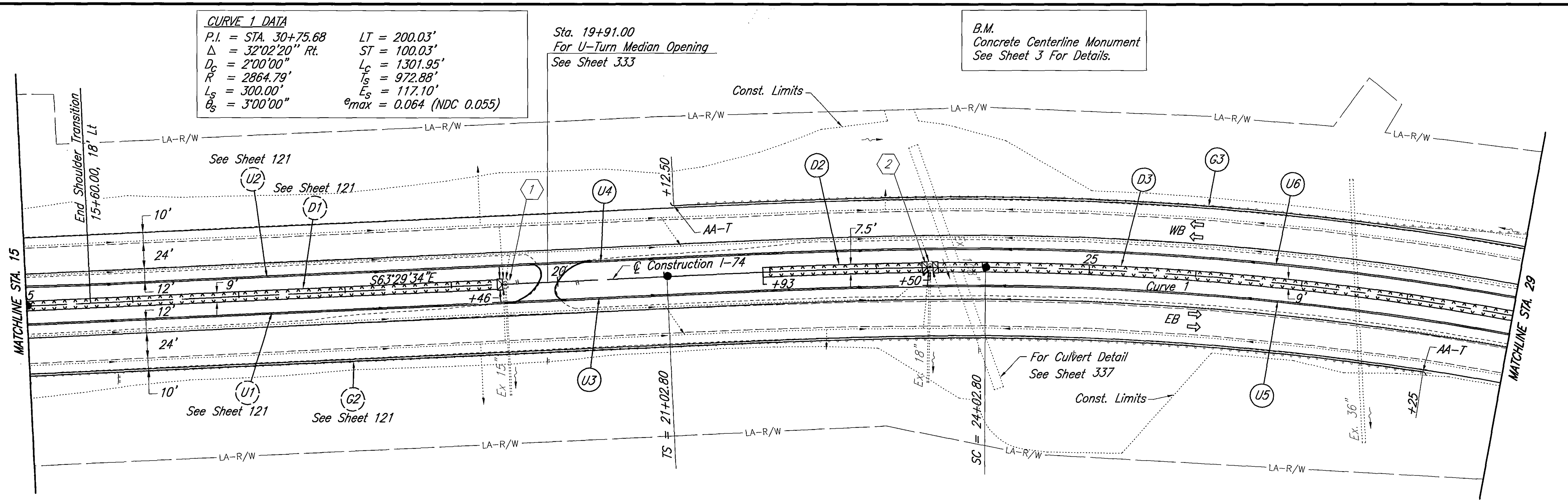
CALCULATED GAB
CHECKED DAS

PLAN AND PROFILE
STA. -9 TO STA. 15

HAM-74-0.00

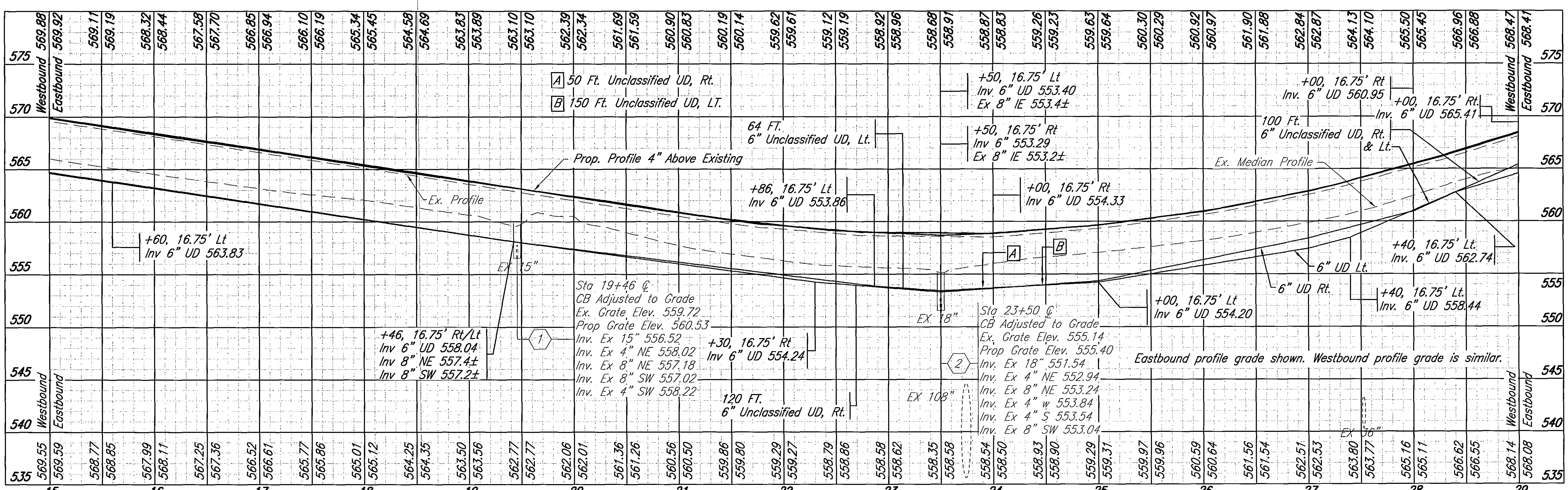
121
421

GP101020.DWG 15 AUG 2003



Drainage Structure No.	Station	Offset	Description
1	19+46	℄	CB Adjusted to Grade
2	23+50	℄	CB Adjusted to Grade

NOTES
1. See Sheet 14 For Drainage Details.
2. AA–X = Anchor Assembly Type X
3. ⟨x⟩ =Drainage Structure
4. For Subsummaries See Sheets 146–149



HORIZONTAL SCALE IN FEET 0 25 50 100

CALCULATED GAB
CHECKED DAS

PLAN AND PROFILE
STA. 15 TO STA. 29

HAM-74-0.00

122
421

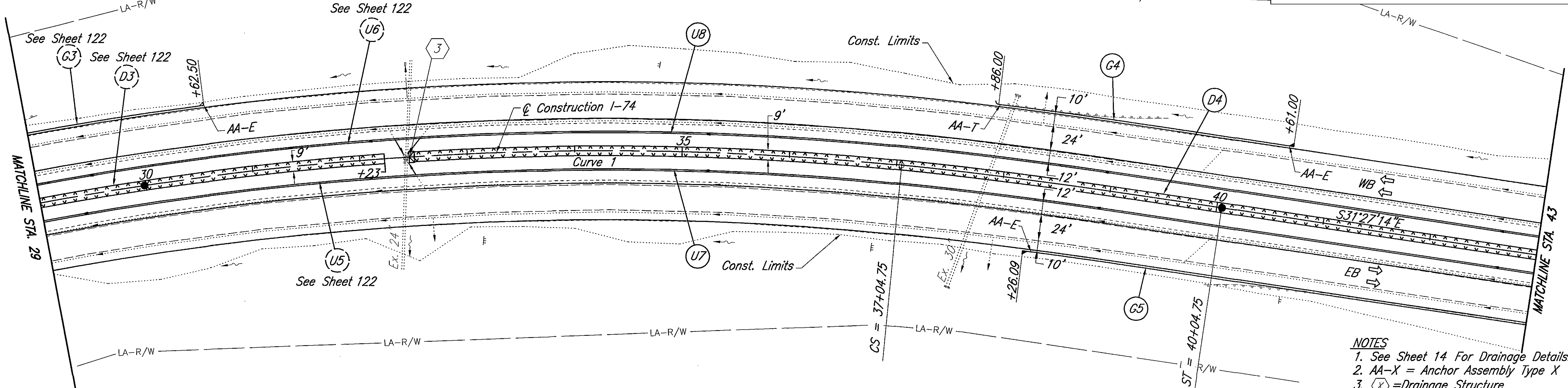
15 AUG 2003
8P102020.DWG

Drainage Structure No.	Station	Offset	Description
3	32+39	℄	CB Adjusted to Grade

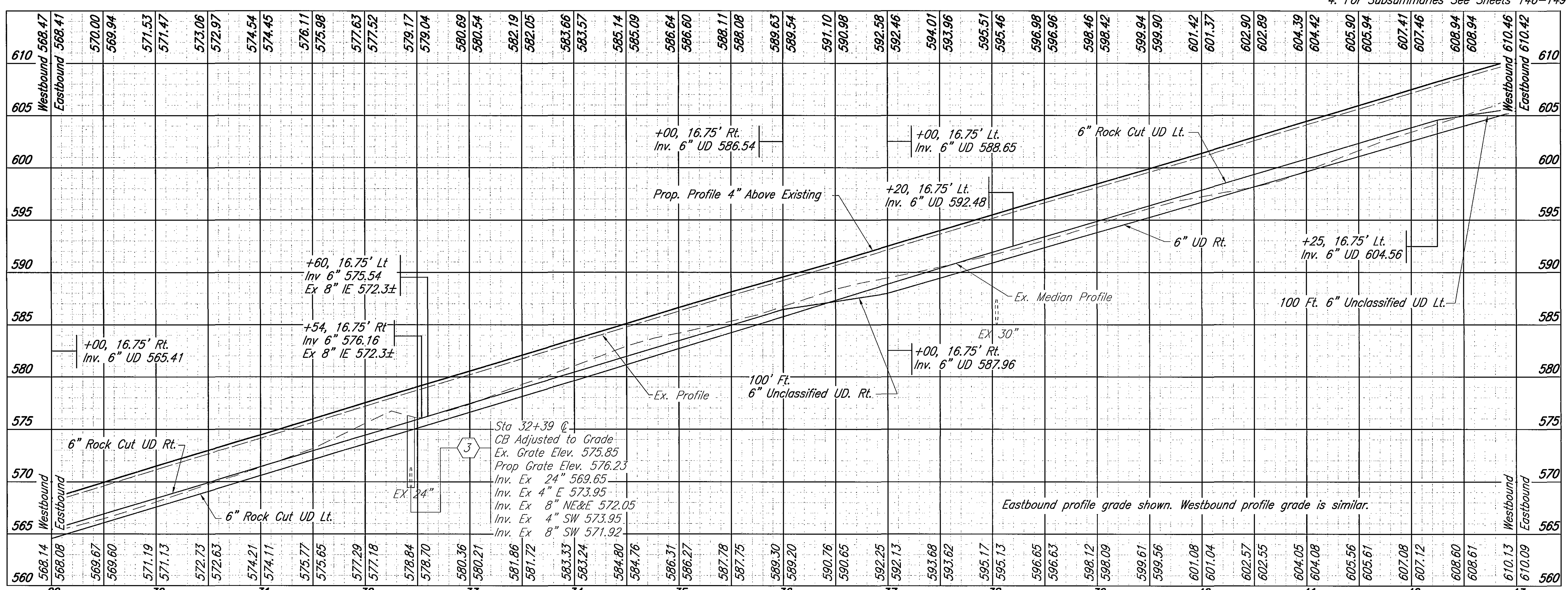
B.M.
Concrete Centerline Monument
See Sheet 3 For Details.

CURVE 1 DATA

P.I. = STA. 30+75.68	LT = 200.03'
Δ = 32°02'20" Rt.	ST = 100.03'
D_C = 2°00'00"	L_C = 1301.95'
R = 2864.79'	T_S = 972.88'
L_S = 300.00'	E_S = 117.10'
θ_S = 3°00'00"	e_{max} = 0.064 (NDC 0.055)



NOTES
1. See Sheet 14 For Drainage Details.
2. AA-X = Anchor Assembly Type X
3. ⟨X⟩ =Drainage Structure
4. For Subsummaries See Sheets 146–149



HORIZONTAL SCALE IN FEET 0 25 50 100

CALCULATED GAB
CHECKED DAS

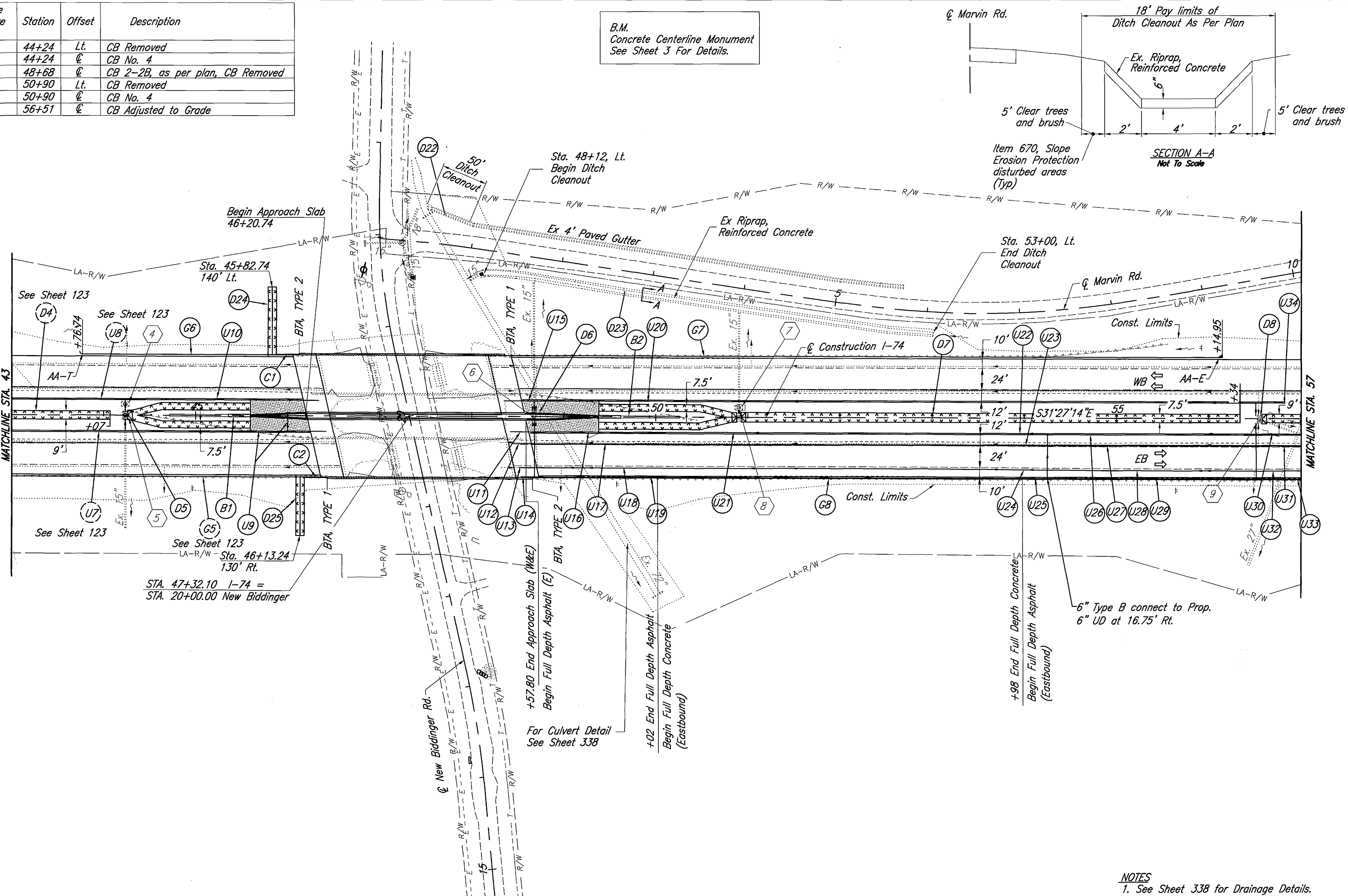
PLAN AND PROFILE
STA. 29 TO STA. 43

HAM-74-0.00

GP103020.DWG 15 AUG 2003

Drainage Structure No.	Station	Offset	Description
4	44+24	Lt.	CB Removed
5	44+24	℄	CB No. 4
6	48+68	℄	CB 2-2B, as per plan, CB Removed
7	50+90	Lt.	CB Removed
8	50+90	℄	CB No. 4
9	56+51	℄	CB Adjusted to Grade

B.M.
Concrete Centerline Monument
See Sheet 3 For Details.



NOTES
1. See Sheet 338 for Drainage Details.
2. AA-X = Anchor Assembly, Type X
3. BTA = Bridge Terminal Assembly
4. See Sheet 335 for Concrete Barrier Details.
5. ⟨X⟩ =Drainage Structure
6. For Subsummaries See Sheets 146-149

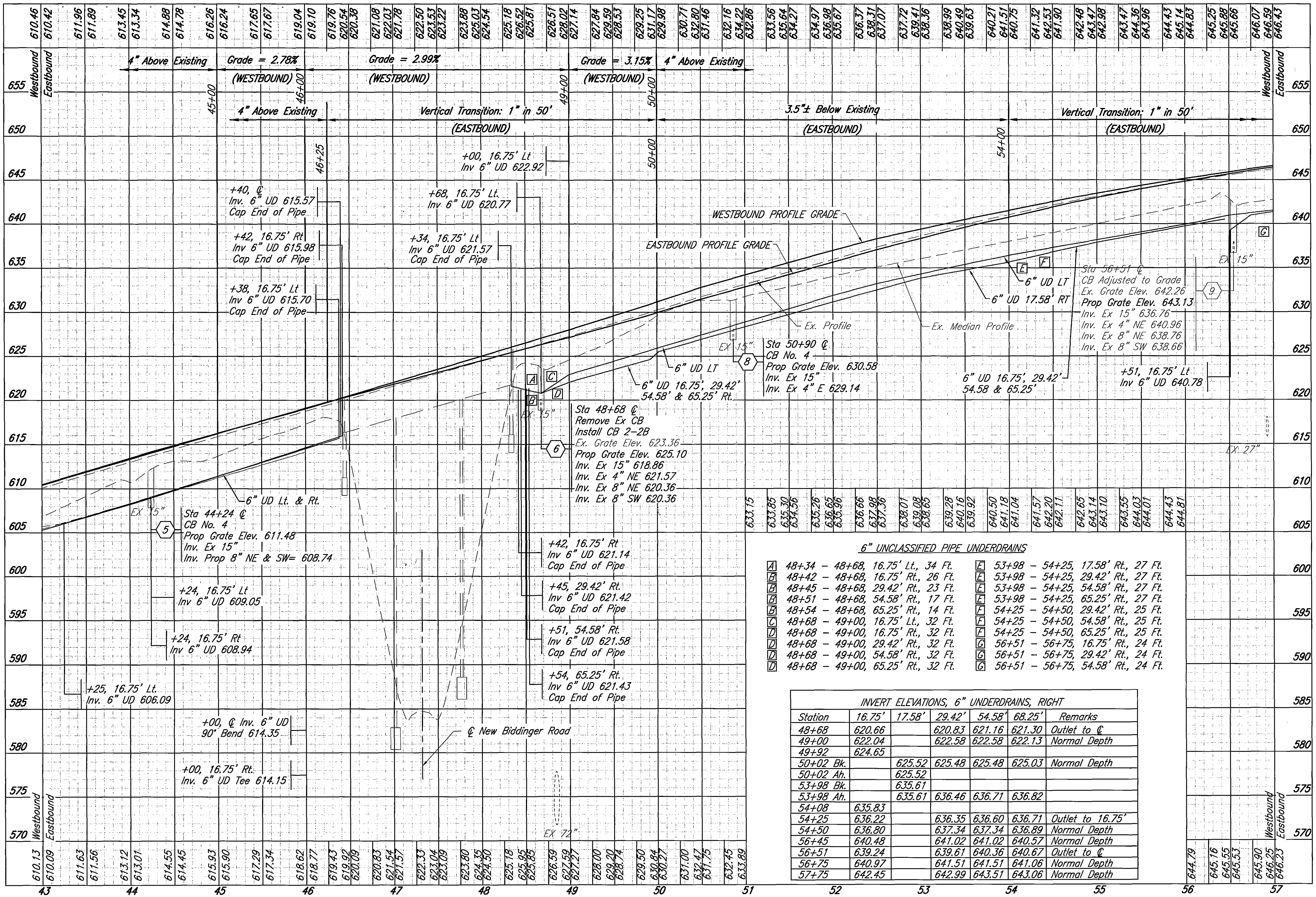
HORIZONTAL SCALE IN FEET 0 25 50 100

CALCULATED GAB
CHECKED DAS

PLAN
STA. 43 TO STA. 57

HAM-74-0.00

GP104020.DWG 15 AUG 2003



6" UNCLASSIFIED PIPE UNDERDRAINS

A	48+34 – 48+68, 16.75' Lt., 34 Ft.	E	53+98 – 54+25, 17.58' Rt., 27 Ft.
B	48+42 – 48+68, 16.75' Rt., 26 Ft.	E	53+98 – 54+25, 29.42' Rt., 27 Ft.
B	48+45 – 48+68, 29.42' Rt., 23 Ft.	E	53+98 – 54+25, 54.58' Rt., 27 Ft.
B	48+51 – 48+68, 54.58' Rt., 17 Ft.	E	53+98 – 54+25, 65.25' Rt., 27 Ft.
B	48+54 – 48+68, 65.25' Rt., 14 Ft.	F	54+25 – 54+50, 29.42' Rt., 25 Ft.
C	48+68 – 49+00, 16.75' Lt., 32 Ft.	F	54+25 – 54+50, 54.58' Rt., 25 Ft.
D	48+68 – 49+00, 16.75' Rt., 32 Ft.	F	54+25 – 54+50, 65.25' Rt., 25 Ft.
D	48+68 – 49+00, 29.42' Rt., 32 Ft.	G	56+51 – 56+75, 16.75' Rt., 24 Ft.
D	48+68 – 49+00, 54.58' Rt., 32 Ft.	G	56+51 – 56+75, 29.42' Rt., 24 Ft.
D	48+68 – 49+00, 65.25' Rt., 32 Ft.	G	56+51 – 56+75, 54.58' Rt., 24 Ft.

INVERT ELEVATIONS, 6" UNDERDRAINS, RIGHT

Station	16.75'	17.58'	29.42'	54.58'	68.25'	Remarks
48+68	620.66		620.83	621.16	621.30	Outlet to ℄
49+00	622.04		622.58	622.58	622.13	Normal Depth
49+92	624.65					
50+02 Bk.		625.52	625.48	625.48	625.03	Normal Depth
50+02 Ah.		625.52				
53+98 Bk.		635.61				
53+98 Ah.		635.61	636.46	636.71	636.82	
54+08	635.83					
54+25	636.22		636.35	636.60	636.71	Outlet to 16.75'
54+50	636.80		637.34	637.34	636.89	Normal Depth
56+45	640.48		641.02	641.02	640.57	Normal Depth
56+51	639.24		639.61	640.36	640.67	Outlet to ℄
56+75	640.97		641.51	641.51	641.06	Normal Depth
57+75	642.45		642.99	643.51	643.06	Normal Depth

HORIZONTAL SCALE IN FEET

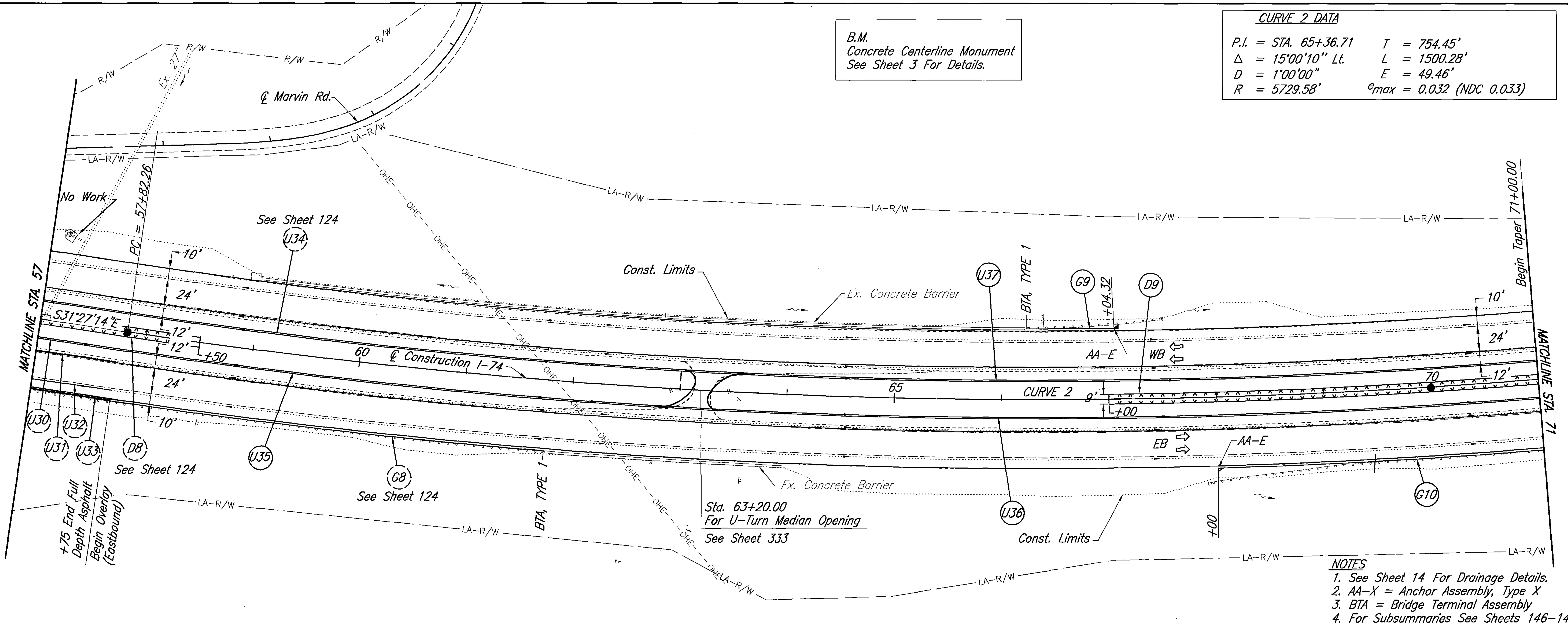
CALCULATED GAB

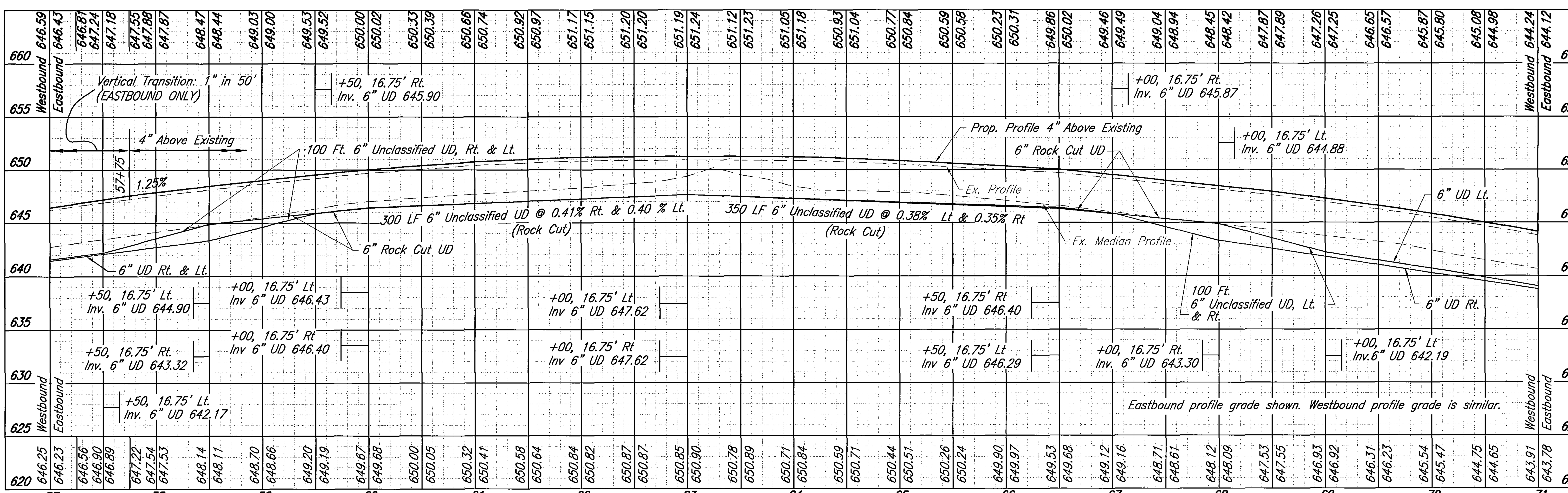
CHECKED DAS

PROFILE STA. 43 TO STA. 57

HAM-74-0.00

GF104020.DWG 15 AUG 2003





HORIZONTAL SCALE IN FEET

CALCULATED GAB

CHECKED DAS

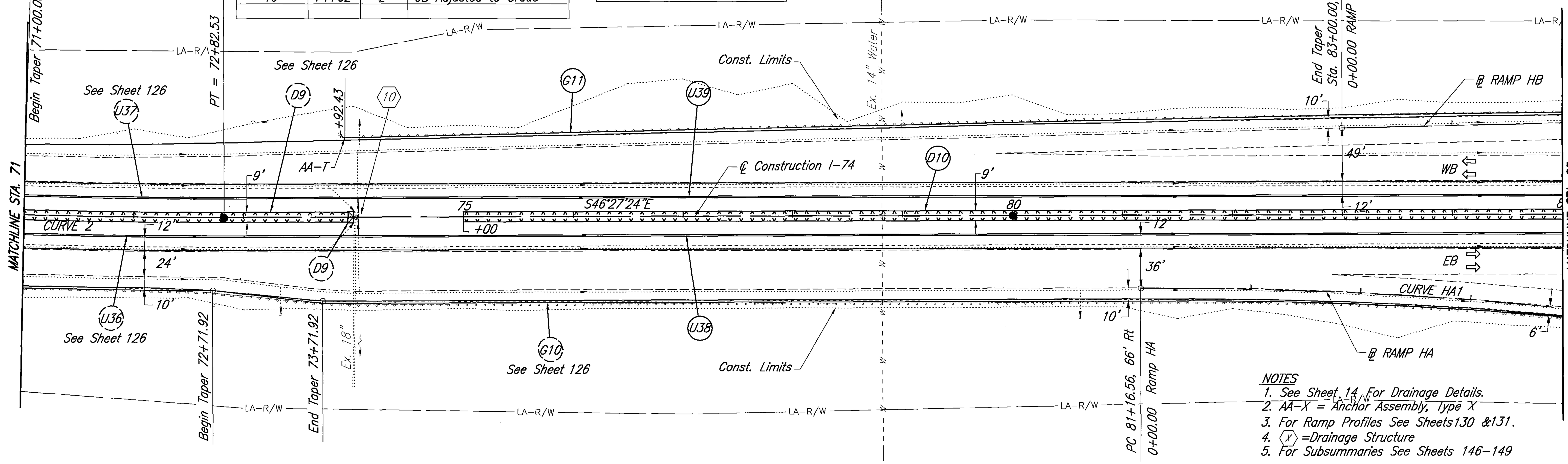
PLAN AND PROFILE STA. 57 TO STA. 71

HAM-74-0.00

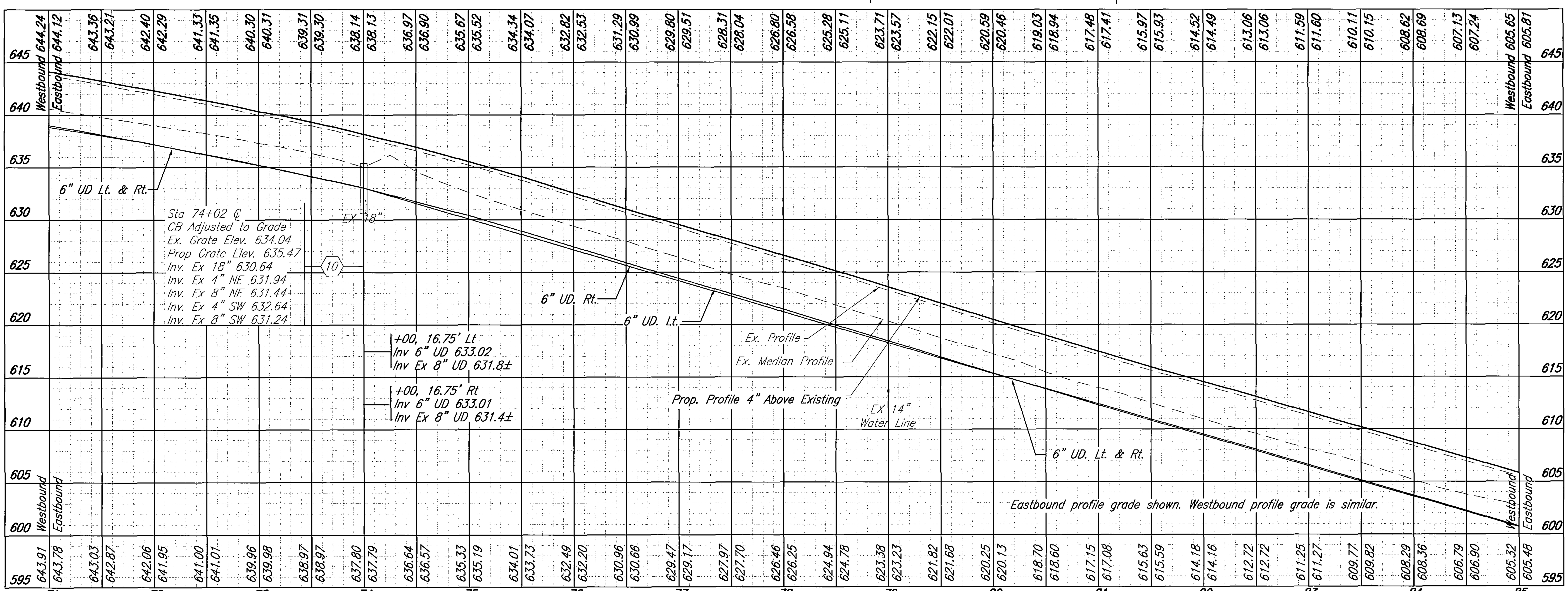
GP105020.DWG 15 AUG 2003

Drainage Structure No.	Station	Offset	Description
10	74+02	℄	CB Adjusted to Grade

B.M.
Concrete Centerline Monument
See Sheet 3 For Details.



NOTES
1. See Sheet 14 For Drainage Details.
2. AA-X = Anchor Assembly, Type X
3. For Ramp Profiles See Sheets130 &131.
4. ⟨X⟩ =Drainage Structure
5. For Subsummaries See Sheets 146-149



0 25 50 100
HORIZONTAL SCALE IN FEET

CALCULATED GAB
CHECKED DAS

PLAN AND PROFILE
STA. 71 TO STA. 85

HAM-74-0.00

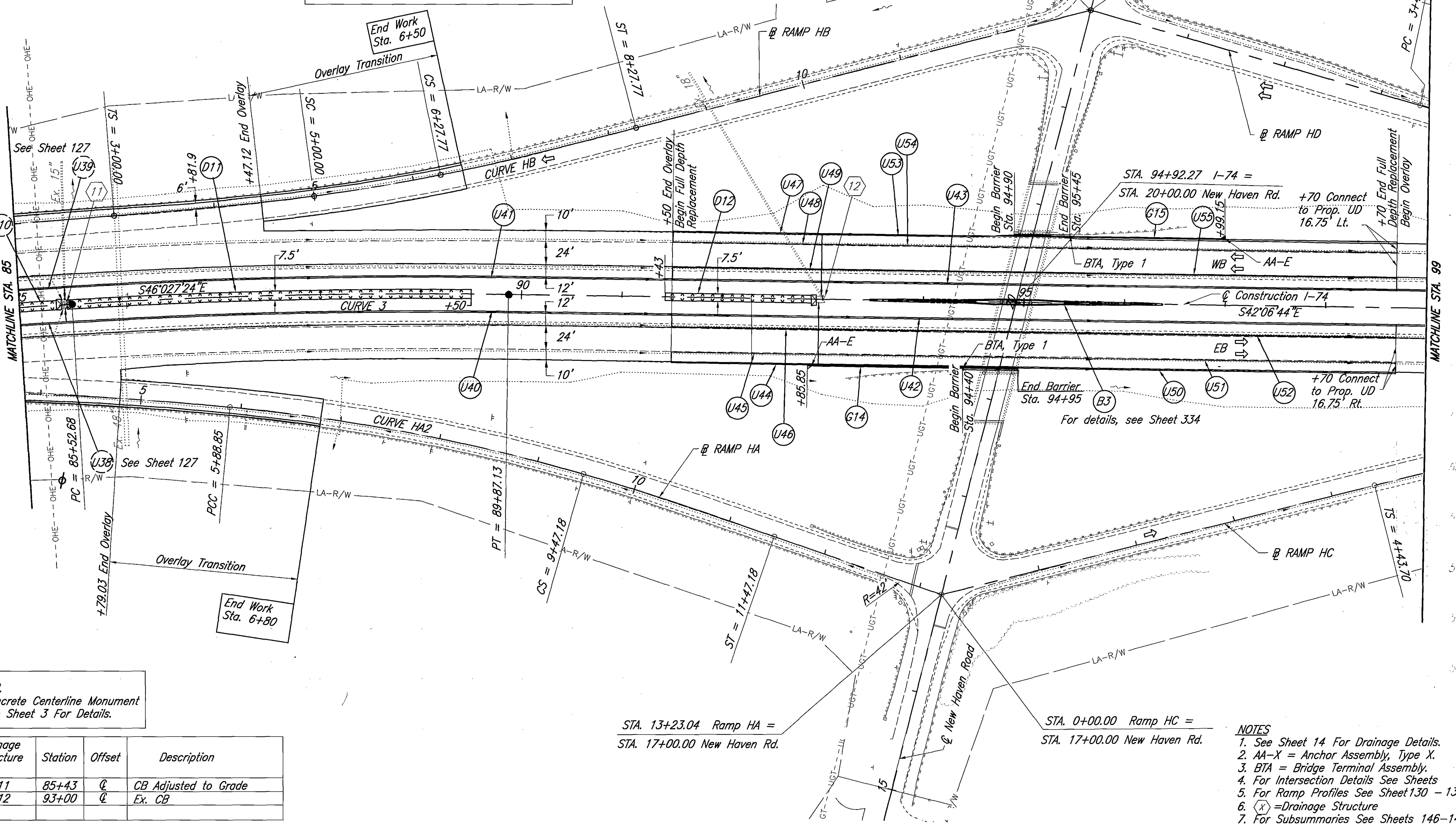
GP10602O.DWG 15 AUG 2003

CURVE 3 DATA	
P.I. = STA. 87+70.01	T = 217.33'
Δ = 4°20'40" Rt.	L = 434.44'
Dc = 1°00'00"	E = 4.12'
R = 5729.58'	e_{max} = 0.032 (NDC 0.033)

CURVE HA1	
P.I. = STA. 2+95.01	T = 295.01'
Δ = 8°49'58" Rt.	L = 588.85'
Dc = 1°30'00"	E = 11.38'
R = 3819.72'	e_{max} = 0.034

CURVE HA2	
P.I. = STA. 8+22.79	Θs = 3°00'00"
Δ = 13°45'00" Rt.	LT = 133.35'
Dc = 3°00'01"	ST = 66.68'
R = 1909.82'	Lc = 357.80'
Ls = 200.00'	T1 = 233.94'
	T2 = 326.69'
	e_{max} = 0.034

CURVE HB	
P.I. = STA. 5+64.35	Θs = 3°00'00"
Δ = 9°49'59" Lt.	LT = 133.35'
Dc = 3°00'01"	ST = 66.68'
R = 1909.86'	Lc = 127.77'
Ls = 200.00'	Ts = 264.35"
	Es = 7.93'
	e_{max} = 0.050



B.M.
Concrete Centerline Monument
See Sheet 3 For Details.

Drainage Structure No.	Station	Offset	Description
11	85+43	℄	CB Adjusted to Grade
12	93+00	℄	Ex. CB

NOTES
1. See Sheet 14 For Drainage Details.
2. AA-X = Anchor Assembly, Type X.
3. BTA = Bridge Terminal Assembly.
4. For Intersection Details See Sheets
5. For Ramp Profiles See Sheet 130 – 133.
6. ⟨x⟩ =Drainage Structure
7. For Subsummaries See Sheets 146–149

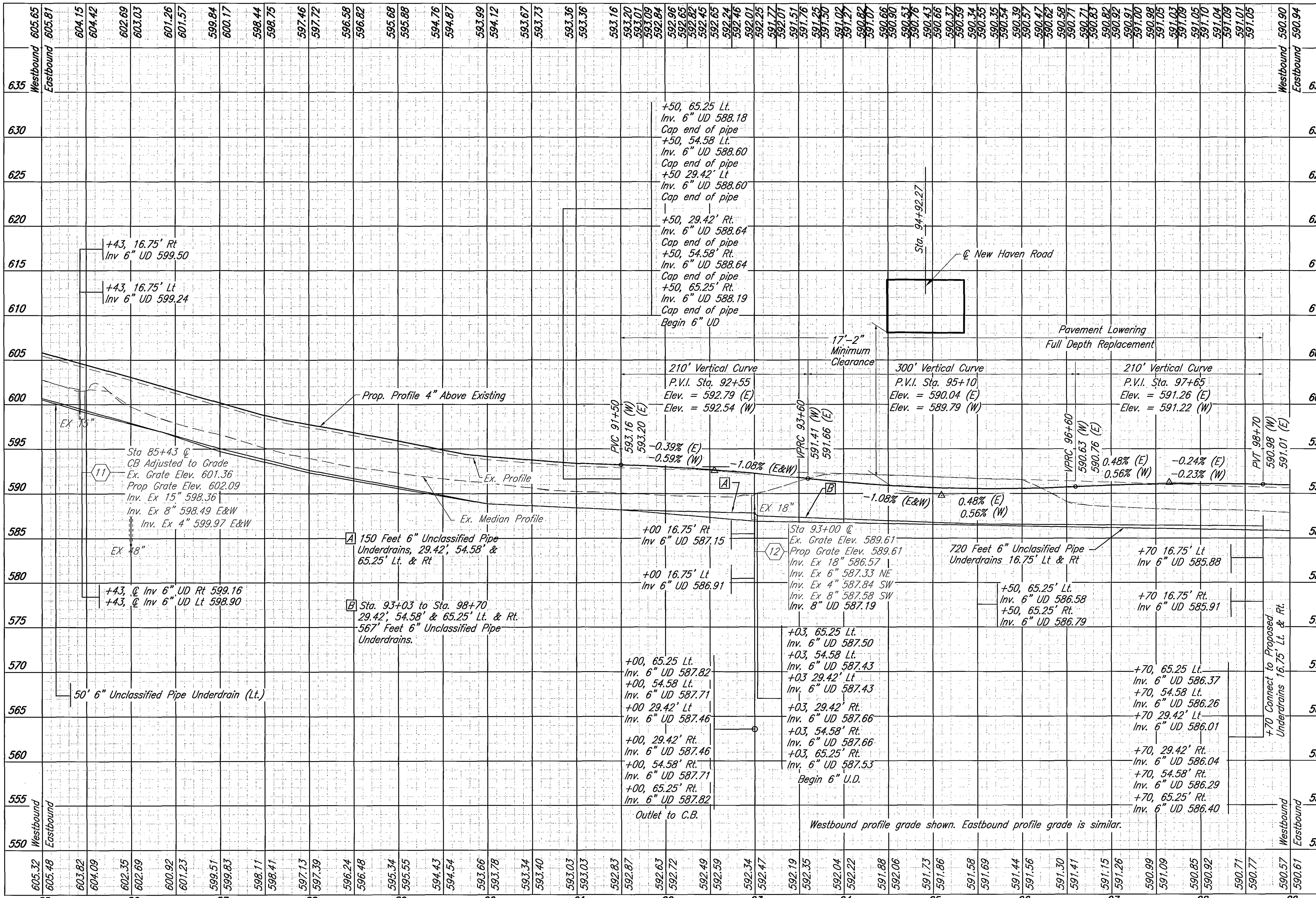
HORIZONTAL SCALE IN FEET 0 25 50 100

CALCULATED GAB | CHECKED DAS

PLAN
STA. 85 TO STA. 99

HAM-74-0.00

GP107020.DWG 18 AUG 2003



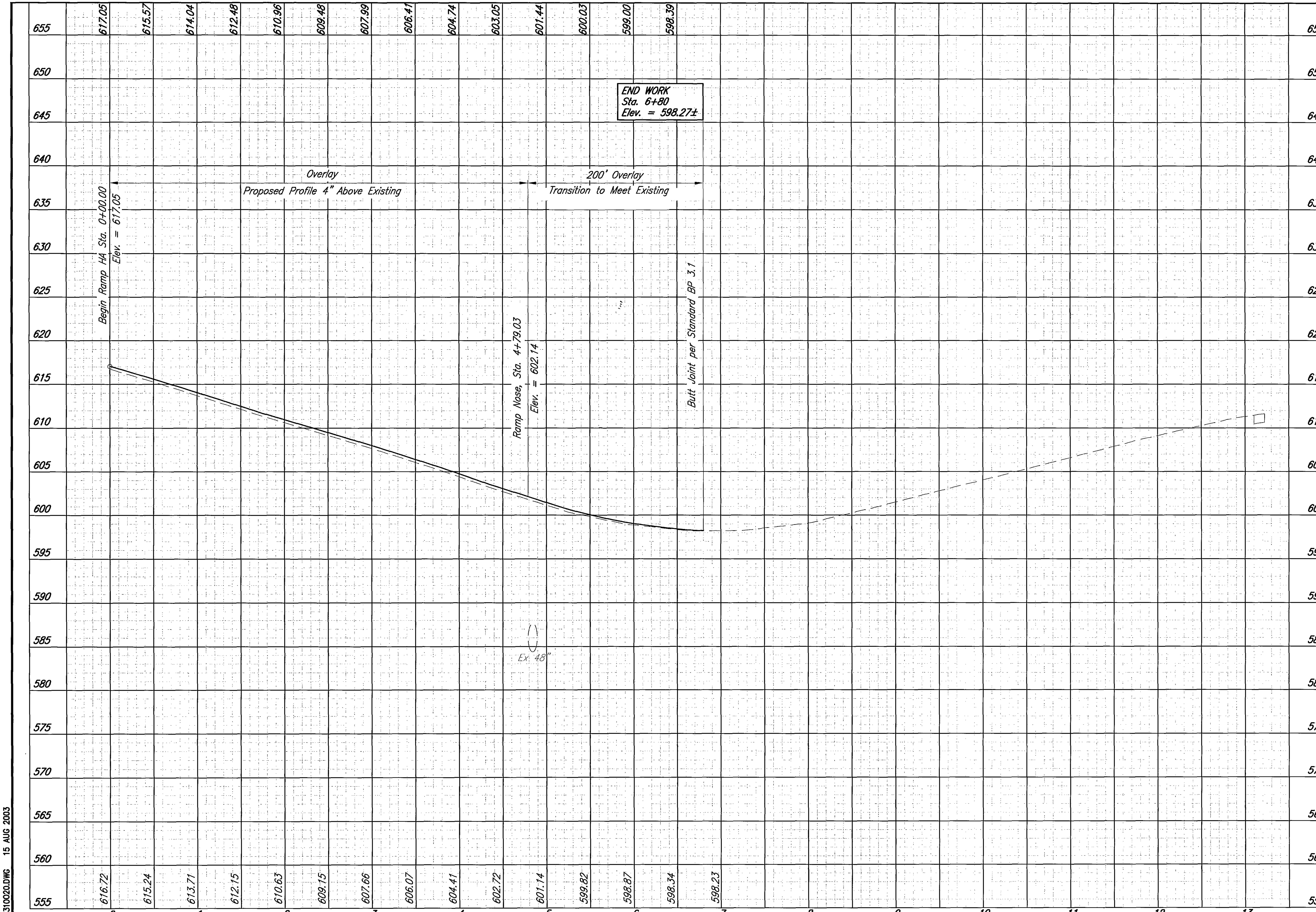
HORIZONTAL SCALE IN FEET 0 25 50 100

CALCULATED GAB CHECKED DAS

PROFILE
STA. 85 TO STA. 99

HAM-74-0.00

GF107020.DWG 18 AUG 2003



HORIZONTAL SCALE IN FEET
0 25 50 100

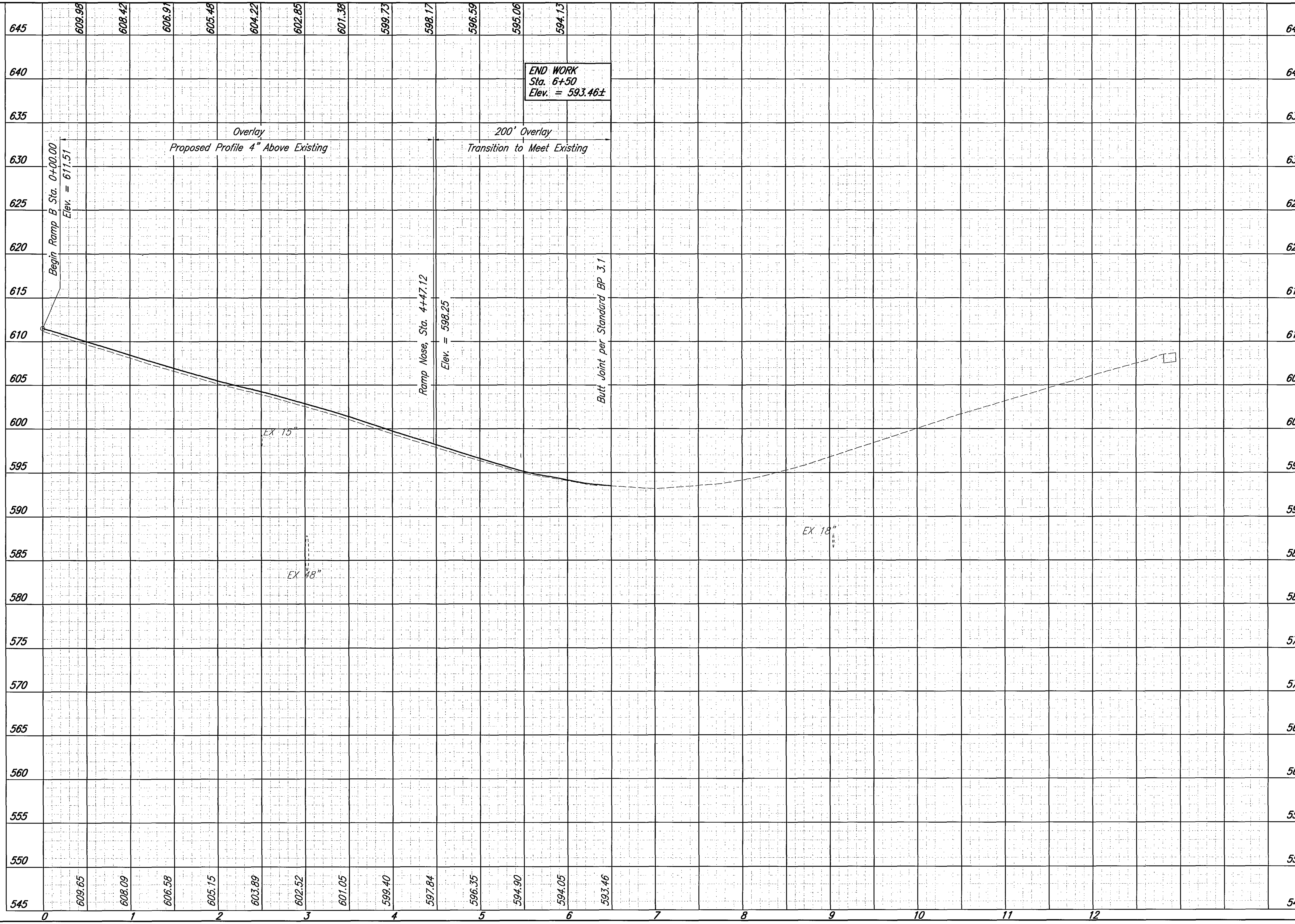
CALCULATED DAS
CHECKED JNR

PROFILE
RAMP HA

HAM-74-0.00

130
421

GF31020.DWG 15 AUG 2003



PROFILE
RAMP HB

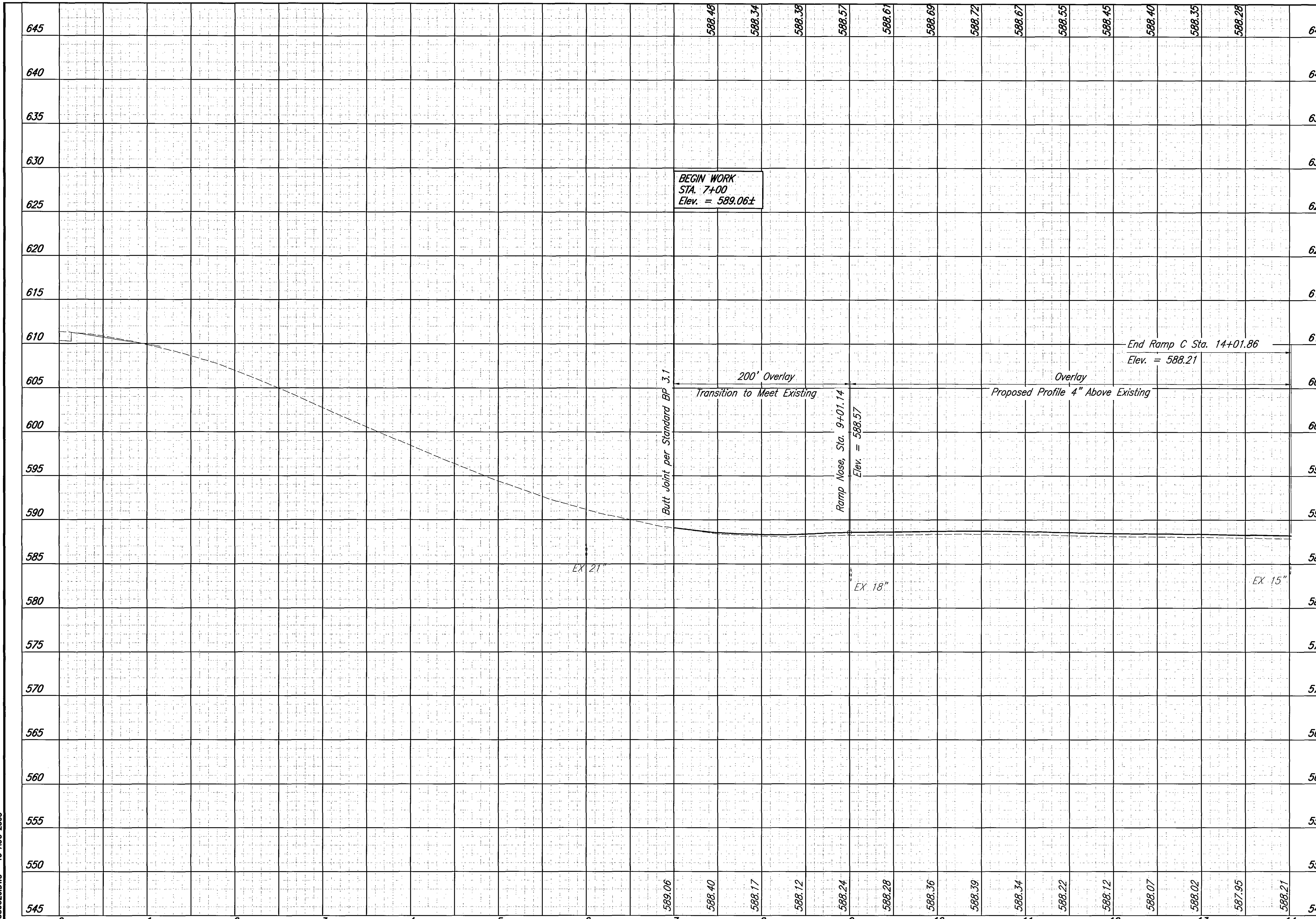
0 25 50 100
HORIZONTAL SCALE IN FEET

CALCULATED JNR
CHECKED DAS

HAM-74-0.00

131
421

GF320020.DWG 15 AUG 2003



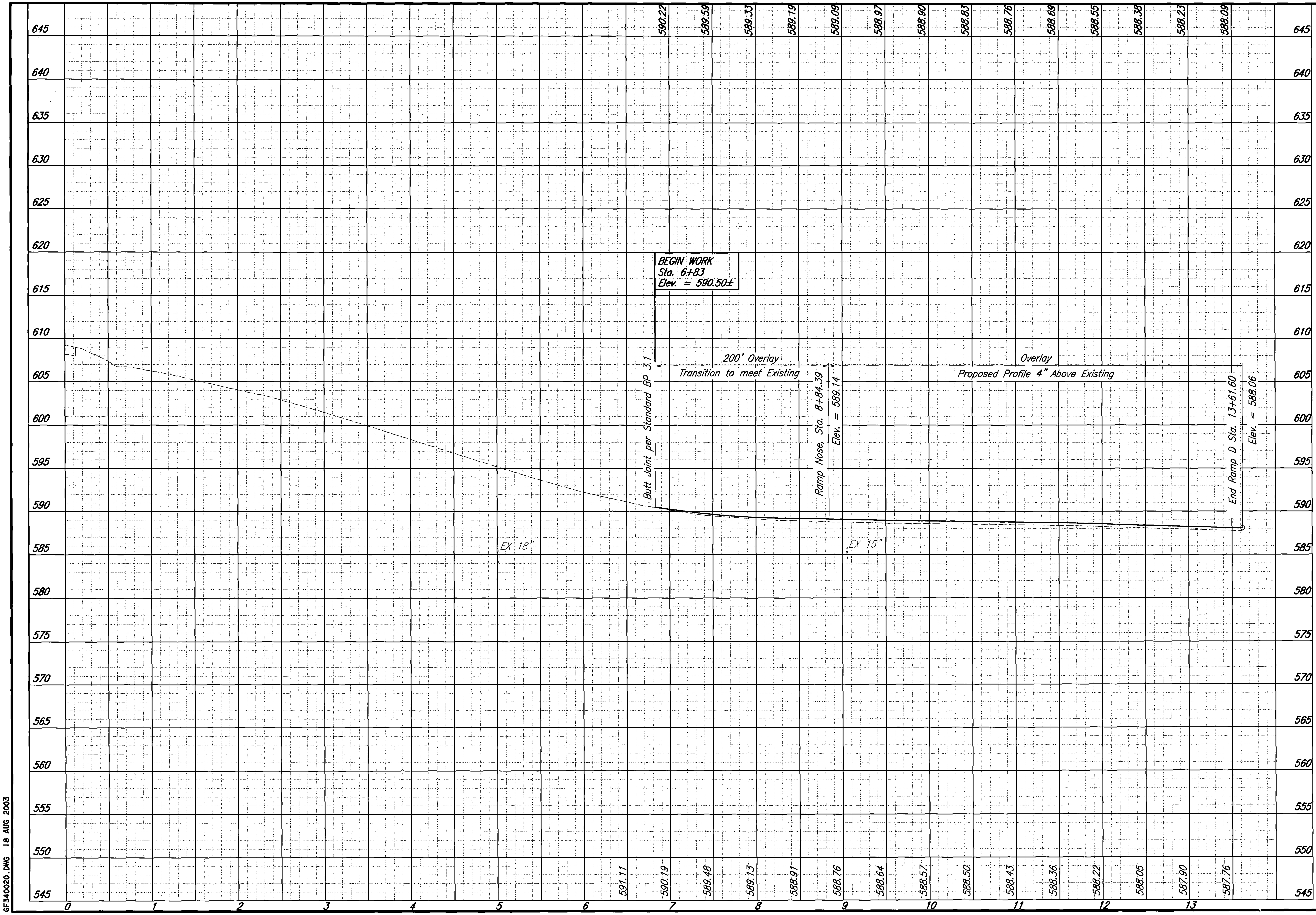
0 25 50 100
HORIZONTAL SCALE IN FEET

CALCULATED JNR
CHECKED DAS

PROFILE
RAMP HC

HAM-74-0.00

GF330020.DWG 15 AUG 2003



0 25 50 100
HORIZONTAL SCALE IN FEET

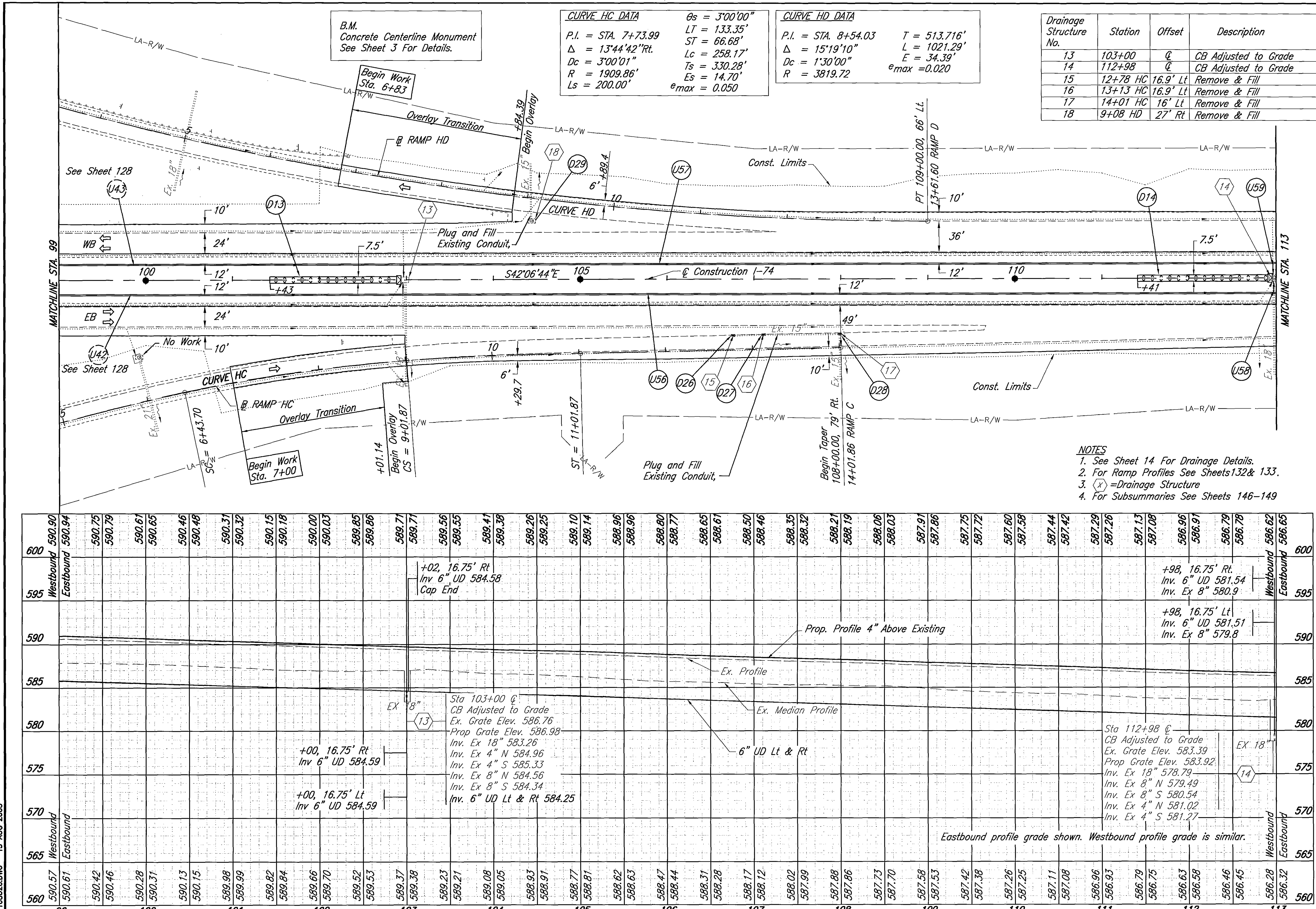
CALCULATED JNR
CHECKED DAS

PROFILE
RAMP HD

HAM-74-0.00

133
421

GF340020.DWG 18 AUG 2003



CURVE HC DATA	
P.I. = STA. 7+73.99	θs = 3°00'00"
Δ = 13°44'42"Rt.	LT = 133.35'
Dc = 3°00'01"	ST = 66.68'
R = 1909.86'	Lc = 258.17'
Ls = 200.00'	Ts = 330.28'
	Es = 14.70'
	e_{max} = 0.050

CURVE HD DATA	
P.I. = STA. 8+54.03	T = 513.716'
Δ = 15°19'10"	L = 1021.29'
Dc = 1°30'00"	E = 34.39'
R = 3819.72	e_{max} =0.020

Drainage Structure No.	Station	Offset	Description
13	103+00	℄	CB Adjusted to Grade
14	112+98	℄	CB Adjusted to Grade
15	12+78 HC	16.9' Lt	Remove & Fill
16	13+13 HC	16.9' Lt	Remove & Fill
17	14+01 HC	16' Lt	Remove & Fill
18	9+08 HD	27' Rt	Remove & Fill

NOTES
1. See Sheet 14 For Drainage Details.
2. For Ramp Profiles See Sheets132& 133.
3. ⟨x⟩ =Drainage Structure
4. For Subsummaries See Sheets 146–149

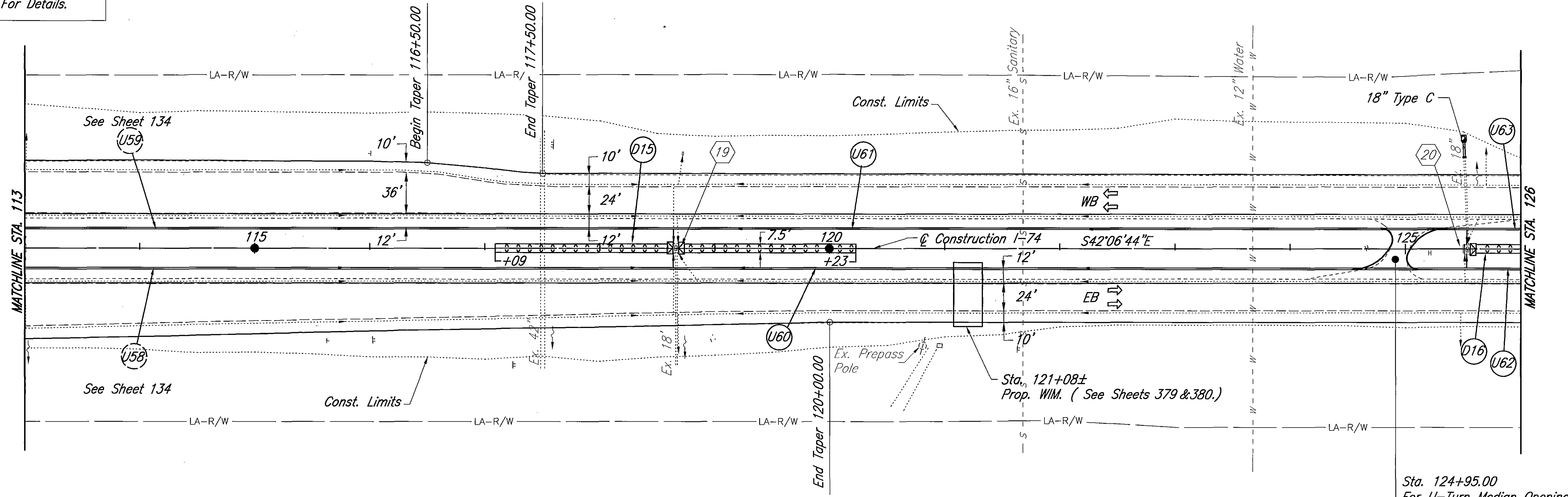
CALCULATED GAB CHECKED DAS

PLAN AND PROFILE
STA. 99 TO STA. 113

HAM-74-0.00

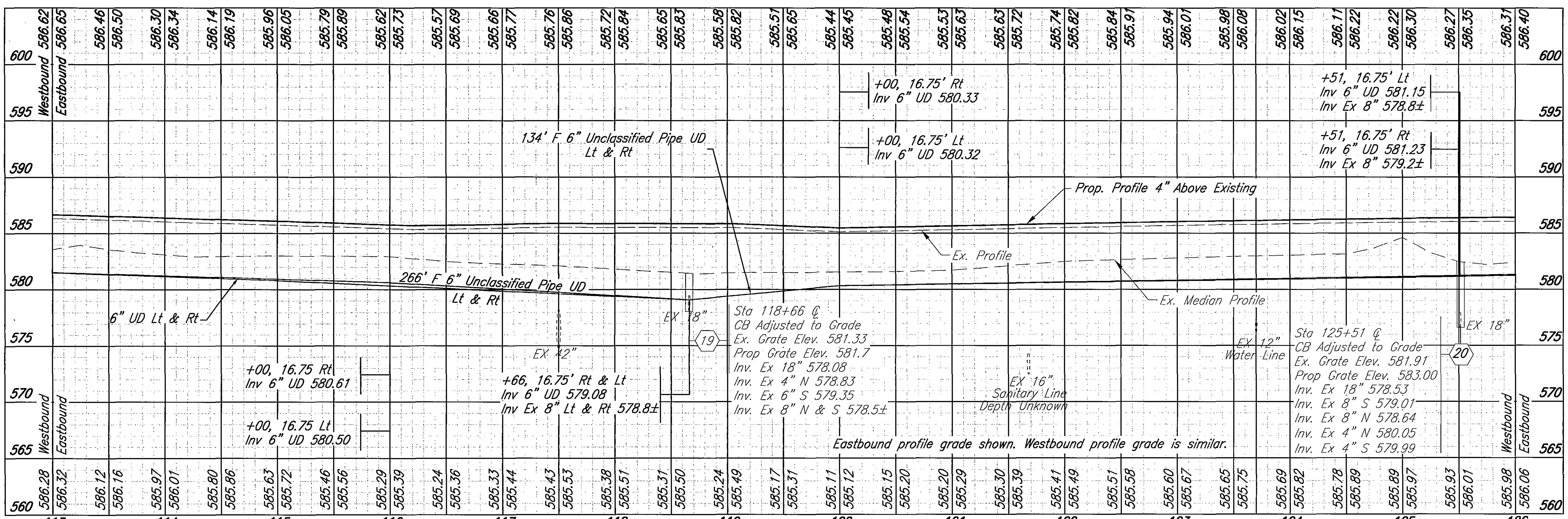
GP108020.DWG 15 AUG 2003

B.M.
Concrete Centerline Monument
See Sheet 3 For Details.



Drainage Structure No.	Station	Offset	Description
19	118+66	℄	CB Adjusted to Grade
20	125+51	℄	CB Adjusted to Grade

NOTES
1. See Sheet 14 For Drainage Details.
2. ⟨X⟩ =Drainage Structure
3. For Subsummaries See Sheets 146–149



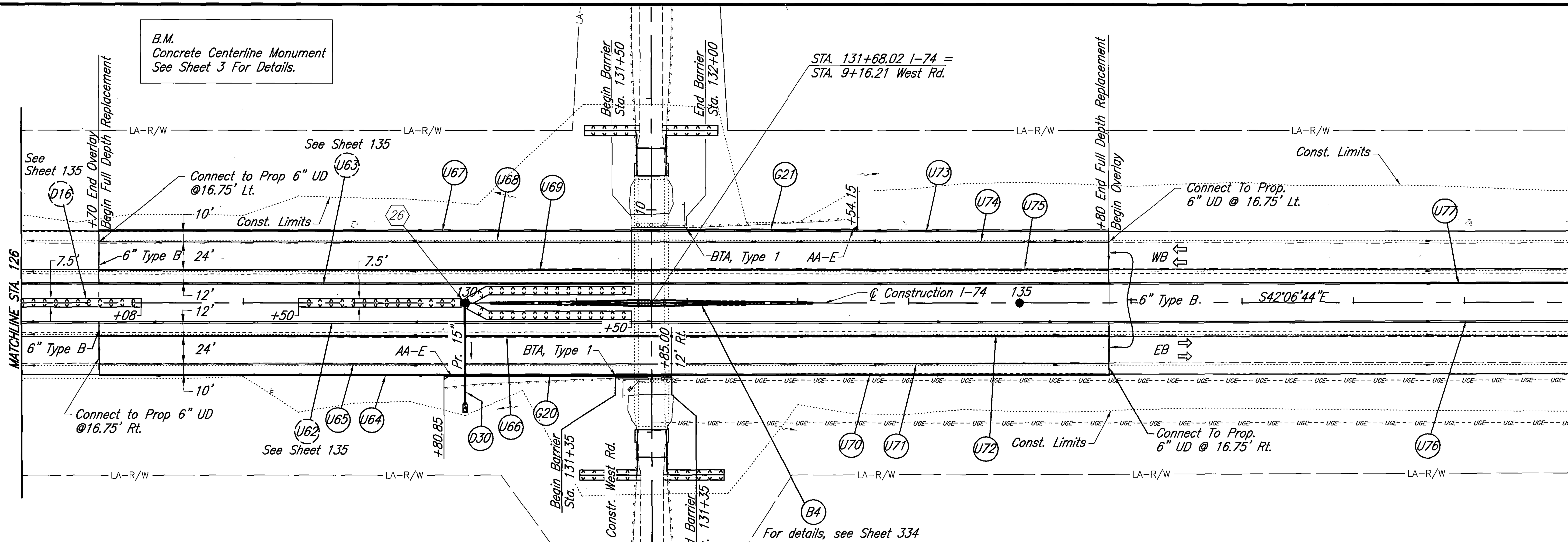
HORIZONTAL SCALE IN FEET

CALCULATED GAB
CHECKED DAS

PLAN AND PROFILE
STA. 113 TO STA. 126

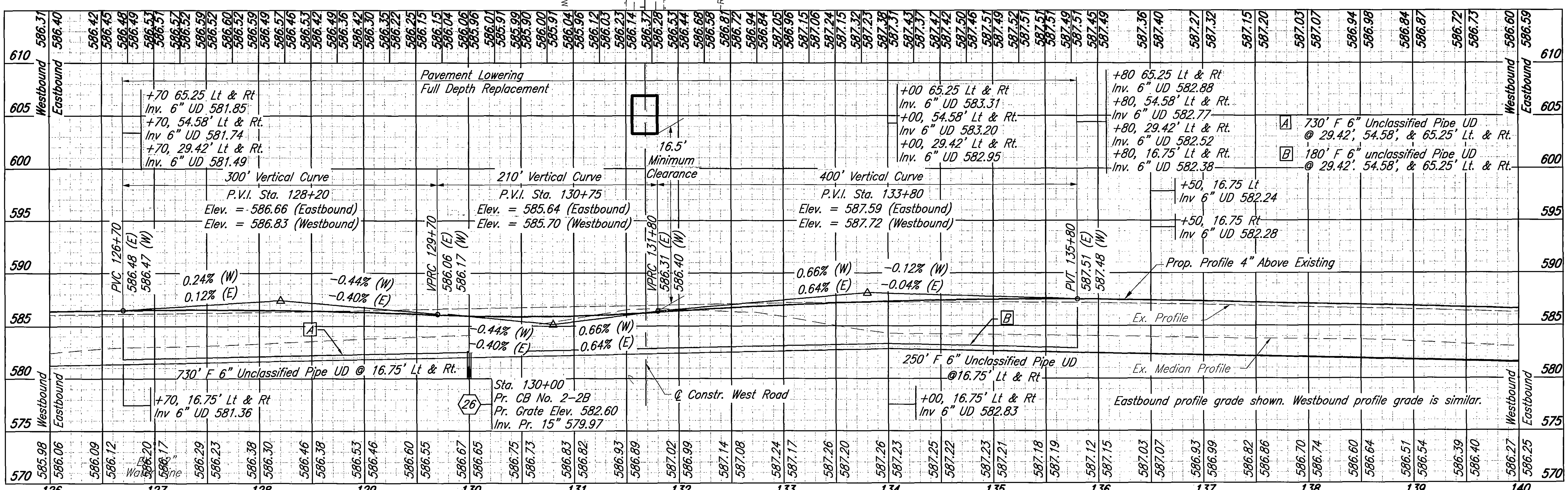
HAM–74–0.00

3P10902D.DWG 15 AUG 2003



Drainage Structure No.	Station	Offset	Description
26	130+00	℄	Pr. CB No. 2-2B

NOTES
1. See Sheet 14 For Drainage Details.
2. AA-X = Anchor Assembly, Type X
3. For West Road Plan & Profile, See Sheet 329
4. ⟨X⟩ =Drainage Structure
5. For Subsummaries See Sheets 146-149



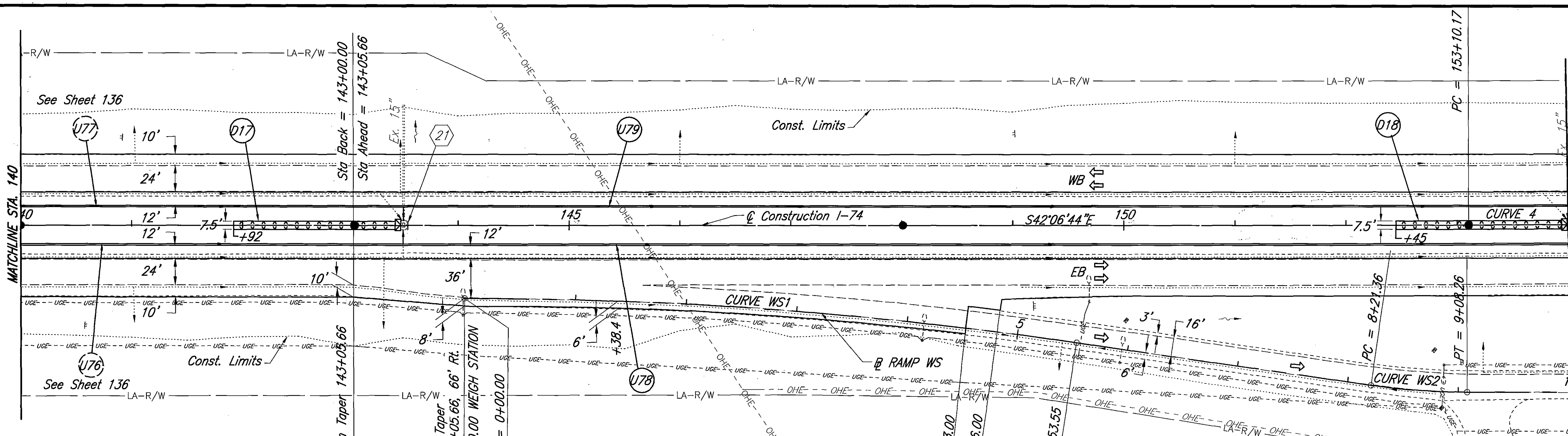
HORIZONTAL SCALE IN FEET 0 25 50 100

CALCULATED GAB CHECKED DAS

PLAN AND PROFILE
STA. 126 TO STA. 140

HAM-74-0.00

GP110020.DWG 18 AUG 2003



CURVE WS1 DATA

P.I. = STA. 2+77.26	T = 277.26'
Δ = 8°18'12" Rt.	L = 553.55'
D = 1°30'00"	E = 10.05'
R = 3819.72'	

CURVE WS2 DATA

P.I. = STA. 8+64.88	T = 43.52'
Δ = 8°17'53" Rt.	L = 86.90'
Dc = 9°33'37"	E = 1.58'
R = 600'	

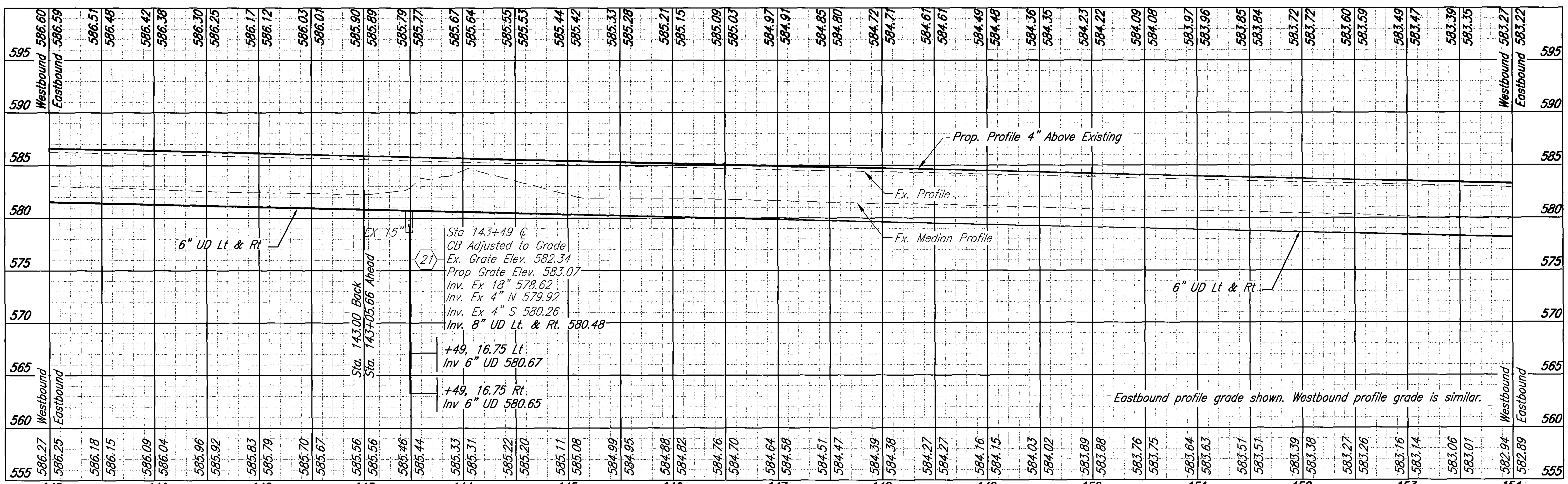
CURVE 4 DATA

P.I. = STA. 163+77.13	T = 1066.96'
Δ = 9°56'00" Rt.	L = 2128.57'
Dc = 00°28'00"	E = 46.27'
R = 12,277.67'	e_{max} = NC (NDC = 0.016)

B.M.
Concrete Centerline Monument
See Sheet 3 For Details.

Drainage Structure No.	Station	Offset	Description
21	143+49	℄	CB Adjusted to Grade

NOTES
1. See Sheet **14** For Drainage Details.
2. For Parking Lot Resurfacing See Sheet **10**
3. ⟨X⟩ =Drainage Structure
4. For Subsummaries See Sheets 146–149



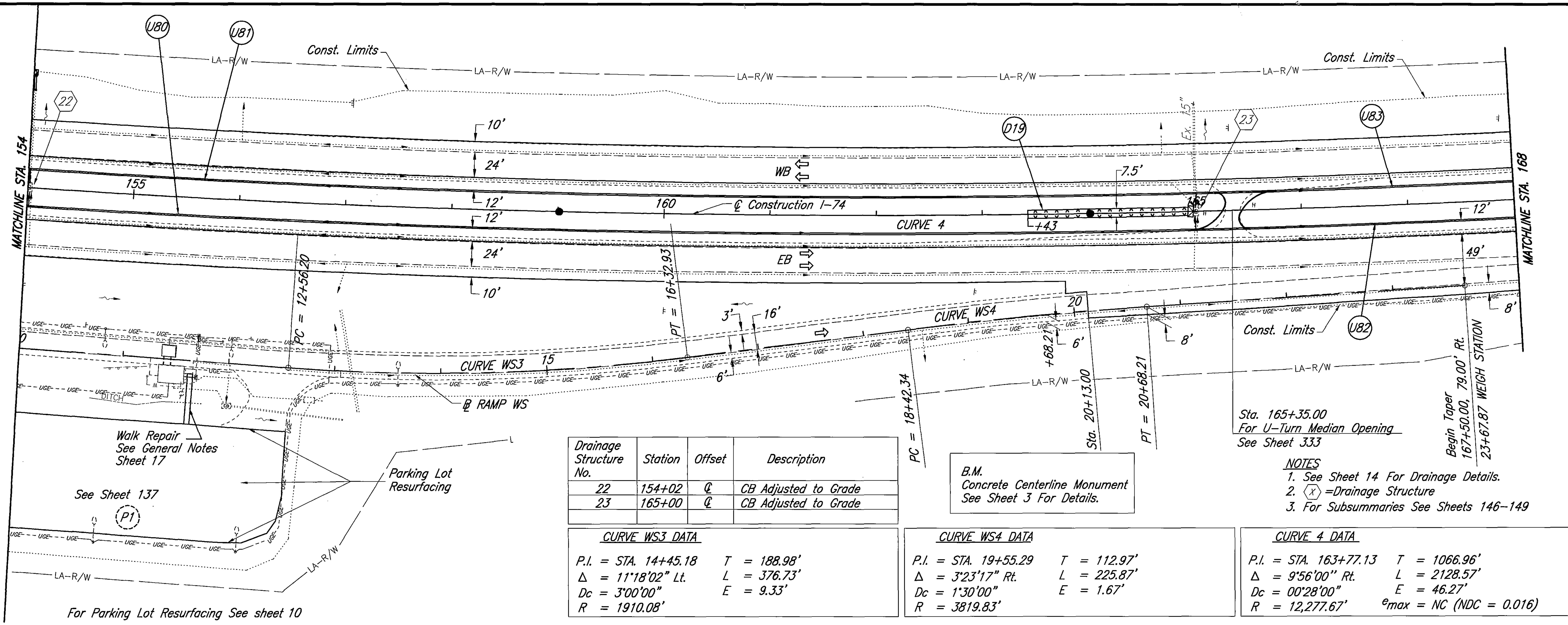
HORIZONTAL SCALE IN FEET

CALCULATED GAB
CHECKED DAS

PLAN AND PROFILE
STA. 140 TO STA. 154

HAM–74–0.00

GP111020.DWG 18 AUG 2003



Drainage Structure No.	Station	Offset	Description
22	154+02	℄	CB Adjusted to Grade
23	165+00	℄	CB Adjusted to Grade

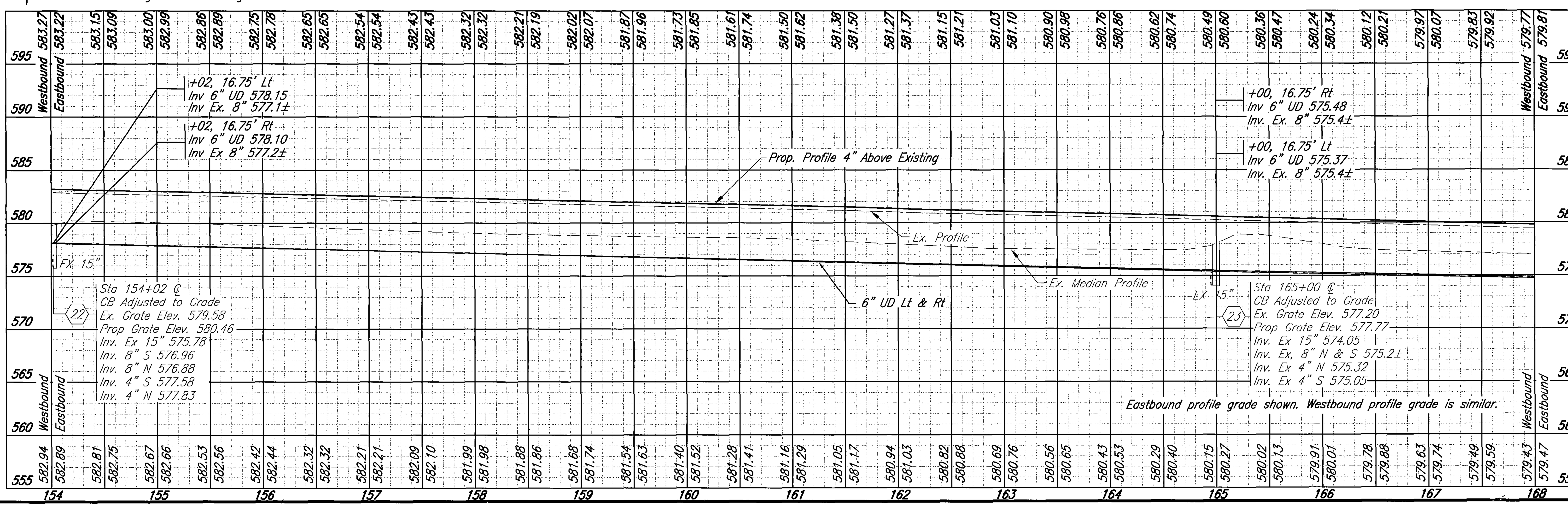
B.M.
Concrete Centerline Monument
See Sheet 3 For Details.

NOTES
1. See Sheet 14 For Drainage Details.
2. ⟨X⟩ =Drainage Structure
3. For Subsummaries See Sheets 146-149

CURVE WS3 DATA
P.I. = STA. 14+45.18 T = 188.98'
Δ = 11°18'02" Lt. L = 376.73'
Dc = 3°00'00" E = 9.33'
R = 1910.08'

CURVE WS4 DATA
P.I. = STA. 19+55.29 T = 112.97'
Δ = 3°23'17" Rt. L = 225.87'
Dc = 1°30'00" E = 1.67'
R = 3819.83'

CURVE 4 DATA
P.I. = STA. 163+77.13 T = 1066.96'
Δ = 9°56'00" Rt. L = 2128.57'
Dc = 00°28'00" E = 46.27'
R = 12,277.67' e_{max} = NC (NDC = 0.016)



PLAN AND PROFILE
STA. 154 TO STA. 168

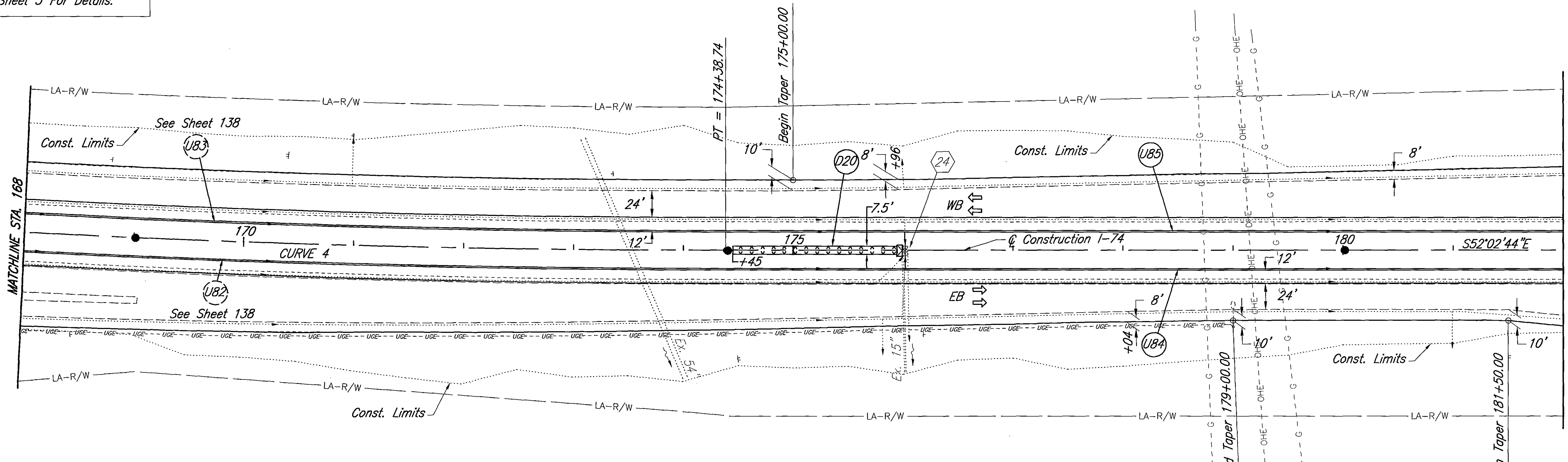
HAM-74-0.00

HORIZONTAL SCALE IN FEET

CALCULATED GAB
CHECKED DAS

GP112020.DWG 18 AUG 2003

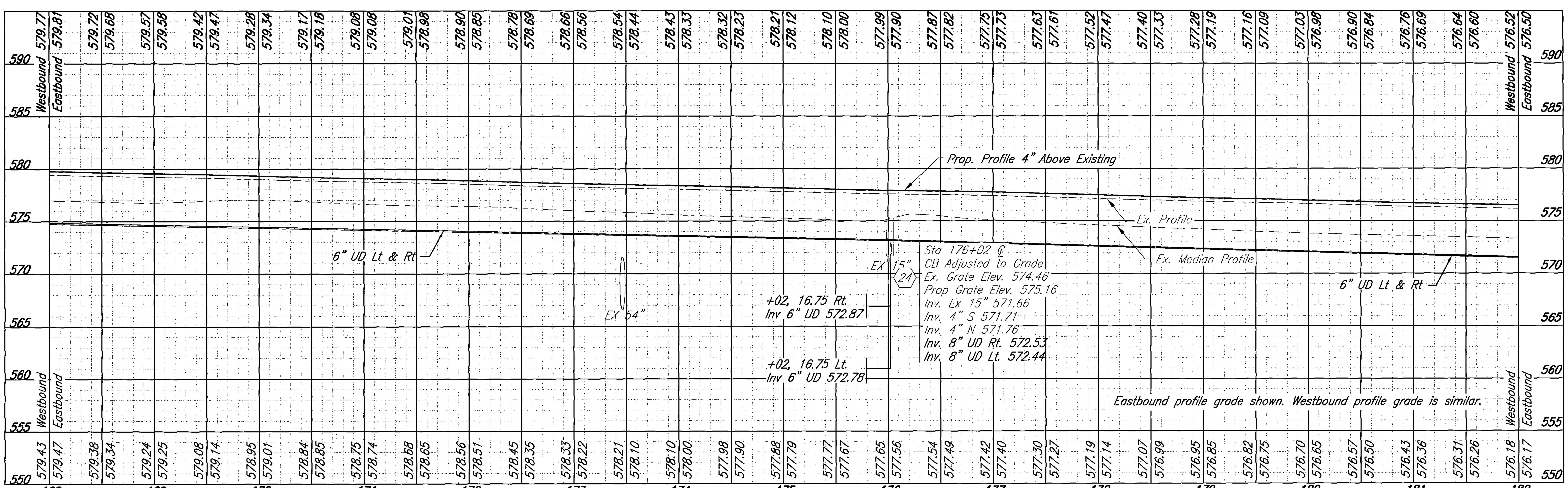
B.M.
Concrete Centerline Monument
See Sheet 3 For Details.



CURVE 4 DATA	
P.I. = STA. 163+77.13	T = 1066.96'
Δ = 9°56'00" Rt.	L = 2128.57'
Dc = 00°28'00"	E = 46.27'
R = 12,277.67'	e_{max} = NC (NDC = 0.016)

Drainage Structure No.	Station	Offset	Description
24	176+02	℄	CB Adjusted to Grade

NOTES
1. See Sheet 14 For Drainage Details.
2. ⟨X⟩ =Drainage Structure
3. For Subsummaries See Sheets 146–149



0 25 50 100
HORIZONTAL SCALE IN FEET

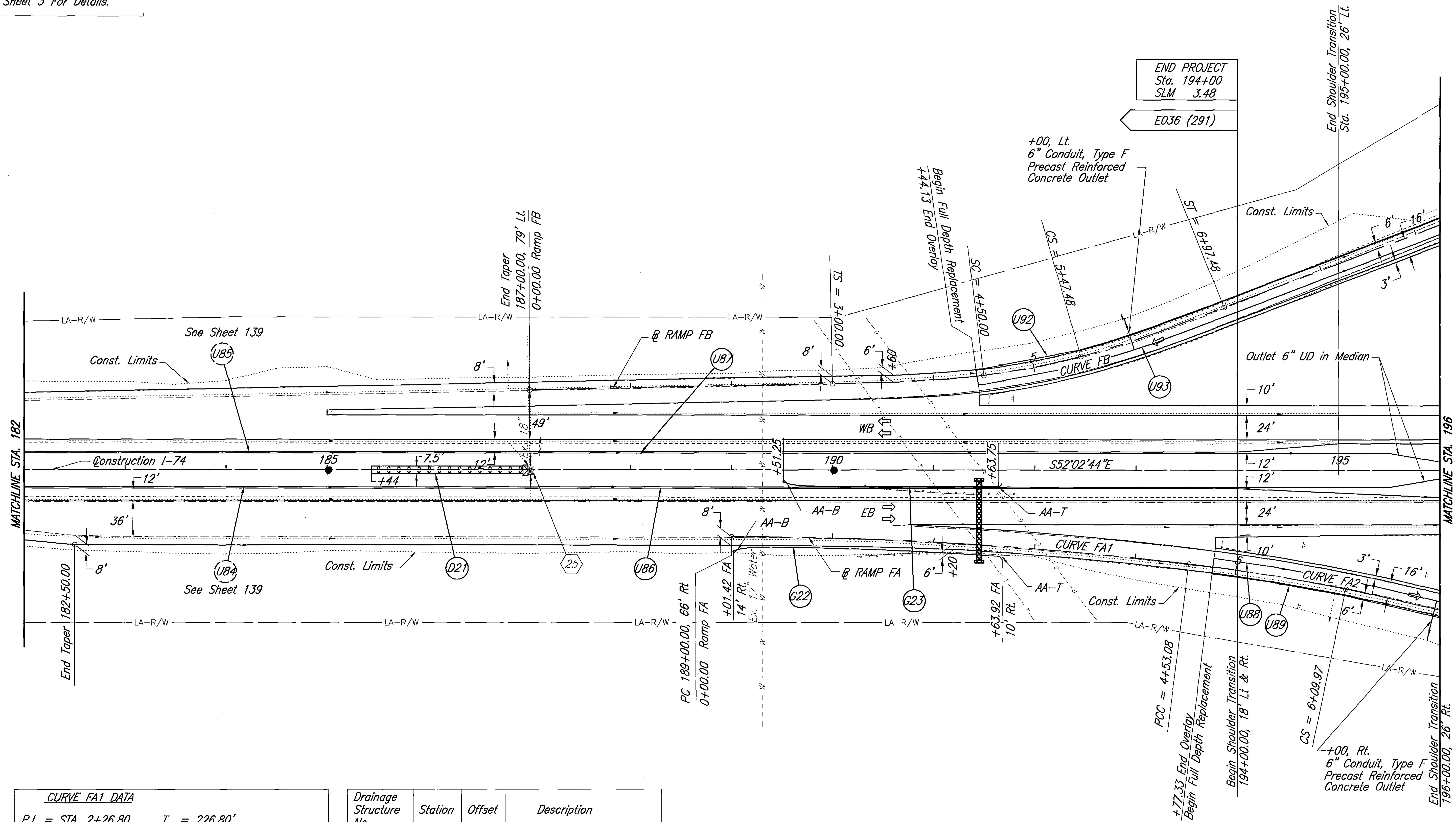
CALCULATED	CHECKED
GAB	DAS

PLAN AND PROFILE
STA. 168 TO STA. 182

HAM-74-0.00

GP113020.DWG 15 AUG 2003

B.M.
Concrete Centerline Monument
See Sheet 3 For Details.



CURVE FA1 DATA

P.I. = STA. 2+26.80	T = 226.80'
Δ = 6°47'46" Rt.	L = 453.08'
Dc = 1°30'00"	E = 6.73'
R = 3,819.72'	e_{max} = 0.034

Drainage Structure No.	Station	Offset	Description
25	187+01	℄	CB Adjusted to Grade

CURVE FA2 DATA

P.I. = STA. 5+73.22	LT = 100.01'
Δ = 6°57'24" Rt.	ST = 50.01'
Dc = 3°00'01"	Lc = 156.89'
R = 1,909.86'	T1 = 120.14'
Ls = 150.00'	T2 = 187.06'
θs = 2°14'60"	e_{max} = 0.034

CURVE FB DATA

P.I. = STA. 5+00.19	LT = 100.06'
Δ = 19°47'55" Lt.	ST = 50.05'
Dc = 8°00'23"	Lc = 97.48'
R = 716.20'	Ts = 200.19'
Ls = 150.00'	Es = 12.15'
θs = 6°00'00"	e_{max} = 0.081

NOTES
1. See Sheet 14 For Drainage Details.
2. AA-X = Anchor Assembly Type X
3. For Ramps Profiles, See Sheet 142-143.
4. ⟨X⟩ =Drainage Structure
5. For Subsummaries See Sheets 146-149

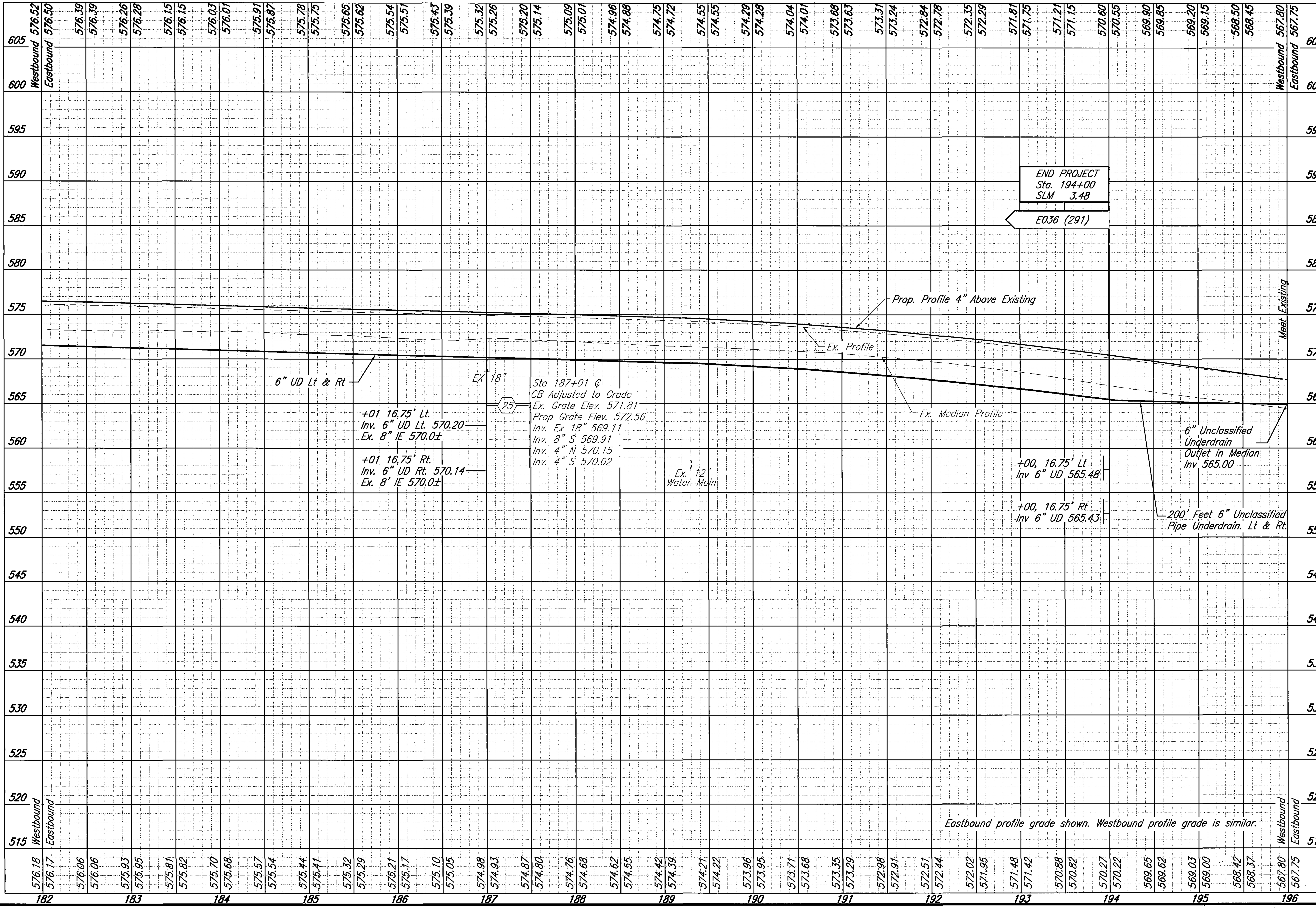
HORIZONTAL SCALE IN FEET 0 25 50 100

CALCULATED GAB
CHECKED DAS

PLAN
STA. 182 TO STA. 196

HAM-74-0.00

GP114020.DWG 15 AUG 2003



0 25 50 100
HORIZONTAL
SCALE IN FEET

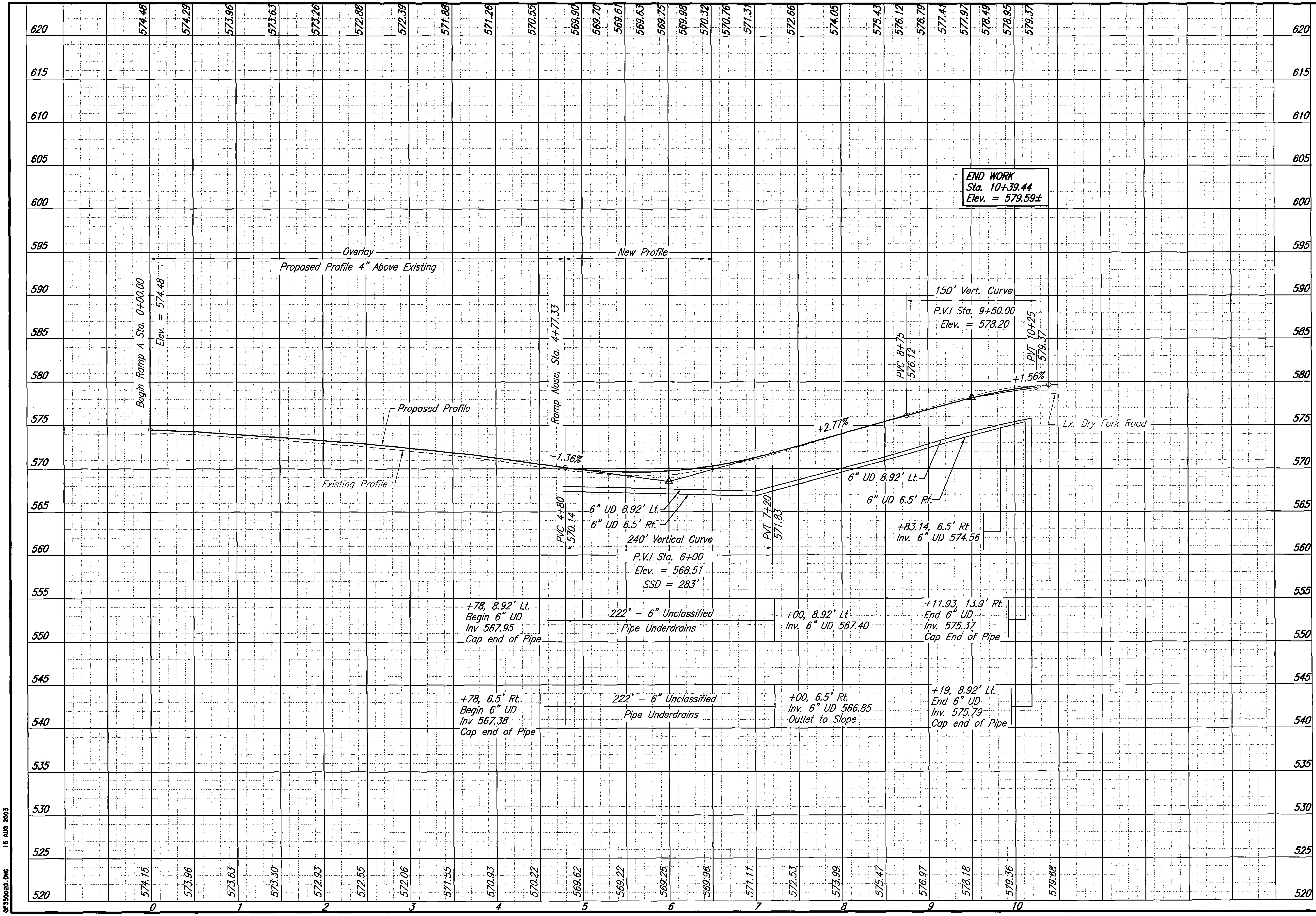
CALCULATED JNR
CHECKED DAS

PROFILE
STA. 182 TO STA. 196

HAM-74-0.00

141
421

GF114020.DWG 18 AUG 2003



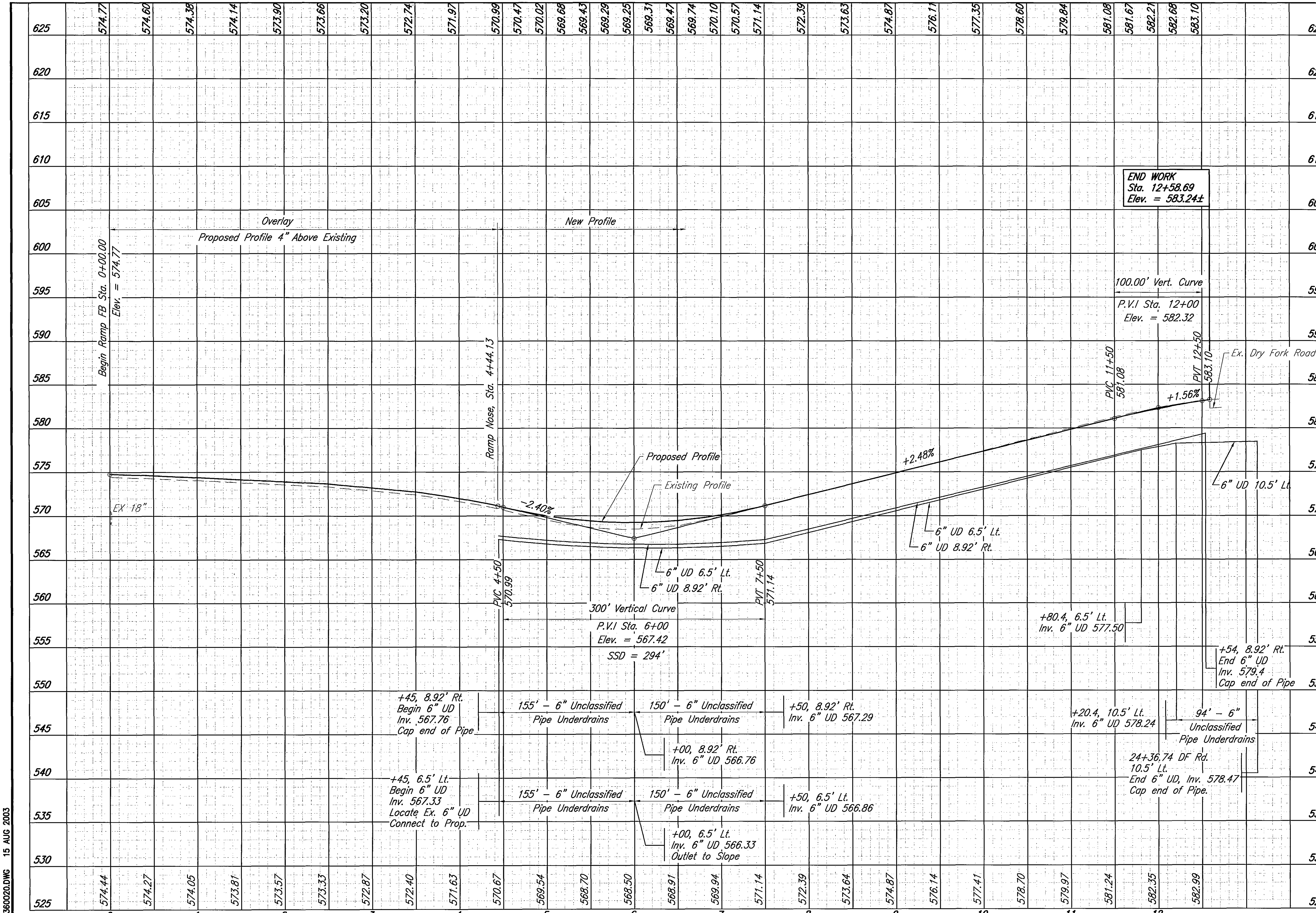
0 25 50 100
HORIZONTAL SCALE IN FEET

CALCULATED JNR
CHECKED DAS

PROFILE
RAMP FA

HAM-74-0.00

0F350020.DWG 15 AUG 2003



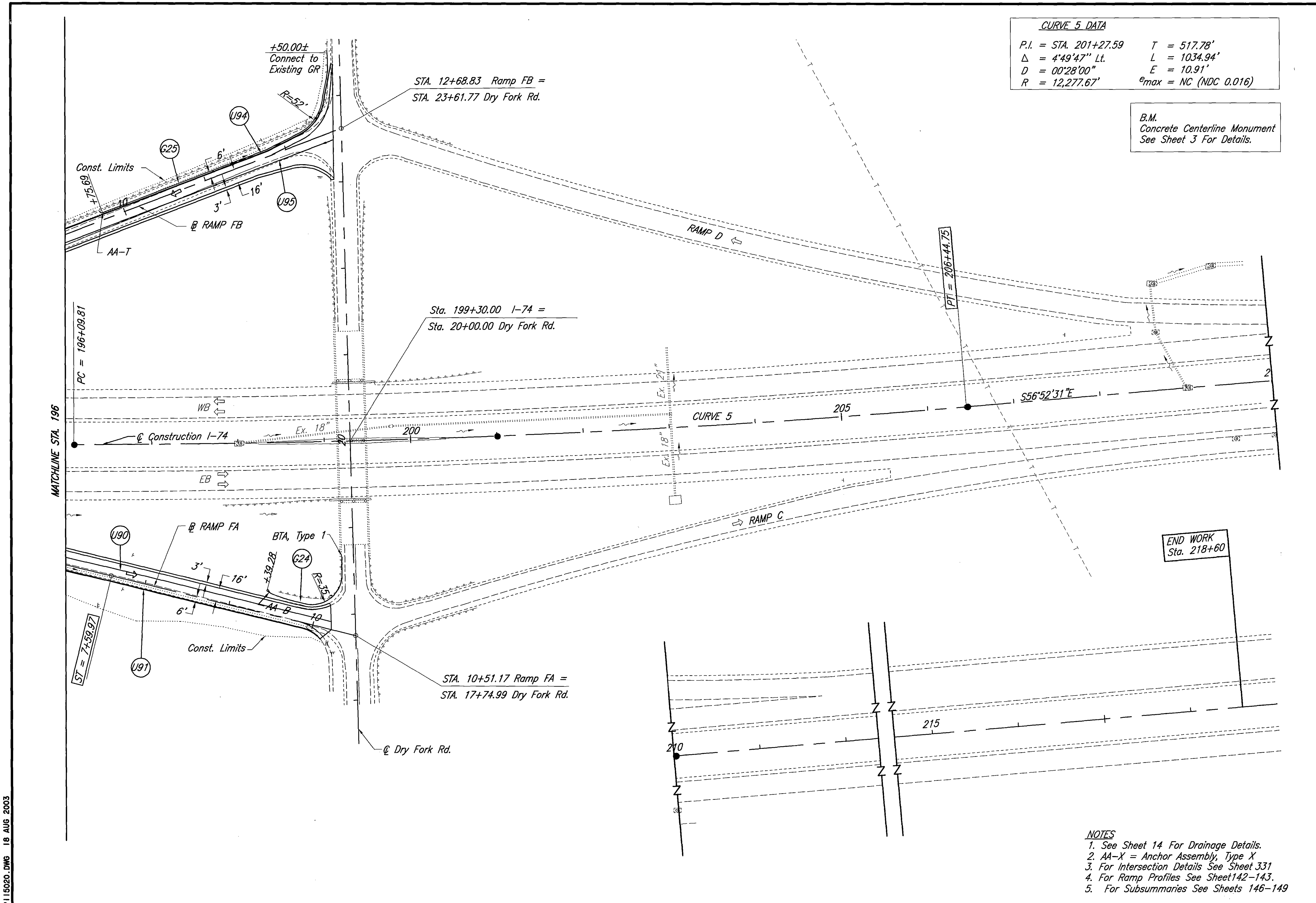
0 25 50 100
HORIZONTAL SCALE IN FEET

CALCULATED DAS
CHECKED JNR

PROFILE
RAMP FB

HAM-74-0.00

GF360020.DWG 15 AUG 2003



HORIZONTAL SCALE IN FEET 0 25 50 100

CALCULATED GAB

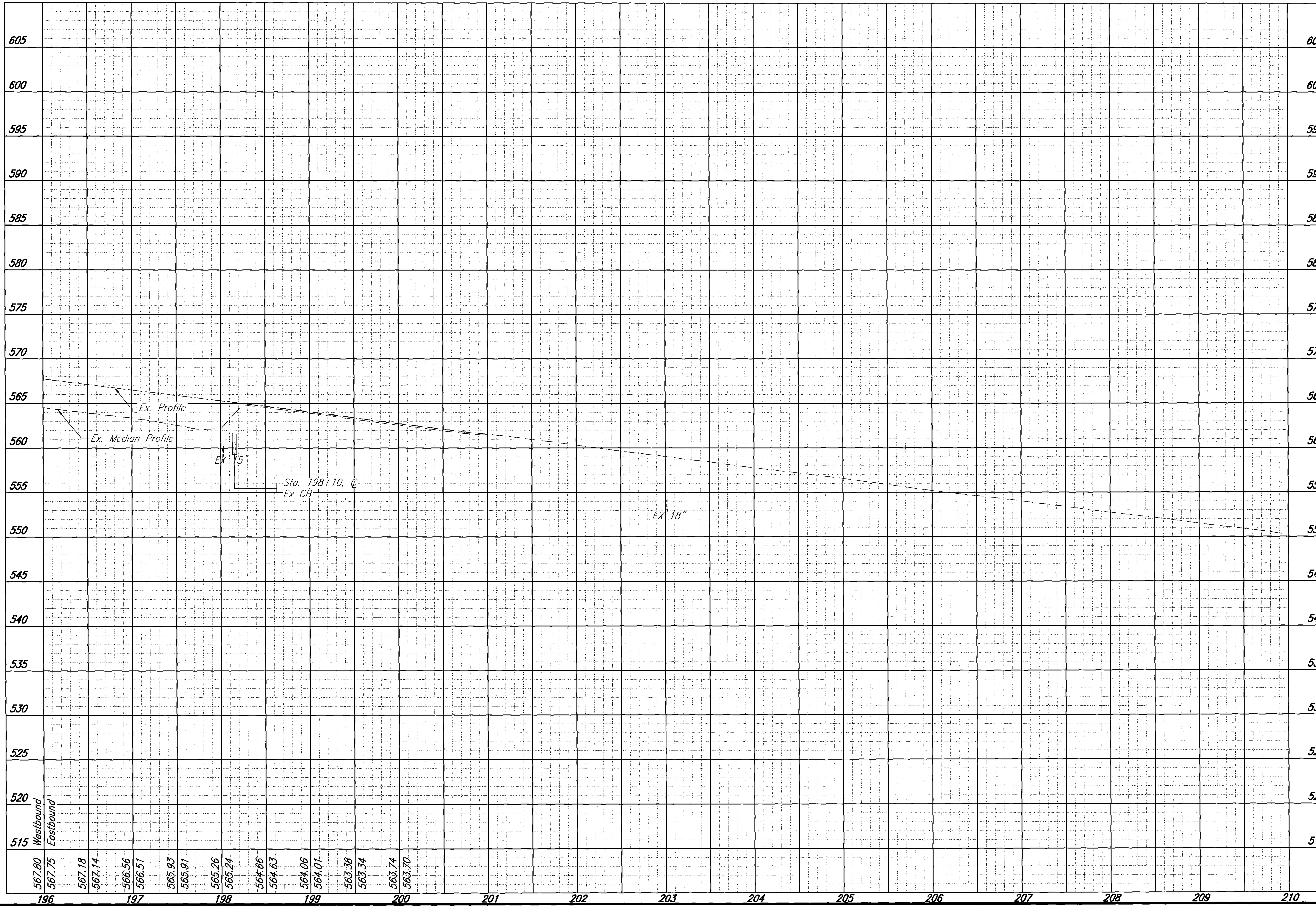
CHECKED DAS

PLAN
STA. 196 TO STA. 218+60

HAM-74-0.00

144
421

GP115020.DWG 18 AUG 2003



0 25 50 100
HORIZONTAL SCALE IN FEET

CALCULATED JNR
CHECKED DAS

PROFILE
STA. 196 TO STA. 210

HAM-74-0.00

145
421

GF115020.DWG 15 AUG 2003

CALC'D ENM CHK'D REF

REFERENCE NUMBER	SHEET NUMBER	FROM STATION	TO STATION	SIDE	CONCRETE BARRIER REMOVED	PIPE REMOVED, 24" AND UNDER	CATCH BASIN OR INLET REMOVED	SPECIAL - FILL AND PLUG EXISTING CONDUIT	DITCH CLEANOUT, AS PER PLAN	4" NON-REINFORCED CONCRETE PAVEMENT	3/4" PREFORMED EXPANSION JOINT FILLER	POROUS BACKFILL	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	CONCRETE MASONRY	15" CONDUIT, TYPE B	15" CONDUIT, TYPE C	18" CONDUIT, TYPE C	CATCH BASIN, NO. 4	CATCH BASIN, NO. 2-2B	CATCH BASIN, NO. 2-2B, AS PER PLAN	CATCH BASIN ADJUSTED TO GRADE	GUARDRAIL, BARRIER DESIGN, TYPE 5	BRIDGE TERMINAL ASSEMBLY, TYPE 1, BARRIER DESIGN	IMPACT ATTENUATOR, TYPE I-98, BIDIRECTIONAL	CURB, TYPE 4-C	CONCRETE BARRIER, SINGLE SLOPE, TYPE B	CONCRETE BARRIER, SINGLE SLOPE, TYPE B, REINFORCED	CONCRETE BARRIER, SINGLE SLOPE, TYPE D	SODDING REINFORCED	SLOPE EROSION PROTECTION	DITCH EROSION PROTECTION	REMARKS	SEE SHEET
				ITEM	202	202	202	202	209	452	516	518	601	602	603	603	603	604	604	604	604	606	606	606	609	622	622	622	660	670	670		
				UNIT	FT	FT	EACH	FT	FT	SQ YD	SQ FT	CU YD	CU YD	CU YD	FT	FT	FT	EACH	EACH	EACH	EACH	FT	EACH	EACH	FT	FT	FT	FT	SQ YD	SQ YD	SQ YD		
B1	124	44+74.09	46+20.74	CL						29	53	46										31.25	1	1			26	120					
B2	124	48+57.80	50+24.65	CL						41												31.25	1	1			26	160					
B3	128	93+46.09	96+38.28	CL	222																	62.50	2	2		119	53						
B4	136	130+24.41	133+11.64	CL	217																	62.50	2	2		114	53						
C1	124	45+86.24	46+05.39	LT																					19								
C2	124	46+16.74	46+36.10	RT																					19								
D1	121 & 122	10+00.00	19+46.00	CL																	1										939		
D2	122	21+93.00	23+50.00	CL																	1										125		
D3	122 & 123	23+50.00	32+23.00	CL																											866		
D4	123 & 124	32+39.00	44+24.00	CL																	1										1161		
D5	124	44+24.00	45+60.74	CL		10	1									8		1													216		
D6	124	48+68.00	50+90.00	CL			1									6				1											242		
D7	124	50+90.00	56+50.00	CL			1									17		1													448		
D8	124 & 126	56+51.00	58+50.00	CL																	1										193		
D9	126 & 127	67+00.00	74+02.00	CL																	1										695		
D10	127 & 128	75+00.00	85+43.00	CL																	1										1036		
D11	128	85+43.00	89+50.00	CL																											333		
D12	128	91+43.00	93+00.00	CL																											125		
D13	134	101+43.00	103+00.00	CL																	1										125		
D14	134	111+41.00	112+98.00	CL																	1										125		
D15	135	117+09.00	120+23.00	CL																	1										250		
D16	135 & 136	125+51.00	127+08.00	CL		6							1.1	0.31			14				1										125		
D17	137	141+92.00	143+49.00	CL																	1										125		
D18	137 & 138	152+45.00	154+02.00	CL		7							1.6	0.25		15					1										125		
D19	138	163+43.00	165+00.00	CL																	1										125		
D20	139	174+45.00	176+02.00	CL																	1										125		
D21	140	185+44.00	187+01.00	CL																	1										125		
D22	124	47+50.00	48+00.00	LT					50																					56			
D23	124	48+12.00	53+00.00	LT					500																					556			
D24	124	45+82.74		LT																									76				
D25	124	46+13.24		RT																									66				
D26	134	12+78.00 HC	13+13.00 HC	LT			1	35																									
D27	134	13+13.00 HC	14+01.00 HC	LT			1	88																									
D28	134	14+01.00 HC		LT			1	53																									
D29	134	9+08.00 HD		RT			1	68																									
D30	136	128+50.00	131+50.00	CL									1.7	0.25	91				1												375		
TOTALS CARRIED TO GENERAL SUMMARY					439	23	7	244	550	70	53	46	4.4	0.81	91	46	14	2	1	1	15	187.50	6	6	39	233	158	280	142	612	8,004		

SUBSUMMARY 1 OF 4

HAM-74-0.00

CALC'D JNR CHK'D DAS

REFERENCE NUMBER	SHEET NUMBER	FROM STATION	TO STATION	SIDE	GUARDRAIL REMOVED	PAVEMENT PLANING, ASPHALT CONCRETE	TACK COAT	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-28	GUARDRAIL, TYPE 5	ANCHOR ASSEMBLY, TYPE B-98	ANCHOR ASSEMBLY, TYPE E-98	ANCHOR ASSEMBLY, TYPE T	BRIDGE TERMINAL ASSEMBLY, TYPE 1	BRIDGE TERMINAL ASSEMBLY, TYPE 2	CONCRETE BARRIER, SINGLE SLOPE, TYPE D	BARRIER REFLECTOR, TYPE A	BARRIER REFLECTOR, TYPE B	REMARKS	SEE SHEET
				ITEM	202	254	407	446	606	606	606	606	606	606	622	626	626		
				UNIT	FT	SQ YD	GAL	CU YD	FT	EACH	EACH	EACH	EACH	EACH	FT	EACH	EACH		
G1	121	9+06.25	11+18.75	RT	150				187.50	1		1				3			
G2	121 & 122	10+00.00	28+25.00	RT	1825				1812.50			1				20			
G3	122 & 123	21+12.50	30+62.50	LT	775				887.50		1	1				10			
G4	123	37+86.00	40+61.00	LT	150				212.50		1	1				3			
G5	123 & 124	38+26.09	46+44.84	RT	650				768.75		1		1			9			
G6	124	43+76.74	46+14.24	LT	213				225.00			1		1		3			
G7	124	48+33.70	56+14.95	LT	725				731.25		1		1			8			
G8	124 & 126	48+64.63	61+77.35	RT	1313				1,312.72				1	1		14			
G9	126	66+23.07	67+04.32	LT	125				31.25		1		1			1			
G10	126 - 128	68+00.00	6+78.95 HA	RT	2017				1,950.00		1					21			
G11	127 & 128	73+92.43	6+55.80 HB	LT	1548				1,550.00			1				17			
G14	128	92+85.85	94+95.00	RT	125				106.25		1		1		55	2	3		
G15	128	94+90.00	96+99.15	LT	125				106.25		1		1		55	2	3		
G20	136	129+80.85	131+85.00	RT	163				106.25		1		1		50	2	3		
G21	136	131+50.00	133+54.15	LT	163				106.25		1		1		50	2	3		
G22	140	0+01.42 FA	2+63.92 FA	RT	150				237.50	1		1							
G23	140	189+51.25	191+63.75	RT	150				187.50	1		1							
G24	144	9+39.28 FA	18+68.43 DF	LT	113				118.75	1			1						
G25	144	9+75.69 FB	24+50.00 DF	LT	475				337.50			1							
P1	137 & 138	WEIGH STATION		RT		4,730	355	197											
TOTALS CARRIED TO GENERAL SUMMARY					10,955	4,730	355	197	10,975.22	4	10	9	9	2	210	117	12		

SUBSUMMARY 2 OF 4

HAM-74-0.00

CALC'D ENM	CHK'D REF

REFERENCE NUMBER	SHEET NUMBER	FROM STATION	TO STATION	SIDE	6" CONDUIT, TYPE B	6" CONDUIT, TYPE F	8" CONDUIT, TYPE B	8" CONDUIT, TYPE F		6" SHALLOW PIPE UNDERDRAINS	6" UNCLASSIFIED PIPE UNDERDRAINS	6" ROCK CUT UNDERDRAINS	PIPE SPECIALS 6" X 6" TEE	PIPE SPECIALS 6" X 8" TEE	PIPE SPECIALS 6" X 8" 90° BEND	PIPE SPECIALS 6" X 6" CROSS	PIPE SPECIALS 6" X 8" CROSS	PIPE SPECIALS 6" CAP	PIPE SPECIALS 6" 90° BEND
				ITEM	603	603	603	603		605	605	605							
				UNIT	FT	FT	FT	FT		FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH
U1	121	10+00	19+46	RT				17		946				1				1	
U2	121	10+00	19+46	LT				17		946				1				1	
U3	122	19+46	23+50	RT				17		284	120						1		
U4	122	19+46	23+50	LT				17		340	64						1		
U5	122	23+50	32+54	RT				17		400	150	354		1					
U6	122	23+50	32+60	LT				17		240	250	420		1					
U7	123	32+39	44+24	RT				17		724	100	346		1					
U8	123	32+39	44+24	LT				17		99	100	965		1					
U9	124	44+24	46+42	RT		17		17		258			1	1					1
U10	124	44+24	46+38	LT				17		214				1					
U11	124	48+42	48+68	RT				17			26						1	1	
U12	124	48+45	48+68	RT			13				23						1	1	
U13	124	48+51	48+68	RT			25				17						1	1	
U14	124	48+54	48+68	RT			11				14			1				1	
U15	124	48+34	48+68	LT				17			34			1				1	
U16	124	48+68	50+02	RT						102	32								
U17	124	48+68	50+02	RT						102	32							1	
U18	124	48+68	50+02	RT						102	32							1	
U19	124	48+68	50+02	RT						102	32							1	
U20	124	48+68	56+51	LT						751	32								
U21	124	50+02	53+98	RT						396									
U22	124	53+98	54+25	RT							27		1						
U23	124	53+98	54+25	RT	13						27					1		1	
U24	124	53+98	54+25	RT	25						27					1		1	
U25	124	53+98	54+25	RT	11						27		1					1	
U26	124	54+25	56+45	RT						220								1	
U27	124	54+25	56+45	RT						195	25							1	
U28	124	54+25	56+45	RT						195	25							1	
U29	124	54+25	56+45	RT						195	25							1	
U30	124	56+51	57+75	RT				17		100	24			1					
U31	124	56+51	57+75	RT			13			100	24			1				1	
U32	124	56+51	57+75	RT			25			100	24			1				1	
U33	124	56+51	57+75	RT			11			124					1			1	
U34	124	56+51	63+00	LT				17		99	400	150		1					
U35	126	57+75	63+00	RT						75	400	50							
U36	126	63+00	74+02	RT				17		602	450	50		1					
U37	126	63+00	74+02	LT				17		502	450	150		1					
U38	127	74+02	85+43	RT				17		1141				1					
U39	127	74+02	85+43	LT				17		1141				1					
U40	128	85+43	93+00	RT				17		757							1		
U41	128	85+43	93+00	LT				17		757							1		
SUBTOTALS					49	17	98	340		12309	3013	2485	3	18	1	2	7	20	1

REFERENCE NUMBER	SHEET NUMBER	FROM STATION	TO STATION	SIDE	6" CONDUIT, TYPE B	6" CONDUIT, TYPE F	8" CONDUIT, TYPE B	8" CONDUIT, TYPE F		6" SHALLOW PIPE UNDERDRAINS	6" UNCLASSIFIED PIPE UNDERDRAINS	6" ROCK CUT UNDERDRAINS	PIPE SPECIALS 6" X 6" TEE	PIPE SPECIALS 6" X 8" TEE	PIPE SPECIALS 6" X 8" 90° BEND	PIPE SPECIALS 6" X 6" CROSS	PIPE SPECIALS 6" X 8" CROSS	PIPE SPECIALS 6" CAP	PIPE SPECIALS 6" 90° BEND
				ITEM	603	603	603	603		605	605	605							
				UNIT	FT	FT	FT	FT		FT	FT	FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH
U42	128	93+00	103+00	RT				17		280	720		1	1					
U43	128	93+00	103+00	LT				17		280	720		1	1					
U44	128	91+50	93+00	RT			11				150			1				1	
U45	128	91+50	93+00	RT			25				150						1	1	
U46	128	91+50	93+00	RT			13				150						1	1	
U47	128	91+50	93+00	LT			11				150			1				1	
U48	128	91+50	93+00	LT			25				150						1	1	
U49	128	91+50	93+00	LT			13				150						1	1	
U50	128	93+03	98+70	RT	11						567								1
U51	128	93+03	98+70	RT	25						567		1						
U52	128	93+03	98+70	RT	13						567		1						
U53	128	93+03	98+70	LT	11						567								1
U54	128	93+03	98+70	LT	25						567		1						
U55	128	93+03	98+70	LT	13						567		1						
U56	134	103+00	112+98	RT				17			998			1				1	
U57	134	103+00	112+98	LT				17			998			1					
U58	134	112+98	118+66	RT				17		302	266						1		
U59	134	112+98	118+66	LT				17		302	266						1		
U60	135	118+66	125+51	RT				17		551	134			1					
U61	135	118+66	125+51	LT				17		551	134			1					
U62	135	125+51	134+00	RT				17		119	730		1	1					
U63	135	125+51	134+00	LT				17		119	730		1	1					
U64	136	126+70	134+00	RT	11						730								1
U65	136	126+70	134+00	RT	25						730		1						
U66	136	126+70	134+00	RT	13						730		1						
U67	136	126+70	134+00	LT	11						730								1
U68	136	126+70	134+00	LT	25						730		1						
U69	136	126+70	134+00	LT	13						730		1						
U70	136	134+00	135+80	RT	11						180								1
U71	136	134+00	135+80	RT	25						180		1						
U72	136	134+00	135+80	RT	13						180		1						
U73	136	134+00	135+80	LT	11						180								1
U74	136	134+00	135+80	LT	25						180		1						
U75	136	134+00	135+80	LT	13						180		1						
U76	136	134+00	143+49	RT				17		693	250		1	1					
U77	136	134+00	143+49	LT				17		693	250		1	1					
U78	137	143+49	154+02	RT				17		1053				1					
U79	137	143+49	154+02	LT				17		1053				1					
U80	138	154+02	165+00	RT				17		1098				1			1		
SUBTOTALS					294	0	98	255		7094	15958	0	18	15	0	0	7	7	6
SUBTOTALS FROM LEFT SIDE					49	17	98	340		12309	3013	2485	3	18	1	2	7	20	1
PIPE SPECIAL TOTALS													21	33	1	2	14	27	7
TOTALS CARRIED TO GENERAL SUMMARY					343	17	196	595		19403	18971	2485							

SUBSUMMARY 3 OF 4

HAM-74-0.00

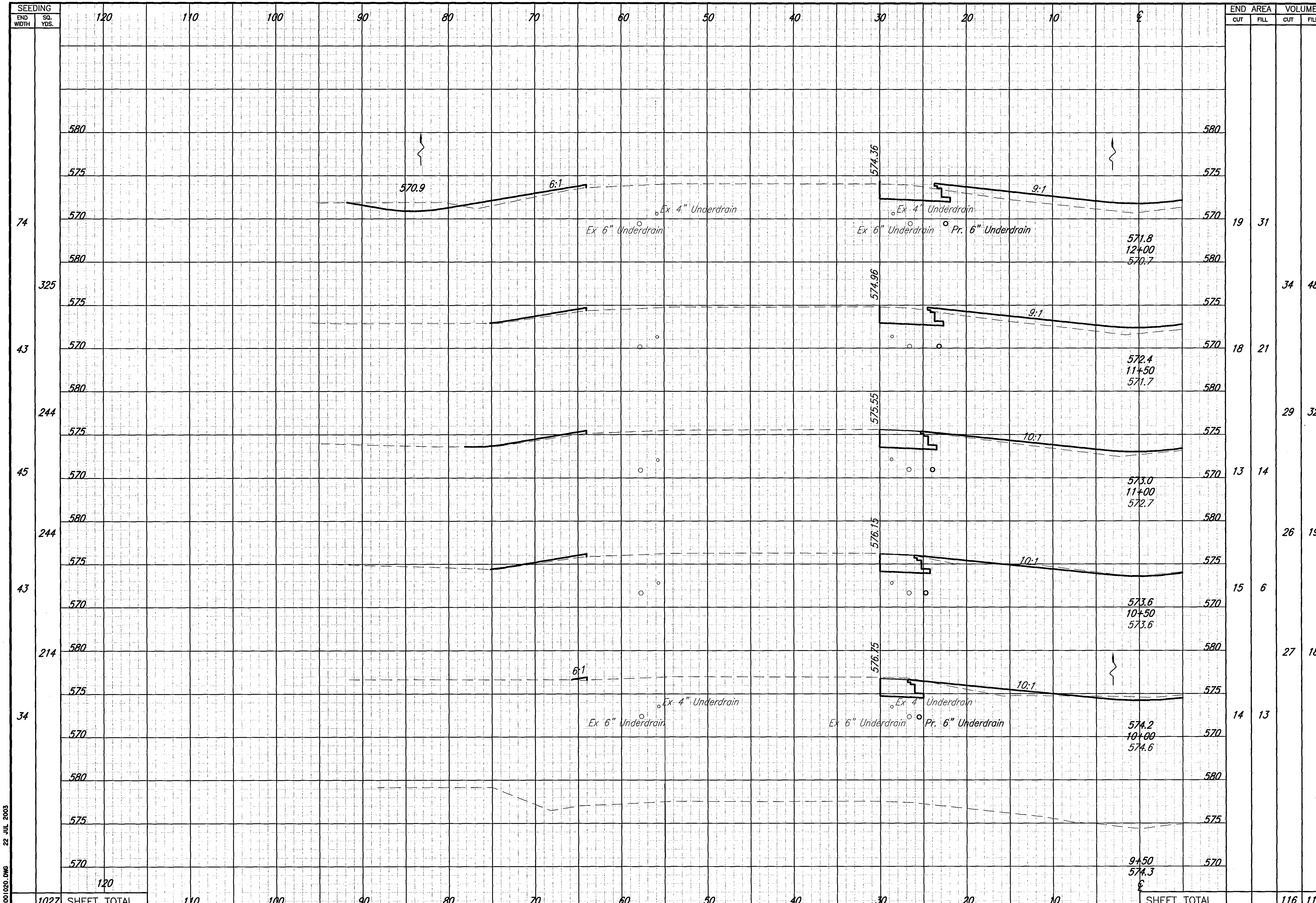
Summaries.xls
SUB3

CALC'D ENM
CHK'D REF

REFERENCE NUMBER	SHEET NUMBER	FROM STATION	TO STATION	SIDE	6" CONDUIT, TYPE B	6" CONDUIT, TYPE F	8" CONDUIT, TYPE F	PRECAST REINFORCED CONCRETE OUTLET	6" SHALLOW PIPE UNDERDRAINS	6" UNCLASSIFIED PIPE UNDERDRAINS	PIPE SPECIALS: 6" X 6" TEE	PIPE SPECIALS: 6" X 8" TEE	PIPE SPECIALS: 6" X 6" CROSS	PIPE SPECIALS: 6" X 8" CROSS	PIPE SPECIALS: 6" CAP
				ITEM	603	603	603	604	605	605					
				UNIT	FT	FT	FT	EACH	FT	FT	EACH	EACH	EACH	EACH	EACH
U81	138	154+02	165+00	LT			17		1098			1		1	
U82	138	165+00	176+02	RT			17		1102			1			
U83	138	165+00	176+02	LT			17		1102			1			
U84	139	176+02	187+01	RT			17		1099					1	
U85	139	176+02	187+01	LT			17		1099					1	
U86	140	187+01	196+00	RT		26		1	699	174	1				1
U87	140	187+01	196+00	LT		26		1	699	174	1				1
		RAMP FA													
U88	140	4+78	7+00	LT	15					222	1				1
U89	140	4+78	7+00	RT		20		1		222			1		1
U90	144	7+00	10+19	LT					319						1
U91	144	7+00	10+11.39	RT					318						1
		RAMP FB													
U92	140	4+45	6+00	LT		16		1		155			1		
U93	140	4+45	6+00	RT	15					155	1				1
U94	144	6+00	24+36.74 DF	LT					470	244					1
U95	144	6+00	12+54	RT					504	150					1
SUBTOTALS					30	88	85	4	8509	1496					
PIPE SPECIAL TOTALS											4	3	2	3	9
TOTALS CARRIED TO GENERAL SUMMARY					30	88	85	4	8509	1496					

SUBSUMMARY 4 OF 4

HAM-74-0.00



CALCULATED SEB
CHECKED GAB

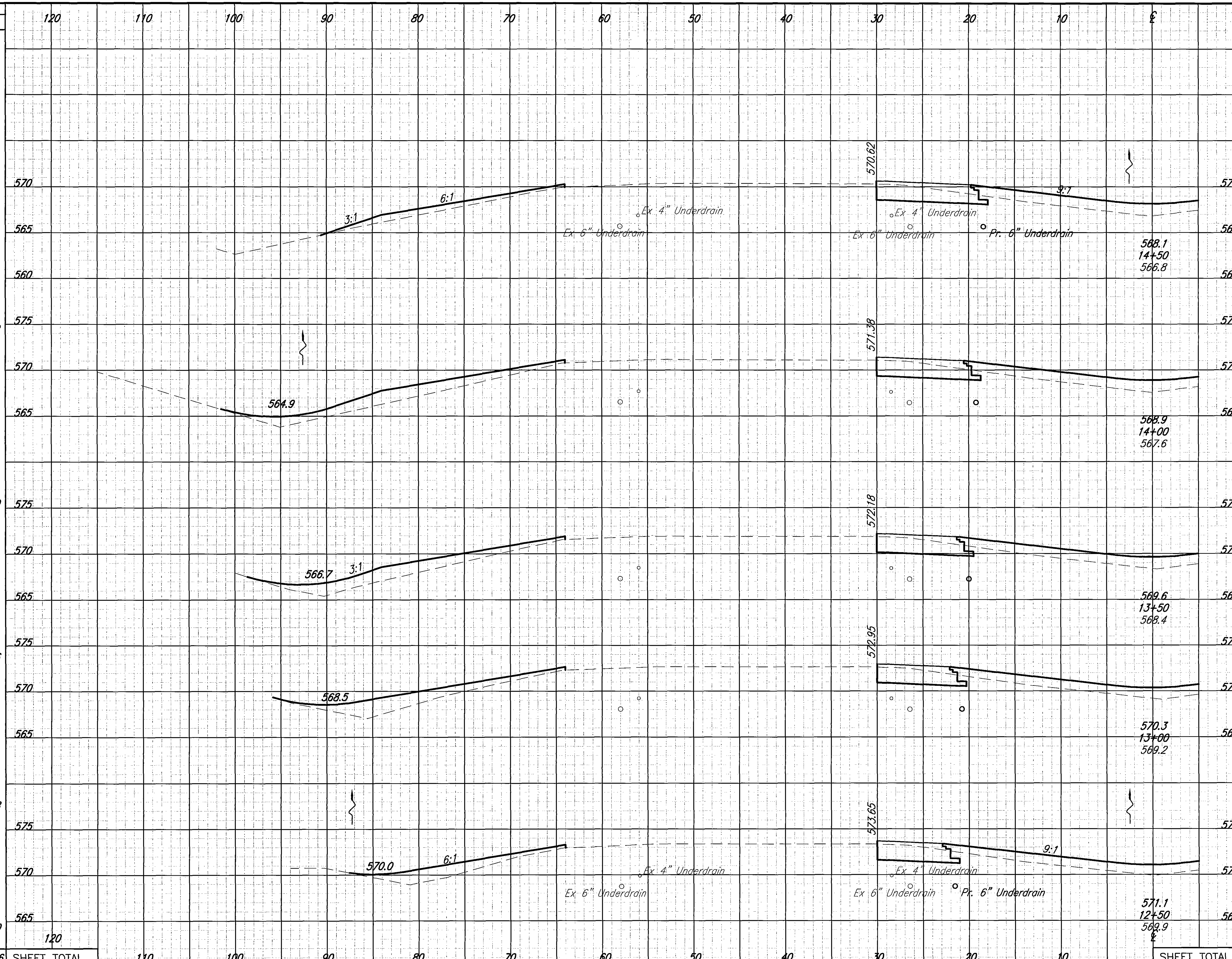
CROSS SECTIONS – WESTBOUND
STA. 9+50 TO STA. 12+00

HAM-74-0.00

CROSS SECTIONS – WESTBOUND
STA. 12+50 TO STA. 14+50

HAM-74-0.00

CALCULATED SEB
CHECKED GAB

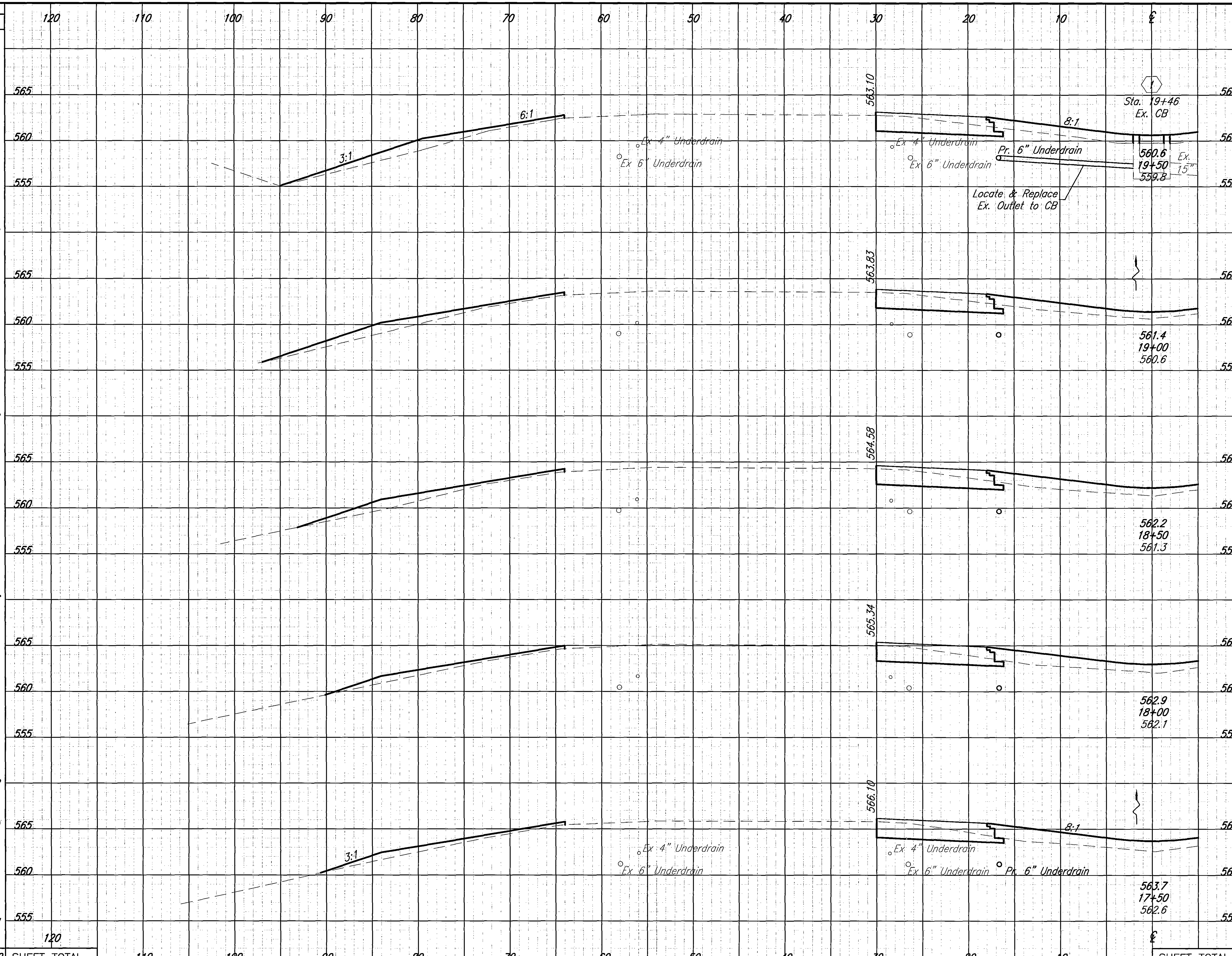


Seeding End Width	Seeding Sq. Yds.	Station	End Area Cut	End Area Fill	Volume Cut	Volume Fill
52		14+50	16	41		
	322				31	92
64		14+00	17	58		
	350				31	106
62		13+50	16	56		
	336				28	100
59		13+00	14	52		
	308				26	91
52		12+50	14	46		
	350				31	71
	1666	SHEET TOTAL			147	460

GX002020.DWG 22 JUL 2003

SEEDING
END WIDTH
SQ. YDS.
END AREA
CUT
FILL
VOLUME
CUT
FILL
CALCULATED SEB
CHECKED GAB
120
110
100
90
80
70
60
50
40
30
20
10
℄
566.85
3:1
6:1
8:1
Ex 4" Underdrain
Ex 6" Underdrain
Pr. 6" Underdrain
564.4
17+00
563.1
51
17
40
289
31
77
567.58
565.1
16+50
563.8
53
17
43
297
31
85
568.32
565.9
16+00
564.5
54
17
49
300
31
87
569.11
566.6
15+50
565.3
54
17
45
289
31
76
569.88
567.4
15+00
566.0
50
17
37
283
31
72
1458
SHEET TOTAL
155
397
570
565
560
CROSS SECTIONS – WESTBOUND
STA. 15+00 TO STA. 17+00
HAM-74-0.00
152
421
0X003020.DWG
22 JUL 2003

SEEDING	
END WIDTH	SQ. YDS.
62	
	331
57	
	306
53	
	286
50	
	278
50	
	281
	1482



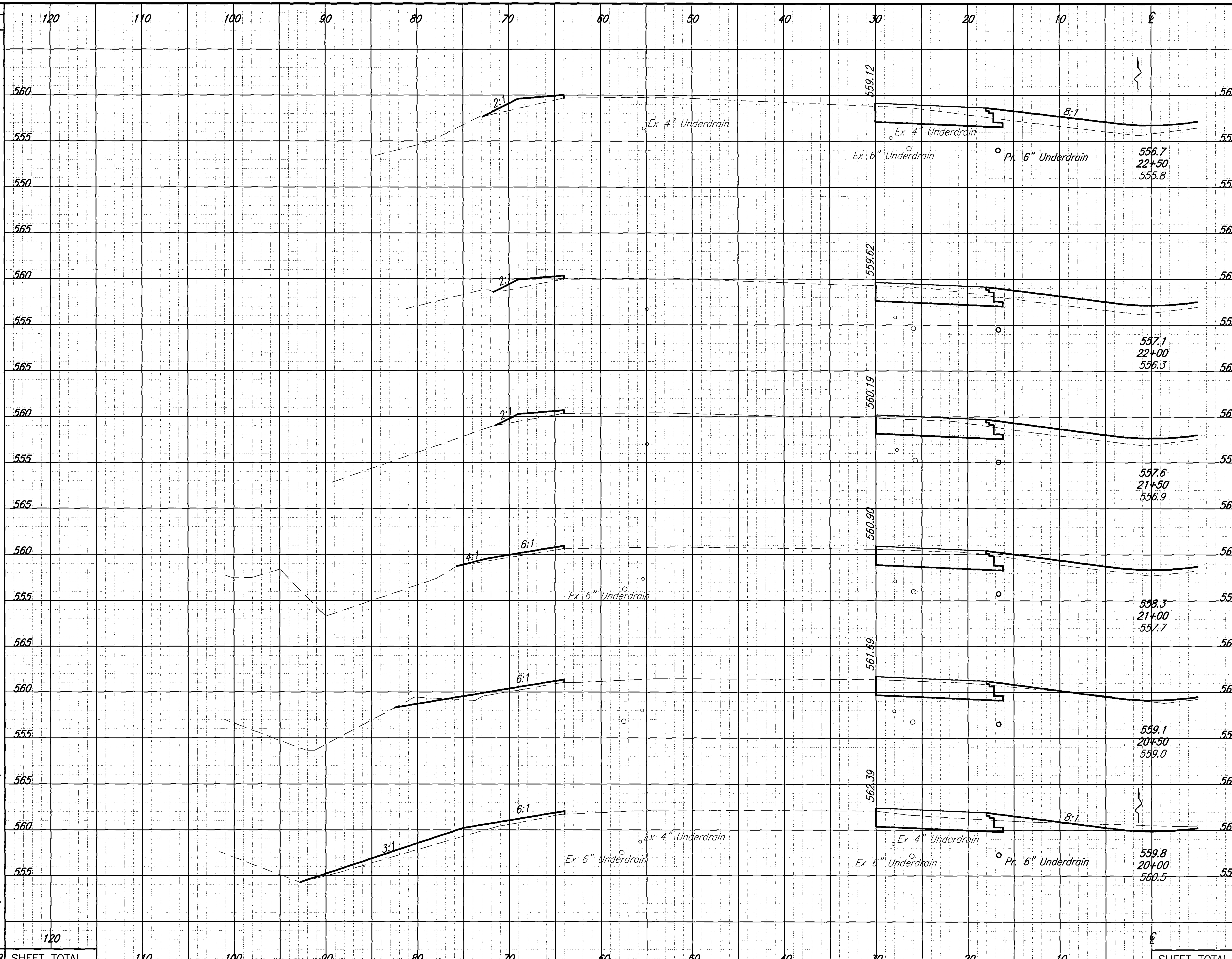
END AREA		VOLUME	
CUT	FILL	CUT	FILL
20	57		
		36	85
19	35		
		34	65
18	35		
		33	64
18	34		
		32	67
17	38		
		31	72
		166	353

CALCULATED DEB
CHECKED GAB

CROSS SECTIONS - WESTBOUND STA. 17+50 TO STA. 19+50

HAM-74-0.00

6X004020.DWG 22 JUL 2003



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
22+50	31		19	28		
		169			36	48
22+00	30		20	24		
		167			39	41
21+50	30		22	20		
		231			43	69
21+00	53		24	54		
		314			46	76
20+50	60		26	28		
		336			47	69
20+00	61		25	46		
		342			42	95
SHEET TOTAL		1559			253	398

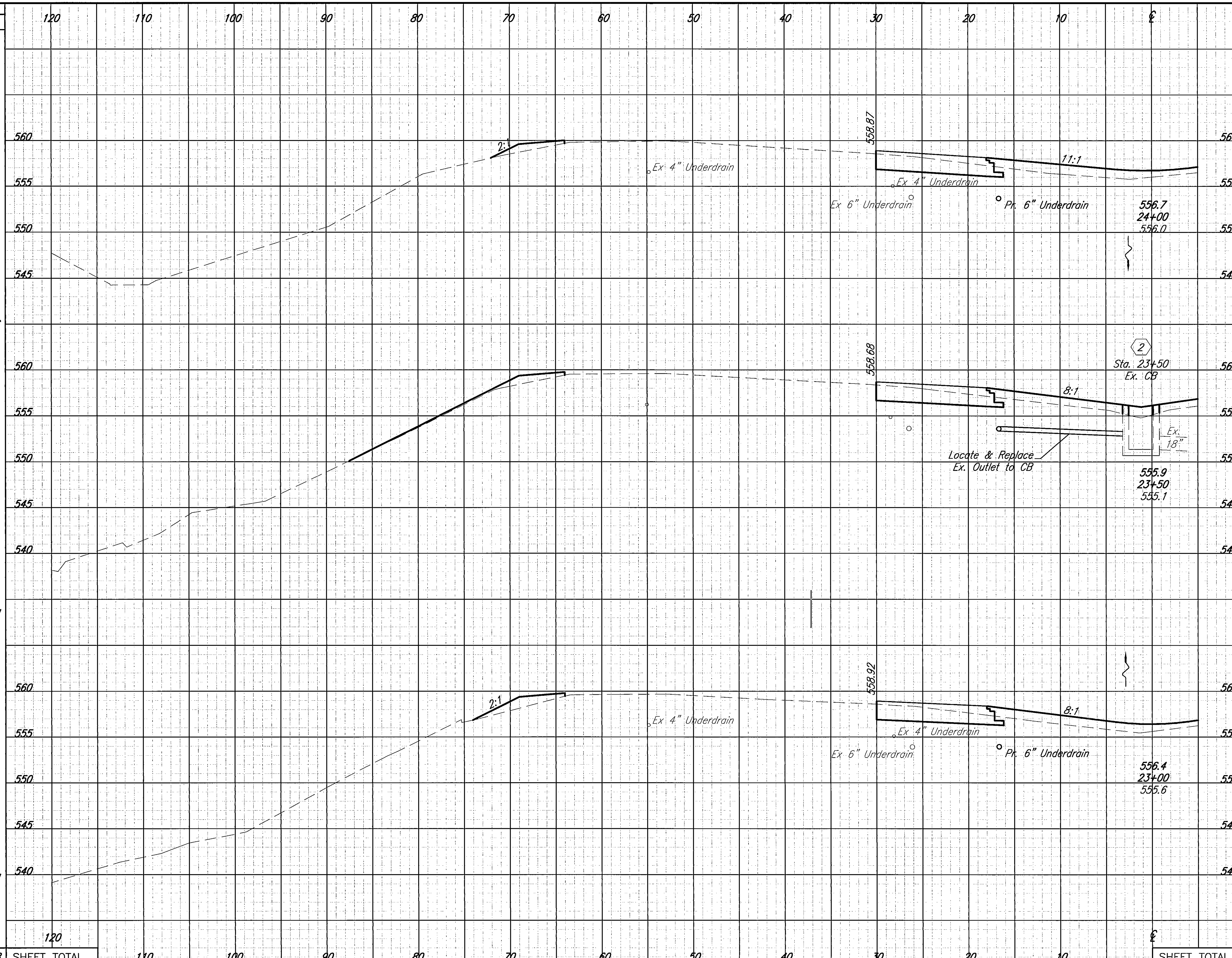
CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA. 20+00 TO STA. 22+50

HAM-74-0.00

GX005020.DWG 22 JUL 2003

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
32		20	24		
	206			37	43
42		20	22		
	211			36	49
34		19	31		
	181			35	55
	598 SHEET TOTAL		SHEET TOTAL	108	147



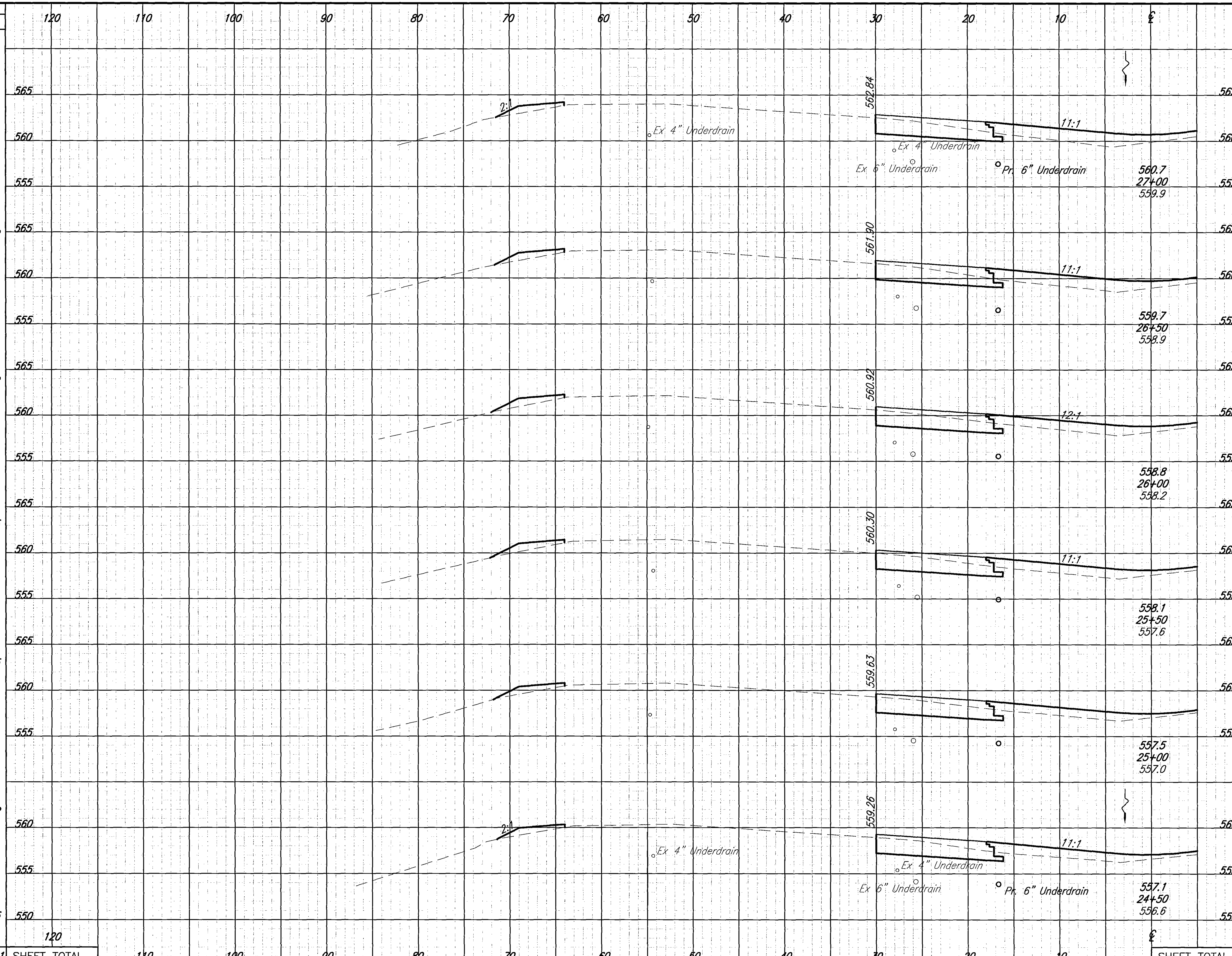
CALCULATED SEB

CHECKED GAB

CROSS SECTIONS – WESTBOUND STA. 23+00 TO STA. 24+00

HAM-74-0.00

GX06020.DWG 22 JUL 2003



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
27+00	31		19	30		
		172			35	55
26+50	31		19	29		
		172			35	50
26+00	31		19	25		
		175			36	45
25+50	32		20	24		
		175			37	42
25+00	31		20	21		
		172			36	41
24+50	31		19	23		
		175			36	44
SHEET TOTAL		1041			215	277

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND STA. 24+50 TO STA. 27+00

HAM-74-0.00

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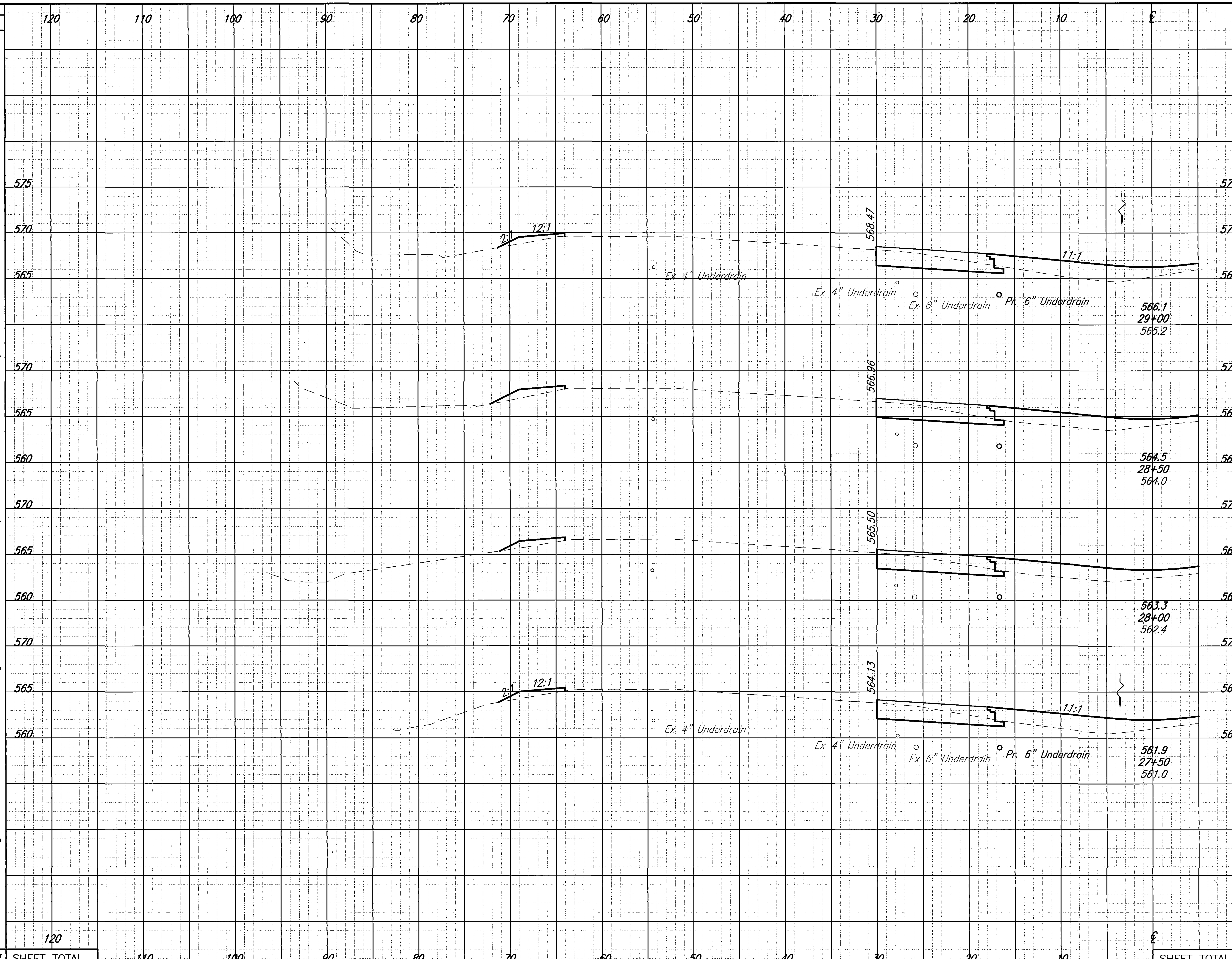
0X007020.DWG 22 JUL 2003

SEEDING END WIDTH	SEEDING SQ. YDS.
38	
	211
38	
	189
30	
	169
31	
	172
	741



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
19	33		
		33	60
17	32		
		32	58
18	31		
		33	60
18	34		
		34	59
		132	237

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA. 27+50 TO STA. 29+00

HAM-74-0.00

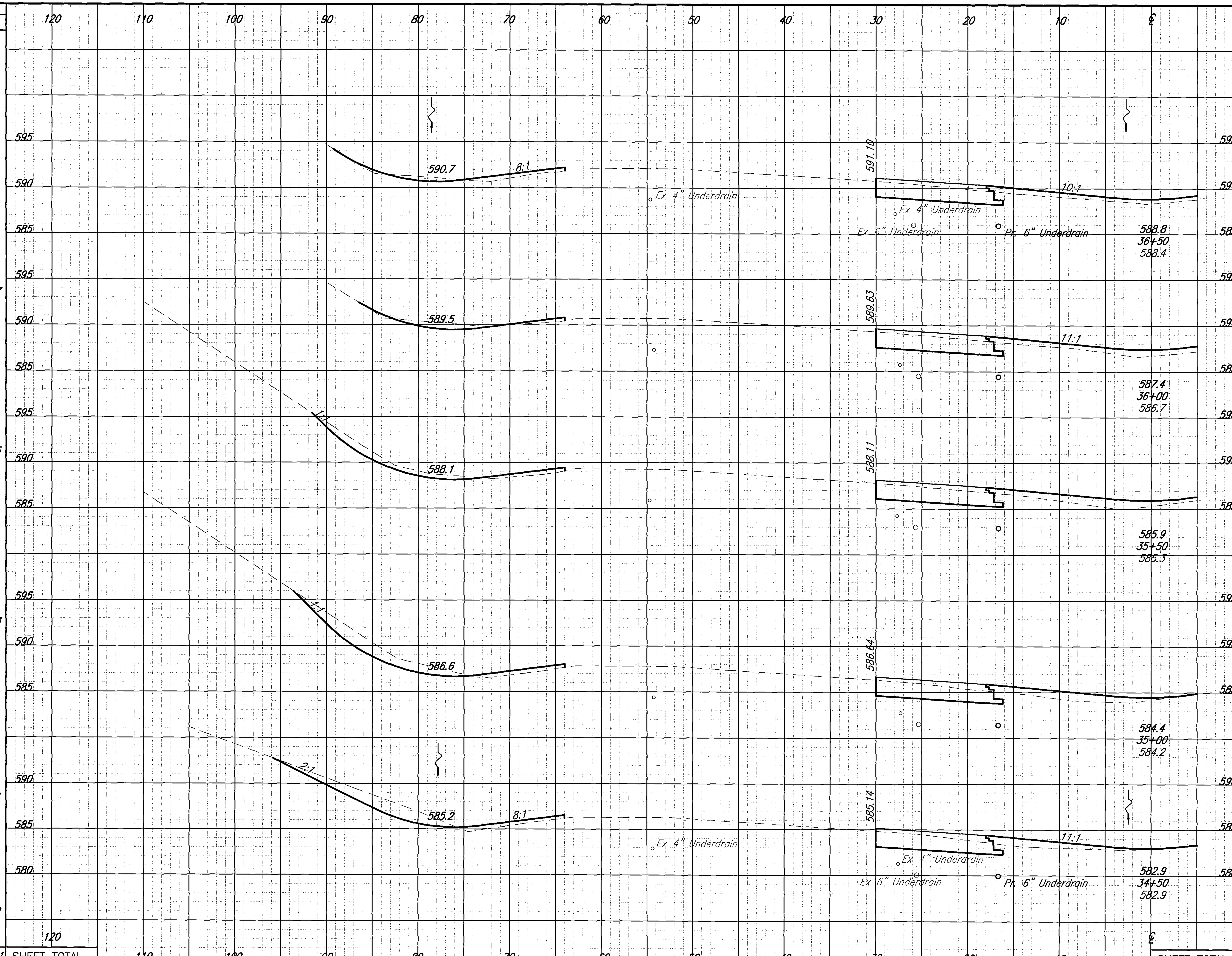
157
421

GX06020.DWG 22 JUL 2003


SEEDING
END WIDTH
SQ. YDS.
END AREA
CUT
FILL
VOLUME
CUT
FILL
CALCULATED SEB
CHECKED GAB
120
110
100
90
80
70
60
50
40
30
20
10
℄
6:1
10:1
576.11
Ex 4" Underdrain
Ex 4" Underdrain
Ex 6" Underdrain
Pr. 6" Underdrain
573.8
31+50
573.1
18
19
24
100
34
48
6:1
11:1
574.54
572.3
31+00
571.4
18
18
28
100
32
56
2:1
12:1
573.06
570.8
30+50
569.8
18
17
32
128
32
60
2:1
12:1
571.53
569.3
30+00
568.1
28
18
33
156
34
64
2:1
12:1
11:1
570.00
Ex 4" Underdrain
Ex 4" Underdrain
Ex 6" Underdrain
Pr. 6" Underdrain
567.8
29+50
566.5
28
19
36
183
35
64
580
575
570
565
667
SHEET TOTAL
SHEET TOTAL
167
292
CROSS SECTIONS – WESTBOUND
STA. 29+50 TO STA. 31+50
HAM-74-0.00
158
421
GX009020.DWG 22 JUL 2003

SEEDING
END WIDTH
SQ. YDS.
END AREA
CUT
FILL
VOLUME
CUT
FILL
CALCULATED SEB
CHECKED GAB
CROSS SECTIONS - WESTBOUND
STA. 32+00 TO STA. 34+00
HAM-74-0.00
159
421
SHEET TOTAL
784
199
167
48
206
26
147
27
150
27
153
28
128
23 20
39 39
19 22
37 41
21 22
38 39
20 20
43 22
26 4
42 26
2:1
583.7
8:1
583.66
11:1
Ex 4" Underdrain
Ex 6" Underdrain
Pr. 6" Underdrain
581.4
34+00
581.0
6:1
582.19
10:1
579.9
33+50
579.3
580.69
578.4
33+00
577.4
579.17
3
Sta. 32+39
Ex. CB
Ex. 24"
576.9
32+50
576.0
Locate & Replace
Ex. Outlet to CB
577.63
575.3
32+00
575.5
GX010020.DWG 22 JUL 2003

SEEDING END WIDTH	SEEDING SQ. YDS.
50	
	267
46	
	275
53	
	303
56	
	314
57	
	292
	1451 SHEET TOTAL



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
24	16		
		46	29
26	15		
		54	32
32	20		
		68	35
41	18		
		74	31
39	15		
		57	32
		299	159

CALCULATED SEB CHECKED GAB

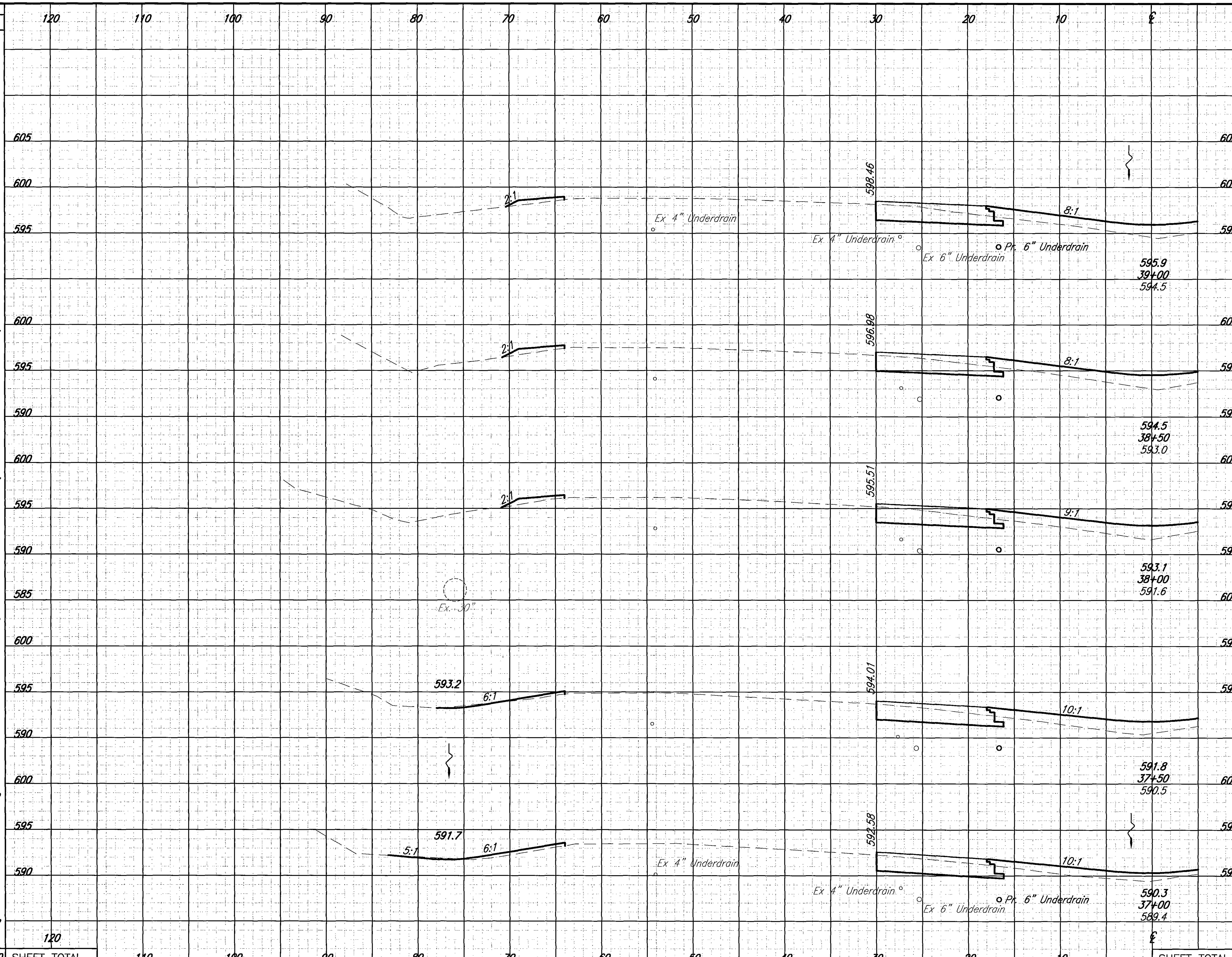
CROSS SECTIONS - WESTBOUND
STA. 34+50 TO STA. 36+50

HAM-74-0.00

160
421

0X011020.DWG 22 JUL 2003

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
30		19	30		
	167			35	56
30		19	30		
	167			35	56
30		19	30		
	186			36	53
37		20	27		
	222			38	46
43		21	23		
	258			42	36
SHEET TOTAL	1000			186	247



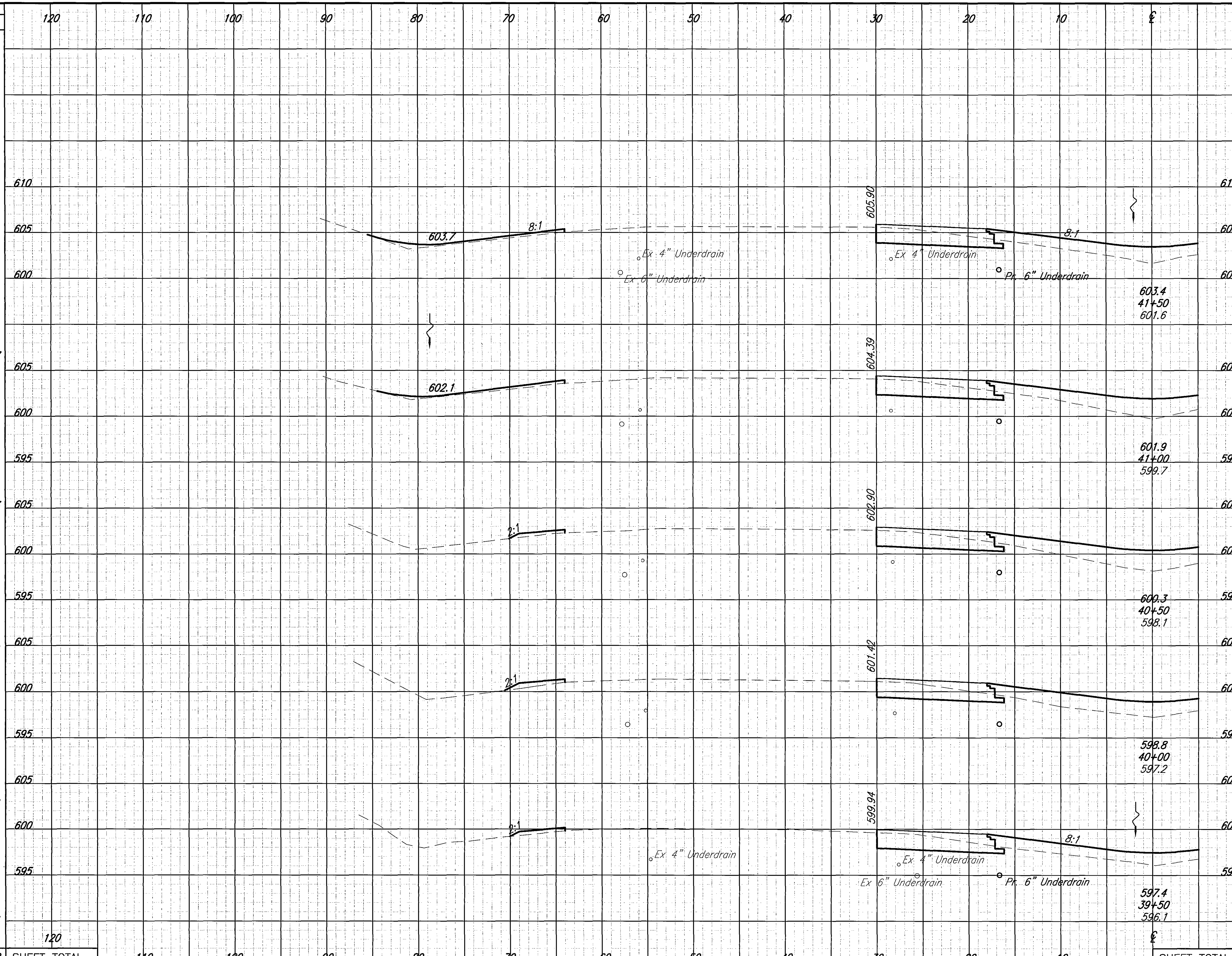
CALCULATED SEB

CHECKED GAB

CROSS SECTIONS – WESTBOUND STA. 37+00 TO STA. 39+00

HAM-74-0.00

0X012020.DWG 22 JUL 2003



SEEDING END WIDTH	SEEDING SQ. YDS.	Station	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
45		41+50	19	36		
	247				35	69
44		41+00	19	38		
	203				35	73
29		40+50	19	41		
	164				35	71
30		40+00	19	36		
	164				35	60
29		39+50	19	29		
	164				35	55
	942	SHEET TOTAL			175	328

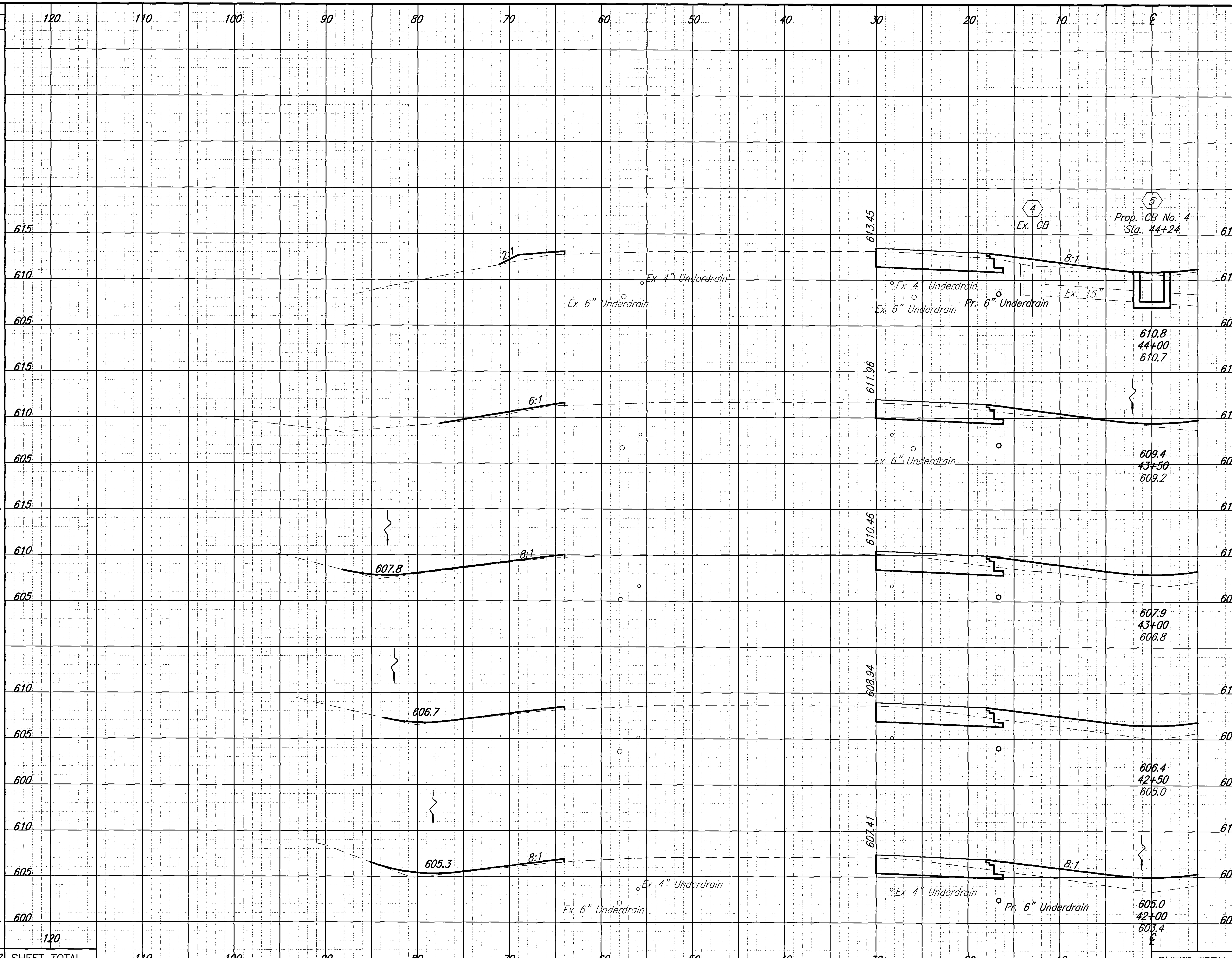
CALCULATED SEB
CHECKED GAB

CROSS SECTIONS - WESTBOUND
STA. 39+50 TO STA. 41+50

HAM-74-0.00

0X013020.DWG 22 JUL 2003

SEEDING END WIDTH	SEEDING SQ. YDS.	STATION	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
30		44+00	22	11		
	186				41	22
37		43+50	22	13		
	233				38	36
47		43+00	19	26		
	250				35	52
43		42+50	19	30		
	242				35	58
44		42+00	19	33		
	247				35	64
	1158	SHEET TOTAL			184	232

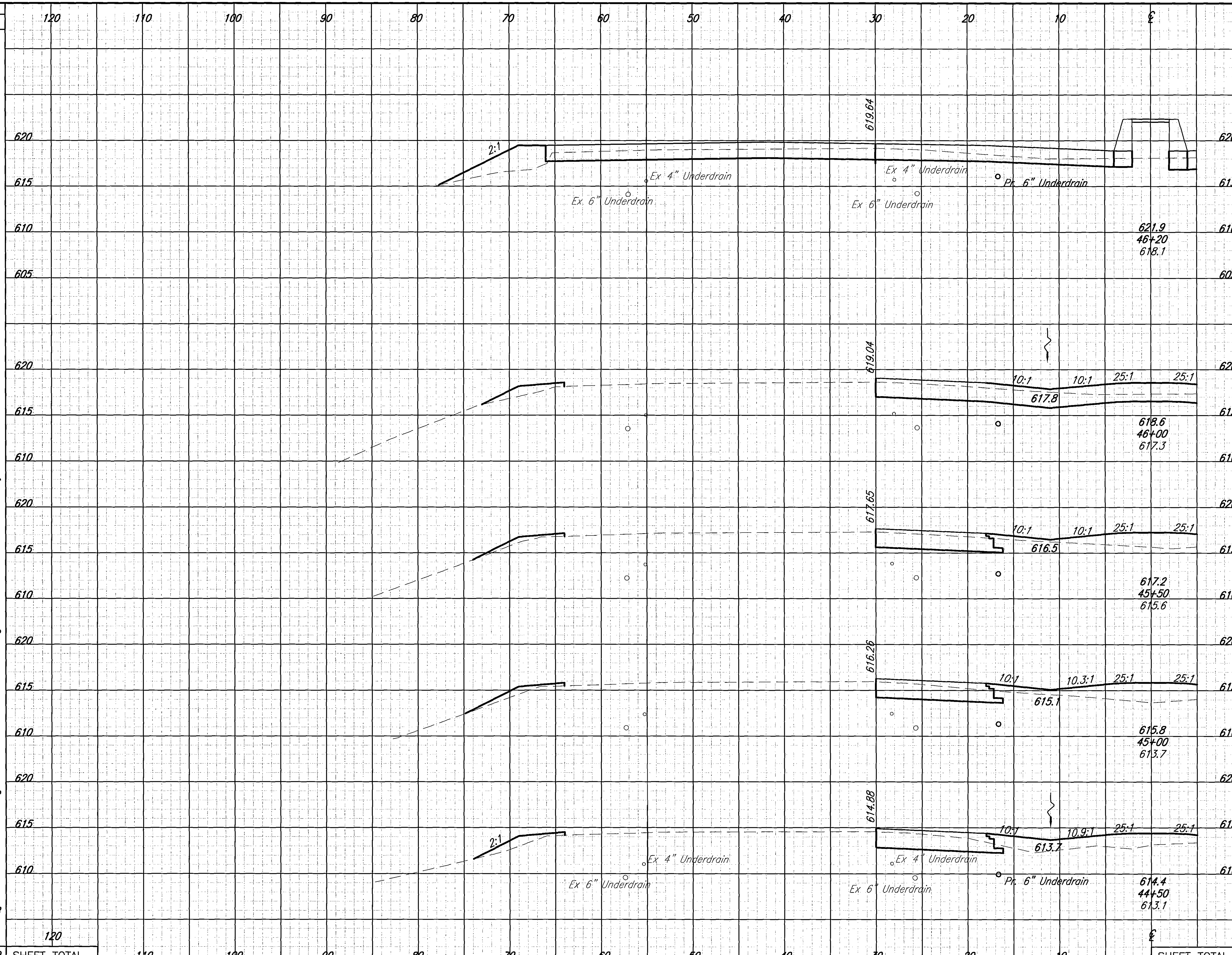


CALCULATED SEB
CHECKED GAB

CROSS SECTIONS - WESTBOUND
STA. 42+00 TO STA. 44+00

HAM-74-0.00

GX014020.DWG 17 APR 2003



SEEDING END WIDTH	SEEDING SQ. YDS.	STATION	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
13		46+20	60	19		
	51				30	17
33		46+00	22	27		
	186				41	49
34		45+50	22	26		
	192				40	56
35		45+00	21	35		
	192				44	47
34		44+50	27	16		
	178				45	25
SHEET TOTAL	799				200	194

CALCULATED SEB CHECKED GAB

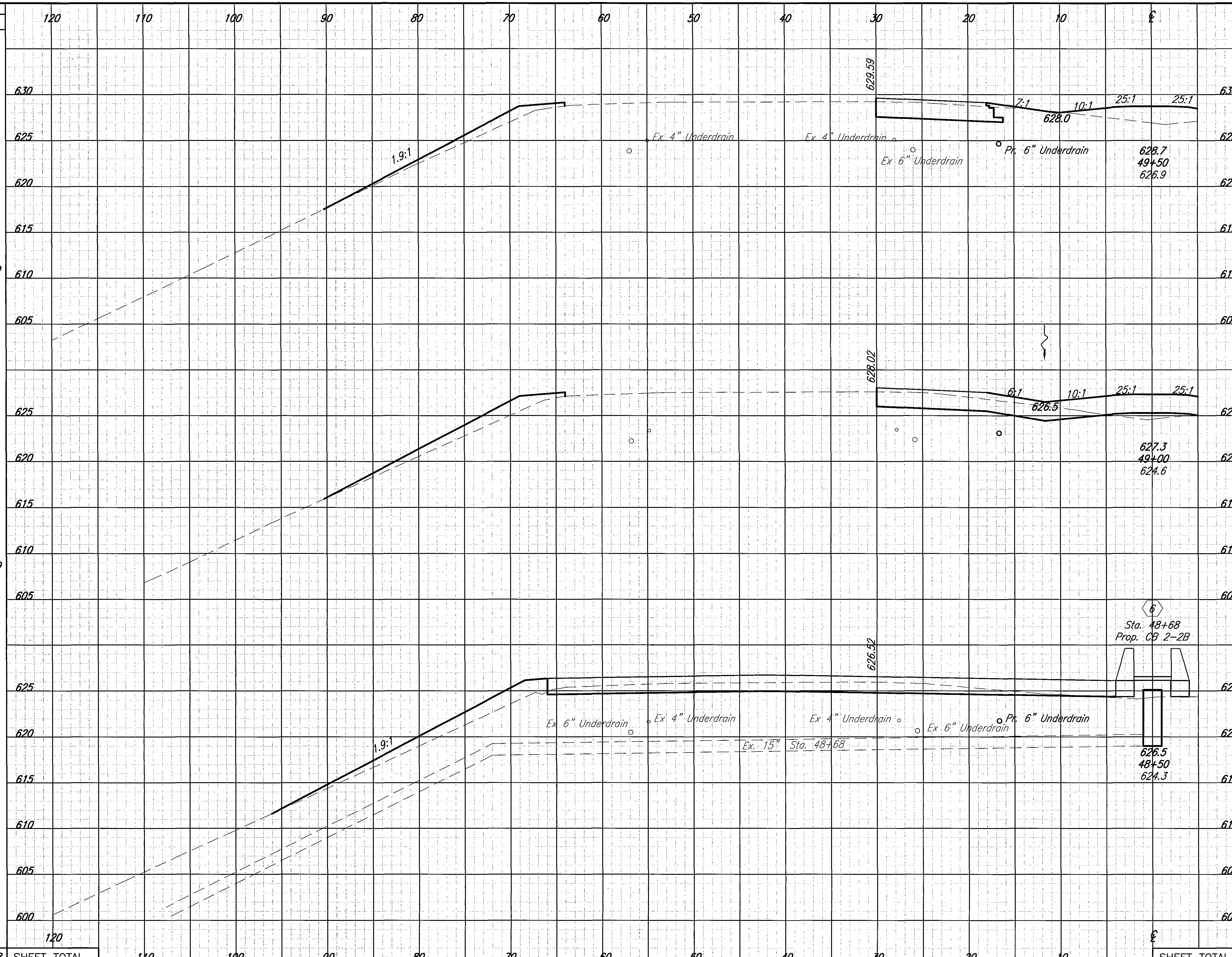
CROSS SECTIONS – WESTBOUND
STA. 44+50 TO STA. 46+20

HAM–74–0.00

XO15020.DWG 23 JUL 2003

CROSS SECTIONS – WESTBOUND STA. 48+50 TO STA. 49+50

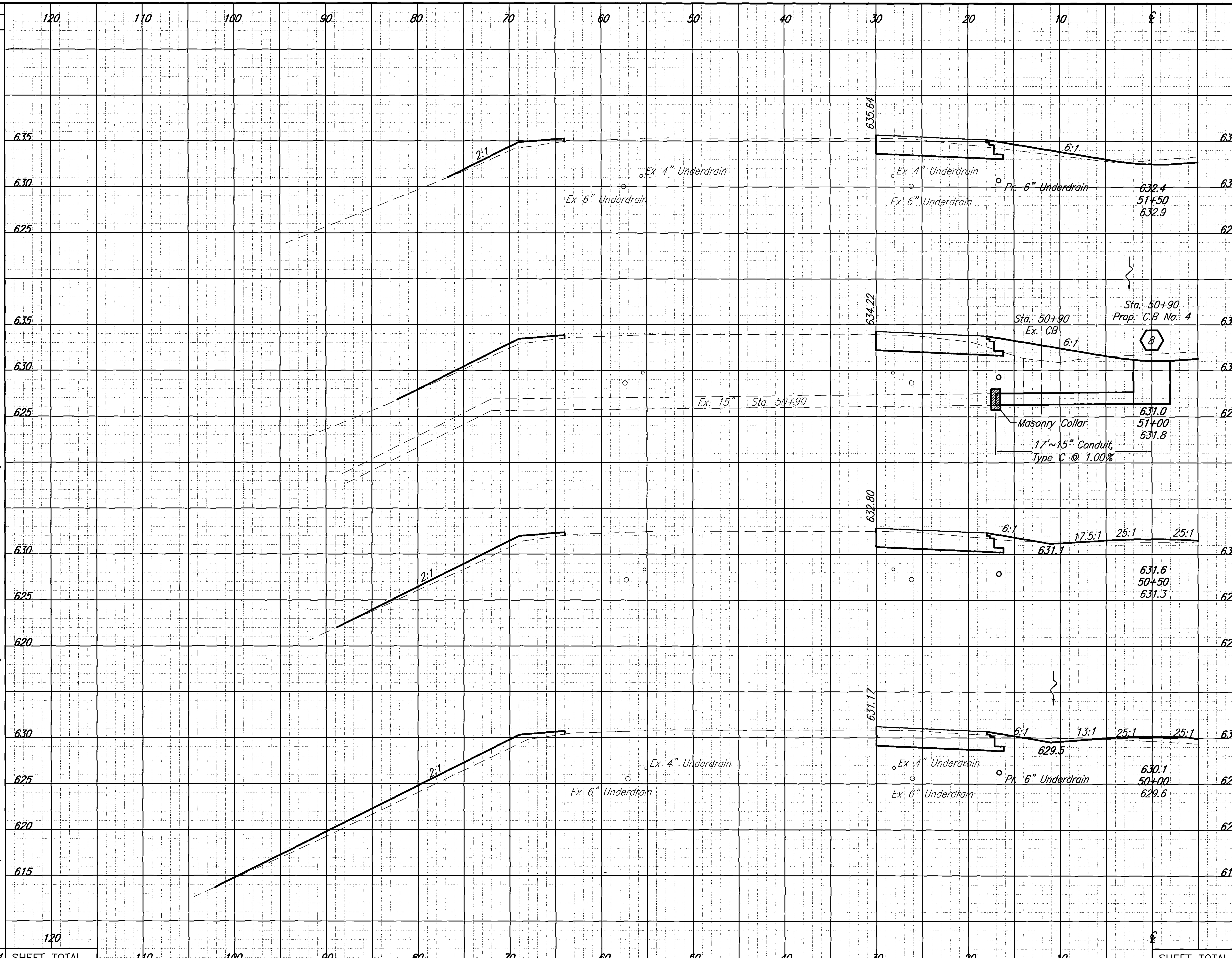
CALCULATED SEB | CHECKED GAB



SEEDING END WIDTH	SEEDING SQ. YDS.	Station	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
52		49+50	23	40		
	289				41	98
52		49+00	21	66		
	239				40	93
34		48+50	22	34		
	528	SHEET TOTAL			81	191

0X016020.DWG 23 JUL 2003

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
37		25	12		
	222			46	31
43		25	21		
	258			62	31
50		42	12		
	319			61	33
65		24	24		
	325			44	59
	1124 SHEET TOTAL		SHEET TOTAL	213	154



CALCULATED SEB
CHECKED GAB

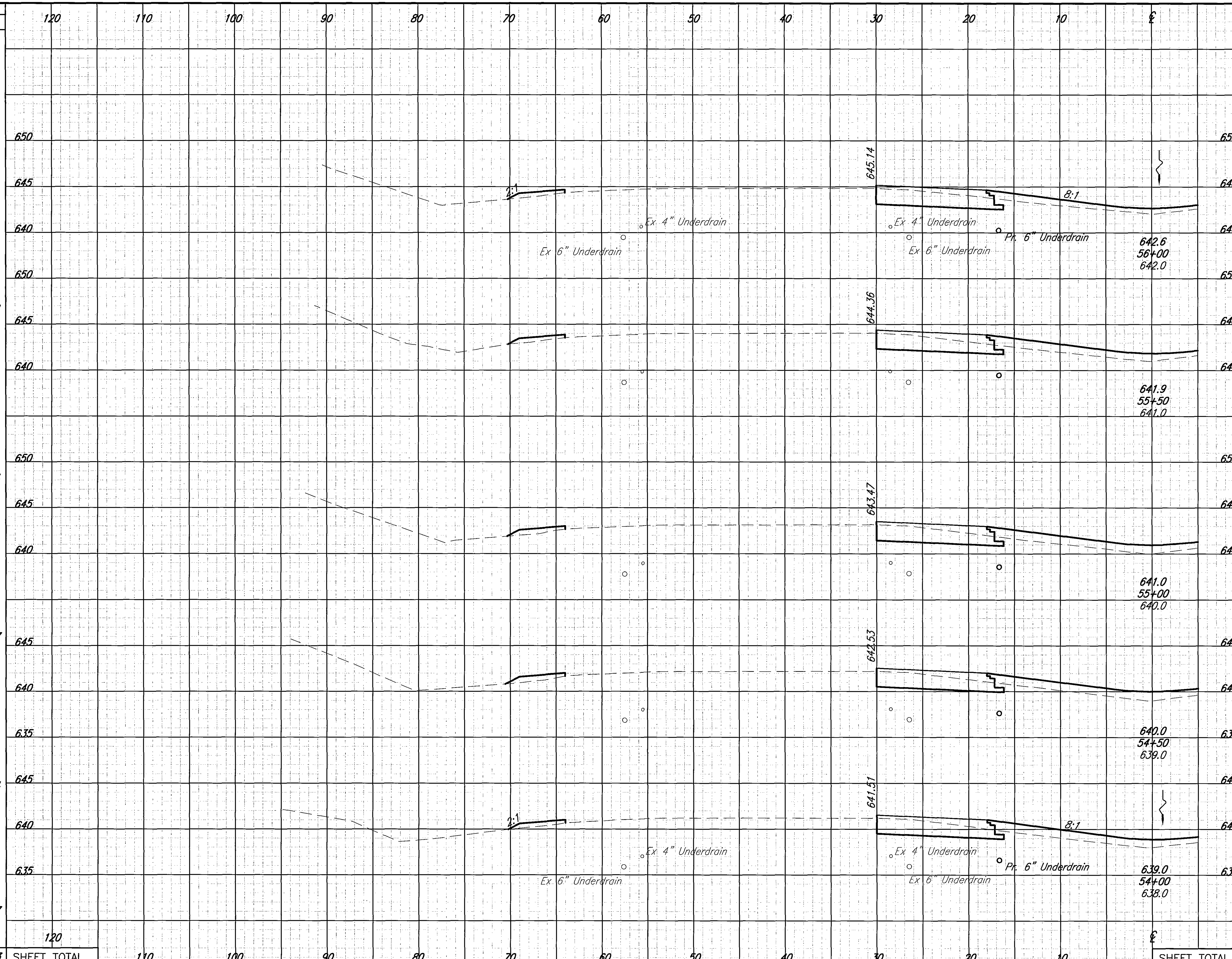
CROSS SECTIONS - WESTBOUND
STA. 50+00 TO STA. 51+50

HAM-74-0.00

166
421

0X017020.DWG 23 JUL 2003

CROSS SECTIONS – WESTBOUND
STA. 52+00 TO STA. 53+50
HAM-74-0.00
167
421
CALCULATED SEB
CHECKED GAB
SEEDING
END WIDTH
SQ. YDS.
END AREA
CUT
FILL
VOLUME
CUT
FILL
120
110
100
90
80
70
60
50
40
30
20
10
℄
645
640
635
630
625
640.49
4:1
7:1
Ex 4" Underdrain
Ex 6" Underdrain
Pr 6" Underdrain
637.8
53+50
637.0
31
19
22
169
36
35
639.41
2:1
7:1
636.5
53+00
636.1
30
20
16
175
38
25
638.31
2:1
6:1
635.2
52+50
635.1
33
21
11
181
42
19
636.98
2:1
6:1
633.8
52+00
634.0
32
24
9
192
45
19
717
SHEET TOTAL
SHEET TOTAL
161
98
0X018020.DWG 23 JUL 2003



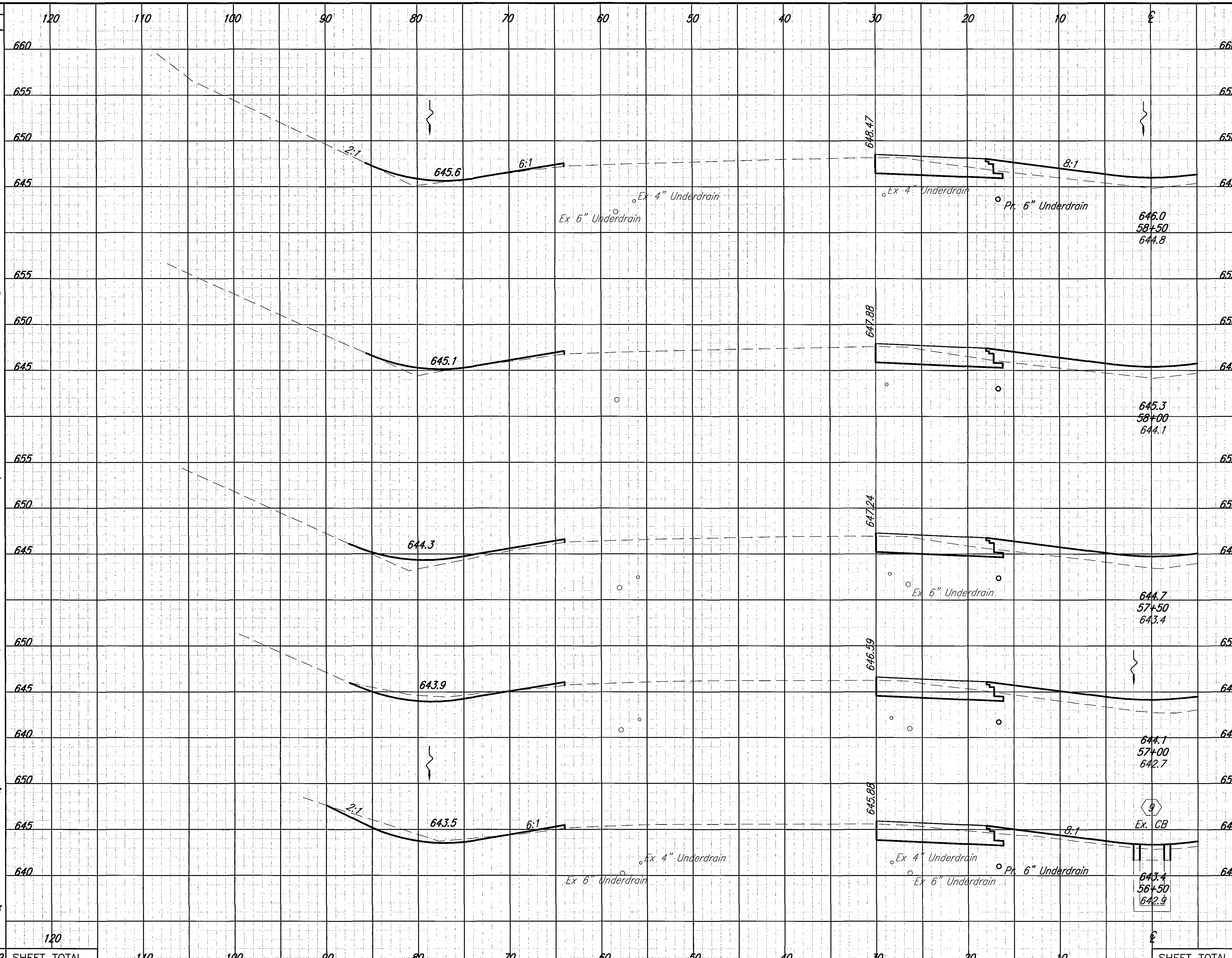
Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
56+00	29		20	16		
		161			37	35
55+50	29		20	22		
		164			37	42
55+00	30		20	23		
		167			37	43
54+50	30		20	23		
		164			37	42
54+00	29		20	22		
		167			37	41
SHEET TOTAL		823			185	203

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA. 54+00 TO STA. 56+00

HAM-74-0.00

6X019020.DWG 23 JUL 2003



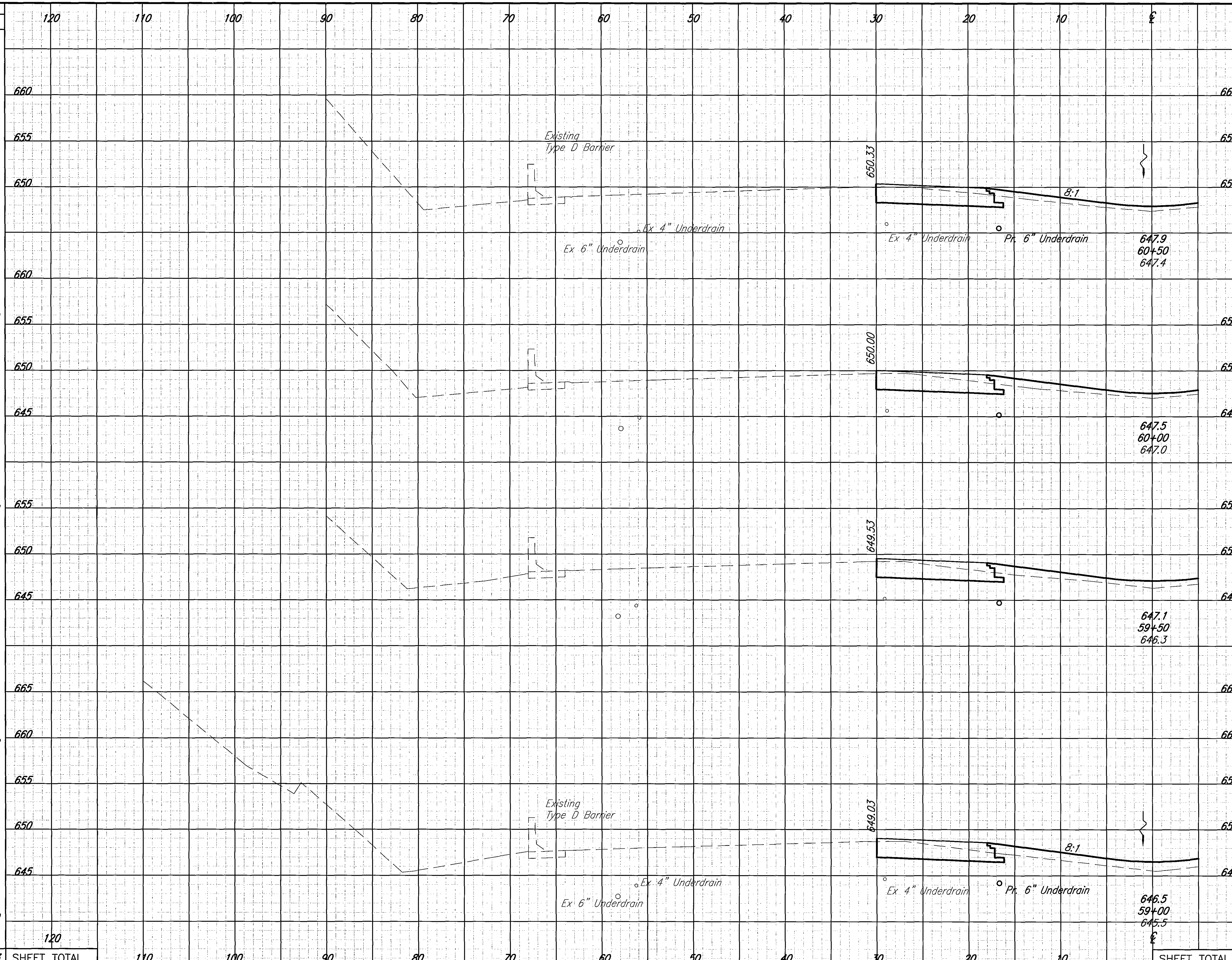
Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
58+50	45		19	27		
		250			35	53
58+00	45		19	30		
		256			35	61
57+50	47		19	36		
		244			36	58
57+00	41		20	27		
		236			38	39
56+50	44		21	15		
		203			38	29
SHEET TOTAL		1189			182	240

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA. 56+50 TO STA. 58+50

HAM-74-0.00

0X020020.DWG 23 JUL 2003



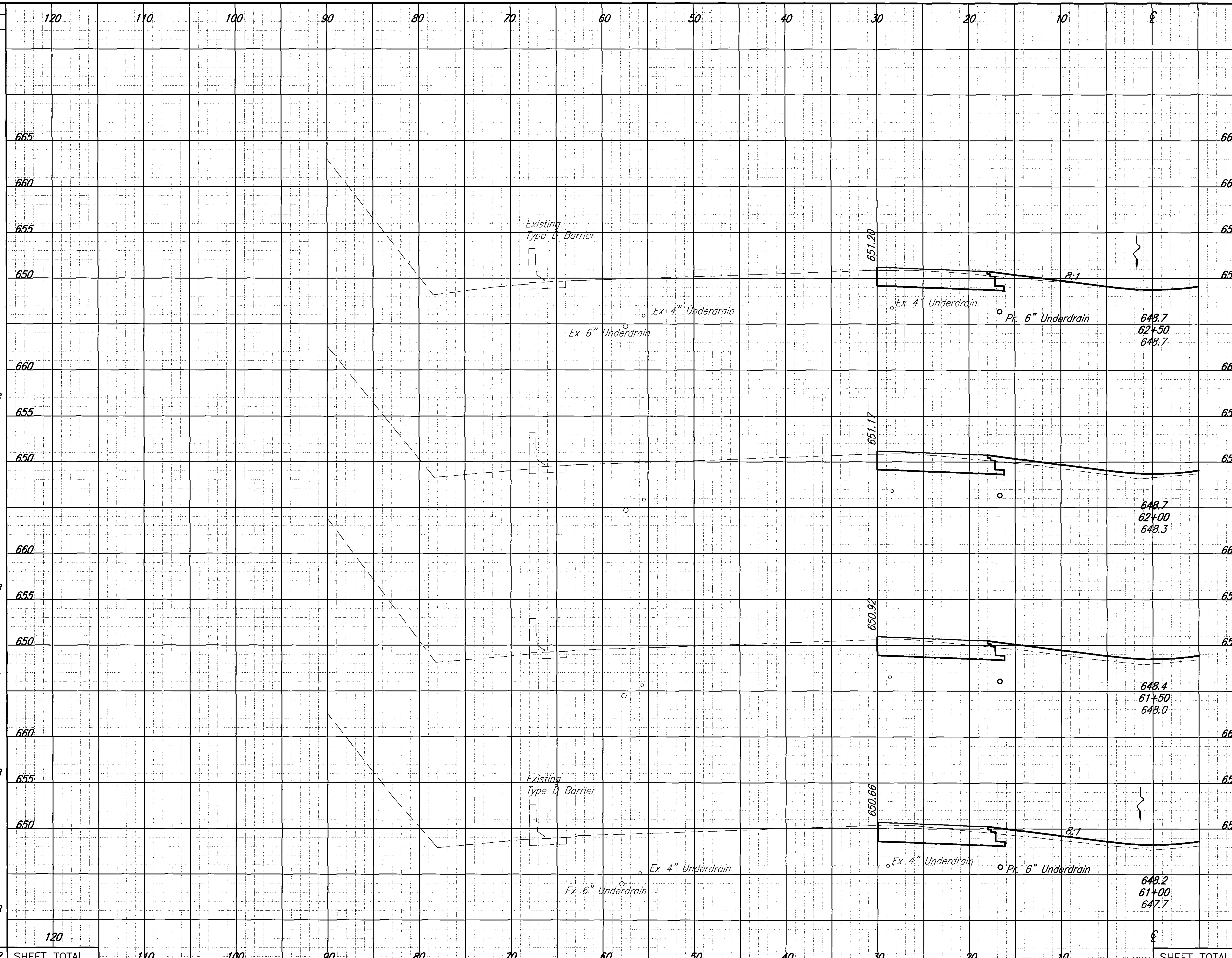
SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
23		22	12		
	128			40	23
23		21	13		
	128			39	27
23		21	16		
	128			38	34
23		20	21		
	189			36	44
	573 SHEET TOTAL			153	128

CALCULATED SEB CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA. 59+00 TO STA. 60+50

HAM-74-0.00

GX021020.DWG 23 JUL 2003



SEEDING END WIDTH	SEEDING SQ. YDS.	Station	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
23		62+50	24	4		
	128				44	14
23		62+00	23	11		
	128				43	22
23		61+50	23	13		
	128				43	23
23		61+00	23	12		
	128				42	22
	512	SHEET TOTAL			172	81

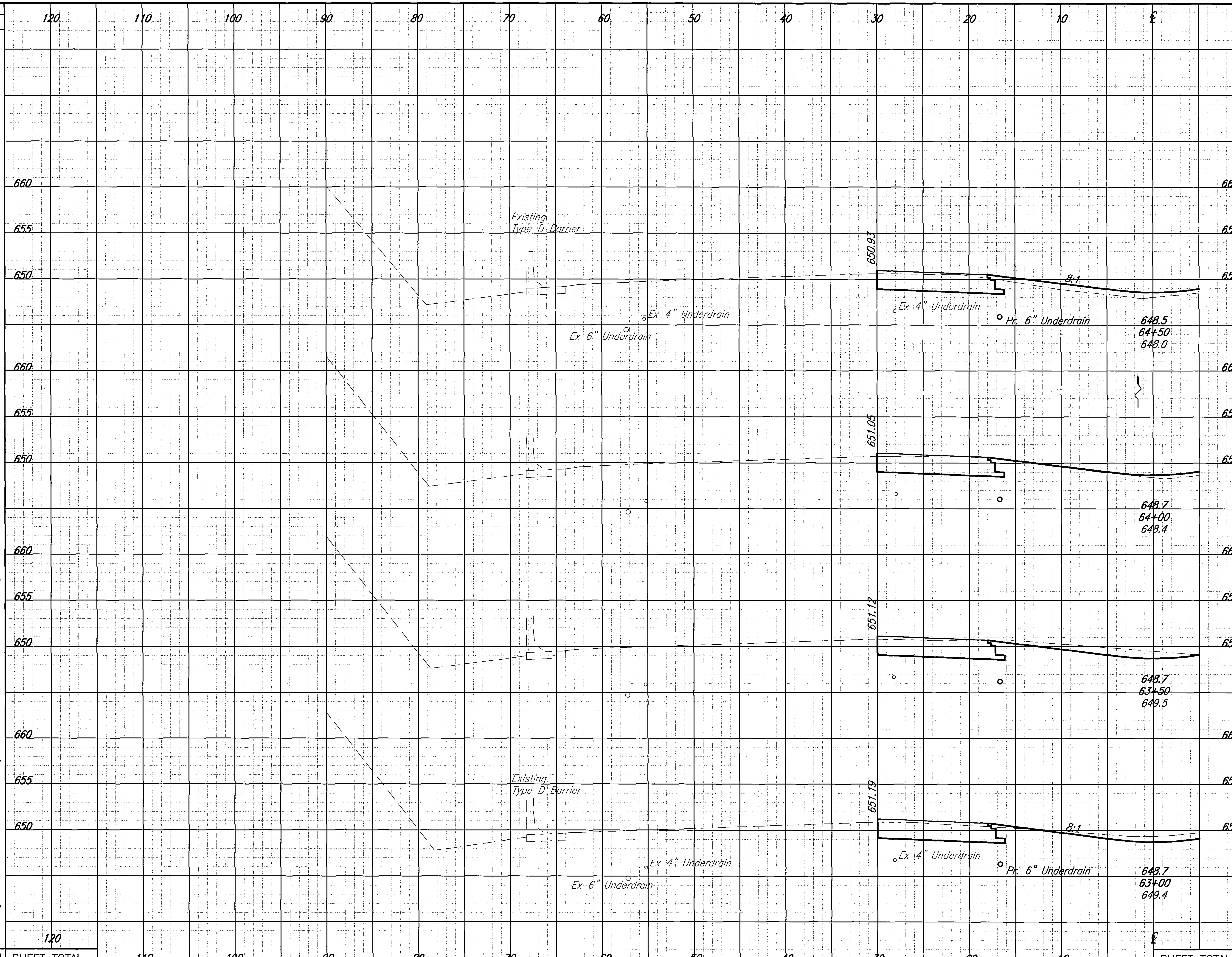
CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA. 61+00 TO STA. 62+50

HAM-74-0.00

171
421

GX022020.DWG 23 JUL 2003



SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
23		25	14		
	128			48	18
23		27	5		
	128			61	6
23		39	2		
	128			66	15
23		32	14		
	128			52	17
	512 SHEET TOTAL	SHEET TOTAL		227	56

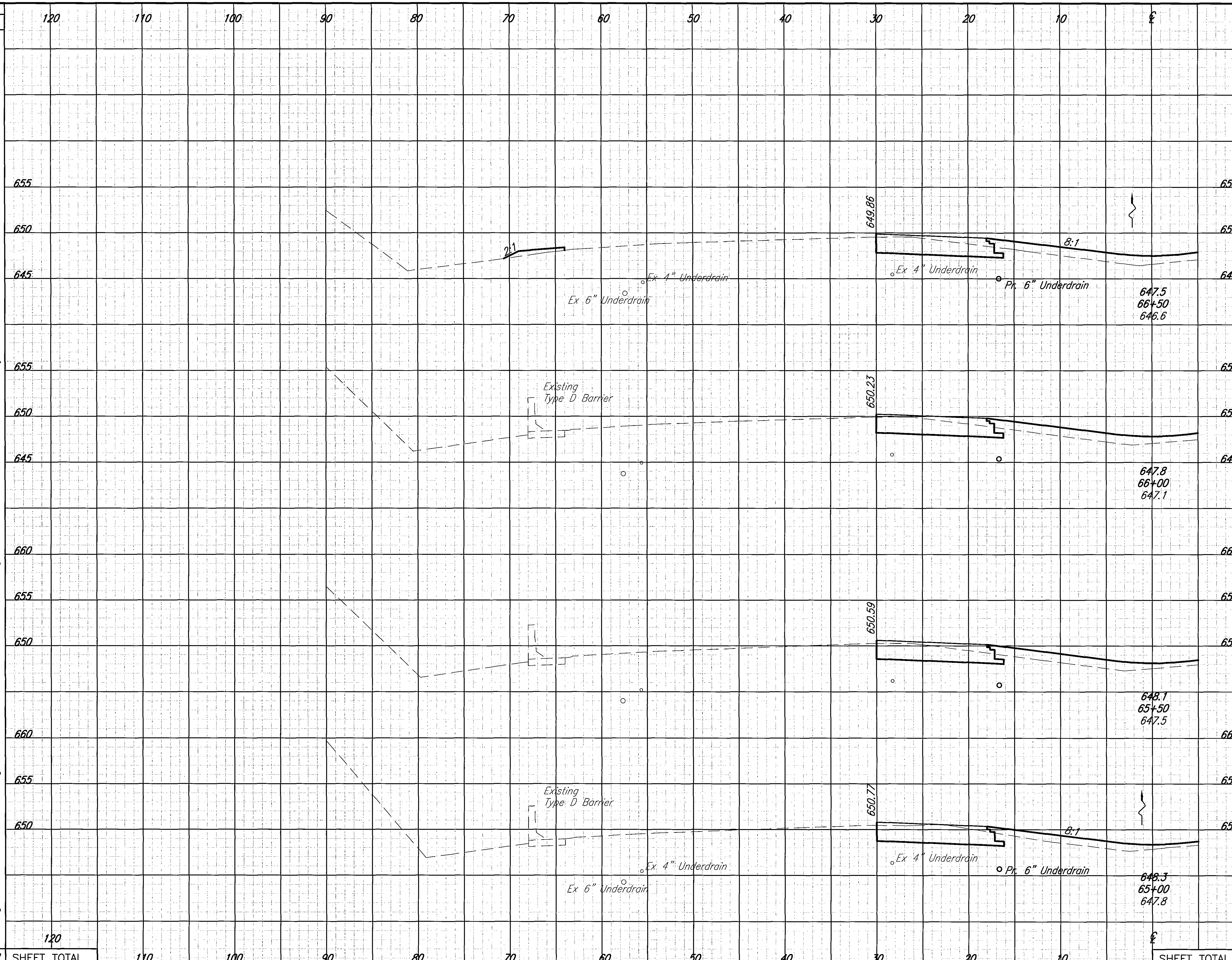
CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND STA. 63+00 TO STA. 64+50

HAM–74–0.00

GX023020.DWG 23 JUL 2003

Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
66+50	30		21	24		
		147			39	41
66+00	23		21	20		
		128			39	36
65+50	23		21	19		
		128			42	33
65+00	23		24	17		
		128			45	29
SHEET TOTAL		531			165	139



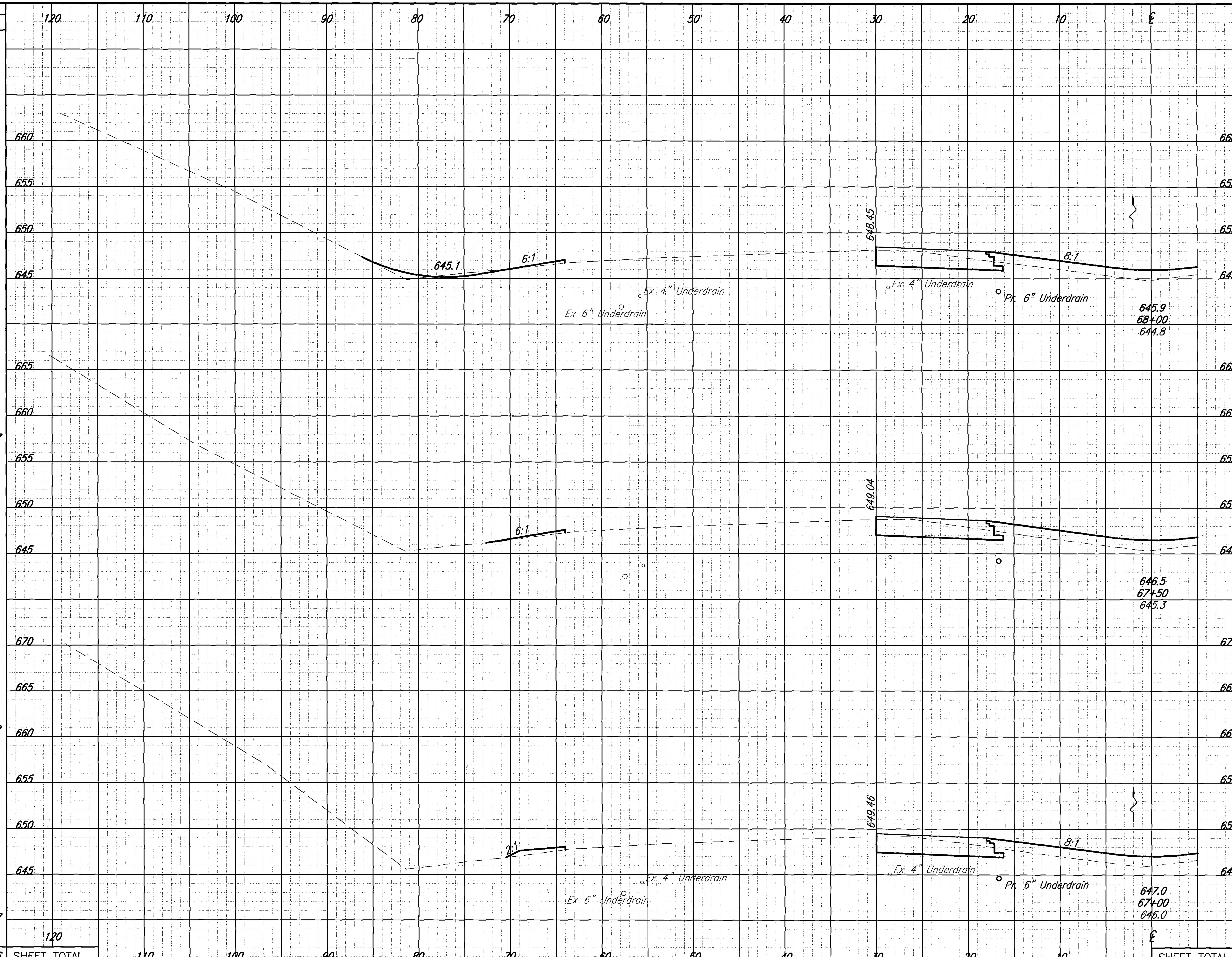
CROSS SECTIONS – WESTBOUND
STA. 65+00 TO STA. 66+50

HAM-74-0.00

CALCULATED SEB CHECKED GAB

0X024020.DWG 23 JUL 2003

CROSS SECTIONS – WESTBOUND
STA. 67+00 TO STA. 68+00

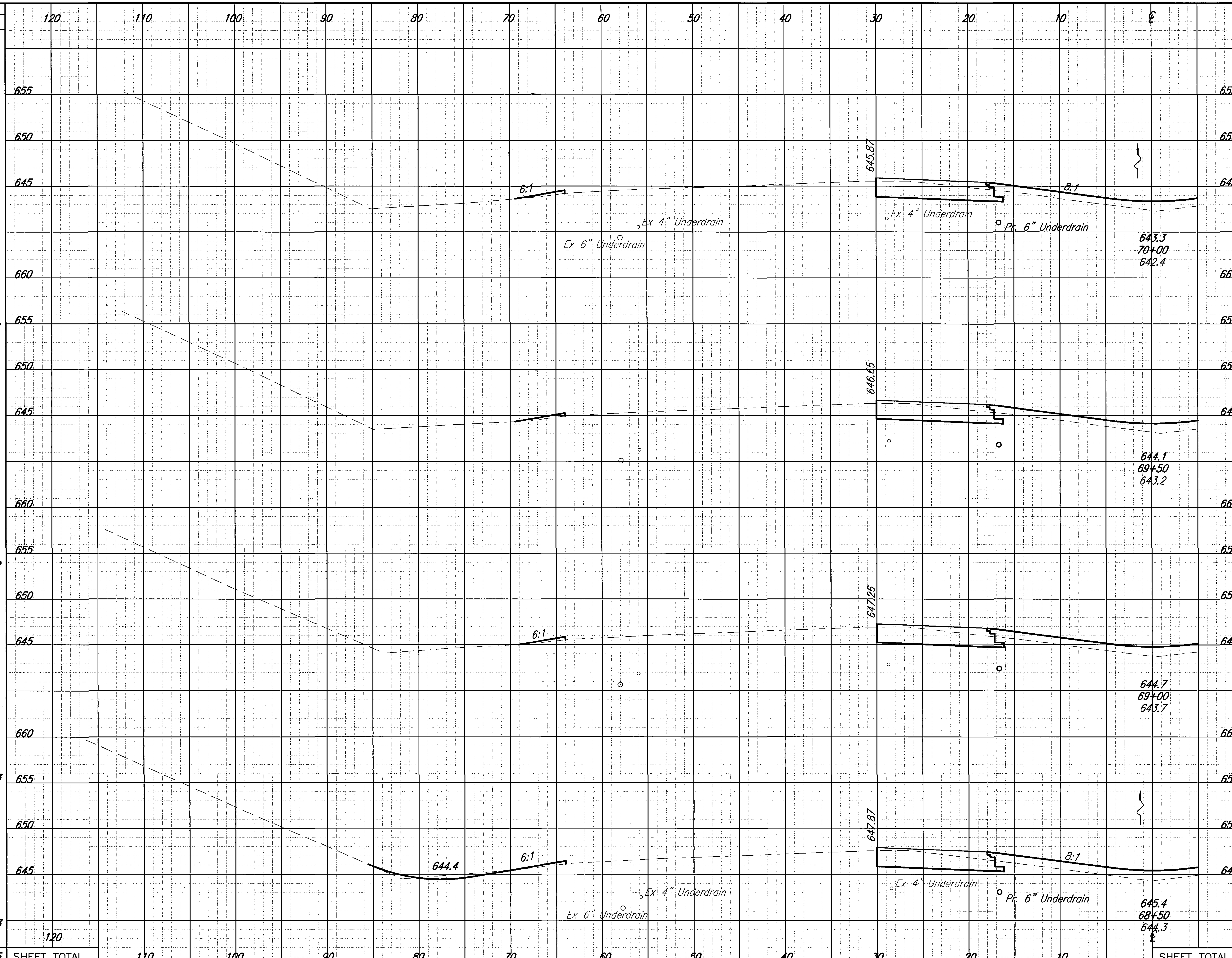


Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
68+00	46		21	26		
		217			39	46
67+50	32		21	24		
		172			39	46
67+00	30		21	26		
		167			39	46
SHEET TOTAL		556			117	138

CALCULATED SEB
CHECKED GAB

HAM-74-0.00

0X025020.DWG 23 JUL. 2003



SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
29		22	19		
	161			41	36
29		22	20		
	158			40	38
28		21	21		
	203			43	37
45		25	19		
	253			43	42
SHEET TOTAL	775			167	153

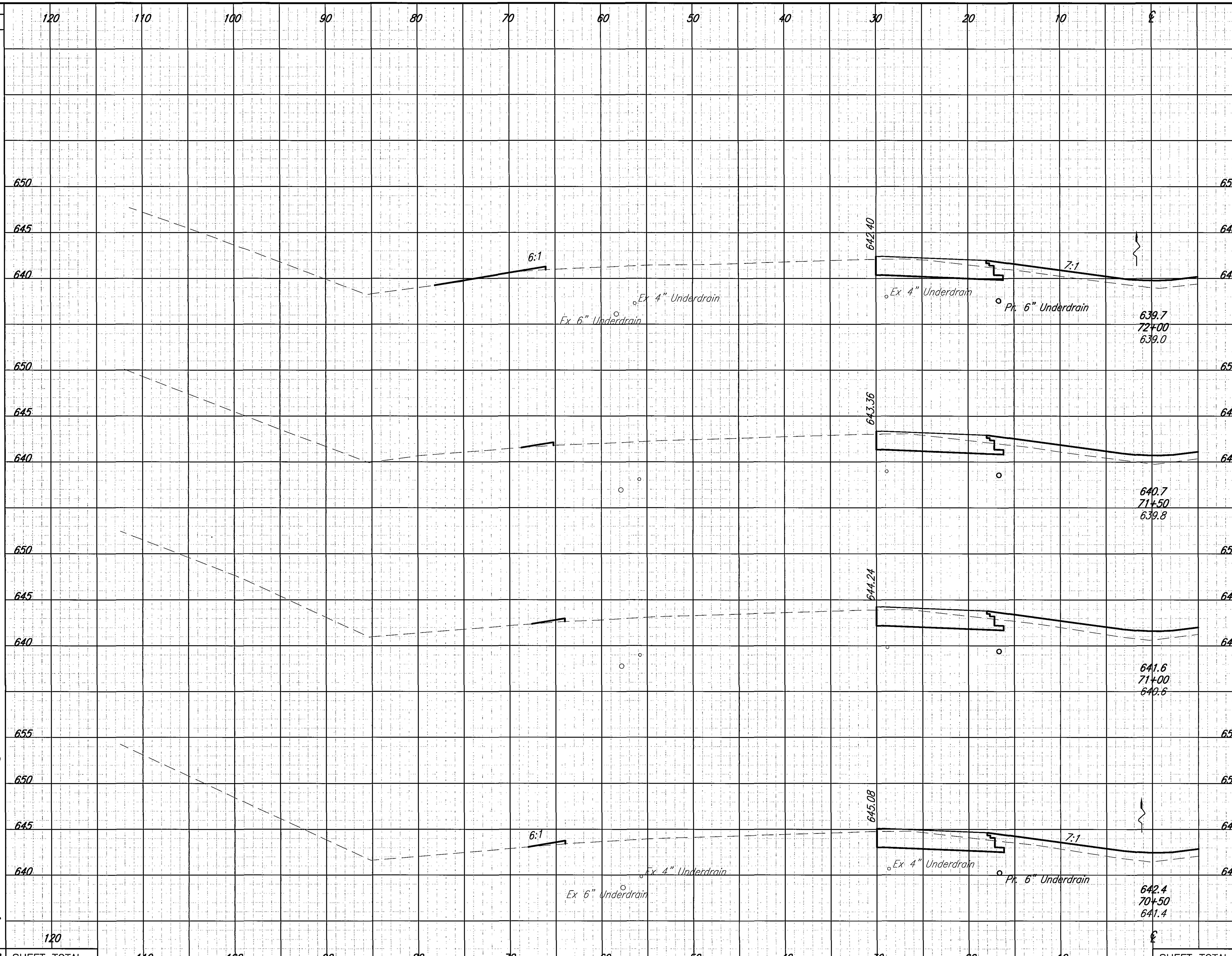
CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND STA. 68+50 TO STA. 70+00

HAM-74-0.00

0X026020.DWG 23 JUL 2003

CROSS SECTIONS – WESTBOUND
STA. 70+50 TO STA. 72+00

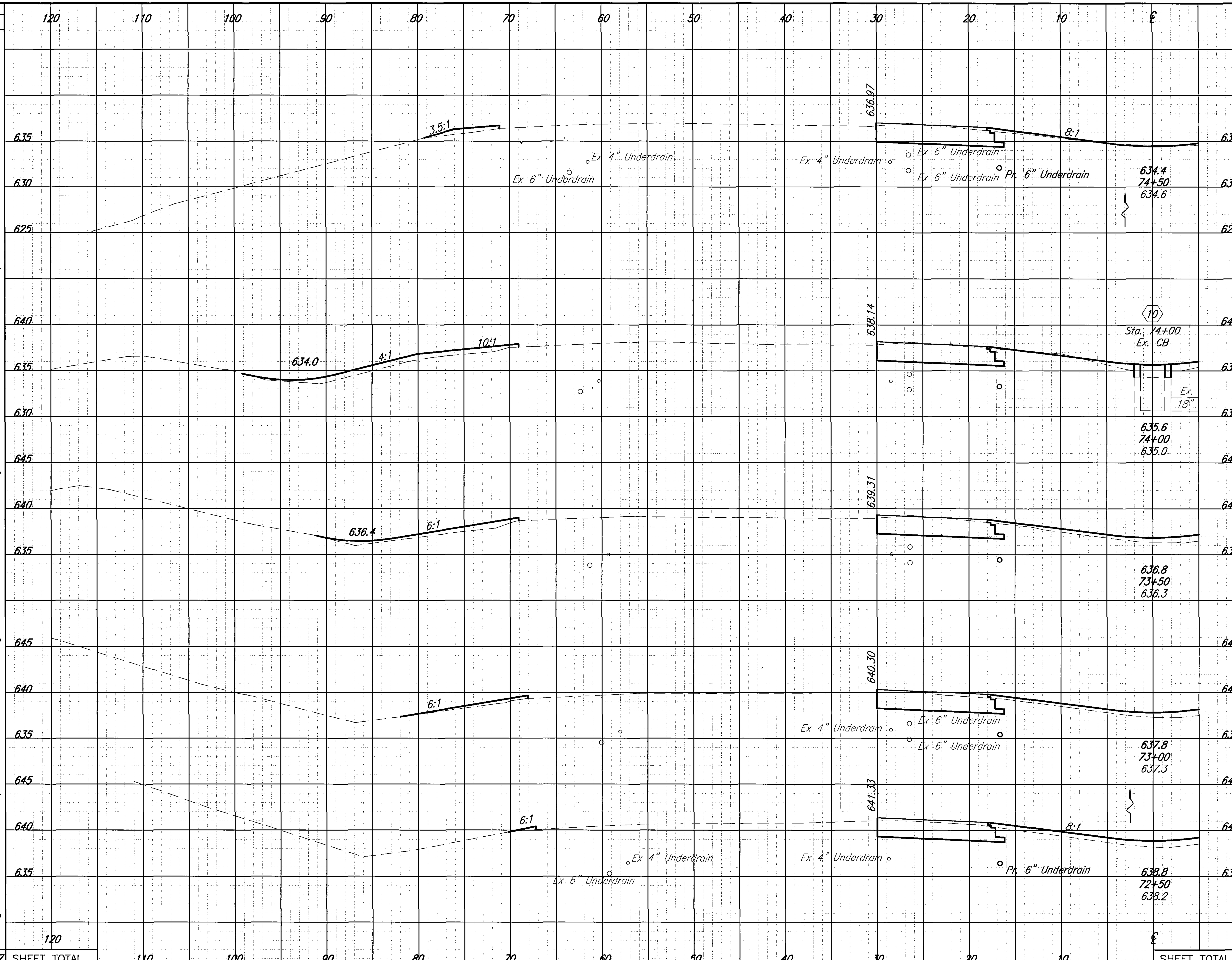


Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
72+00	35		23	16		
		172			42	32
71+50	27		22	19		
		150			41	35
71+00	27		22	19		
		150			41	36
70+50	27		22	20		
		156			41	36
SHEET TOTAL		628			165	139

CALCULATED SEB
CHECKED GAB

HAM-74-0.00

GX027020.DWG 23 JUL 2003



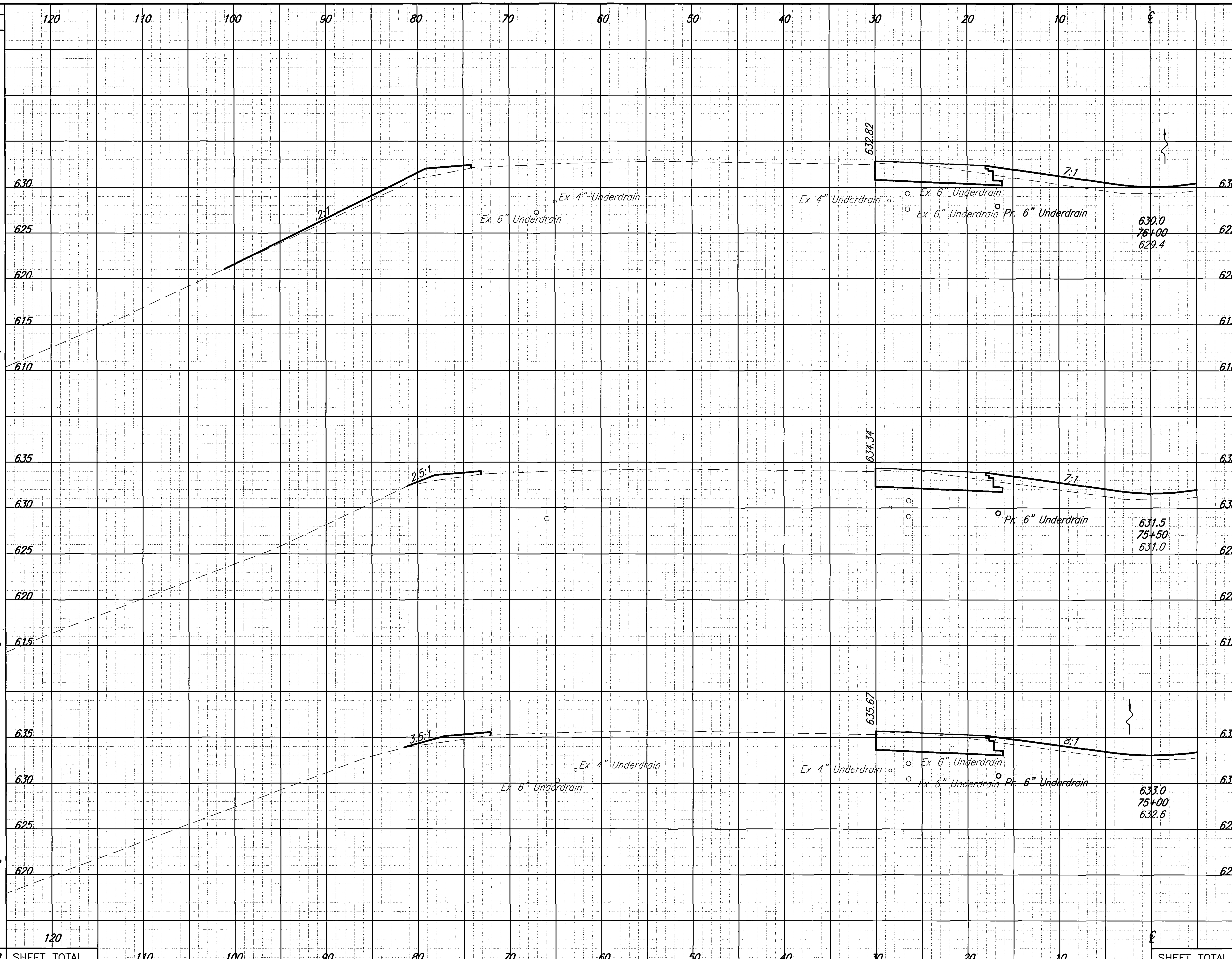
SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
31		26	6		
	233			49	27
53		27	23		
	272			49	40
45		26	20		
	228			47	31
37		25	13		
	175			45	25
26		24	14		
	169			44	28
	1077			234	151

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA. 72+50 TO STA. 74+50

HAM-74-0.00

GX028020.DWG 20 FEB 2003



SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
53	233	23	29	43	50
31	178	23	25	44	39
33	178	25	17	47	21
SHEET TOTAL	589			134	110

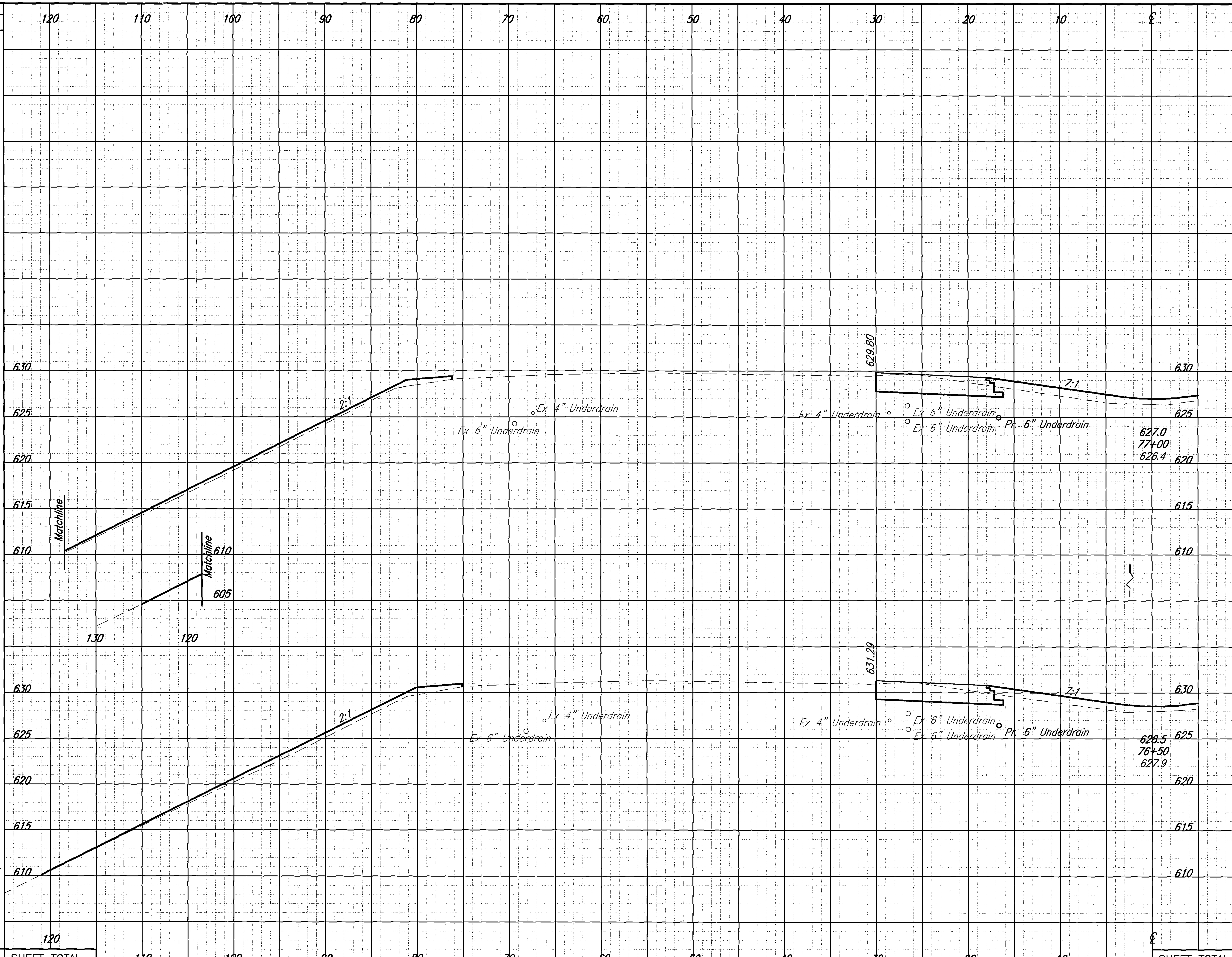
CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA.75+00 TO STA. 76+00

HAM-74-0.00

0X029020.DWG 23 JUL 2003

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
89		23	24		
	453			43	45
74		23	25		
	353			43	50
	806 SHEET TOTAL		SHEET TOTAL	86	95



CALCULATED SEB
CHECKED GAB

CROSS SECTIONS - WESTBOUND
STA. 76+50 TO STA. 77+00

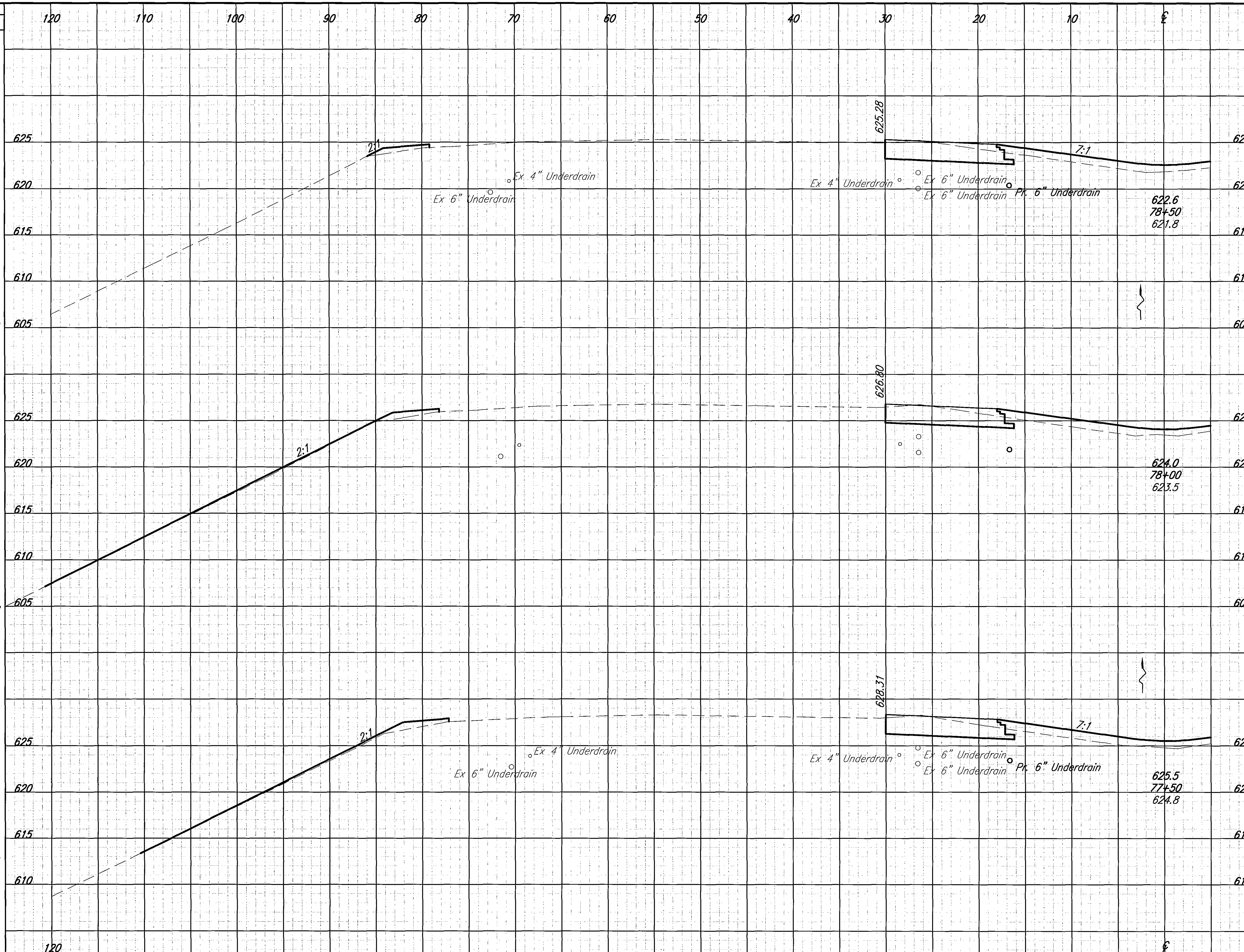
HAM-74-0.00

0X030020.DWG 16 JUL 2003

CROSS SECTIONS – WESTBOUND STA. 77+50 TO STA. 78+50

HAM–74–0.00

CALCULATED SEB CHECKED GAB

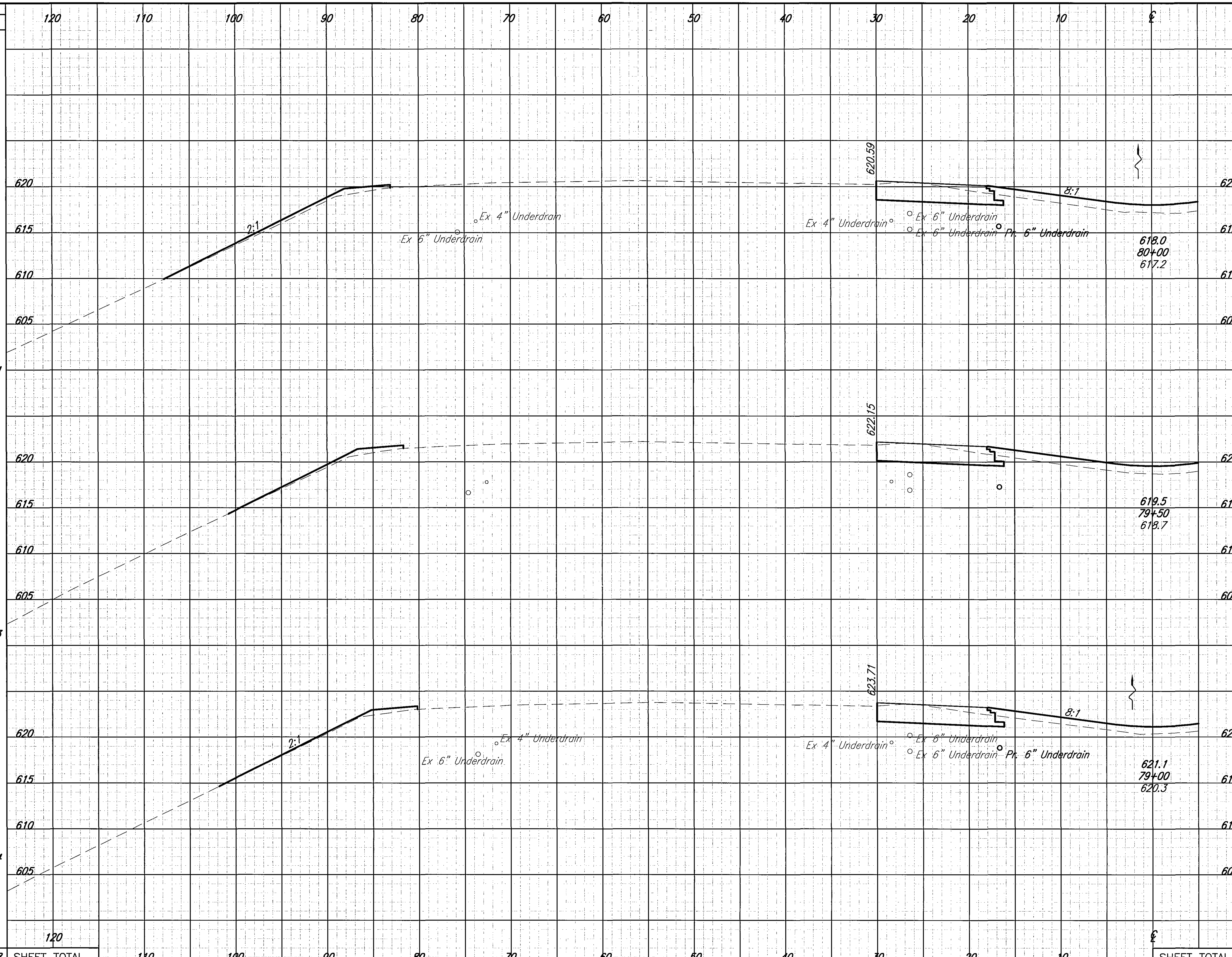


SEEDING END WIDTH	SEEDING SQ. YDS.
30	
	278
70	
	358
59	
	394
	1030 SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
24	22		
		44	41
23	22		
		43	43
23	24		
		43	44
SHEET TOTAL		130	128

0X031020.DWG 16 JUL 2003

SEEDING	
END WIDTH	SQ. YDS.
50	
	261
44	
	253
47	
	214
	728



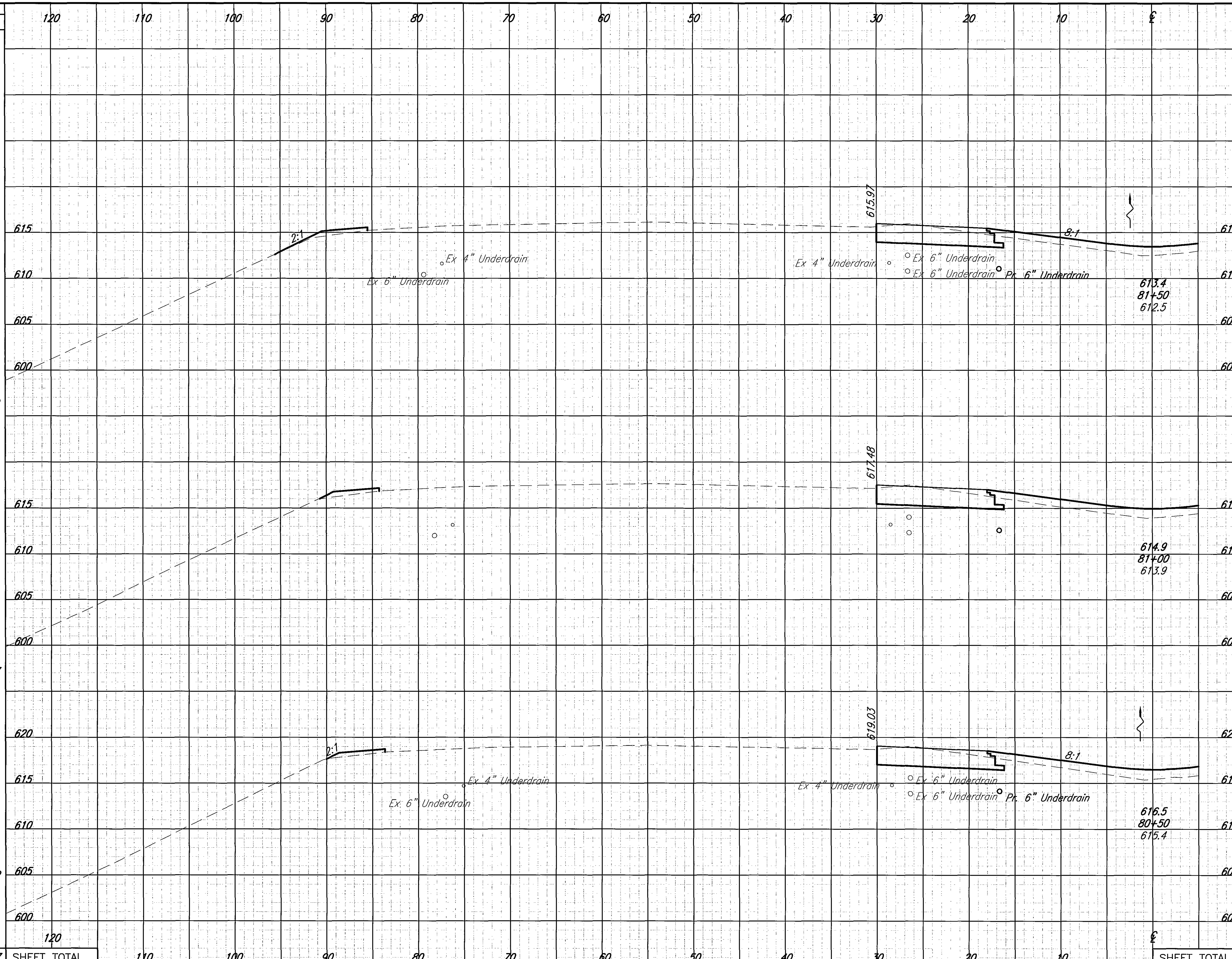
END AREA		VOLUME	
CUT	FILL	CUT	FILL
23	27		
		43	48
23	25		
		43	44
23	22		
		44	41
		130	133

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS - WESTBOUND
STA. 79+00 TO STA. 80+00

HAM-74-0.00

GX032020.DWG 20 FEB 2003



SEEDING END WIDTH	SEEDING SQ. YDS.
34	
	178
30	
	167
30	
	222
	567 SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
24	22		
		44	41
24	22		
		44	42
24	23		
		44	46
SHEET TOTAL		132	129

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA. 80+50 TO STA. 81+50

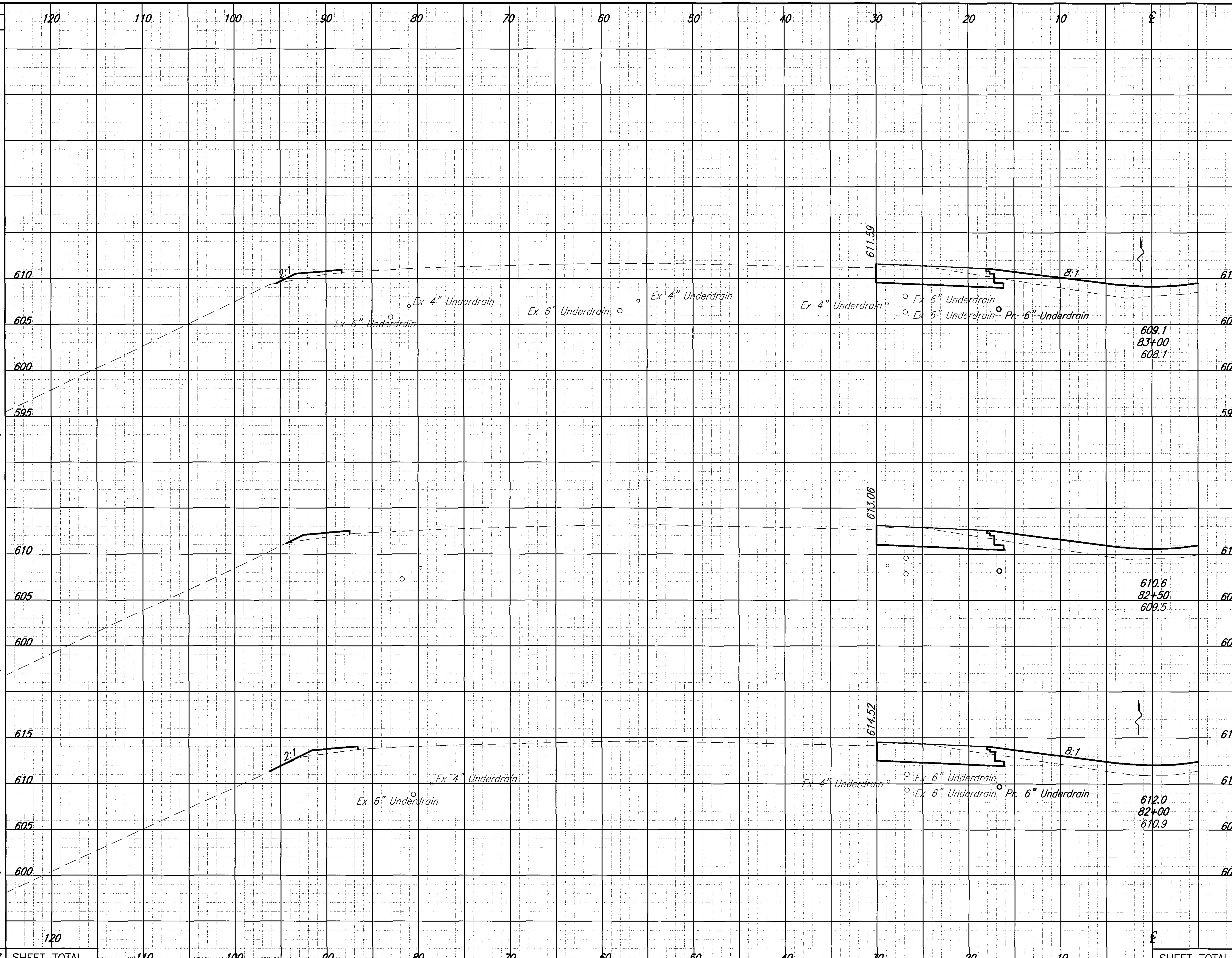
HAM–74–0.00

182 / 421

GX033020.DWG 23 JUL 2003

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA. 82+00 TO STA. 83+00

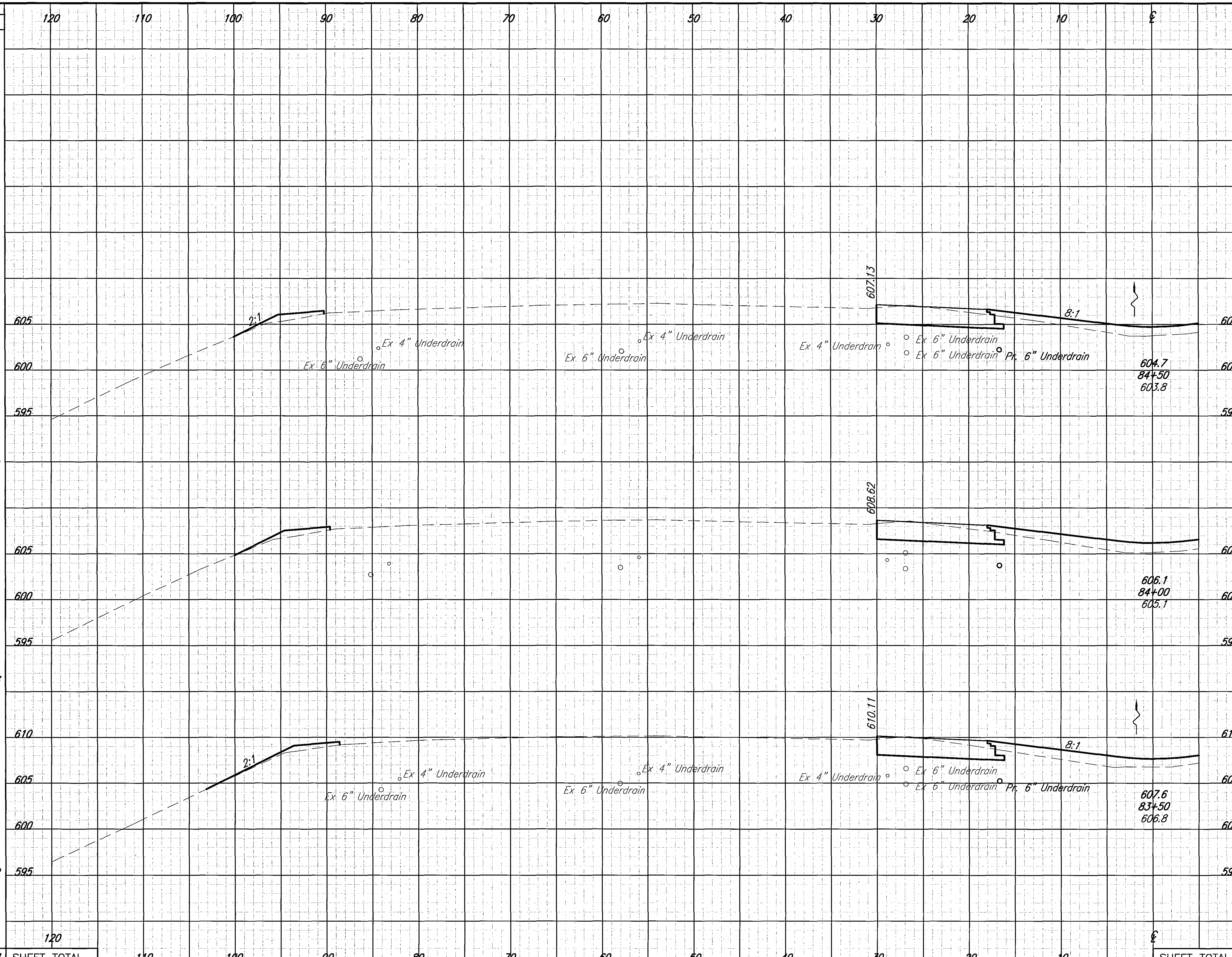


Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
83+00	30		23	28		
		167			43	52
82+50	30		23	28		
		175			44	50
82+00	33		24	26		
		186			44	44
SHEET TOTAL		528			131	146

HAM-74-0.00

GX034020.DWG 23 JUL 2003

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
33		25	24		
	186			45	47
34		24	27		
	203			44	50
39		23	27		
	192			43	51
SHEET TOTAL	581			132	148



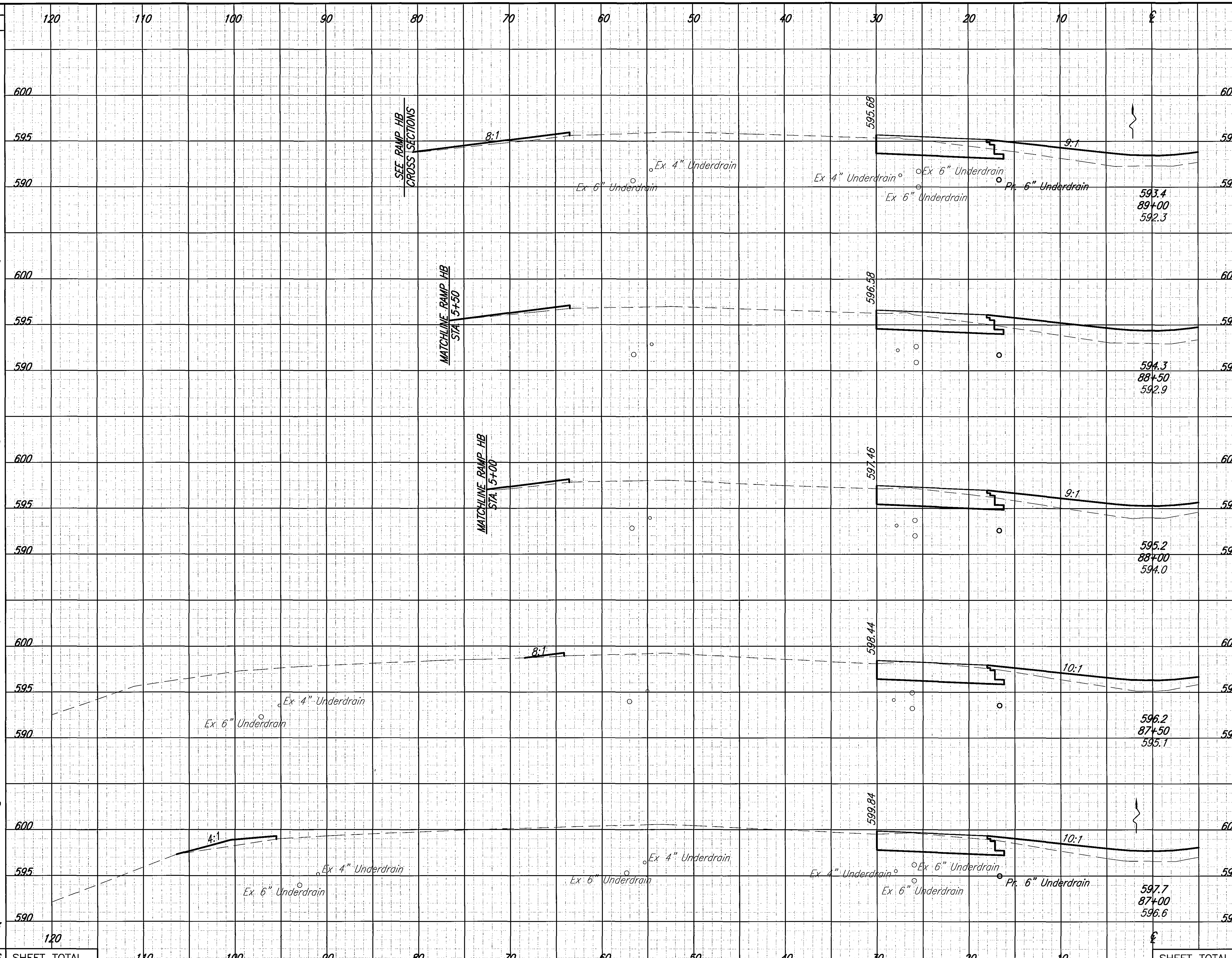
CALCULATED SEB
CHECKED GAB

CROSS SECTIONS - WESTBOUND
STA. 83+50 TO STA. 84+50

HAM-74-0.00

GX035020.DWG 23 JUL 2003

SEEDING
END WIDTH
SQ. YDS.
END AREA
CUT
FILL
VOLUME
CUT
FILL
CALCULATED SEB
CHECKED GAB
CROSS SECTIONS – WESTBOUND
STA. 85+00 TO STA. 86+50
HAM-74-0.00
185
421
GX036020.DWG
18 AUG 2003
120
110
100
90
80
70
60
50
40
30
20
10
℄
601.26
3:1
10:1
Ex 4" Underdrain
Ex 6" Underdrain
Pr. 6" Underdrain
599.1
86+50
597.9
32
24
29
175
45
47
602.69
2.5:1
9:1
600.5
86+00
599.7
31
25
22
Ex. 48"
172
47
30
604.15
2:1
Outlet 6" Underdrain
to CB Sta. 85+43
11
Sta. 85+43
Ex. CB
Ex. 15"
Sta. 85+43
601.9
85+50
601.5
31
26
10
183
46
27
605.65
2:1
9:1
603.3
85+00
602.8
35
24
19
189
45
40
600
595
590
605
719
SHEET TOTAL
183
144



SEEDING END WIDTH	SEEDING SQ. YDS.	STATION	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
40		89+00	20	31		
	211				37	60
36		88+50	20	34		
	189				40	57
32		88+00	23	28		
	164				45	45
27		87+50	26	21		
	169				47	44
34		87+00	25	26		
	183				45	51
	916	SHEET TOTAL			214	257

CALCULATED SEB
CHECKED GAB

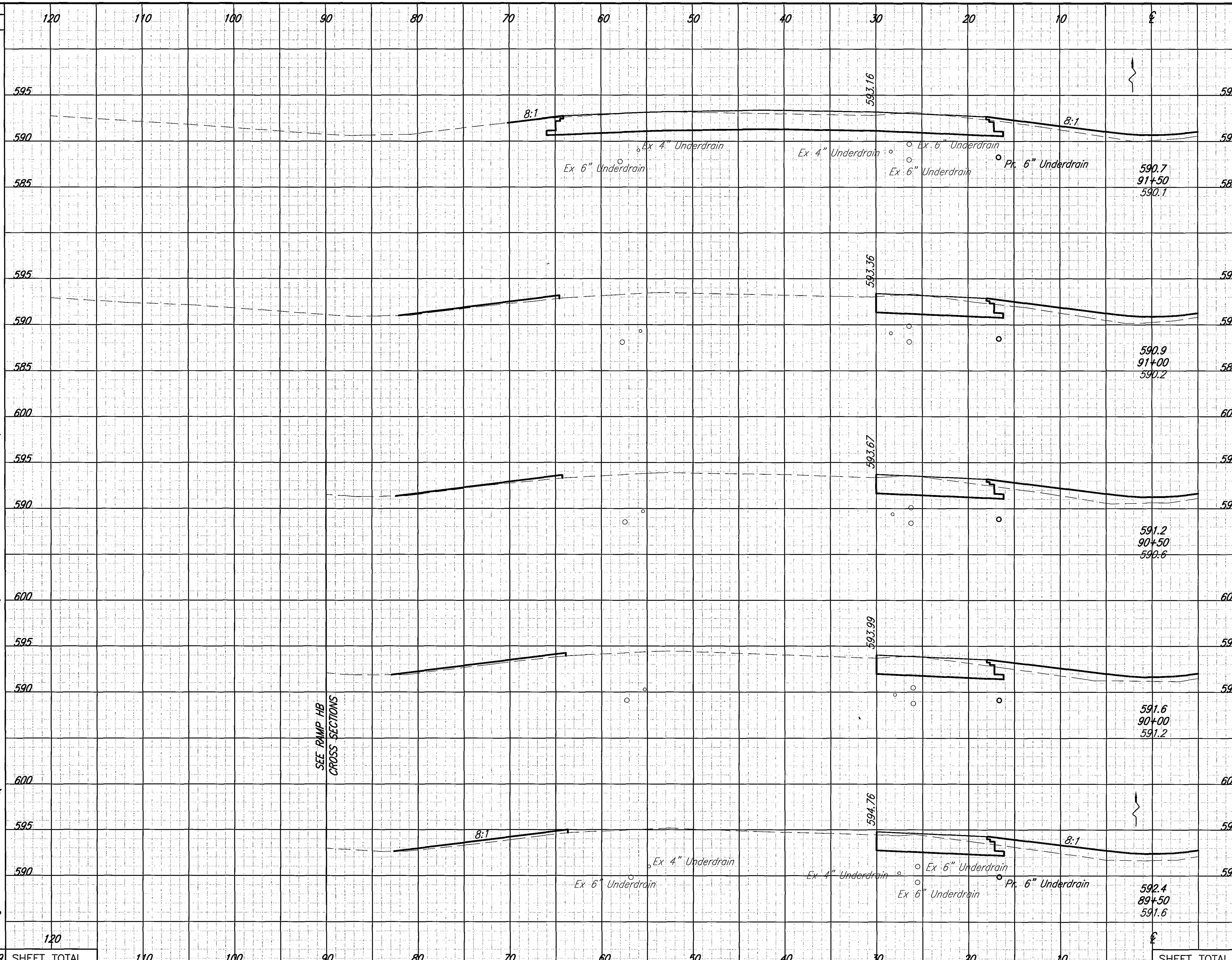
CROSS SECTIONS – WESTBOUND STA. 87+00 TO STA. 89+00

HAM-74-0.00

186
421

GX037020.DWG 23 JUL 2003

Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
91+50	29		90	15		
		192			106	31
91+00	40		25	19		
		225			45	38
90+50	41		24	22		
		231			44	39
90+00	42		24	20		
		233			43	42
89+50	42		22	25		
		228			39	52
SHEET TOTAL		1109			277	202



CALCULATED SEB
CHECKED GAB

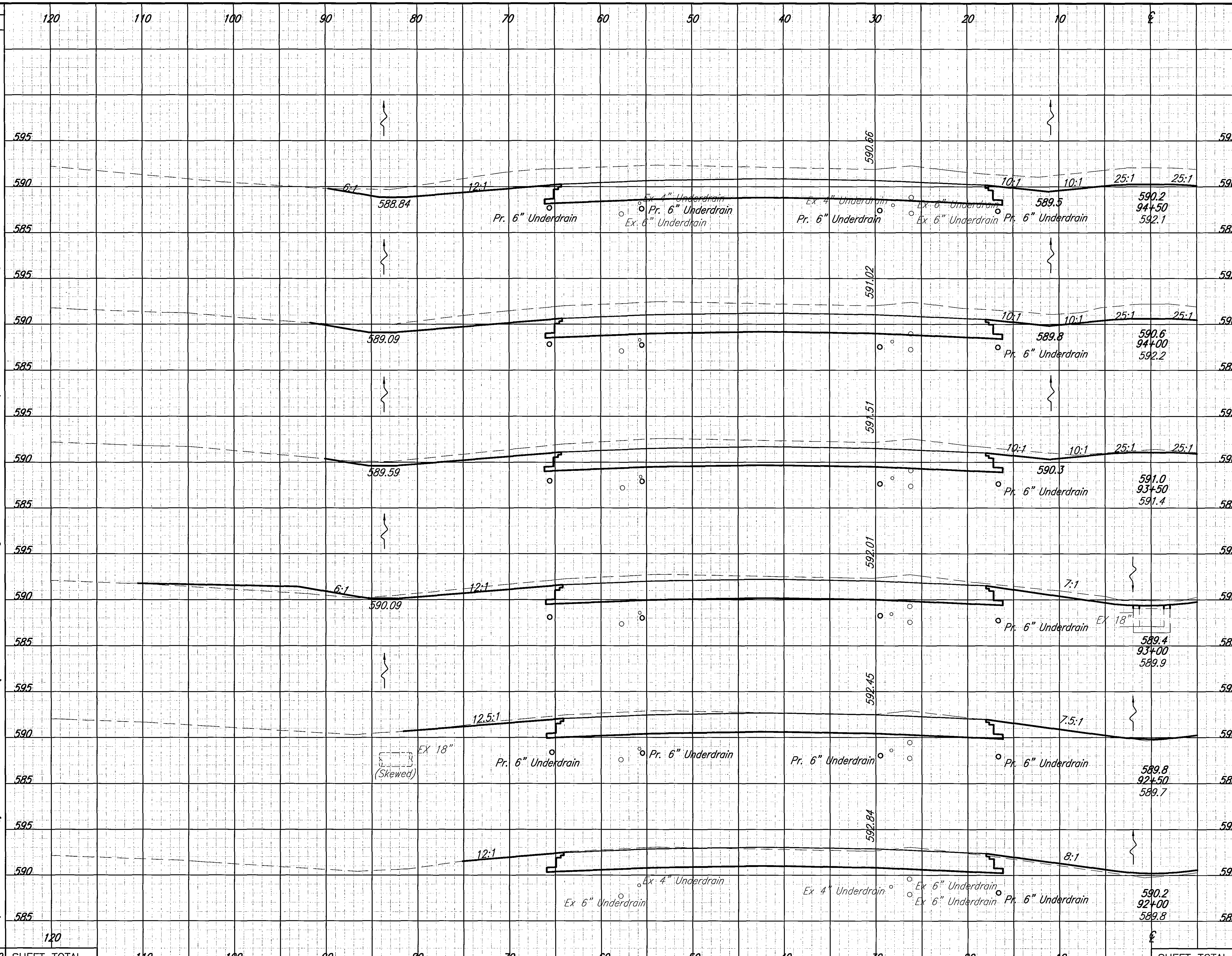
CROSS SECTIONS – WESTBOUND STA 89+50 TO STA. 91+50

HAM-74-0.00

187 / 421

0X038020.DWG 23 JUL 2003

SEEDING		**Station**	**END AREA**		**VOLUME**	
END WIDTH	SQ. YDS.		CUT	FILL	CUT	FILL
48		94+50	236	4		
	272				417	7
50		94+00	214	4		
	275				347	7
49		93+50	161	4		
	328				282	7
69		93+00	144	4		
	303				237	7
40		92+50	112	4		
	206				197	13
34		92+00	101	10		
	175				177	23
	1559	SHEET TOTAL			1657	64



CROSS SECTIONS – WESTBOUND
STA. 92+00 TO STA. 94+50

HAM-74-0.00

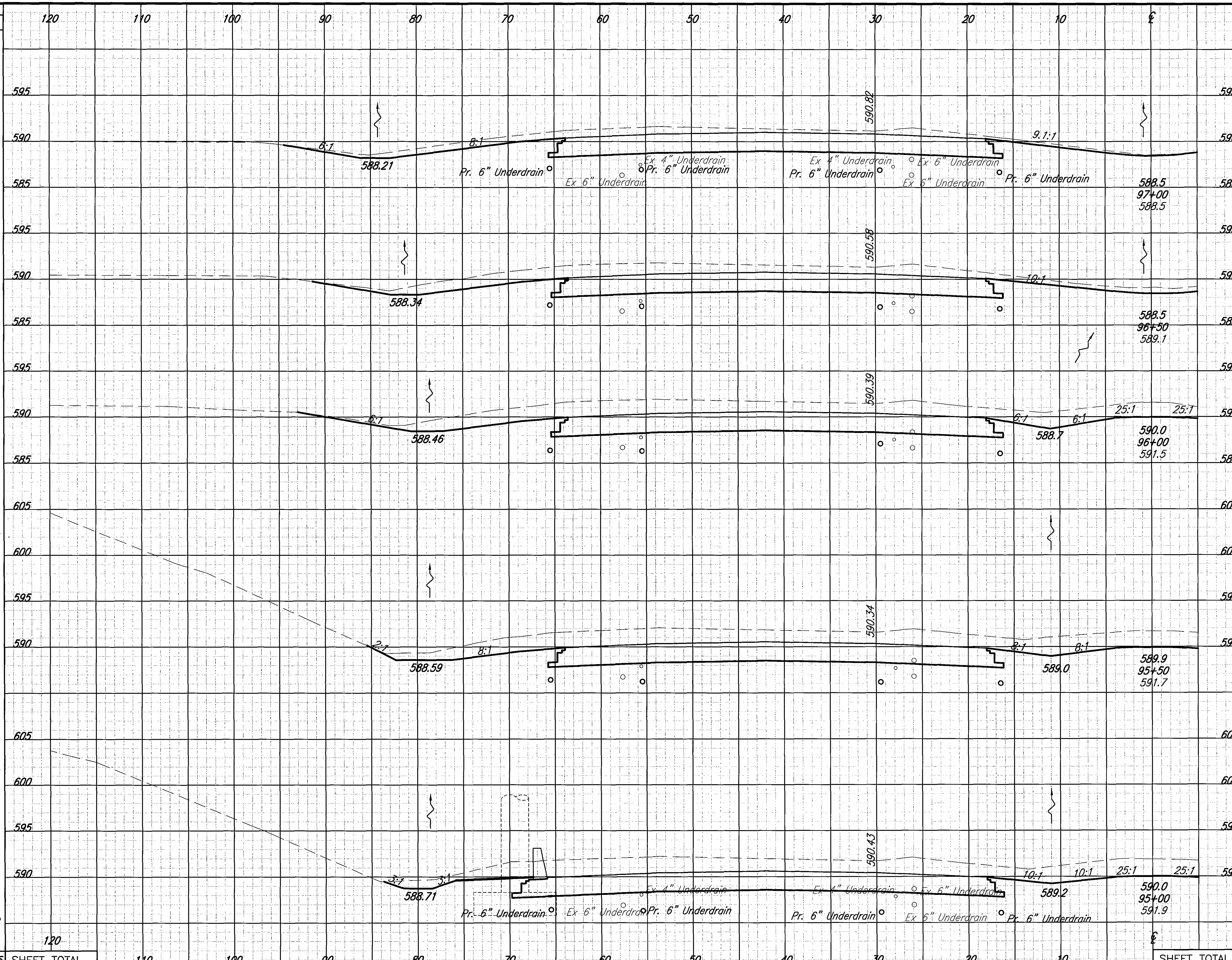
CALCULATED SEB
CHECKED GAB

0X039020.DWG 23 JUL 2003

CROSS SECTIONS – WESTBOUND
STA. 95+00 TO STA. 97+00

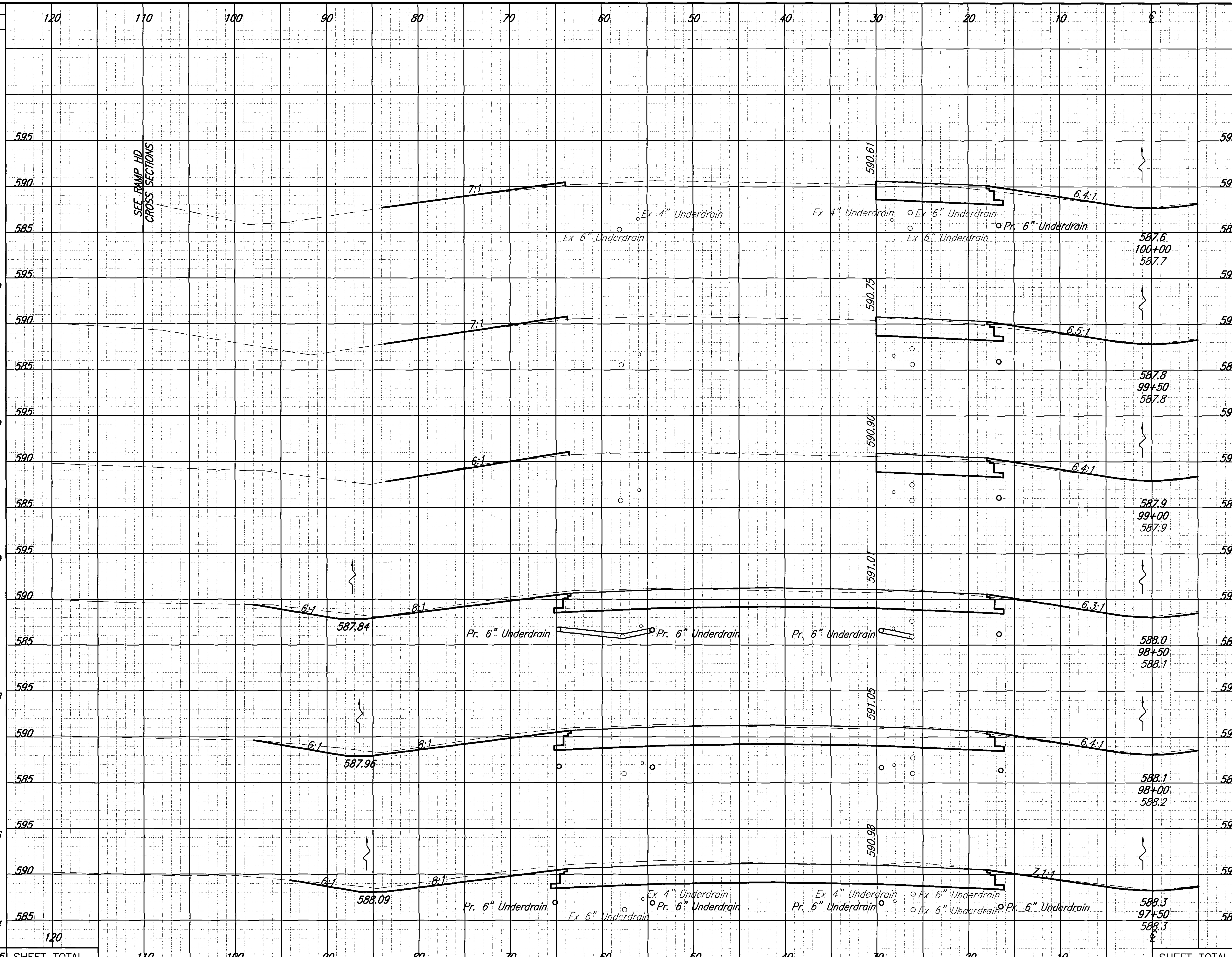
HAM-74-0.00

CALCULATED SEB
CHECKED GAB



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
97+00	53		144	4		
		289			295	7
96+50	51		175	4		
		286			365	7
96+00	52		219	4		
		267			416	7
95+50	44		230	4		
		231			436	7
95+00	39		241	4		
		242			442	7
SHEET TOTAL		1315			1954	35

GX040020.DWG 15 AUG 2003



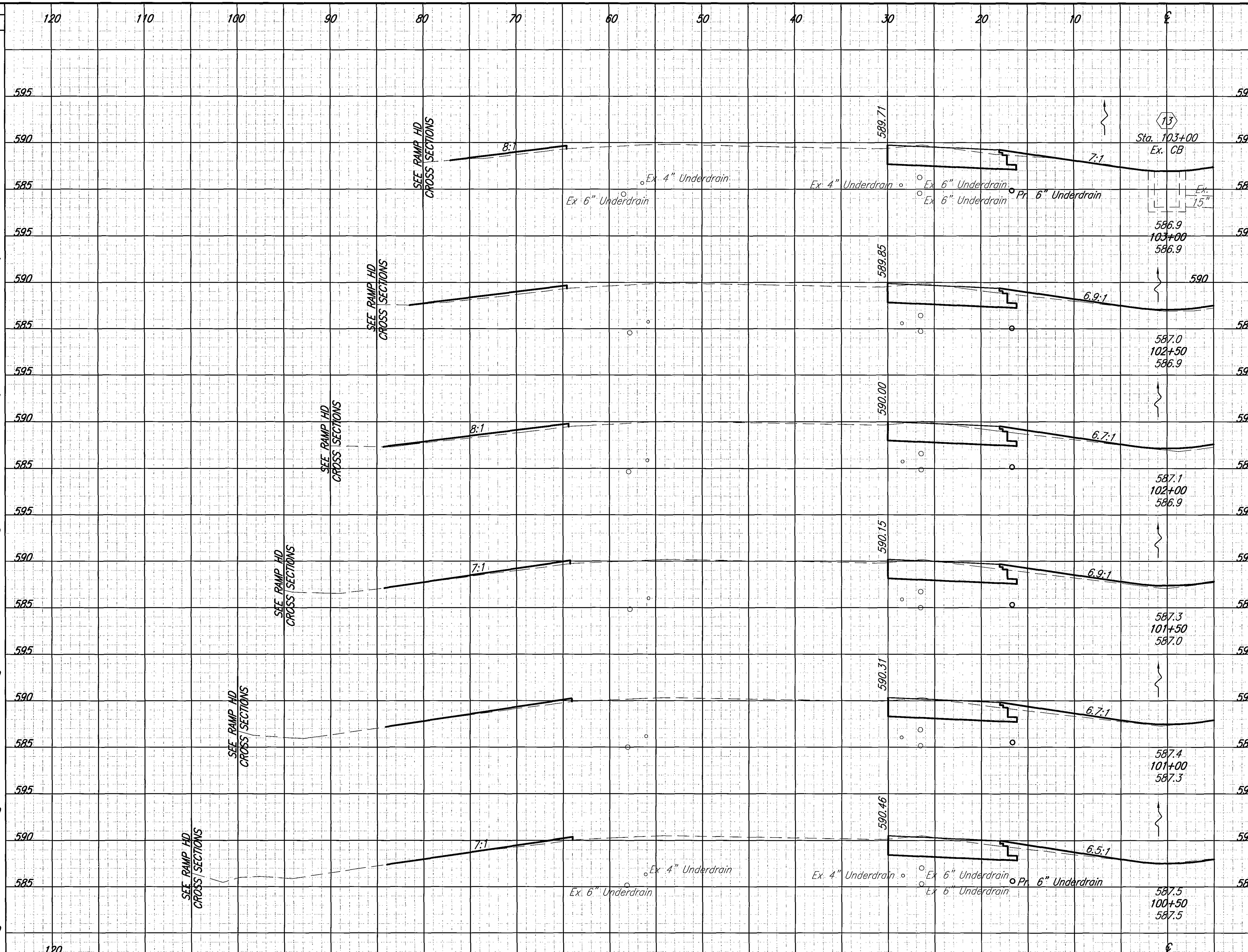
Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
100+00	43		25	5		
		239			46	8
99+50	43		25	4		
		239			47	7
99+00	43		26	4		
		239			119	6
98+50	43		103	2		
		278			197	5
98+00	57		110	3		
		306			217	6
97+50	53		124	4		
		294			248	7
SHEET TOTAL		1595			874	39

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND STA. 97+50 TO STA. 100+00

HAM-74-0.00

0X041020.DWG 23 JUL 2003



SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
36		26	9		
	211			48	18
40		26	10		
	231			48	19
43		26	11		
	239			47	19
43		25	10		
	239			46	17
43		25	8		
	239			46	15
43		25	8		
	239			46	12
SHEET TOTAL	1398			281	100

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA. 100+50 TO STA. 103+00

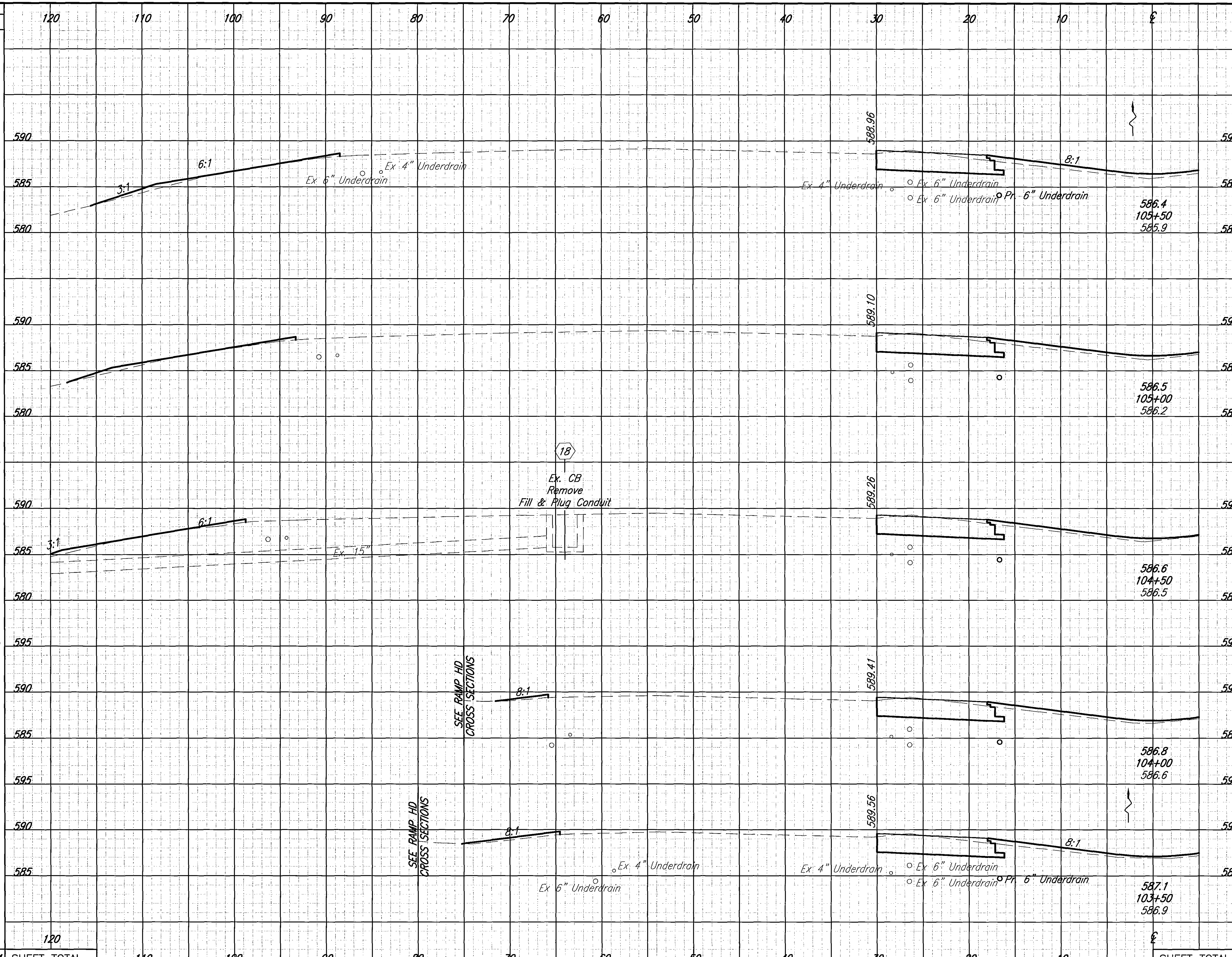
HAM-74-0.00

GX042020.DWG 23 JUL 2003

CROSS SECTIONS – WESTBOUND
STA. 103+50 TO STA. 105+50

HAM-74-0.00

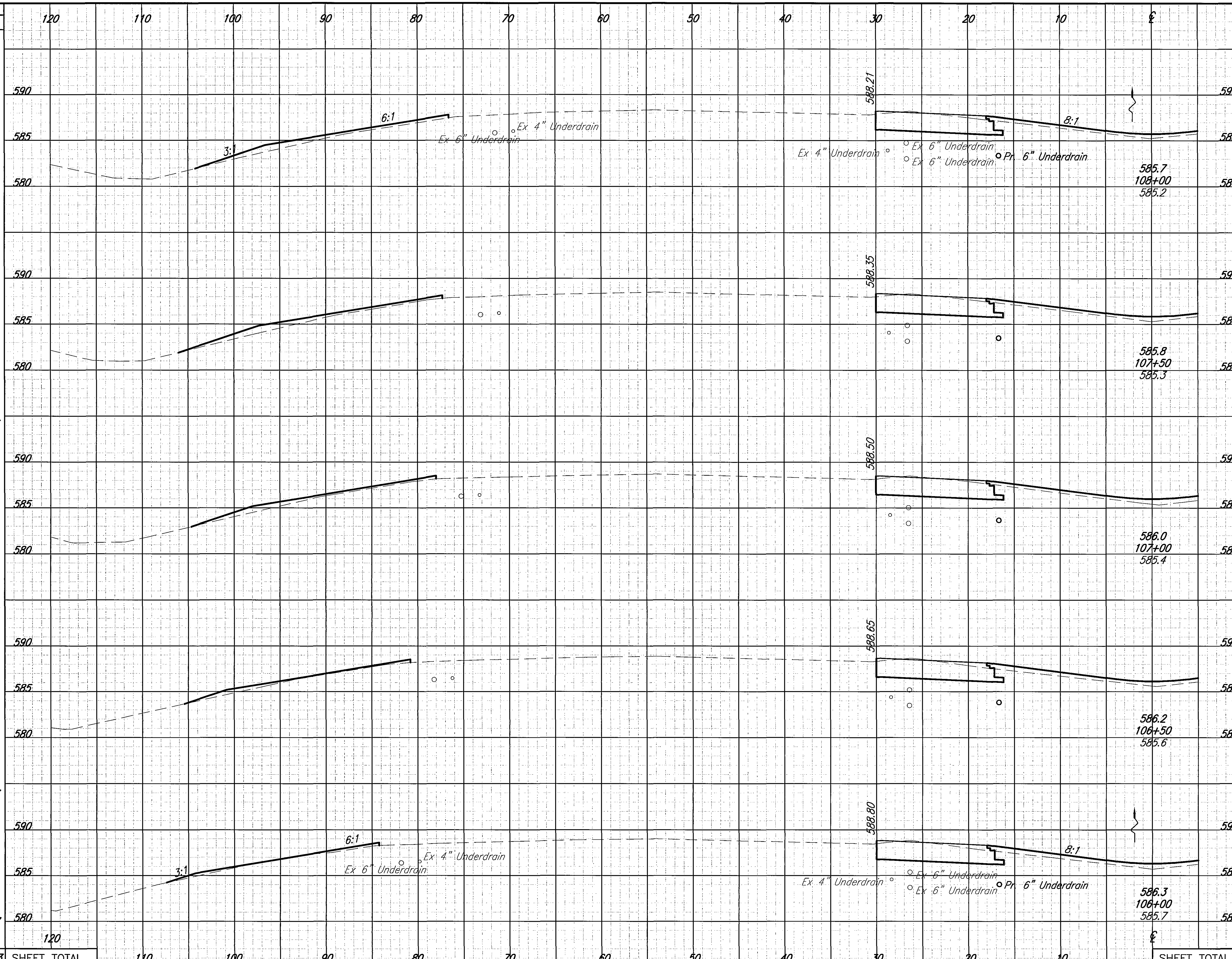
CALCULATED SEB | CHECKED GAB



SEEDING END WIDTH	SEEDING SQ. YDS.
50	
	272
48	
	256
44	
	200
28	
	172
34	
	194
SHEET TOTAL	1094

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
26	16		
		48	27
26	13		
		48	22
26	11		
		48	19
26	9		
		47	19
25	12		
		47	20
SHEET TOTAL		238	107

GX043020.DWG 23 JUL 2003



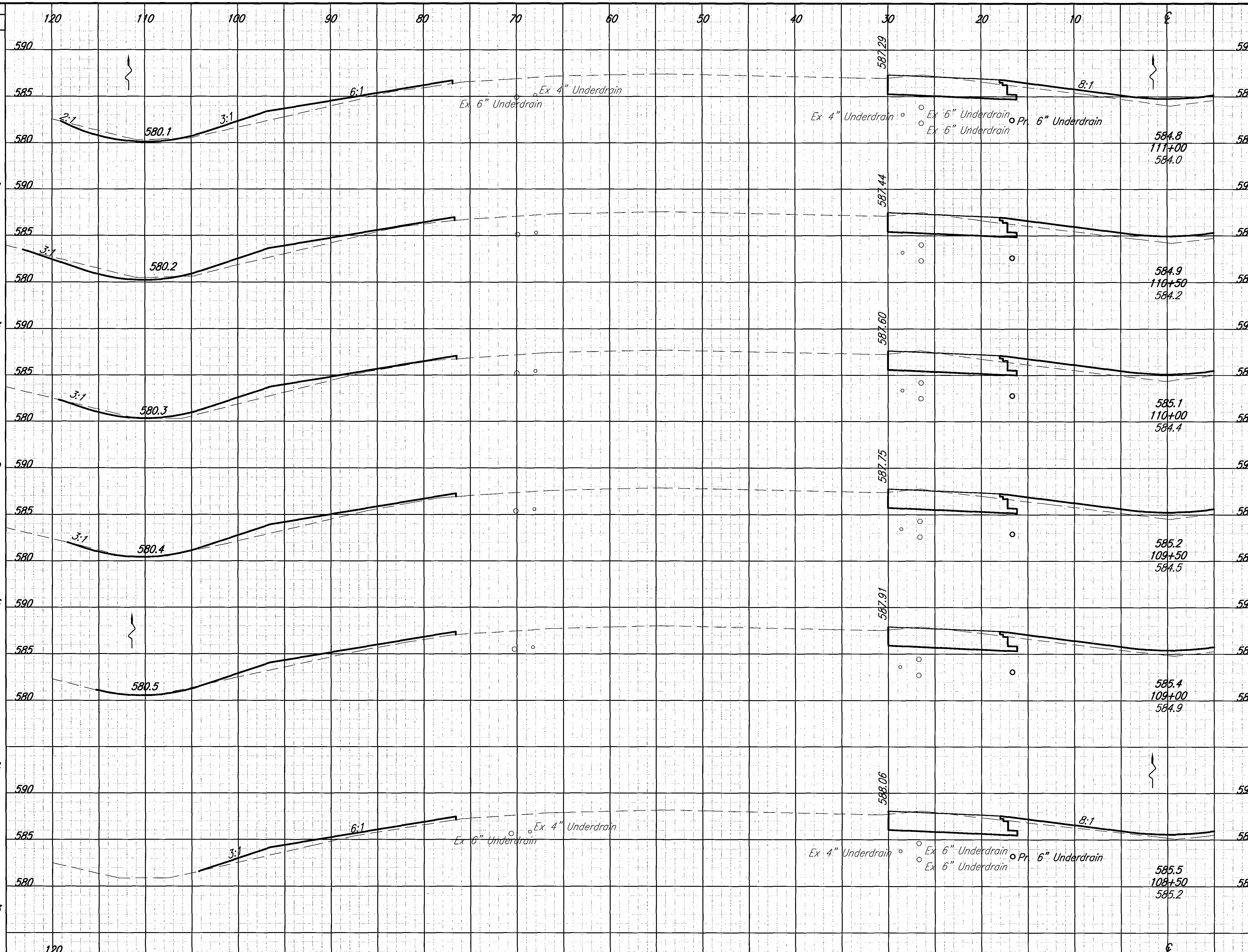
Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
108+00	51		26	20		
		286			48	38
107+50	52		26	21		
		283			48	37
107+00	50		26	19		
		264			47	31
106+50	45		25	15		
		253			46	28
106+00	46		25	15		
		267			47	29
SHEET TOTAL		1353			236	163

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA. 106+00 TO STA. 108+00

HAM-74-0.00

GX044020.DWG 23 JUL 2003



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
111+00	66		30	26		
		381			56	50
110+50	71		31	28		
		383			54	50
110+00	67		27	26		
		369			49	48
109+50	66		26	26		
		356			48	45
109+00	62		26	23		
		314			48	40
108+50	51		26	20		
		283			48	37
SHEET TOTAL		2086			303	270

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA. 108+50 TO STA. 111+00

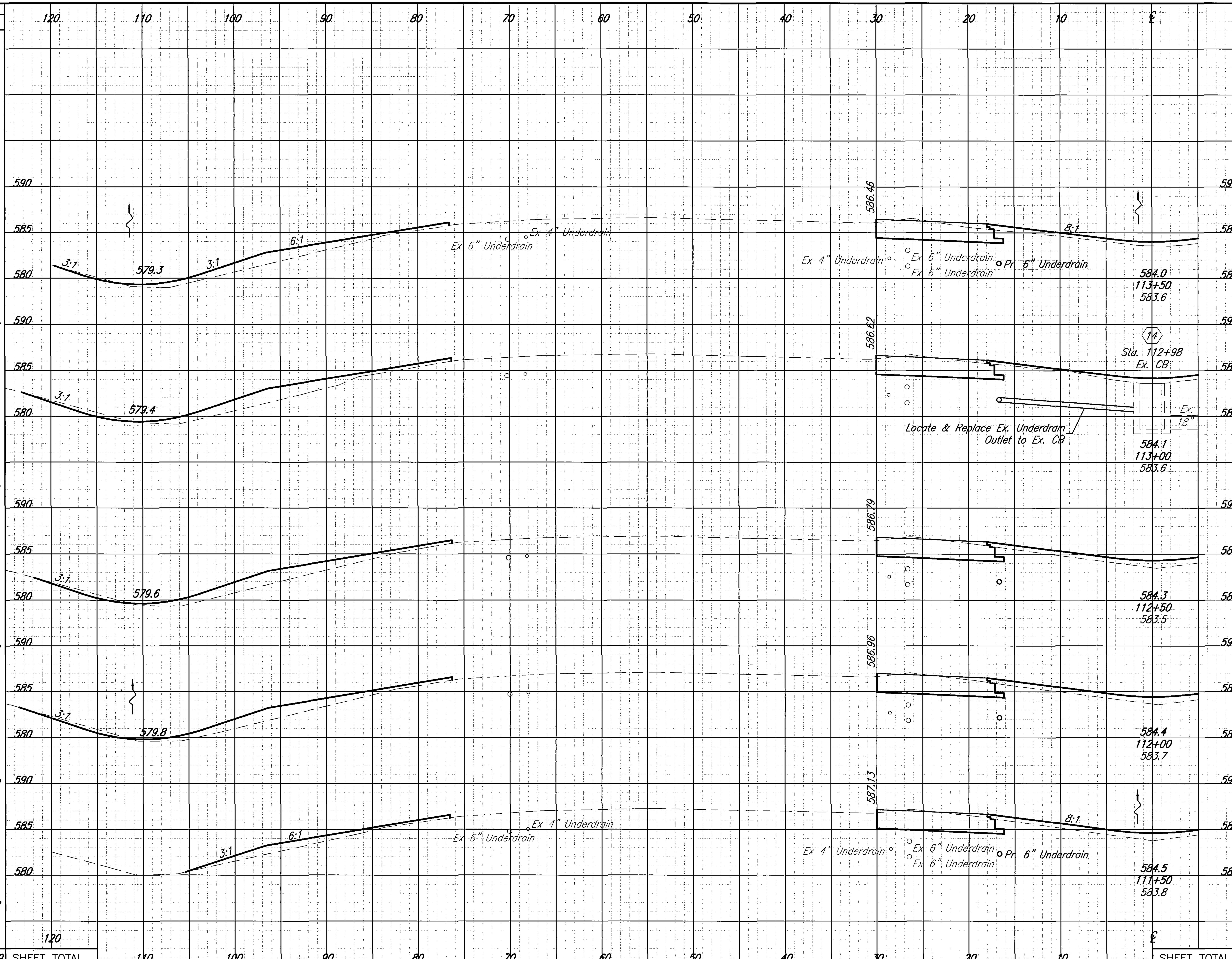
HAM–74–0.00

6X045020.DWG 23 JUL 2003

CROSS SECTIONS – WESTBOUND
STA. 111+50 TO STA. 113+50

HAM-74-0.00

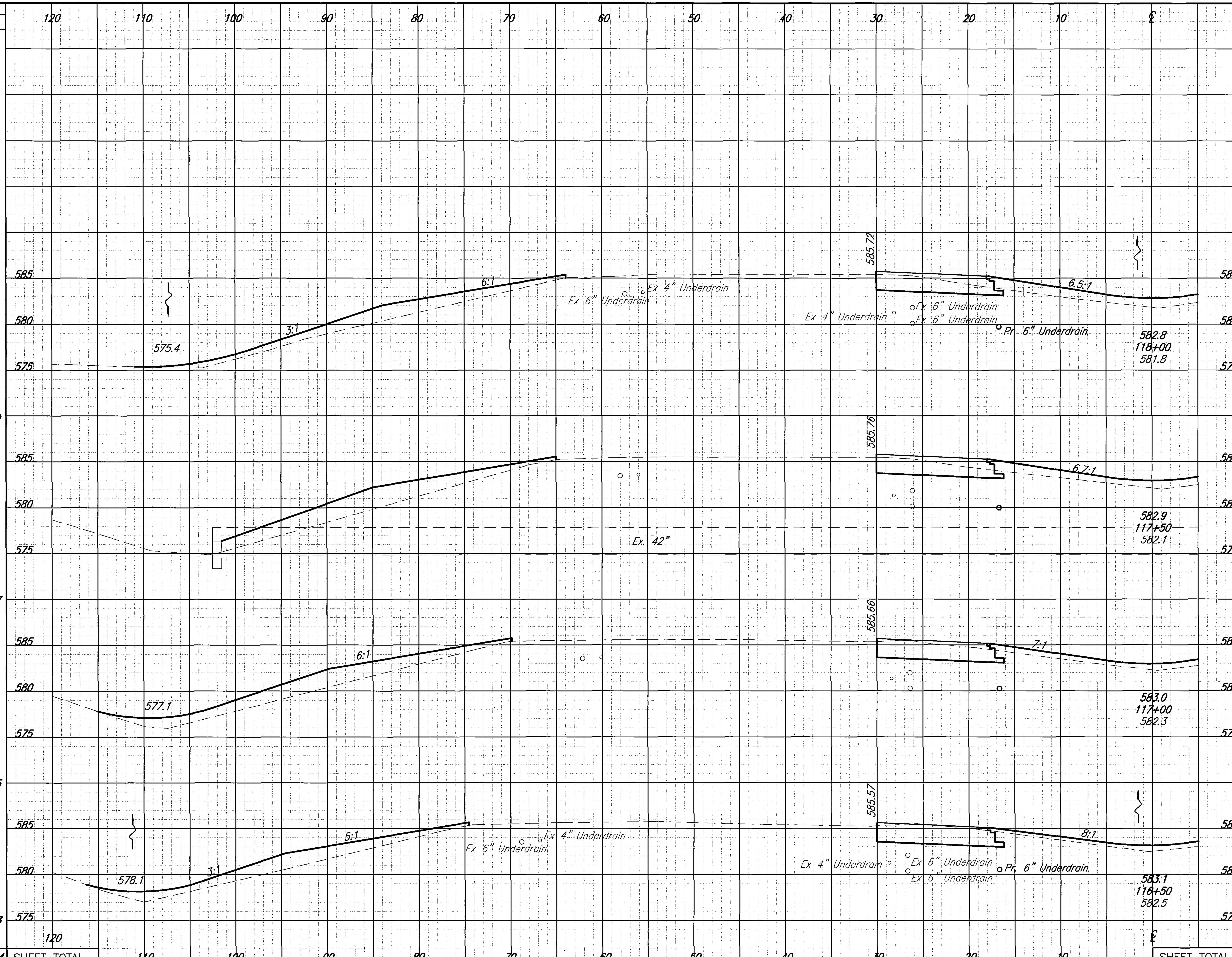
CALCULATED SEB · CHECKED GAB



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
113+50	67		25	33		
		383			50	64
113+00	71		29	36		
		392			54	71
112+50	70		29	41		
		358			54	72
112+00	59		29	37		
		308			51	59
111+50	52		26	27		
		328			52	49
SHEET TOTAL		1769			261	315

0X046020.DWG 23 JUL 2003

SEEDING
END WIDTH
SQ. YDS.
END AREA
CUT
FILL
VOLUME
CUT
FILL
CALCULATED SEB
CHECKED GAB
CROSS SECTIONS – WESTBOUND
STA. 114+00 TO STA. 116+00
HAM-74-0.00
196
421
120
110
100
90
80
70
60
50
40
30
20
10
℄
585.62
6:1
3:1
8:1
578.8
Ex 6" Underdrain
Ex 4" Underdrain
Ex 4" Underdrain
Ex 6" Underdrain
Ex 6" Underdrain
Pr. 6" Underdrain
583.2
116+00
582.9
585.79
578.9
583.4
115+50
583.0
585.96
579.0
583.5
115+00
583.0
586.14
579.1
583.7
114+50
582.9
586.30
579.2
583.8
114+00
583.1
585
580
575
63
350
63
356
65
361
65
356
63
361
26
39
48
60
26
26
47
46
25
24
46
56
25
36
47
69
26
38
47
66
1784
SHEET TOTAL
SHEET TOTAL
235
297
GX047020.DWG
23 JUL 2003



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
118+00	68		19	68		
		389			35	146
117+50	72		19	90		
		417			34	148
117+00	78		18	70		
		425			41	110
116+50	75		26	49		
		383			48	81
SHEET TOTAL		1614			158	485

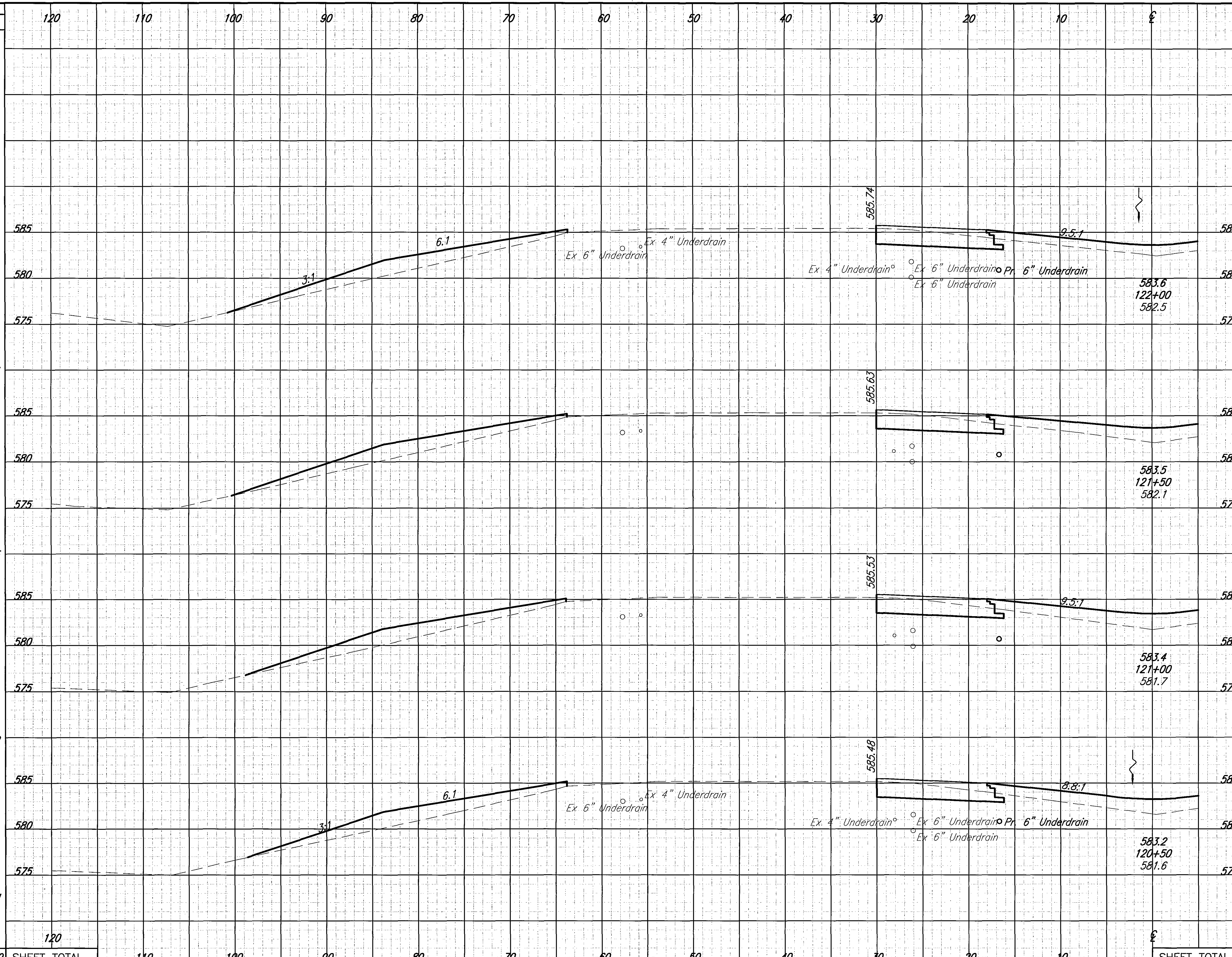
CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA. 116+50 TO STA. 118+00

HAM-74-0.00

GX048020.DWG 23 JUL 2003

SEEDING
END WIDTH
SQ. YDS.
END AREA
CUT
FILL
VOLUME
CUT
FILL
CALCULATED SEB
CHECKED GAB
120
110
100
90
80
70
60
50
40
30
20
10
℄
585.44
585
580
575
3:1
Ex 6" Underdrain
Ex 4" Underdrain
Ex 4" Underdrain
Ex 6" Underdrain
Ex 6" Underdrain
Pr. 6" Underdrain
8.6:1
583.1
120+00
581.5
55
19
53
306
36
101
585.51
7.5:1
582.9
119+50
581.5
55
20
56
303
38
97
585.58
6.5:1
582.6
119+00
581.5
54
21
49
308
38
88
585.65
19
Sta. 118+66
Ex. CB
6:1
Ex 6" Underdrain
Ex 4" Underdrain
Ex 4" Underdrain
Ex 6" Underdrain
Ex 6" Underdrain
Pr. 6" Underdrain
3:1
582.7
118+50
581.5
57
20
46
347
36
106
1264
SHEET TOTAL
SHEET TOTAL
148
392
CROSS SECTIONS – WESTBOUND
STA. 118+50 TO STA. 120+00
HAM-74-0.00
198
421
GX049020.DWG 23 JUL 2003



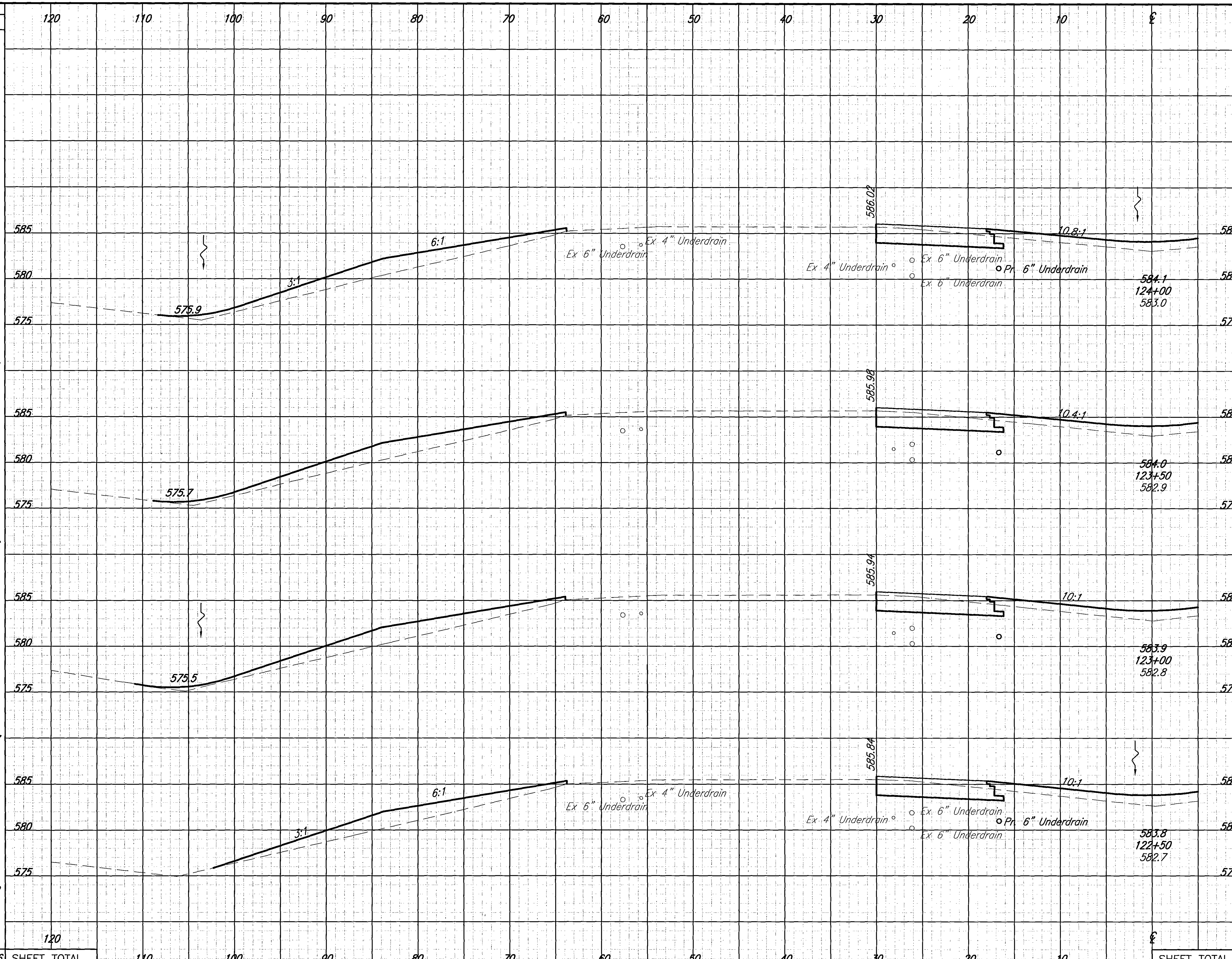
Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
122+00	61		21	51		
		331			38	97
121+50	58		20	54		
		325			37	102
121+00	59		20	56		
		322			37	102
120+50	57		20	54		
		311			36	99
SHEET TOTAL		1289			148	400

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA. 120+50 TO STA. 122+00

HAM-74-0.00

GX050020.DWG 23 JUL 2003



SEEDING END WIDTH	SEEDING SQ. YDS.
68	
	381
69	
	386
70	
	367
62	
	342
SHEET TOTAL	1476

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
21	62		
		39	114
21	61		
		39	114
21	62		
		39	112
21	59		
		39	102
		156	442

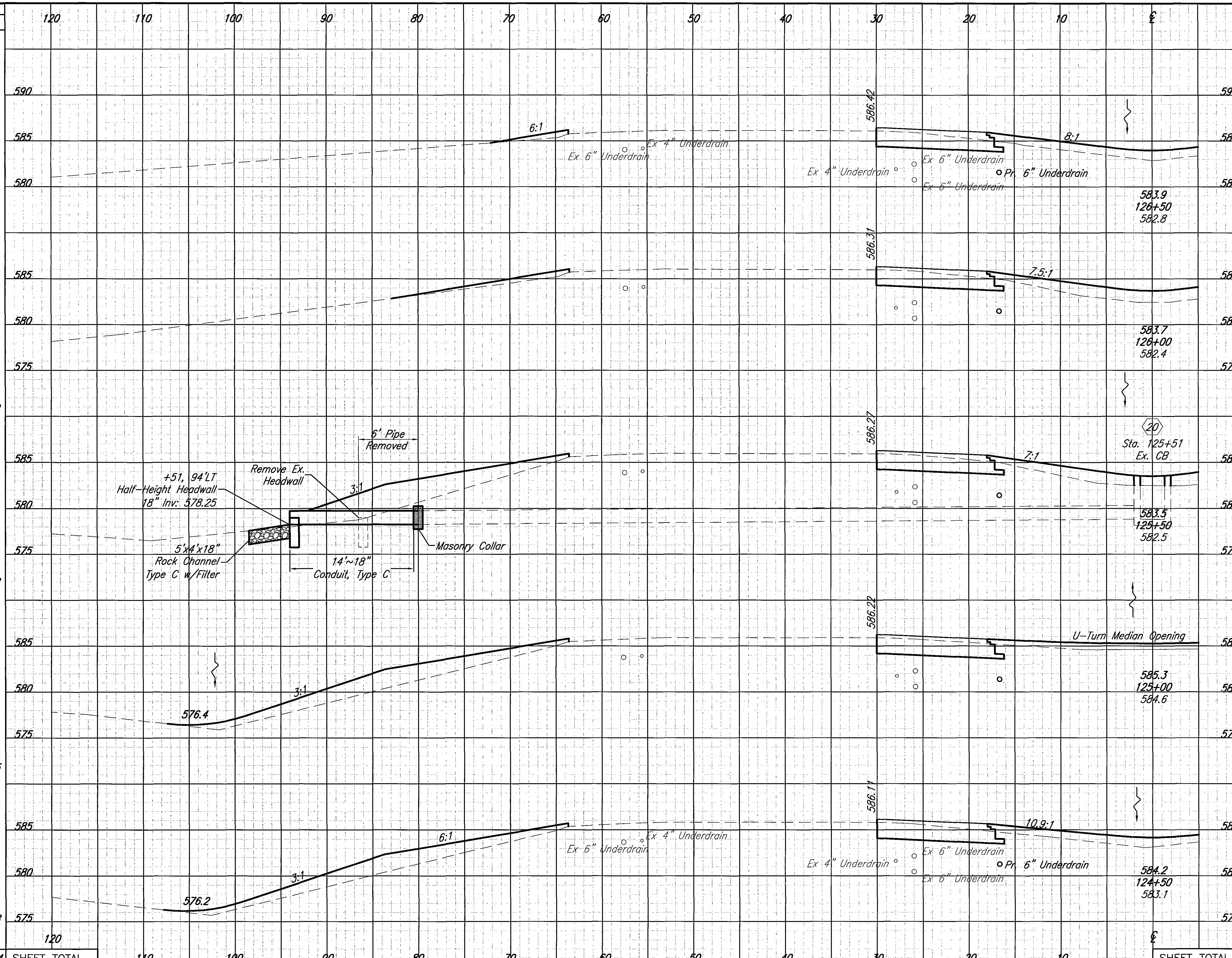
CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA. 122+50 TO STA. 124+00

HAM–74–0.00

200
421

GX051020.DWG 23 JUL 2003



SEEDING END WIDTH	SEEDING SQ. YDS.
29	
	181
36	
	242
51	
	328
67	
	375
68	
	378
	1504 SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
21	24		
		39	52
21	32		
		40	92
22	67		
		49	109
31	51		
		48	103
21	60		
		39	113
SHEET TOTAL		215	469

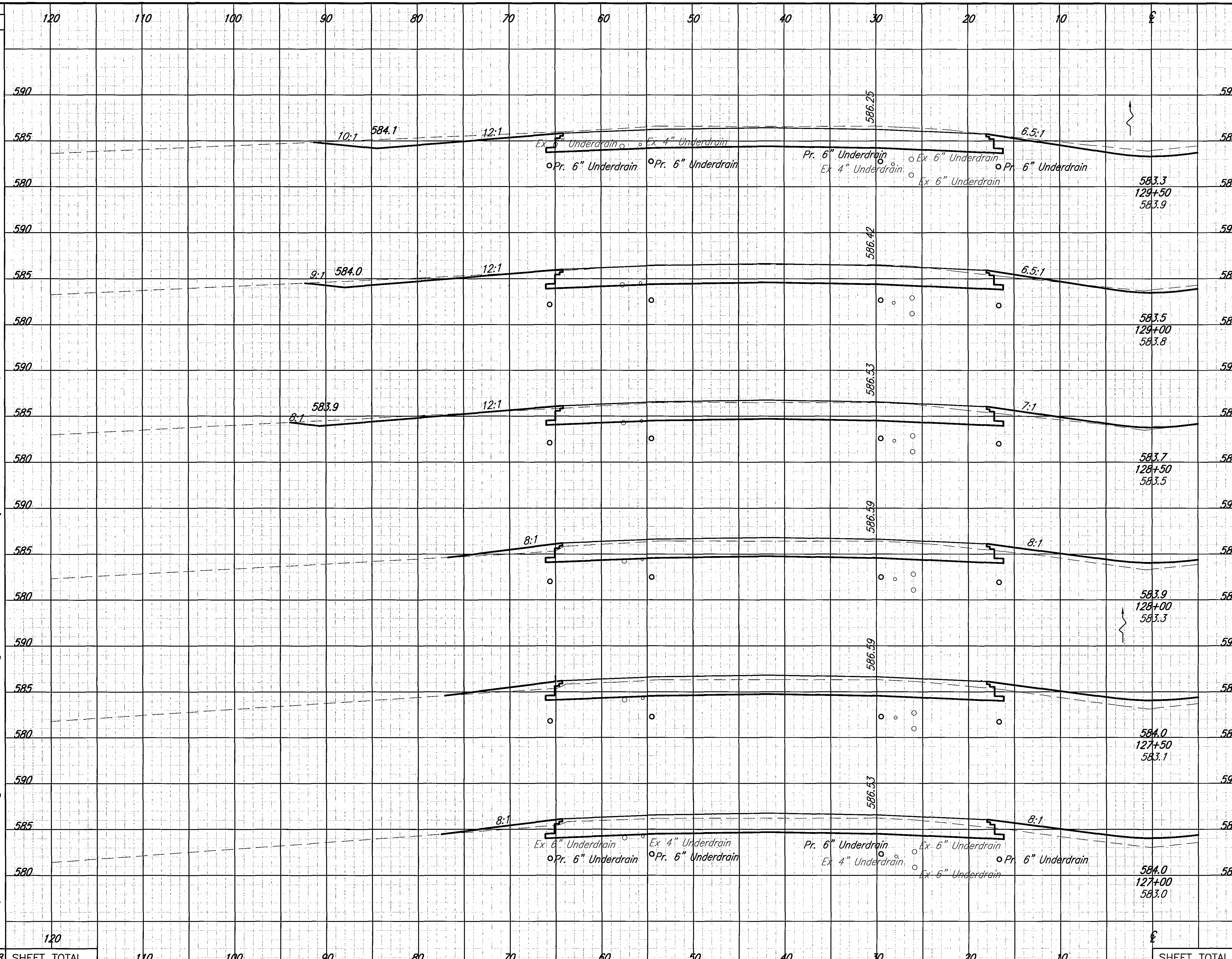
CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND STA. 124+50 TO STA. 126+50

HAM-74-0.00

201 / 421

GX052020.DWG 23 JUL 2003



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
129+50	50		134	4		
		281			223	11
129+00	51		107	8		
		289			189	19
128+50	53		97	13		
		247			169	30
128+00	36		85	19		
		200			154	38
127+50	36		81	22		
		200			148	43
127+00	36		79	24		
		181			93	44
SHEET TOTAL		1398			976	185

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA. 127+00 TO STA. 129+50

HAM-74-0.00

202
421

GX053020.DWG 23 JUL 2003

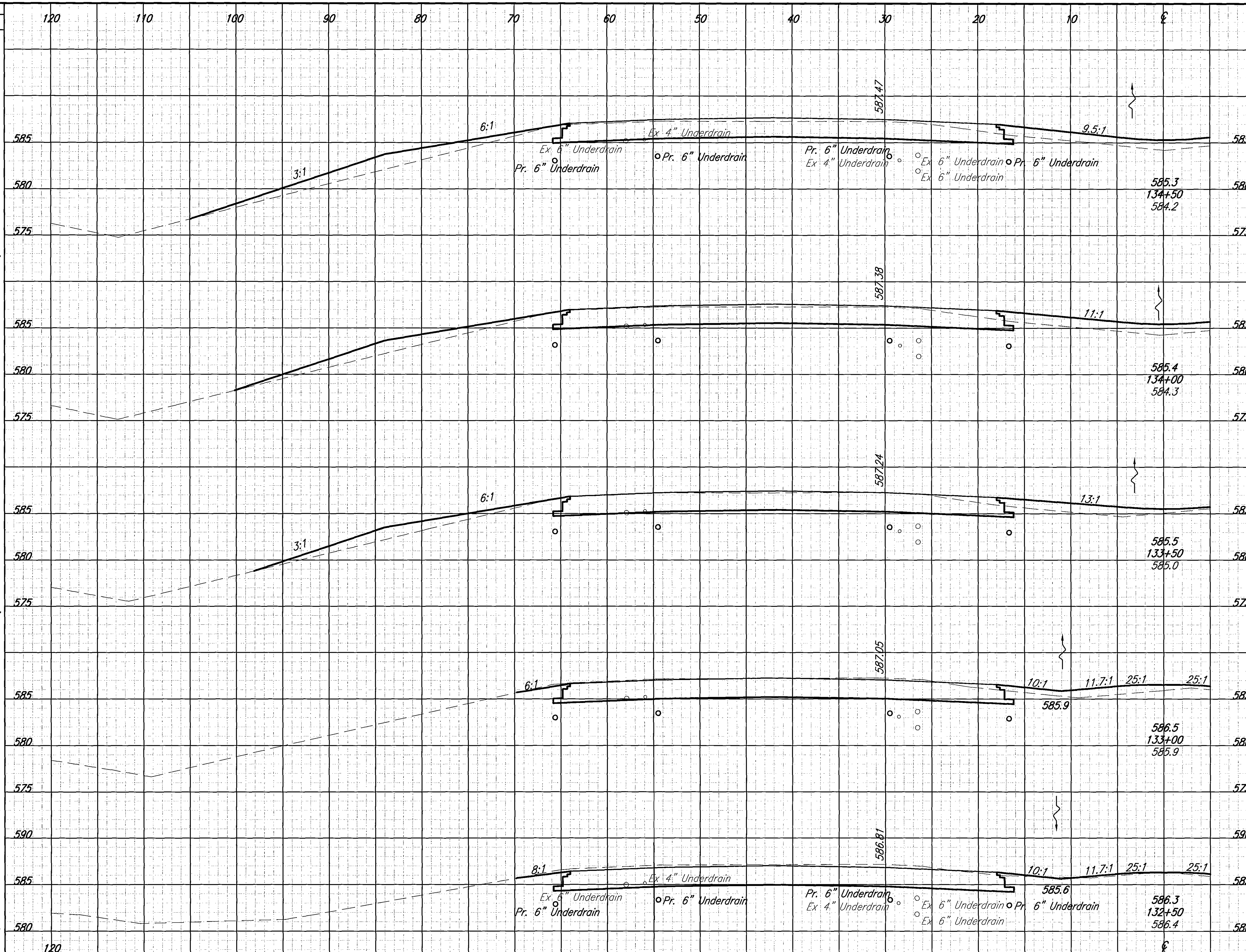
CROSS SECTIONS – WESTBOUND
STA. 130+00 TO STA. 132+00
HAM-74-0.00
CALCULATED SEB
CHECKED GAB
203
421
SEEDING
END WIDTH
SQ. YDS.
END AREA
CUT
FILL
VOLUME
CUT
FILL
36
189
32
214
45
244
43
247
46
267
1161
SHEET TOTAL
142 4
289 7
170 4
319 7
174 4
331 7
183 4
317 7
159 4
271 7
1527 35
586.0
132+00
586.6
585.7
131+50
586.5
585.5
131+00
585.7
585.5
130+50
584.9
583.1
130+00
584.1
586.53
586.23
586.04
585.99
586.06
585.3
585.0
584.8
584.5
584.5
584.4
584.3
10:1
12:1
11.5:1
11.3:1
25:1
7:1
7.7:1
6.5:1
Ex 4" Underdrain
Ex 6" Underdrain
Pr. 6" Underdrain
26
Sta. 130+00
Pr. CB No. 2-2B
GX05402D.DWG
15 AUG 2003

CROSS SECTIONS – WESTBOUND
STA. 132+50 TO STA. 134+50

HAM-74-0.00

CALCULATED SEB | CHECKED GAB

SEEDING END WIDTH	SEEDING SQ. YDS.
65	
	347
60	
	328
58	
	247
31	
	172
31	
	186
SHEET TOTAL	1280

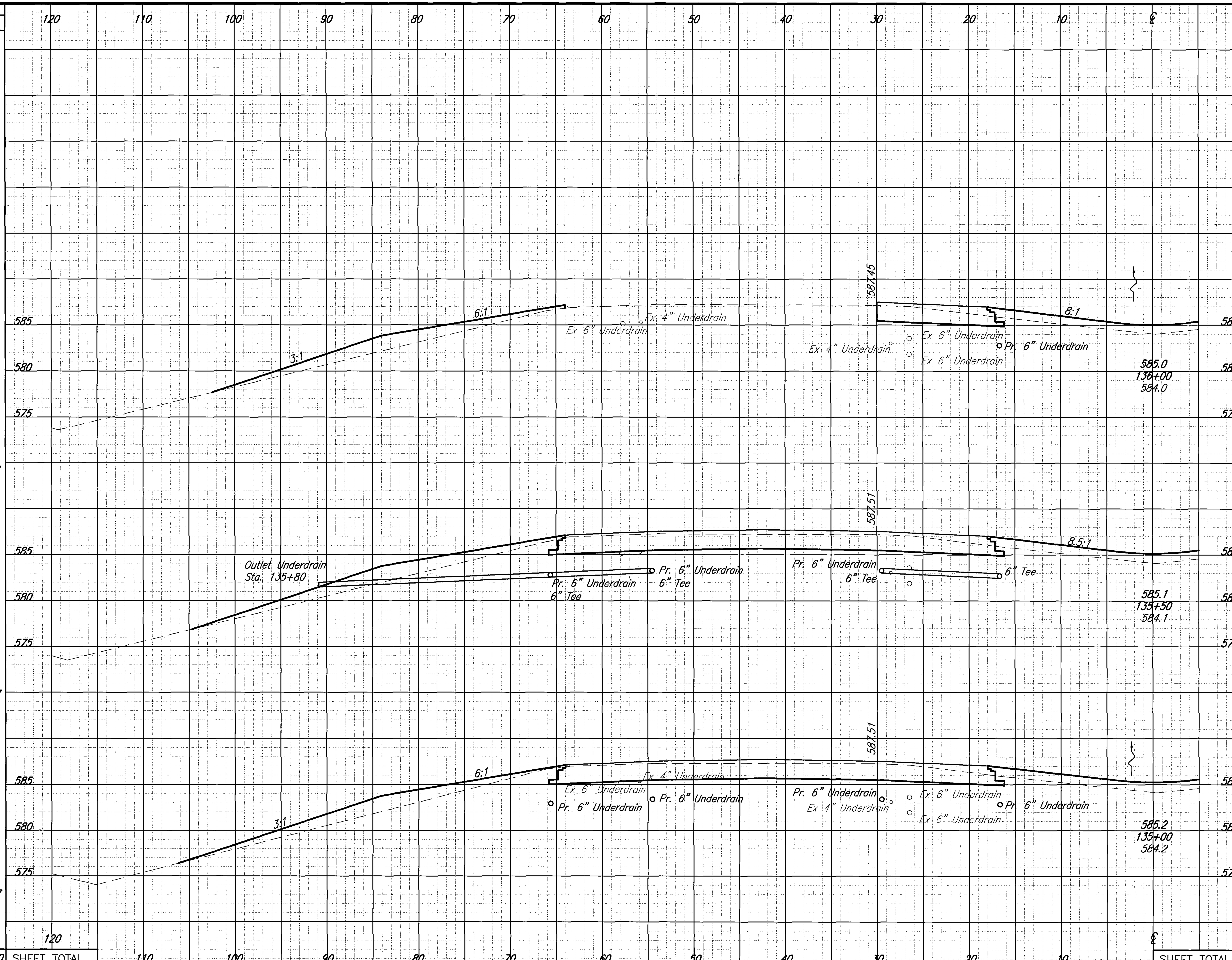


END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
85	49		
		161	82
89	40		
		173	66
98	31		
		186	45
103	18		
		197	20
110	4		
		233	7
SHEET TOTAL		950	220

23 JUL 2003 0X055020.DWG

CROSS SECTIONS - WESTBOUND
STA. 135+00 TO STA. 136+00

CALCULATED SEB
CHECKED GAB



Seeding End Width	Seeding Sq. Yds.	Station	End Area Cut	End Area Fill	Volume Cut	Volume Fill
63		136+00	20	57		
	356				94	108
65		135+50	81	60		
	367				152	106
67		135+00	83	55		
	367				156	96
	1090	SHEET TOTAL			402	310

HAM-74-0.00

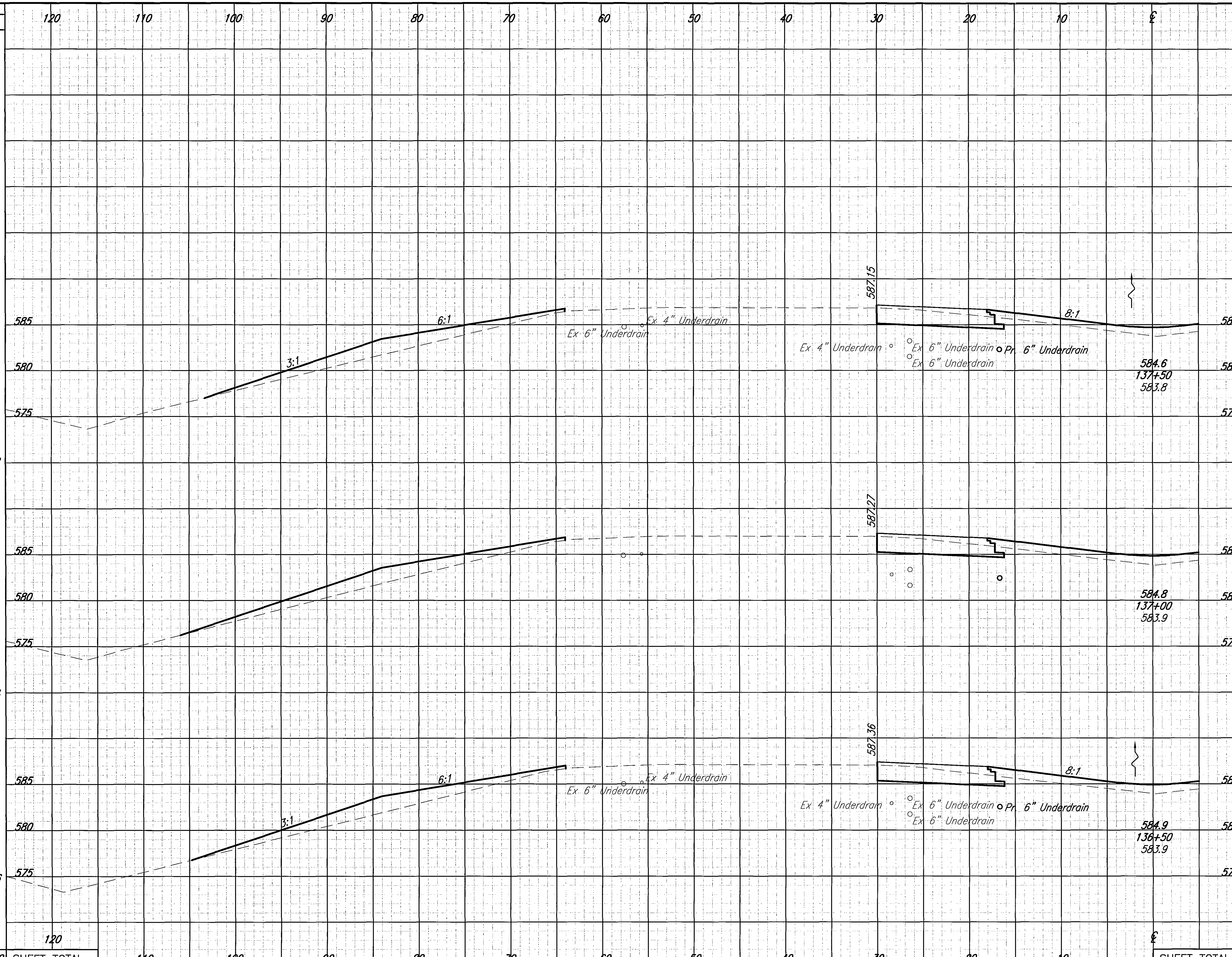
GX056020.DWG 15 AUG 2003

CROSS SECTIONS – WESTBOUND
STA. 136+50 TO STA. 137+50

CALCULATED SEB | CHECKED GAB

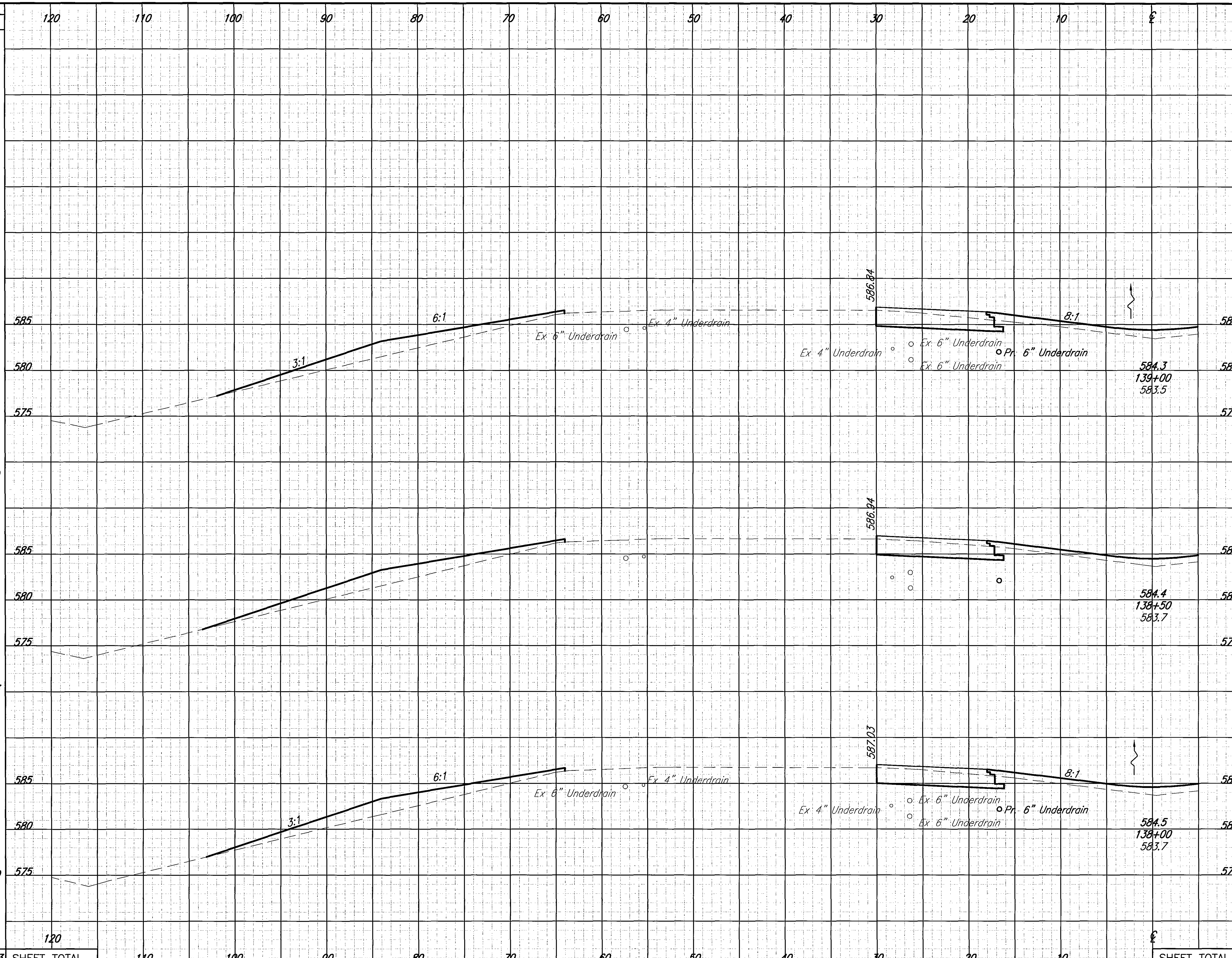
HAM-74-0.00

Station	SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
137+50	63		21	54		
		358			39	105
137+00	66		21	59		
		364			38	107
136+50	65		20	57		
		356			37	106
SHEET TOTAL		1078			114	318



GX057020.DWG 23 JUL 2003

SEEDING	
END WIDTH	SQ. YDS.
62	
	350
64	
	353
63	
	350
	1053 SHEET TOTAL



END AREA		VOLUME	
CUT	FILL	CUT	FILL
21	52		
		40	95
22	51		
		41	95
22	52		
		40	98
		121	288

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA. 138+00 TO STA. 139+00

HAM-74-0.00

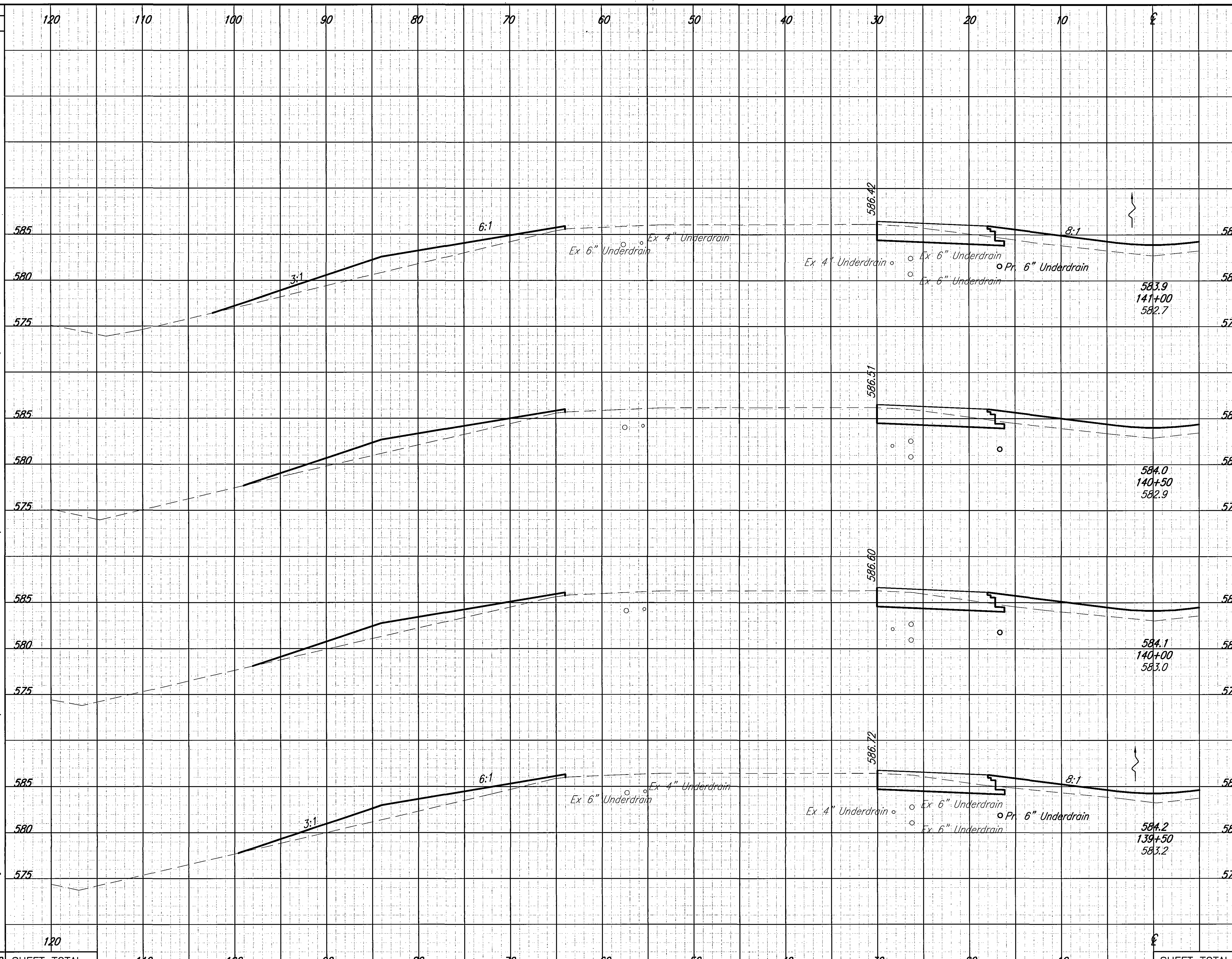
207
421

GX058020.DWG 23 JUL 2003

CROSS SECTIONS – WESTBOUND
STA. 139+50 TO STA. 141+00

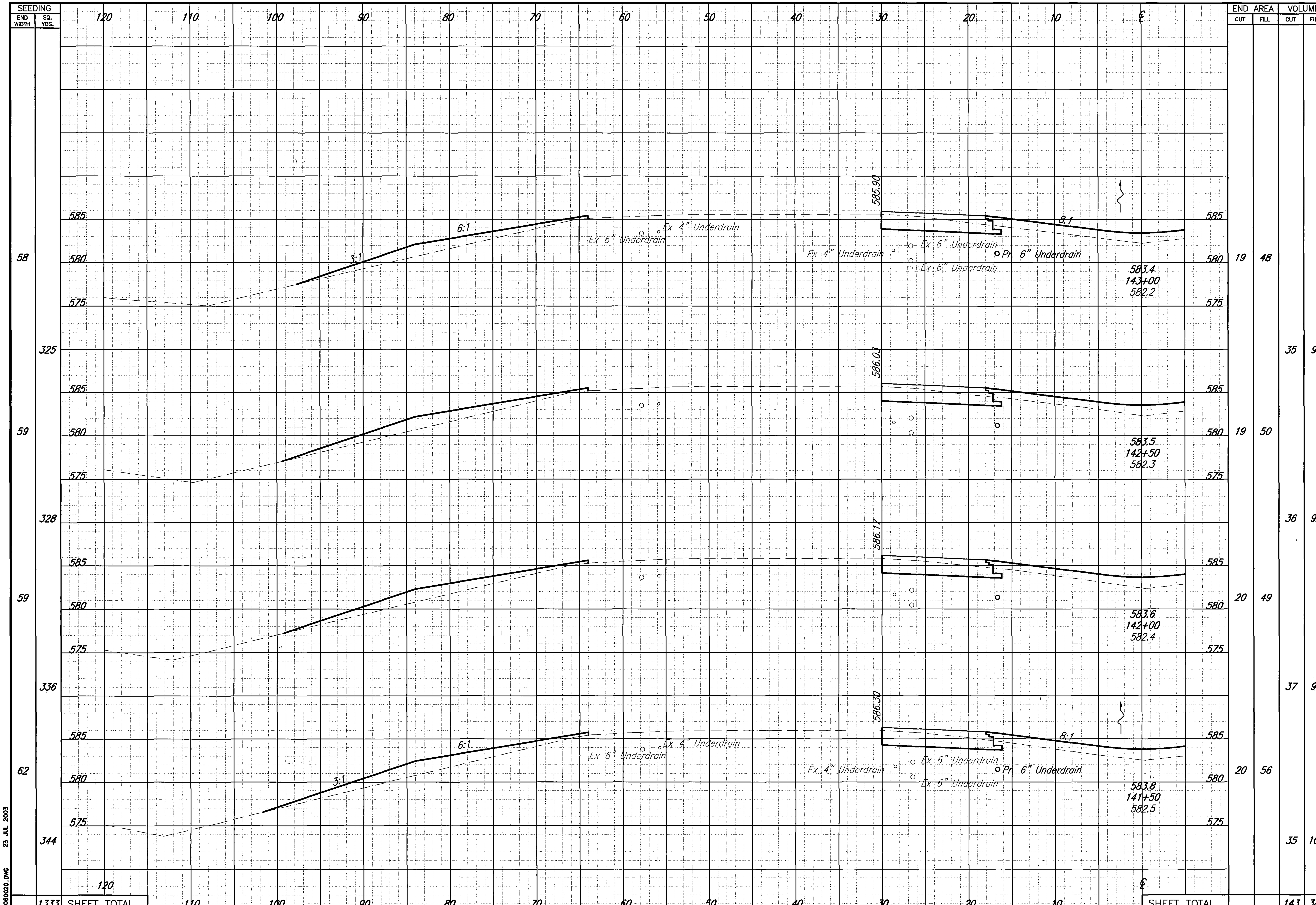
HAM-74-0.00

CALCULATED SEB | CHECKED GAB



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
141+00	62		18	60		
		336			33	105
140+50	59		18	53		
		325			34	95
140+00	58		19	50		
		325			35	94
139+50	59		19	52		
		336			37	96
SHEET TOTAL		1322			139	390

GX059020.DWG 23 JUL 2003

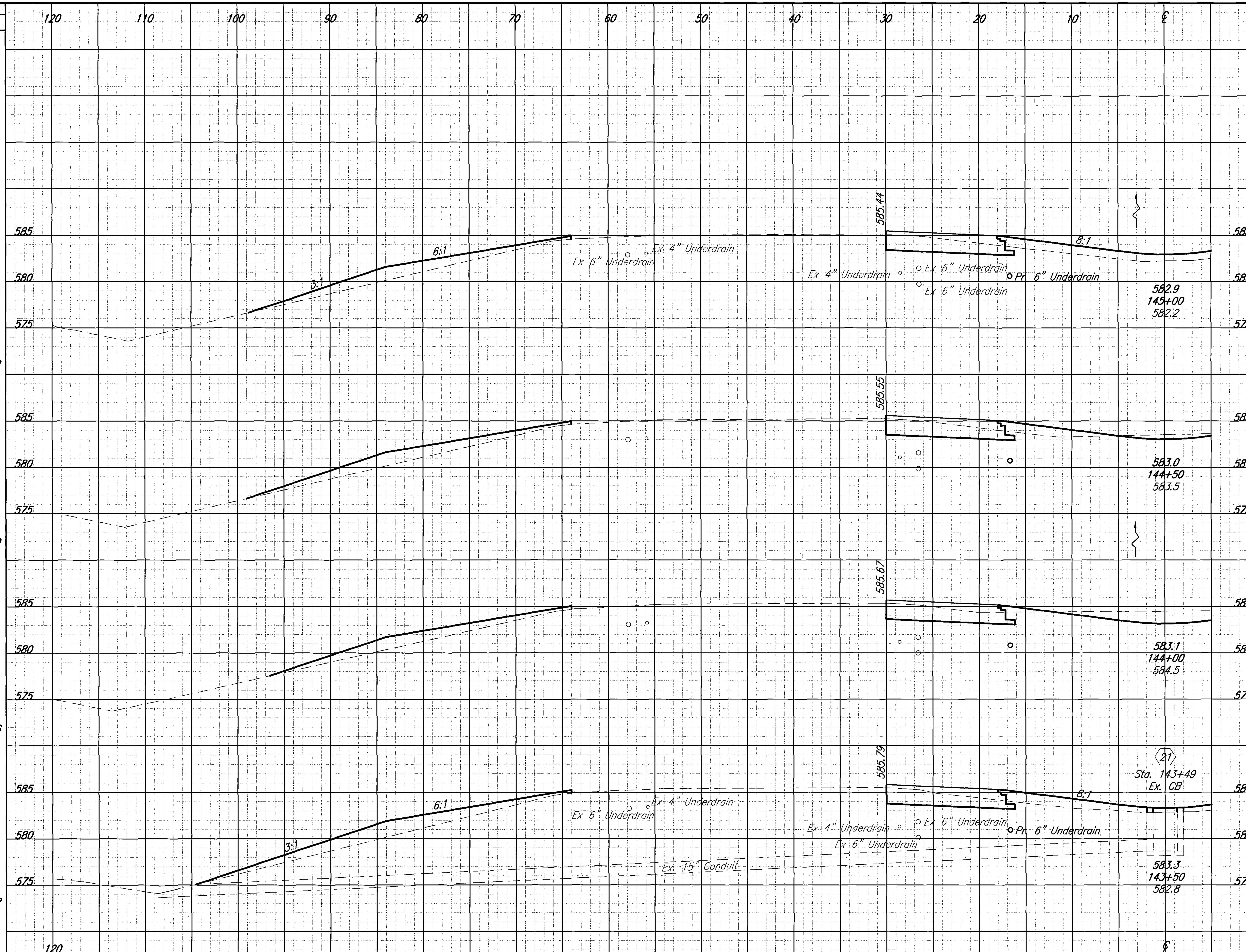


CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA. 141+50 TO STA. 143+00

HAM-74-0.00

209
421



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
145+00	59		19	46		
		328			38	76
144+50	59		22	36		
		319			53	58
144+00	56		35	27		
		336			49	75
143+50	65		18	54		
		342			34	94
SHEET TOTAL		1325			174	303

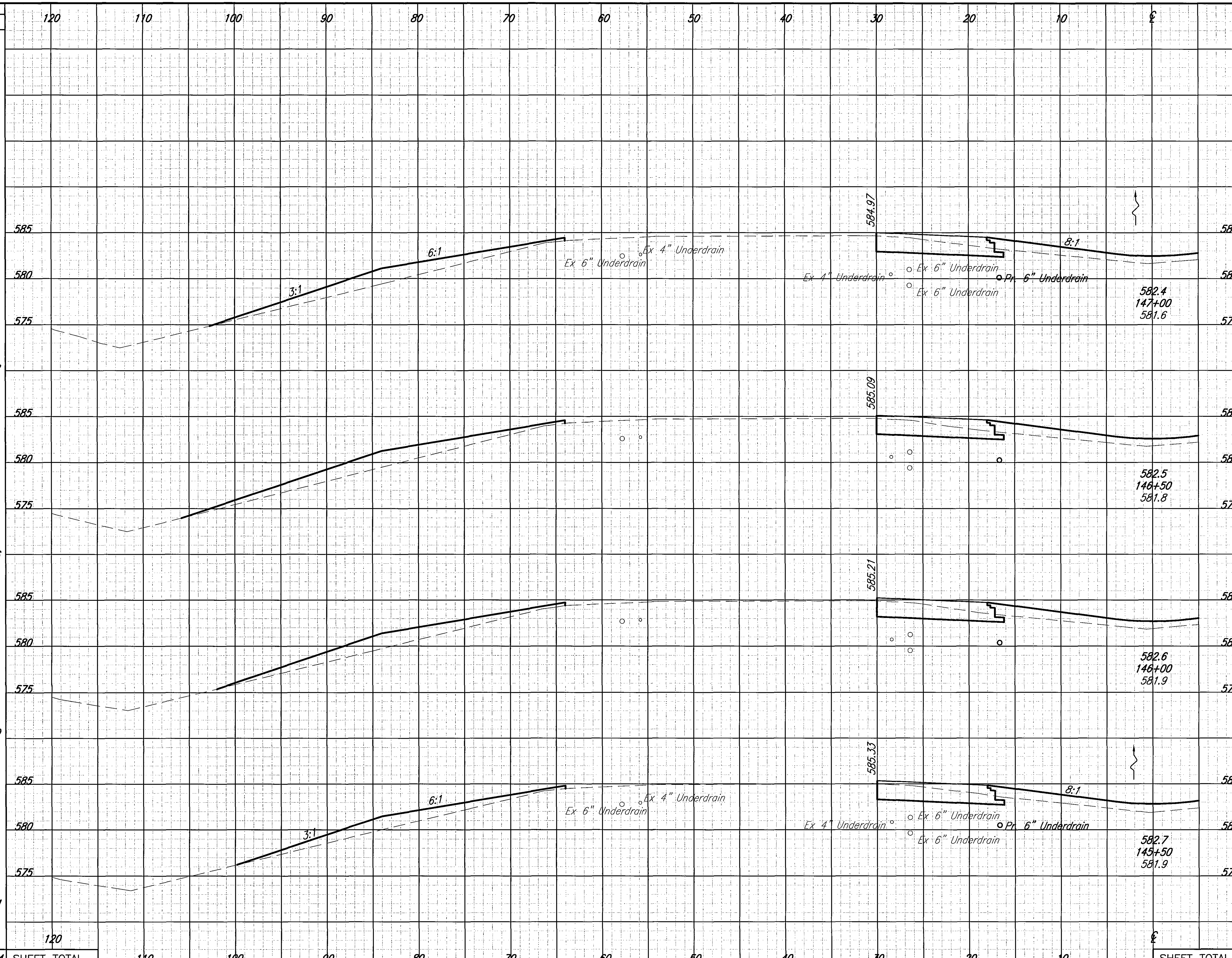
CALCULATED SEB CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA. 143+50 TO STA. 145+00

HAM-74-0.00

210
421

GX061020.DWG 23 JUL 2003



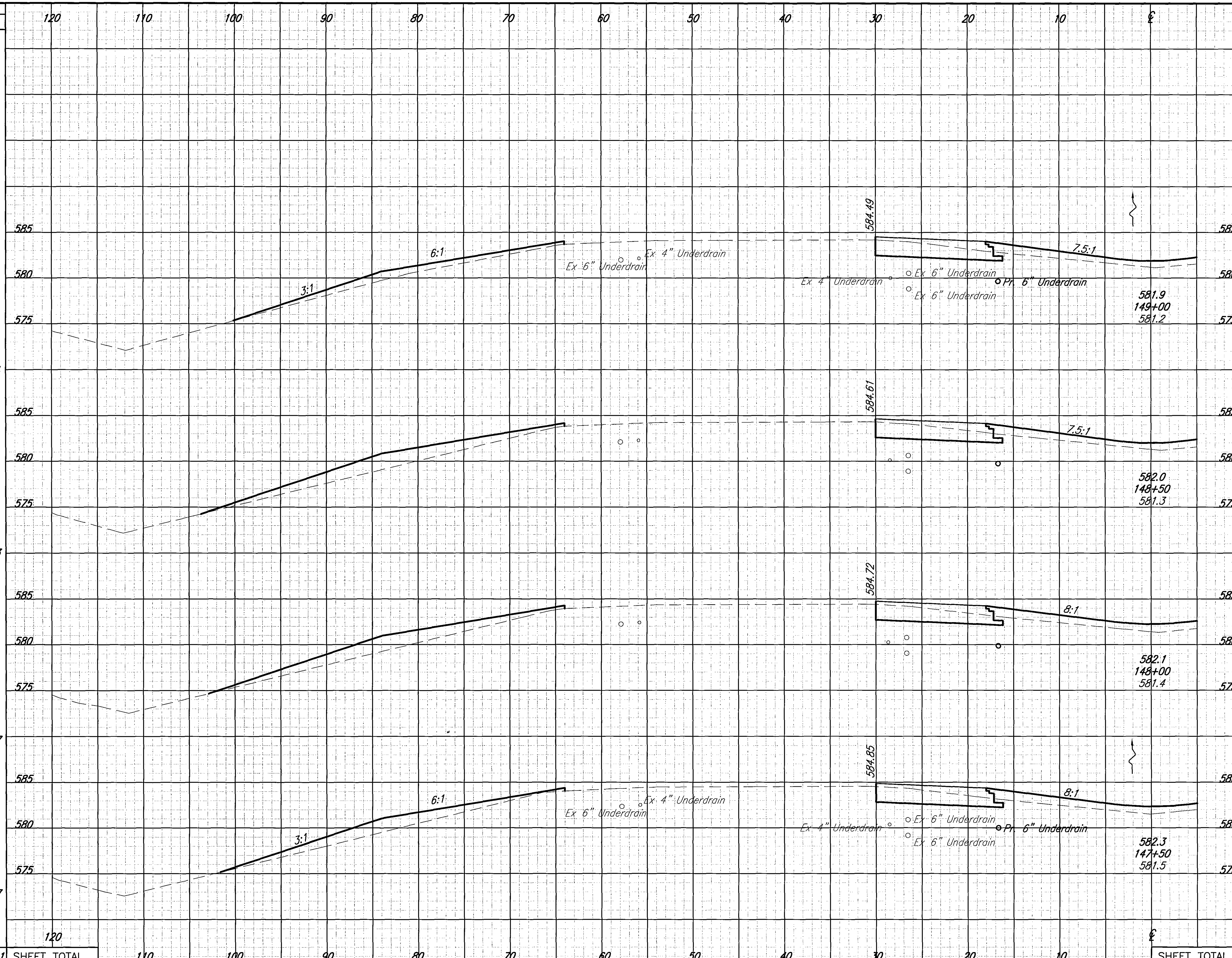
SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
63		19	53		
	358			34	103
66		18	58		
	356			33	102
62		18	52		
	339			34	93
60		19	48		
	331			35	87
SHEET TOTAL	1384			136	385

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA. 145+50 TO STA. 147+00

HAM–74–0.00

GX062020.DWG 23 JUL 2003



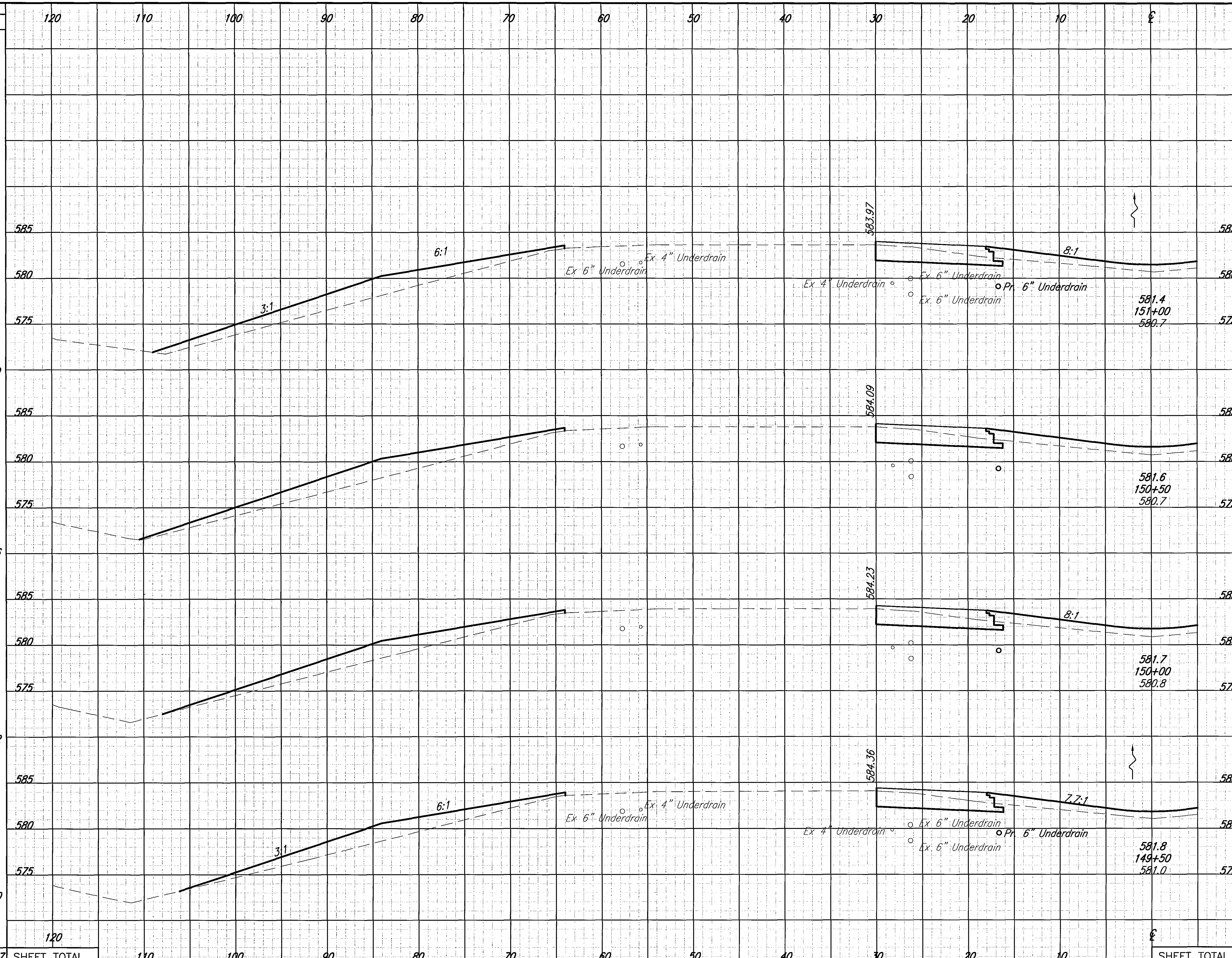
SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
60		19	38		
	344			35	88
64		19	57		
	353			35	103
63		19	54		
	347			35	94
62		19	47		
	347			35	93
SHEET TOTAL	1391			140	378

CALCULATED SEB CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA. 147+50 TO STA. 149+00

HAM-74-0.00

0X063020.DWG 23 JUL 2003



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
151+00	69		18	76		
		389			34	136
150+50	71		19	71		
		386			35	124
150+00	68		19	63		
		372			35	114
149+50	66		19	60		
		350			35	91
SHEET TOTAL		1497			139	465

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA. 149+50 TO STA. 151+00

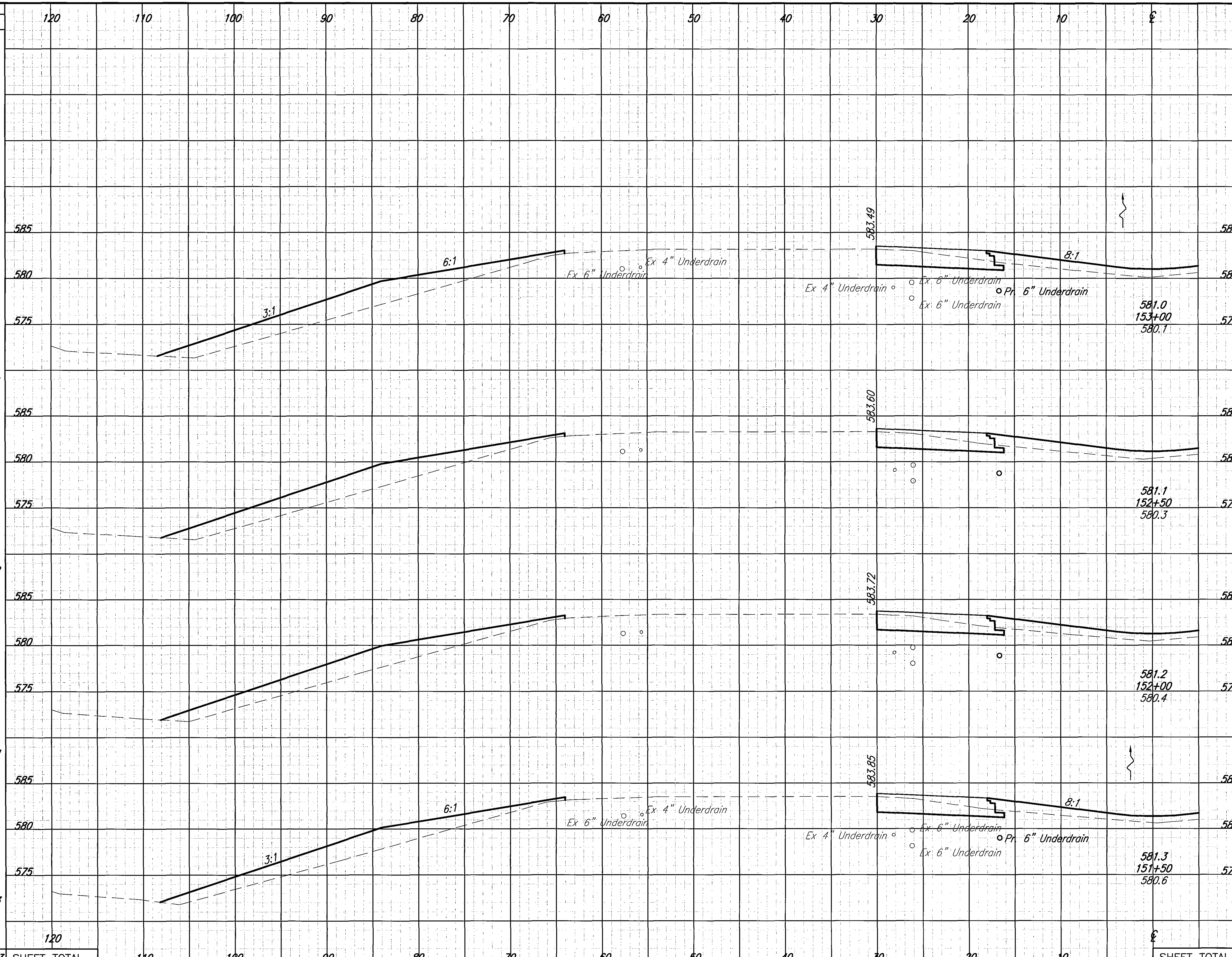
HAM-74-0.00

GX064020.DWG 23 JUL 2003

CROSS SECTIONS – WESTBOUND
STA. 151+50 TO STA. 153+00

HAM-74-0.00

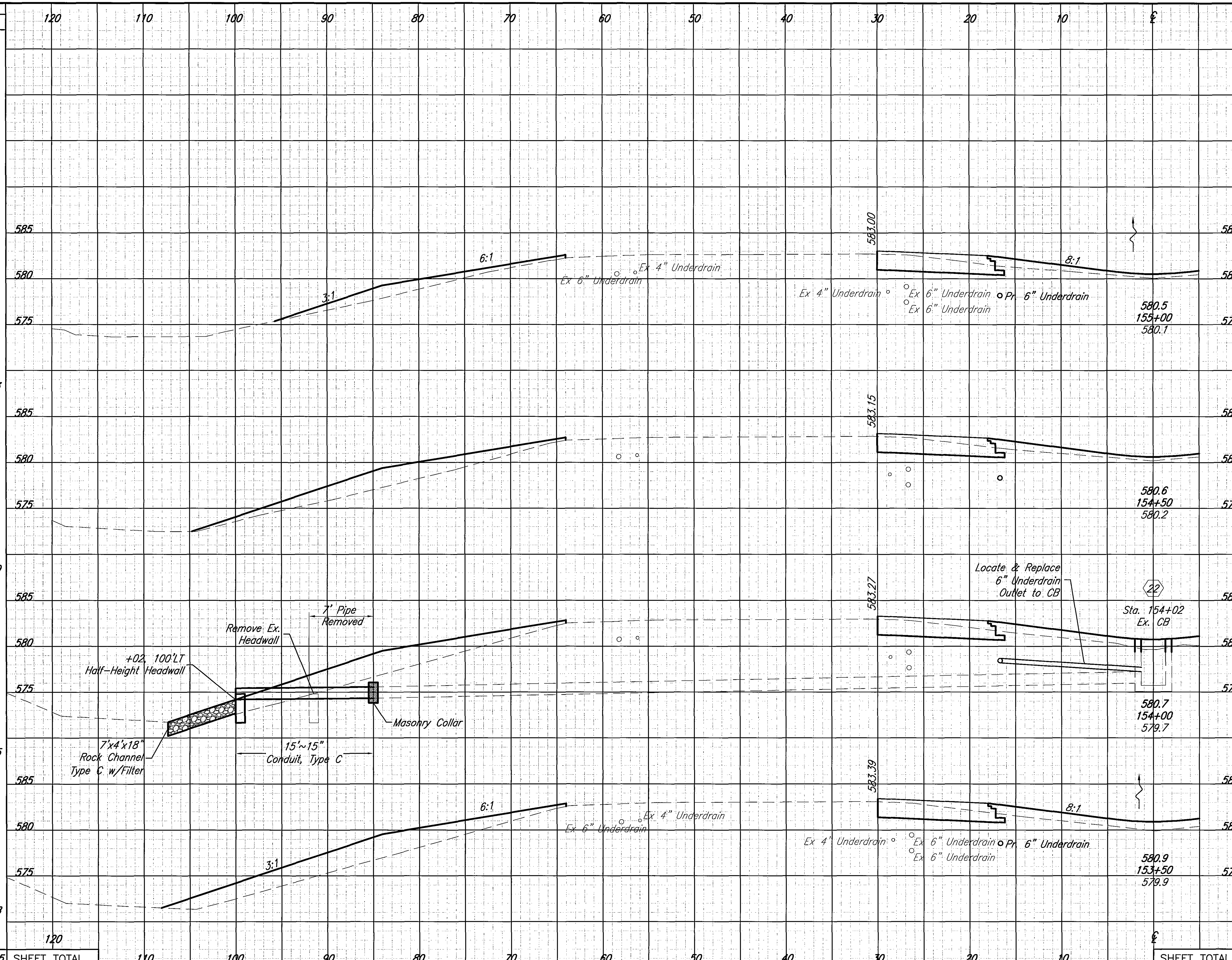
CALCULATED SEB | CHECKED GAB



SEEDING END WIDTH	SEEDING SQ. YDS.	Station	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
69		153+00	19	91		
	381				34	166
68		152+50	18	88		
	378				33	158
68		152+00	18	83		
	381				33	150
69		151+50	18	79		
	383				33	144
SHEET TOTAL	1523				133	618

GX065020.DWG 23 JUL 2003

CROSS SECTIONS – WESTBOUND
STA. 153+50 TO STA. 155+00



SEEDING END WIDTH	SEEDING SQ. YDS.
55	
	333
65	
	369
68	
	375
67	
	378
SHEET TOTAL	1455

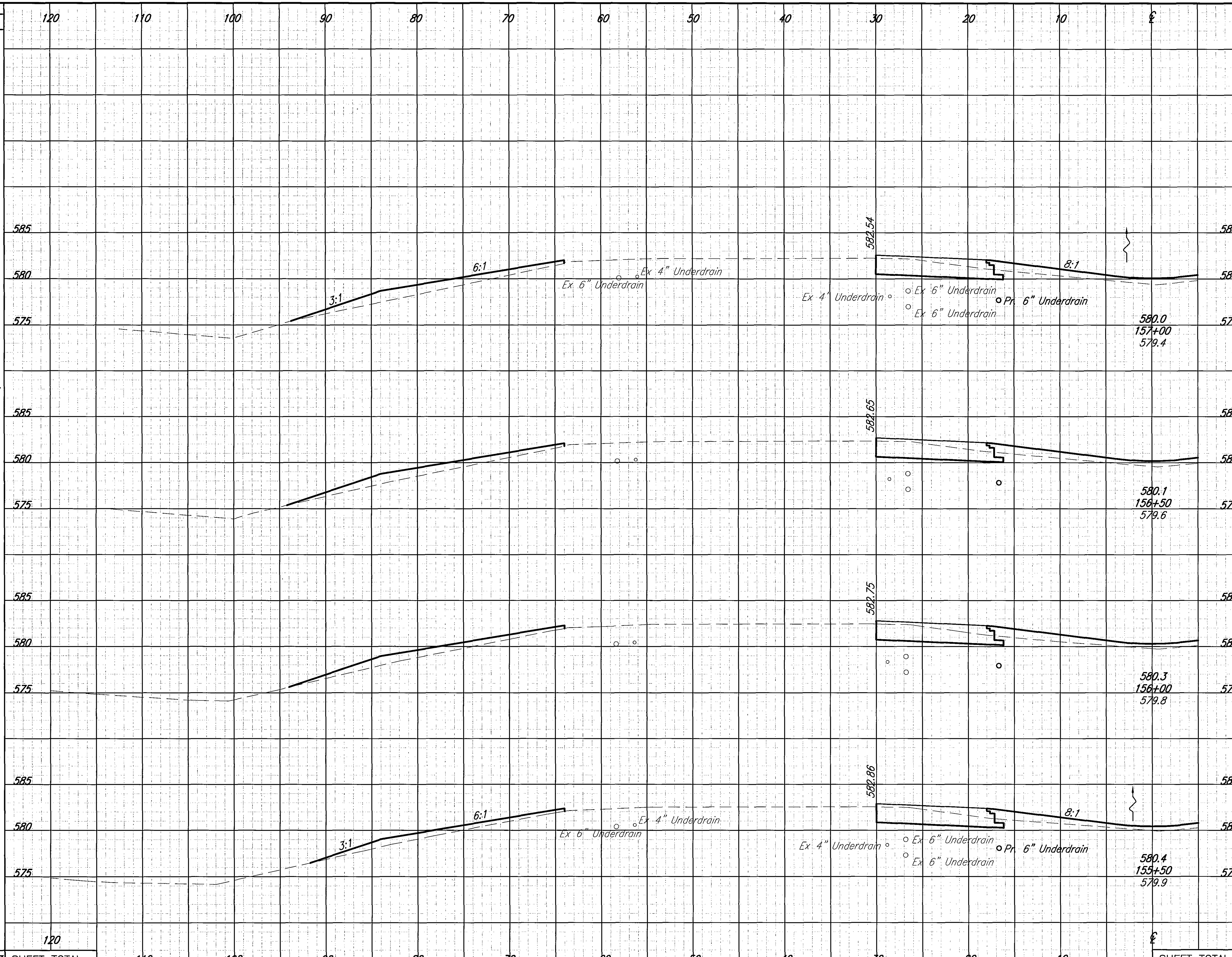
END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
20	35		
		37	86
20	58		
		37	138
20	91		
		36	169
19	91		
		35	169
SHEET TOTAL		145	562

CALCULATED SEB
CHECKED GAB

HAM-74-0.00

215
421

GX066020.DWG 23 JUL 2003



SEEDING END WIDTH	SEEDING SQ. YDS.	STATION	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
53		157+00	21	38		
	297				39	69
54		156+50	21	37		
	300				38	68
54		156+00	20	36		
	292				37	58
51		155+50	20	27		
	294				37	57
	1183	SHEET TOTAL			151	252

CROSS SECTIONS – WESTBOUND
STA. 155+50 TO STA. 157+00

HAM-74-0.00

CALCULATED SEB

CHECKED GAB

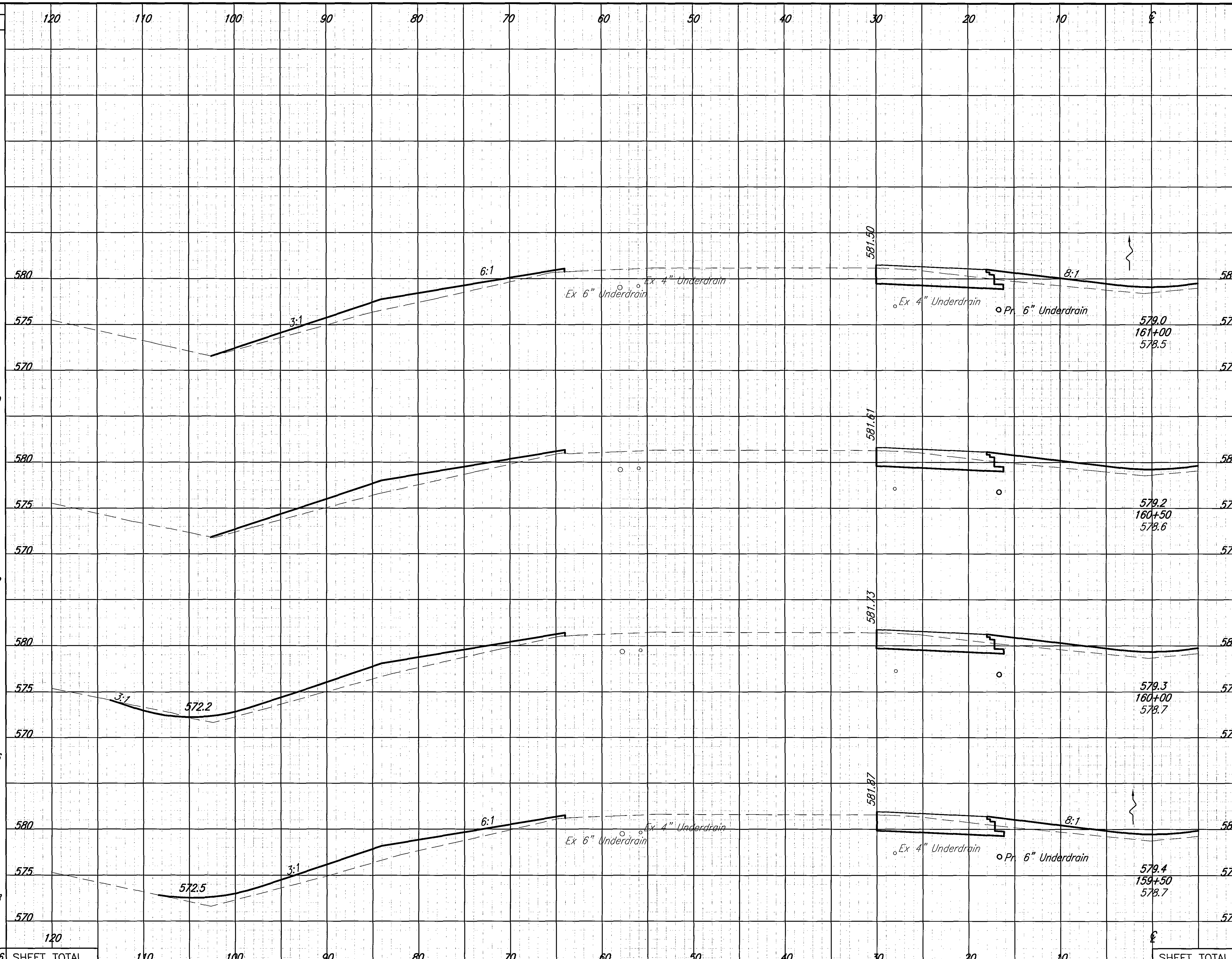
216
421

GX067020.DWG 23 JUL 2003

SEEDING
END WIDTH
SQ. YDS.
END AREA
CUT
FILL
VOLUME
CUT
FILL
120
110
100
90
80
70
60
50
40
30
20
10
℄
580
575
570
585
6:1
3:1
8:1
572.6
582.02
Ex 4" Underdrain
Ex 6" Underdrain
Ex 4" Underdrain
Pr 6" Underdrain
579.6
159+00
578.8
68
20
55
378
37
102
582.21
572.7
579.7
158+50
578.9
68
20
55
381
37
98
582.32
572.8
579.8
158+00
579.1
69
20
51
378
37
91
582.43
573.3
579.9
157+50
579.2
67
20
47
333
38
79
1470
SHEET TOTAL
149
370
CALCULATED SEB
CHECKED GAB
CROSS SECTIONS – WESTBOUND
STA. 157+50 TO STA. 159+00
HAM-74-0.00
217
421
0X068020.DWG
24 JUL 2003

CROSS SECTIONS - WESTBOUND
STA. 159+50 TO STA. 161+00

HAM-74-0.00



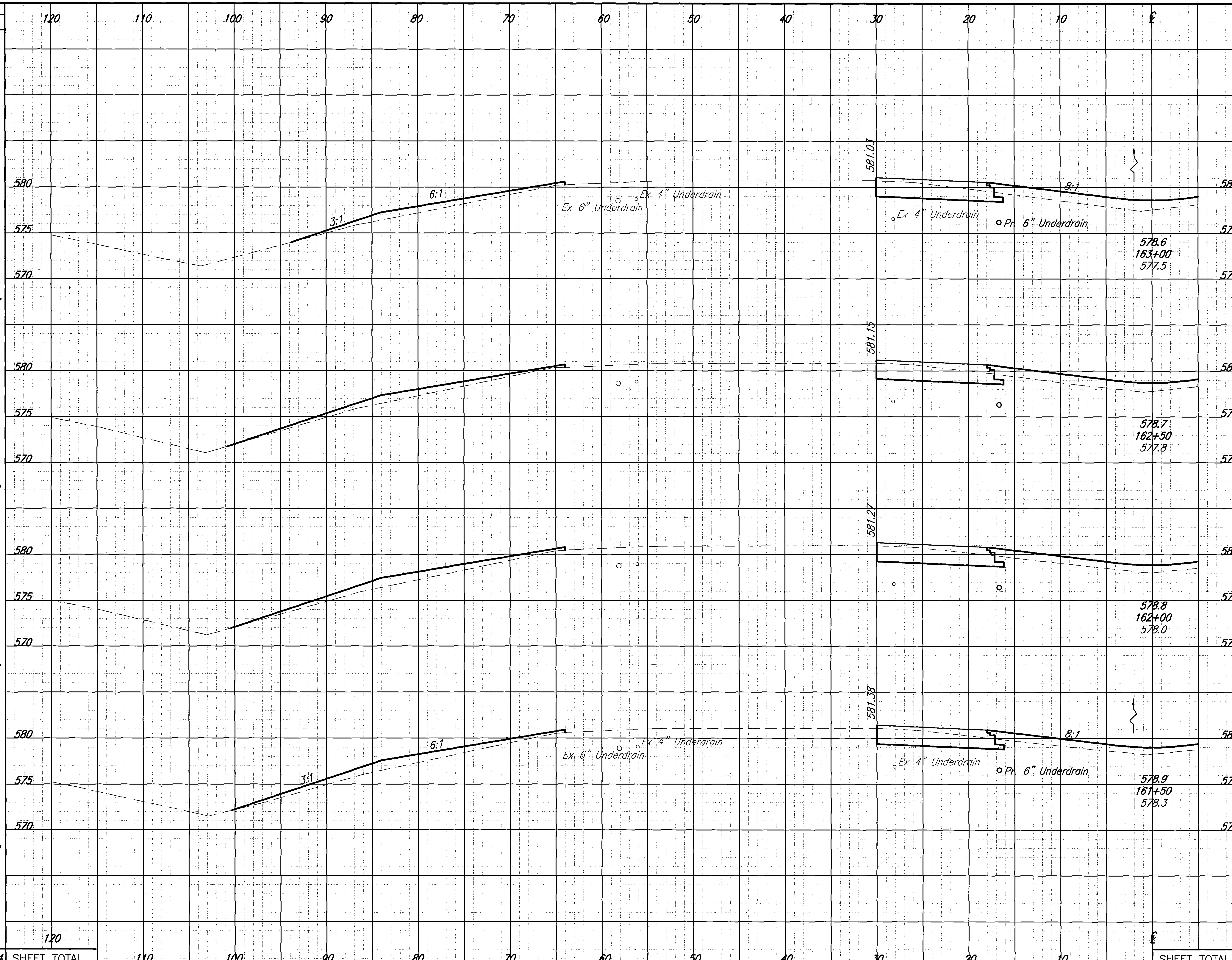
Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
161+00	63		20	42		
		350			37	82
160+50	63		20	47		
		372			40	89
160+00	71		23	49		
		386			40	96
159+50	68		20	55		
		378			37	102
SHEET TOTAL		1486			154	369

CALCULATED SEB
CHECKED GAB

0X069020.DWG 24 JUL 2003

CROSS SECTIONS – WESTBOUND
STA. 161+50 TO STA. 163+00

HAM-74-0.00

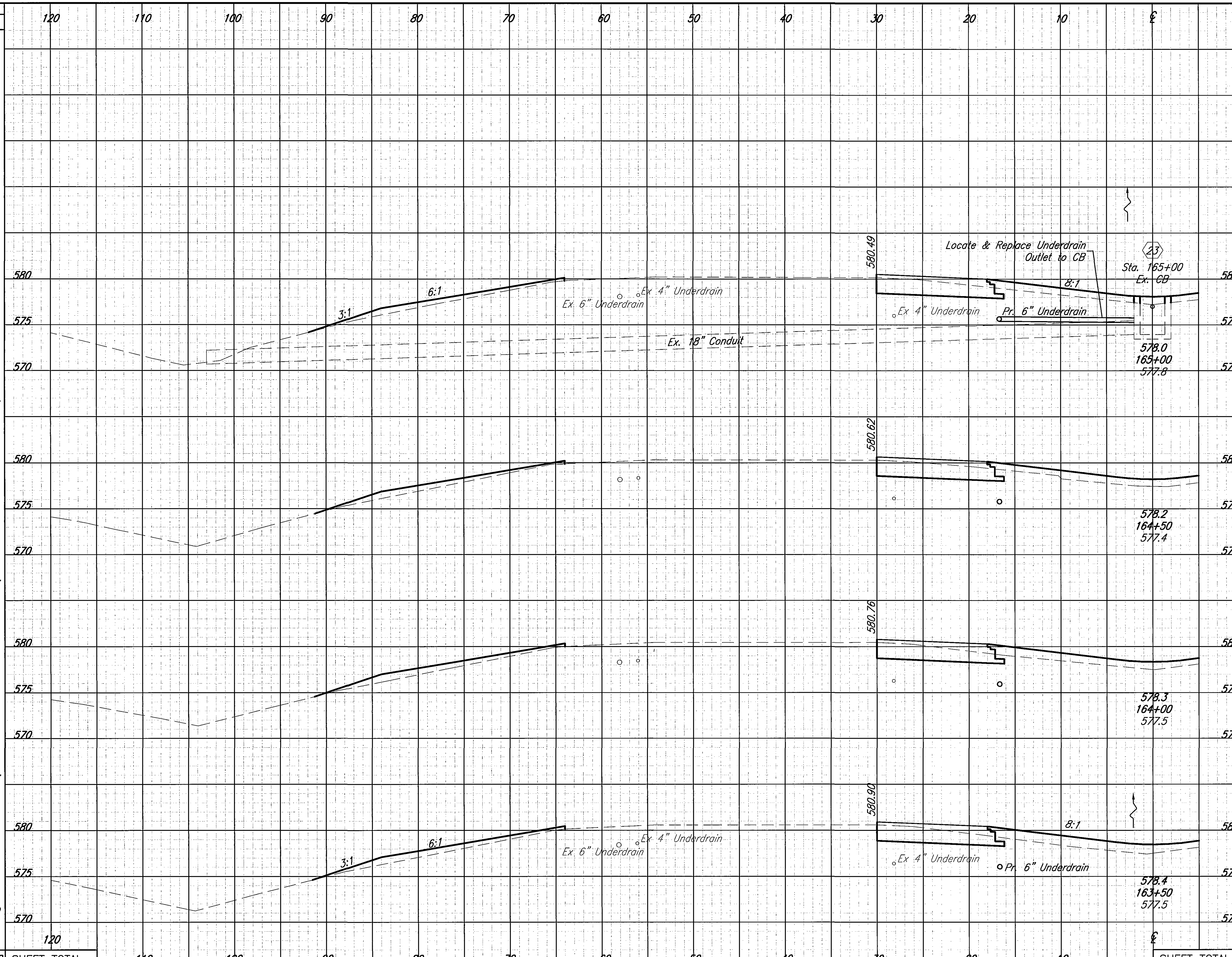


Station	Seeding End Width	Seeding Sq. Yds.
163+00	53	
		317
162+50	61	
		339
162+00	61	
		336
161+50	60	
		342
SHEET TOTAL		1334

Station	End Area Cut	End Area Fill	Volume Cut	Volume Fill
163+00	20	37		
			37	69
162+50	20	37		
			38	69
162+00	21	38		
			38	69
161+50	20	37		
			37	73
SHEET TOTAL			150	280

CALCULATED SEB
CHECKED GAB

GX070020.DWG 24 JUL 2003



SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
51		20	26		
	283			38	51
51		21	29		
	283			38	56
51		20	32		
	283			37	62
51		20	35		
	289			37	67
SHEET TOTAL	1138			150	236

CALCULATED SEB

CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA. 163+50 TO STA. 165+00

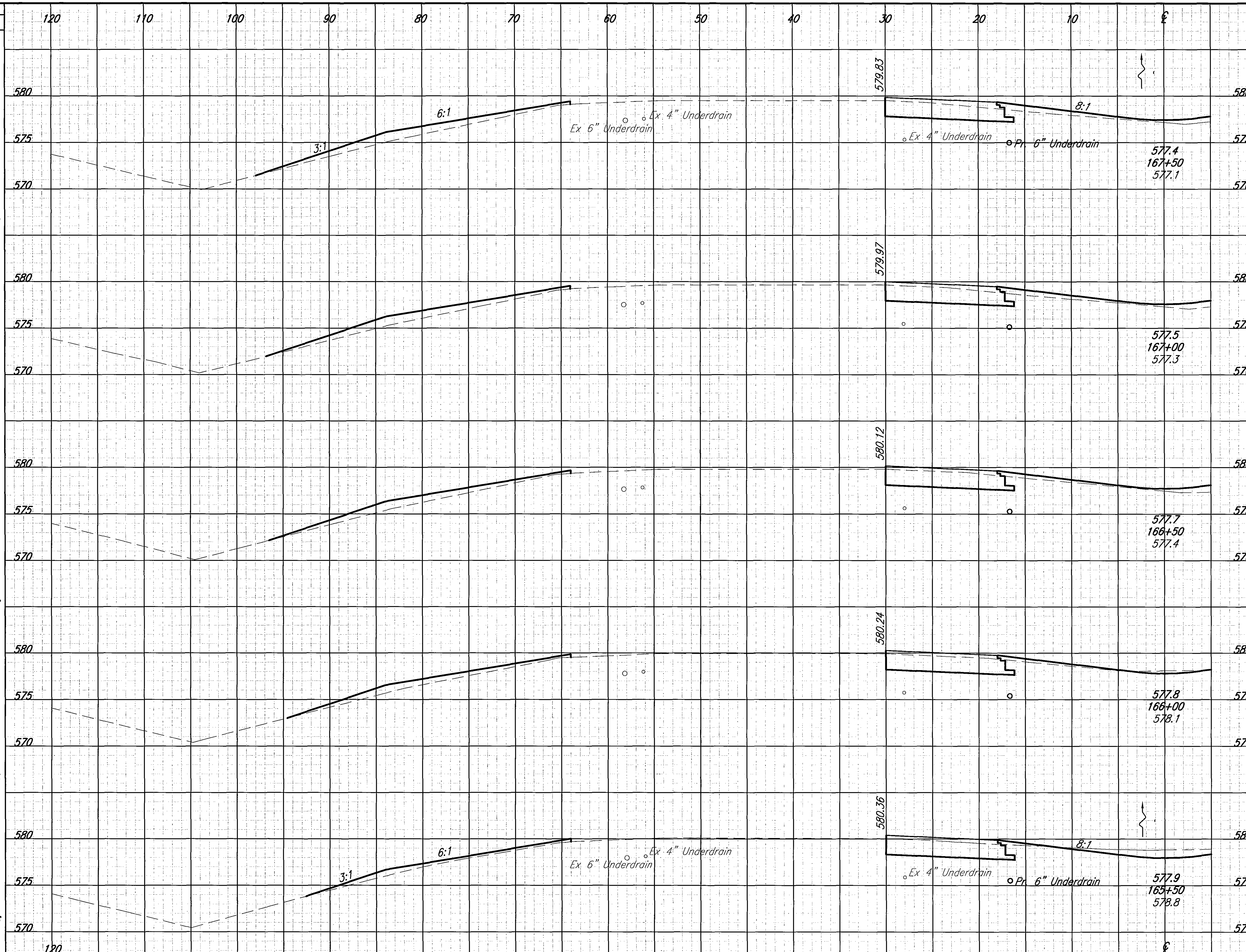
HAM-74-0.00

GX071020.DWG 23 JUL 2003

CROSS SECTIONS – WESTBOUND STA. 165+50 TO STA. 167+50

HAM-74-0.00

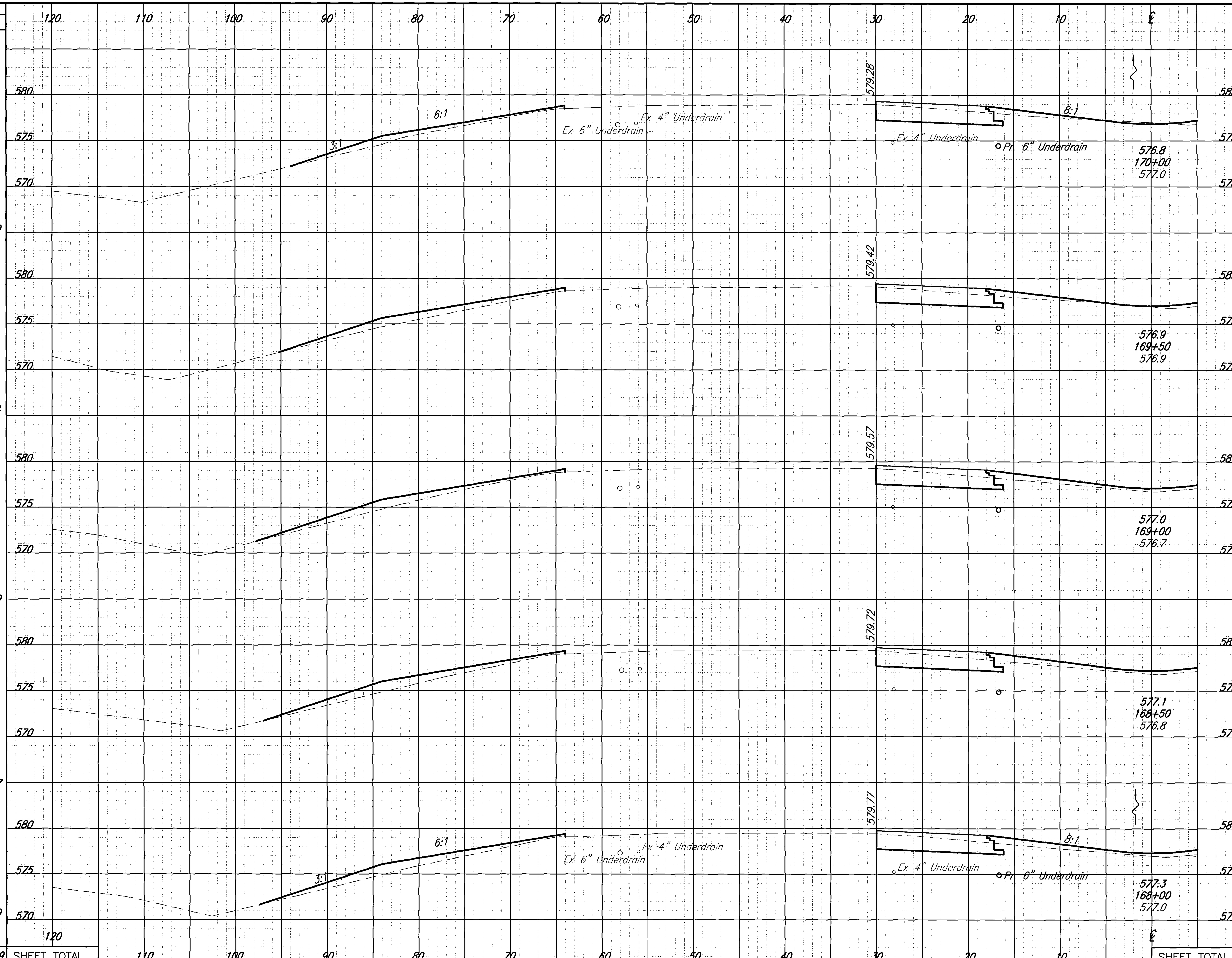
CALCULATED SEB | CHECKED GAB



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
167+50	58		21	30		
		319			40	54
167+00	57		22	28		
		314			42	48
166+50	56		23	24		
		306			44	39
166+00	54		25	18		
		294			44	27
165+50	52		23	11		
		286			40	34
SHEET TOTAL		1519			210	202

GX072020.DWG 24 JUL 2003

Seeding End Width	Seeding Sq. Yds.	Station	End Area Cut	End Area Fill	Volume Cut	Volume Fill
53		170+00	22	18		
	300				40	40
55		169+50	21	25		
	314				38	49
58		169+00	20	28		
	319				37	54
57		168+50	20	30		
	317				37	56
57		168+00	20	30		
	319				38	56
	1569	SHEET TOTAL			190	255



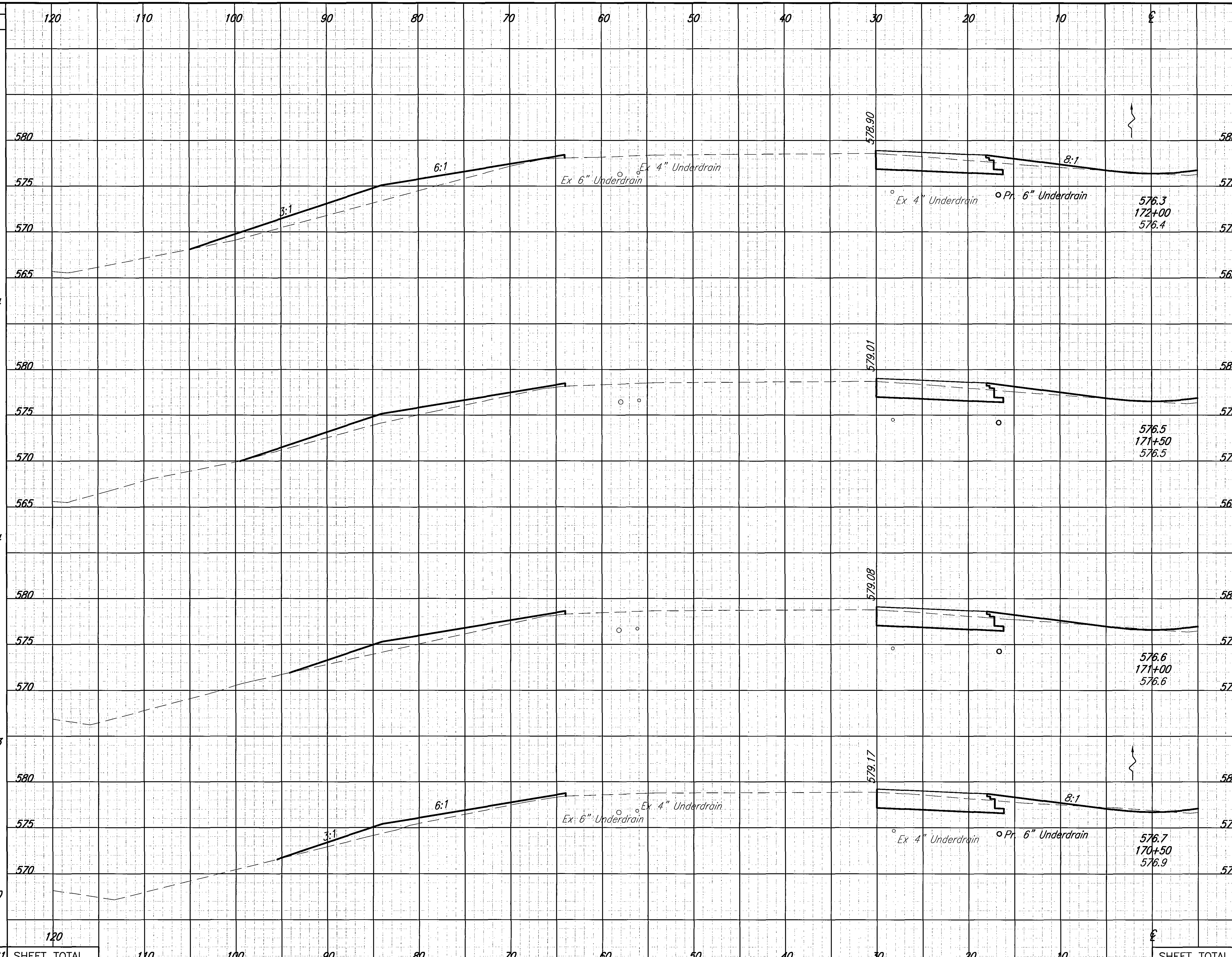
CROSS SECTIONS - WESTBOUND
STA. 168+00 TO STA. 170+00

HAM-74-0.00

CALCULATED SEB
CHECKED GAB

222
421

GX073020.DWG 24 JUL 2003



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
172+00	65		21	42		
		344			39	63
171+50	59		21	26		
		314			40	45
171+00	54		22	23		
		303			41	40
170+50	55		22	20		
		300			41	35
SHEET TOTAL		1261			161	183

CALCULATED SEB
CHECKED GAB

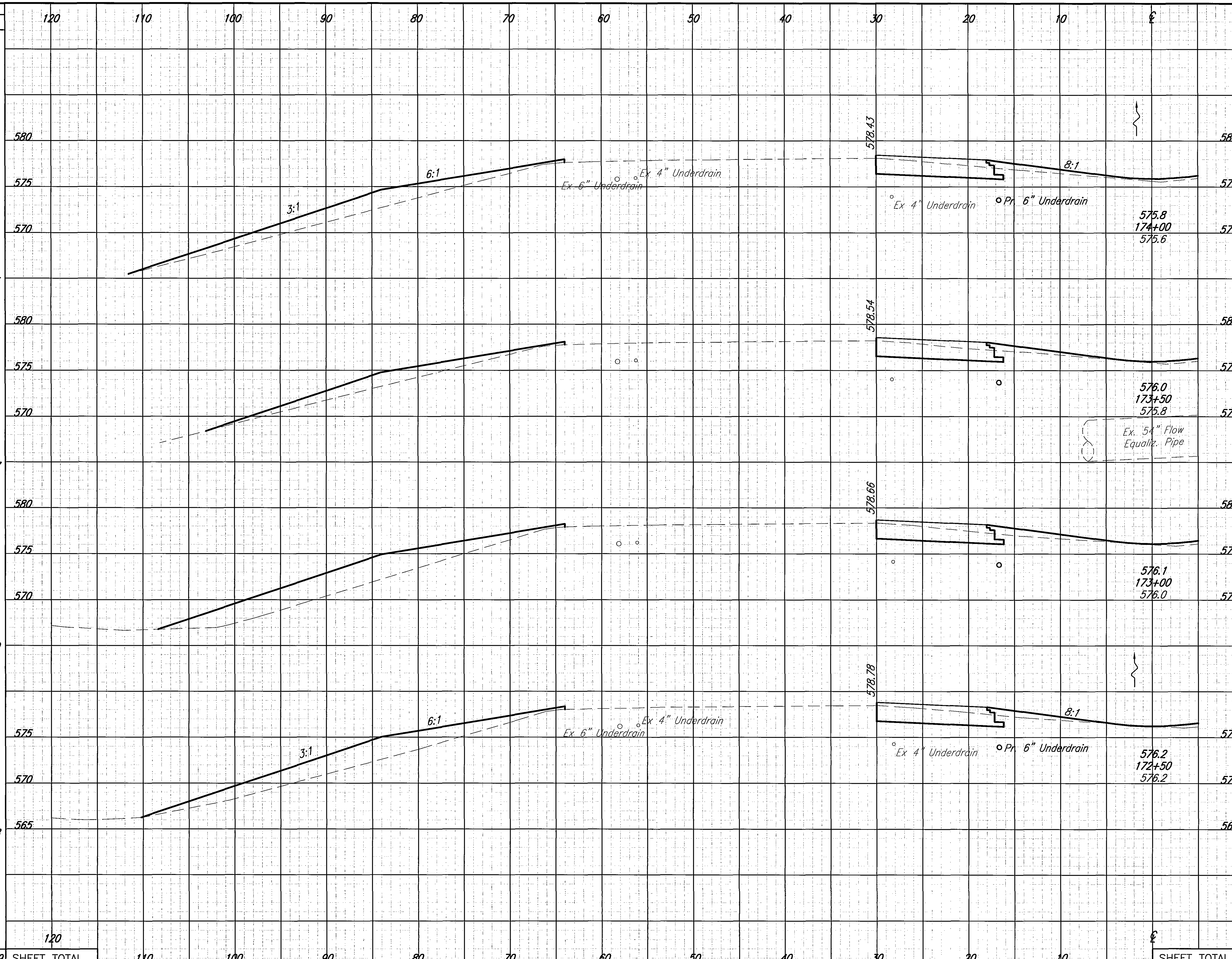
CROSS SECTIONS – WESTBOUND
STA. 170+50 TO STA. 172+00

HAM-74-0.00

223
421

GX074020.DWG 24 JUL 2003

SEEDING END WIDTH	SEEDING SQ. YDS.
72	375
63	367
69	389
71	378
SHEET TOTAL	1509



END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
20	56		
		37	88
20	39		
		37	114
20	84		
		38	143
21	70		
		39	104
SHEET TOTAL		151	449

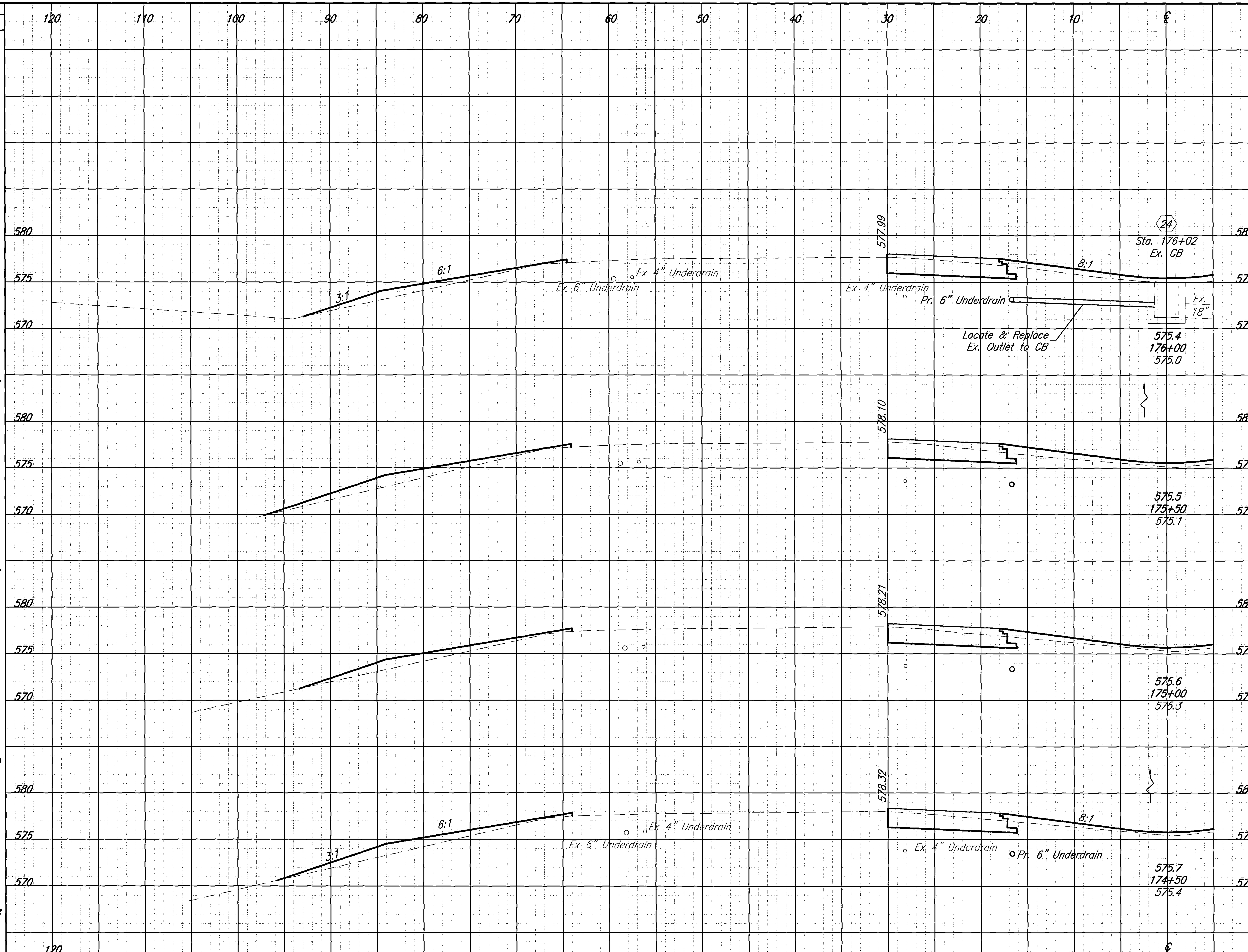
CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND STA. 172+50 TO STA. 174+00

HAM-74-0.00

224
421

0X075020.DWG 24 JUL 2003



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
176+00	52		21	26		
		303			38	55
175+50	57		20	33		
		306			37	56
175+00	53		20	27		
		300			37	52
174+50	55		20	29		
		353			37	79
SHEET TOTAL		1262			149	242

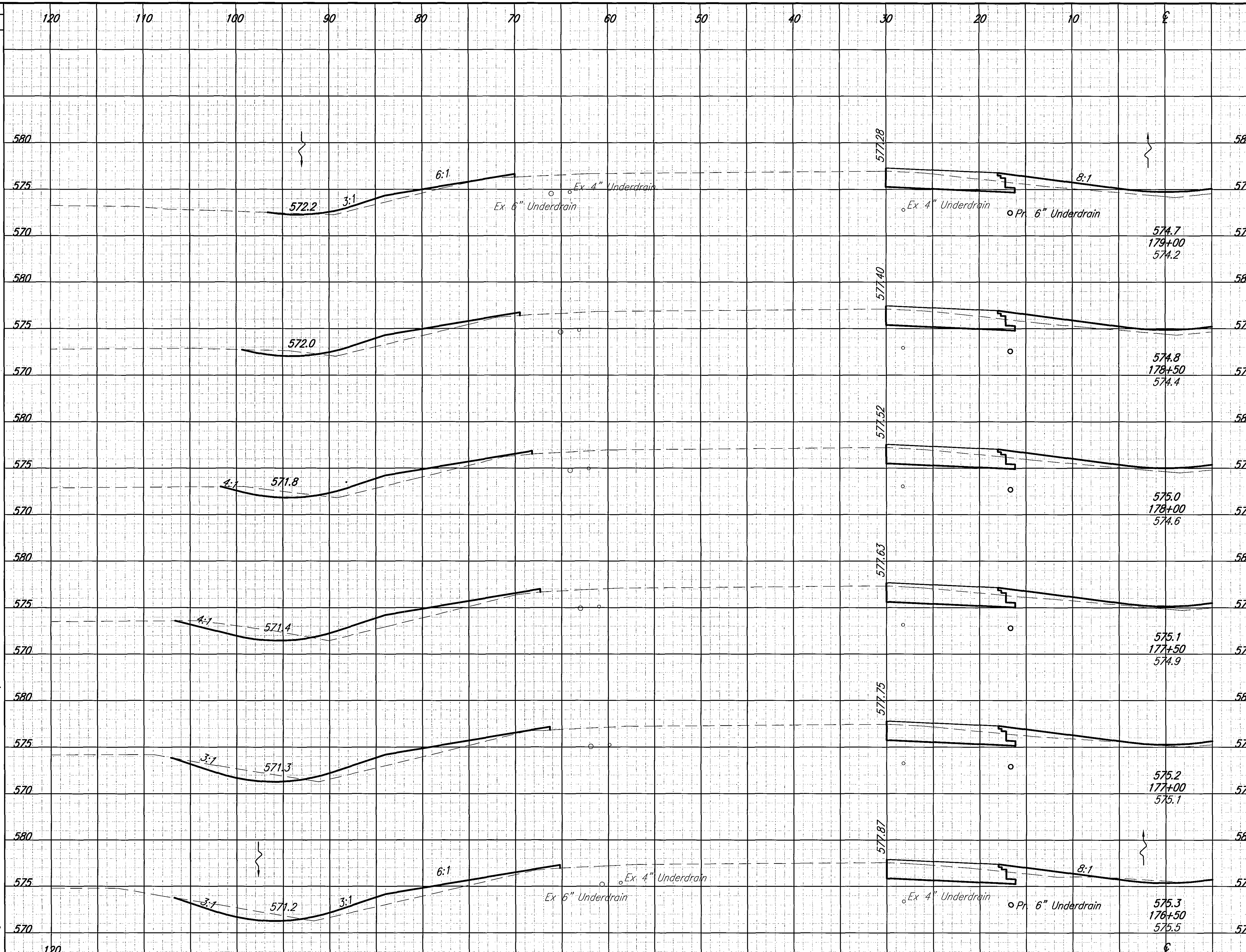
CROSS SECTIONS – WESTBOUND STA. 174+50 TO STA. 176+00

CALCULATED SEB
CHECKED GAB

HAM-74-0.00

0X076020.DWG 24 JUL 2003

CROSS SECTIONS – WESTBOUND
STA. 176+50 TO STA. 179+00



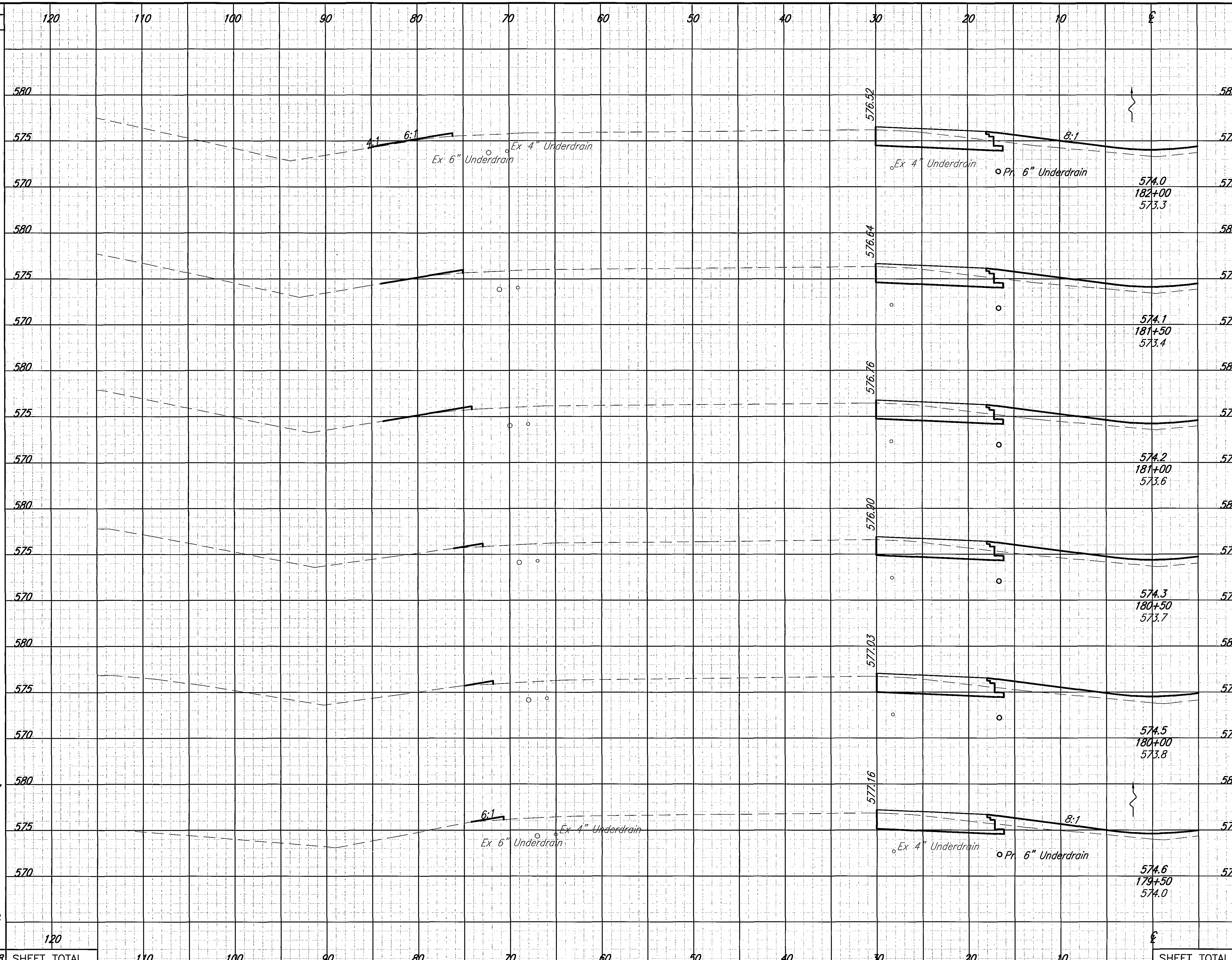
SEEDING END WIDTH	SEEDING SQ. YDS.	STATION	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
50		179+00	20	22		
	289				41	44
54		178+50	24	26		
	308				46	48
57		178+00	26	26		
	331				54	50
62		177+50	32	28		
	353				57	49
65		177+00	30	25		
	364				55	44
66		176+50	29	23		
	328				46	45
SHEET TOTAL	1973	SHEET TOTAL			299	280

CALCULATED SEB
CHECKED GAB

HAM-74-0.00

226
421

GX077020.DWG 23 JUL 2003



SEEDING END WIDTH	SEEDING SQ. YDS.
	178
32	
	181
32	
	164
33	
	144
26	
	147
26	
	214
27	
	1028

SHEET TOTAL

END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
20	18		
		37	33
20	18		
		37	33
20	18		
		37	33
20	18		
		37	33
20	18		
		37	32
20	17		
		37	36
		222	200

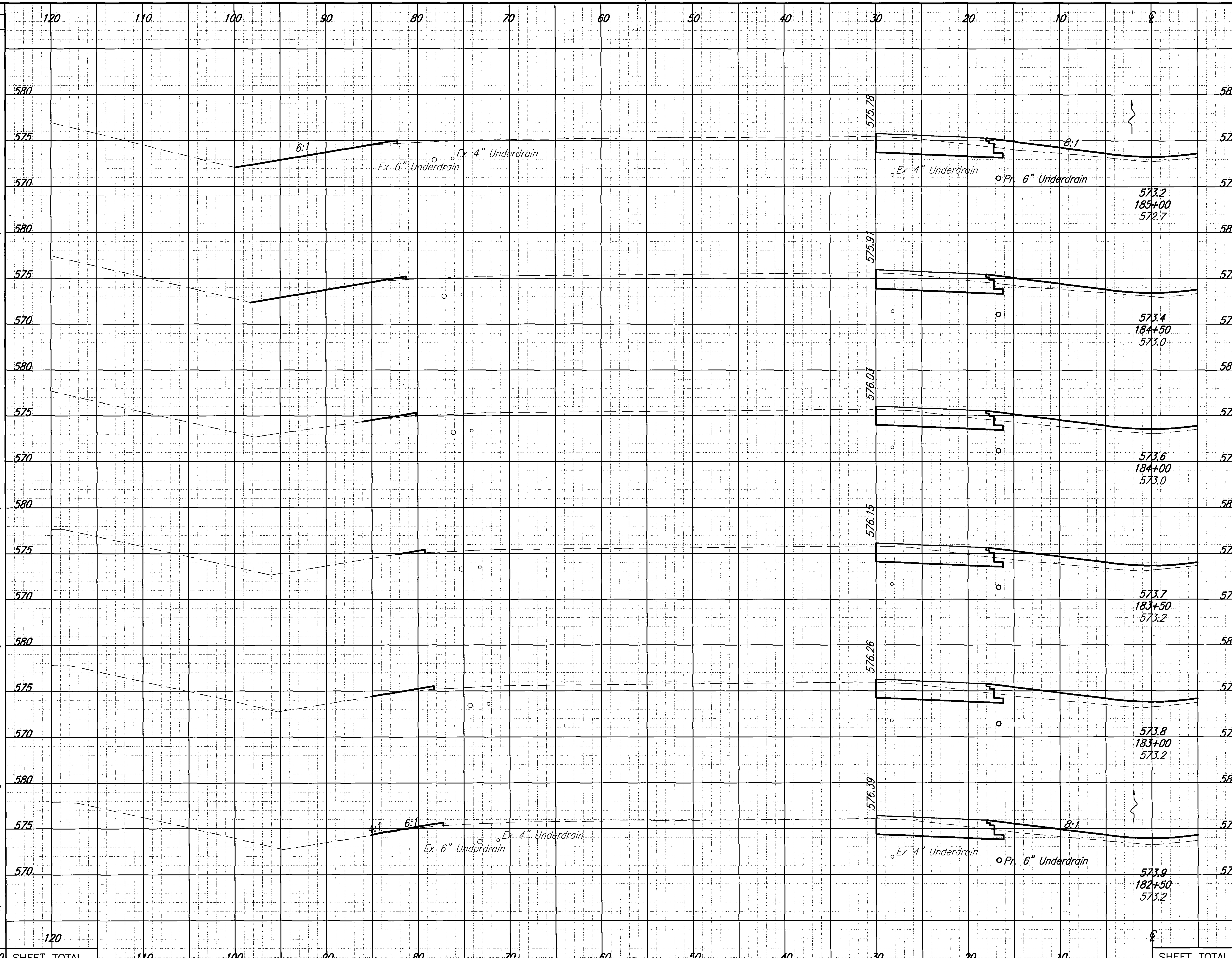
SHEET TOTAL

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA. 179+50 TO STA. 182+00

HAM-74-0.00

GX078020.DWG 23 JUL 2003



SEEDING END WIDTH	SEEDING SQ. YDS.	STATION	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
41		185+00	20	15		
	225				37	27
40		184+50	20	14		
	192				37	27
29		184+00	20	15		
	153				37	30
26		183+50	20	17		
	156				37	32
30		183+00	20	18		
	169				37	33
31		182+50	20	18		
	175				37	33
	1070	SHEET TOTAL			222	182

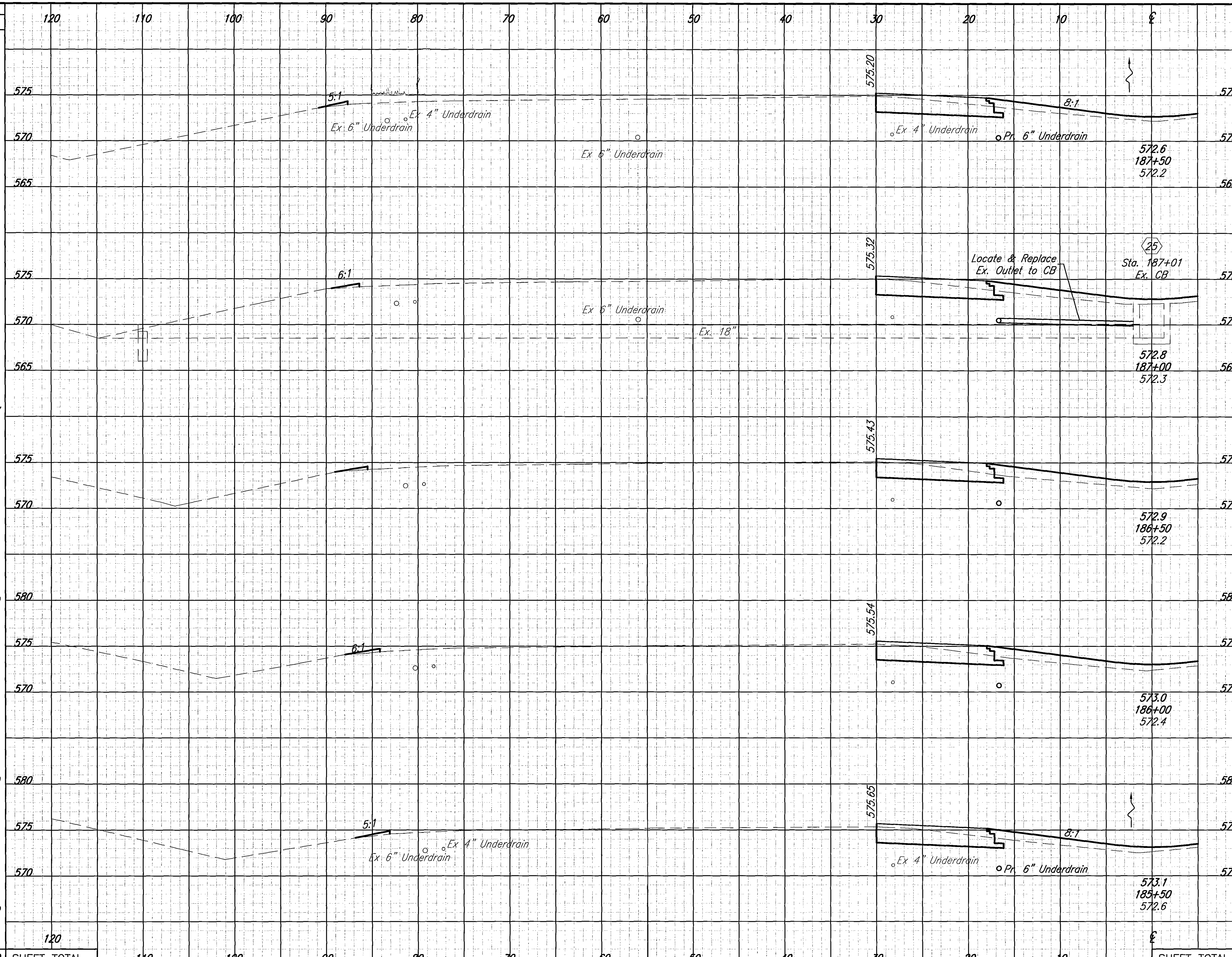
CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA. 182+50 TO STA. 185+00

HAM-74-0.00

228
421

GX079020.DWG 23 JUL 2003



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
187+50	26		20	14		
		144			37	30
187+00	26		20	18		
		147			36	34
186+50	27		19	19		
		150			35	34
186+00	27		19	18		
		150			36	32
185+50	27		20	17		
		189			37	30
SHEET TOTAL		780			181	160

CALCULATED SEB

CHECKED GAB

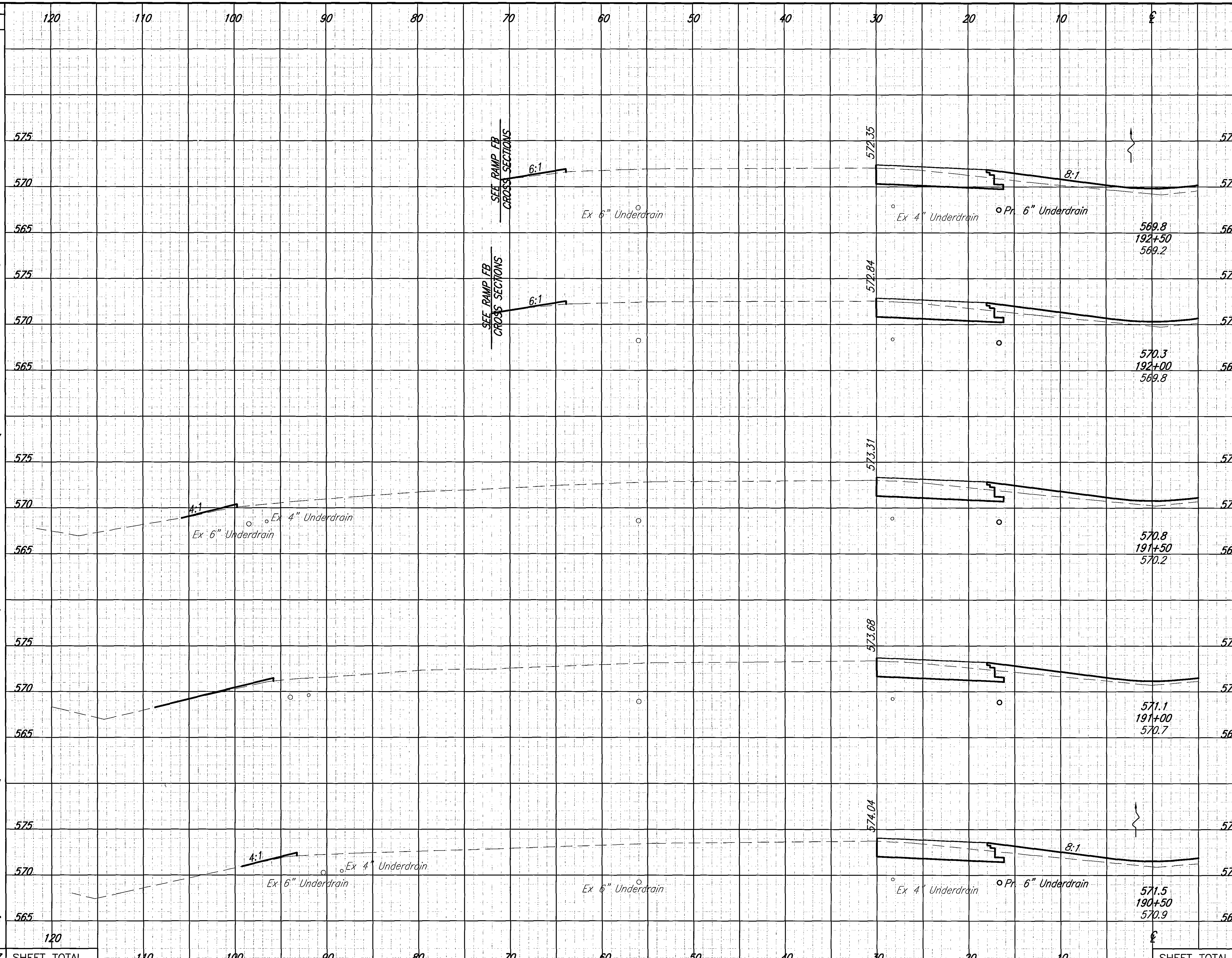
CROSS SECTIONS – WESTBOUND
STA. 185+50 TO STA. 187+50

HAM-74-0.00

0X080020.DWG 23 JUL 2003

SEEDING
END WIDTH
SQ. YDS.
END AREA
CUT
FILL
VOLUME
CUT
FILL
CALCULATED SEB
CHECKED GAB
120
110
100
90
80
70
60
50
40
30
20
10
℄
574.29
4:1
Ex 4" Underdrain
Ex 6" Underdrain
Ex 6" Underdrain
Ex 4" Underdrain
Pr. 6" Underdrain
8:1
575
570
565
27
20
16
571.8
190+00
571.1
153
37
31
574.55
28
20
18
572.0
189+50
571.3
150
37
32
574.75
4:1
26
20
17
572.2
189+00
571.5
144
37
31
574.96
5:1
26
20
16
572.4
188+50
571.8
144
37
29
575.09
5:1
Ex 6" Underdrain
Ex 4" Underdrain
Ex 6" Underdrain
Ex 4" Underdrain
Pr. 6" Underdrain
8:1
26
20
15
572.5
188+00
572.0
144
37
27
735
SHEET TOTAL
SHEET TOTAL
185
150
CROSS SECTIONS - WESTBOUND
STA. 188+00 TO STA. 190+00
HAM-74-0.00
230
421
GX081020.DWG 23 JUL 2003

SEEDING	
END WIDTH	SQ. YDS.
31	
	172
31	
	167
29	
	181
36	
	181
29	
	156
	857



END AREA		VOLUME	
CUT	FILL	CUT	FILL
21	16		
		39	28
21	14		
		39	26
21	14		
		39	25
21	13		
		38	27
20	16		
		37	30
		192	136

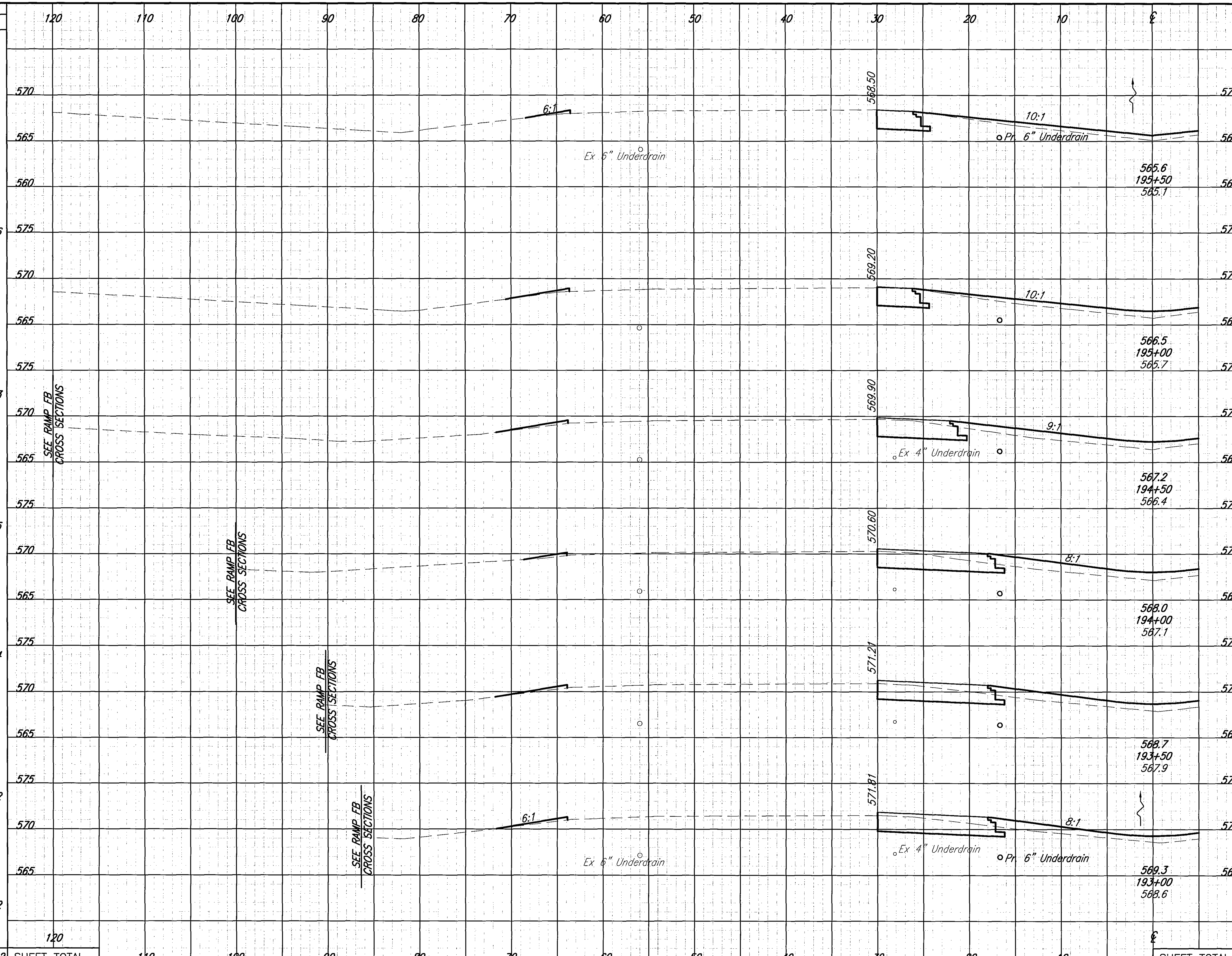
CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – WESTBOUND
STA. 190+50 TO STA. 192+50

HAM-74-0.00

0X082020.DWG 23 JUL 2003

CROSS SECTIONS – WESTBOUND
STA. 193+00 TO STA. 195+50



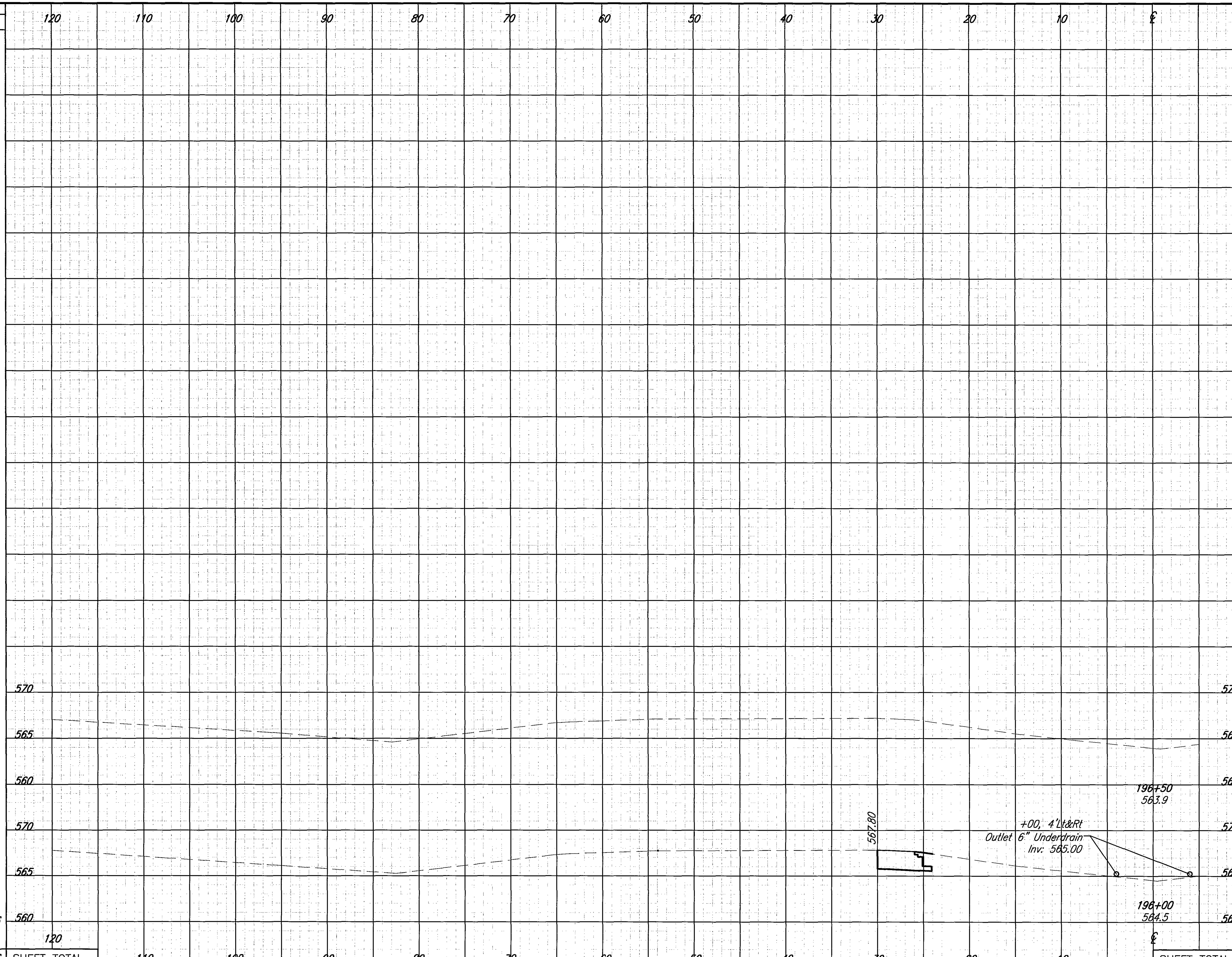
Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
195+50	36		12	14		
		206			21	29
195+00	38		11	17		
		203			26	36
194+50	35		17	22		
		175			34	40
194+00	28		20	21		
		164			37	37
193+50	31		20	19		
		172			37	34
193+00	31		20	18		
		172			38	31
SHEET TOTAL		1092			193	207

CALCULATED SEB
CHECKED GAB

HAM-74-0.00

6X083020.DWG 23 JUL 2003

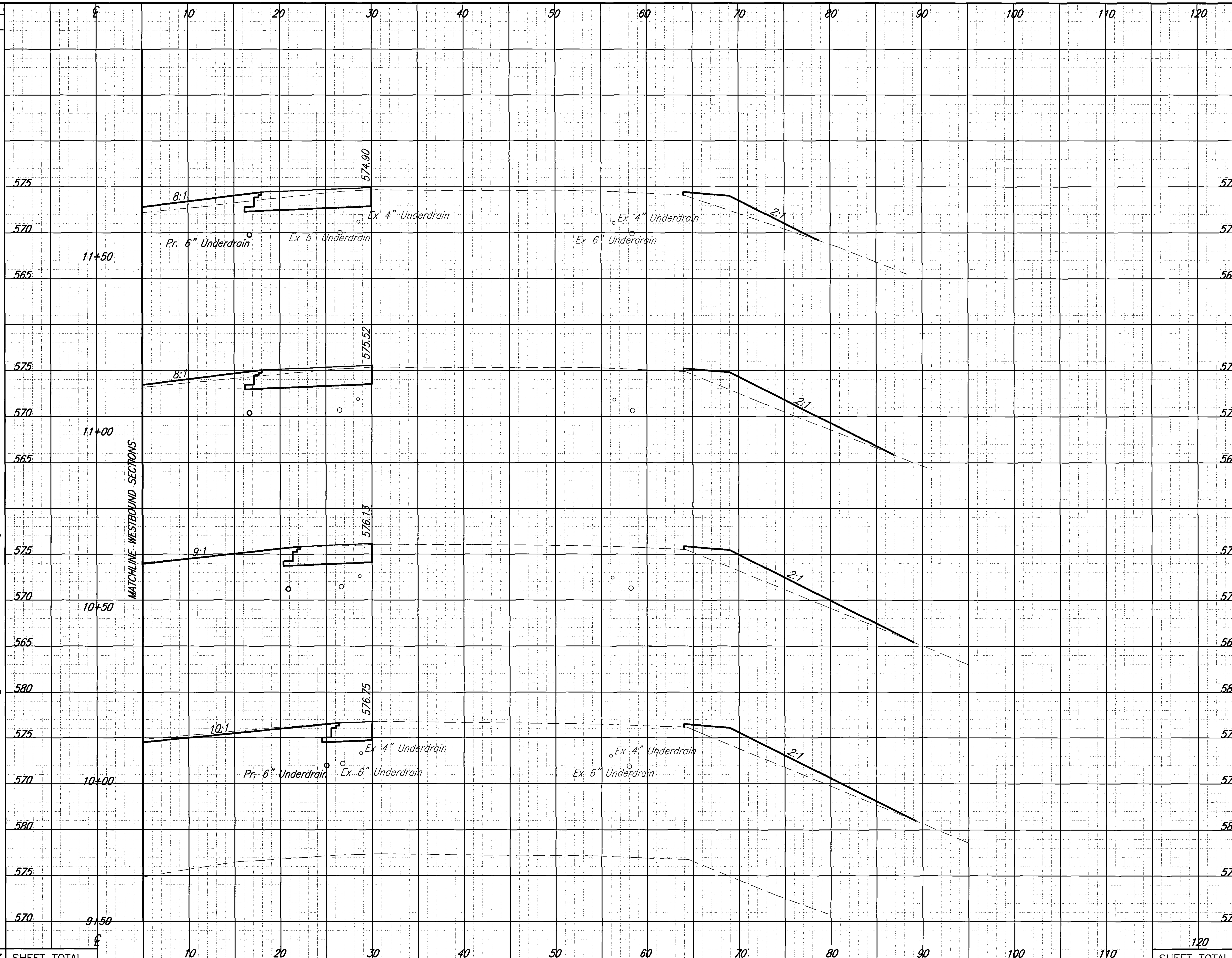
SEEDING		END AREA		VOLUME	
END WIDTH	SQ. YDS.	CUT	FILL	CUT	FILL
2		12	2		
	106			22	15
	106 SHEET TOTAL		SHEET TOTAL	22	15



CALCULATED SEB
CHECKED GAB

CROSS SECTIONS - WESTBOUND
STA. 196+00 TO STA. 196+50

HAM-74-0.00



Station	SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
11+50	28		21	22		
		178			41	47
11+00	36		23	29		
		219			39	47
10+50	43		19	22		
		250			31	41
10+00	47		15	22		
SHEET TOTAL		647			111	135

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 9+50 TO STA. 11+50

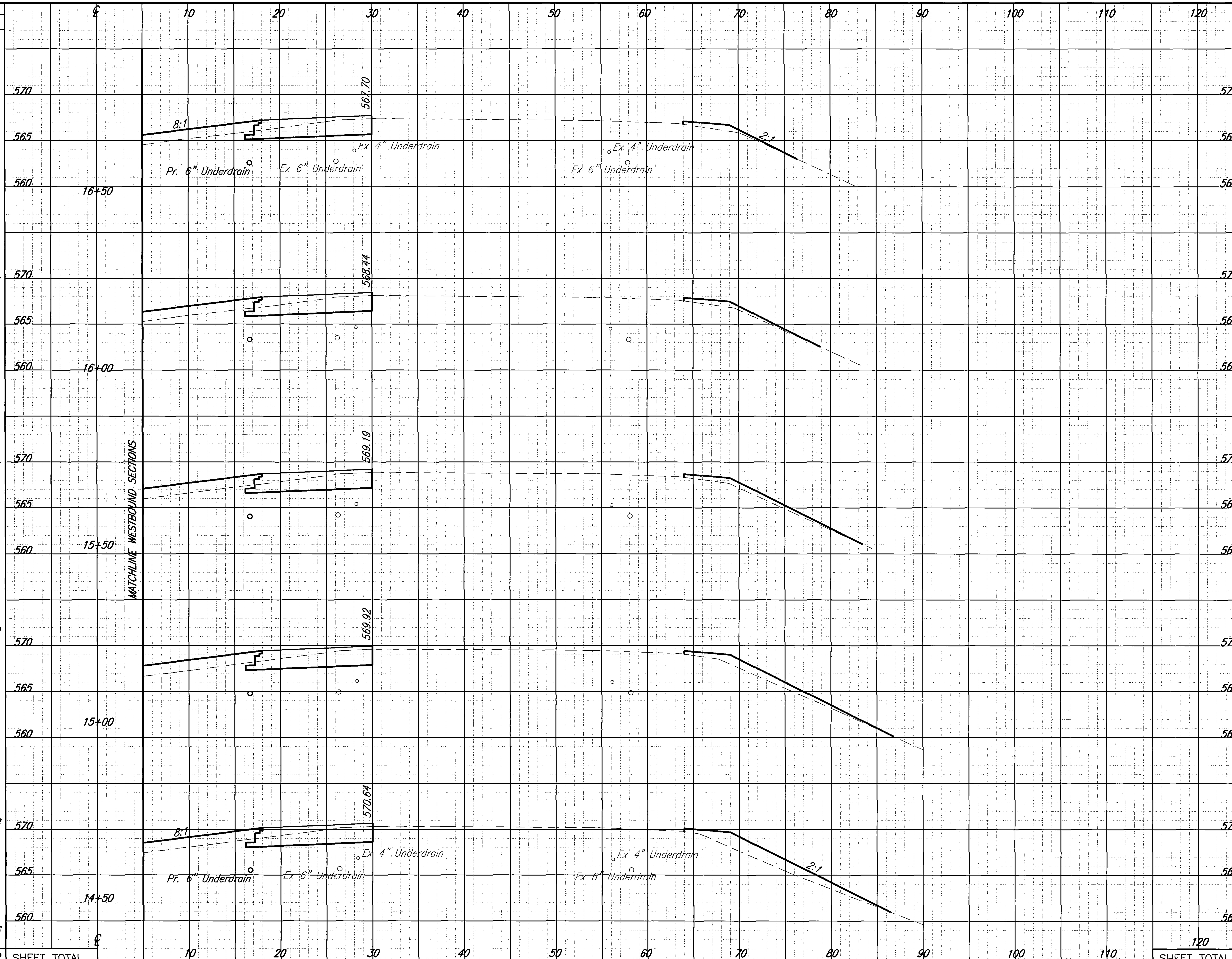
HAM-74-0.00

OX100020.DWG 24 JUL 2003

CROSS SECTIONS - EASTBOUND
STA. 12+00 TO STA. 14+00
HAM-74-0.00
CALCULATED SEB
CHECKED GAB
235
421
SEEDING
END WIDTH
SQ. YDS.
END AREA
CUT
FILL
VOLUME
CUT
FILL
MATCHLINE WESTBOUND SECTIONS
14+00
571.37
8:1
2:1
Ex 4" Underdrain
Ex 4" Underdrain
Pr. 6" Underdrain
Ex 6" Underdrain
Ex 6" Underdrain
37
19
35
13+50
572.10
200
35
65
35
19
35
13+00
572.84
186
35
60
32
19
30
12+50
573.57
175
36
54
31
20
28
12+00
574.29
169
37
49
30
20
25
161
38
44
891
SHEET TOTAL
181
272
0X101020.DWG
24 JUL 2003

CROSS SECTIONS – EASTBOUND
STA. 14+50 TO STA. 16+50

Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
16+50	26		19	17		
		153			35	32
16+00	29		19	18		
		175			35	36
15+50	34		19	21		
		200			35	44
15+00	38		19	26		
		208			35	56
14+50	37		19	34		
		206			35	64
SHEET TOTAL		942			175	232



CALCULATED SEB
CHECKED GAB

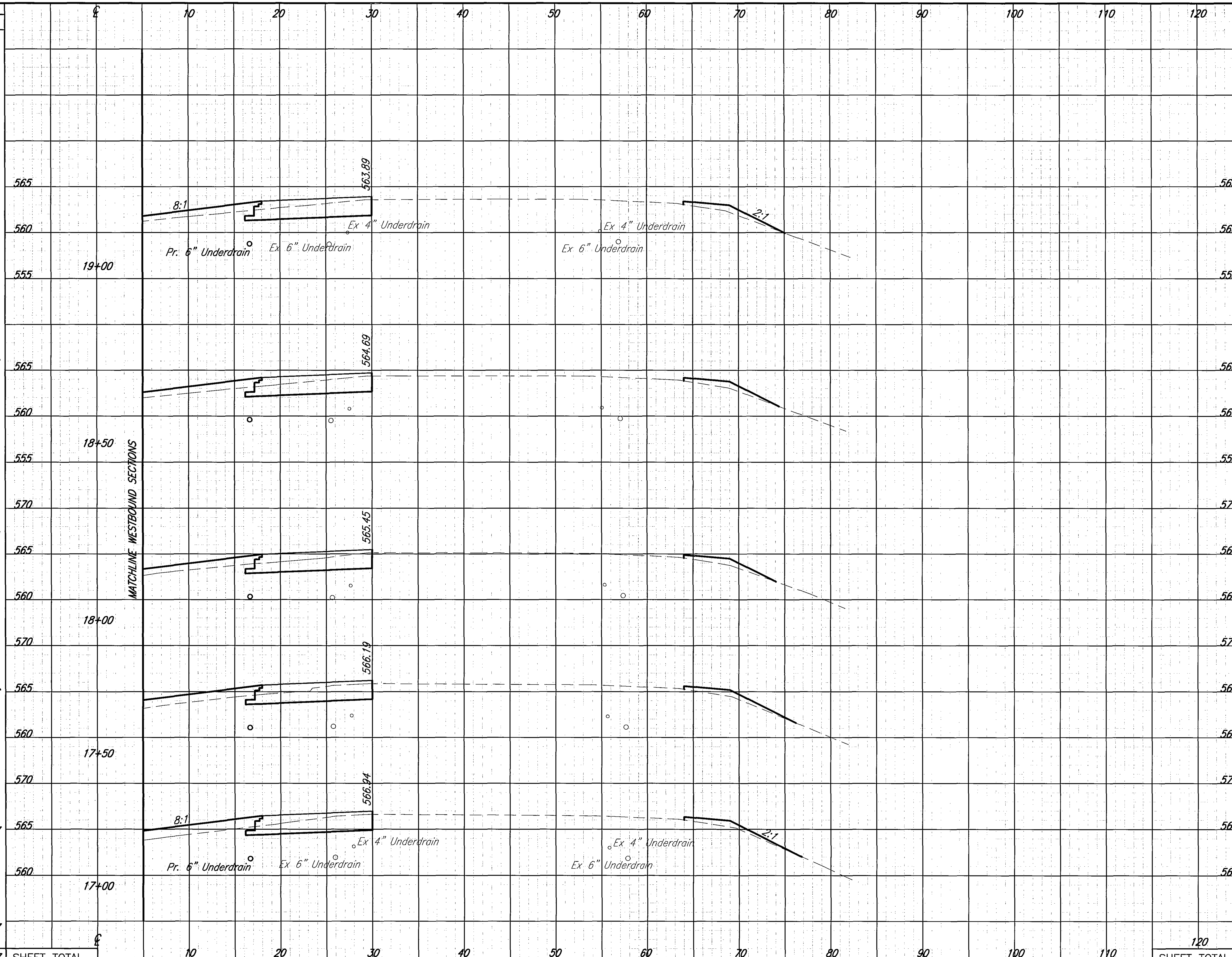
HAM-74-0.00

236/421

24 JUL 2003
GX102020.DWG

CROSS SECTIONS – EASTBOUND
STA. 17+00 TO STA. 19+00

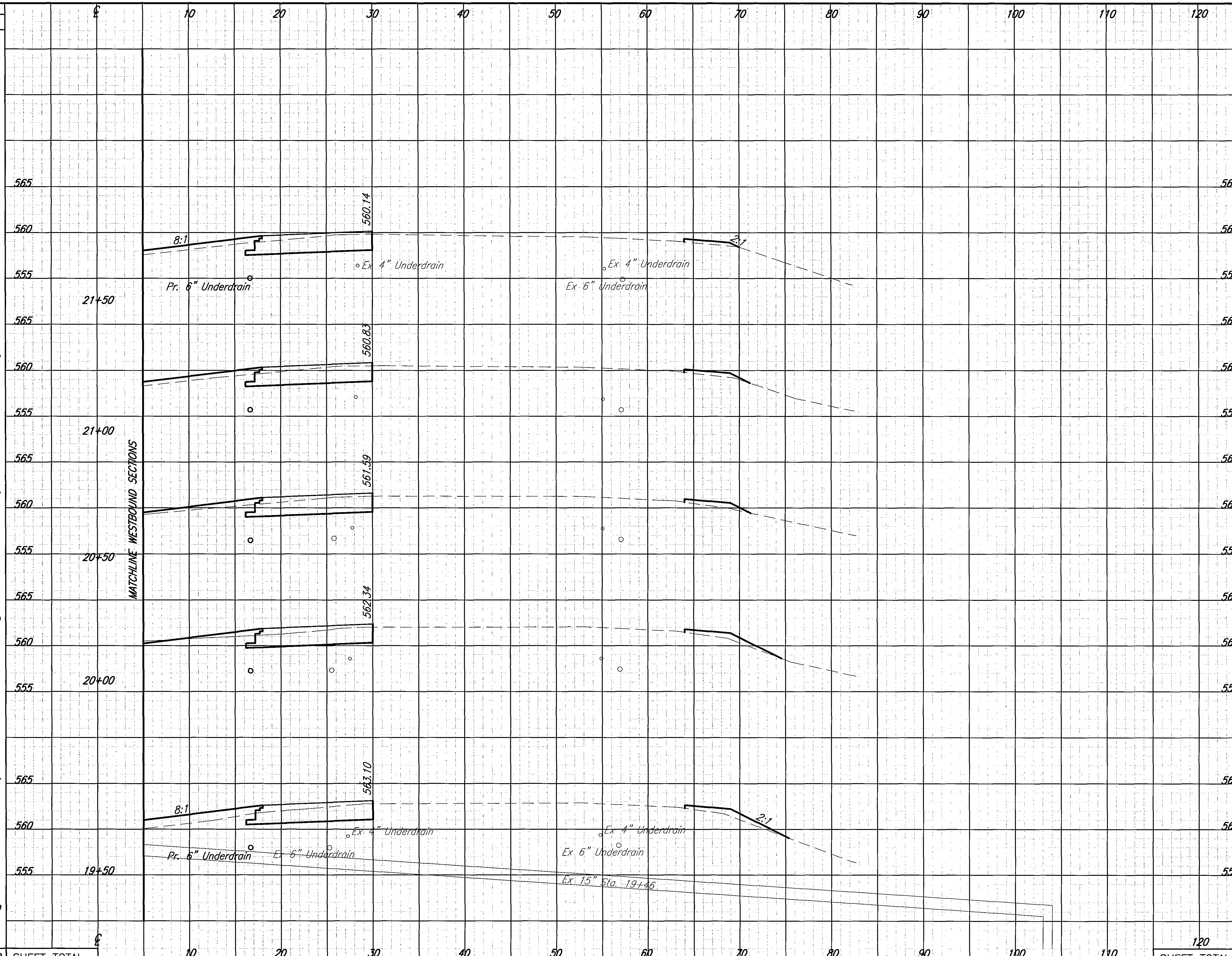
HAM-74-0.00



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
19+00	25		19	14		
		136			35	27
18+50	24		19	15		
		131			34	27
18+00	23		18	14		
		136			34	29
17+50	26		19	17		
		147			35	32
17+00	27		19	18		
		147			35	32
SHEET TOTAL		697			173	147

CALCULATED SEB
CHECKED GAB

GX103020.DWG 24 JUL 2003



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
21+50	19		22	9		
		108			41	18
21+00	20		22	10		
		111			41	18
20+50	20		22	9		
		100			40	16
20+00	16		21	8		
		114			38	23
19+50	25		20	17		
		139			36	29
SHEET TOTAL		572			196	104

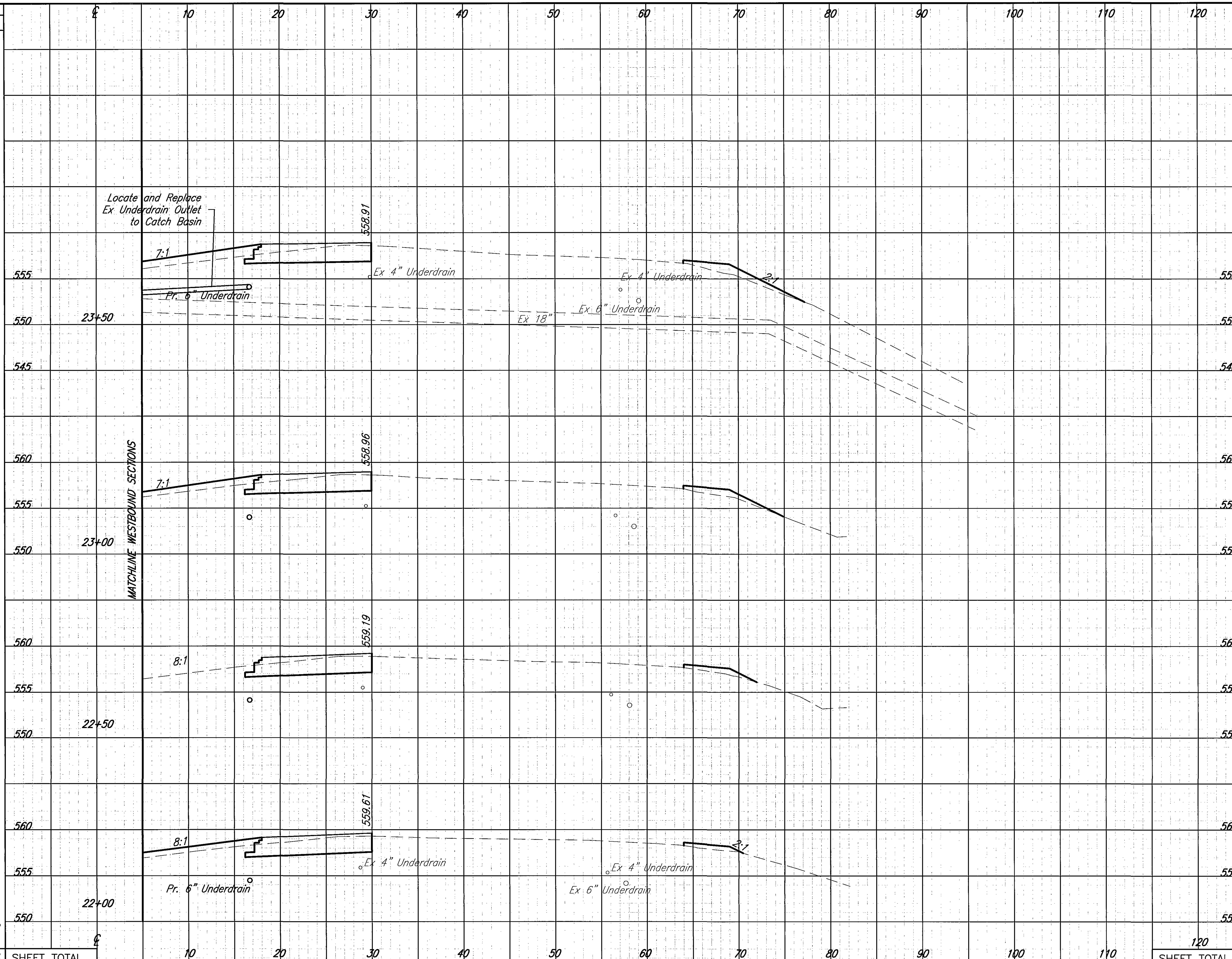
CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 19+50 TO STA. 21+50

HAM-74-0.00

238
421

GX104020.DWG 24 JUL 2003



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
23+50	27		20	21		
		144			38	33
23+00	25		21	15		
		128			40	26
22+50	21		22	13		
		114			41	22
22+00	20		22	11		
		108			41	19
SHEET TOTAL		494			160	100

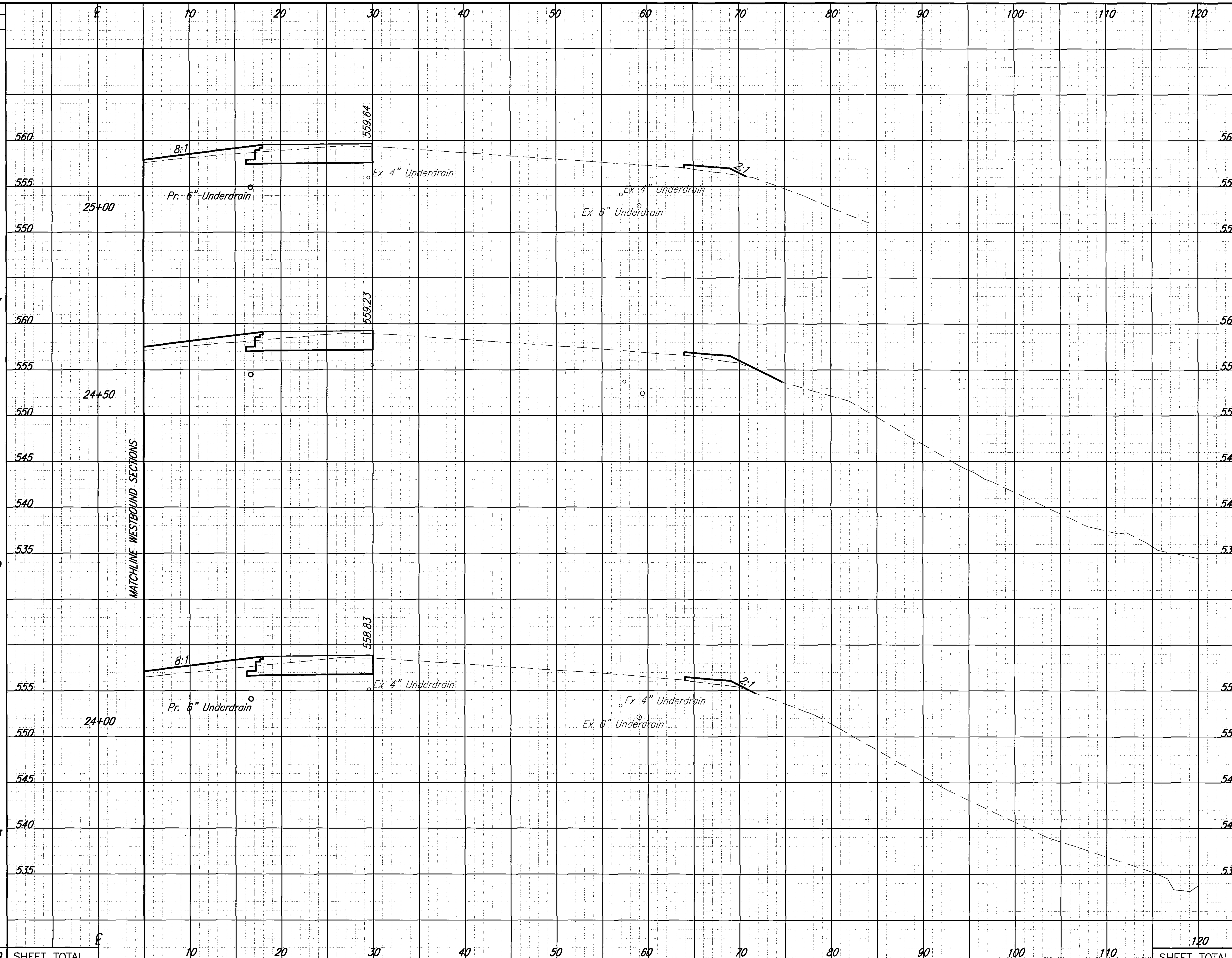
CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 22+00 TO STA. 23+50

HAM-74-0.00

239
421

24 JUL 2003
0X105020.DWG



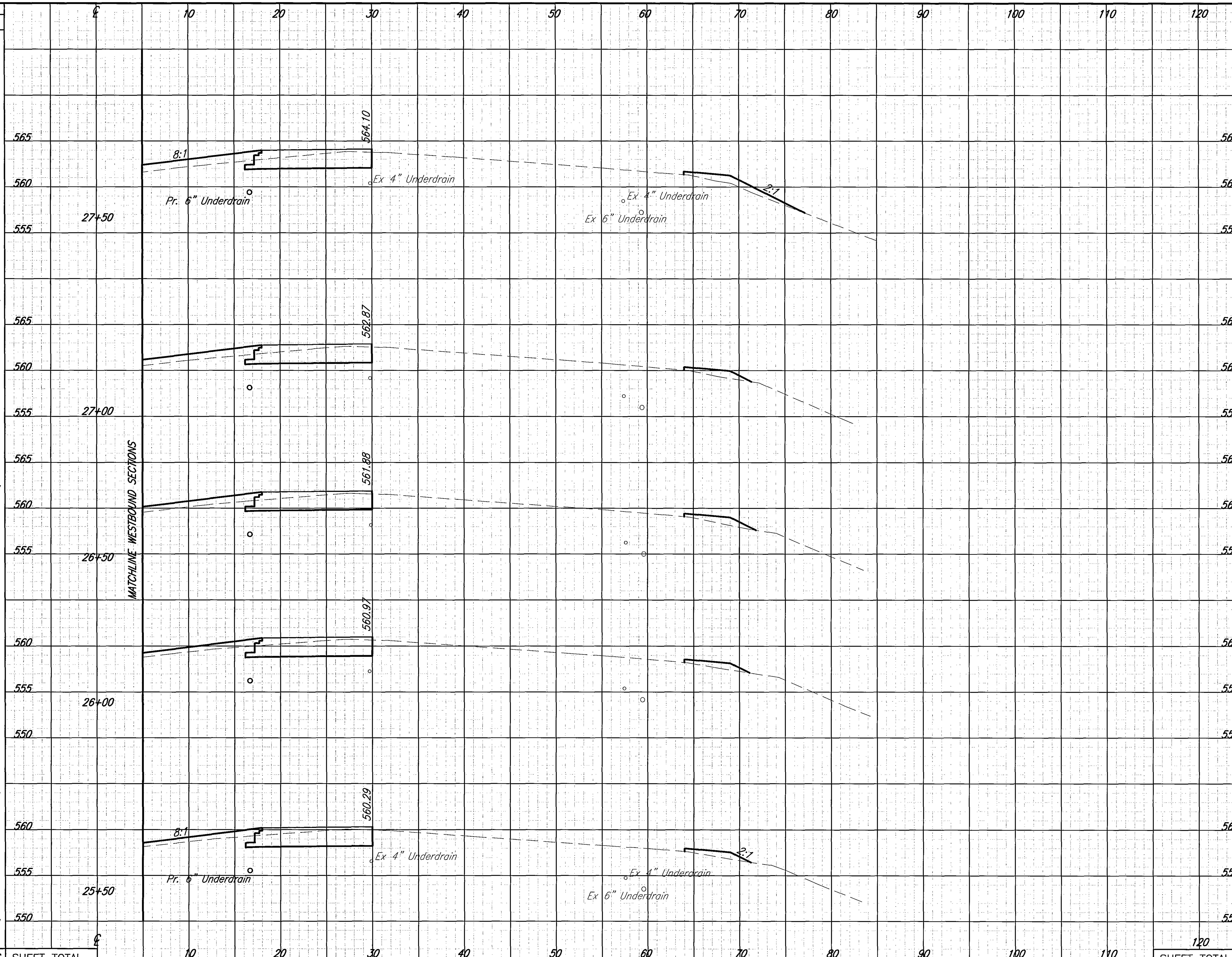
Station	SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
25+00	20		22	10		
		117			40	19
24+50	22		21	11		
		119			39	22
24+00	21		21	13		
		133			38	31
SHEET TOTAL		369			117	72

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 24+00 TO STA. 25+00

HAM–74–0.00

GX106020.DWG 24 JUL 2003



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
27+50	27		20	18		
		133			37	30
27+00	21		20	14		
		117			38	25
26+50	21		21	13		
		114			39	22
26+00	20		21	11		
		111			40	20
25+50	20		22	11		
		111			41	19
SHEET TOTAL		586			195	116

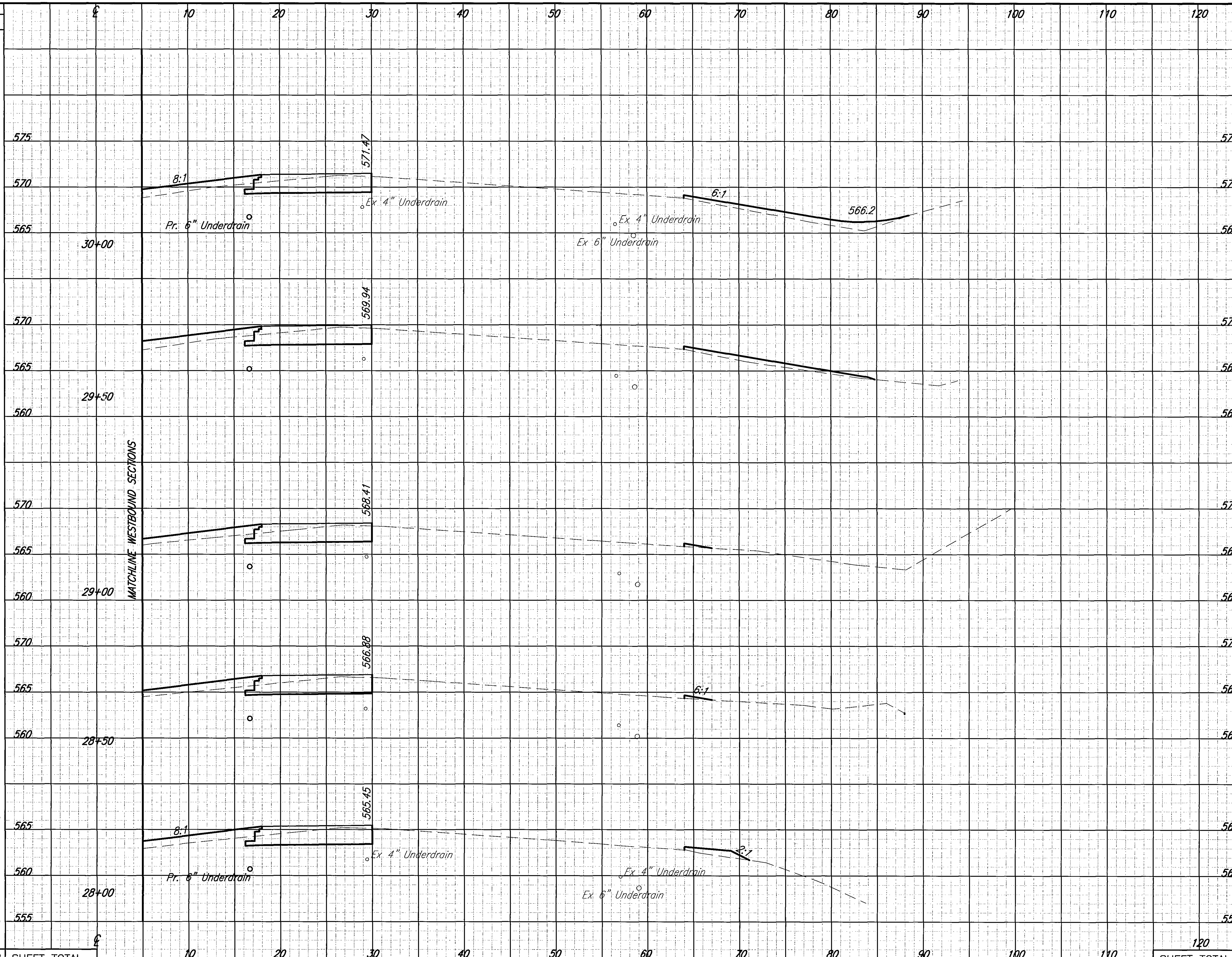
CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND STA. 25+50 TO STA. 27+50

HAM-74-0.00

0X107020.DWG 24 JUL 2003

Seeding: End Width	Seeding: Sq. Yds.	Station	End Area: Cut	End Area: Fill	Volume: Cut	Volume: Fill
38		30+00	21	23		
	200				39	39
34		29+50	21	19		
	139				38	28
16		29+00	20	11		
	89				37	20
16		28+50	20	11		
	100				37	24
20		28+00	20	15		
	131				37	31
	659	SHEET TOTAL			188	142

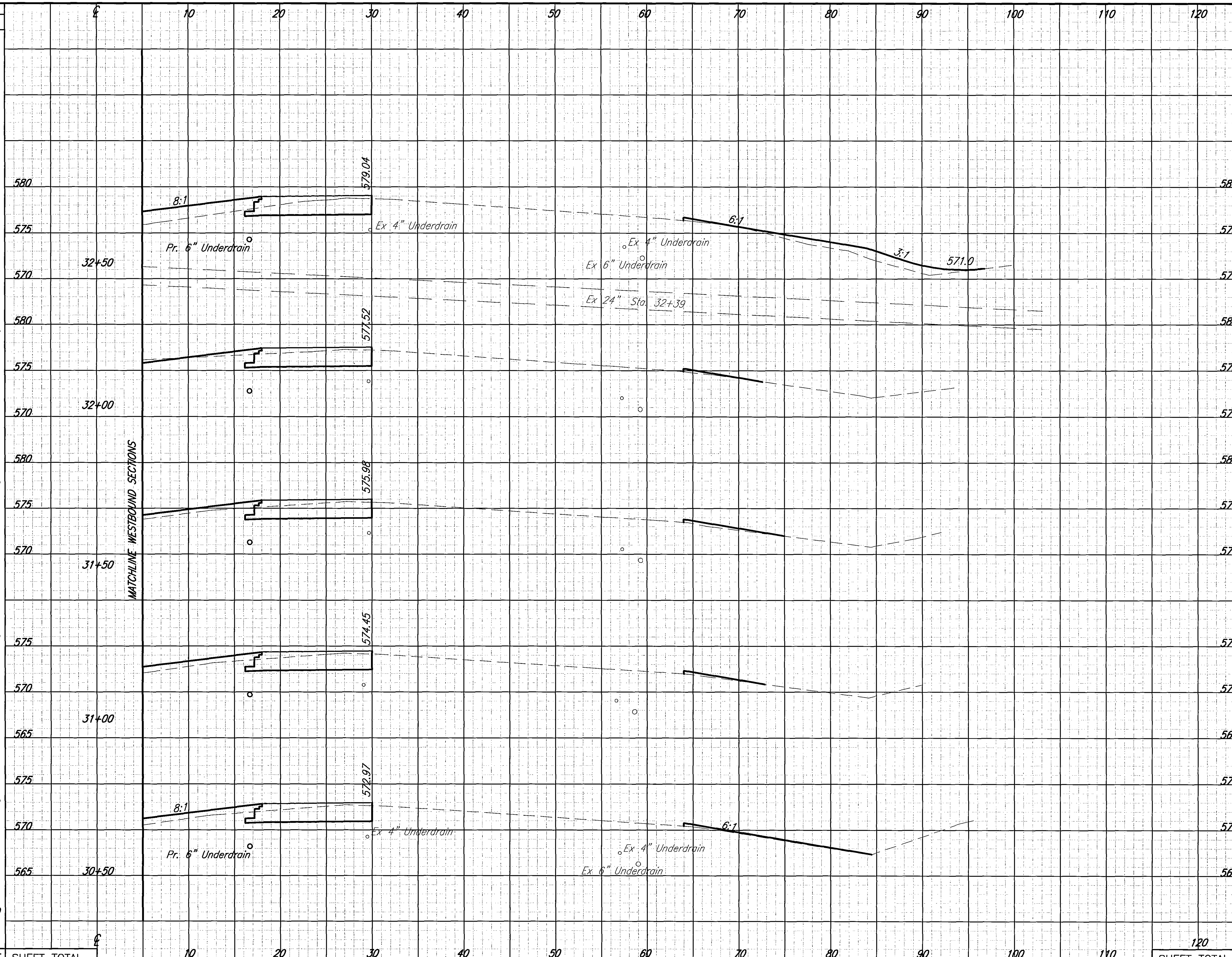


CALCULATED SEB
CHECKED GAB

CROSS SECTIONS - EASTBOUND
STA. 28+00 TO STA. 30+00

HAM-74-0.00

GX108020.DWG 25 JUL 2003



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
32+50	33		19	32		
		153			39	32
32+00	22		23	3		
		128			42	11
31+50	24		22	9		
		128			41	18
31+00	22		22	10		
		156			40	19
30+50	34		21	11		
		200			39	31
SHEET TOTAL		765			201	111

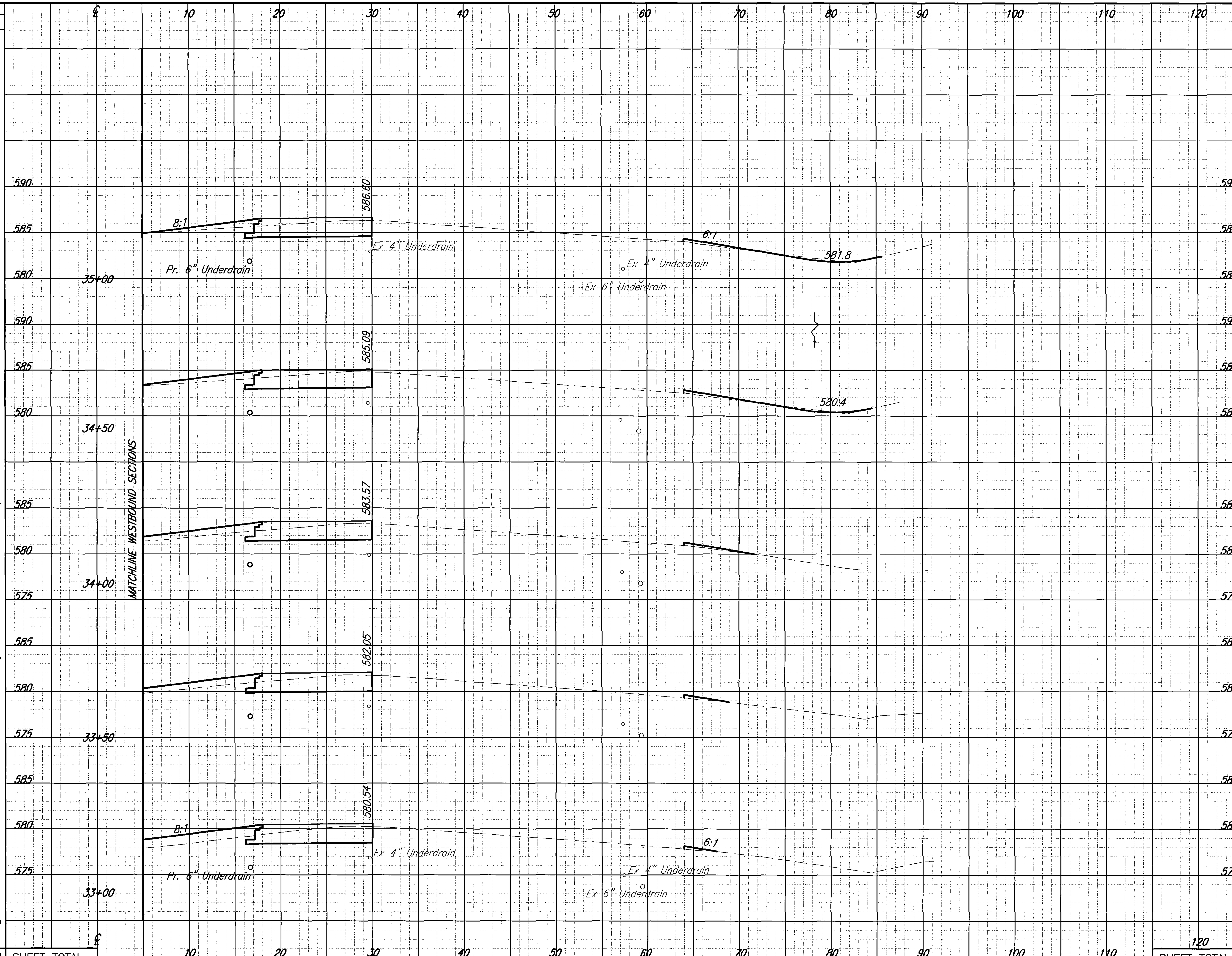
CALCULATED SEB
CHECKED GAB

CROSS SECTIONS - EASTBOUND STA. 30+50 TO STA. 32+50

HAM-74-0.00

0X109020.DWG 28 JUL 2003

Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
35+00	35		22	8		
		192			41	15
34+50	34		22	8		
		153			39	18
34+00	21		20	11		
		108			38	19
33+50	18		21	10		
		97			38	22
33+00	17		20	14		
		139			36	43
SHEET TOTAL		689			192	117



CALCULATED SEB
CHECKED GAB

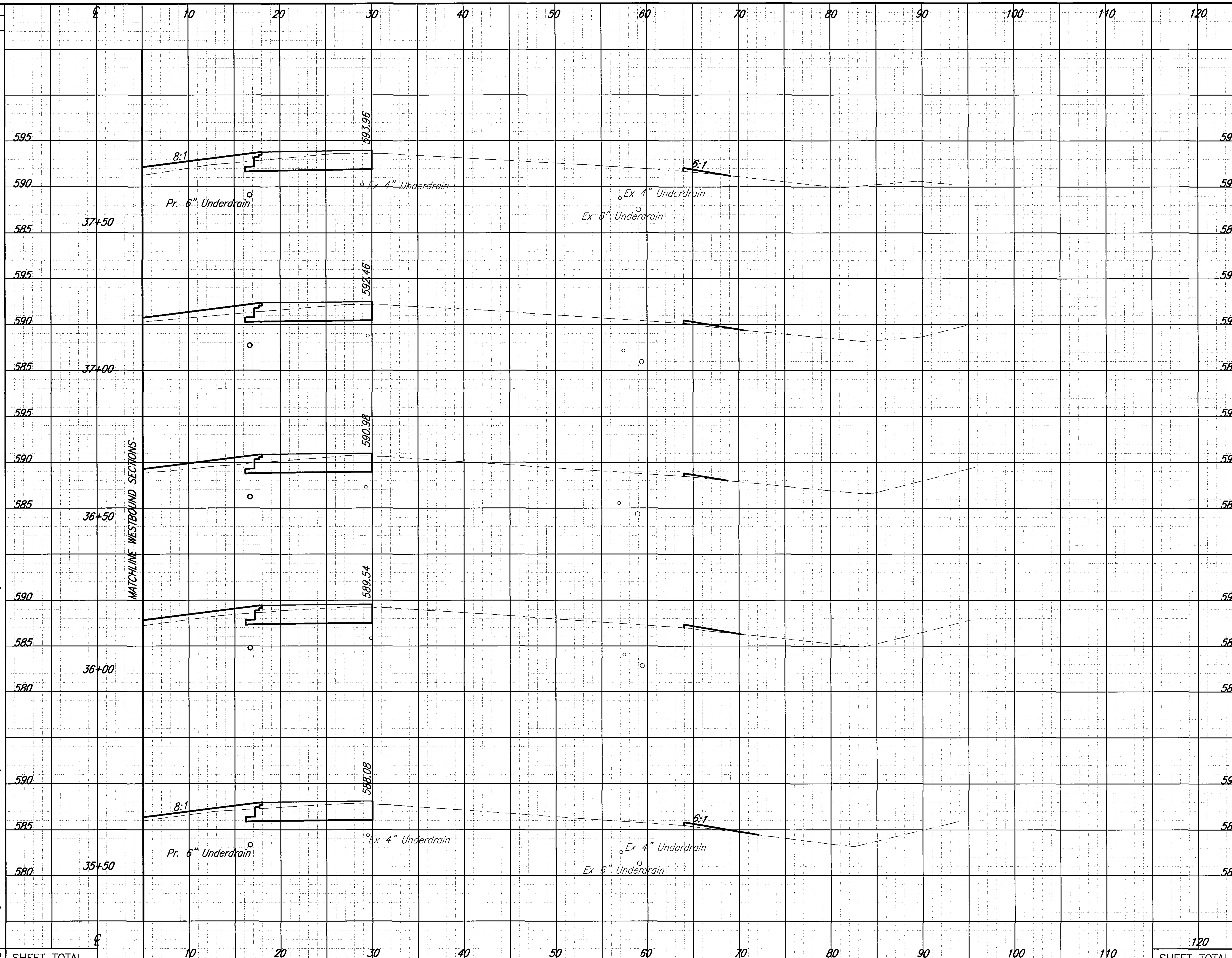
CROSS SECTIONS – EASTBOUND
STA. 33+00 TO STA. 35+00

HAM-74-0.00

244
421

GX110020.DWG 25 JUL 2003

CROSS SECTIONS – EASTBOUND
STA. 35+50 TO STA. 37+50



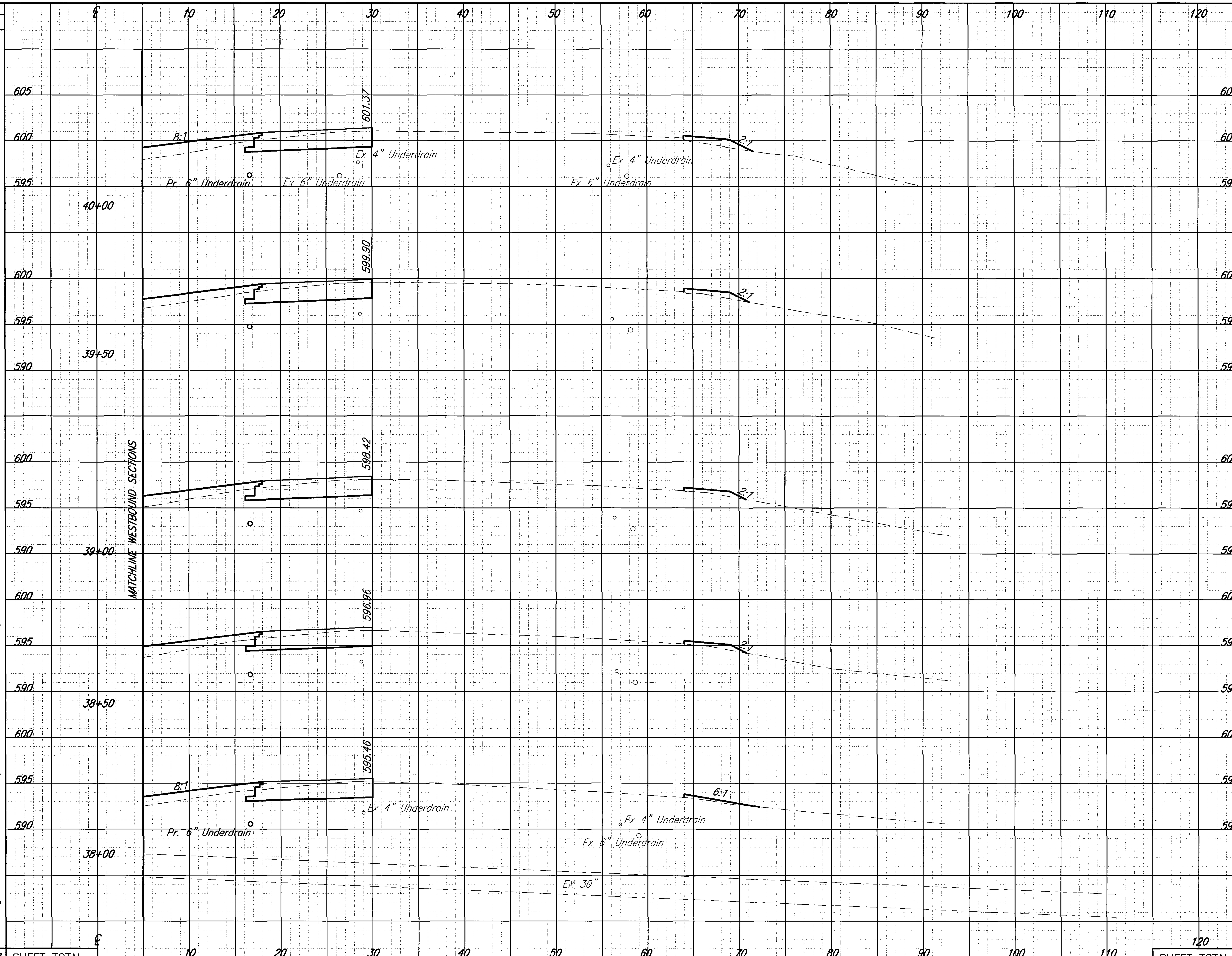
Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
37+50	18		21	11		
		106			38	19
37+00	20		20	10		
		106			37	19
36+50	18		20	10		
		103			39	18
36+00	19		22	9		
		111			41	15
35+50	21		22	7		
		156			41	14
SHEET TOTAL		582			196	85

CALCULATED	SEB
CHECKED	GAB

HAM-74-0.00

0X111020.DWG 24 JUL 2003

CROSS SECTIONS – EASTBOUND
STA. 38+00 TO STA. 40+00



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
40+00	21		21	19		
		114			40	31
39+50	20		22	15		
		111			41	27
39+00	20		22	14		
		111			40	27
38+50	20		21	15		
		114			39	26
38+00	21		21	13		
		108			39	22
SHEET TOTAL		558			199	133

CALCULATED SEB
CHECKED GAB

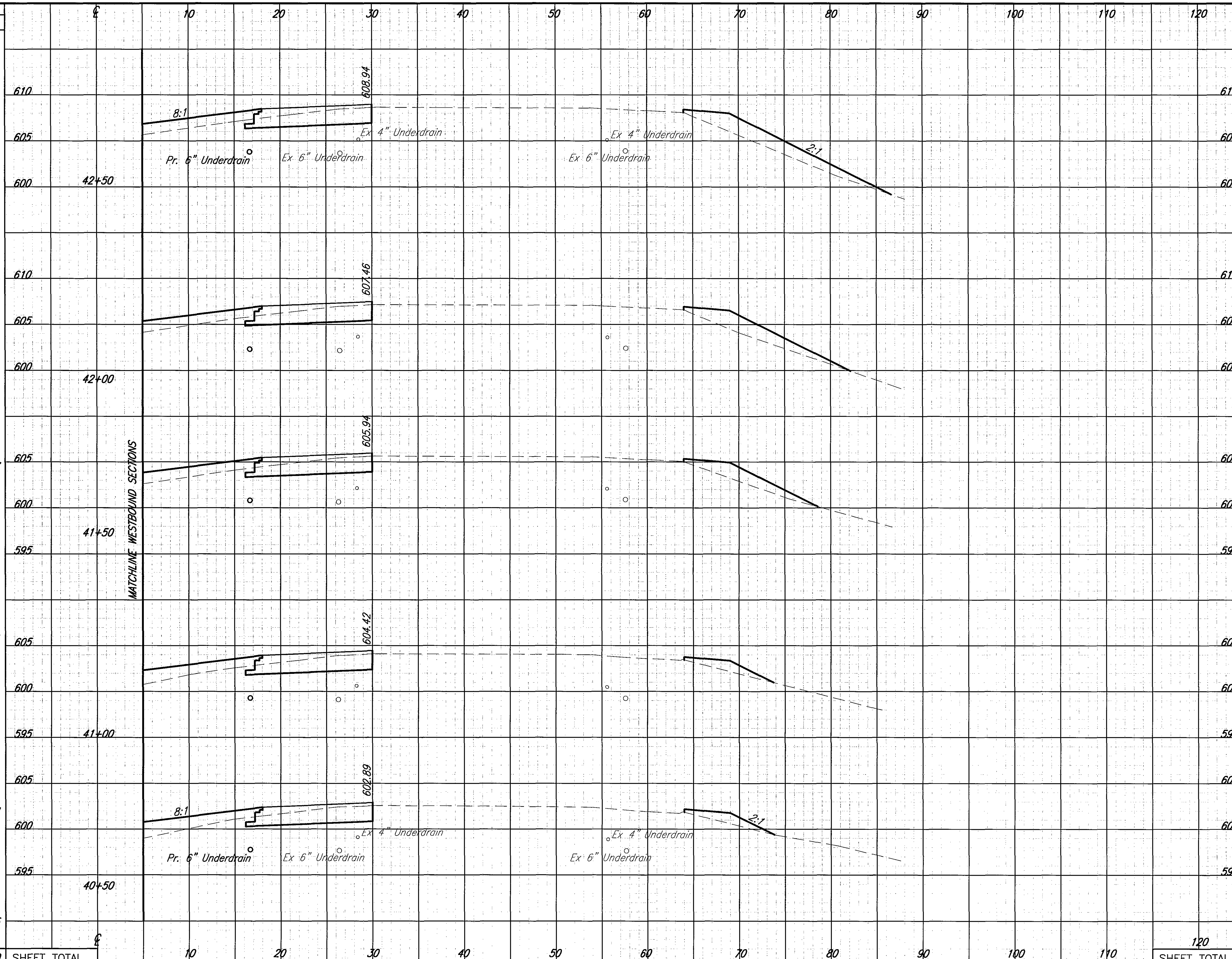
HAM-74-0.00

GX112020.DWG 24 JUL 2003

CROSS SECTIONS – EASTBOUND STA. 40+50 TO STA. 42+50

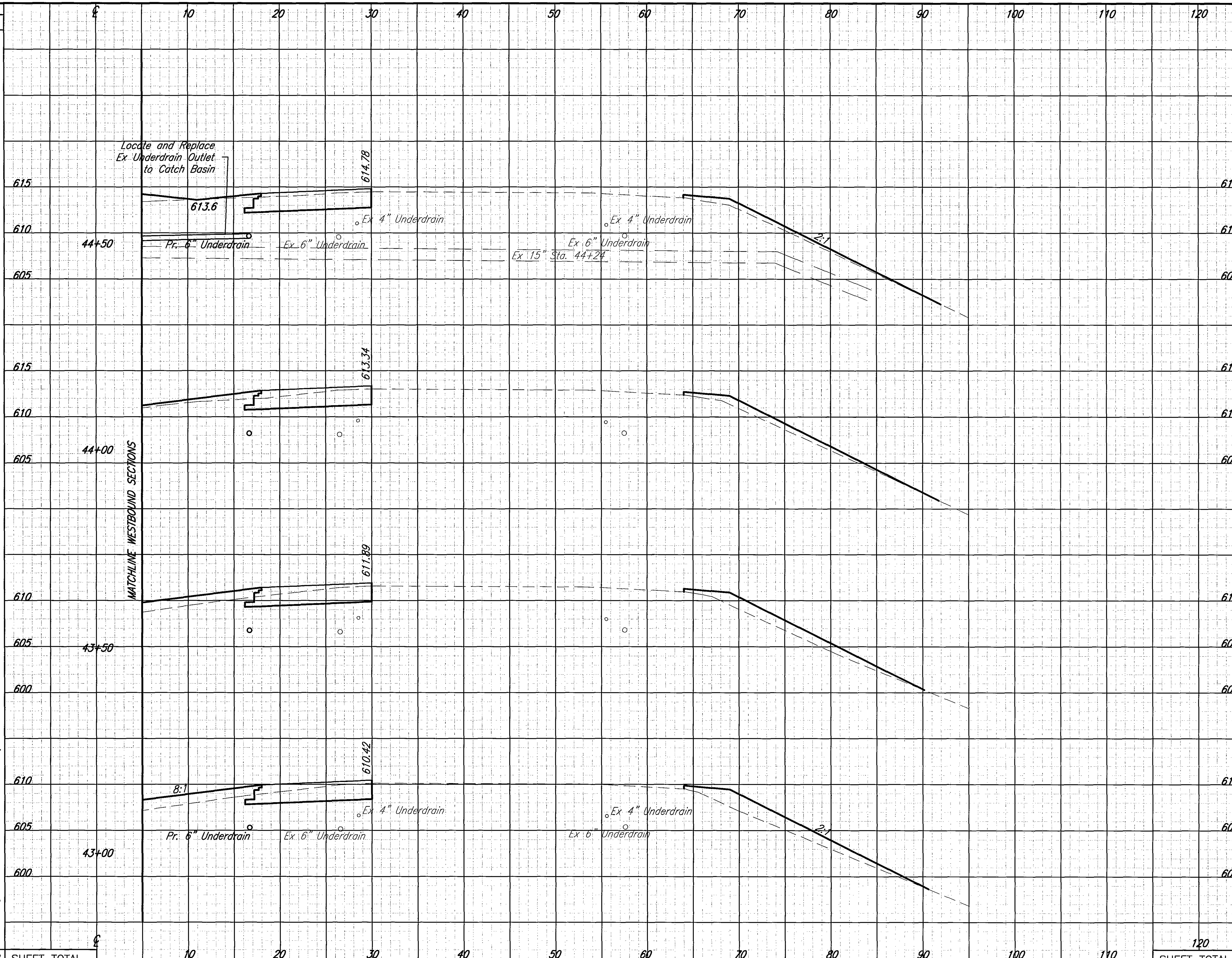
HAM-74-0.00

CALCULATED SEB CHECKED GAB



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
42+50	38		19	39		
		192			35	67
42+00	31		19	33		
		167			35	56
41+50	29		19	28		
		144			35	45
41+00	23		19	21		
		131			36	41
40+50	24		20	23		
		125			38	39
SHEET TOTAL		759			179	248

0X113020.DWG 24 JUL 2003



	SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
44+50	44		26	12		
		244			44	28
44+00	44		21	18		
		239			38	46
43+50	42		20	32		
		233			36	66
43+00	42		19	39		
		222			35	72
SHEET TOTAL		938			153	212

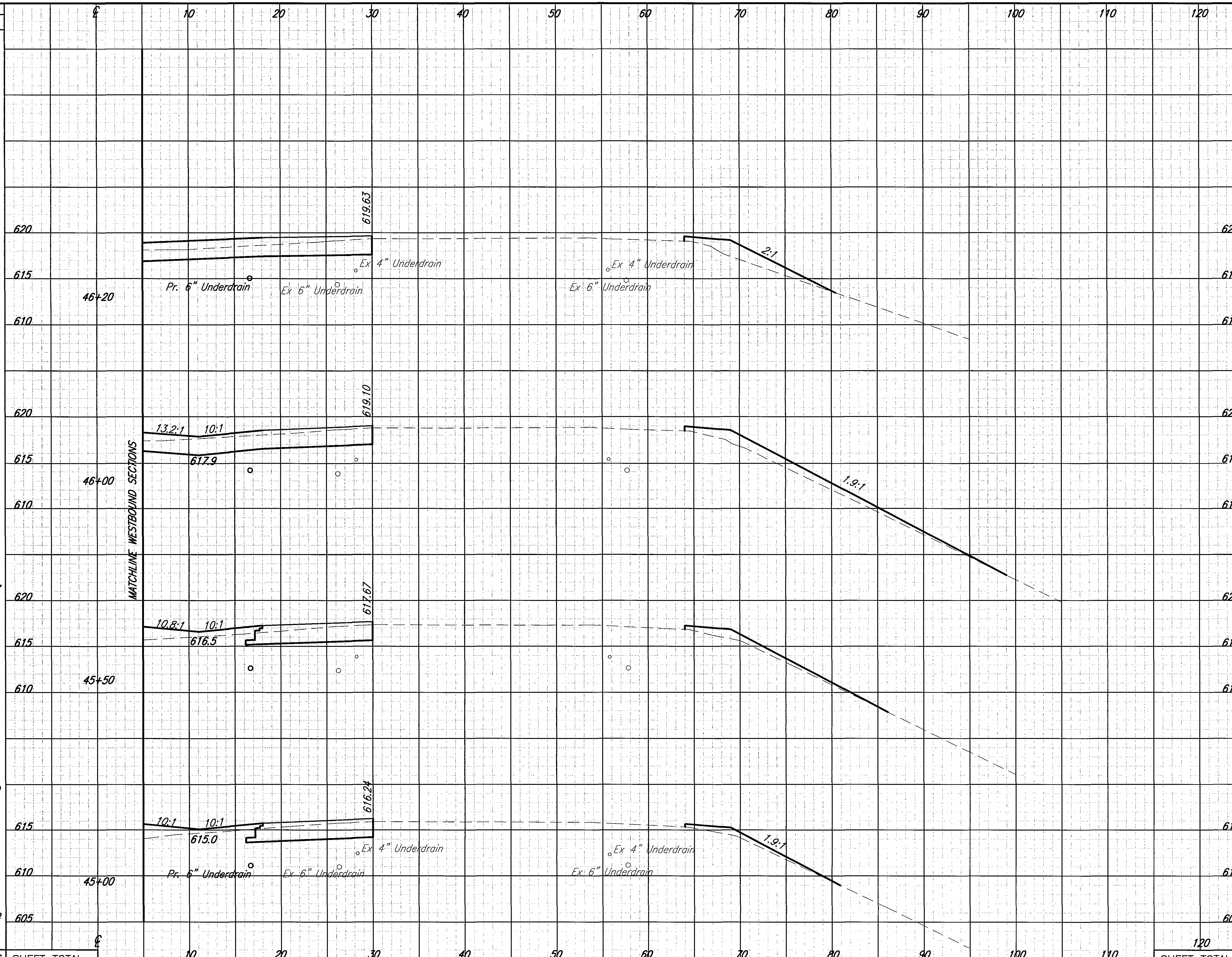
CALCULATED SEB
CHECKED GAB

CROSS SECTIONS - EASTBOUND
STA. 43+00 TO STA. 44+50

HAM-74-0.00

0X114020.DWG 24 JUL 2003

CROSS SECTIONS – EASTBOUND
STA. 45+00 TO STA. 46+20

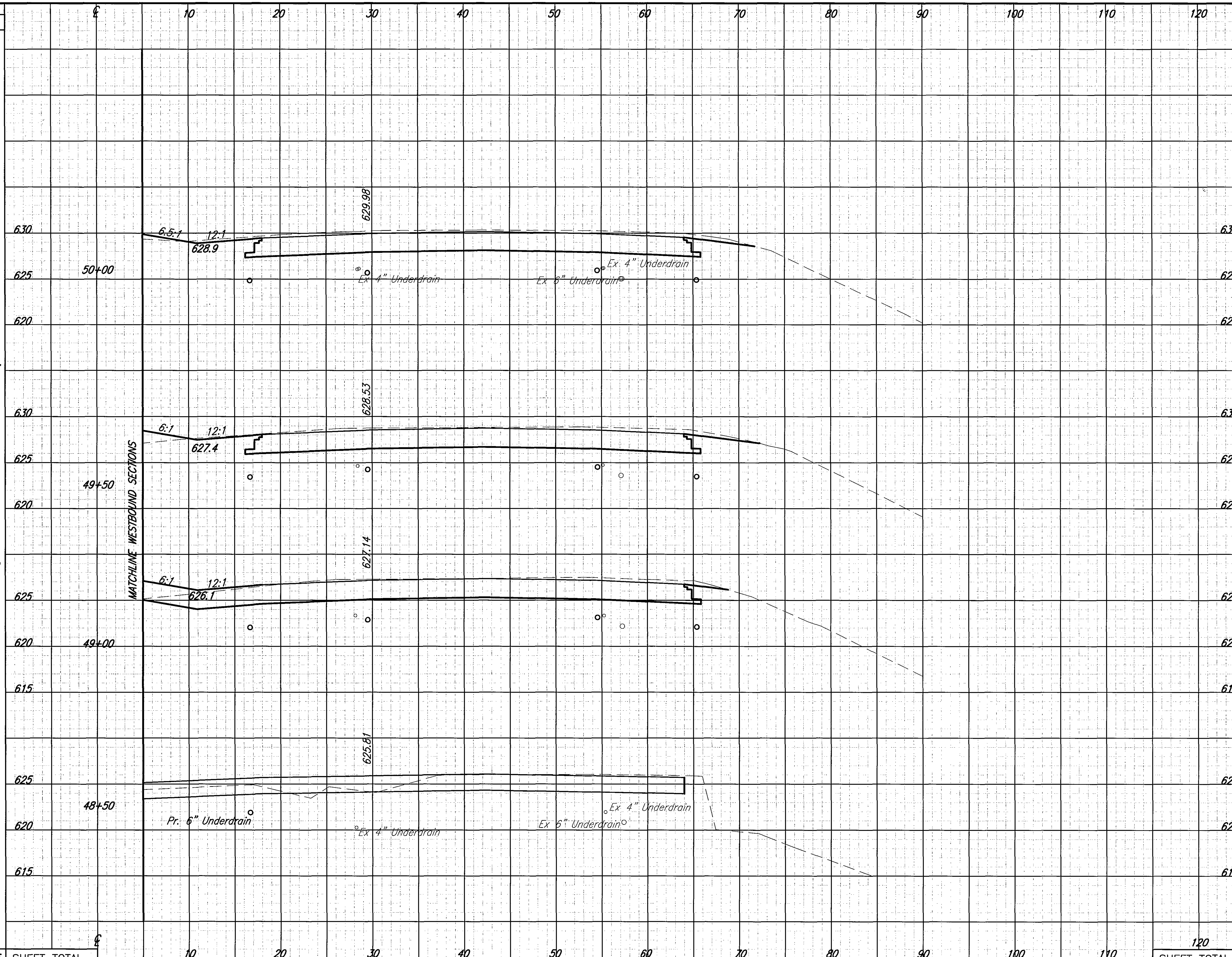


Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
46+20	31		17	31		
		92			13	23
46+00	52		19	31		
		247			36	48
45+50	37		20	21		
		189			39	34
45+00	31		22	16		
		208			44	26
SHEET TOTAL		736			132	131

CALCULATED SEB
CHECKED GAB

HAM-74-0.00

GX115020.DWG 24 JUL 2003



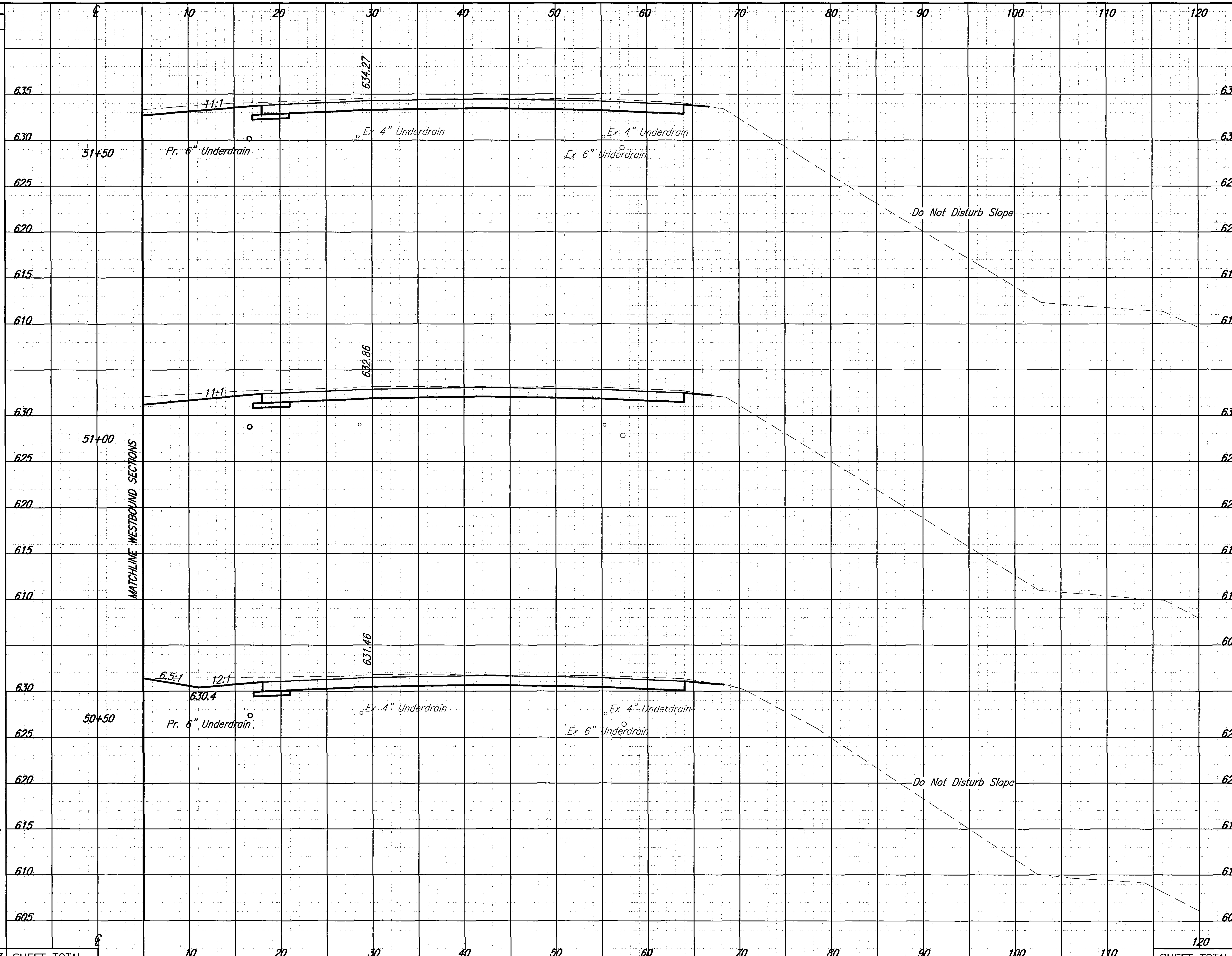
Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
50+00	21		116	1		
		117			211	4
49+50	21		112	3		
		108			203	8
49+00	18		107	6		
		50			139	10
48+50	0		43	5		
SHEET TOTAL		275			553	22

CALCULATED SEB CHECKED GAB

CROSS SECTIONS – EASTBOUND STA. 48+50 TO STA. 50+00

HAM-74-0.00

0X116020.DWG 24 JUL 2003



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
51+50	16		65	0		
		89			126	0
51+00	16		71	0		
		92			133	0
50+50	17		73	0		
		106			175	1
SHEET TOTAL		287			434	1

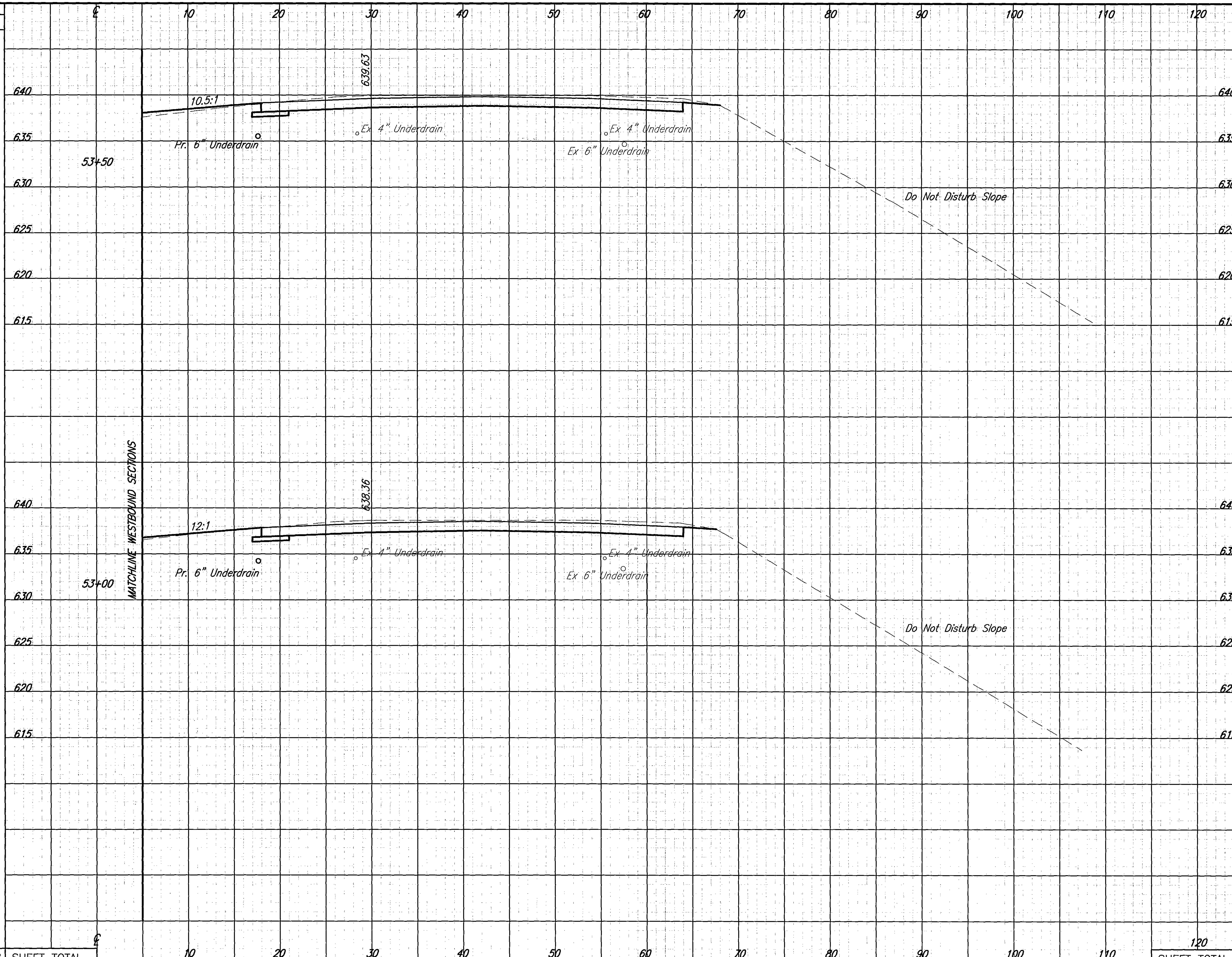
CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 50+50 TO STA. 51+50

HAM-74-0.00

0X17020.DWG 24 JUL 2003

SEEDING
END WIDTH
SQ. YDS.
END AREA
CUT
FILL
VOLUME
CUT
FILL
CALCULATED SEB
CHECKED GAB
10:1
637.07
635
630
625
620
615
610
52+50
Do Not Disturb Slope
17
94
63
0
118
0
11:1
635.67
MATCHLINE WESTBOUND SECTIONS
52+00
Pr. 6" Underdrain
Ex 4" Underdrain
Ex 4" Underdrain
Ex 6" Underdrain
Do Not Disturb Slope
17
64
0
92
119
0
10
20
30
40
50
60
70
80
90
100
110
120
186
SHEET TOTAL
SHEET TOTAL
237
0
CROSS SECTIONS – EASTBOUND
STA. 52+00 TO STA. 52+50
HAM-74-0.00
252
421
GX118020.DWG
18 AUG 2003



SEEDING END WIDTH	SEEDING SQ. YDS.	STATION	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
17		53+50	60	4		
	94				111	5
17		53+00	60	1		
	94				114	1
SHEET TOTAL	188		SHEET TOTAL		225	6

CALCULATED SEB
CHECKED GAB

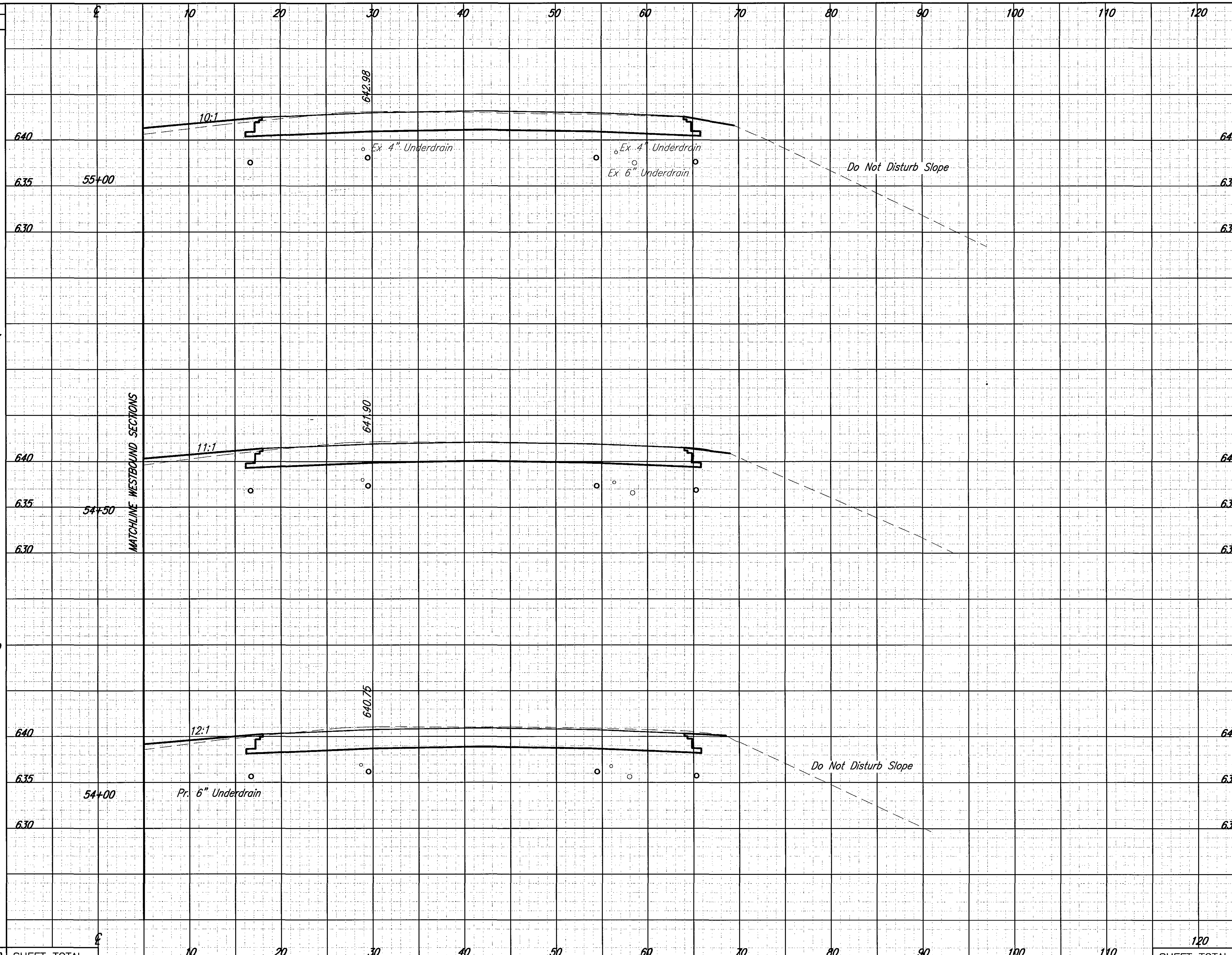
CROSS SECTIONS – EASTBOUND
STA. 53+00 TO STA. 53+50

HAM–74–0.00

0X118A020.DWG 24 JUL 2003

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND STA. 54+00 TO STA. 55+00

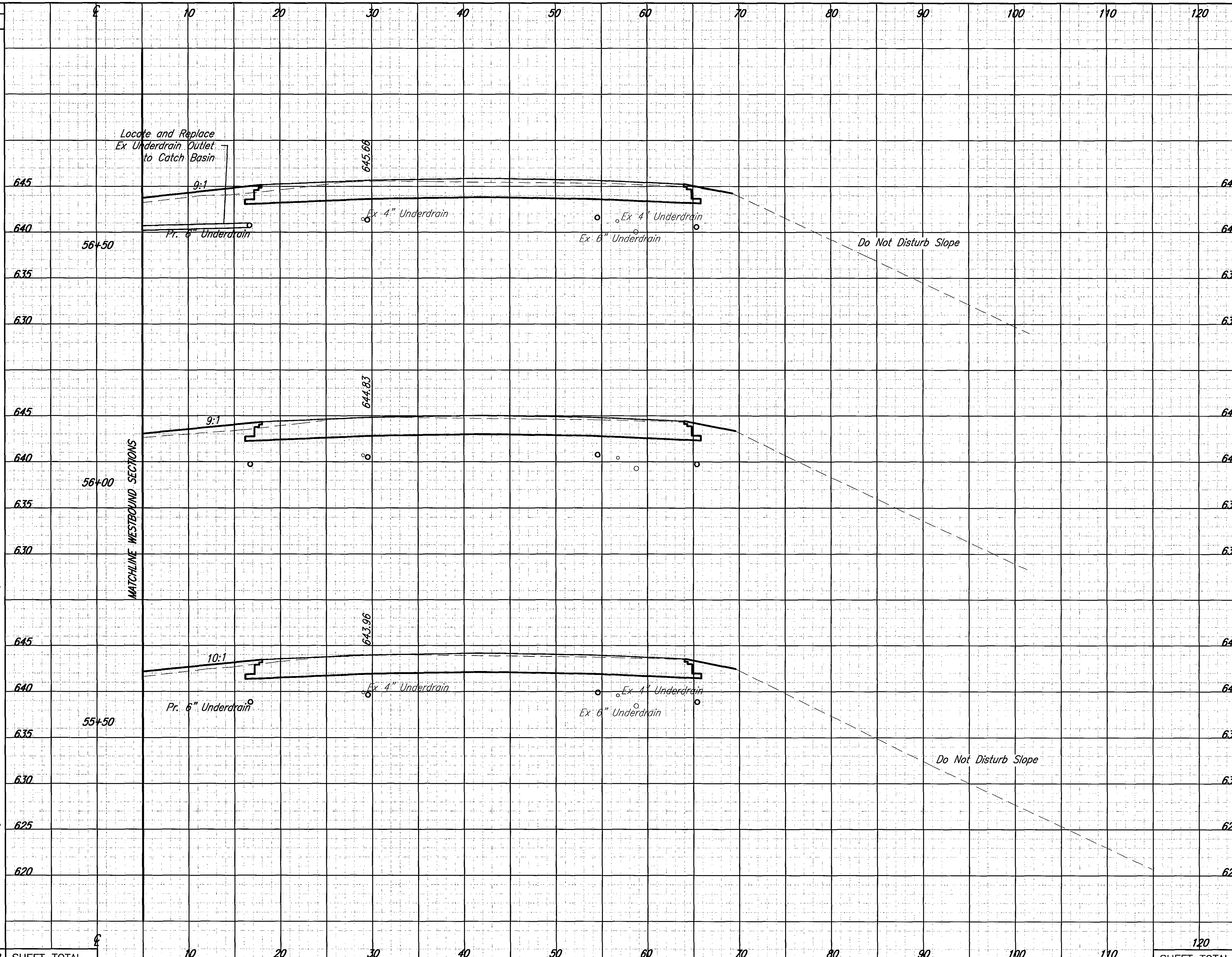


Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
55+00	19		93	10		
		103			179	19
54+50	18		100	10		
		100			191	17
54+00	18		106	8		
		97			154	11
SHEET TOTAL		300			524	47

HAM-74-0.00

GX119020.DWG 24 JUL 2003

SEEDING END WIDTH	SEEDING SQ. YDS.	STATION	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
19		56+50	83	10		
	106				157	19
19		56+00	87	10		
	106				165	18
19		55+50	91	9		
	106				170	18
	318	SHEET TOTAL			492	55

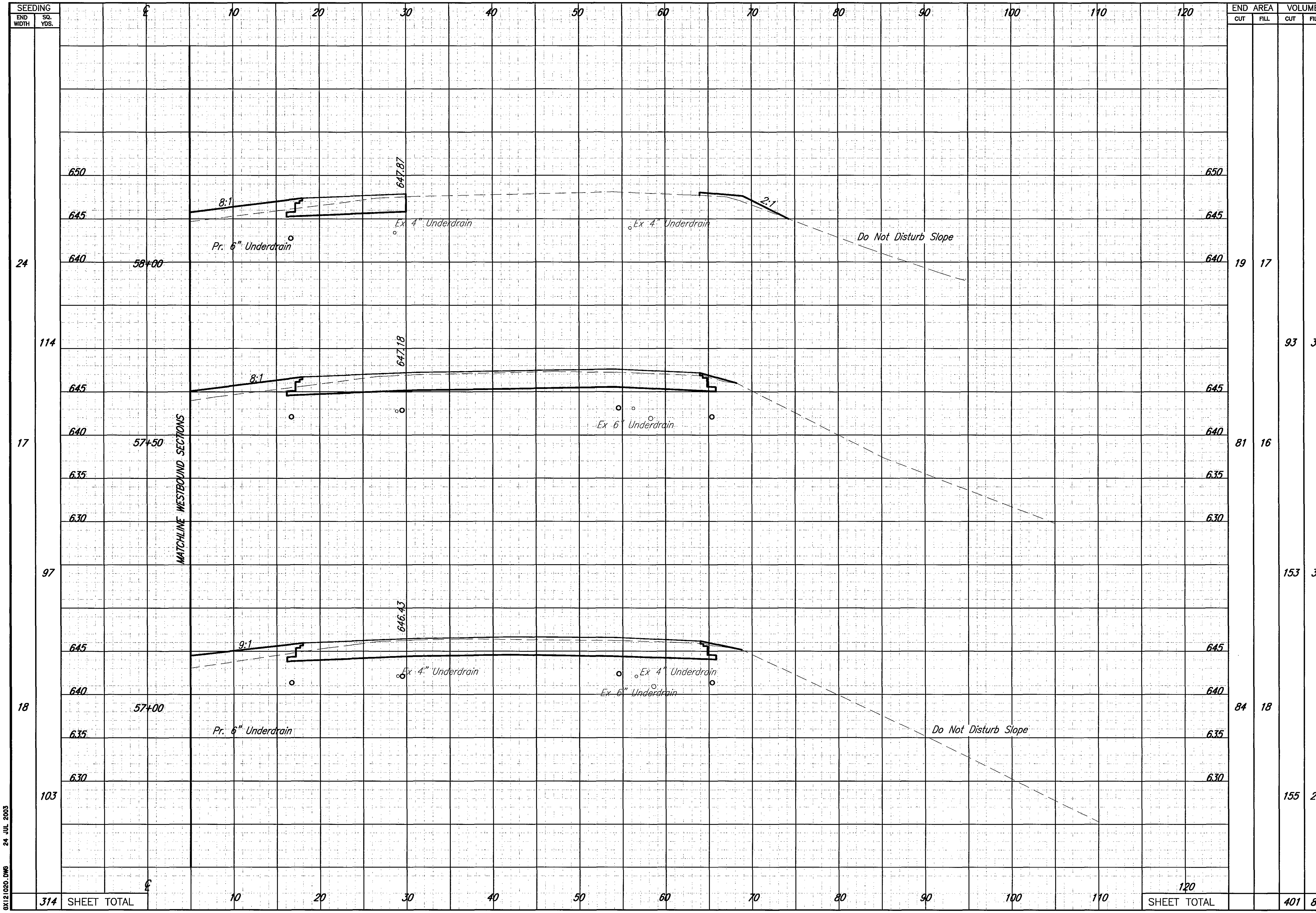


CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 55+50 TO STA. 56+50

HAM-74-0.00

0X120020.DWG 24 JUL 2003



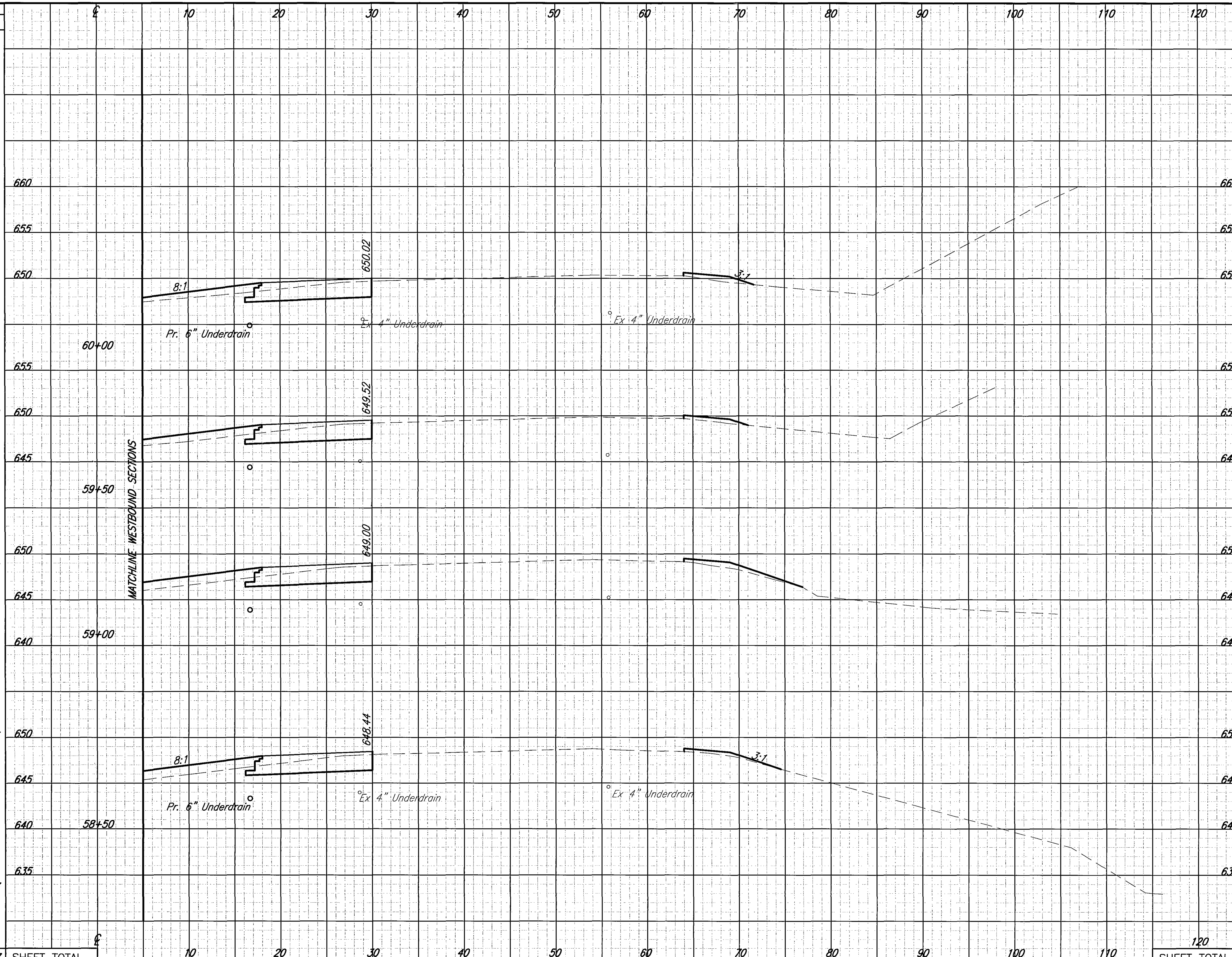
CALCULATED SEB
CHECKED GAB

CROSS SECTIONS - EASTBOUND
STA. 57+00 TO STA. 58+00

HAM-74-0.00

0X121020.DWG 24 JUL 2003

SEEDING	
END WIDTH	SQ. YDS.
20	
	108
19	
	111
21	
	125
24	
	133
	477



END AREA		VOLUME	
CUT	FILL	CUT	FILL
20	10		
		37	19
20	11		
		37	22
20	13		
		36	26
19	15		
		35	30
		145	97

CALCULATED SEB
CHECKED GAB

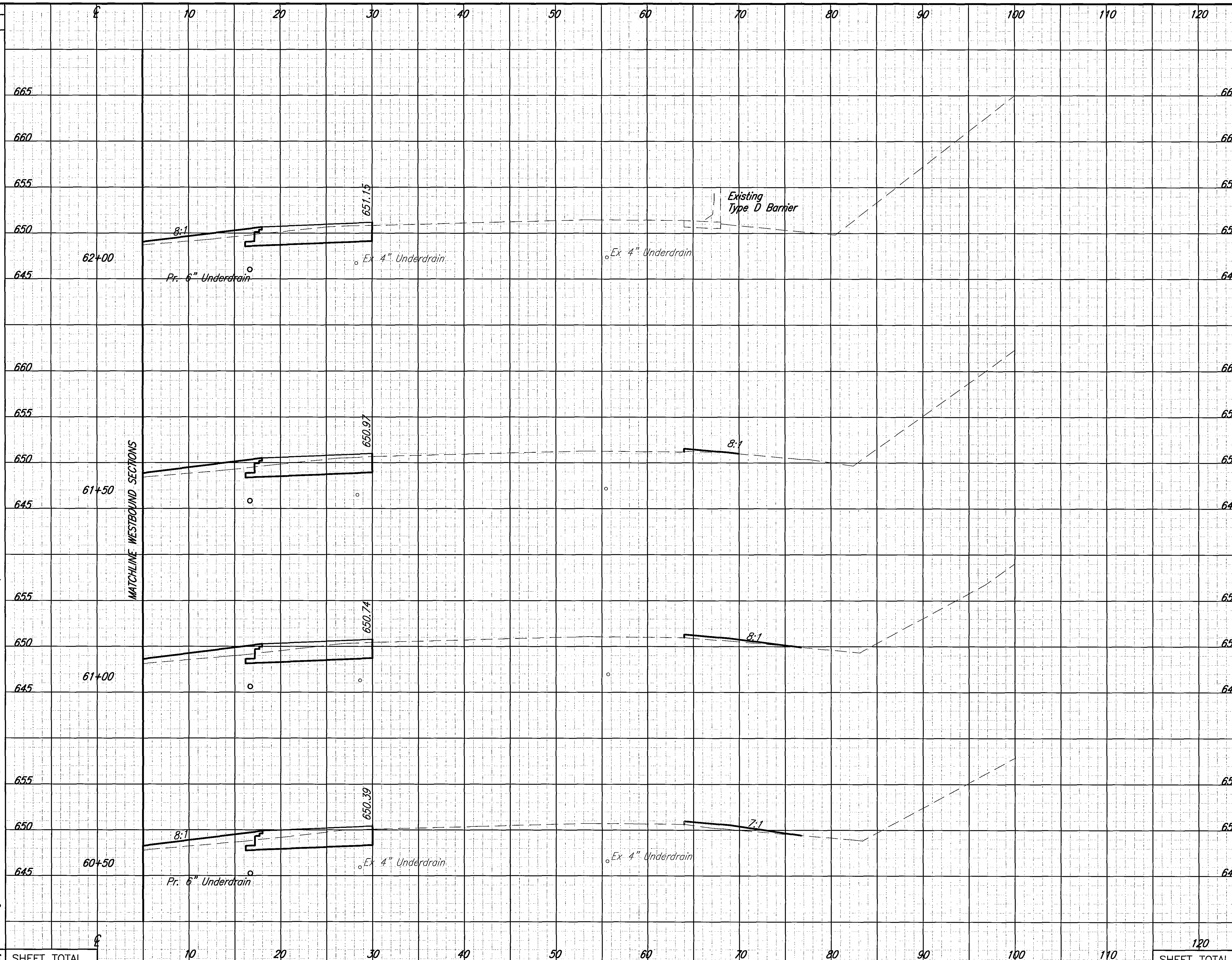
CROSS SECTIONS – EASTBOUND
STA. 58+50 TO STA. 60+00

HAM-74-0.00

257
421

0X122020.DWG 25 JUL 2003

Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
62+00	13		22	8		
		89			39	17
61+50	19		20	10		
		125			37	20
61+00	26		20	12		
		144			37	23
60+50	26		20	13		
		128			37	21
SHEET TOTAL		486			150	81

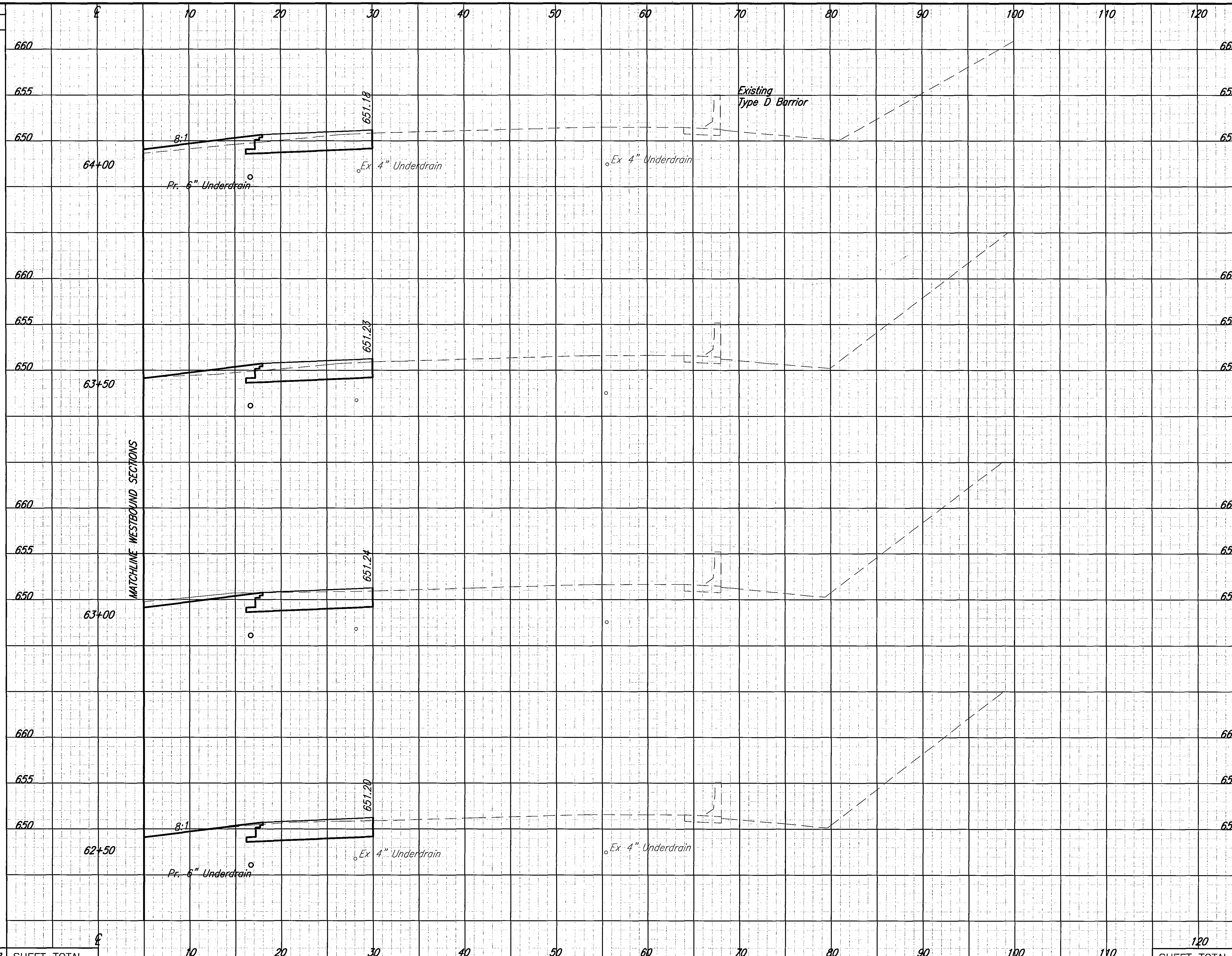


CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND STA. 60+50 TO STA. 62+00

HAM-74-0.00

0X123020.DWG 28 JUL 2003



Station	SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
64+00	13		21	8		
		72			39	13
63+50	13		21	6		
		72			48	7
63+00	13		31	2		
		72			52	4
62+50	13		25	2		
		72			44	9
SHEET TOTAL		288			183	33

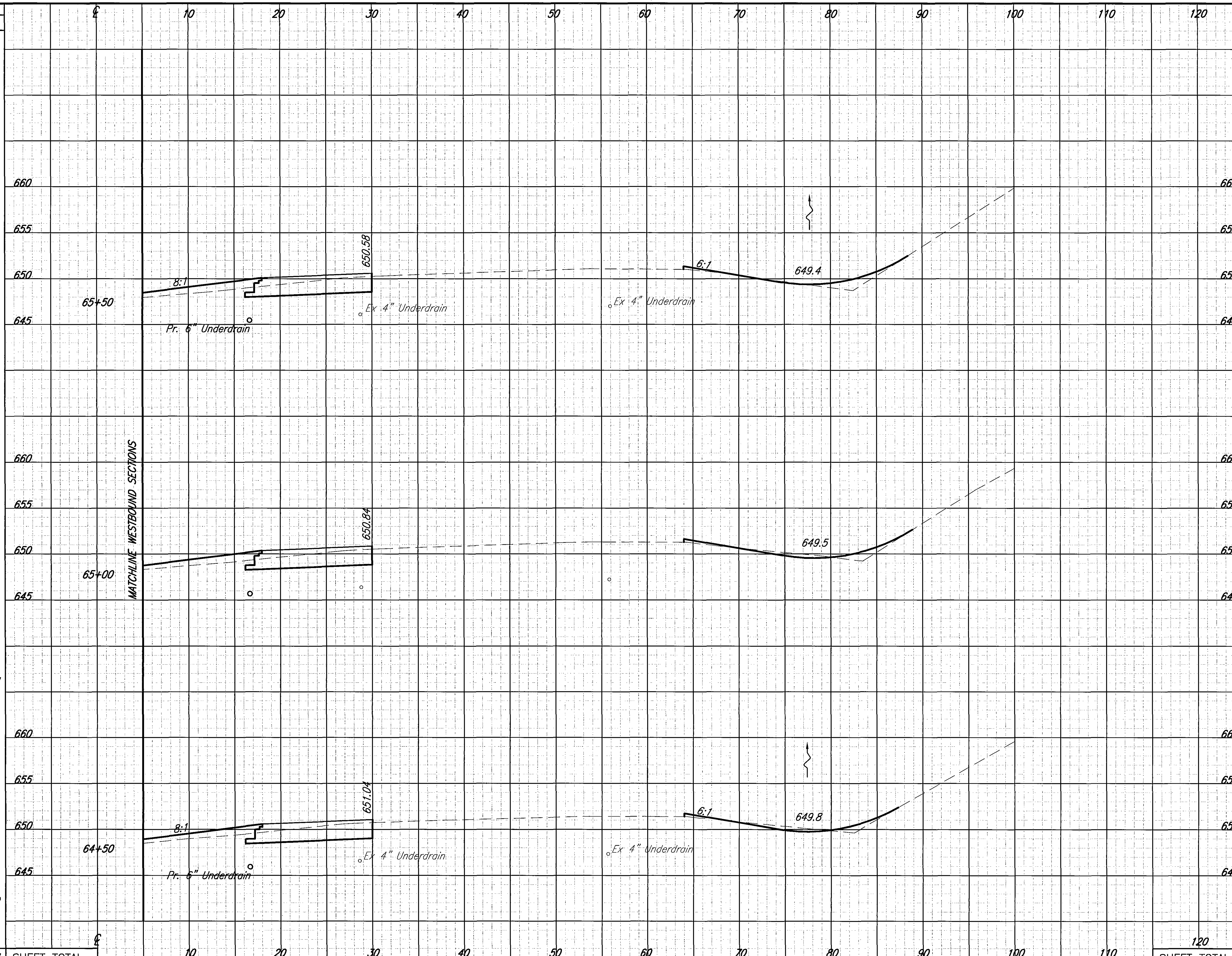
CALCULATED SEB CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 62+50 TO STA. 64+00

HAM–74–0.00

0X124020.DWG 28 JUL 2003

CROSS SECTIONS – EASTBOUND
STA. 64+50 TO STA. 65+50



SEEDING END WIDTH	SEEDING SQ. YDS.
38	
	214
39	
	211
37	
	139
SHEET TOTAL	564

Station	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
65+50	20	16		
			39	28
65+00	22	14		
			42	24
64+50	23	12		
			41	19
SHEET TOTAL			122	71

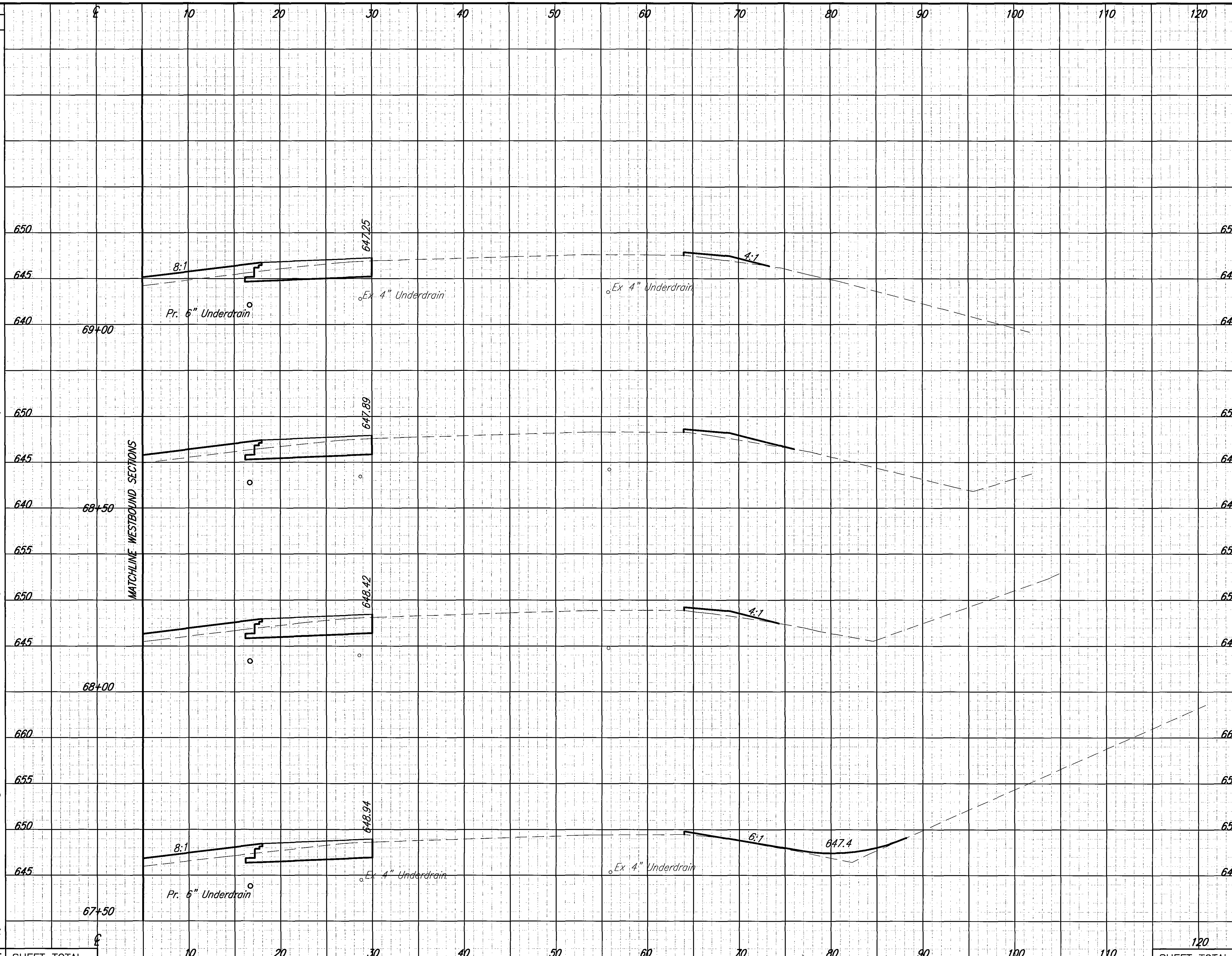
CALCULATED SEB
CHECKED GAB

HAM-74-0.00

260
421

0X125020.DWG 28 JUL 2003


SEEDING
END WIDTH
SQ. YDS.
END AREA
CUT
FILL
VOLUME
CUT
FILL
CALCULATED SEB
CHECKED GAB
CROSS SECTIONS – EASTBOUND
STA. 66+00 TO STA. 67+00
HAM-74-0.00
261
421
67+00
66+50
66+00
649.49
650.02
650.31
647.9
648.6
649.1
8:1
6:1
Ex 4" Underdrain
Pr. 6" Underdrain
MATCHLINE WESTBOUND SECTIONS
39
40
38
219
217
211
647
SHEET TOTAL
19
20
19
23
19
19
35
40
35
39
36
32
106
111
GX126020.DWG
28 JUL 2003



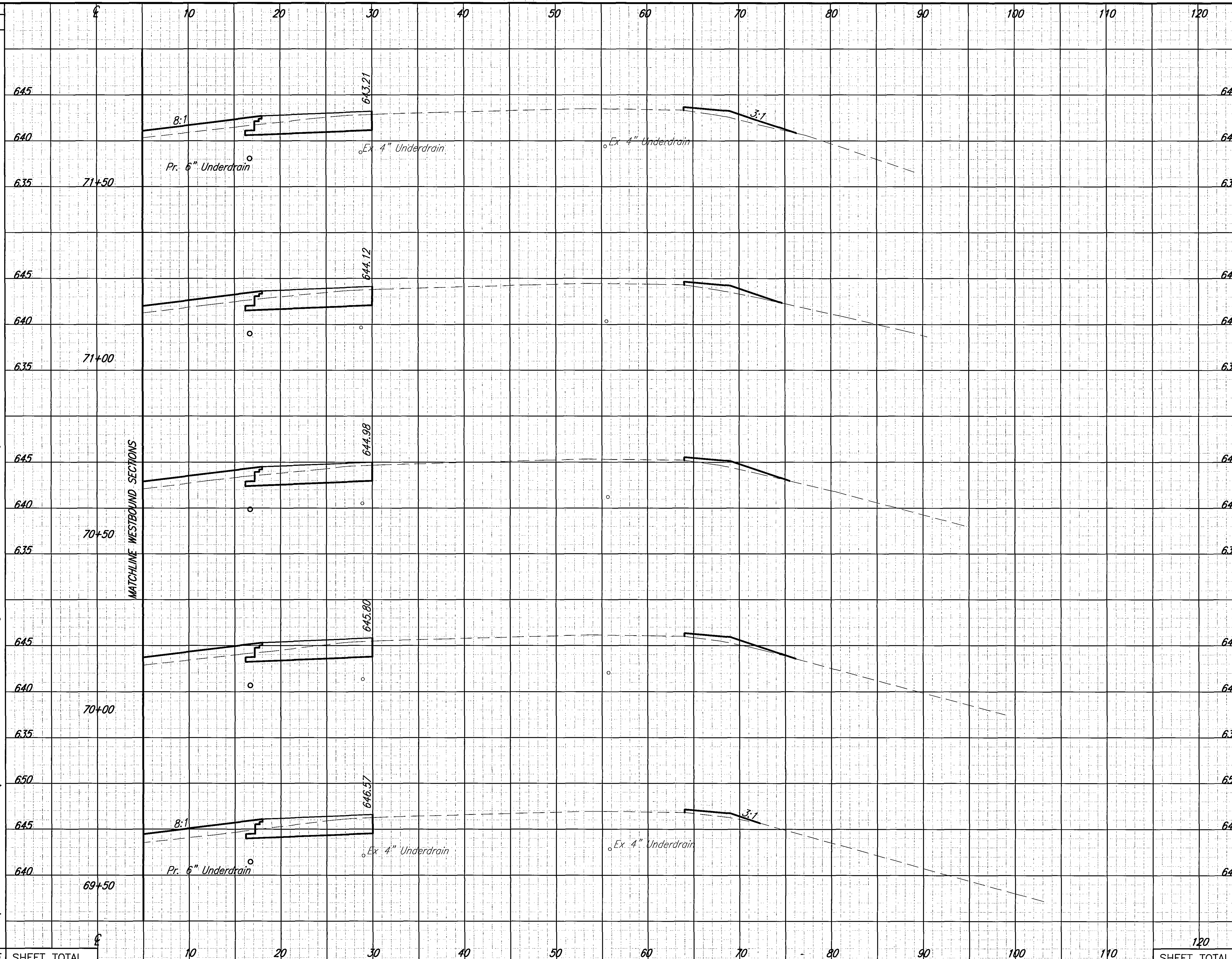
Station	SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
69+00	23		20	15		
		133			37	29
68+50	25		20	16		
		136			37	29
68+00	24		20	15		
		172			37	31
67+50	38		20	18		
		214			36	35
SHEET TOTAL		655			147	124

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 67+50 TO STA. 69+00

HAM-74-0.00

GX127020.DWG 28 JUL 2003



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
71+50	26		20	16		
		139			38	29
71+00	24		21	15		
		136			38	28
70+50	25		20	15		
		142			36	29
70+00	26		19	16		
		133			35	30
69+50	22		19	16		
		125			36	29
SHEET TOTAL		675			183	145

CROSS SECTIONS – EASTBOUND
STA. 69+50 TO STA. 71+50

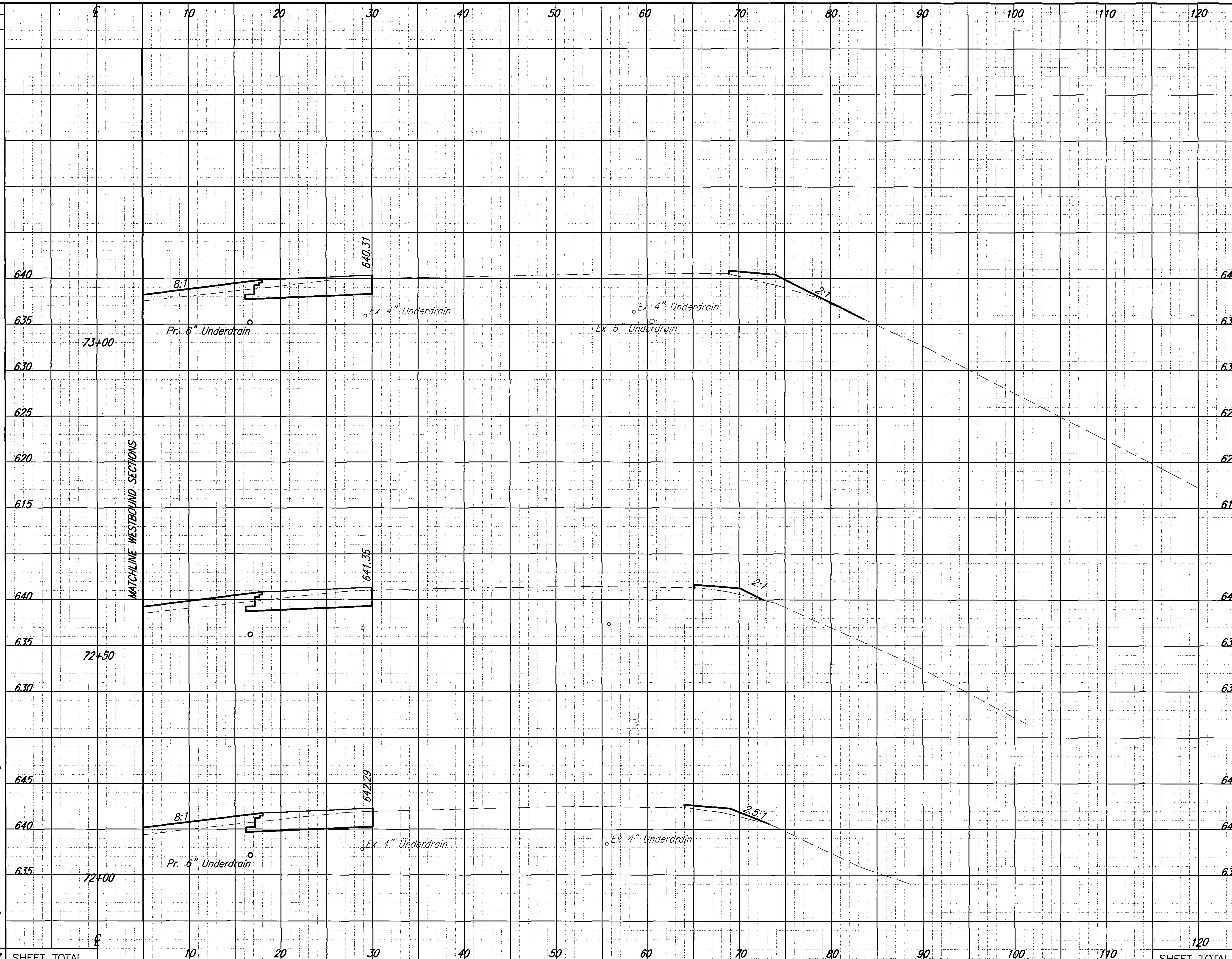
CALCULATED SEB
CHECKED GAB

HAM-74-0.00

GX128020.DWG 28 JUL 2003

CROSS SECTIONS – EASTBOUND
STA. 72+00 TO STA. 73+00

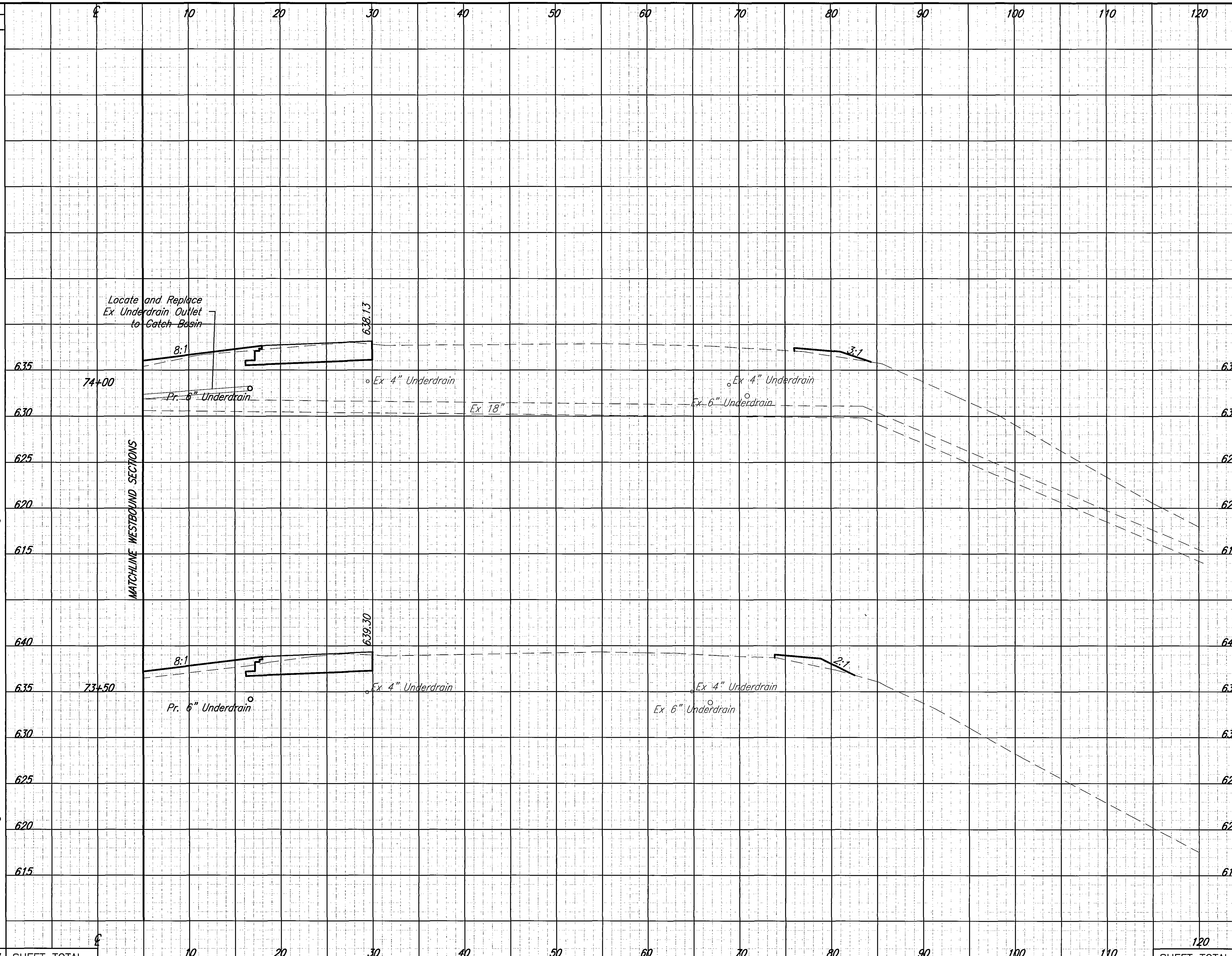
HAM-74-0.00



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
73+00	29		21	18		
		139			38	30
72+50	21		20	14		
		122			37	27
72+00	23		20	15		
		136			37	29
SHEET TOTAL		397			112	86

CALCULATED SEB
CHECKED GAB

GX129020.DWG 28 JUL 2003



SEEDING	
END WIDTH	SQ. YDS.
22	
	122
22	
	142
	264

SHEET TOTAL

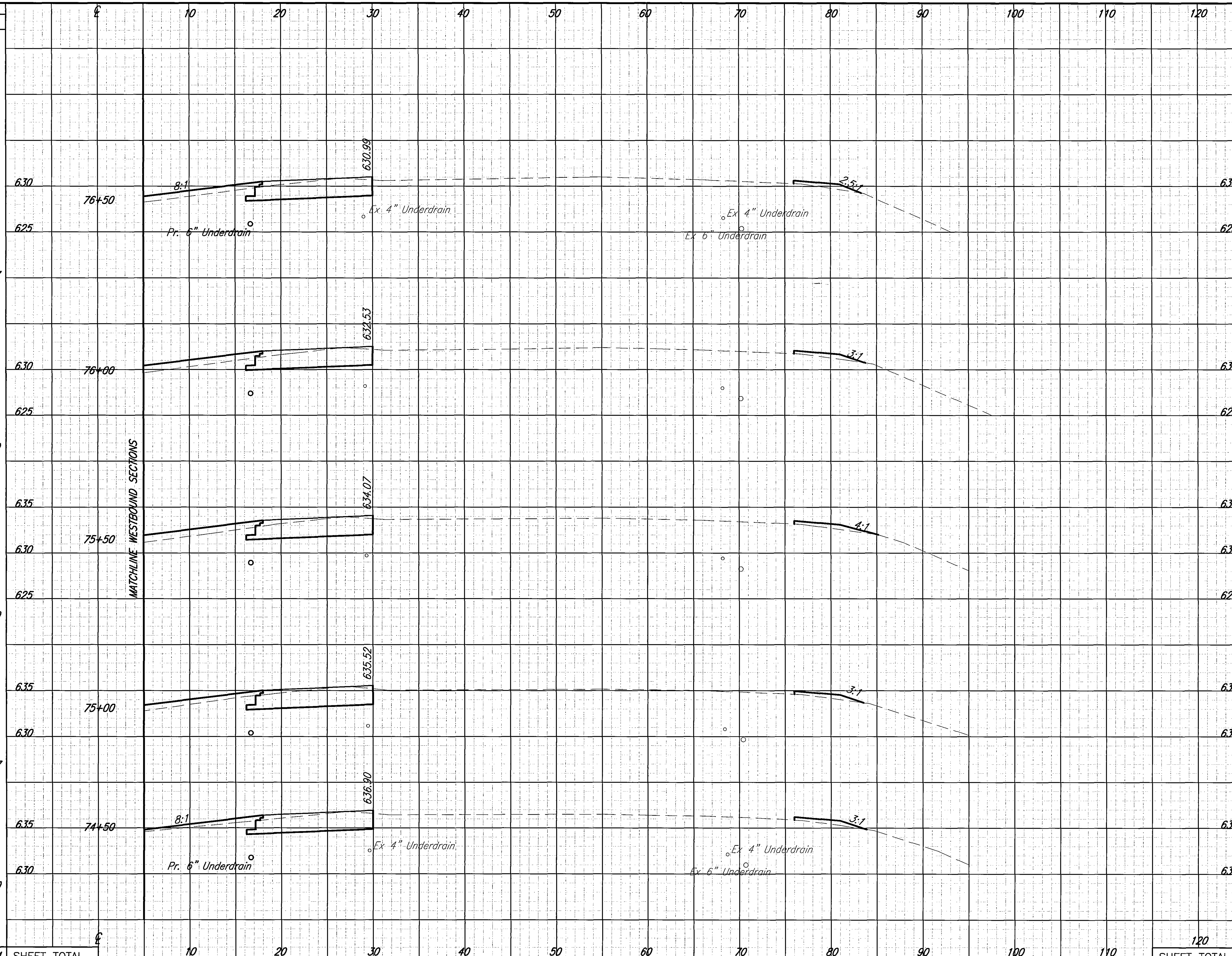
END AREA		VOLUME	
CUT	FILL	CUT	FILL
25	9		
		44	22
23	15		
		41	31
SHEET TOTAL		85	53

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 73+50 TO STA. 74+00

HAM-74-0.00

GX130020.DWG 28 JUL 2003



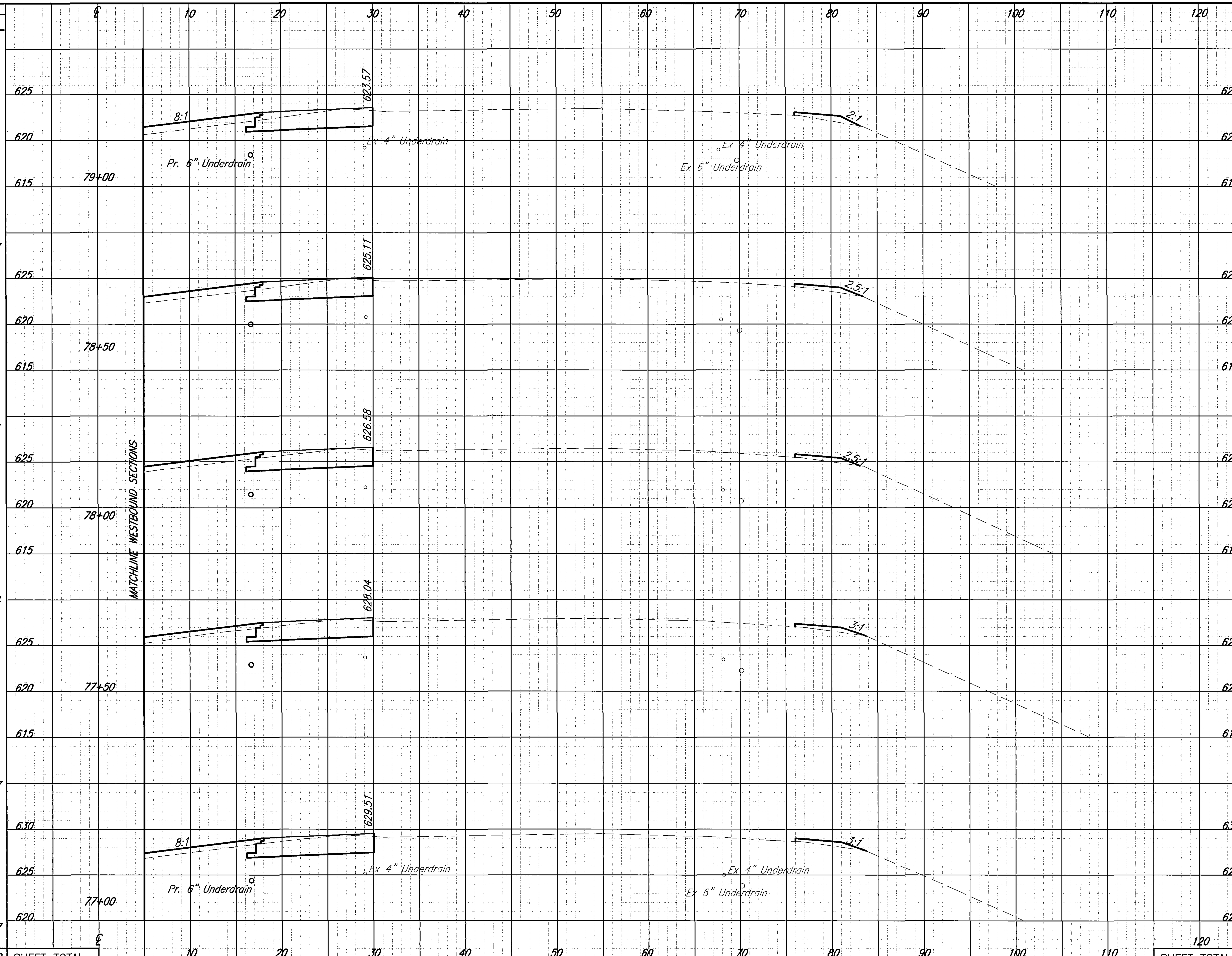
Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
76+50	21		24	11		
		117			44	22
76+00	21		24	13		
		119			44	24
75+50	22		24	13		
		119			45	21
75+00	21		25	10		
		117			45	17
74+50	21		24	8		
		119			45	16
SHEET TOTAL		591			223	100

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 74+50 TO STA. 76+50

HAM-74-0.00

0X131020.DWG 28 JUL 2003



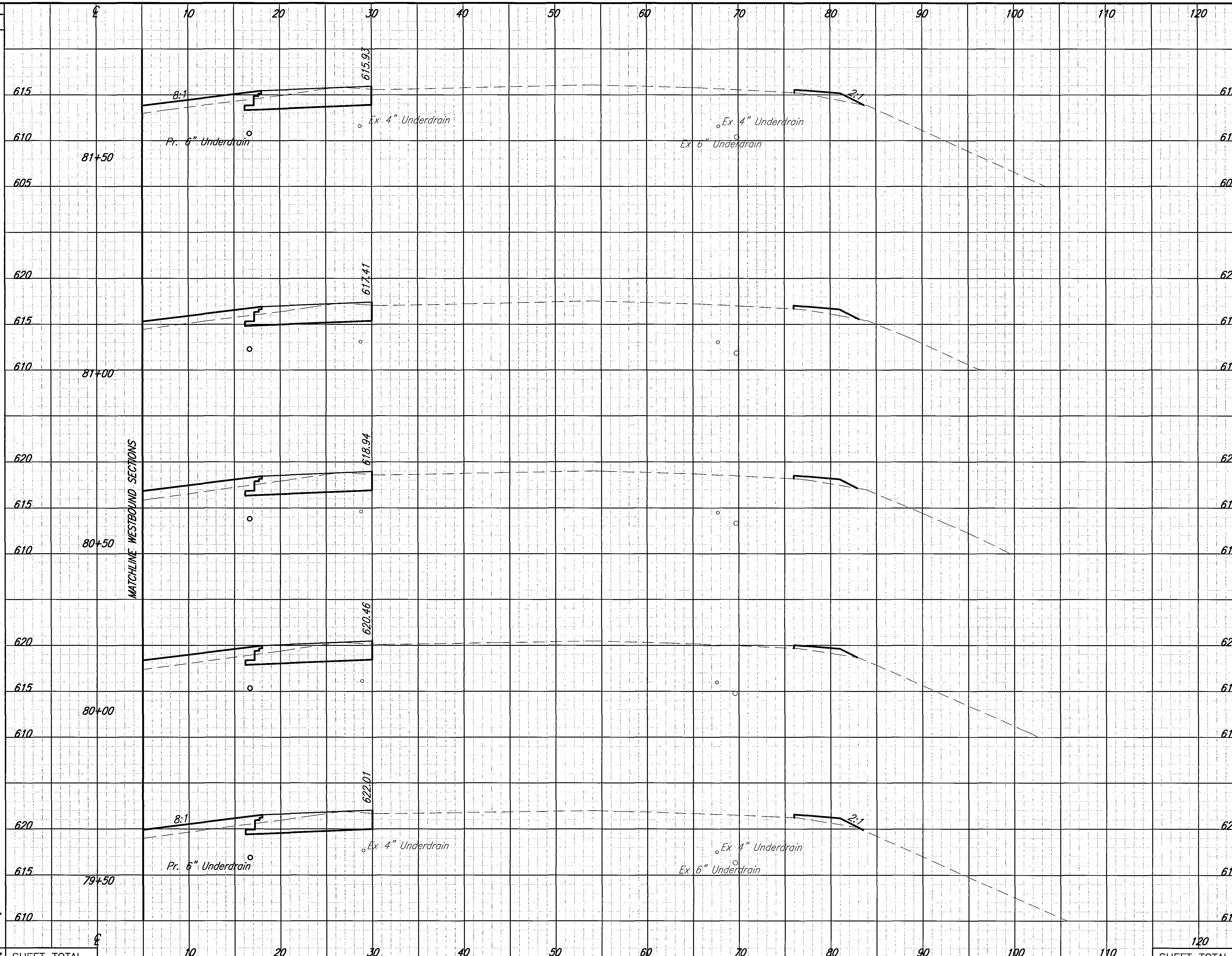
Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
79+00	21		23	14		
		117			43	25
78+50	21		23	13		
		114			44	22
78+00	20		24	11		
		114			44	20
77+50	21		24	11		
		117			44	20
77+00	21		24	11		
		117			44	20
SHEET TOTAL		579			219	107

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 77+00 TO STA. 79+00

HAM-74-0.00

GX132020.DWG 28 JUL 2003



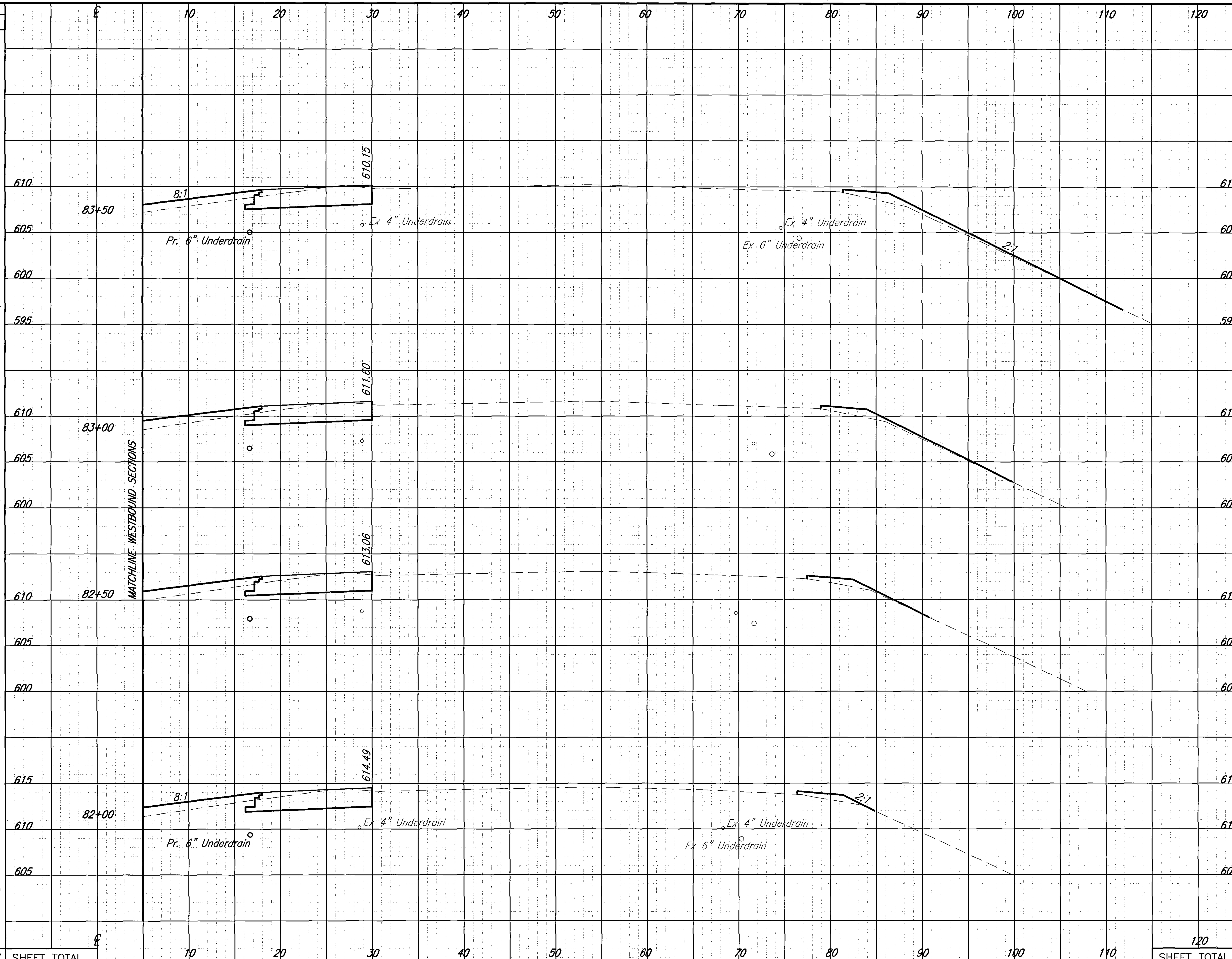
Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
81+50	21		23	14		
		114			43	26
81+00	20		23	14		
		111			43	27
80+50	20		23	15		
		111			42	28
80+00	20		22	15		
		114			41	28
79+50	21		22	15		
		117			42	27
SHEET TOTAL		567			211	136

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 79+50 TO STA. 81+50

HAM–74–0.00

GX133020.DWG 28 JUL 2003



STA.	SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
83+50	47		24	20		
		231			44	35
83+00	36		24	18		
		175			44	31
82+50	27		24	16		
		136			44	29
82+00	22		23	15		
		119			43	27
SHEET TOTAL		661			175	122

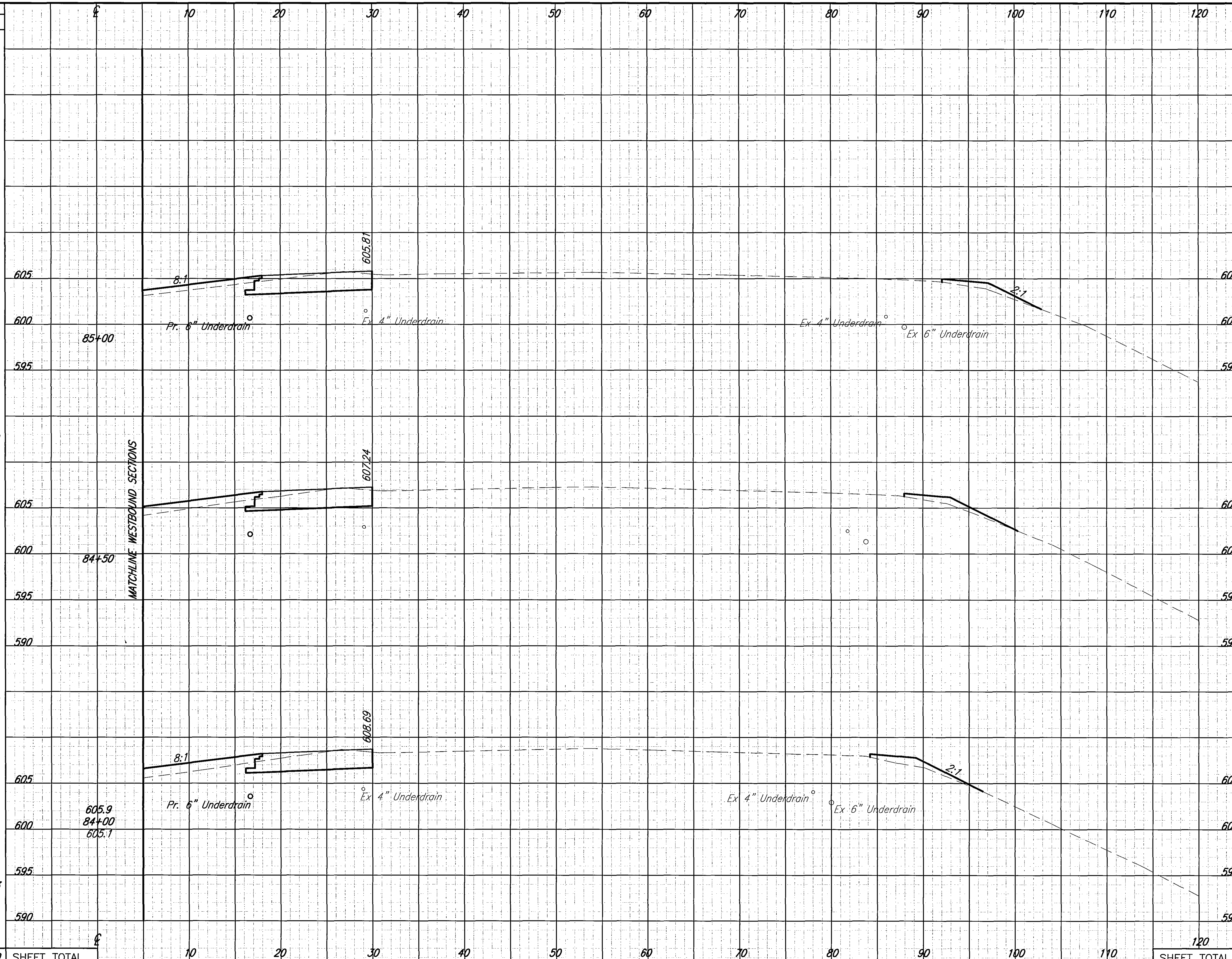
CROSS SECTIONS – EASTBOUND STA. 82+00 TO STA. 83+50

CALCULATED SEB CHECKED GAB

HAM-74-0.00

GX134020.DWG 19 AUG 2003

SEEDING END WIDTH	SEEDING SQ. YDS.	Station	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
25		85+00	24	13		
	142				44	27
26		84+50	24	16		
	144				44	31
26		84+00	23	18		
	203				44	35
	489	SHEET TOTAL			132	93



CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 84+00 TO STA. 85+00

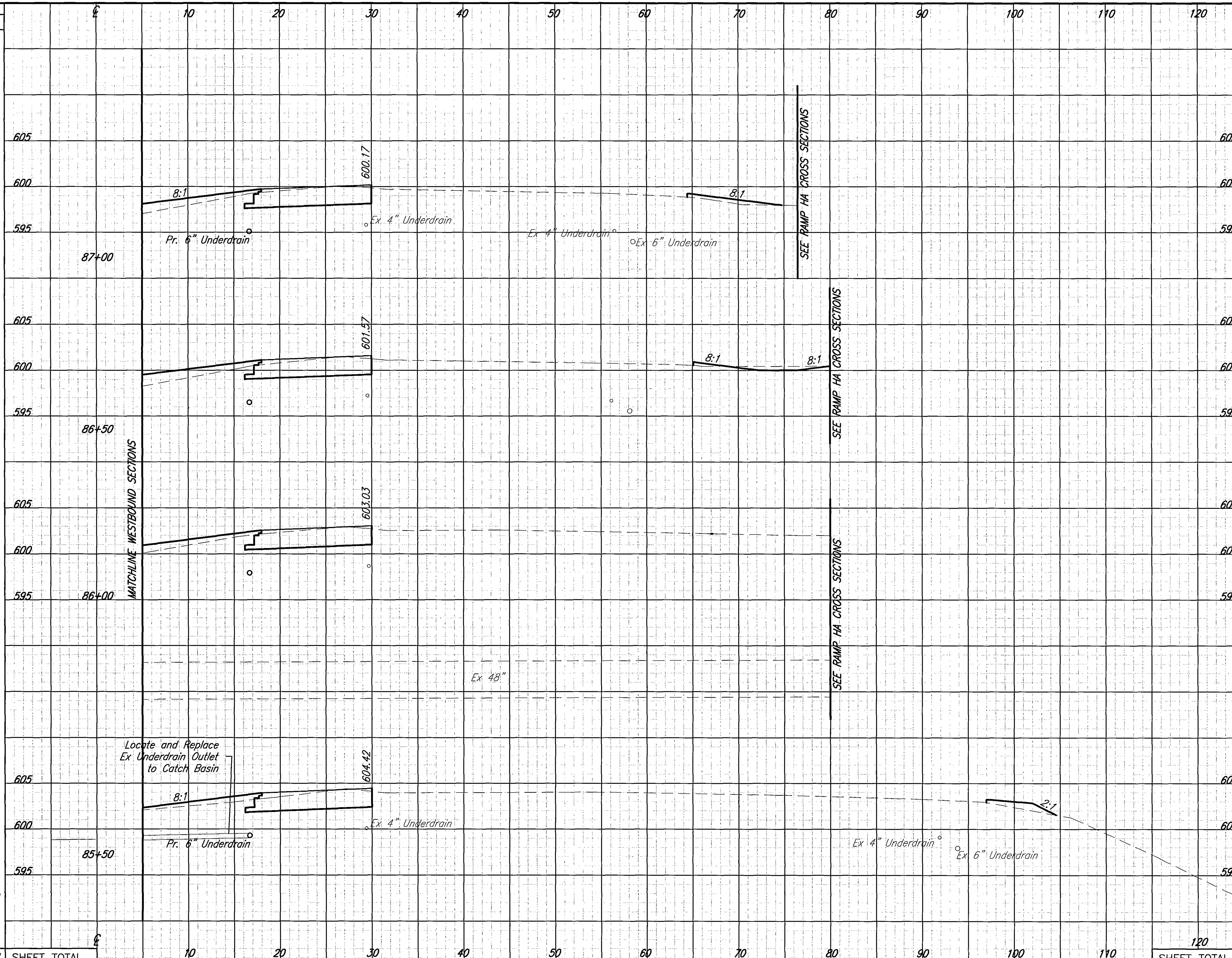
HAM-74-0.00

GX135020.DWG 28 JUL 2003

CROSS SECTIONS – EASTBOUND
STA. 85+50 TO STA. 87+00

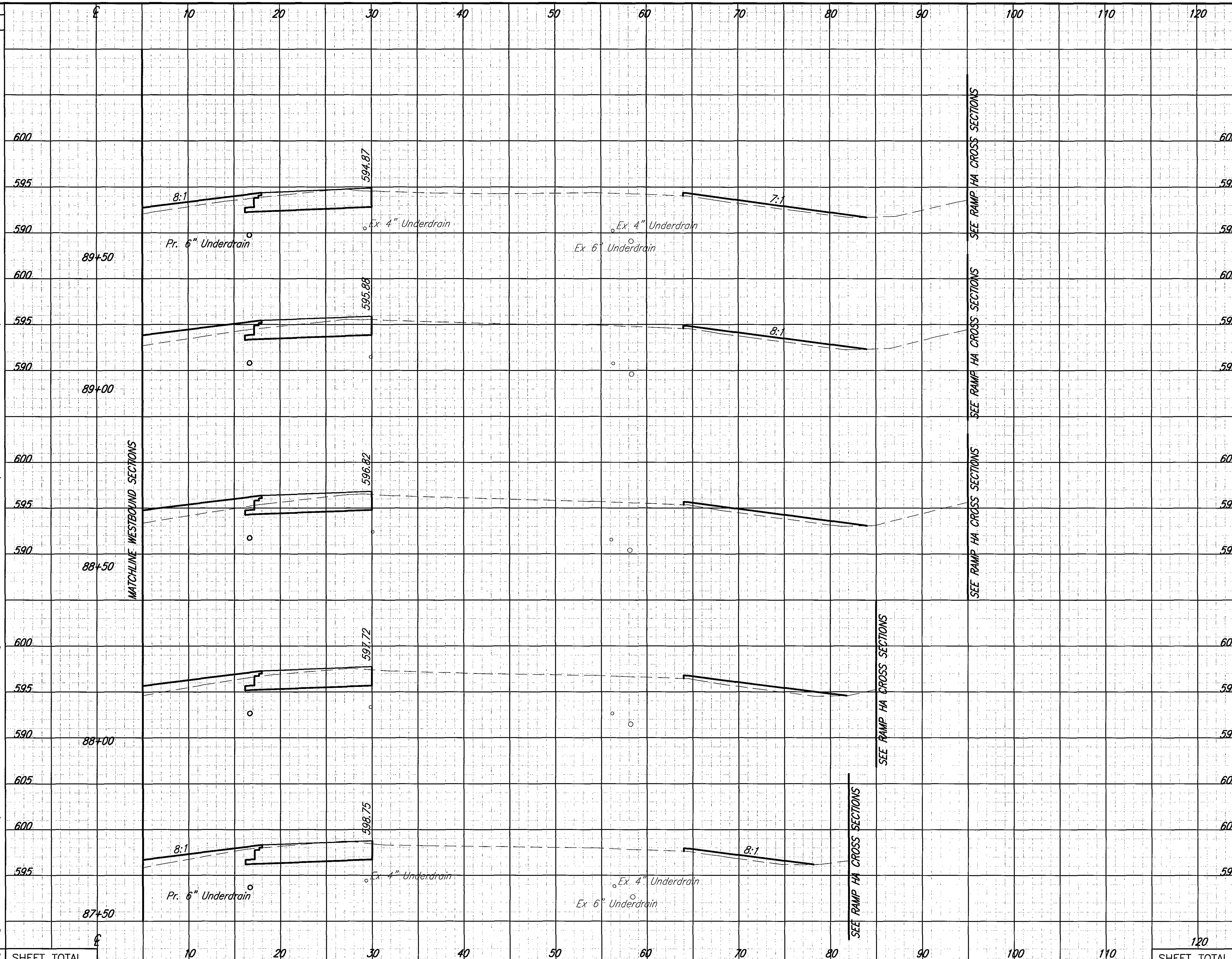
HAM-74-0.00

CALCULATED SEB — CHECKED GAB



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
87+00	23		25	13		
		142			49	24
86+50	28		28	13		
		114			49	19
86+00	13		25	8		
		86			45	18
85+50	18		24	11		
		119			44	22
SHEET TOTAL		461			187	83

0X136020.DWG 28 JUL 2003



Seeding End Width	Seeding Sq. Yds.	Station	End Area Cut	End Area Fill	Volume Cut	Volume Fill
33		89+50	25	13		
	183				43	30
33		89+00	21	19		
	183				38	39
33		88+50	20	23		
	178				41	38
31		88+00	24	18		
	161				46	29
27		87+50	26	13		
	139				47	24
	844	SHEET TOTAL			215	160

CALCULATED SEB
CHECKED GAB

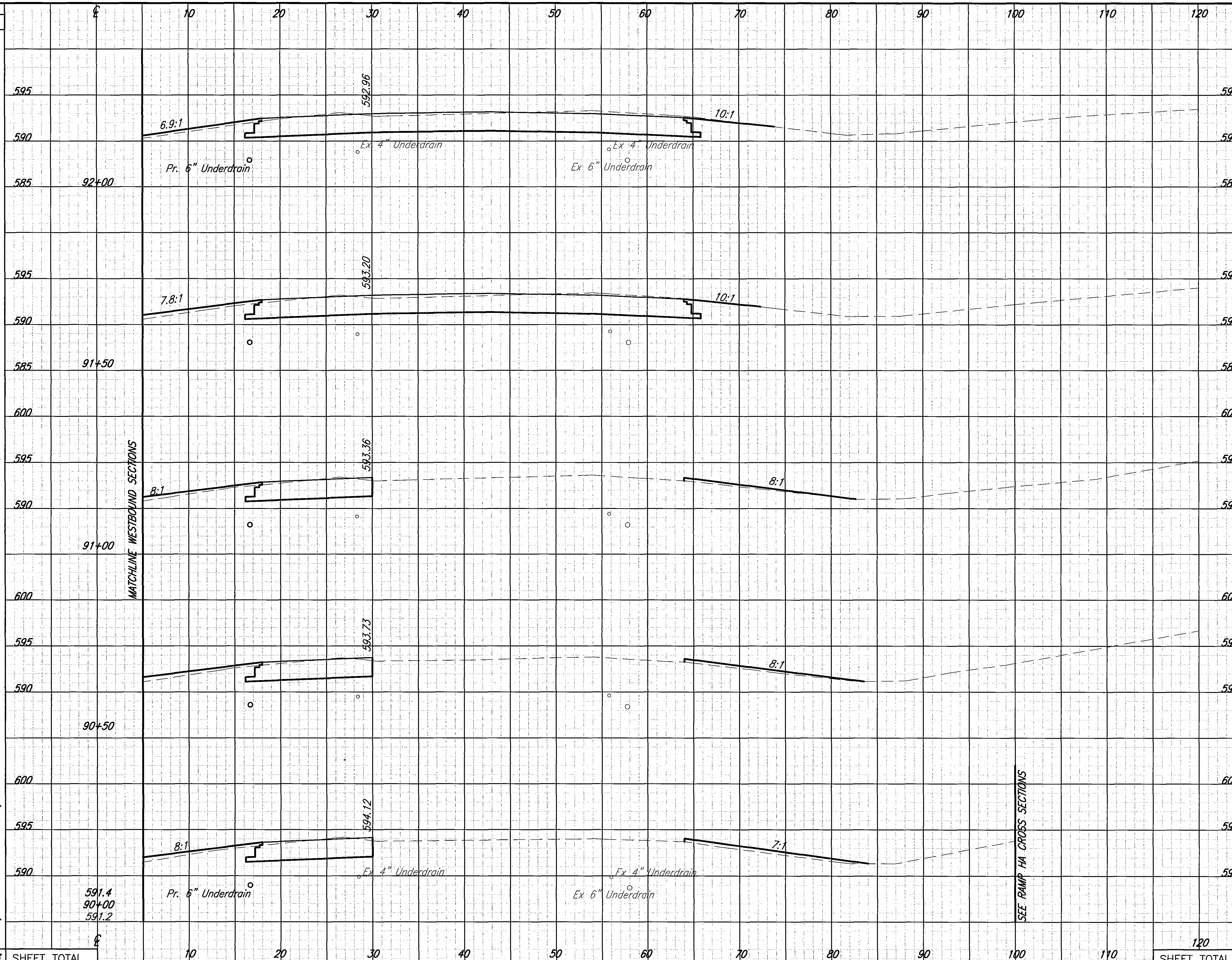
CROSS SECTIONS – EASTBOUND
STA. 87+50 TO STA. 89+50

HAM-74-0.00

0X137020.DWG 24 JUL 2003

CROSS SECTIONS – EASTBOUND STA. 90+00 TO STA. 92+00

HAM-74-0.00

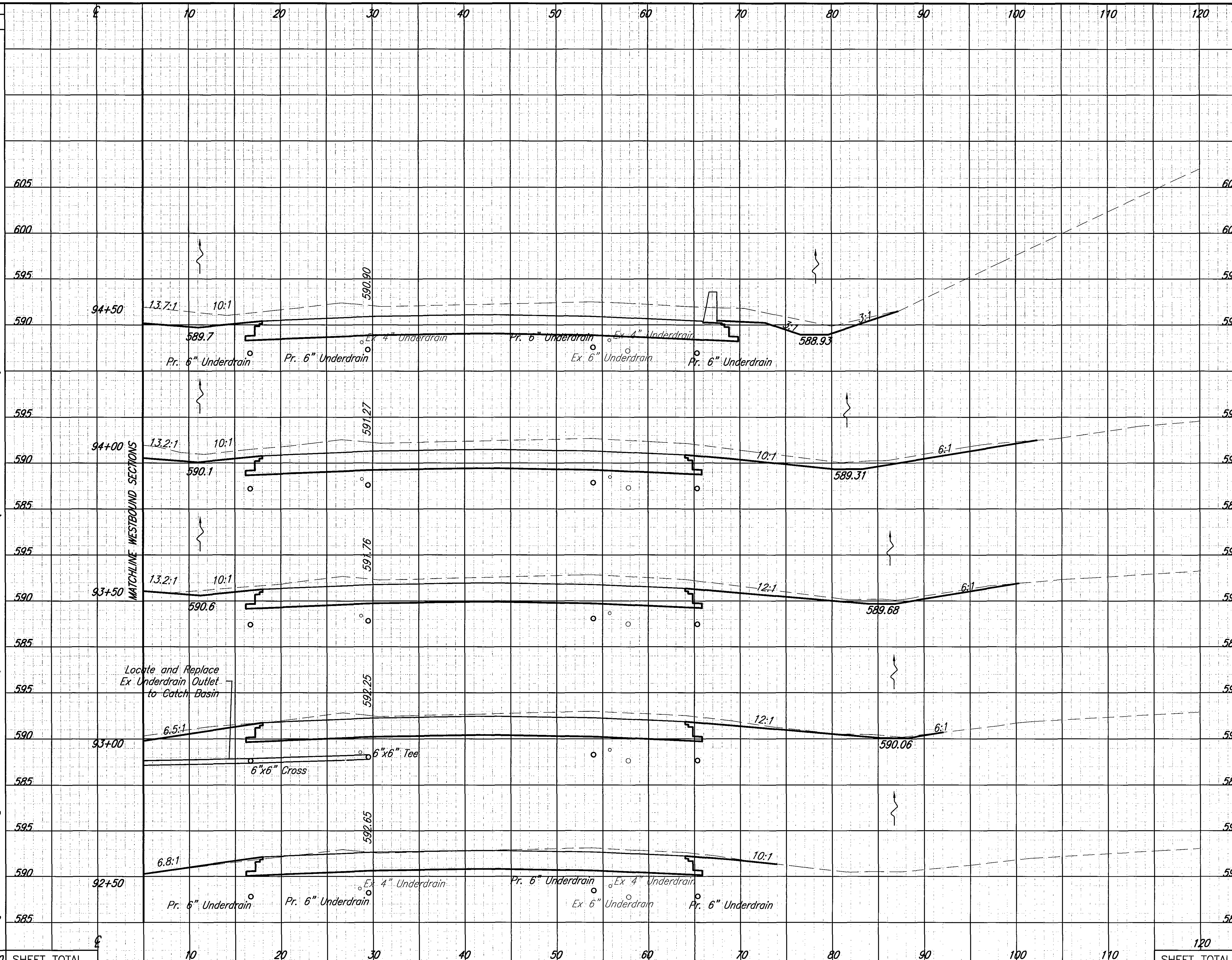


Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
92+00	23		26	12		
		178			48	19
91+50	21		26	9		
		178			49	16
91+00	32		27	8		
		181			49	17
90+50	33		26	10		
		183			49	20
591.4 90+00 591.2	33		27	12		
		183			48	23
SHEET TOTAL		903			243	95

CALCULATED SEB
CHECKED GAB

GX138020.DWG 28 JUL 2003

Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
94+50	33		207	4		
		236			367	7
94+00	52		189	4		
		283			319	7
93+50	50		155	4		
		244			264	7
93+00	38		130	4		
		169			226	8
92+50	23		114	5		
		128			130	16
SHEET TOTAL		1060			1306	45



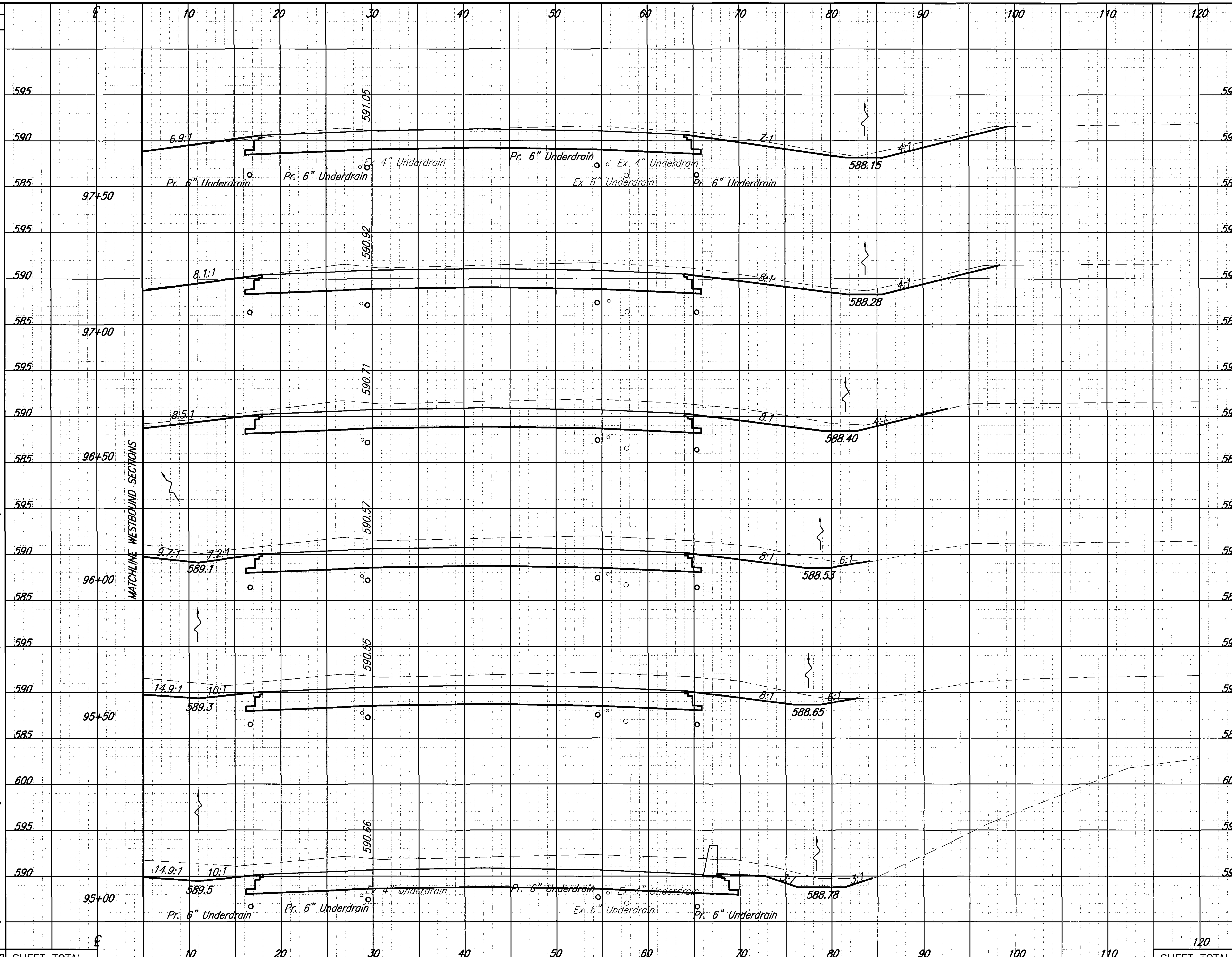
CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 92+50 TO STA. 94+50

HAM-74-0.00

274
421

GX139020.DWG 24 JUL 2003



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
97+50	49		121	5		
		269			244	8
97+00	48		142	4		
		250			284	7
96+50	42		165	4		
		206			327	7
96+00	32		188	4		
		178			360	7
95+50	32		201	4		
		172			366	7
95+00	30		194	4		
		175			371	7
SHEET TOTAL		1250			1952	43

CALCULATED SEB CHECKED GAB

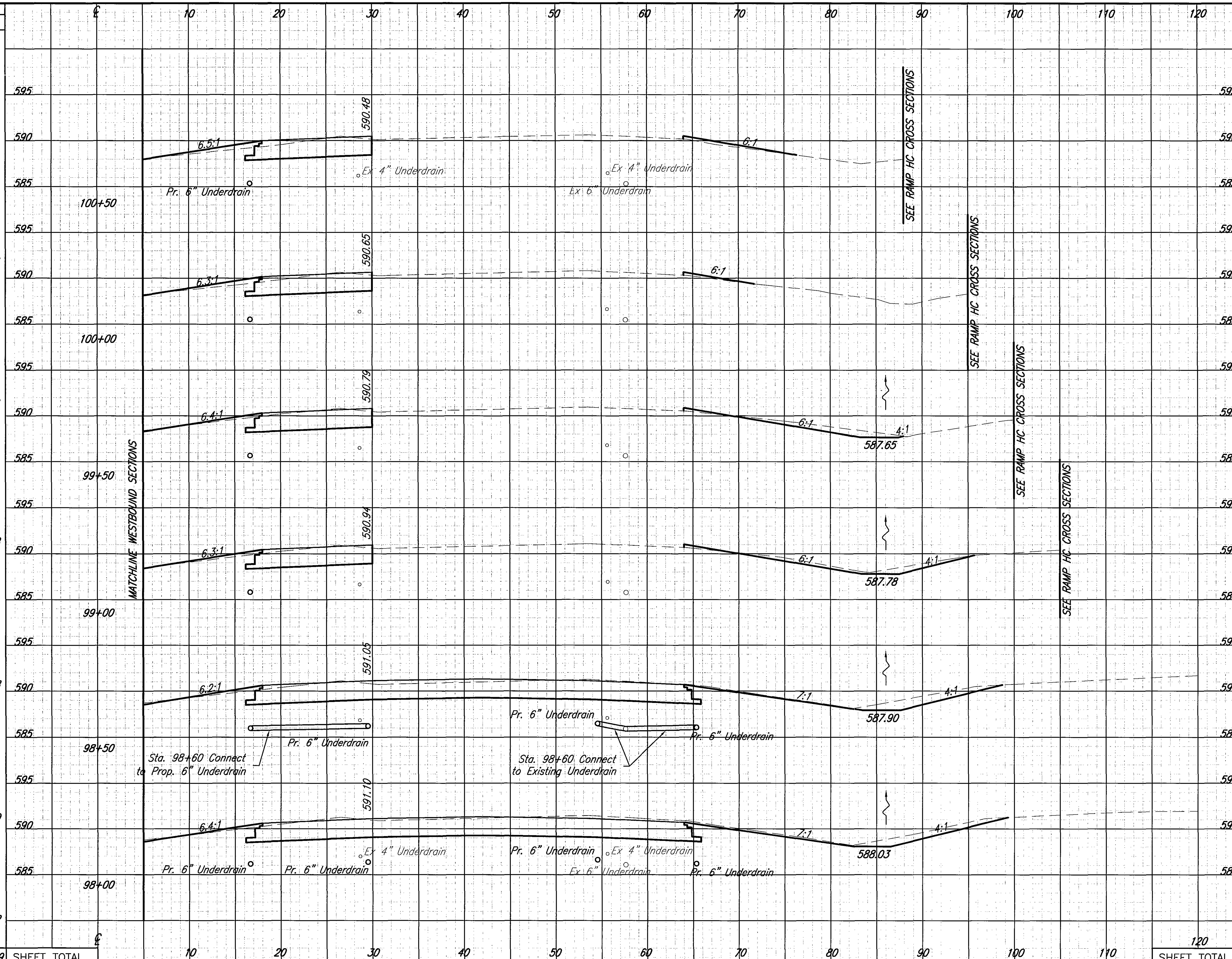
CROSS SECTIONS – EASTBOUND STA. 95+00 TO STA. 97+50

HAM-74-0.00

275
421

0X140020.DWG 24 JUL 2003

CROSS SECTIONS – EASTBOUND
STA. 98+00 TO STA. 100+50



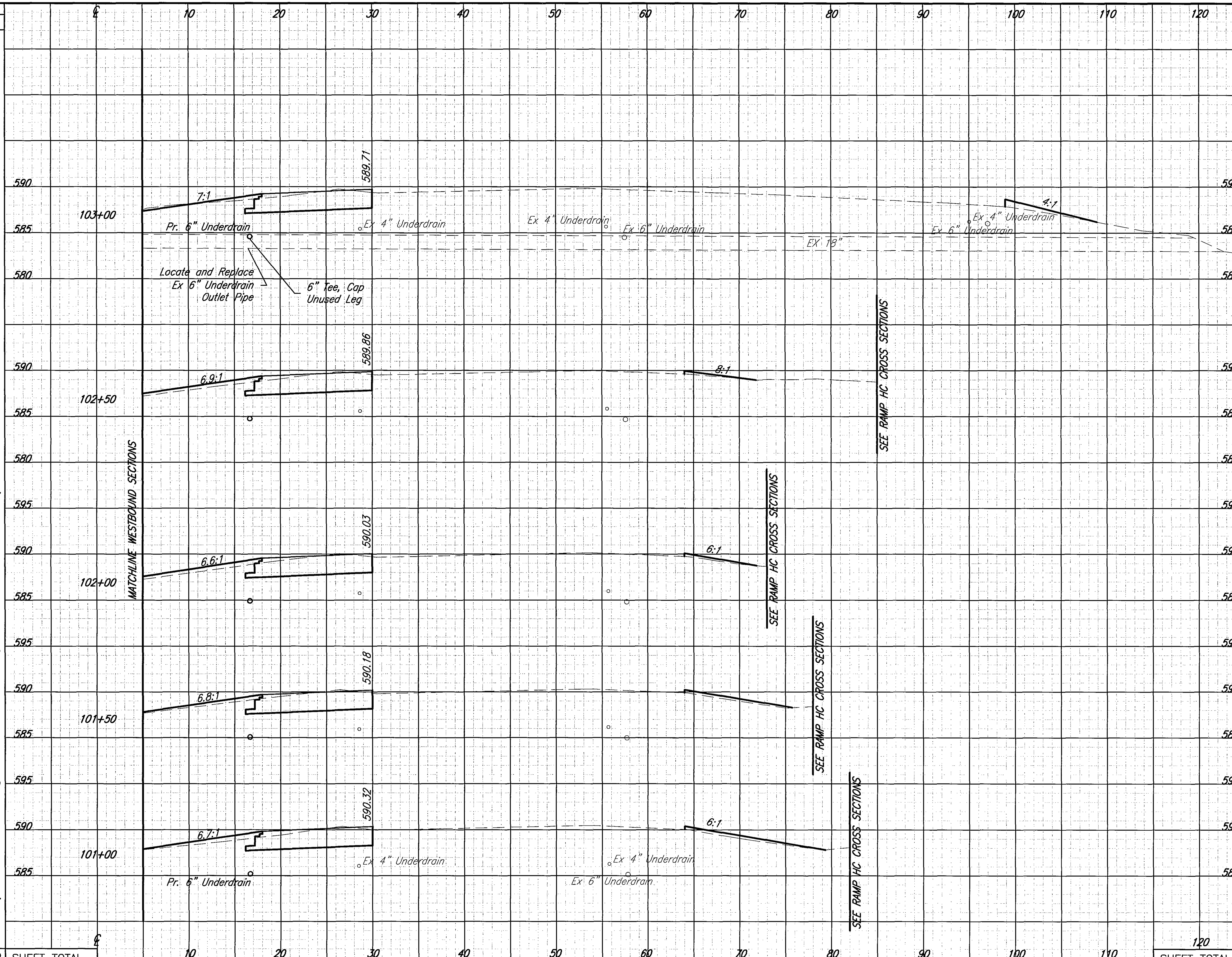
Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
100+50	26		24	7		
		131			45	11
100+00	21		25	5		
		161			54	8
99+50	37		33	4		
		228			62	7
99+00	45		34	4		
		258			128	8
98+50	48		104	5		
		269			200	6
98+00	49		112	2		
		272			216	6
SHEET TOTAL		1319			705	46

CALCULATED SEB
CHECKED GAB

HAM-74-0.00

GX141020.DWG 24 JUL 2003

CROSS SECTIONS – EASTBOUND
STA. 101+00 TO STA. 103+00



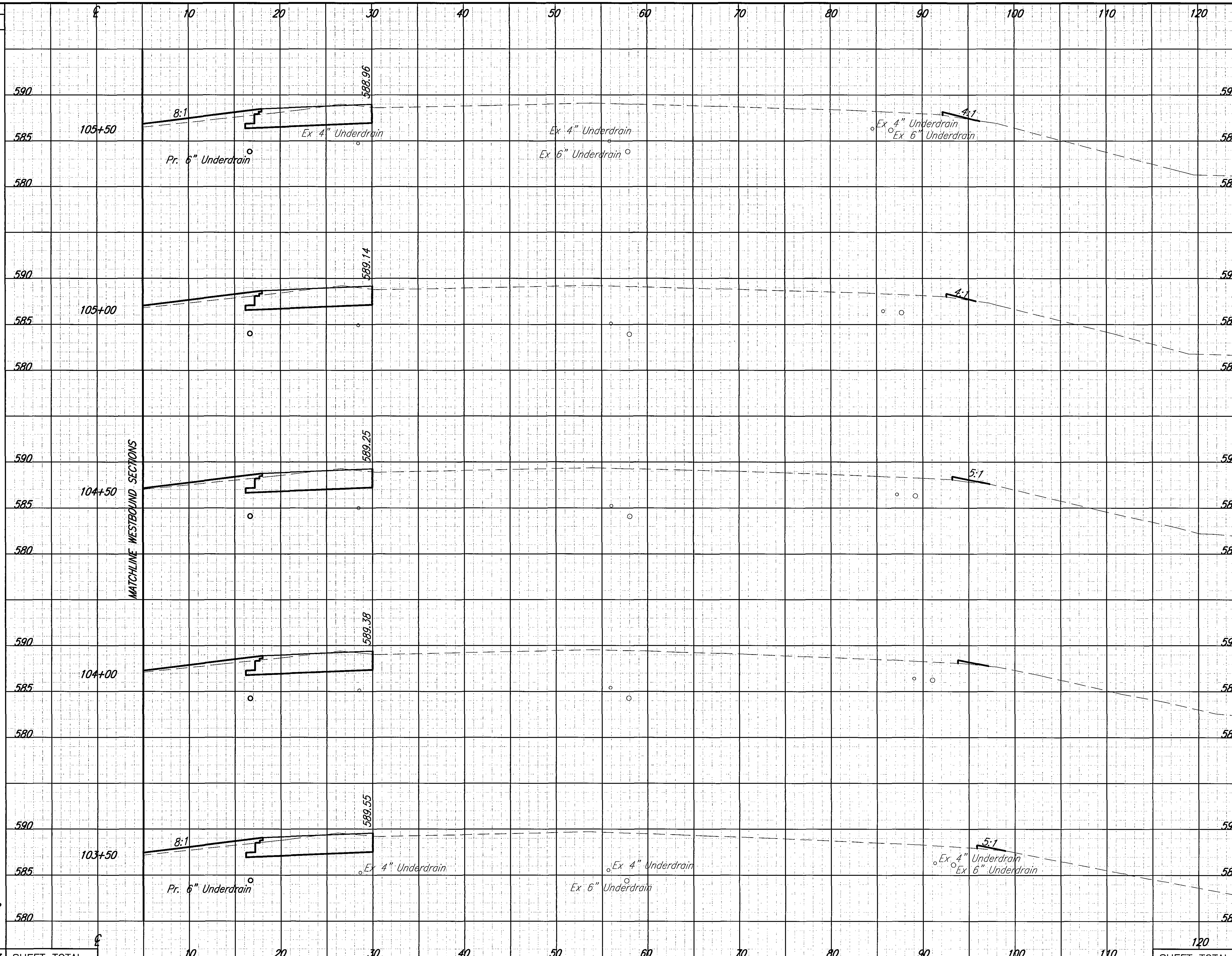
Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
103+00	23		25	7		
		122			46	13
102+50	21		25	7		
		117			46	13
102+00	21		25	7		
		128			47	13
101+50	25		26	7		
		150			47	15
101+00	29		25	9		
		153			45	15
SHEET TOTAL		670			231	69

CALCULATED SEB
CHECKED GAB

HAM-74-0.00

0X142020.DWG 24 JUL 2003

CROSS SECTIONS – EASTBOUND
STA. 103+50 TO STA. 105+50



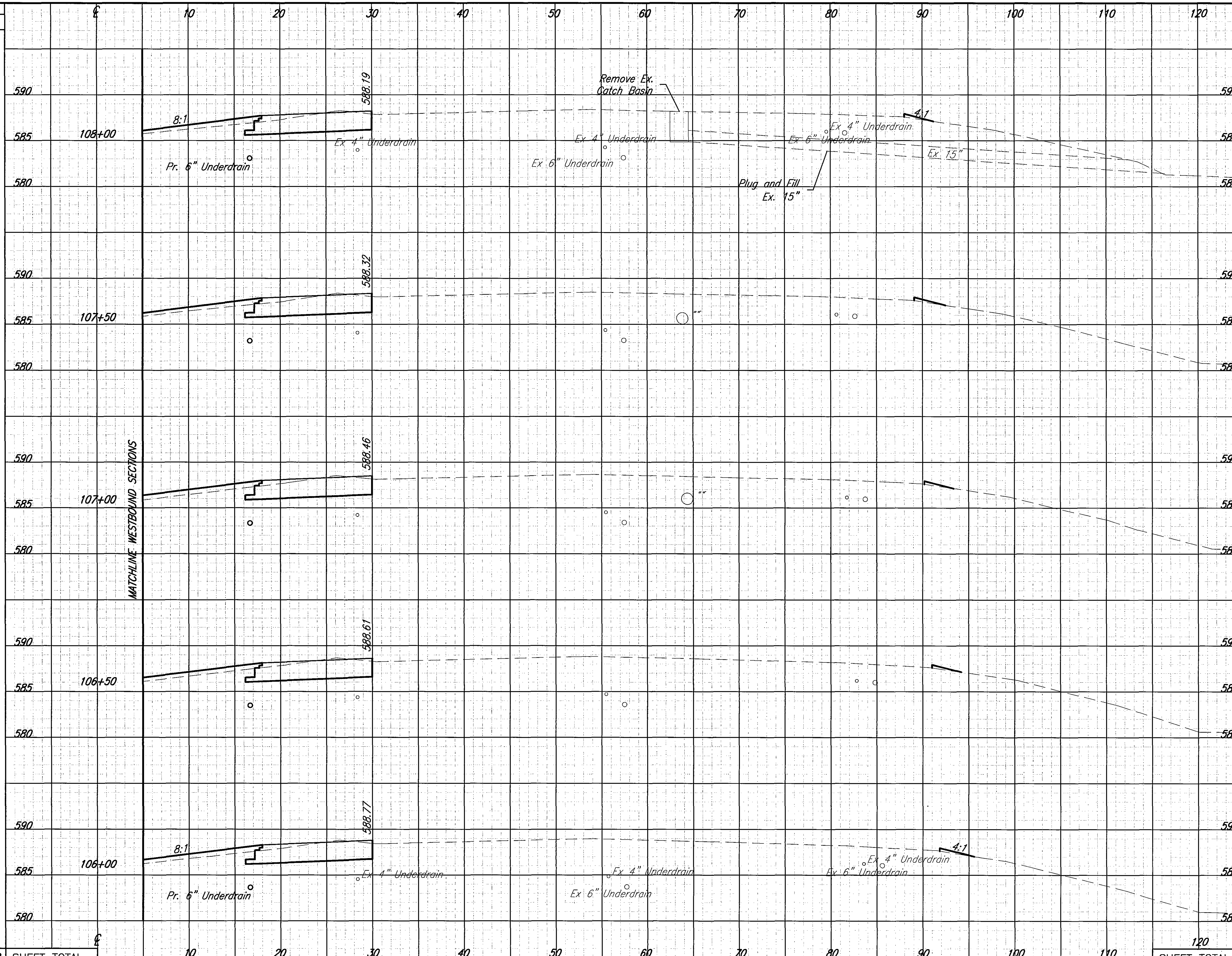
Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
105+50	17		25	7		
		92			47	12
105+00	16		26	6		
		92			48	10
104+50	17		26	5		
		92			48	9
104+00	16		26	5		
		89			47	10
103+50	16		25	6		
		108			46	12
SHEET TOTAL		473			236	53

CALCULATED SEB
CHECKED GAB

HAM-74-0.00

GX143020.DWG 24 JUL 2003

CROSS SECTIONS – EASTBOUND
STA. 106+00 TO STA. 108+00



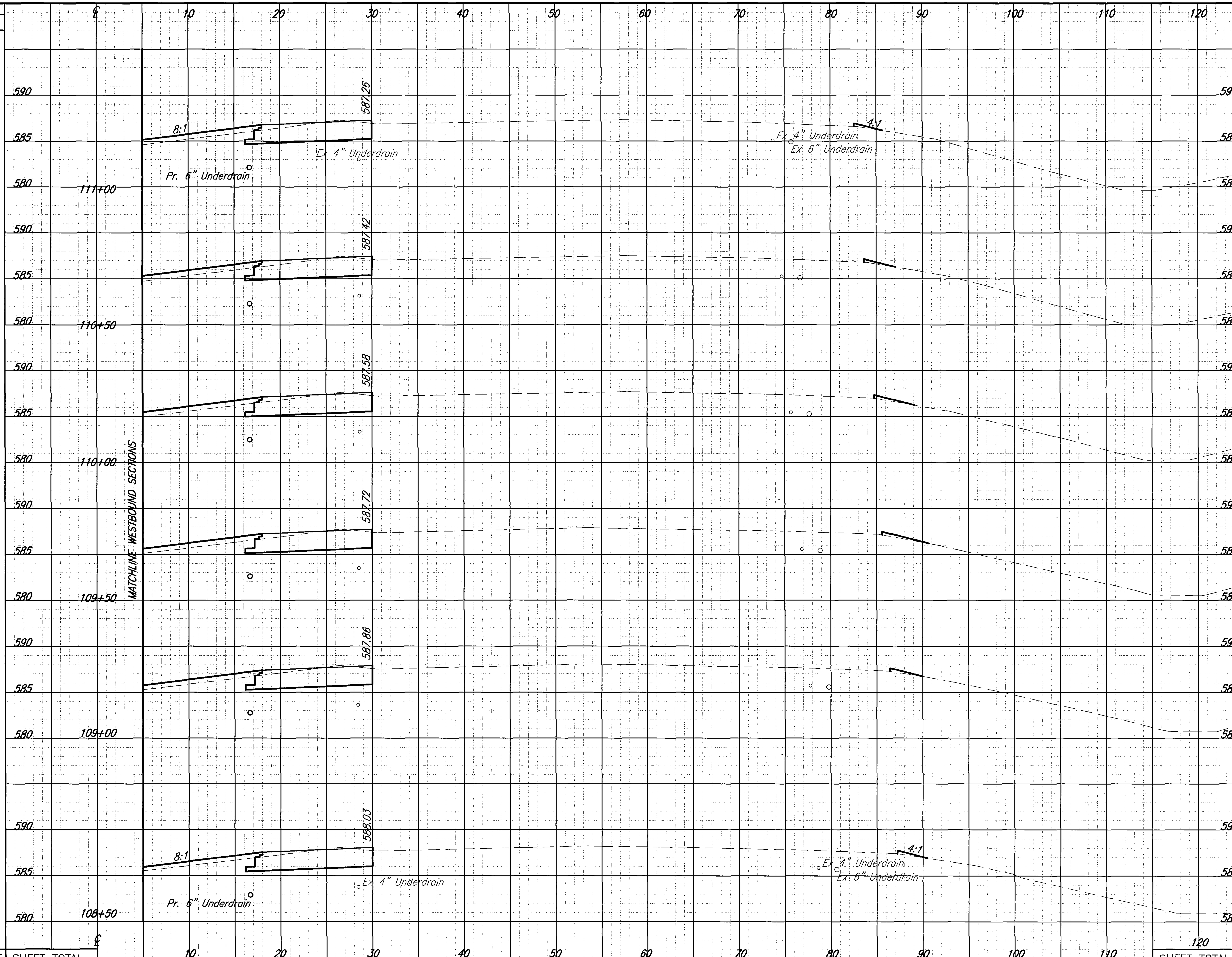
Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
108+00	16		25	8		
		92			46	14
107+50	17		25	7		
		92			46	14
107+00	16		25	8		
		89			46	14
106+50	16		25	7		
		92			46	14
106+00	17		25	8		
		94			46	14
SHEET TOTAL		459			230	70

CALCULATED SEB
CHECKED GAB

HAM-74-0.00

0X144020.DWG 24 JUL 2003

Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
111+00	16		25	8		
		92			46	16
110+50	17		25	9		
		97			46	16
110+00	18		25	8		
		100			46	16
109+50	18		25	9		
		97			46	16
109+00	17		25	8		
		86			46	14
108+50	14		25	7		
		83			46	14
SHEET TOTAL		555			276	92



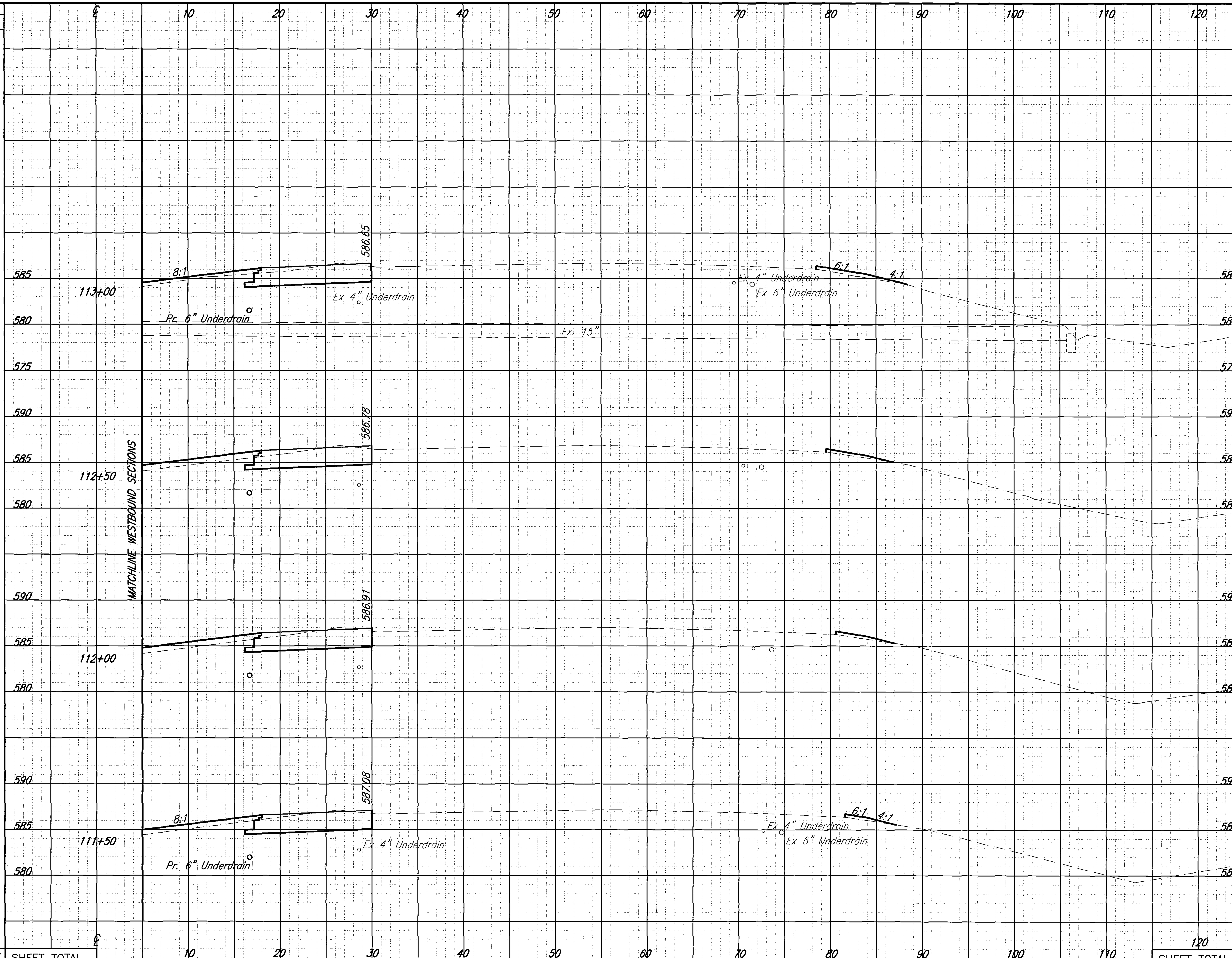
CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 108+50 TO STA. 111+00

HAM-74-0.00

0X145020.DWG 24 JUL 2003

CROSS SECTIONS – EASTBOUND
STA. 111+50 TO STA. 113+00

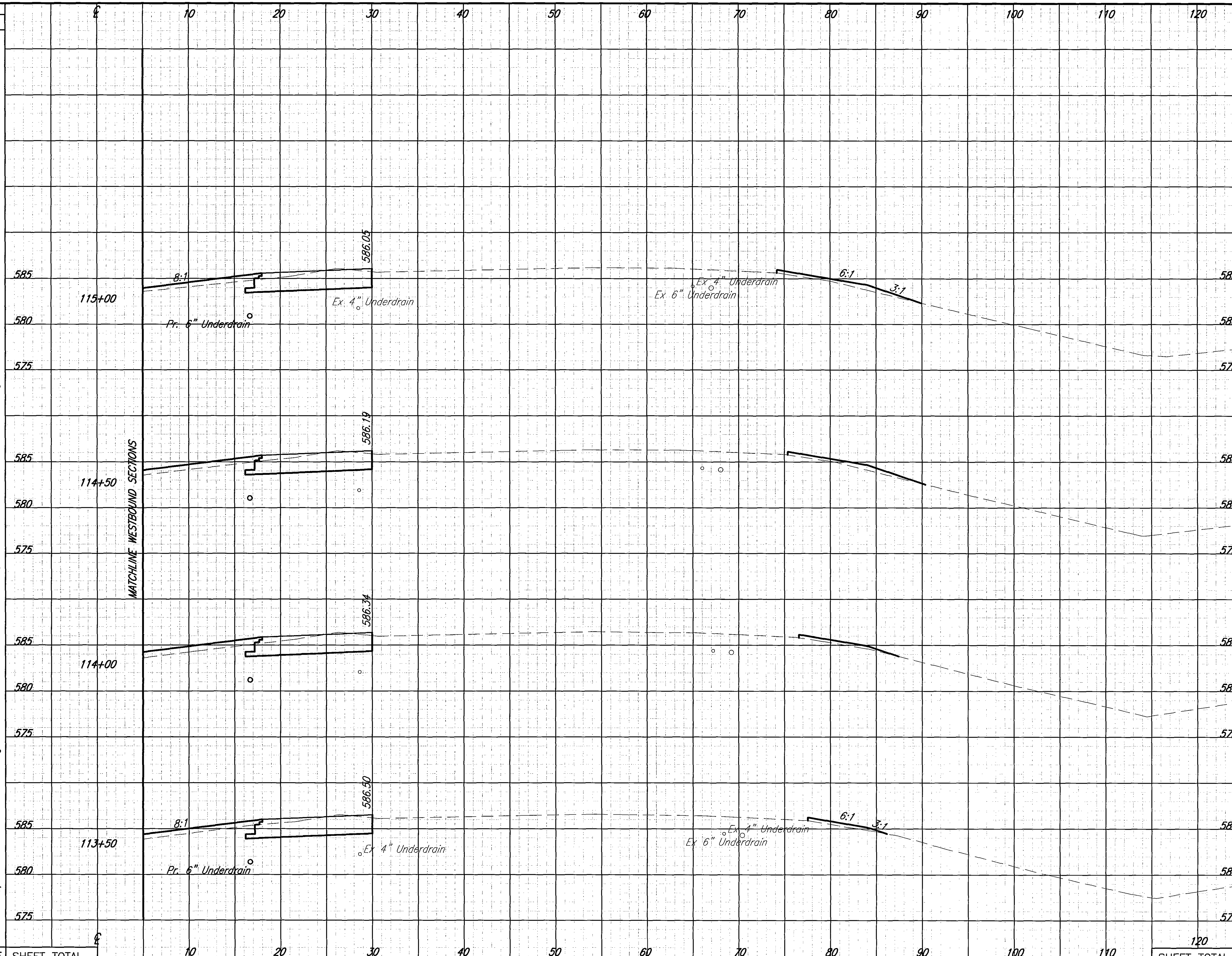


Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
113+00	23		25	9		
		122			45	19
112+50	21		24	11		
		114			46	19
112+00	20		25	10		
		108			47	18
111+50	19		26	9		
		97			47	16
SHEET TOTAL		441			185	72

CALCULATED SEB CHECKED GAB

HAM-74-0.00

0X146020.DWG 24 JUL 2003



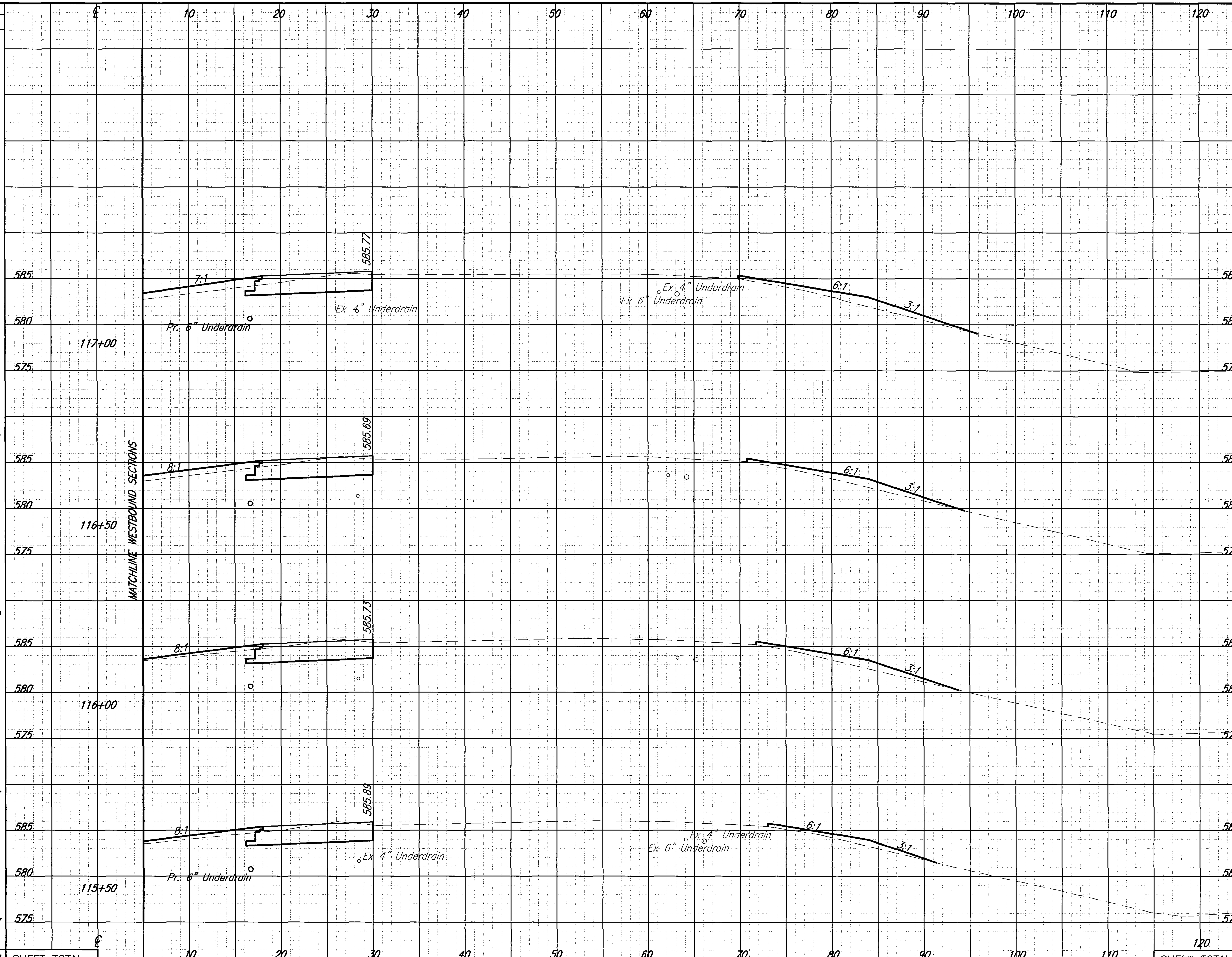
Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
115+00	29		24	12		
		158			44	23
114+50	28		24	13		
		144			44	23
114+00	24		24	12		
		128			45	20
113+50	22		25	10		
		125			46	18
SHEET TOTAL		555			179	84

CROSS SECTIONS – EASTBOUND
STA. 113+50 TO STA. 115+00

HAM-74-0.00

CALCULATED SEB
CHECKED GAB

0X147020.DWG 24 JUL 2003



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
117+00	39		21	24		
		211			42	42
116+50	37		24	21		
		200			46	35
116+00	35		26	17		
		183			47	29
115+50	31		25	14		
		167			45	24
SHEET TOTAL		761			180	130

CALCULATED SEB
CHECKED GAB

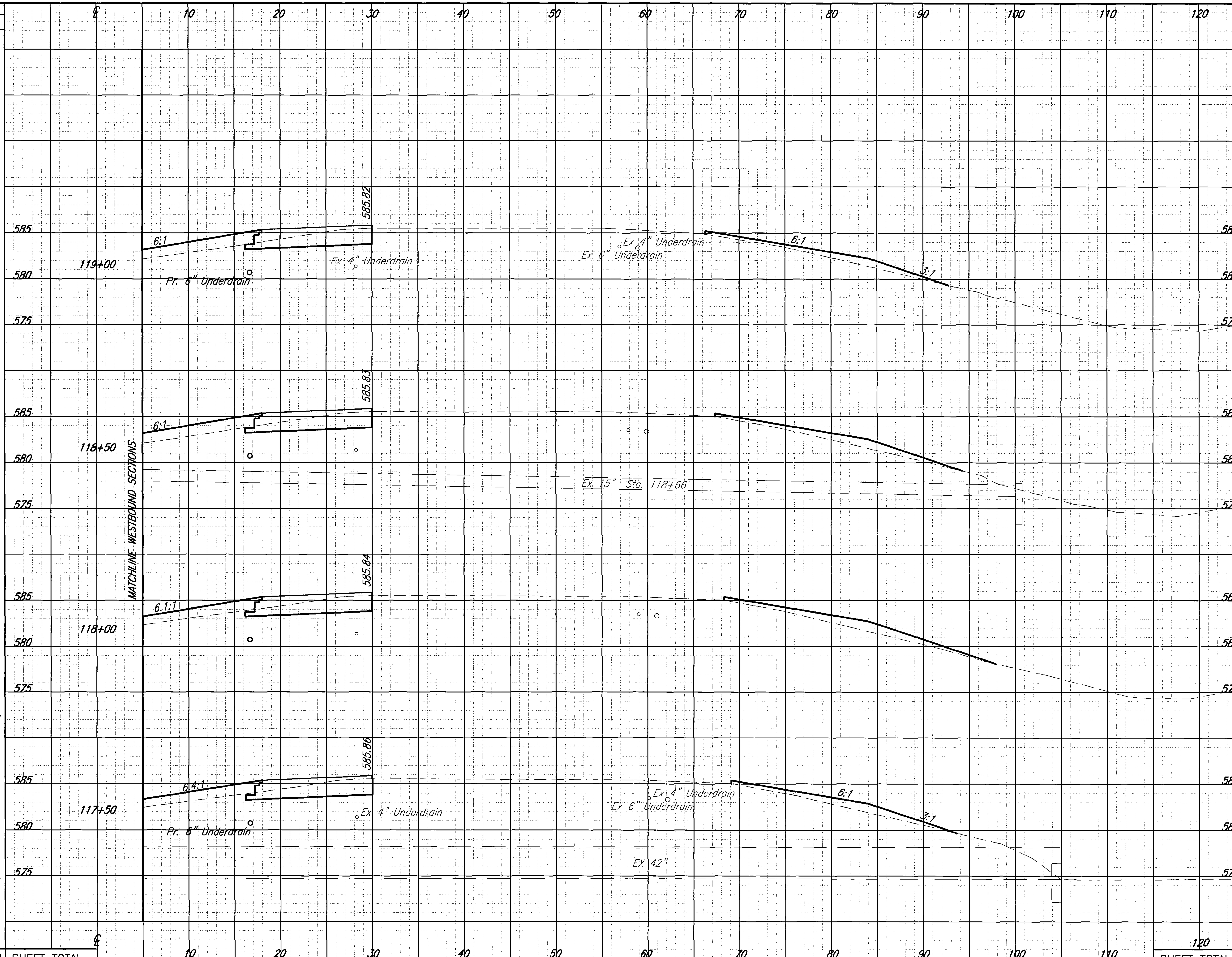
CROSS SECTIONS – EASTBOUND
STA. 115+50 TO STA. 117+00

HAM-74-0.00

GX148020.DWG 24 JUL 2003

CROSS SECTIONS – EASTBOUND
STA. 117+50 TO STA. 119+00

Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
119+00	39		17	26		
		219			32	51
118+50	40		18	29		
		231			33	55
118+00	43		18	30		
		225			33	52
117+50	38		18	26		
		214			36	46
SHEET TOTAL		889			134	204



CALCULATED SEB
CHECKED GAB

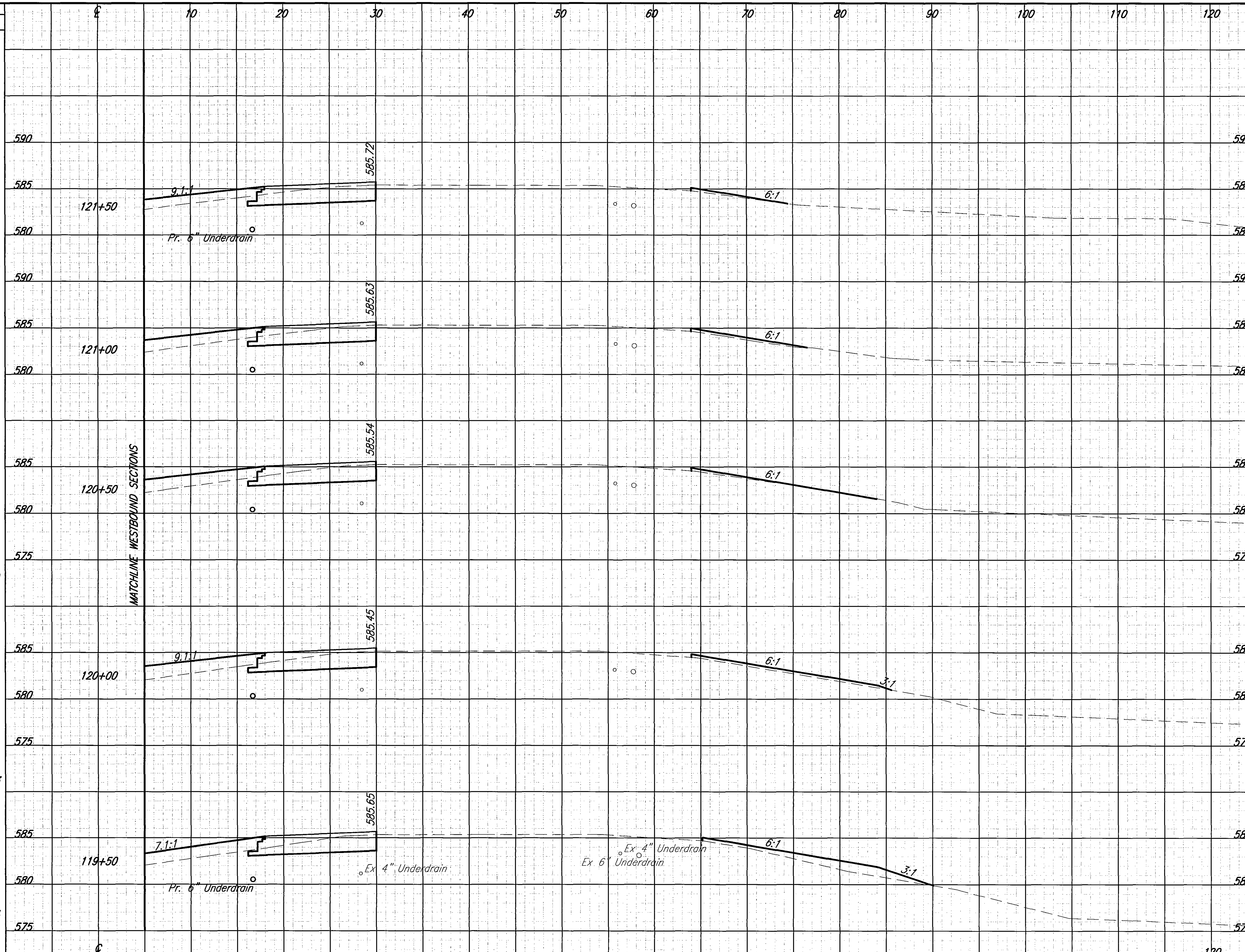
HAM-74-0.00

284
421

0X149020.DWG 24 JUL 2003

CROSS SECTIONS – EASTBOUND
STA. 119+50 TO STA. 121+50

Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
121+50	24		21	14		
		139			38	30
121+00	26		20	18		
		164			36	33
120+50	33		19	18		
		189			35	37
120+00	35		19	22		
		203			34	49
119+50	38		18	31		
		214			32	53
SHEET TOTAL		909			175	202

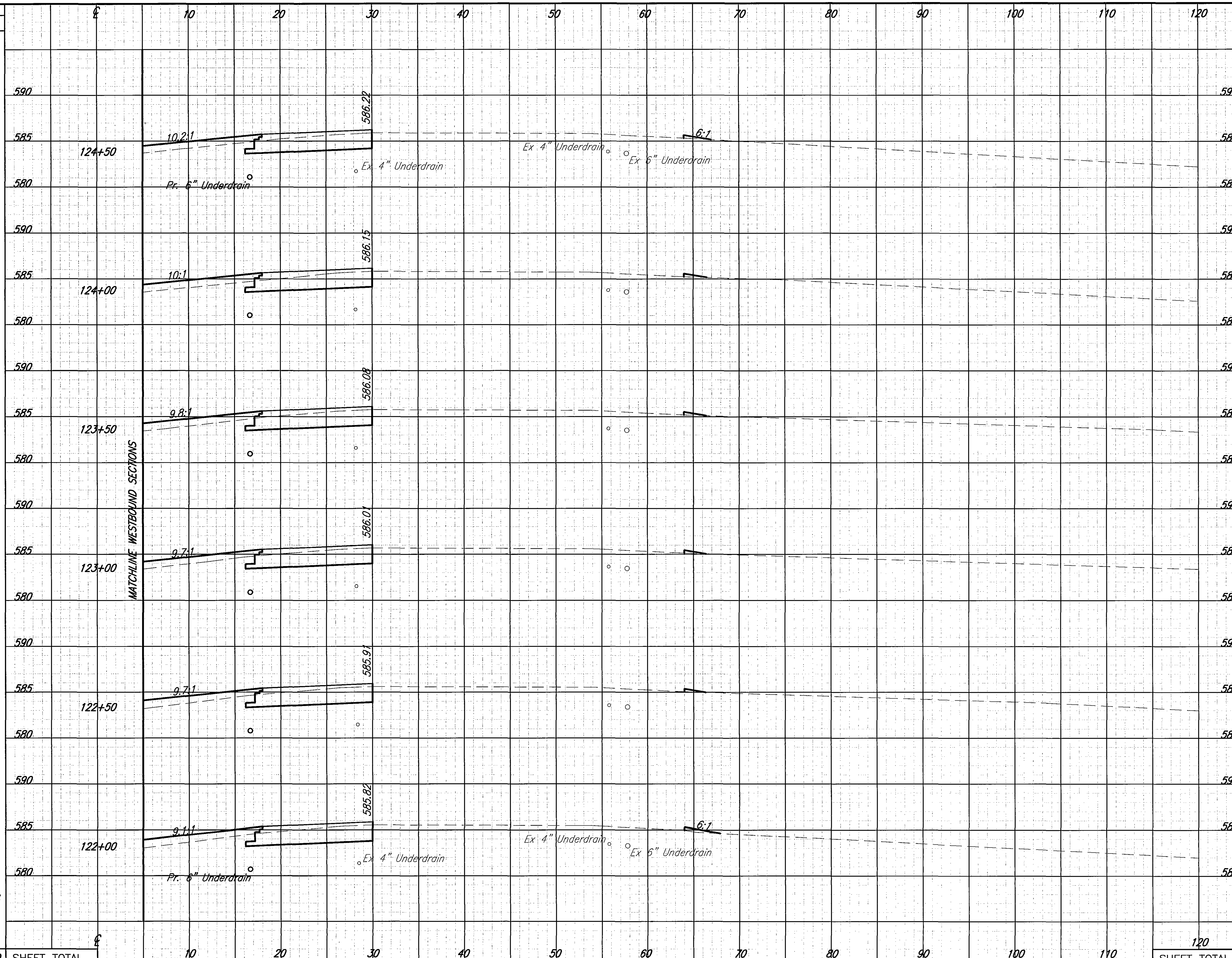


CALCULATED SEB
CHECKED GAB

HAM-74-0.00

GX150020.DWG 24 JUL 2003

Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
124+50	16		21	11		
		89			39	20
124+00	16		21	11		
		89			39	20
123+50	16		21	11		
		86			40	19
123+00	15		22	10		
		83			41	19
122+50	15		22	11		
		89			41	20
122+00	17		22	11		
		114			40	23
SHEET TOTAL		550			240	121



CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 122+00 TO STA. 124+50

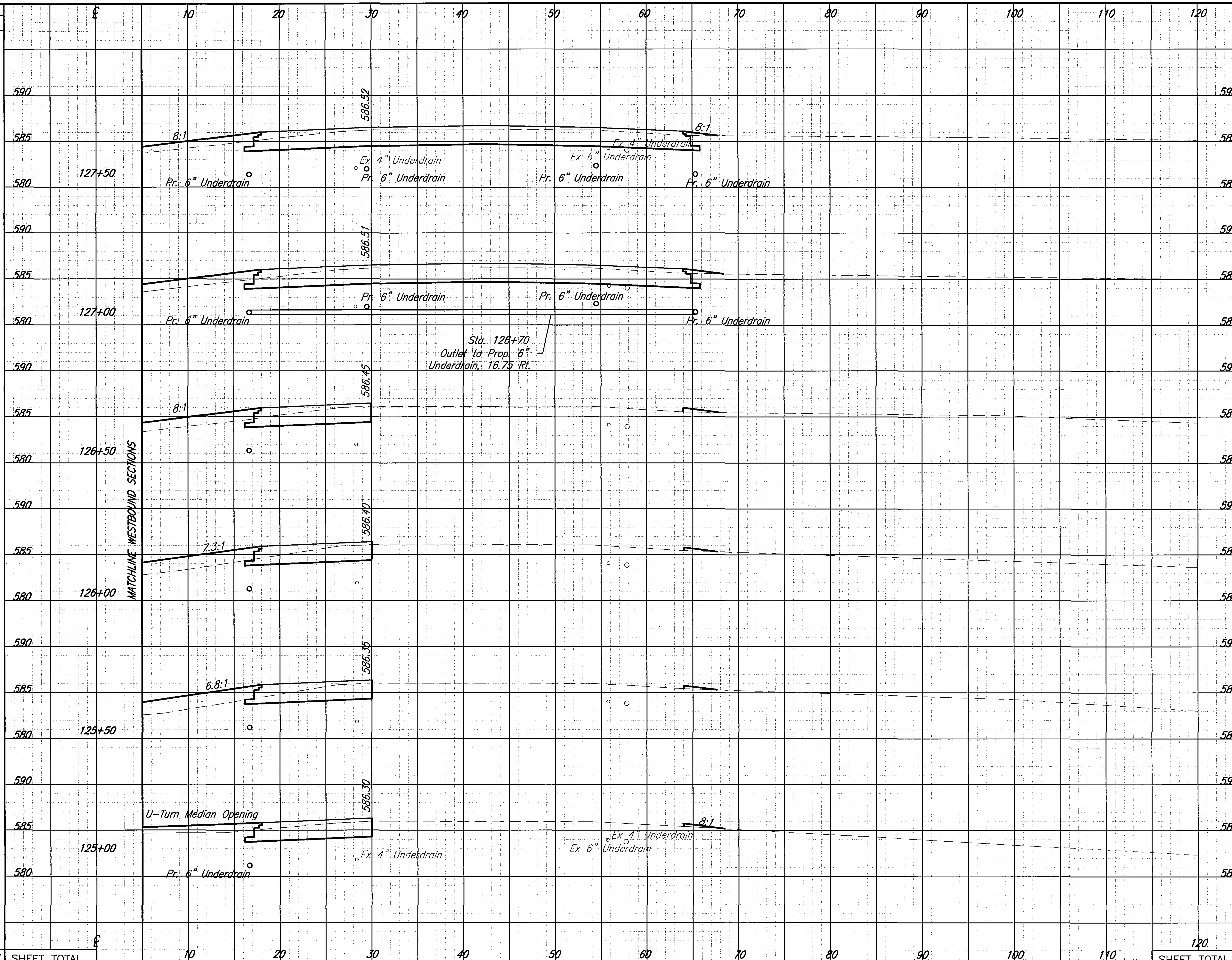
HAM–74–0.00

6X151020.DWG 24 JUL 2003

CROSS SECTIONS – EASTBOUND STA. 125+00 TO STA. 127+50

HAM-74-0.00

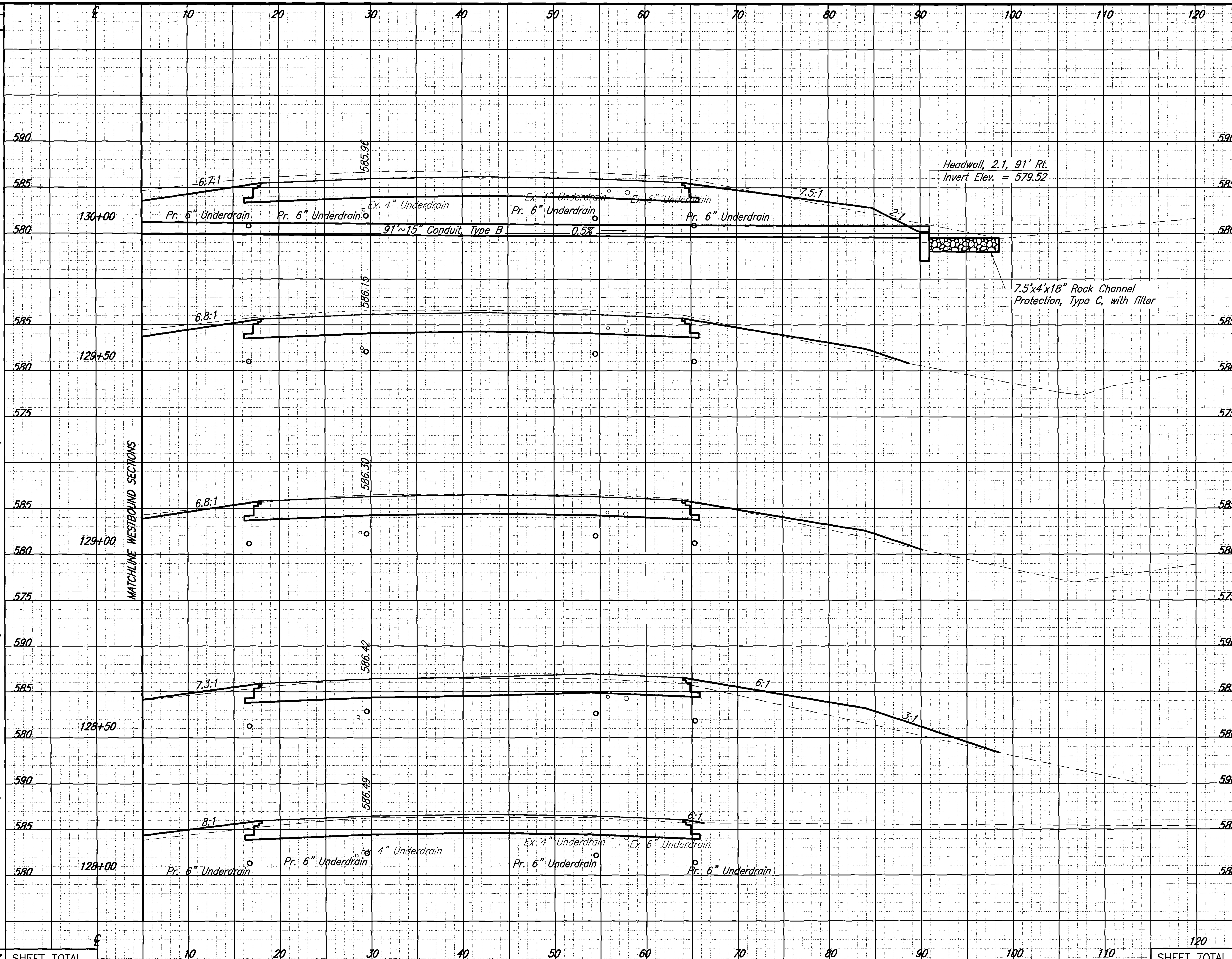
CALCULATED SEB | CHECKED GAB



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
127+50	17		81	12		
		97			147	24
127+00	18		78	14		
		97			90	26
126+50	17		19	14		
		94			34	31
126+00	17		18	19		
		94			32	36
125+50	17		17	20		
		97			36	23
125+00	18		22	5		
		94			40	15
SHEET TOTAL		573			379	155

0X152020.DWG 24 JUL 2003

Station	SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
130+00	36		145	3		
		206			248	10
129+50	38		123	8		
		217			213	19
129+00	40		107	12		
		247			178	48
128+50	49		85	40		
		178			158	46
128+00	15		86	10		
		89			155	20
SHEET TOTAL		937			952	143

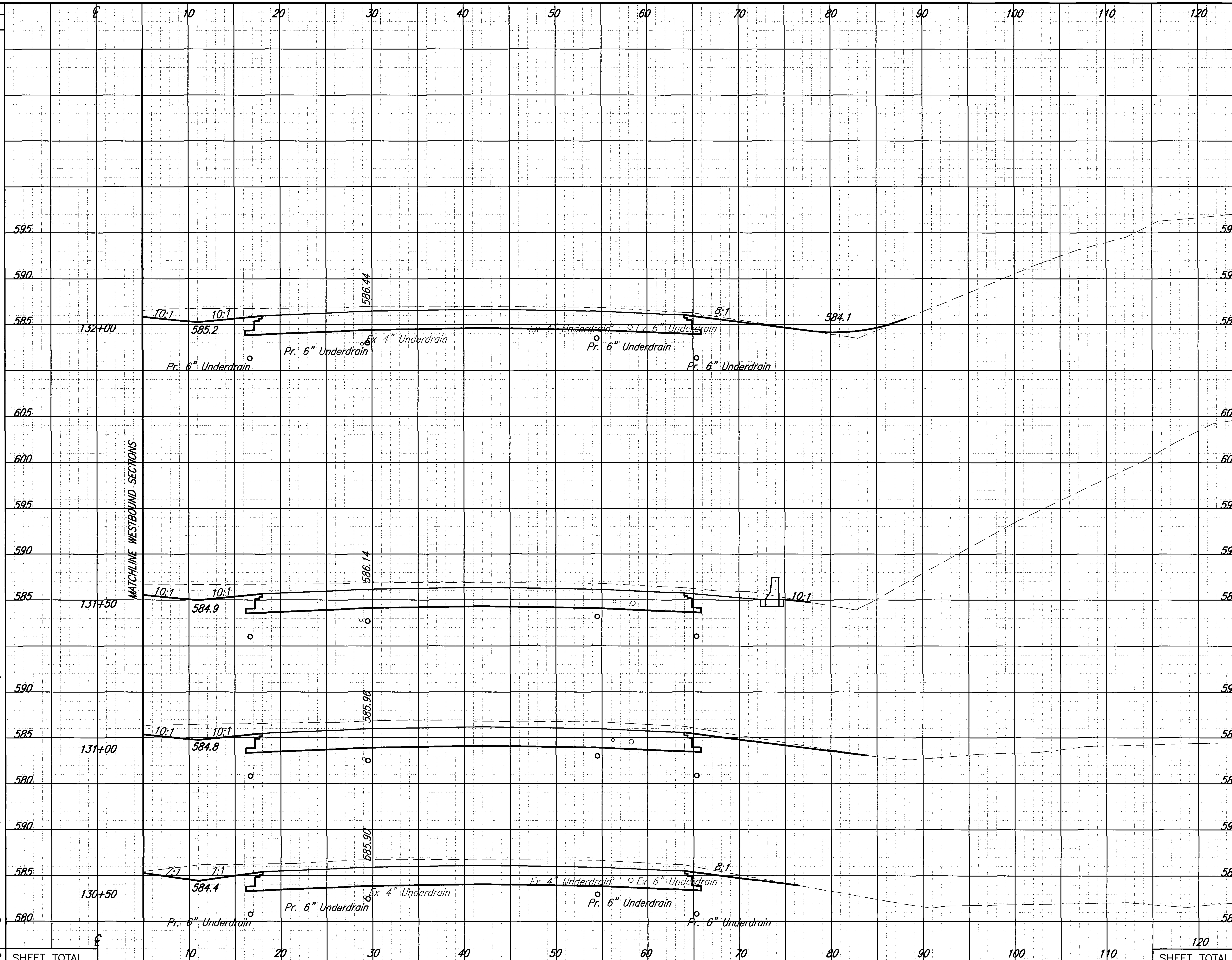


CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND STA. 128+00 TO STA. 130+00

HAM-74-0.00

GX153020.DWG 15 AUG 2003



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
132+00	38		140	7		
		150			292	9
131+50	16		175	3		
		136			312	6
131+00	33		162	4		
		164			296	7
130+50	26		158	4		
		172			281	6
SHEET TOTAL		622			1181	28

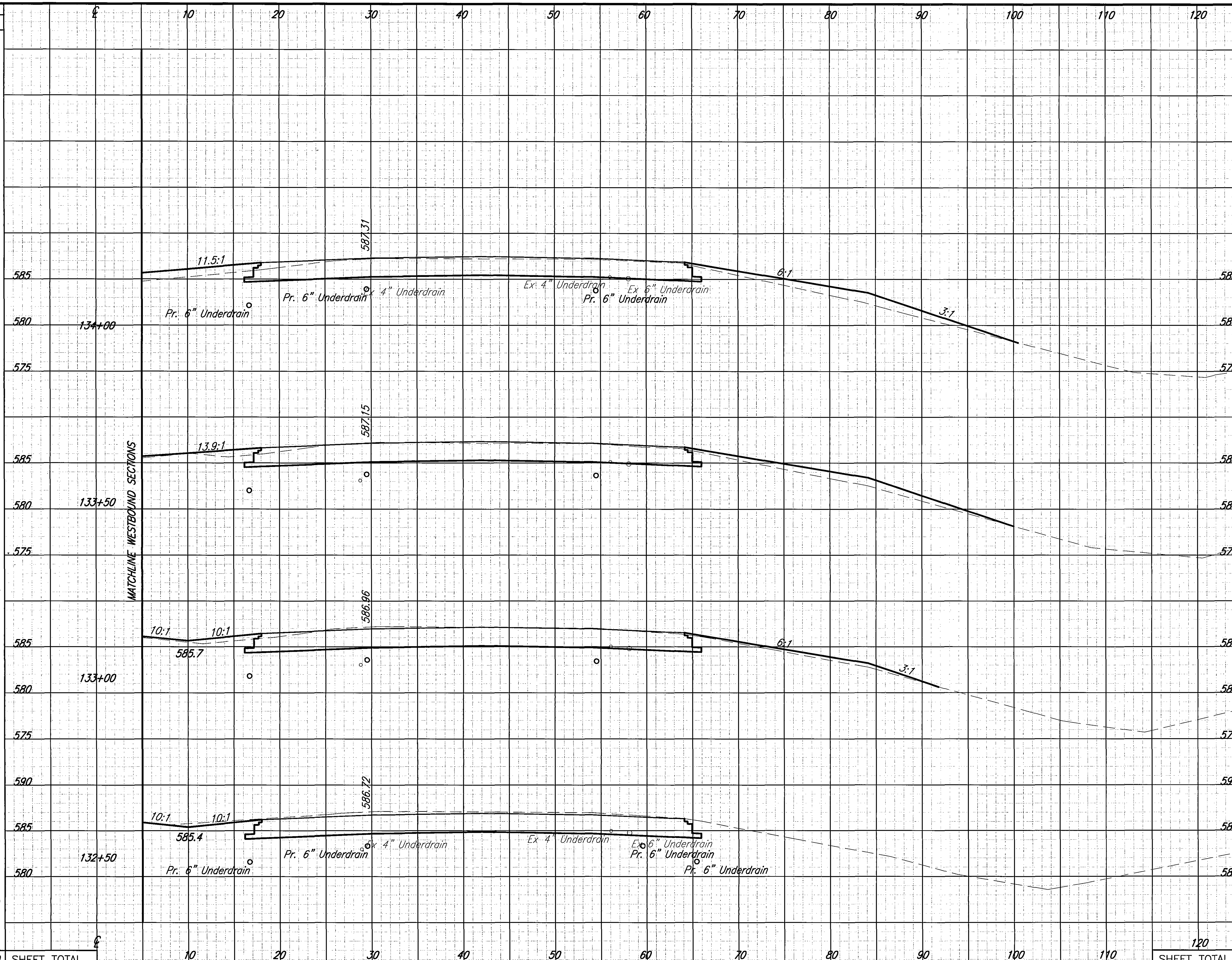
CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 130+50 TO STA. 132+00

HAM-74-0.00

0X154020.DWG 24 JUL 2003

CROSS SECTIONS – EASTBOUND
STA. 132+50 TO STA. 134+00



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
134+00	51		90	33		
		281			172	53
133+50	50		96	24		
		225			181	35
133+00	31		100	14		
		122			197	17
132+50	13		113	4		
		142			234	10
SHEET TOTAL		770			784	115

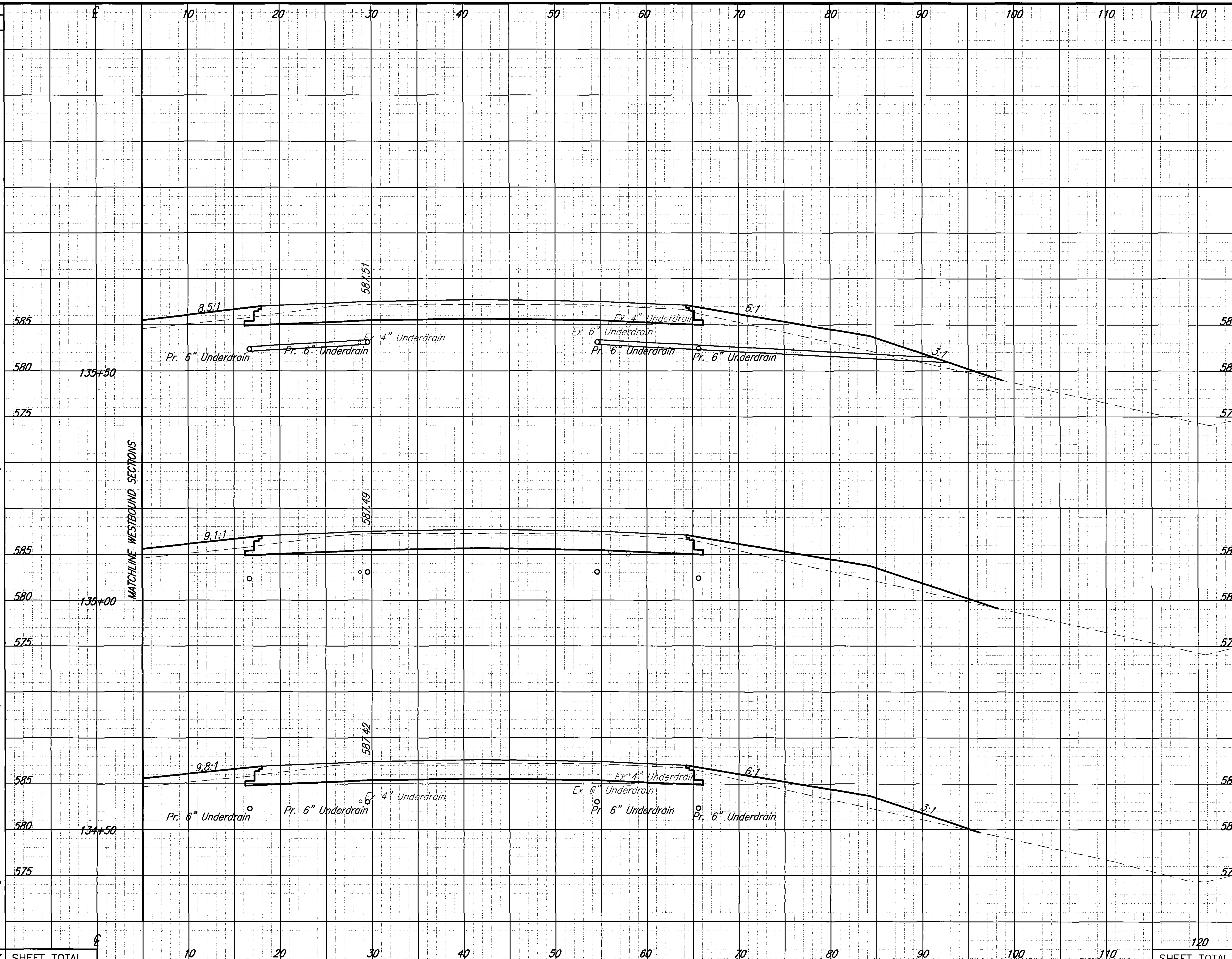
CALCULATED SEB
CHECKED GAB

HAM-74-0.00

290
421

GX155020.DWG 15 AUG 2003

CROSS SECTIONS – EASTBOUND
STA. 134+50 TO STA. 135+50



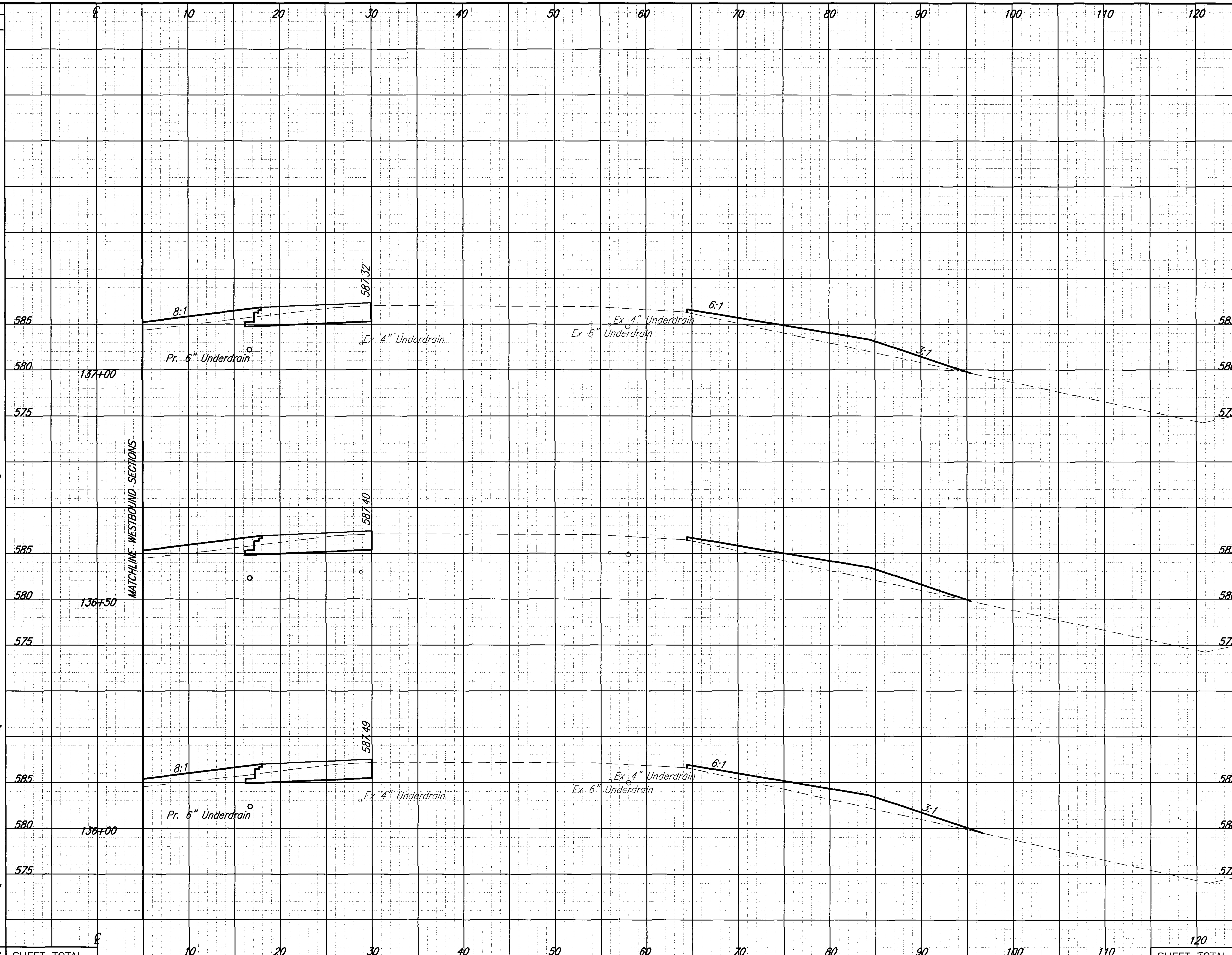
Seeding End Width	Seeding Sq. Yds.	Station	End Area Cut	End Area Fill	Volume Cut	Volume Fill
48		135+50	77	47		
	267				145	83
48		135+00	80	43		
	261				152	73
46		134+50	84	36		
	269				161	64
SHEET TOTAL	797			SHEET TOTAL	458	220

CALCULATED SEB
CHECKED GAB

HAM-74-0.00

291
421

0X156020.DWG 15 AUG 2003



SEEDING END WIDTH	SEEDING SQ. YDS.	STATION
45		137+00
	250	
45		136+50
	253	
46		136+00
	261	
	764	SHEET TOTAL

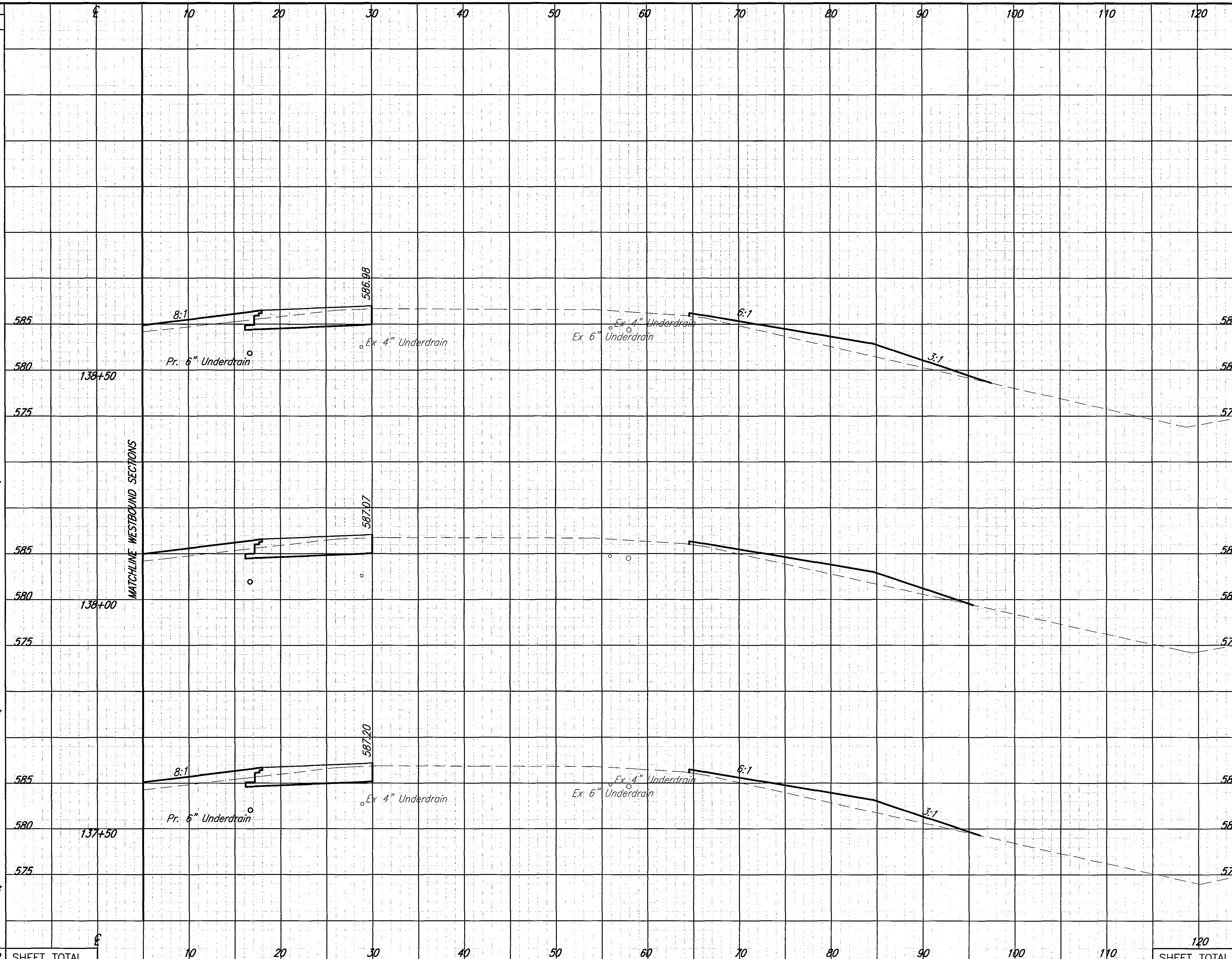
STATION	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
137+00	20	35		
			37	65
136+50	20	35		
			36	67
136+00	19	37		
			89	78
SHEET TOTAL			162	210

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 136+00 TO STA. 137+00

HAM-74-0.00

0X157020.DWG 24 JUL 2003



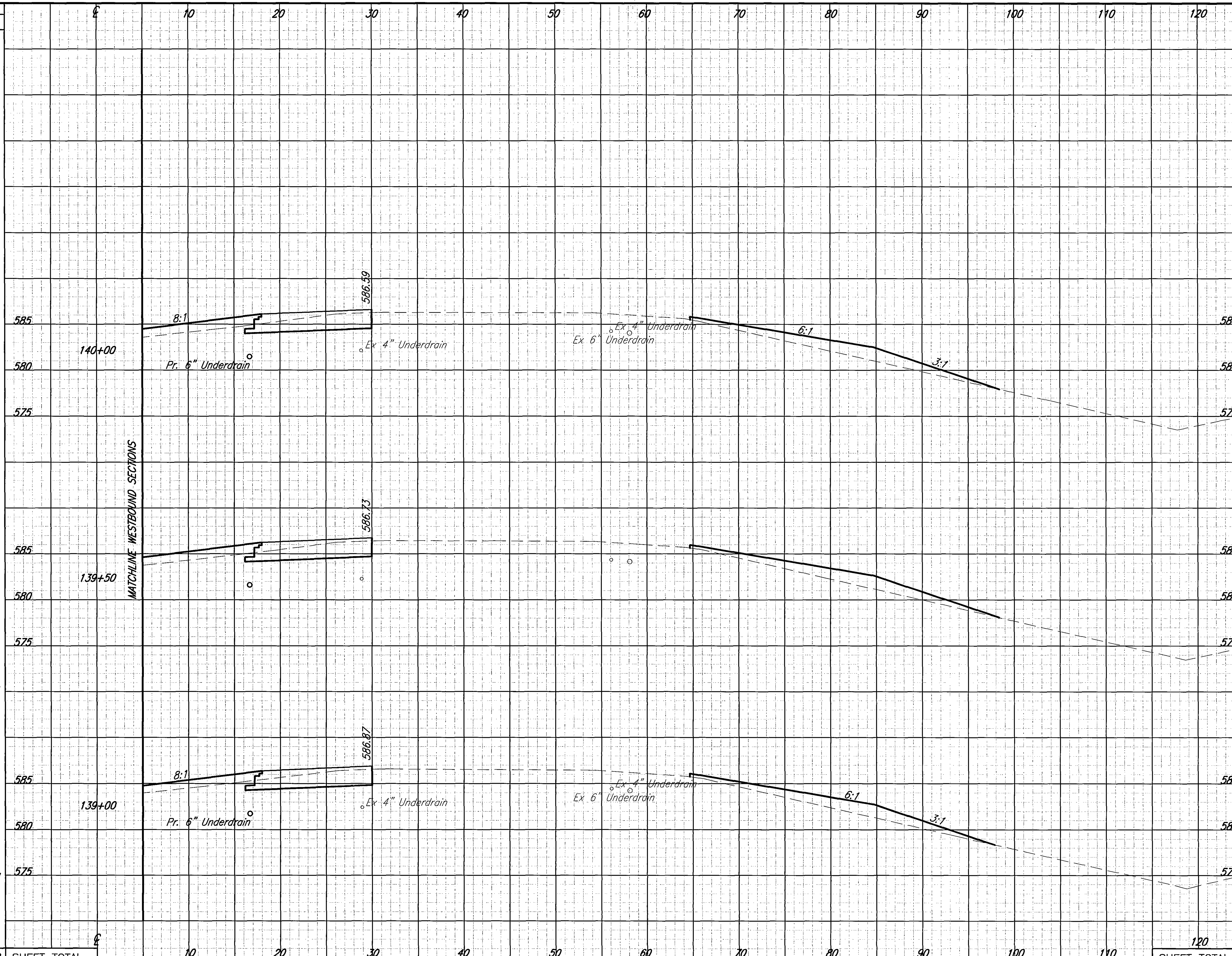
Station	SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
138+50	47		20	35		
		256			37	63
138+00	45		20	33		
		253			37	63
137+50	46		20	35		
		253			37	65
SHEET TOTAL		762			111	191

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 137+50 TO STA. 138+50

HAM-74-0.00

0X158020.DWG 24 JUL 2003



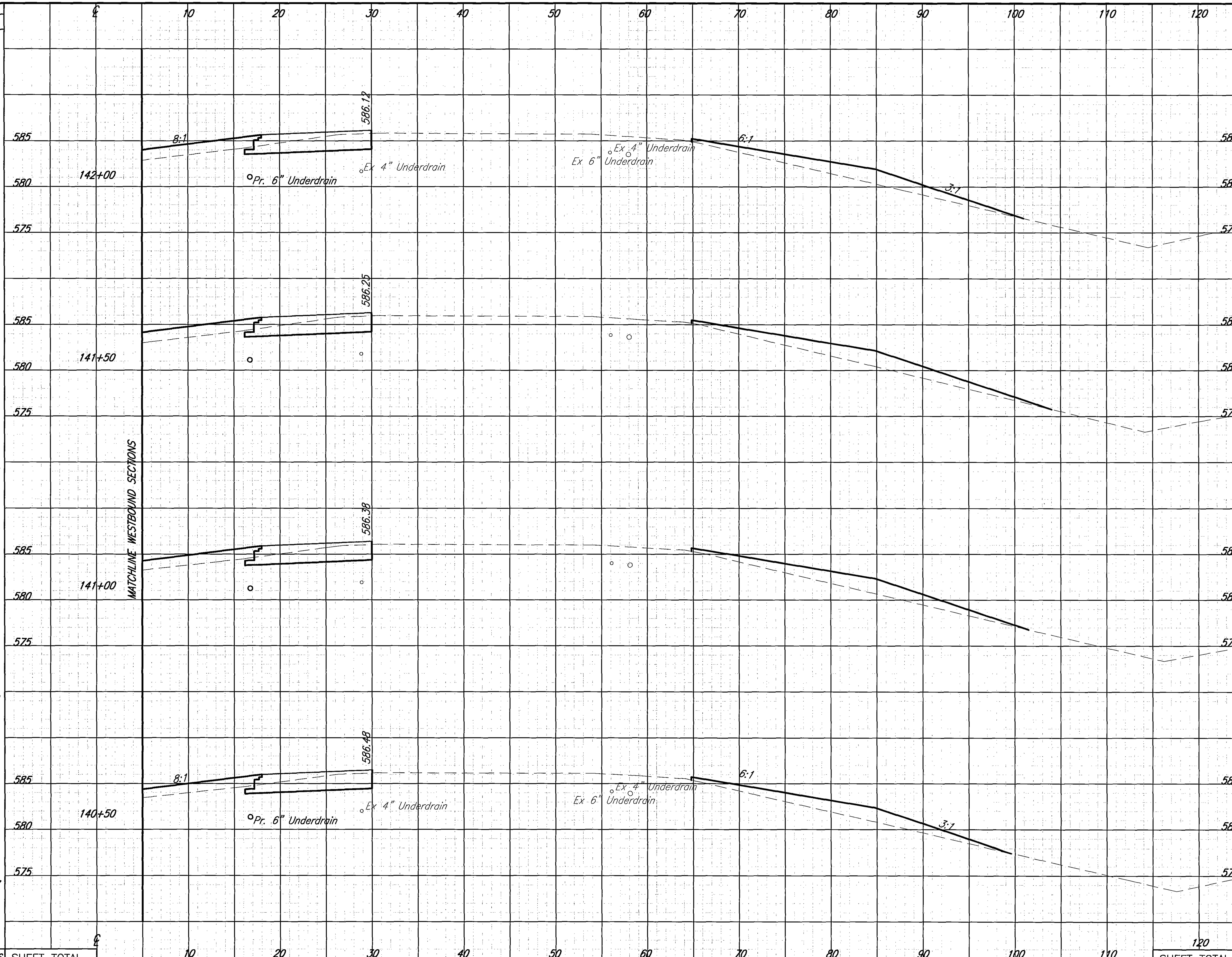
SEEDING END WIDTH	SEEDING SQ. YDS.	Station	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
47		140+00	19	41		
	264				35	74
48		139+50	19	39		
	264				36	70
47		139+00	20	37		
	261				37	67
	789	SHEET TOTAL			108	211

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND STA. 139+00 TO STA. 140+00

HAM-74-0.00

GX159020.DWG 25 JUL 2003



SEEDING END WIDTH	SEEDING SQ. YDS.	STATION
50		142+00
	289	
54		141+50
	292	
51		141+00
	278	
49		140+50
	267	
SHEET TOTAL	1126	

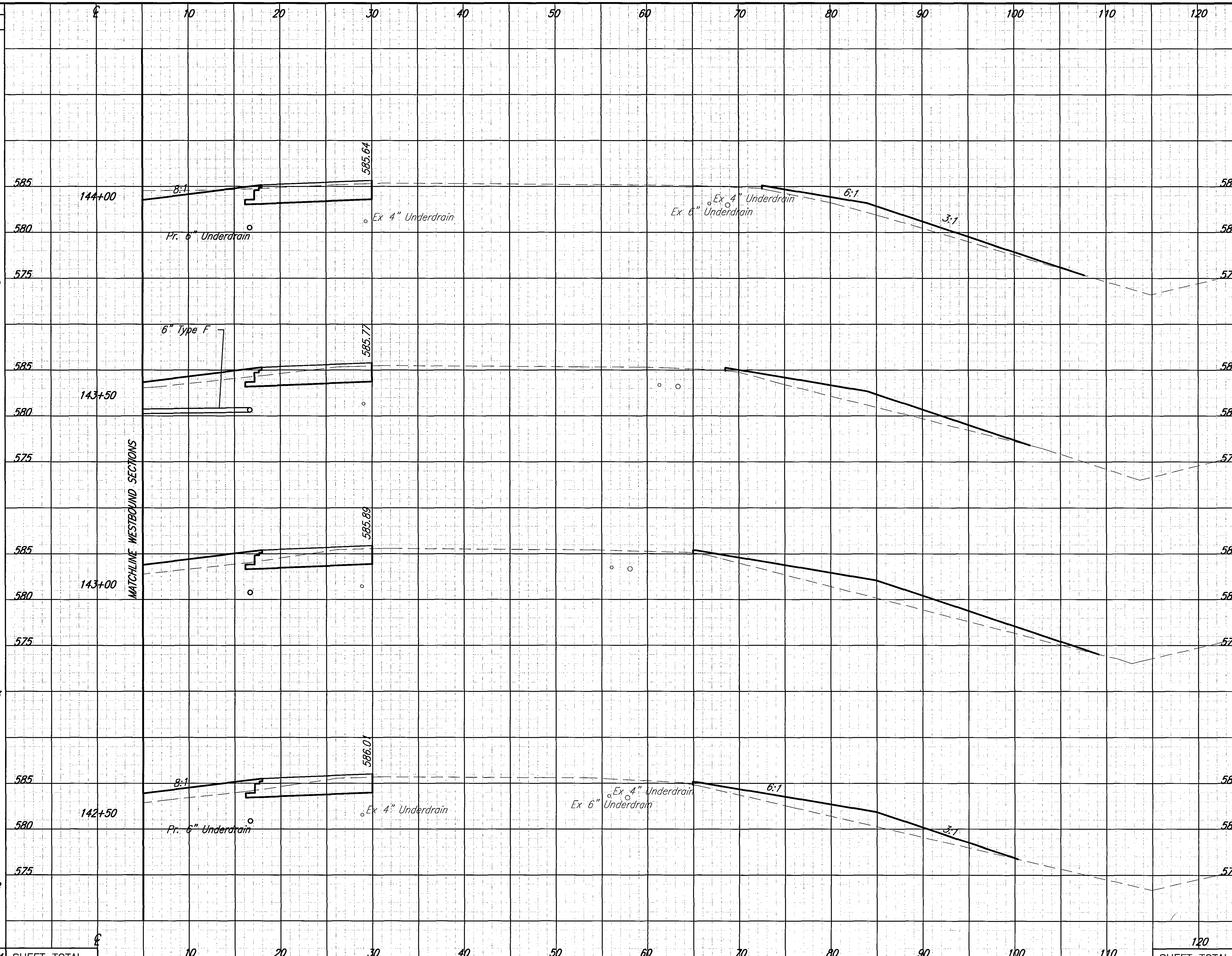
STATION	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
142+00	19	47		
			34	91
141+50	18	51		
			34	91
141+00	19	47		
			35	83
140+50	19	43		
			35	78
SHEET TOTAL			138	343

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 140+50 TO STA. 142+00

HAM-74-0.00

GX160020.DWG 19 AUG 2003



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
144+00	50		28	20		
		269			44	53
143+50	47		20	37		
		294			36	89
143+00	59		19	59		
		303			35	96
142+50	50		19	45		
		278			35	85
SHEET TOTAL		1144			150	323

CALCULATED SEB CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 142+50 TO STA. 144+00

HAM-74-0.00

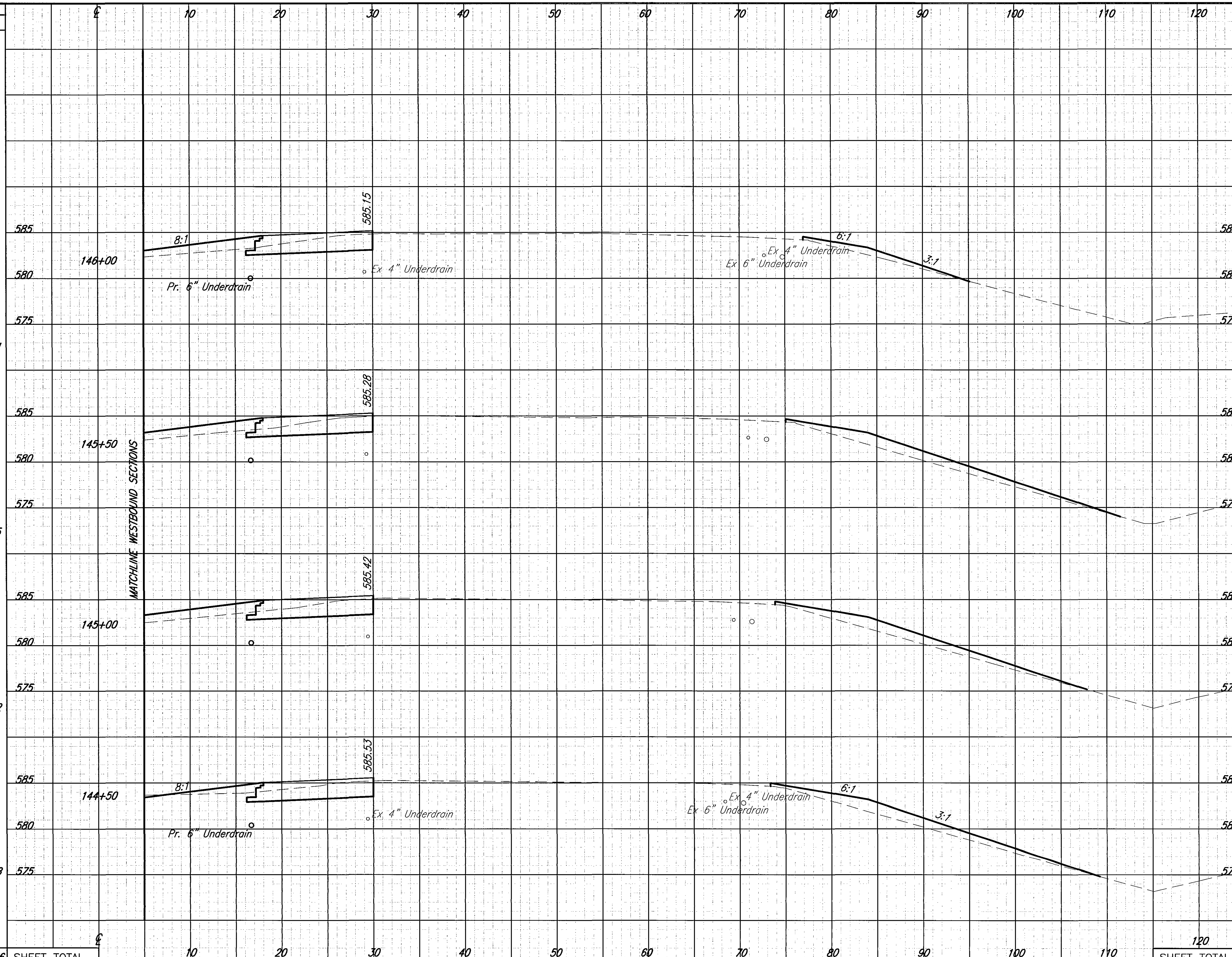
296
421

0X161020.DWG 24 JUL 2003

CROSS SECTIONS – EASTBOUND
STA. 144+50 TO STA. 146+00

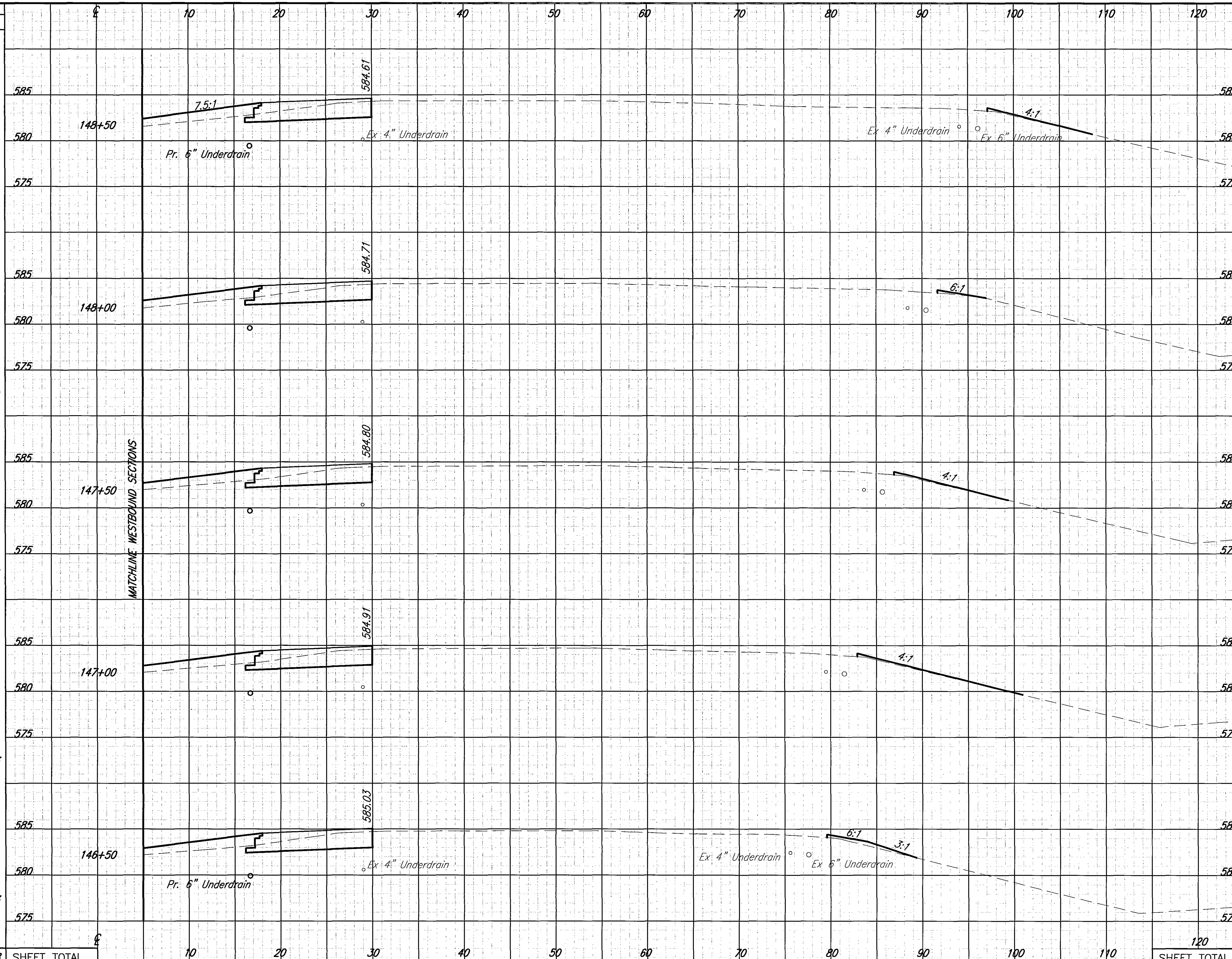
HAM–74–0.00

CALCULATED SEB | CHECKED GAB



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
146+00	32		18	20		
		231			33	53
145+50	51		18	37		
		275			33	67
145+00	48		18	35		
		272			34	56
144+50	50		19	26		
		278			44	43
SHEET TOTAL		1056			144	219

GX162020.DWG 24 JUL 2003



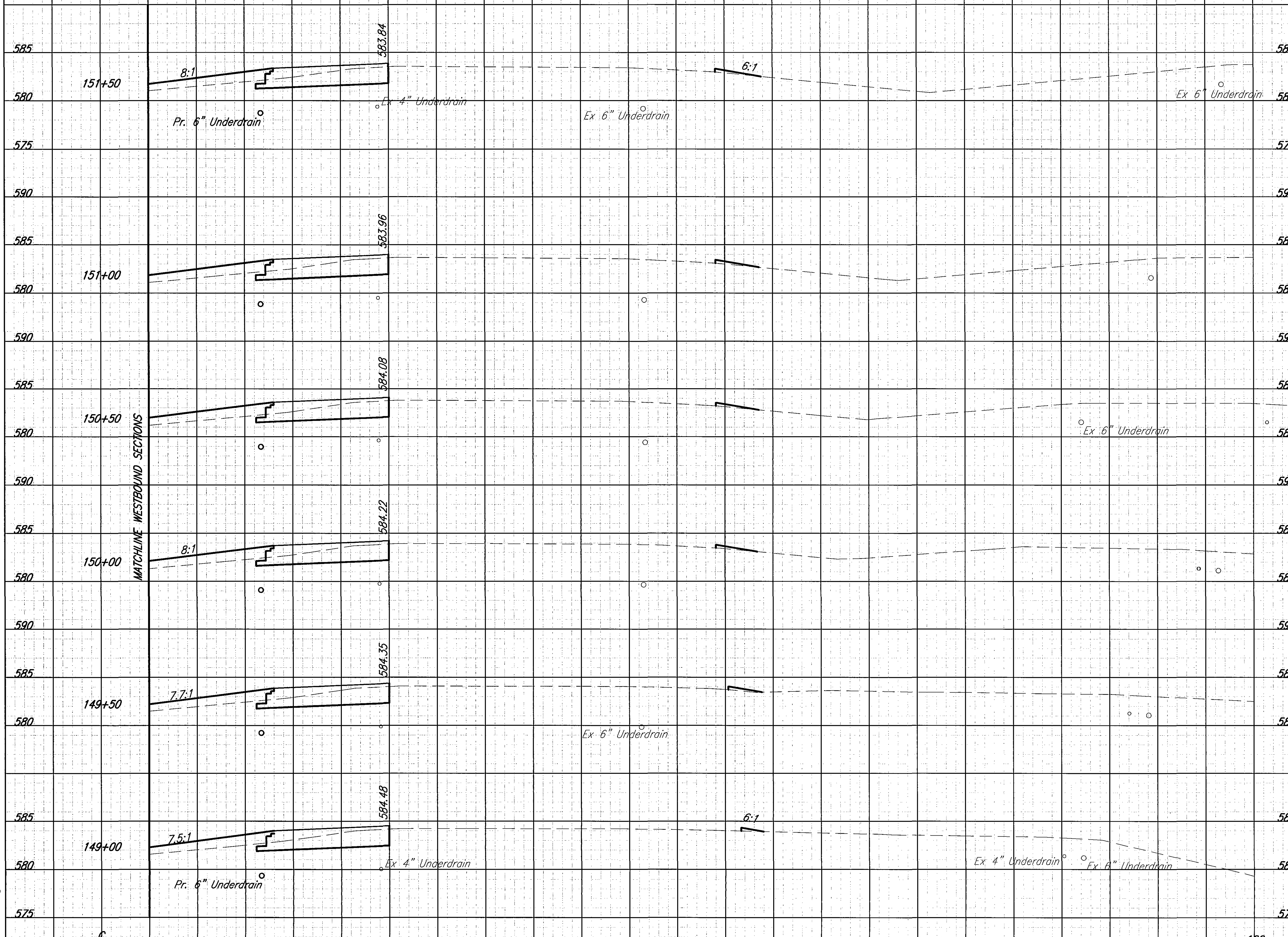
Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
148+50	25		18	14		
		119			33	25
148+00	18		18	13		
		122			33	24
147+50	26		18	13		
		161			33	25
147+00	32		18	14		
		153			33	27
146+50	23		18	15		
		153			33	32
SHEET TOTAL		708			165	133

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 146+50 TO STA. 148+50

HAM-74-0.00

GX163020.DWG 24 JUL 2003



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
151+50	18		18	12		
		100			33	23
151+00	18		18	13		
		100			33	24
150+50	18		18	13		
		97			33	24
150+00	17		18	13		
		94			33	24
149+50	17		18	13		
		89			33	24
149+00	15		18	13		
		112			33	25
SHEET TOTAL		592			198	144

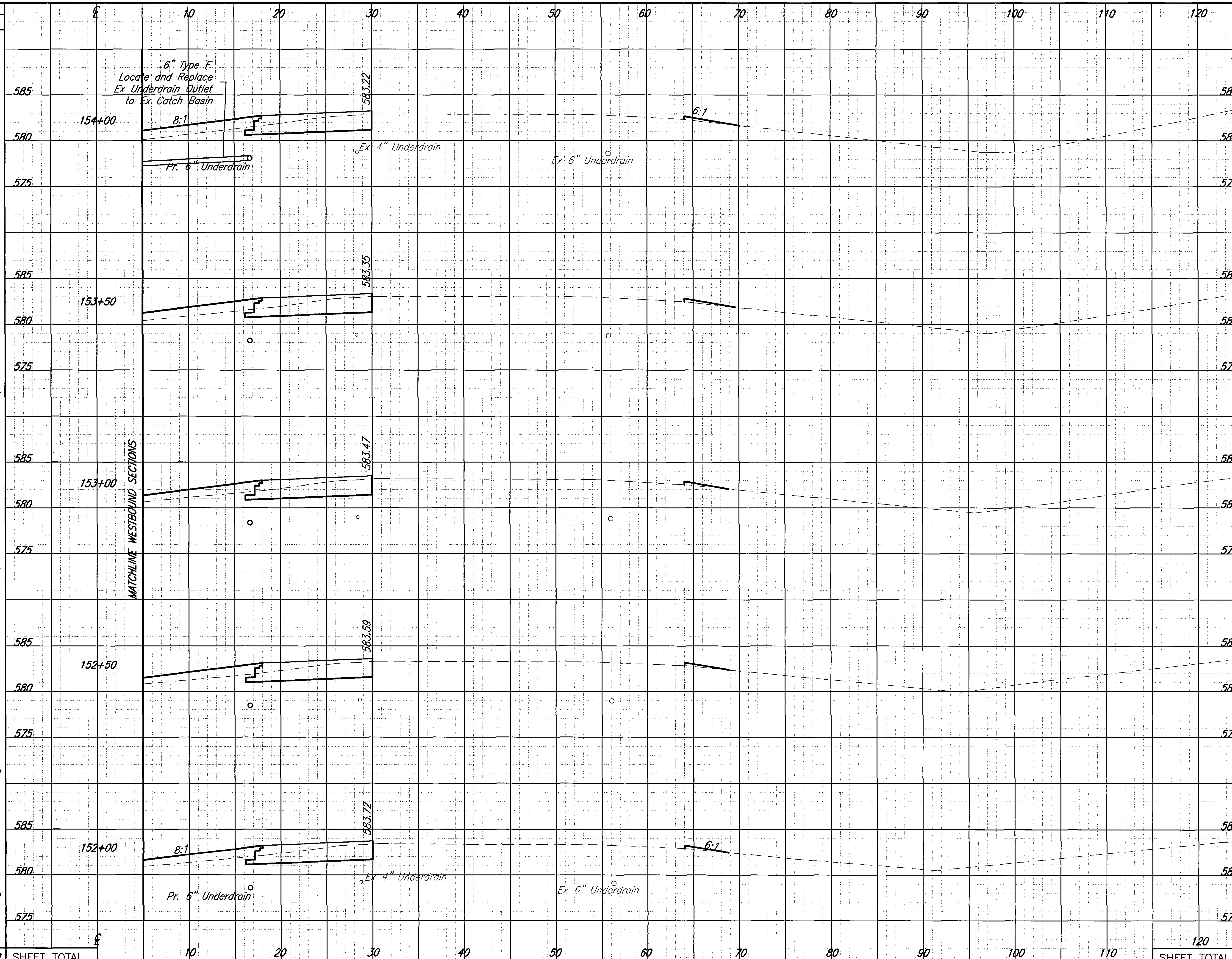
CALCULATED SEB | CHECKED GAB

CROSS SECTIONS – EASTBOUND STA. 149+00 TO STA. 151+50

HAM–74–0.00

0X164020.DWG 24 JUL 2003

CROSS SECTIONS – EASTBOUND
STA. 152+00 TO STA. 154+00



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
154+00	19		19	14		
		106			34	25
153+50	19		18	13		
		103			34	23
153+00	18		19	12		
		100			35	22
152+50	18		19	12		
		100			35	23
152+00	18		19	13		
		100			34	23
SHEET TOTAL		509			172	116

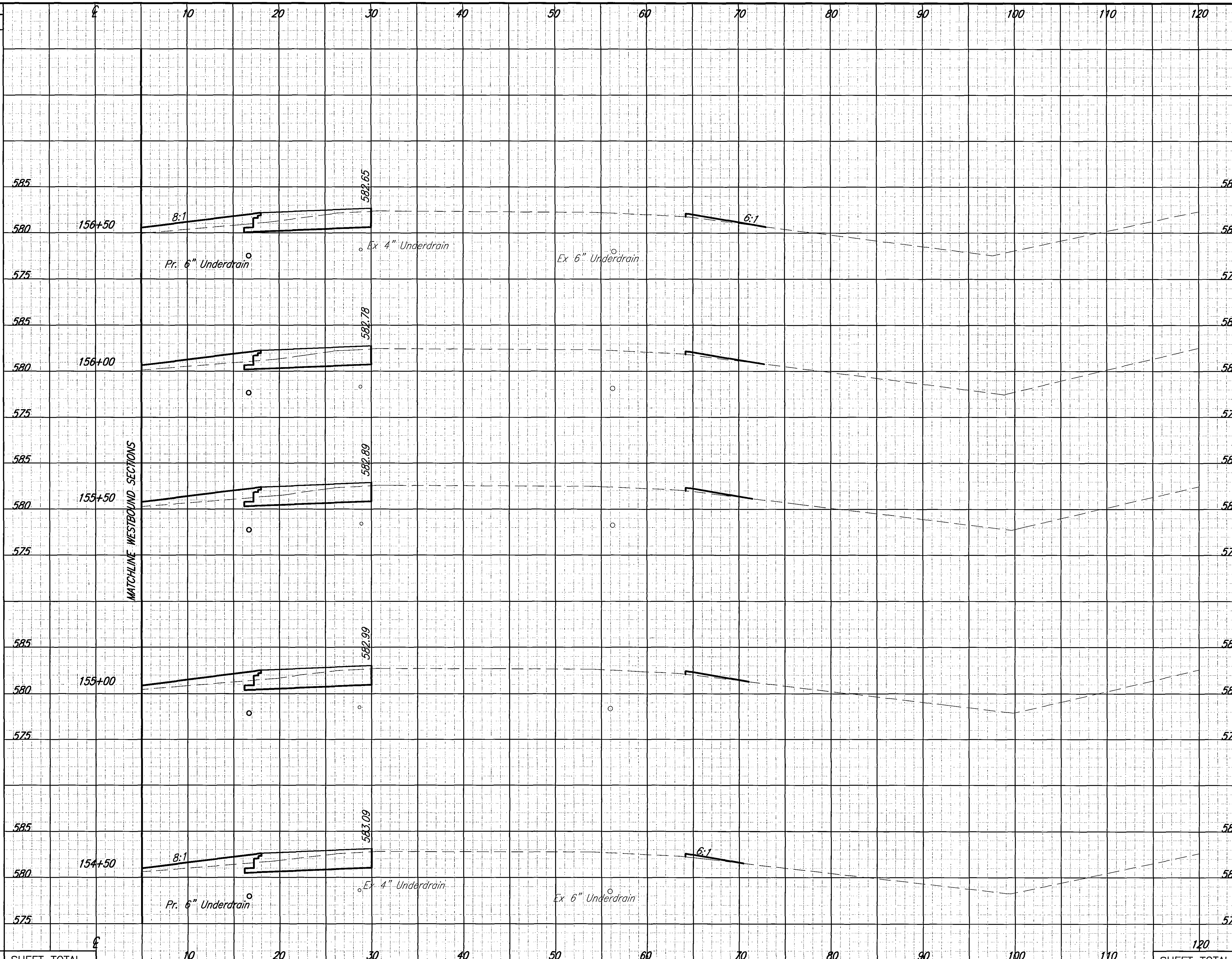
CALCULATED SEB
CHECKED GAB

HAM-74-0.00

0X165020.DWG 24 JUL 2003

SEEDING	
END WIDTH	SQ. YDS.
22	
	122
22	
	117
20	
	111
20	
	111
20	
	108
	569

SHEET TOTAL



SHEET TOTAL

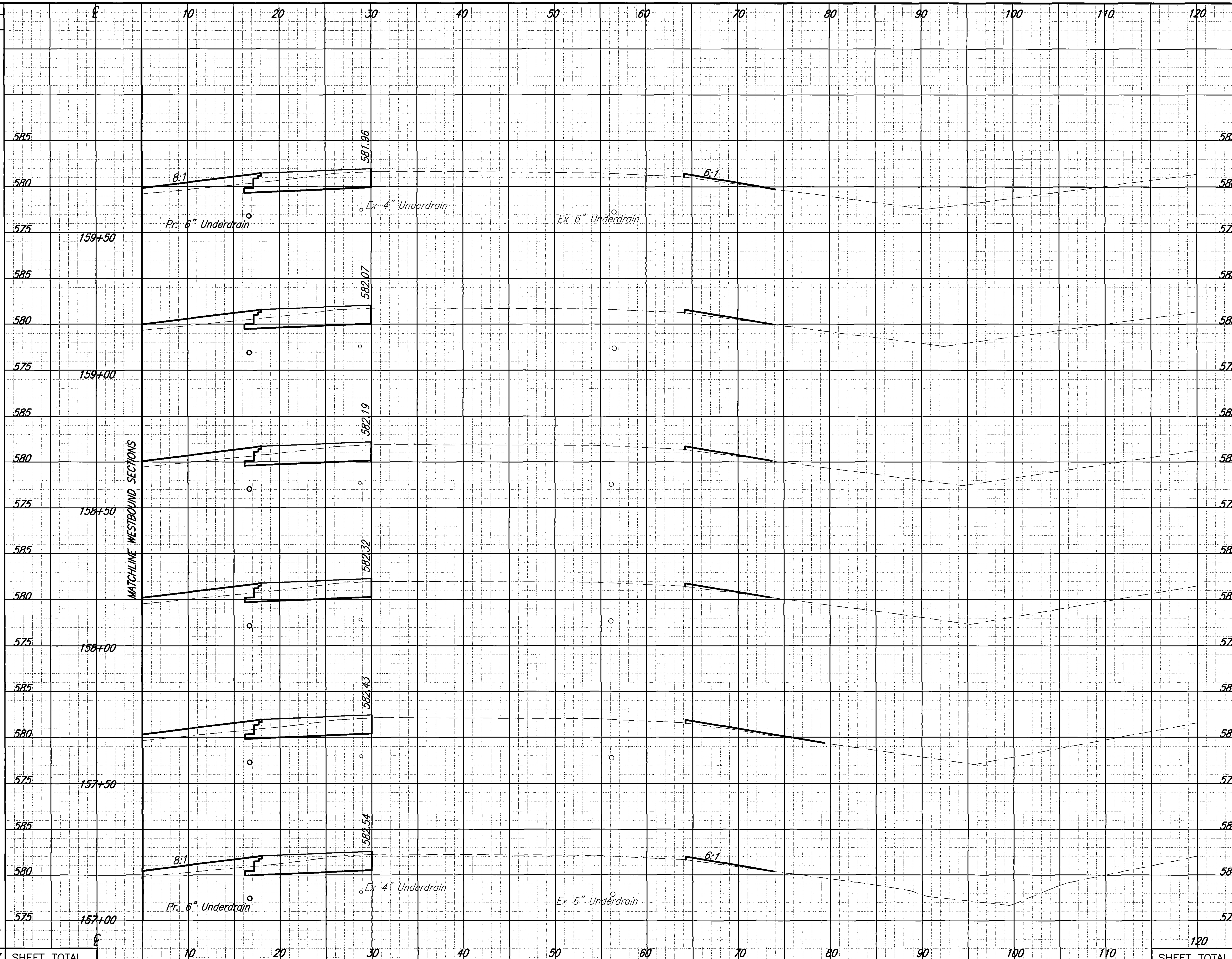
END AREA		VOLUME	
CUT	FILL	CUT	FILL
19	12		
		34	22
18	12		
		34	21
19	11		
		35	19
19	10		
		35	19
19	10		
		35	22
		173	103

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 154+50 TO STA. 156+50

HAM–74–0.00

0X156020.DWG 25 JUL 2003



SEEDING END WIDTH	SEEDING SQ. YDS.	STATION	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
23		159+50	19	12		
	128				36	22
23		159+00	20	12		
	128				37	22
23		158+50	20	12		
	125				36	22
22		158+00	19	12		
	139				35	23
28		157+50	19	13		
	142				35	23
23		157+00	19	12		
	125				35	22
	787	SHEET TOTAL			214	134

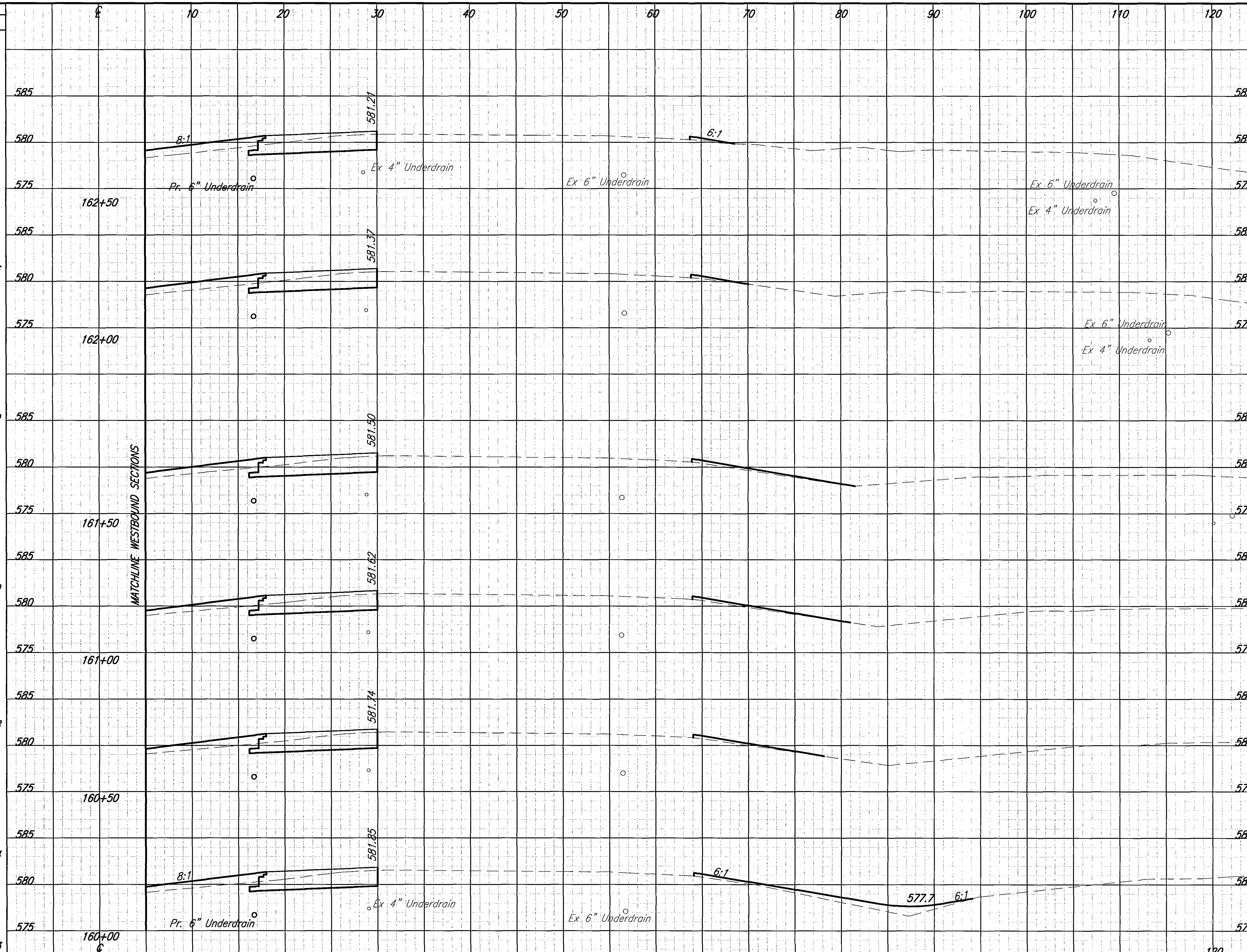
CALCULATED SEB

CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 157+00 TO STA. 159+50

HAM-74-0.00

GX167020.DWG 25 JUL 2003



SEEDING END WIDTH	SEEDING SQ. YDS.	STATION	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
18		162+50	20	13		
	103				36	23
19		162+00	19	12		
	139				36	23
31		161+50	20	13		
	169				37	23
30		161+00	20	12		
	158				37	22
27		160+50	20	12		
	194				36	32
43		160+00	19	23		
	183				35	32
	946	SHEET TOTAL			217	155

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 160+00 TO STA. 162+50

HAM-74-0.00

303/421

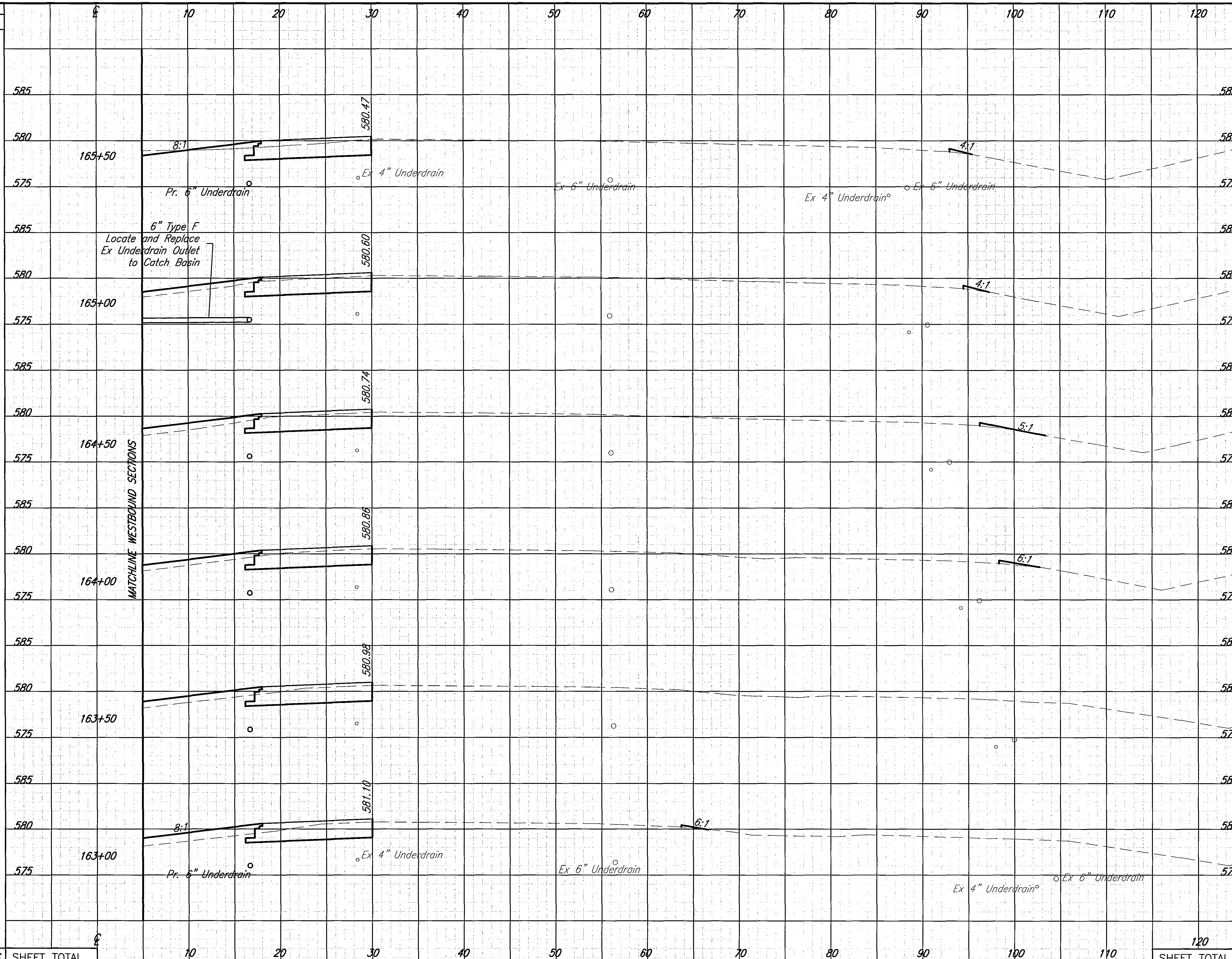
0X168020.DWG 24 JUL 2003

CROSS SECTIONS – EASTBOUND
STA. 163+00 TO STA. 165+50

HAM-74-0.00

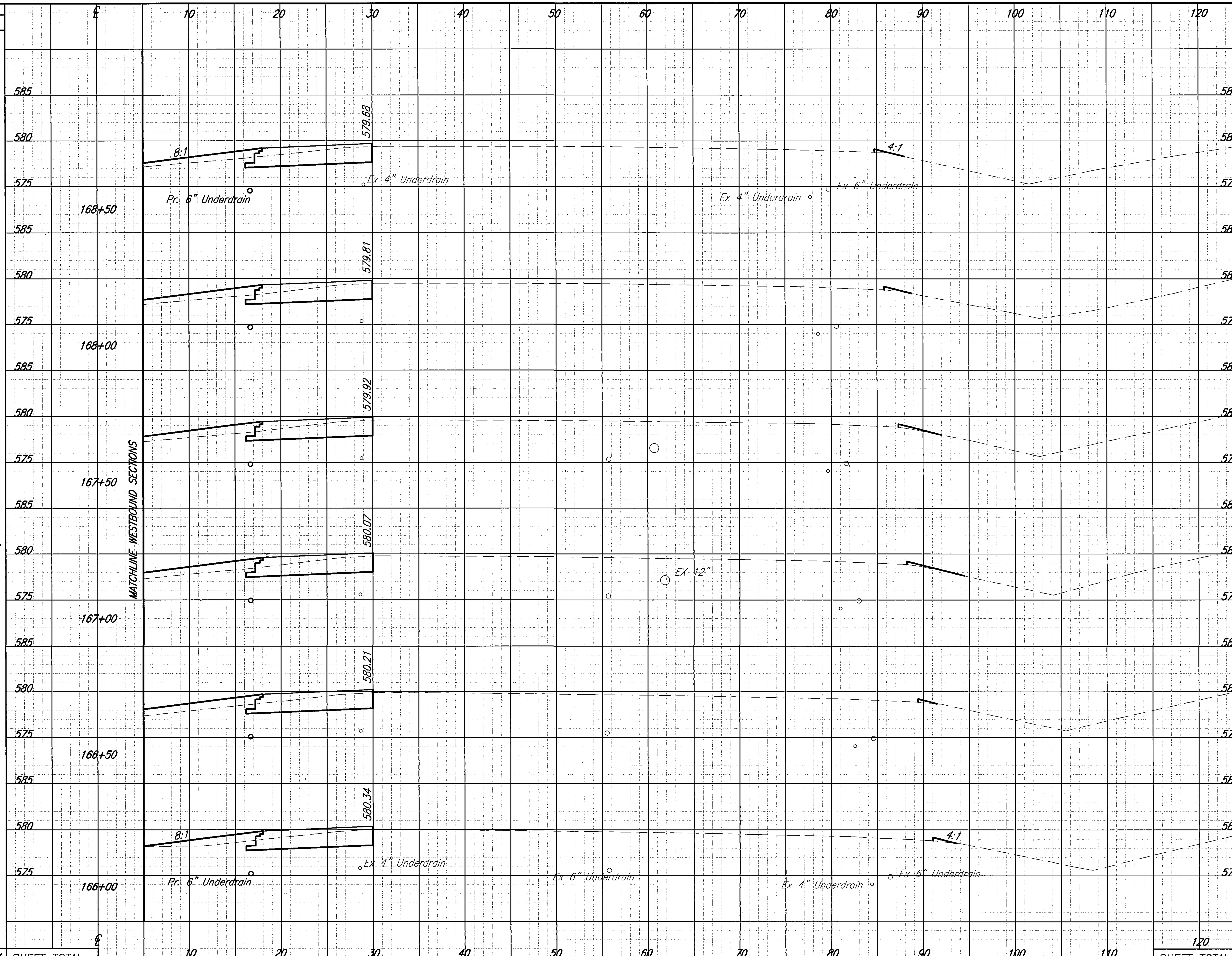
CALCULATED SEB CHECKED GAB

Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
165+50	16		22	4		
		89			42	11
165+00	16		23	8		
		100			43	18
164+50	20		23	11		
		106			42	19
164+00	18		22	9		
		86			40	18
163+50	13		21	10		
		81			38	20
163+00	16		20	12		
		94			37	23
SHEET TOTAL		556			242	109



19 AUG 2003

GX169020.DWG



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
168+50	16		20	9		
		89			36	18
168+00	16		19	10		
		94			35	19
167+50	18		19	11		
		106			35	21
167+00	20		19	12		
		97			35	21
166+50	15		19	11		
		86			36	19
166+00	16		20	9		
		89			39	12
SHEET TOTAL		561			216	110

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 166+00 TO STA. 168+50

HAM-74-0.00

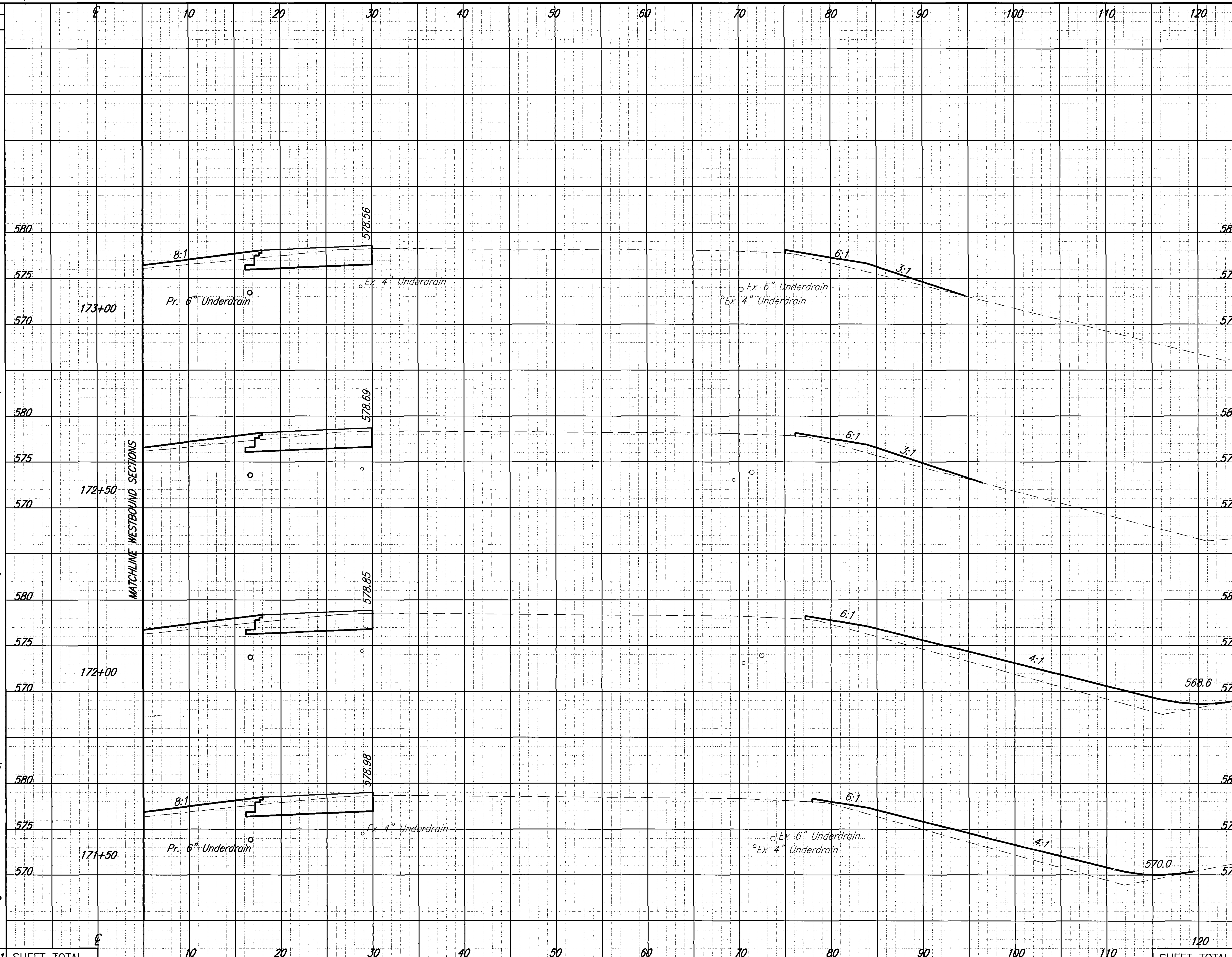
GX170020.DWG 24 JUL 2003

CROSS SECTIONS – EASTBOUND
STA. 169+00 TO STA. 171+00
HAM-74-0.00
306
421
SEEDING
END WIDTH
SQ. YDS.
END AREA
CUT
FILL
VOLUME
CUT
FILL
CALCULATED SEB
CHECKED GAB
MATCHLINE WESTBOUND SECTIONS
171+00
170+50
170+00
169+50
169+00
579.08
579.18
579.34
579.47
579.58
8:1
6:1
4:1
571.7
573.4
574.2
574.8
Ex 4" Underdrain
Ex 6" Underdrain
49
40
37
35
18
247
214
200
147
94
902
SHEET TOTAL
21 37
21 28
21 23
20 15
20 9
39 60
39 47
38 35
37 22
37 17
190 181
580
575
570
585
10
20
30
40
50
60
70
80
90
100
110
120
GX171020.DWG 25 JUL 2003

CROSS SECTIONS – EASTBOUND
STA. 171+50 TO STA. 173+00

HAM-74-0.00

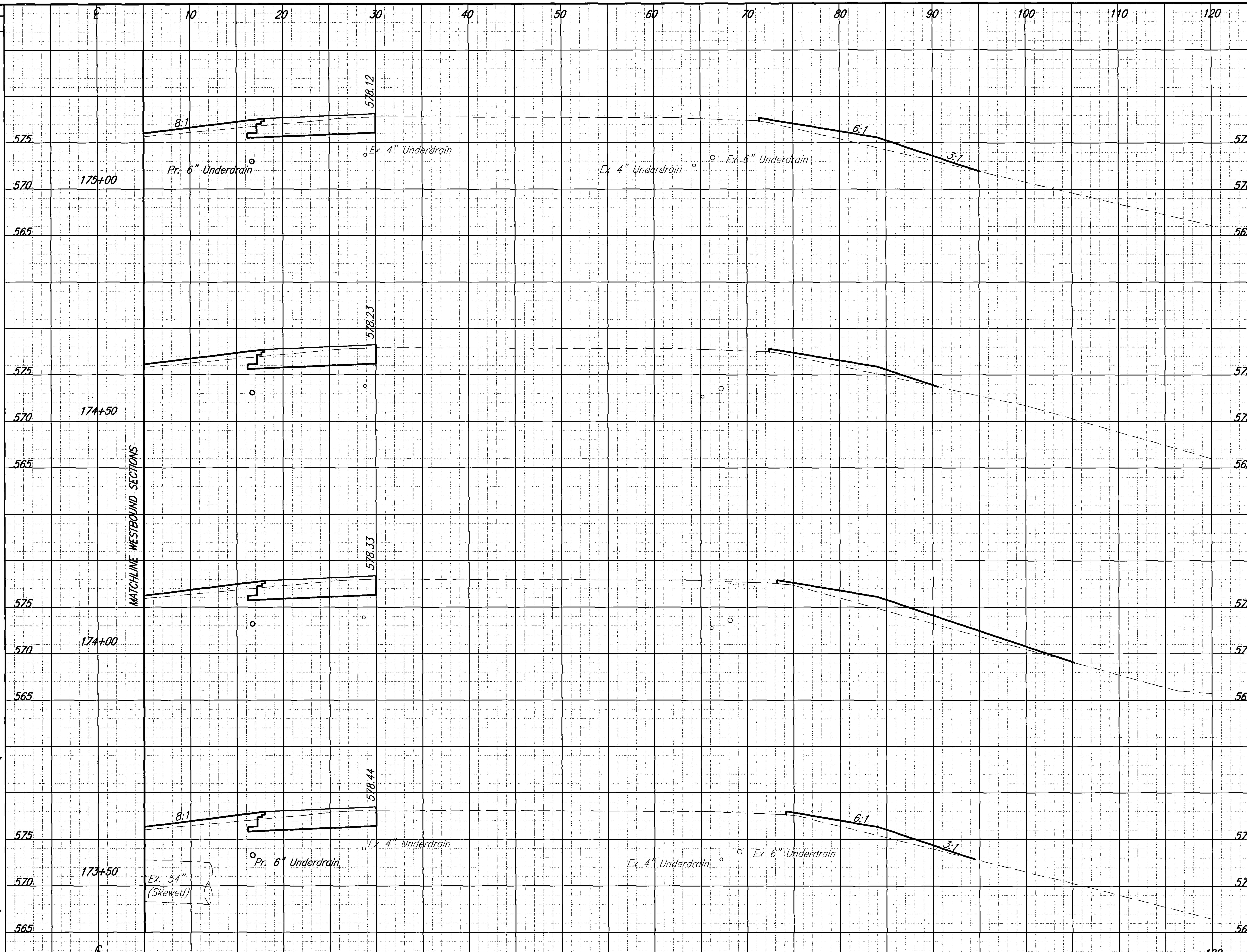
CALCULATED SEB
CHECKED GAB



SEEDING END WIDTH	SEEDING SQ. YDS.	STATION	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
33		173+00	21	18		
	183				39	33
33		172+50	21	18		
	261				39	68
61		172+00	21	55		
	325				39	92
56		171+50	21	44		
	292				39	75
	1061	SHEET TOTAL			156	268

GX172020.DWG 25 JUL 2003

Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
175+00	37		21	23		
		189			39	36
174+50	31		21	16		
		211			39	41
174+00	45		21	28		
		217			39	43
173+50	33		21	18		
		183			39	33
SHEET TOTAL		800			156	153



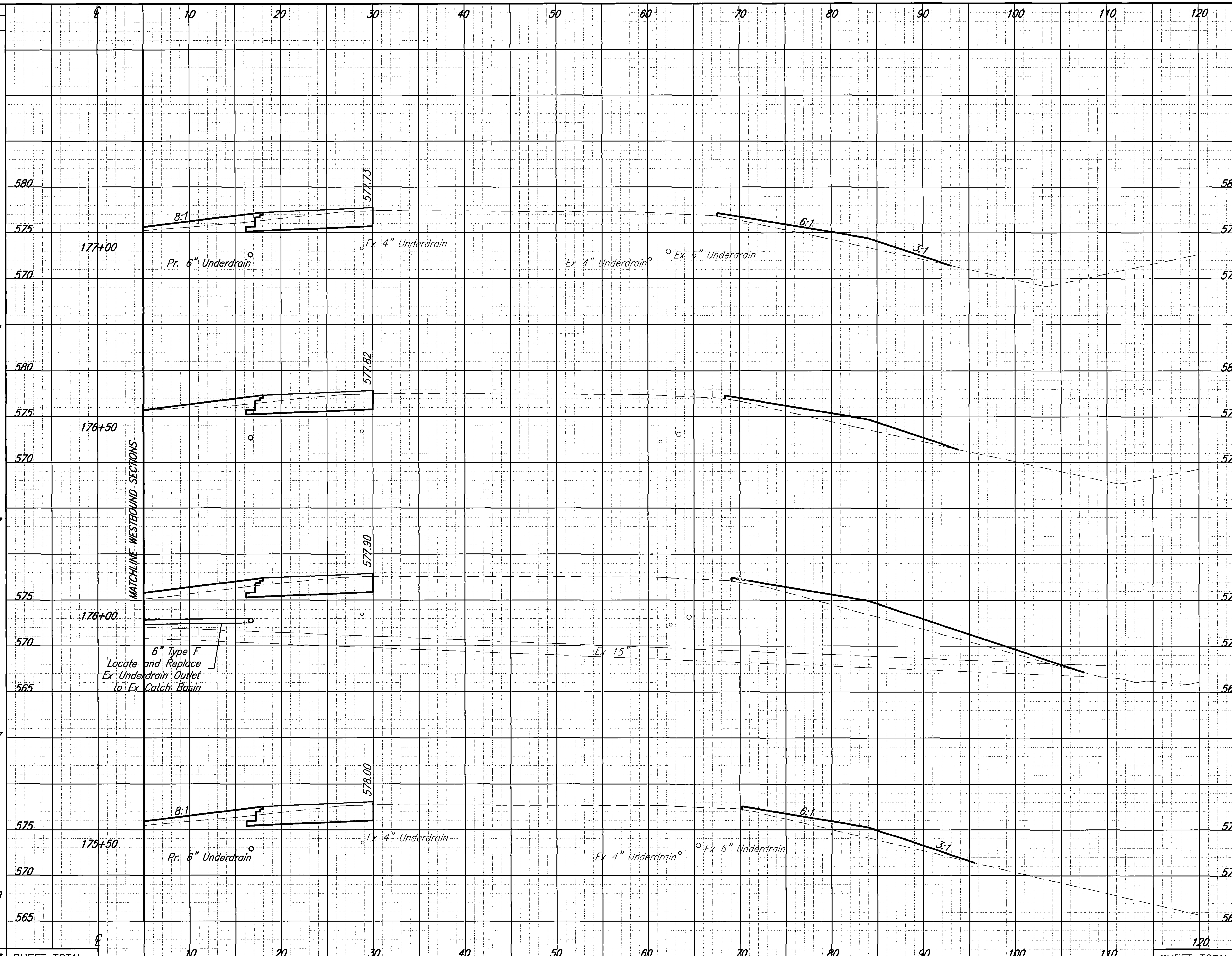
CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 173+50 TO STA. 175+00

HAM-74-0.00

308
421

GX173020.DWG 28 JUL 2003



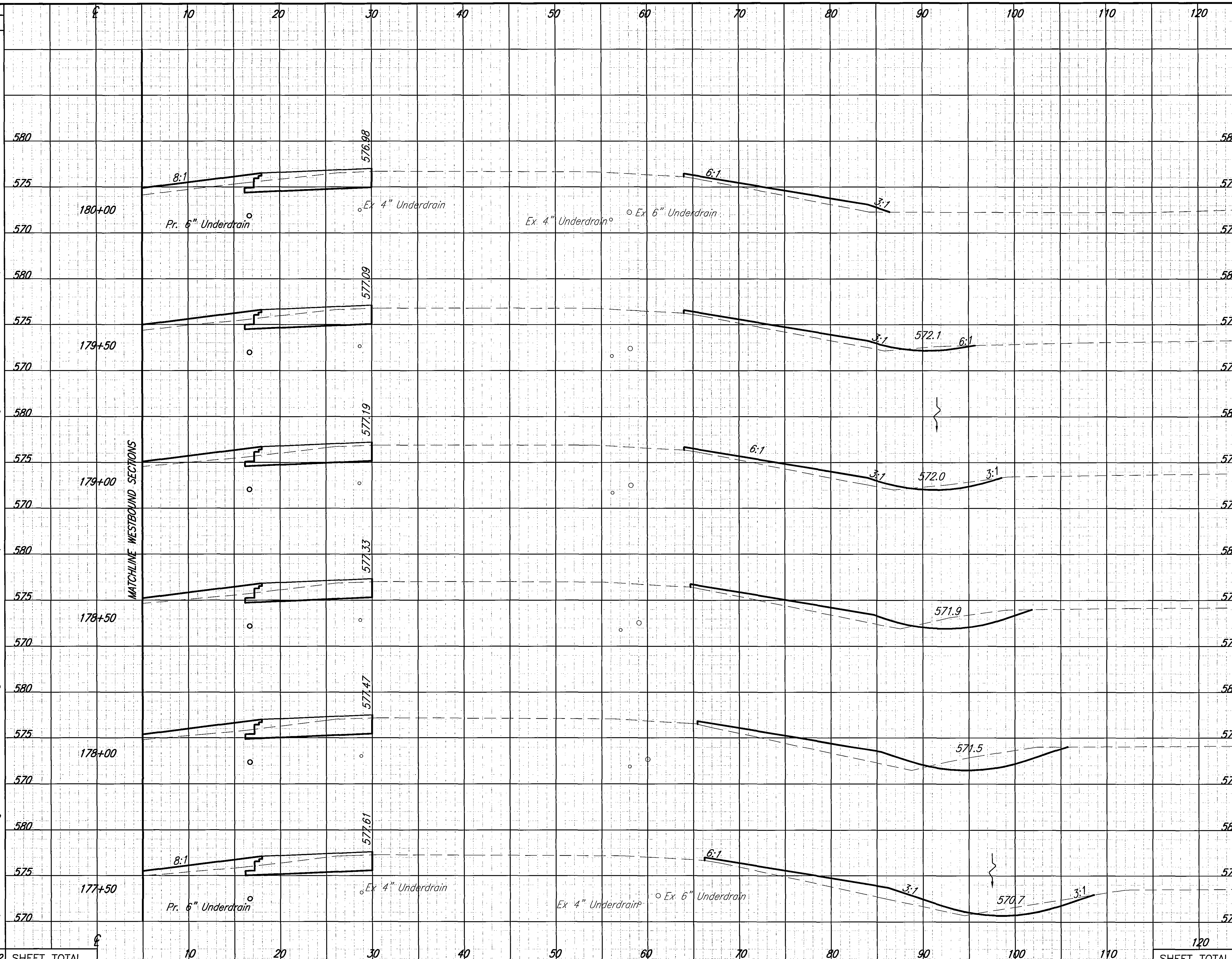
Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
177+00	38		20	24		
		211			38	44
176+50	38		21	23		
		247			39	57
176+00	51		21	39		
		247			39	60
175+50	38		21	26		
		208			39	45
SHEET TOTAL		913			155	206

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 175+50 TO STA. 177+00

HAM-74-0.00

GX174020.DWG 25 JUL 2003



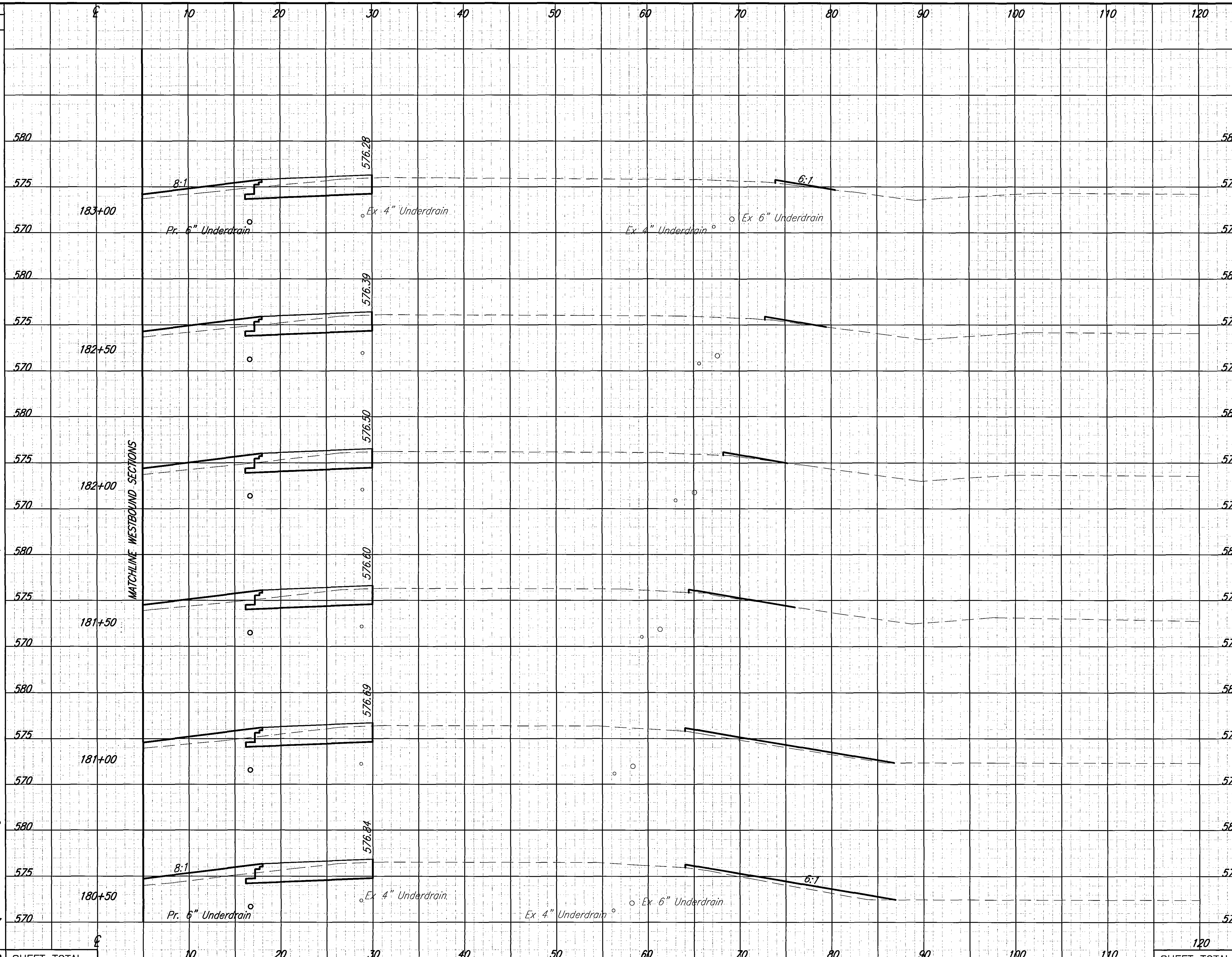
Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
180+00	36		20	22		
		225			40	41
179+50	45		23	22		
		258			44	41
179+00	48		24	22		
		275			51	44
178+50	51		31	25		
		292			62	52
178+00	54		36	31		
		308			59	58
177+50	57		28	32		
		264			44	52
SHEET TOTAL		1622			300	288

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 177+50 TO STA. 180+00

HAM-74-0.00

GX175020.DWG 24 JUL 2003



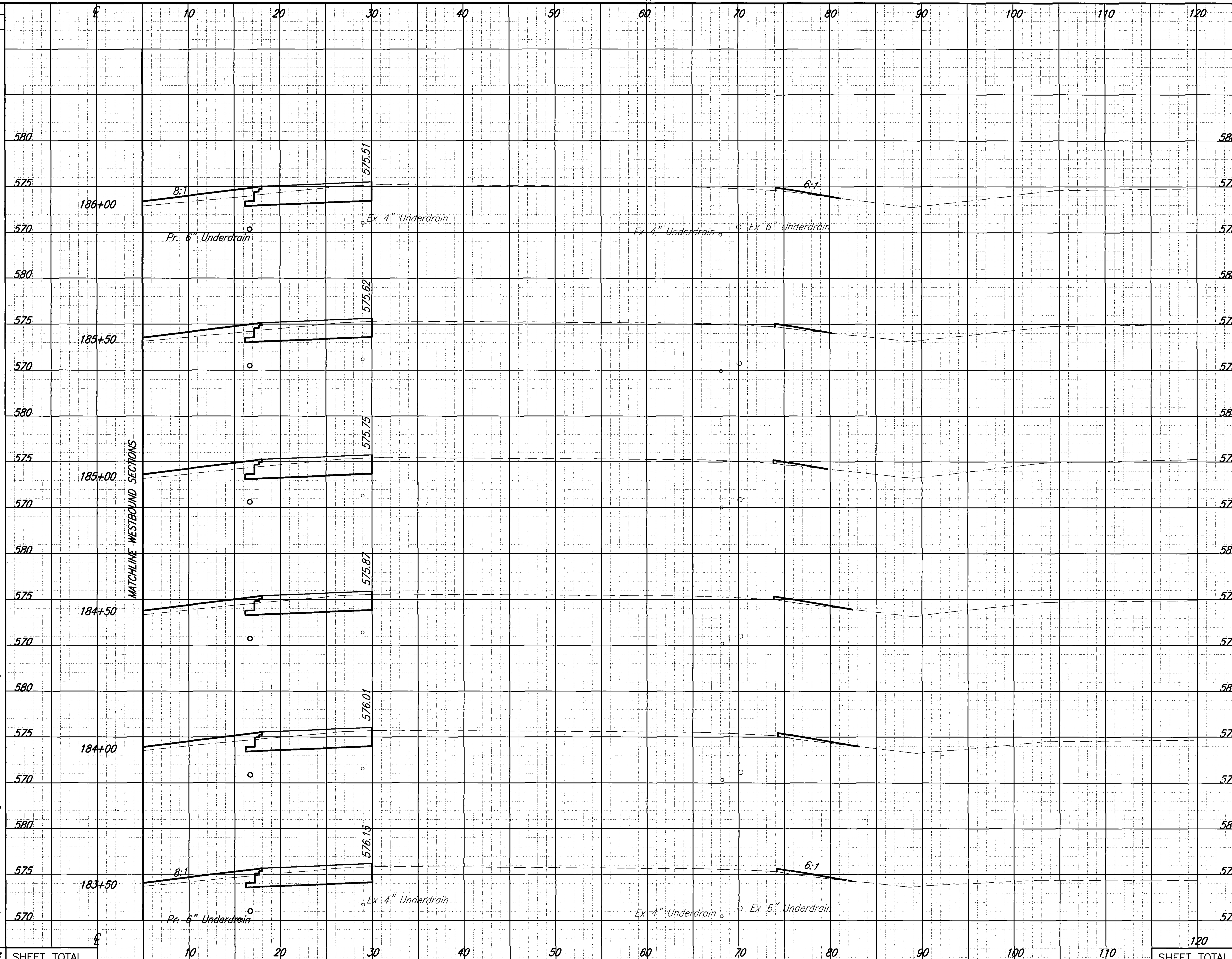
Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
183+00	20		21	10		
		111			38	19
182+50	20		20	11		
		111			37	20
182+00	20		20	11		
		125			37	21
181+50	25		20	12		
		164			37	26
181+00	34		20	16		
		192			37	32
180+50	35		20	19		
		197			37	38
SHEET TOTAL		900			223	156

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 180+50 TO STA. 183+00

HAM-74-0.00

24 JUL 2003
GX176020.DWG



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
186+00	20		20	10		
		108			38	18
185+50	19		21	9		
		106			39	17
185+00	19		21	9		
		114			39	18
184+50	22		21	10		
		122			39	18
184+00	22		21	9		
		119			39	17
183+50	21		21	9		
		114			39	18
SHEET TOTAL		683			233	106

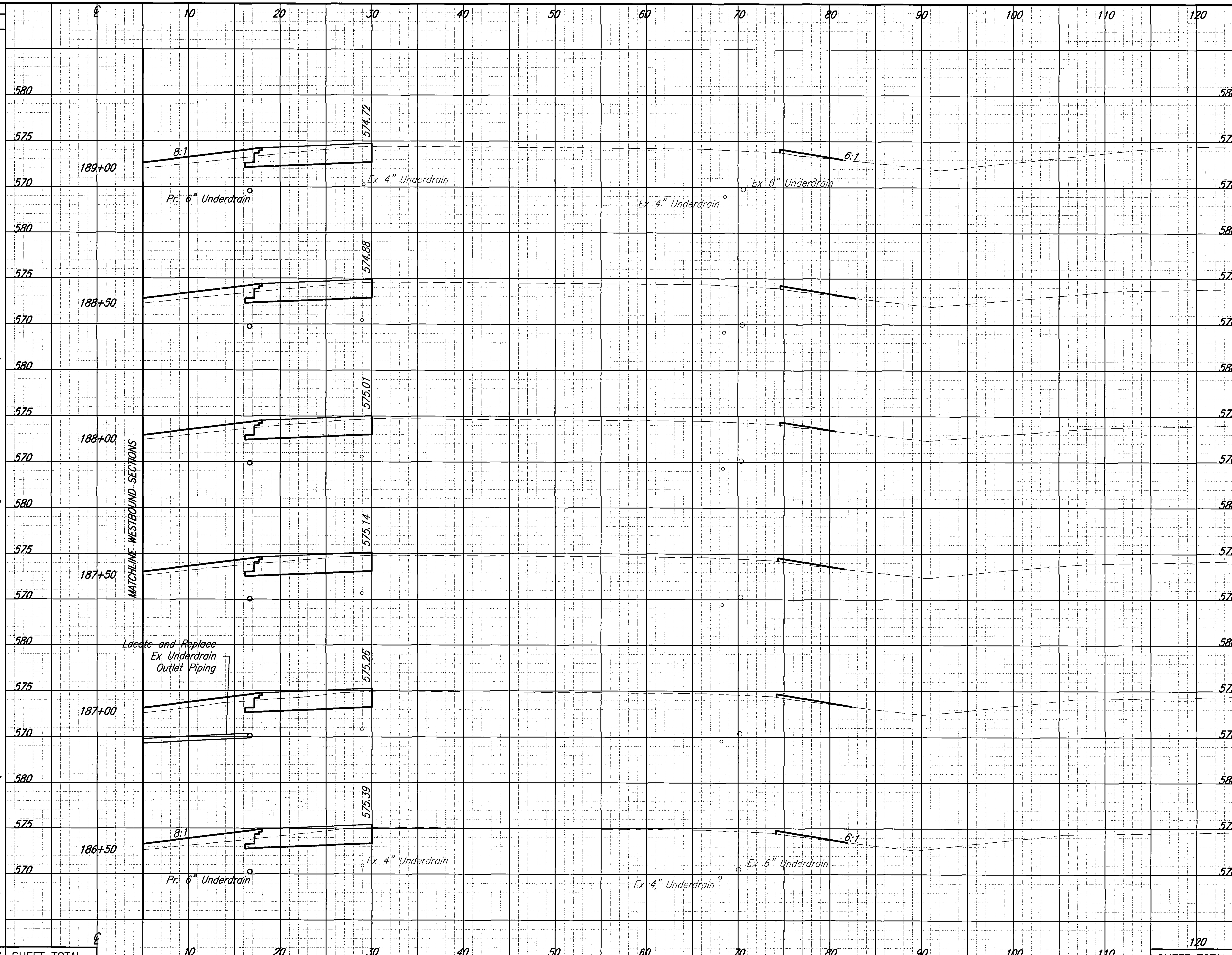
CALCULATED SEB CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 183+50 TO STA. 186+00

HAM–74–0.00

GX177020.DWG 25 JUL 2003

CROSS SECTIONS – EASTBOUND
STA. 186+50 TO STA. 189+00

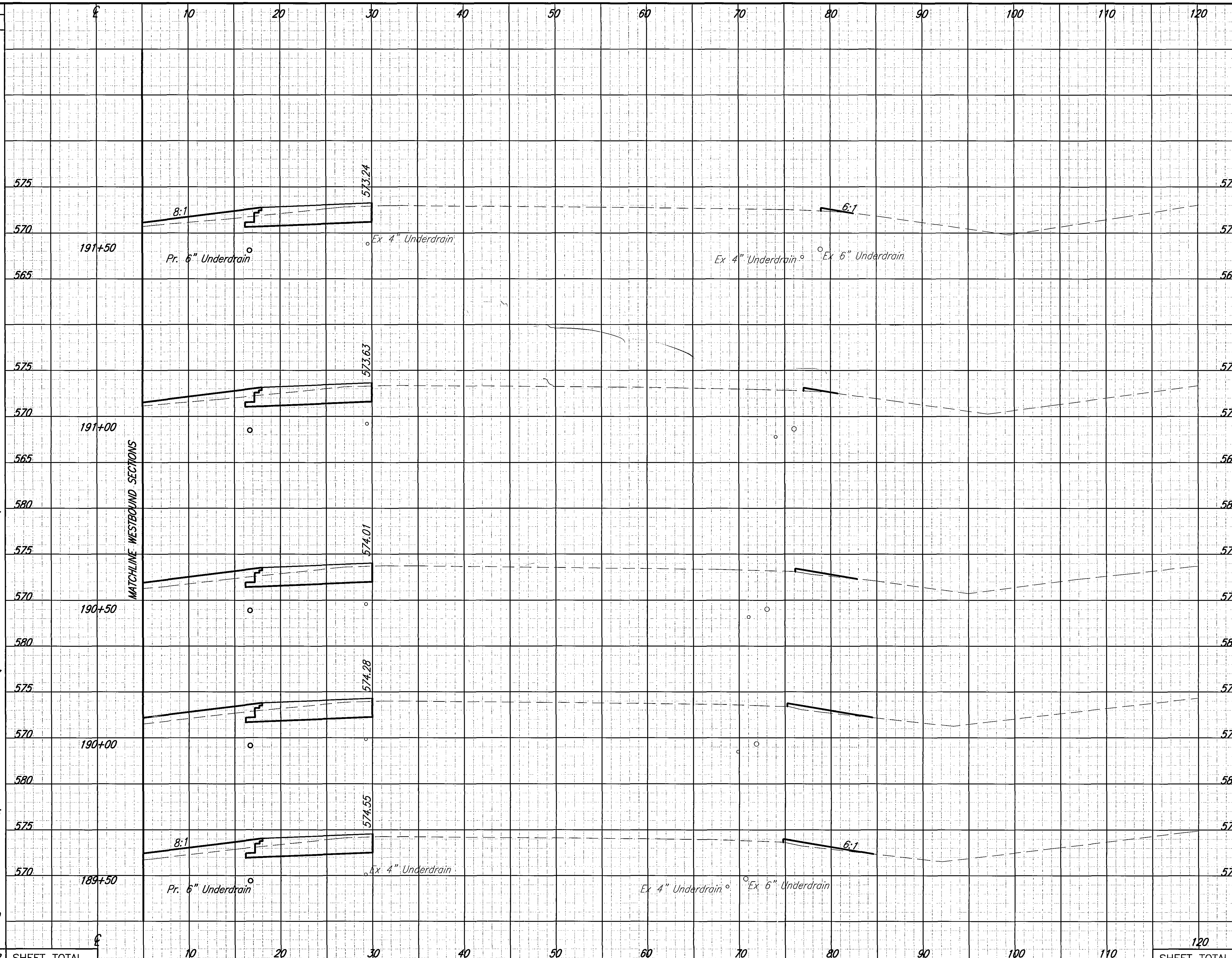


Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
189+00	20		20	11		
		114			37	20
188+50	21		20	11		
		111			38	19
188+00	19		21	9		
		108			39	17
187+50	20		21	9		
		114			38	18
187+00	21		20	10		
		117			37	20
186+50	21		20	12		
		114			37	20
SHEET TOTAL		678			226	114

CALCULATED SEB
CHECKED GAB

HAM-74-0.00

0X178020.DWG 24 JUL 2003



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
191+50	17		20	9		
		94			38	17
191+00	17		21	9		
		103			38	19
190+50	20		20	12		
		117			38	22
190+00	22		21	12		
		125			38	23
189+50	23		20	13		
		119			37	22
SHEET TOTAL		558			189	103

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – EASTBOUND
STA. 189+50 TO STA. 191+50

HAM-74-0.00

314
421

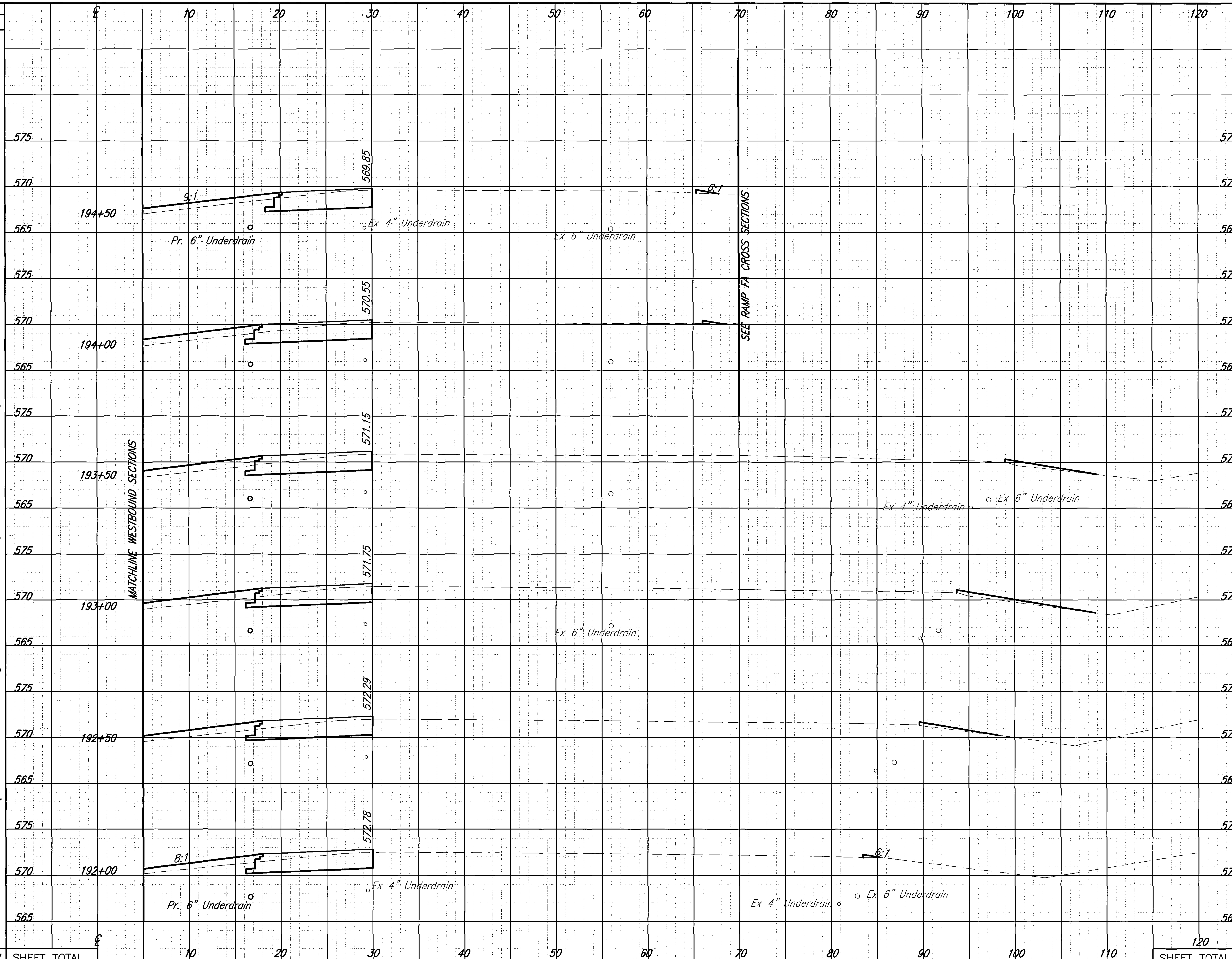
0X179020.DWG 25 JUL 2003

CROSS SECTIONS – EASTBOUND
STA. 192+00 TO STA. 194+50

HAM–74–0.00

CALCULATED SEB
CHECKED GAB

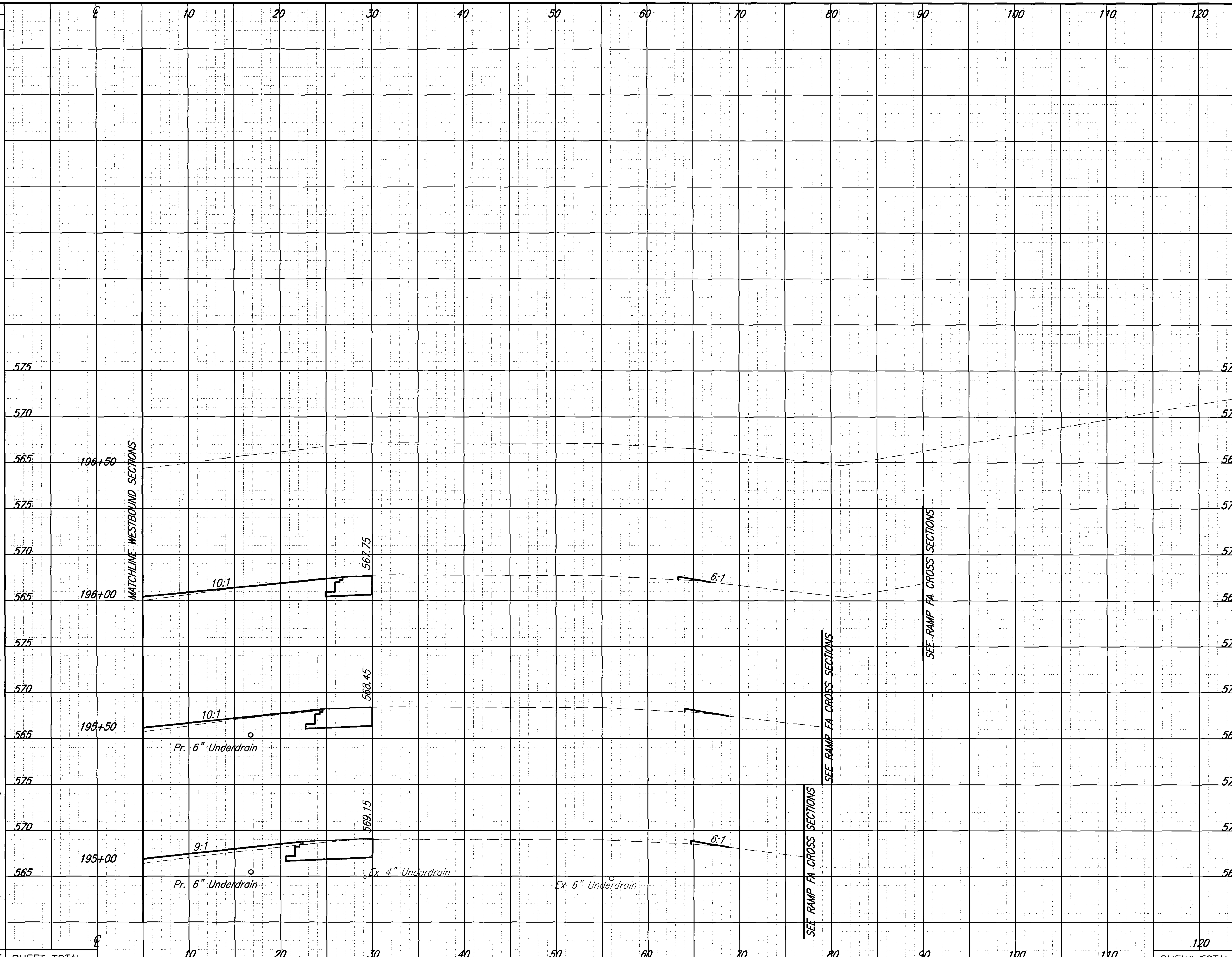
Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
194+50	18		19	10		
		92			37	19
194+00	15		21	11		
		106			38	22
193+50	23		20	13		
		142			37	25
193+00	28		20	14		
		139			38	23
192+50	22		21	11		
		103			39	19
192+00	15		21	9		
		89			38	17
SHEET TOTAL		671			227	125



19 AUG 2003
GX180020.DWG

CROSS SECTIONS – EASTBOUND
STA. 195+00 TO STA. 196+00

CALCULATED SEB — CHECKED GAB



SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
25		11	5		
	136			23	10
24		14	6		
	128			29	13
22		17	8		
	111			33	17
SHEET TOTAL	375			85	40

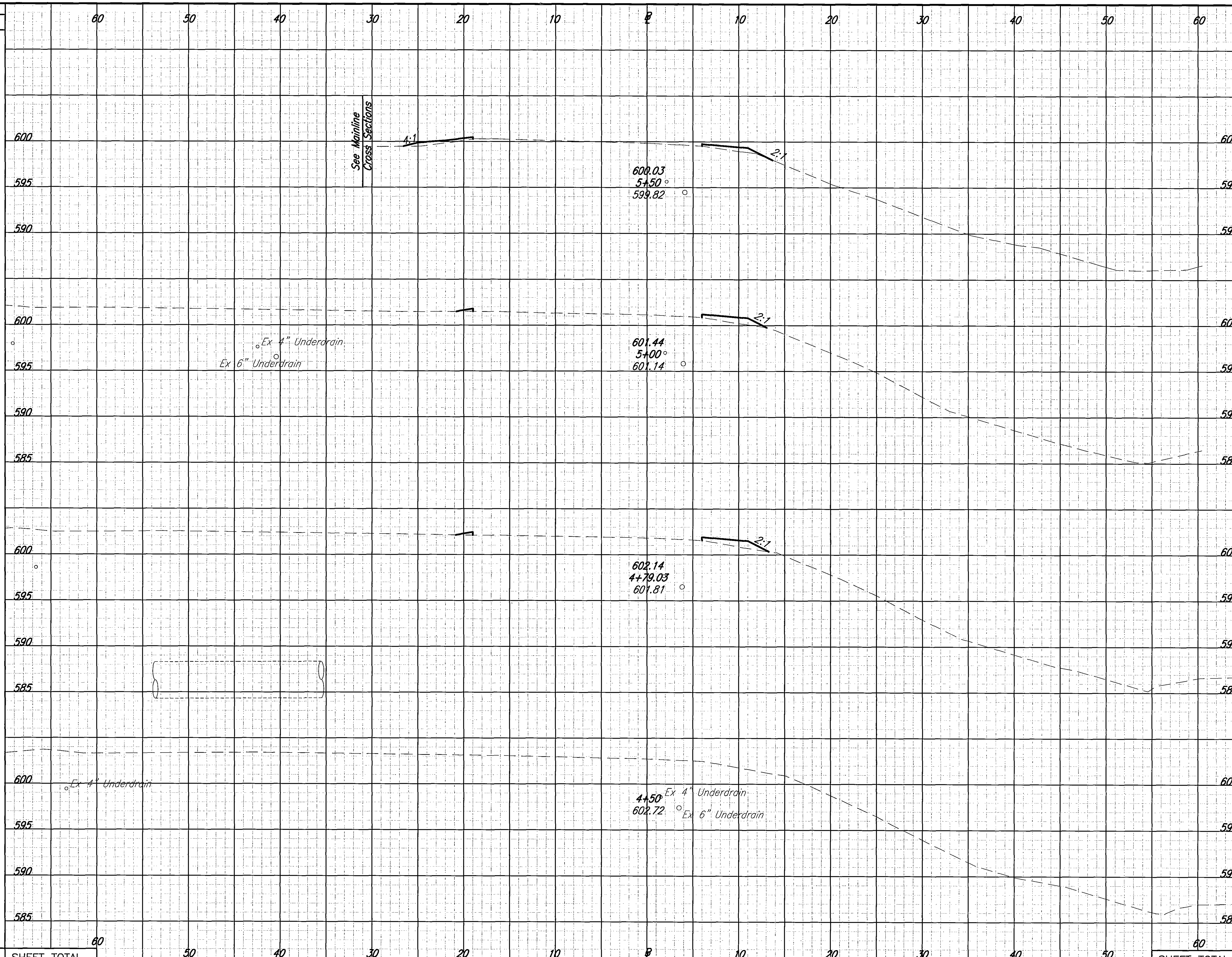
HAM-74-0.00

GX181020.DWG 19 AUG 2003

CROSS SECTIONS - RAMP HA
STA. 4+50 TO STA. 5+50

SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
15			5		
	67				8
9			4		
	21				3
9			4		
	88				11

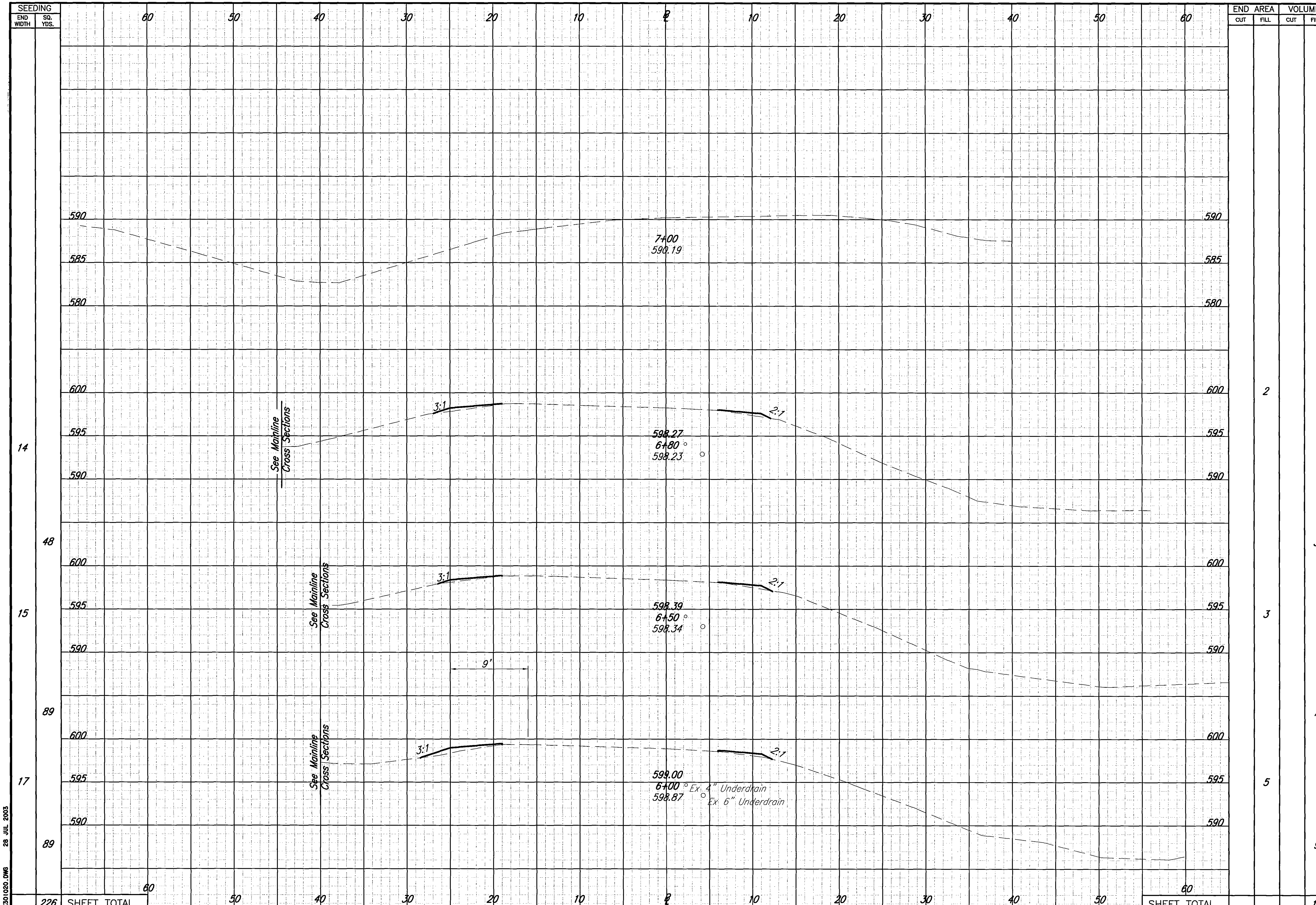
SHEET TOTAL



CALCULATED SEB
CHECKED GAB

HAM-74-0.00

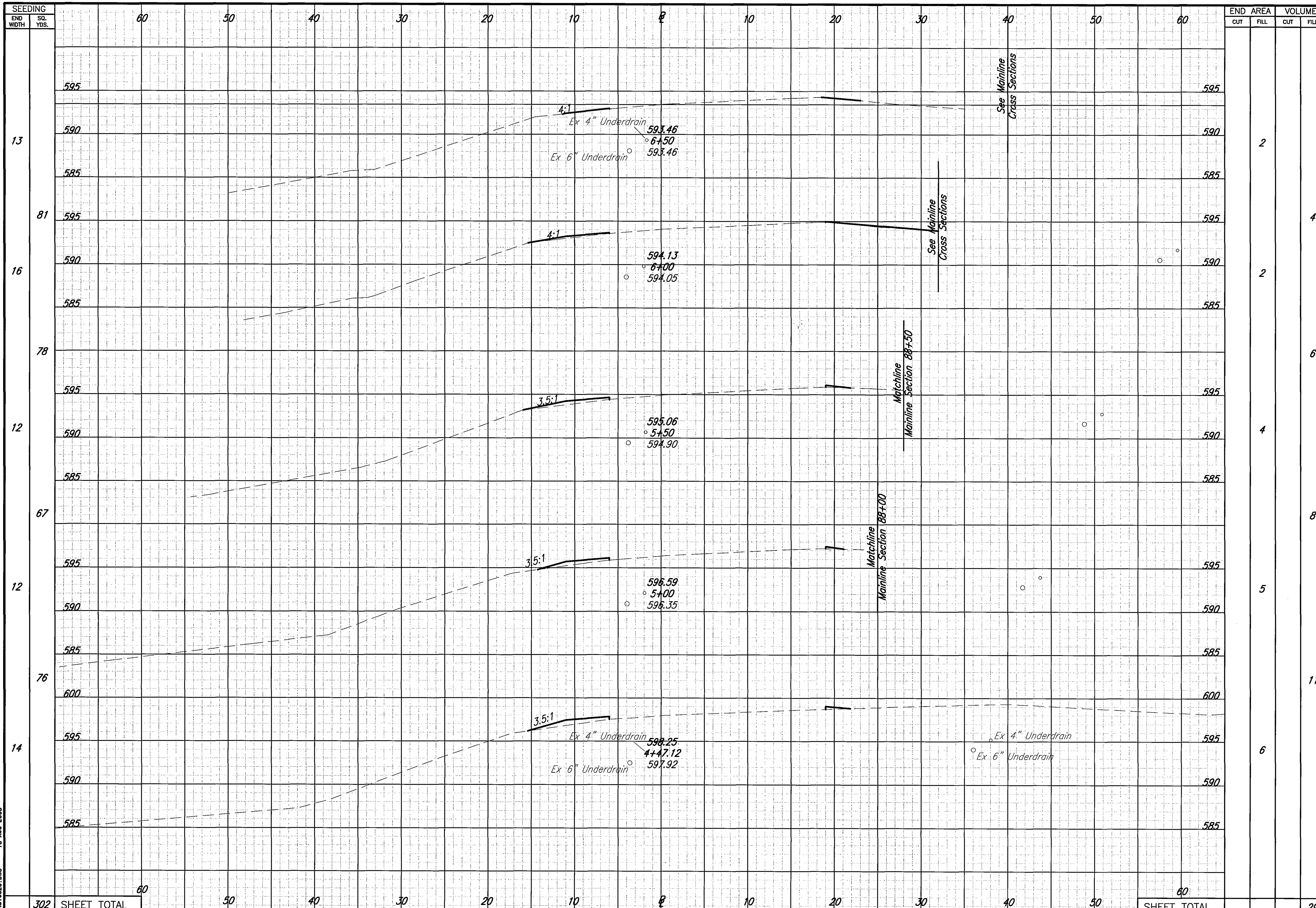
0X300020.DWG 25 JUL 2003



CALCULATED SEB
CHECKED GAB

CROSS SECTIONS - RAMP HA
STA. 6+00 TO STA. 6+80

HAM-74-0.00



CALCULATED DAS
CHECKED JNR

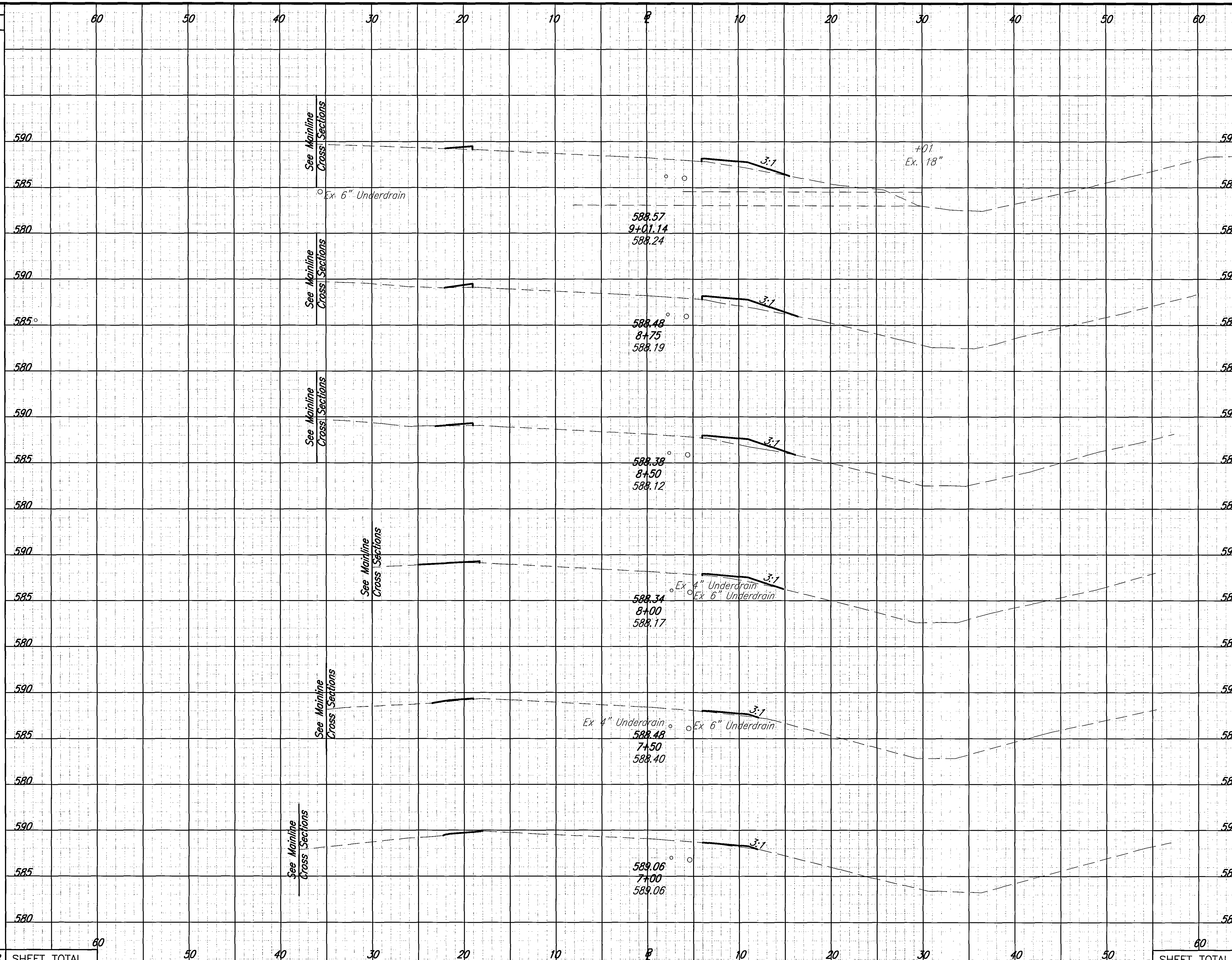
CROSS SECTIONS – RAMP HB
STA. 4+47.12 TO STA. 6+50

HAM-74-0.00

GX310020.DWG 15 AUG 2003

SEEDING	
END WIDTH	SQ. YDS.
14	
	41
14	
	44
18	
	94
16	
	86
15	
	83
15	
	348

SHEET TOTAL



END AREA		VOLUME	
CUT	FILL	CUT	FILL
	6		
			6
	6		
			12
	7		
			9
	3		
			6
	3		
			5
	2		
			38

SHEET TOTAL

CALCULATED DAS
CHECKED JNR

CROSS SECTIONS - RAMP HC
STA. 7+00 TO STA. 9+01.14

HAM-74-0.00

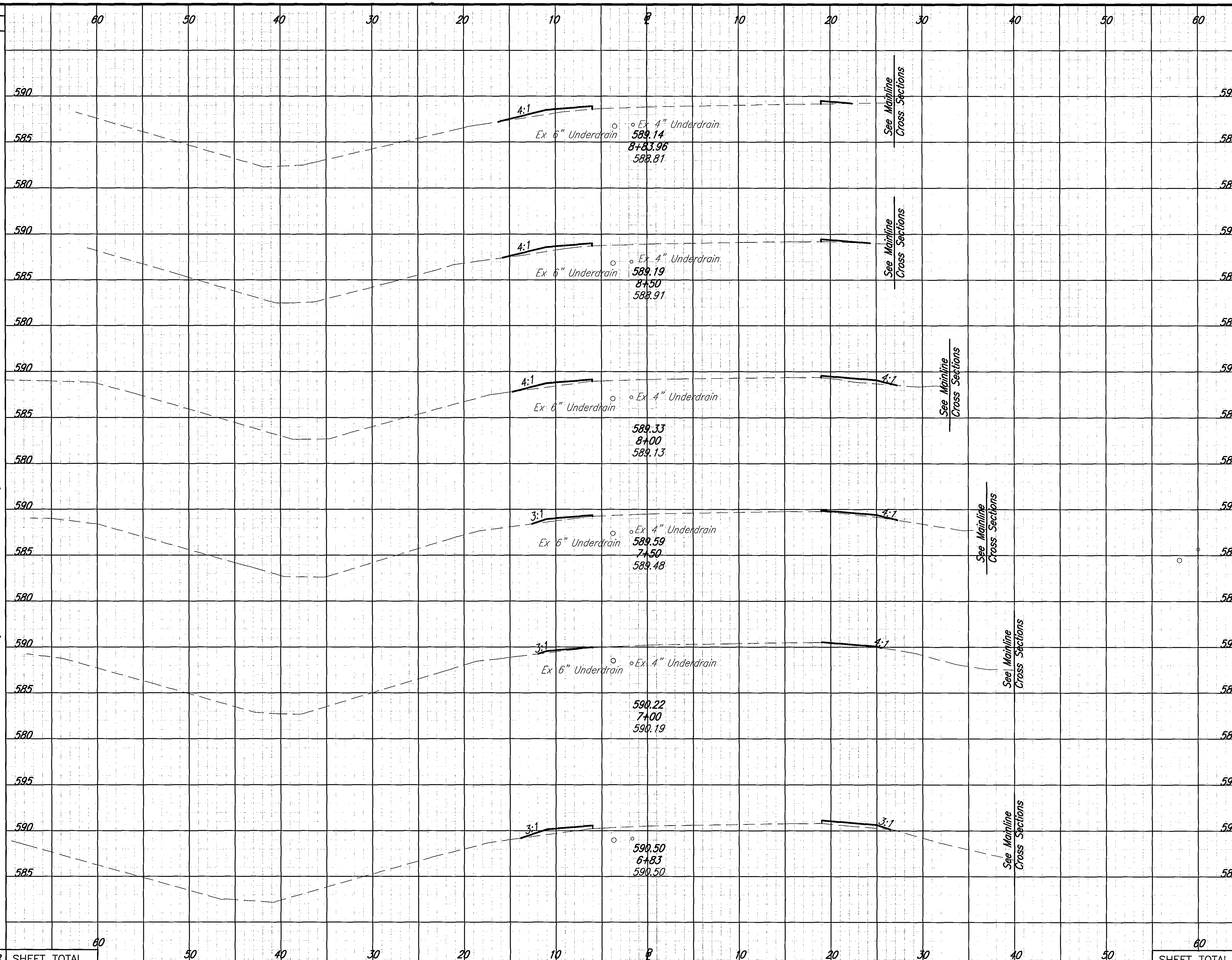
320
421

18 AUG 2003
GX322020.DWG

CROSS SECTIONS – RAMP HD
STA. 6+83 TO STA. 8+83.96

HAM-74-0.00

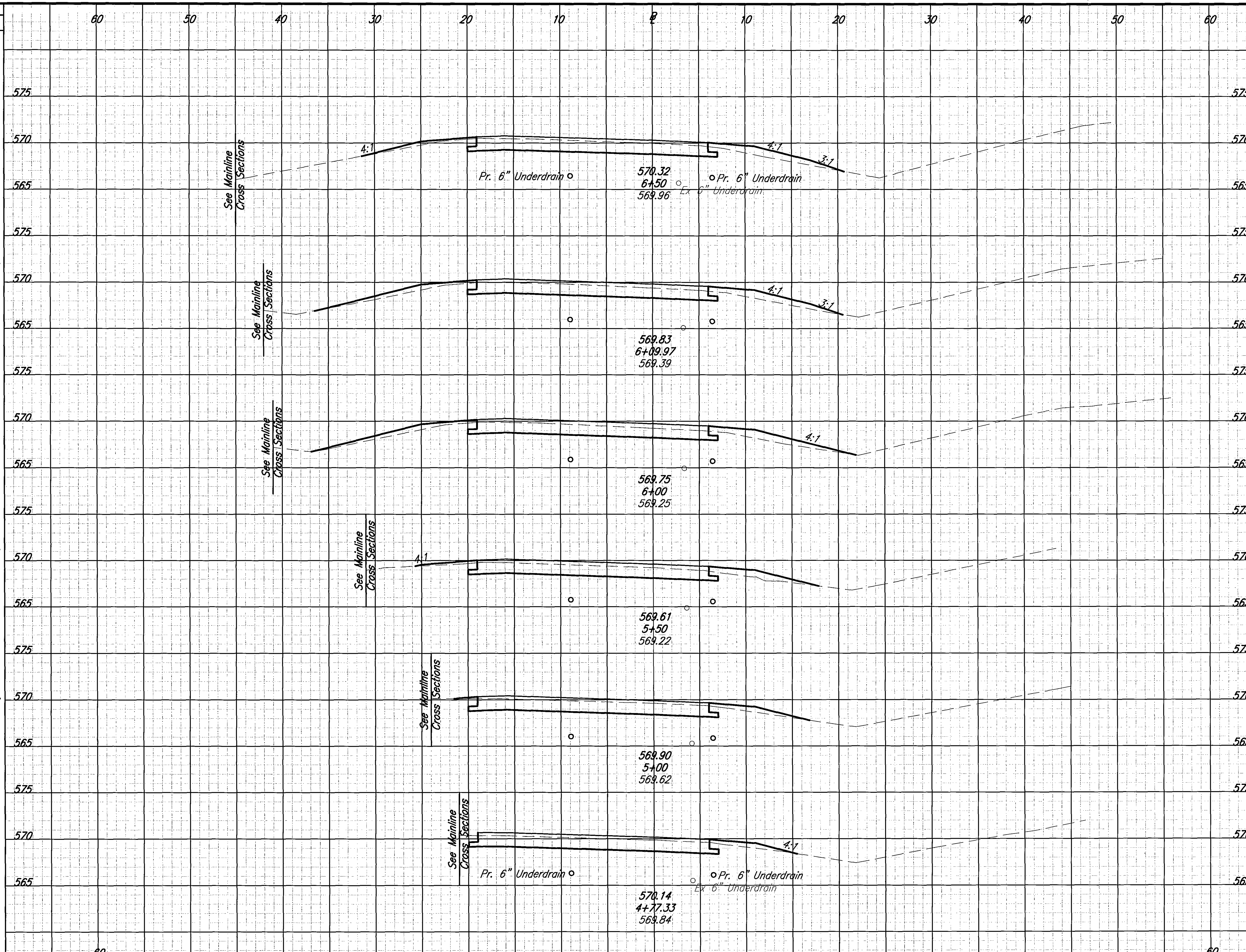
CALCULATED DAS · CHECKED JNR



SEEDING END WIDTH	SEEDING SQ. YDS.	Station	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
15		8+83.96		3		
	55					4
14		8+50		4		
	94					11
20		8+00		8		
	111					19
20		7+50		12		
	106					17
18		7+00		6		
	32					4
16		6+83		7		
SHEET TOTAL	398				SHEET TOTAL	55

0X342020.DWG 18 AUG 2003

Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
6+50	47		35	25		
		207			50	39
6+09.97	46		32	28		
		50			12	10
6+00	44		31	27		
		206			57	37
5+50	30		31	13		
		147			59	20
5+00	23		33	9		
		54			27	7
4+77.33	20		32	8		
SHEET TOTAL		664			205	113



CALCULATED SEB
CHECKED GAB

CROSS SECTIONS – RAMP FA
STA. 4+77.33 TO STA. 6+50

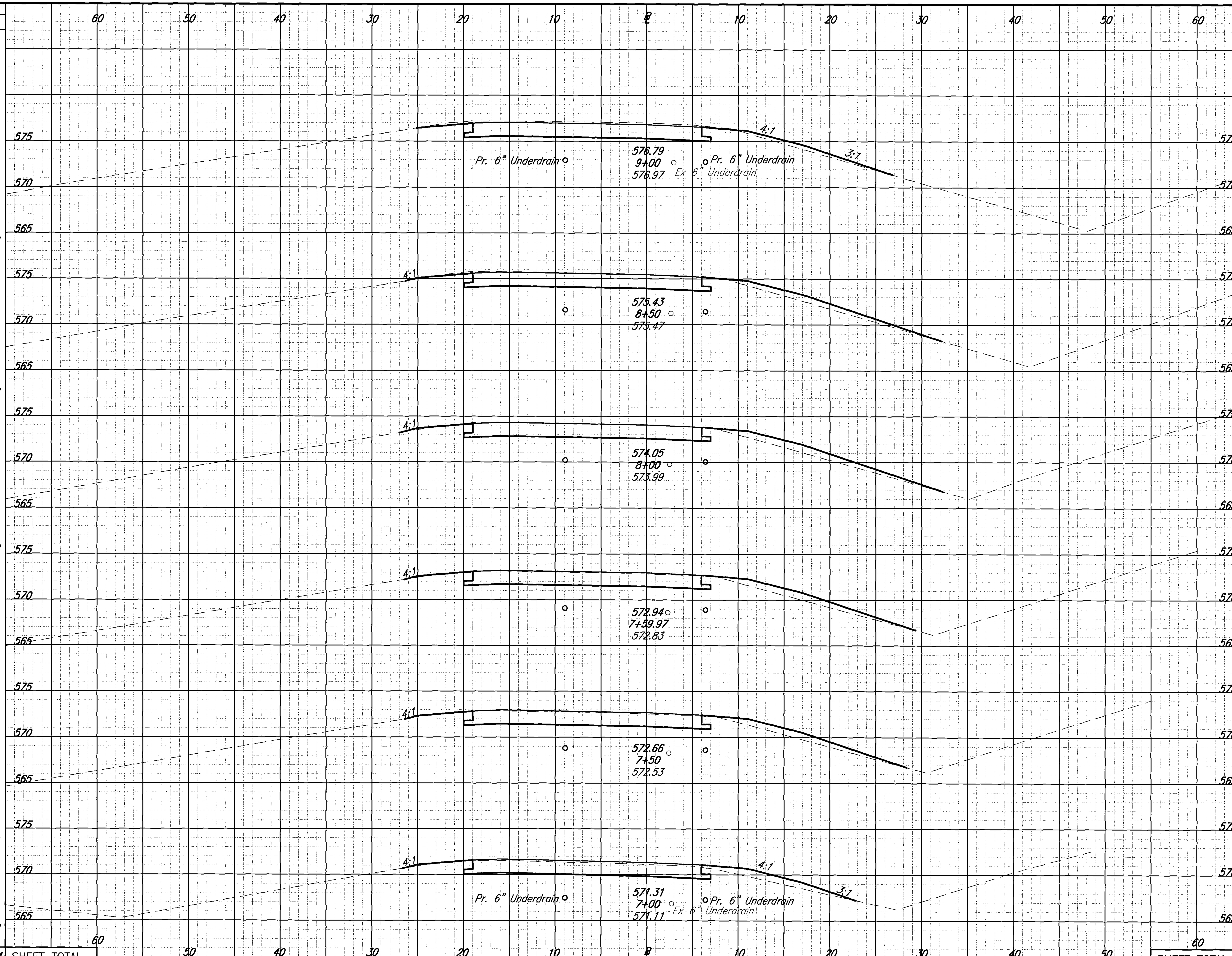
HAM–74–0.00

GX350020.DWG 18 AUG 2003

CROSS SECTIONS – RAMP FA
STA. 7+00 TO STA. 9+00

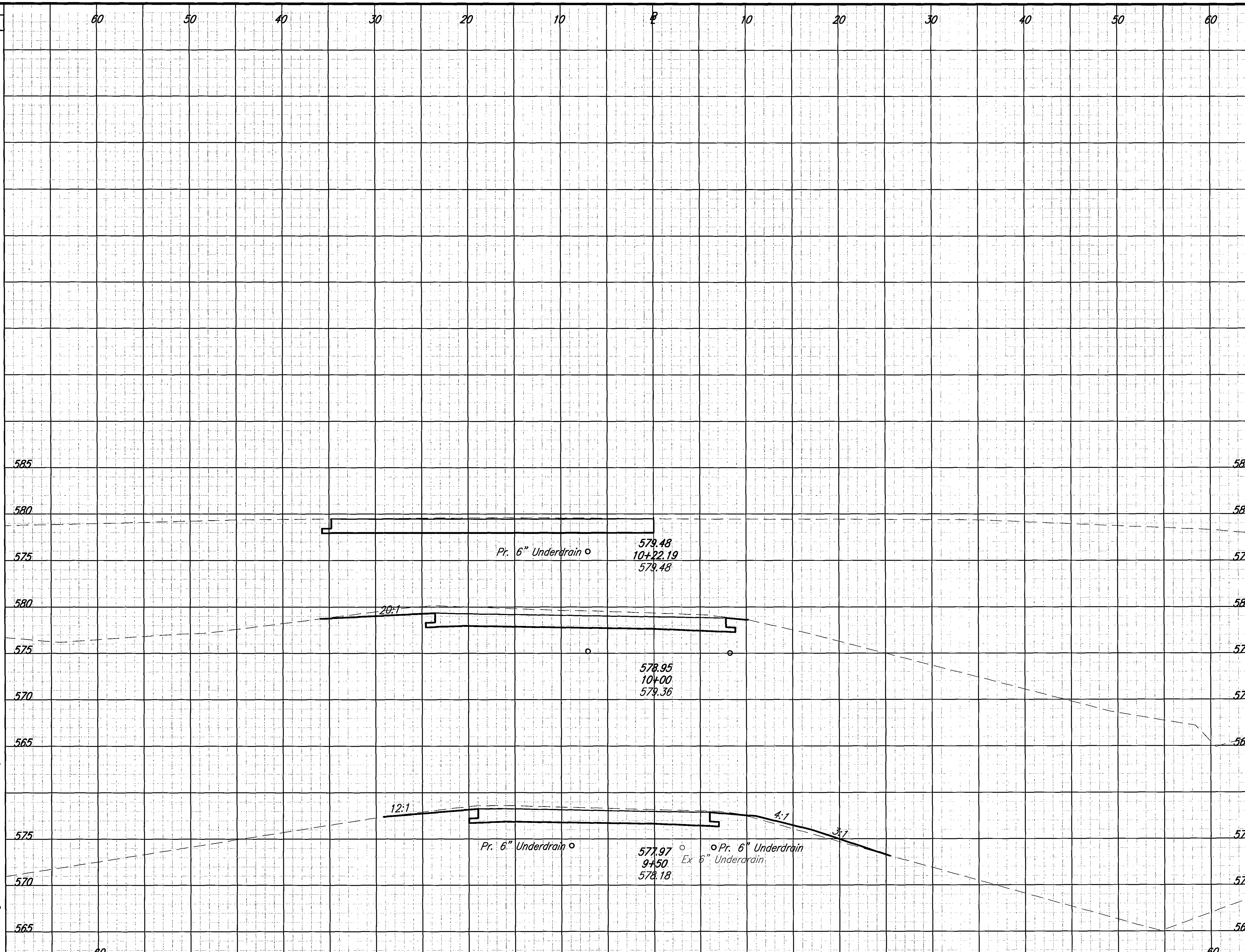
HAM-74-0.00

CALCULATED SEB
CHECKED GAB



Station	SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
9+00	27		46	7		
		172			82	18
8+50	35		43	12		
		231			81	35
8+00	48		44	26		
		202			64	36
7+59.97	43		43	22		
		47			16	8
7+50	42		43	21		
		214			74	35
7+00	35		37	17		
		228			67	39
SHEET TOTAL		1094			384	171

0X351020.DWG 25 JUL 2003



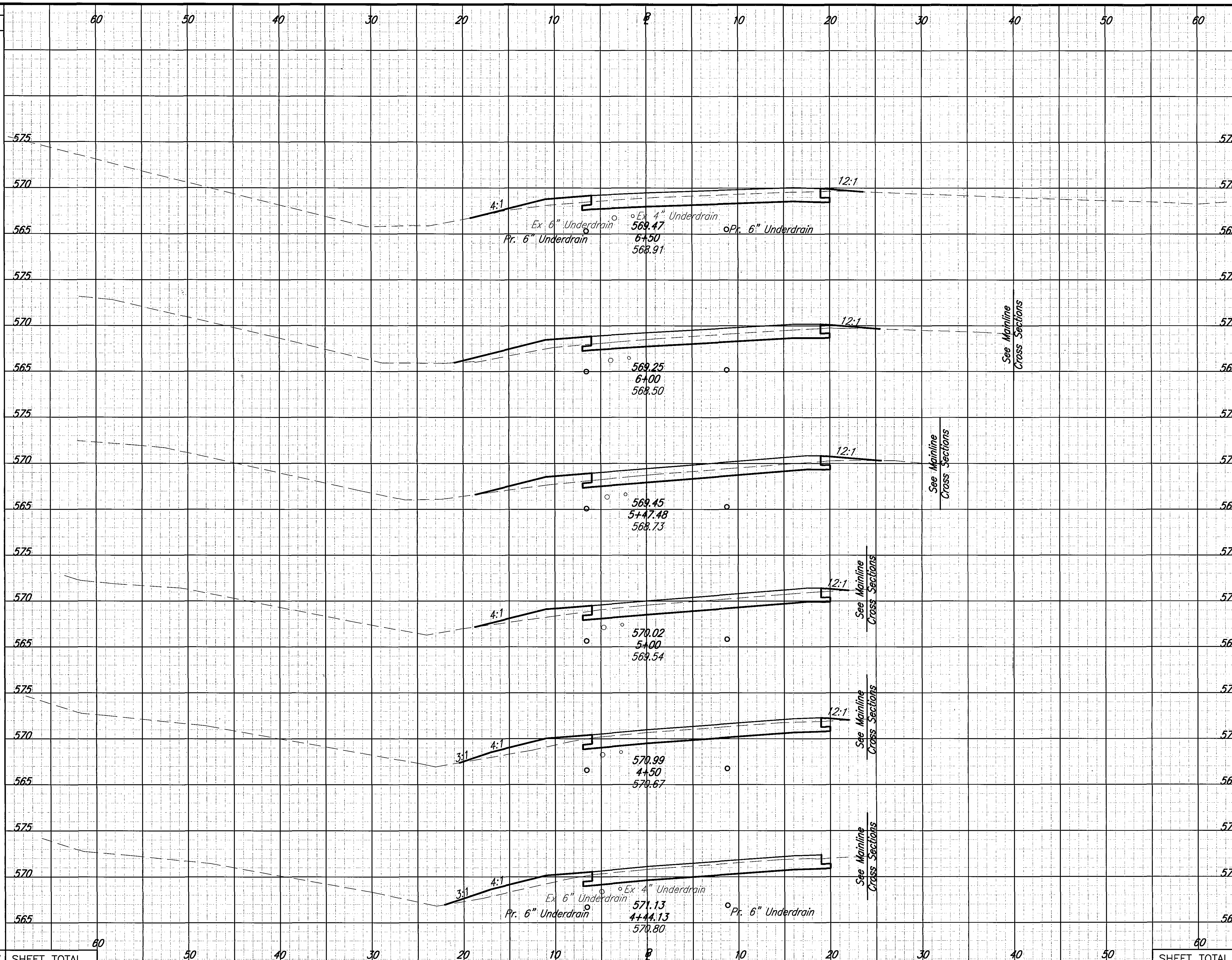
SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
2		55	1		
	21			50	1
15		67	2		
	125			105	7
30		46	6		
	158			85	12
SHEET TOTAL	304			240	20

CALCULATED SEB
CHECKED GAB

CROSS SECTIONS - RAMP FA
STA. 9+50 TO STA. 10+22.19

HAM-74-0.00

GX352020.DWG 18 AUG 2003



SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
24		26	8		
	133			44	19
24		22	13		
	140			42	22
24		21	10		
	119			42	17
21		27	9		
	119			55	19
22		32	11		
	13			7	2
19		32	11		
SHEET TOTAL	524			190	79

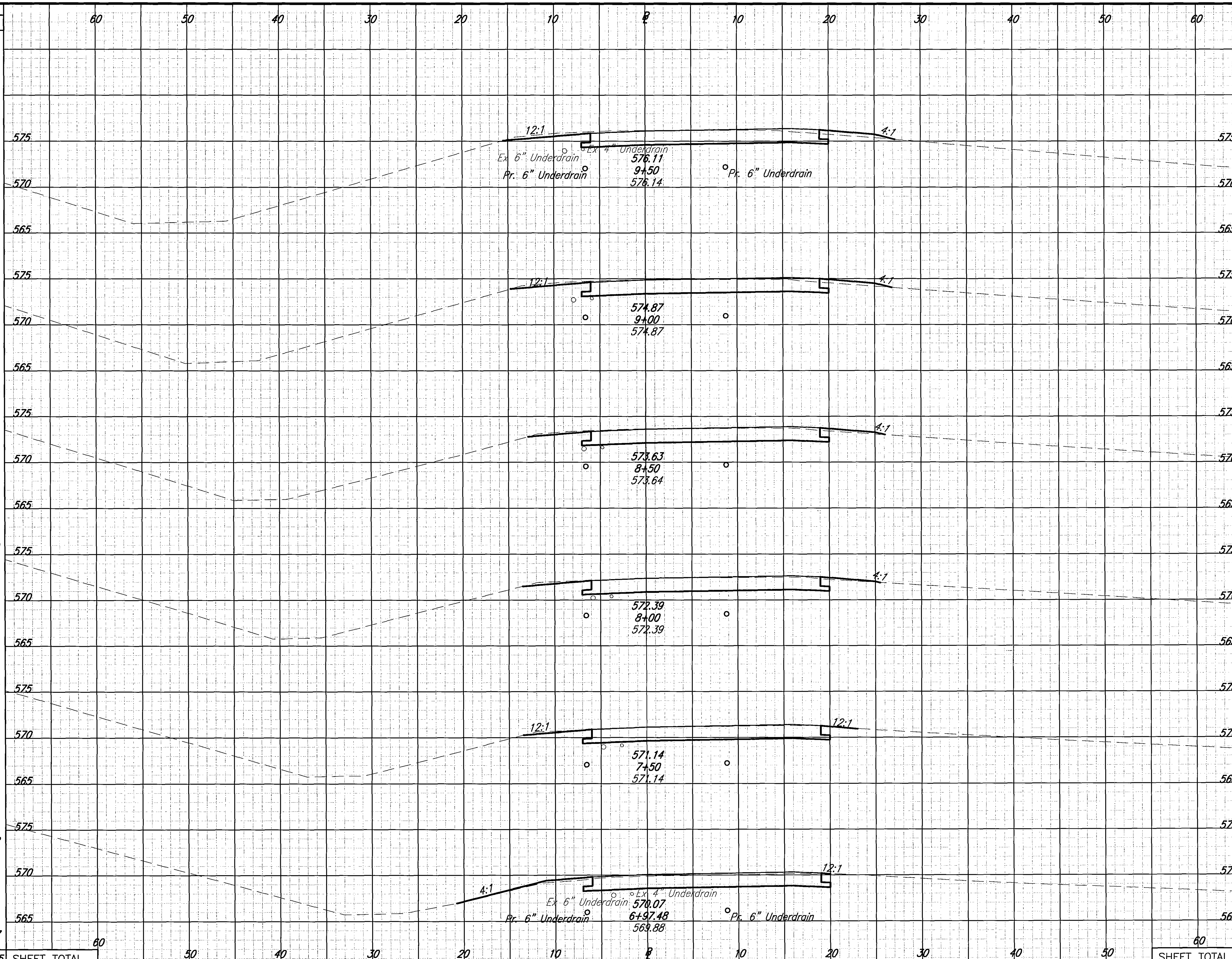
CALCULATED DAS
CHECKED JNR

CROSS SECTIONS - RAMP FB
STA. 4+44.13 TO STA. 6+50

HAM-74-0.00

325
421

GX360020.DWG 18 AUG 2003



Station	Seeding End Width	Seeding Sq. Yds.	End Area Cut	End Area Fill	Volume Cut	Volume Fill
9+50	21		40	5		
		114			74	9
9+00	20		40	4		
		183			73	7
8+50	46		39	3		
		239			73	6
8+00	40		40	3		
		194			74	5
7+50	30		40	2		
		158			74	6
6+97.48	24		36	4		
		127			55	11
SHEET TOTAL		1015			423	44

CALCULATED DAS
CHECKED JNR

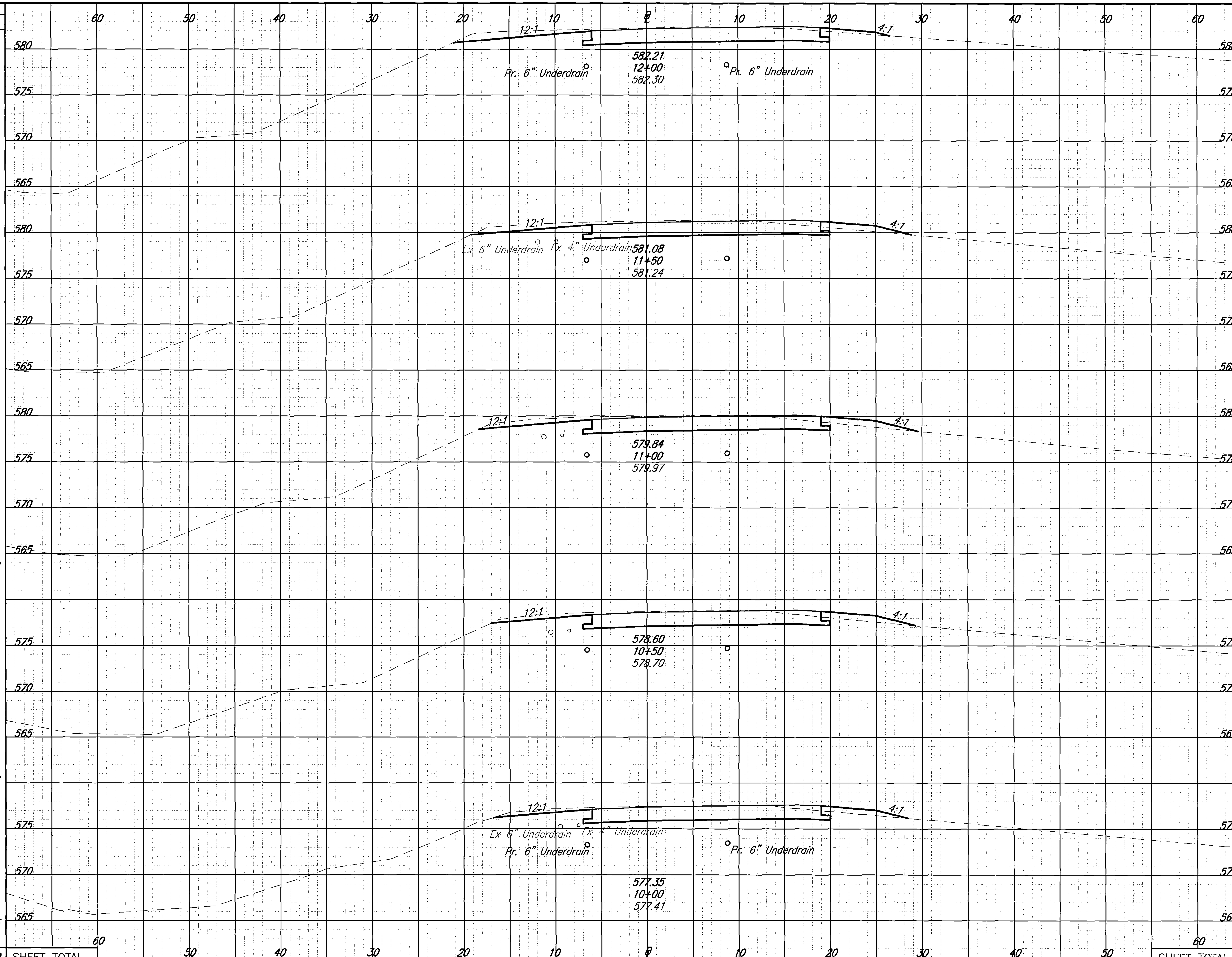
CROSS SECTIONS – RAMP FB
STA. 6+97.48 TO STA. 9+50

HAM-74-0.00

326
421

GX361020.DWG 18 AUG 2003

CROSS SECTIONS – RAMP FB
STA. 10+00 TO STA. 12+00

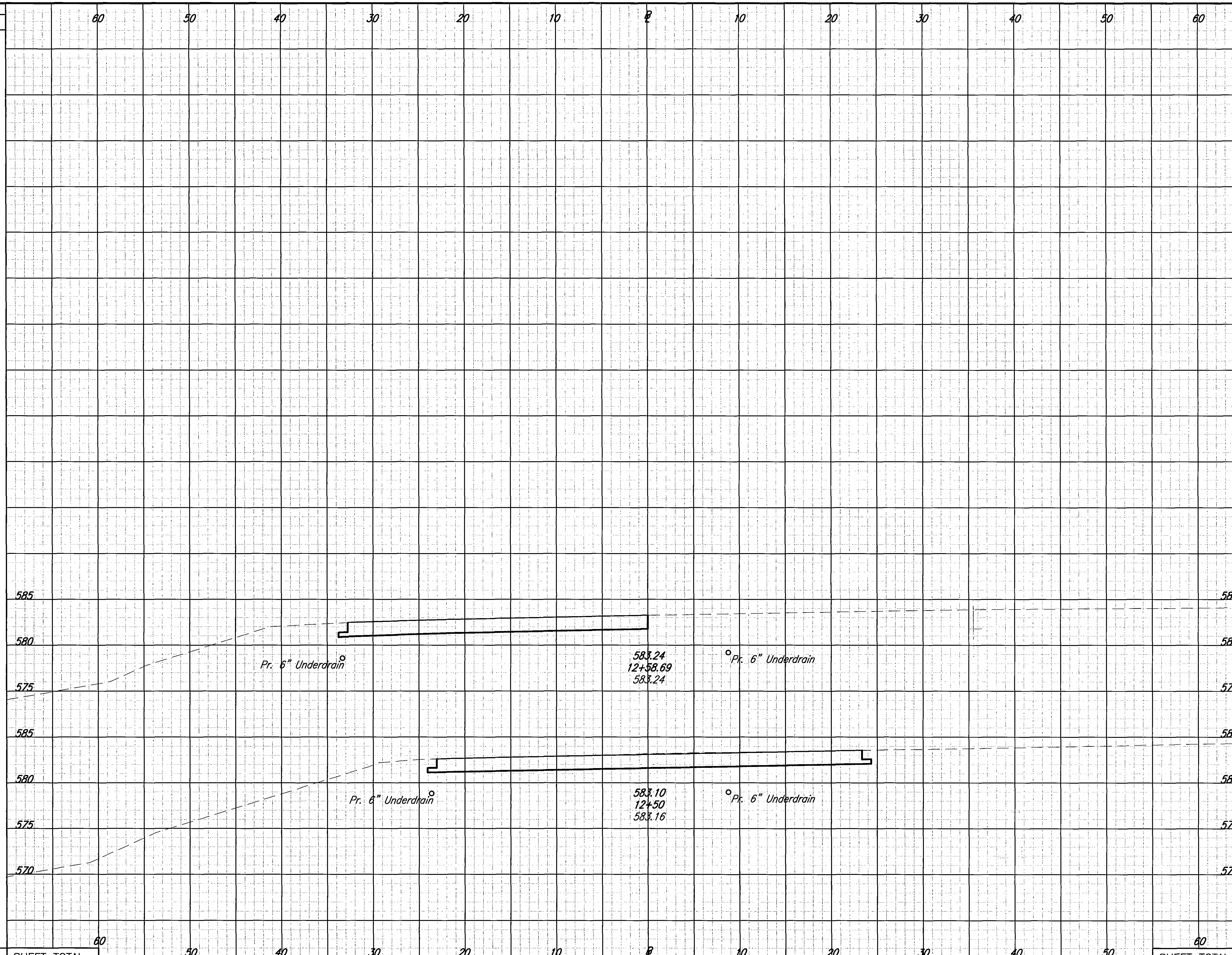


SEEDING END WIDTH	SEEDING SQ. YDS.	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
25		47	4		
	142			87	6
26		47	7		
	144			85	10
26		45	7		
	142			81	13
25		43	7		
	136			79	12
24		42	6		
	125			76	10
SHEET TOTAL	689			408	51

CALCULATED DAS
CHECKED JNR

HAM-74-0.00

GX362020.DWG 18 AUG 2003



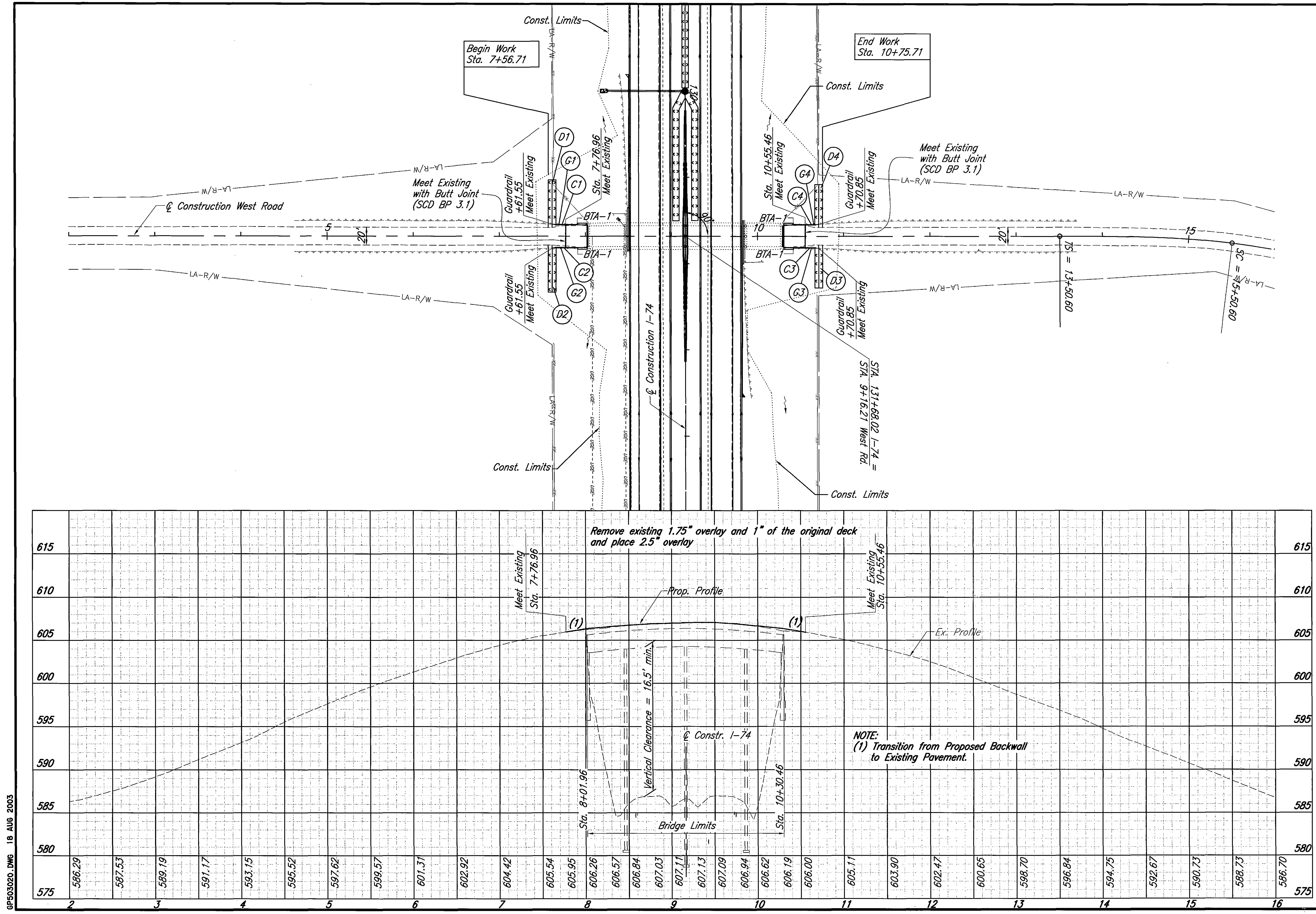
SEEDING END WIDTH	SEEDING SQ. YDS.	STATION	END AREA CUT	END AREA FILL	VOLUME CUT	VOLUME FILL
2		12+58.69	50	1		
	3				20	0
4		12+50	72	2		
	81				110	6
	84	SHEET TOTAL			130	6

CROSS SECTIONS - RAMP FB
STA. 12+50 TO STA. 12+58.69

HAM-74-0.00

CALCULATED DAS
CHECKED JNR

0X363020.DWG 24 JUL 2003



0 25 50 100
HORIZONTAL SCALE IN FEET

CALCULATED CAH
CHECKED DAS

PLAN AND PROFILE - WEST ROAD
STA. 2+00 TO STA. 16+00

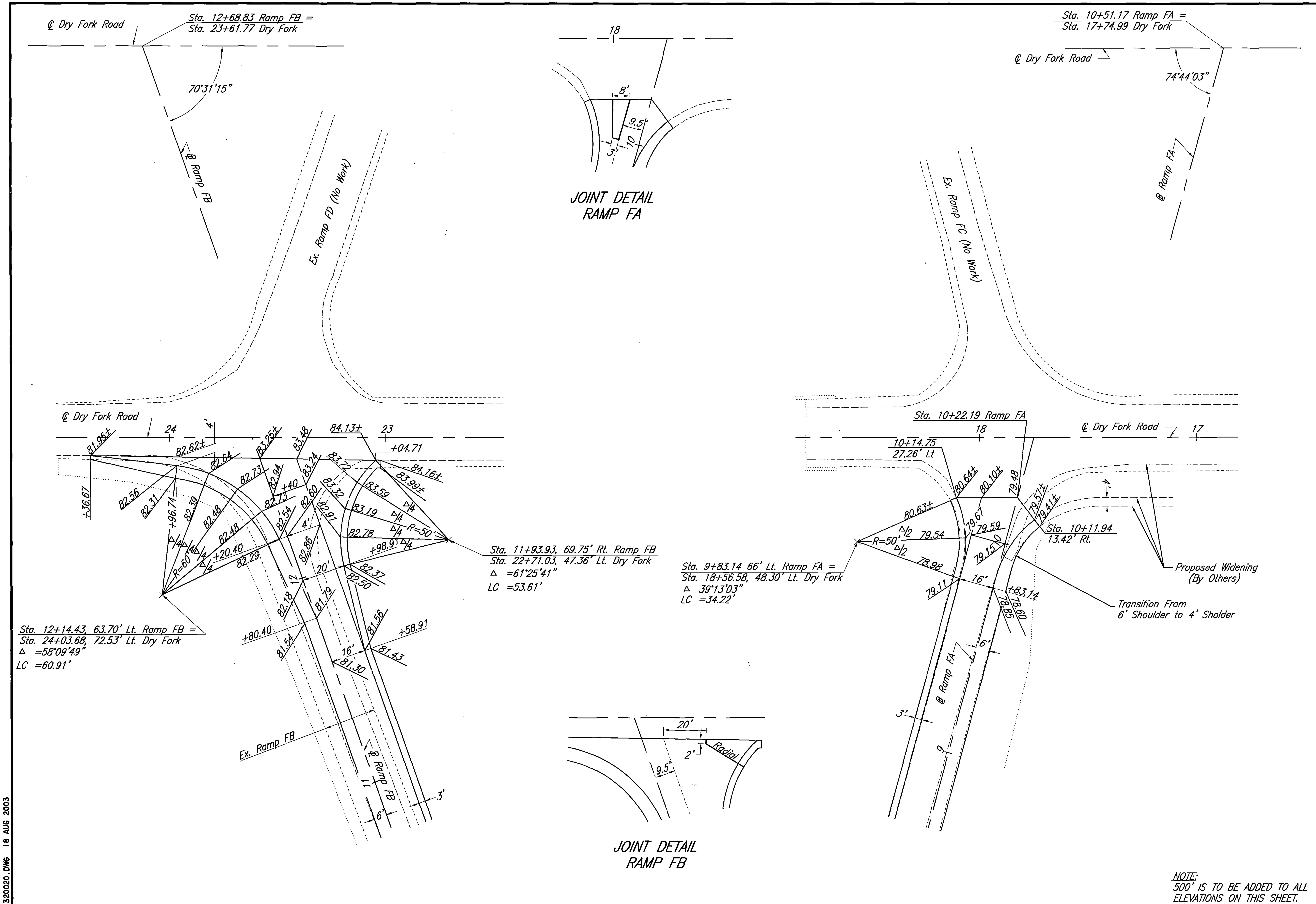
HAM-74-0.00

CALC'D DAS
CHK'D REF

REFERENCE NUMBER	SHEET NUMBER	FROM STATION	TO STATION	SIDE	GUARDRAIL REMOVED	GUARDRAIL, TYPE 5	BRIDGE TERMINAL ASSEMBLY, TYPE 1	CURB, TYPE 4-C	BARRIER REFLECTOR, TYPE A	SODDING REINFORCED	REMARKS	SEE SHEET
				ITEM	202	606	606	609	626	660		
				UNIT	FT	FT	EACH	FT	EACH	SQ YD		
C1	329	7+64.71	7+76.96	LT				12.25				
C2	329	7+64.71	7+76.96	RT				12.25				
C3	329	10+55.46	10+67.71	RT				12.25				
C4	329	10+55.46	10+67.71	LT				12.25				
D1	329	7+61.21		LT						55		
D2	329	7+61.21		RT						55		
D3	329	10+71.21		RT						50		
D4	329	10+71.21		LT						50		
G1	329	7+61.55	7+92.81	LT	32	31.25	1		1			
G2	329	7+61.55	7+92.81	RT	32	31.25	1		1			
G3	329	10+39.61	10+70.85	RT	32	31.25	1		1			
G4	329	10+39.61	10+70.85	LT	32	31.25	1		1			
TOTALS CARRIED TO GENERAL SUMMARY					128	125.00	4	49	4	210		

SUBSUMMARY WEST ROAD

HAM-74-0.00



INTERSECTION DETAILS
DRY FORK ROAD

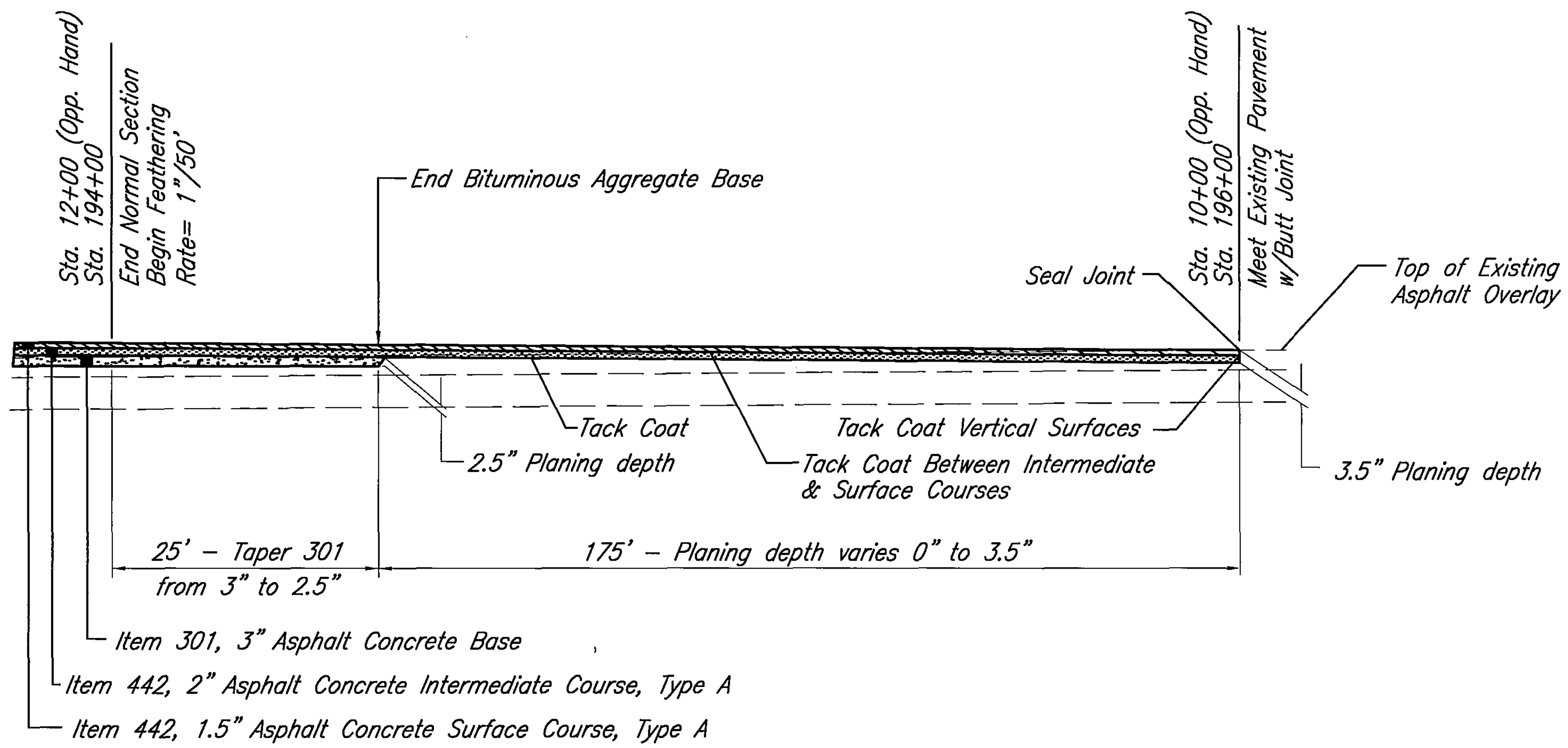
HORIZONTAL SCALE IN FEET

CALCULATED DAS
CHECKED JNR

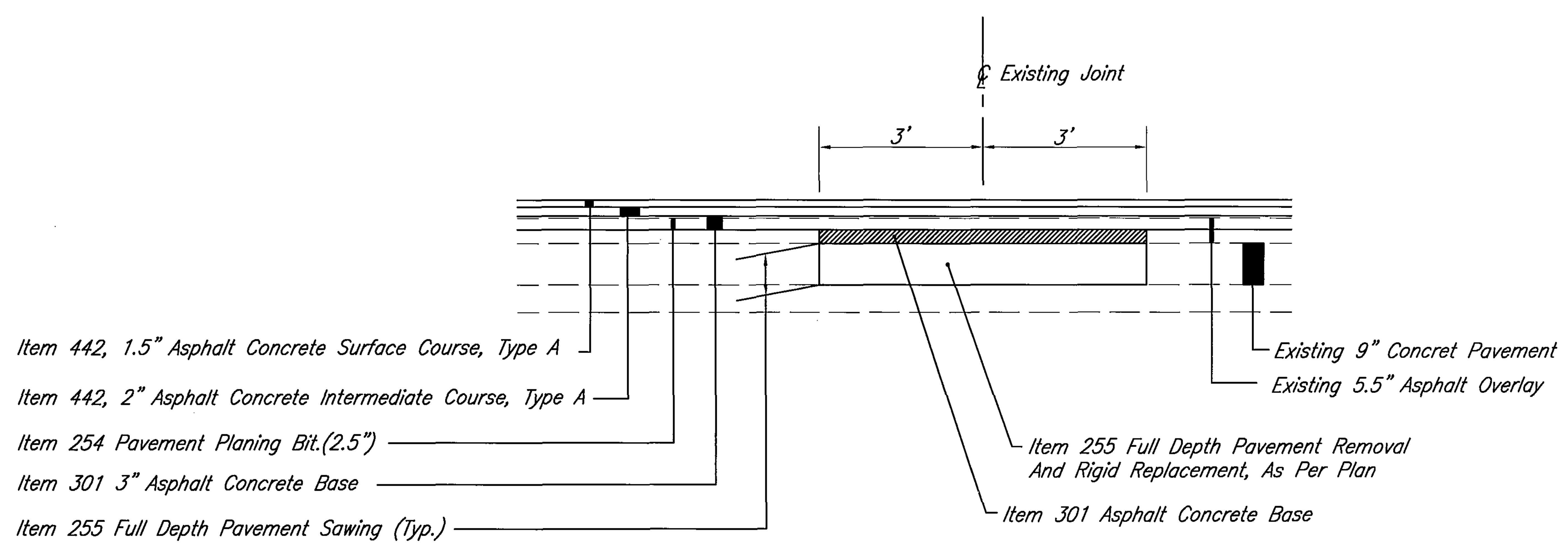
HAM-74-0.00

NOTE:
500' IS TO BE ADDED TO ALL ELEVATIONS ON THIS SHEET.

G1320020.DWG 18 AUG 2003



FEATHERING AT PROJECT LIMITS



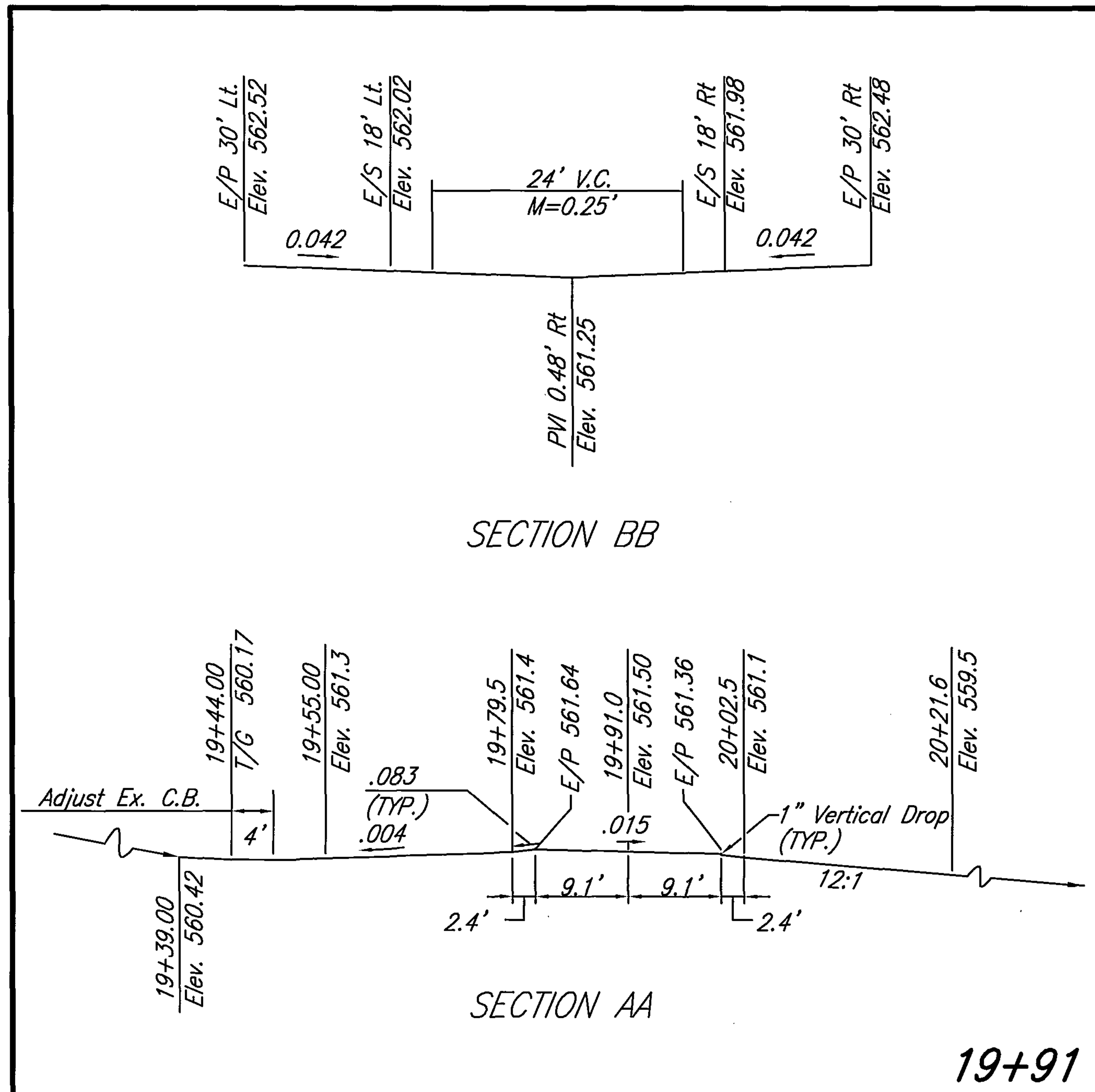
Note:
1 See Standard Drawing BP-2.5 For Dowel
Bars And Other Details Not Shown
2 See Typical Sections

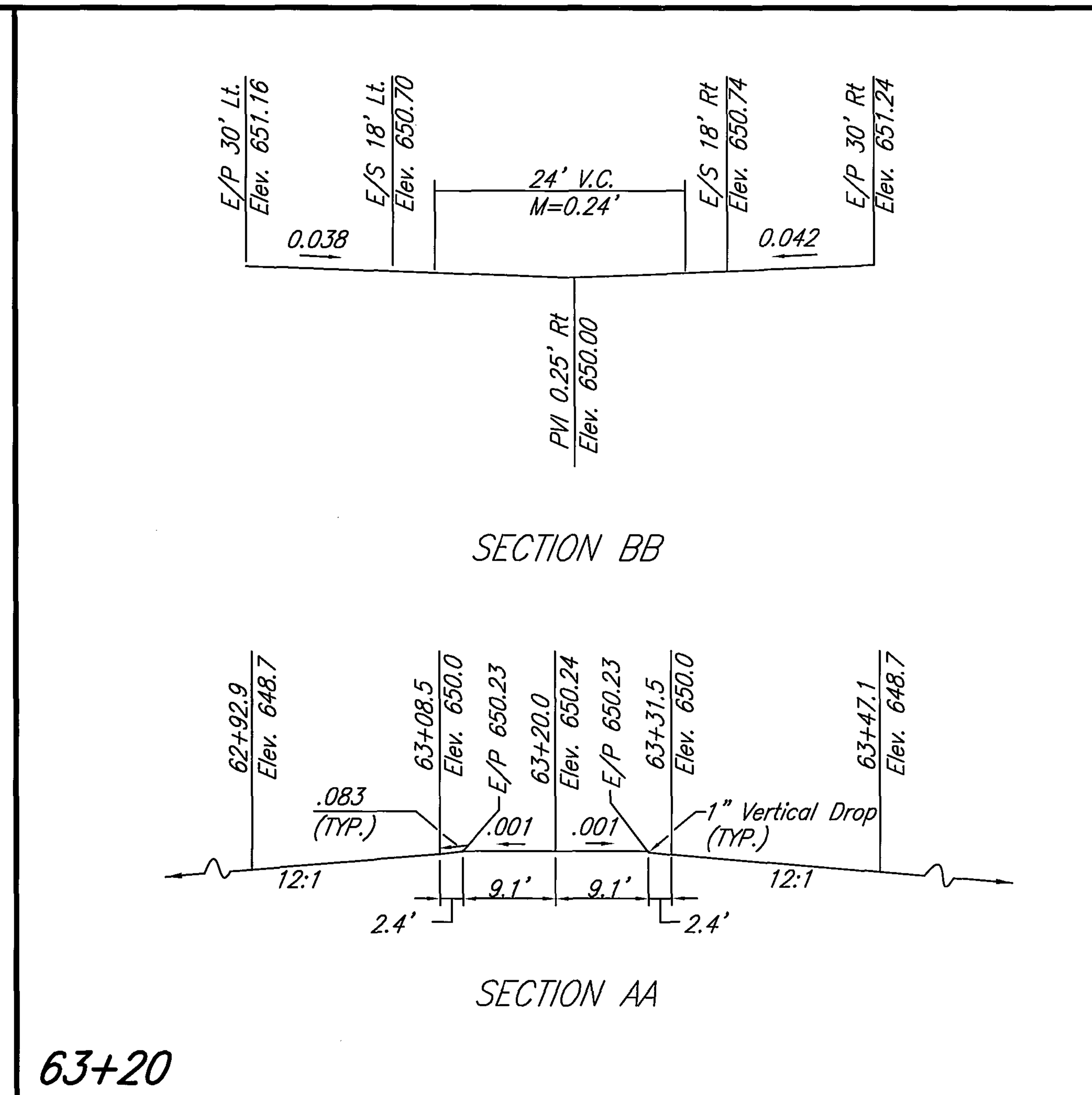
ITEM 255 FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, AS PER PLAN

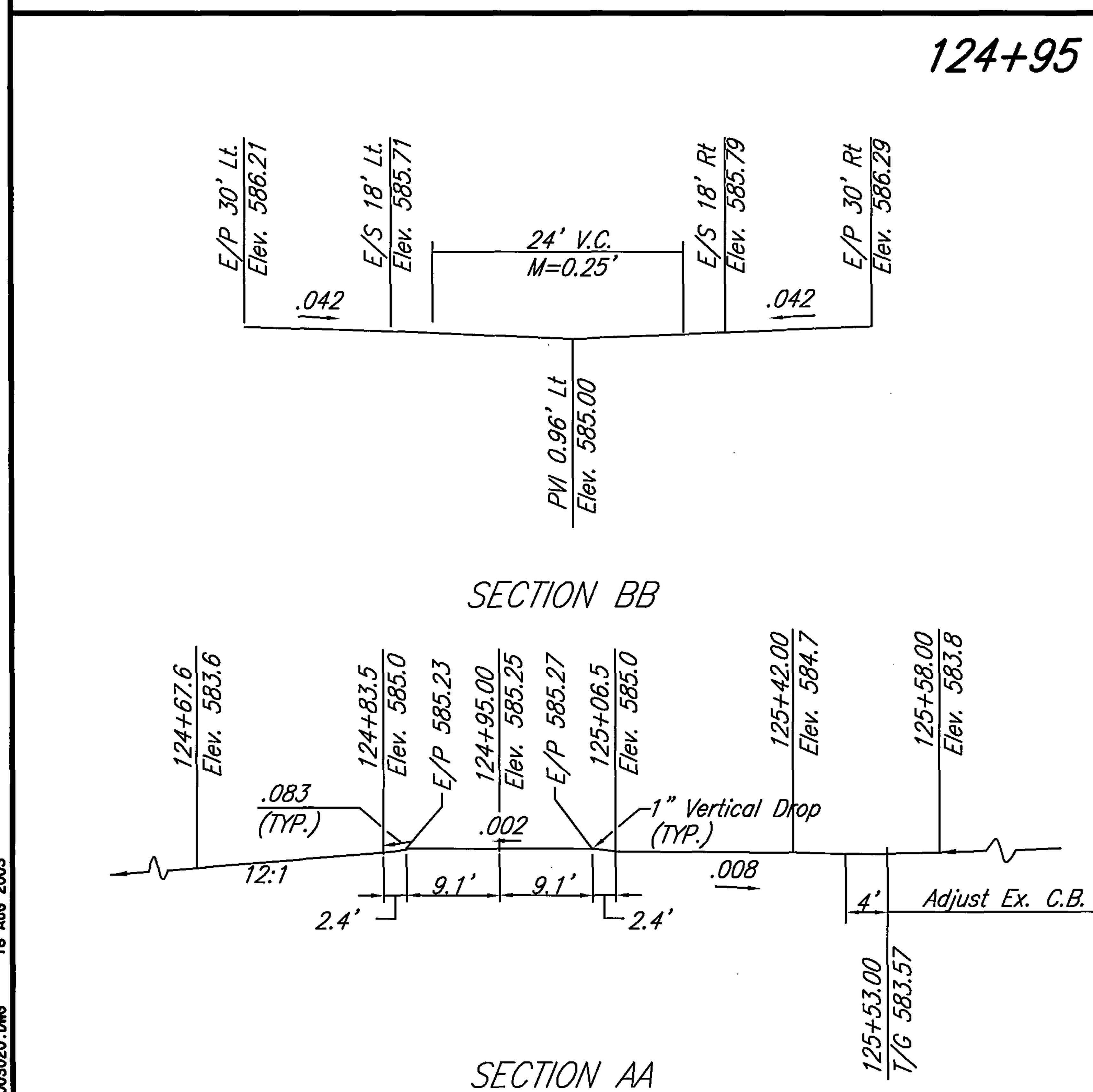
MISCELLANEOUS DETAILS

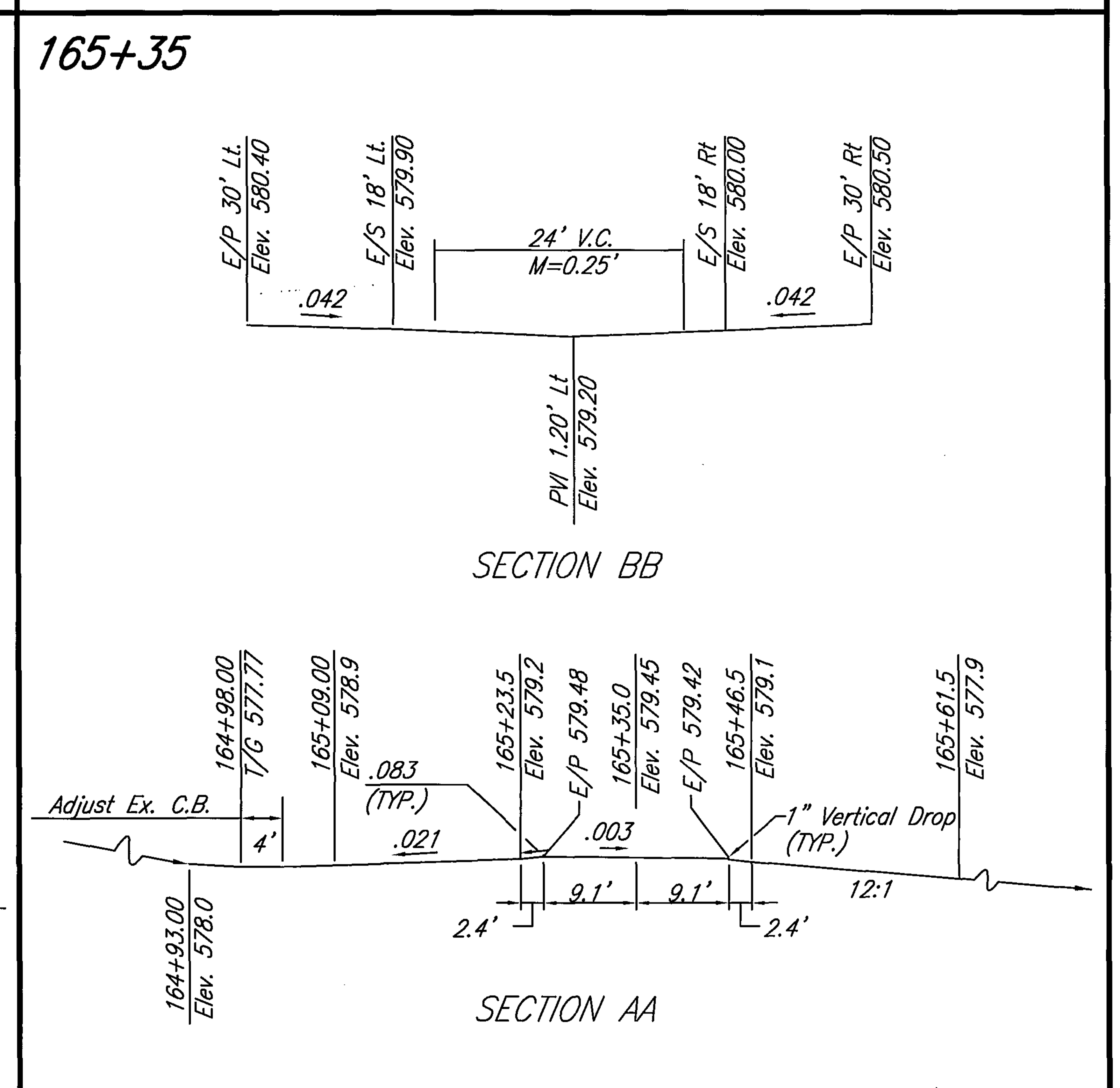
HAM-74-0.00

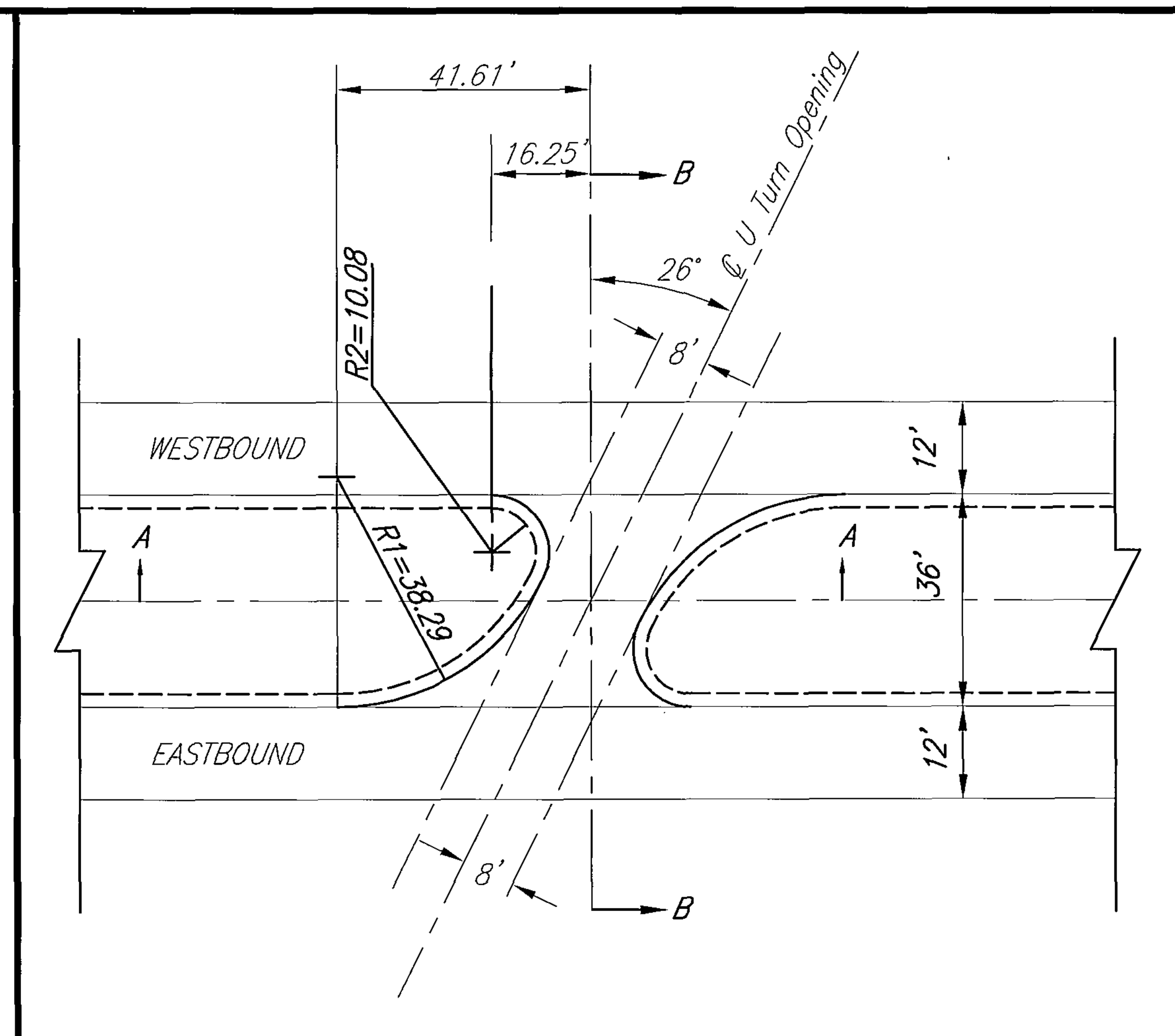
GMO02020.DWG 19 AUG 2003





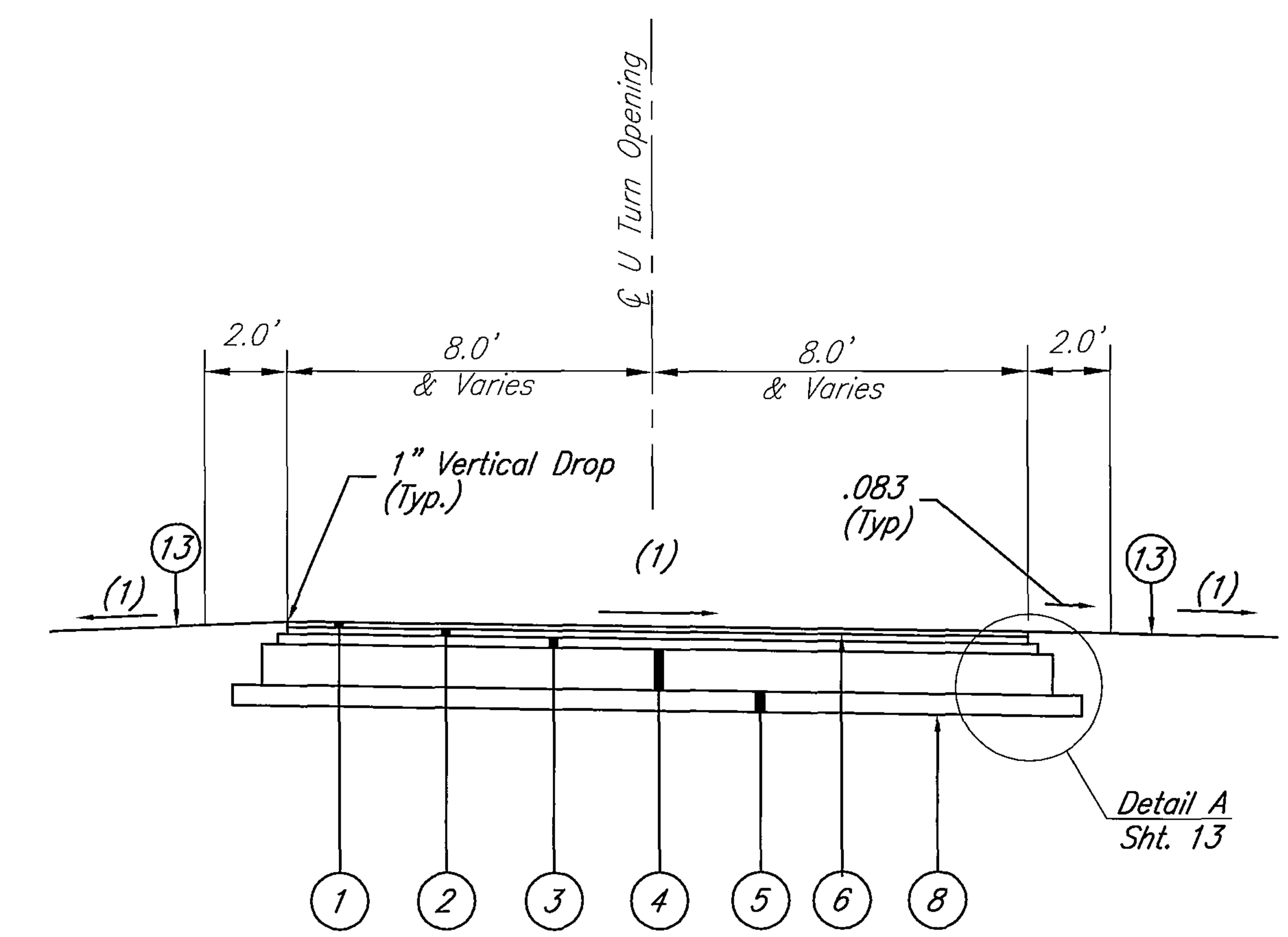






U-TURN MEDIAN OPENINGS

NTS



TYPICAL SECTION

NTS

(1) Slopes vary as shown on Section AA

LEGEND:

(1) Item 442	1.5" Asphalt concrete surface course, 12.5mm, Type A (446) w/SS 1059 Warranty Spec.
(2) Item 442	2" Asphalt concrete intermediate course, 19mm, Type A (446)
(3) Item 301	3" Asphalt concrete base, PG 64-22
(4) Item 302	12" Asphalt concrete base, PG 64-22
(5) Item 304	6" Aggregate base
(6) Item 407	Tack coat for intermediate course
(8) Item 204	Subgrade compaction
(13) Item 659	Seeding and mulching

N

0 5 10 20 HORIZONTAL SCALE IN FEET

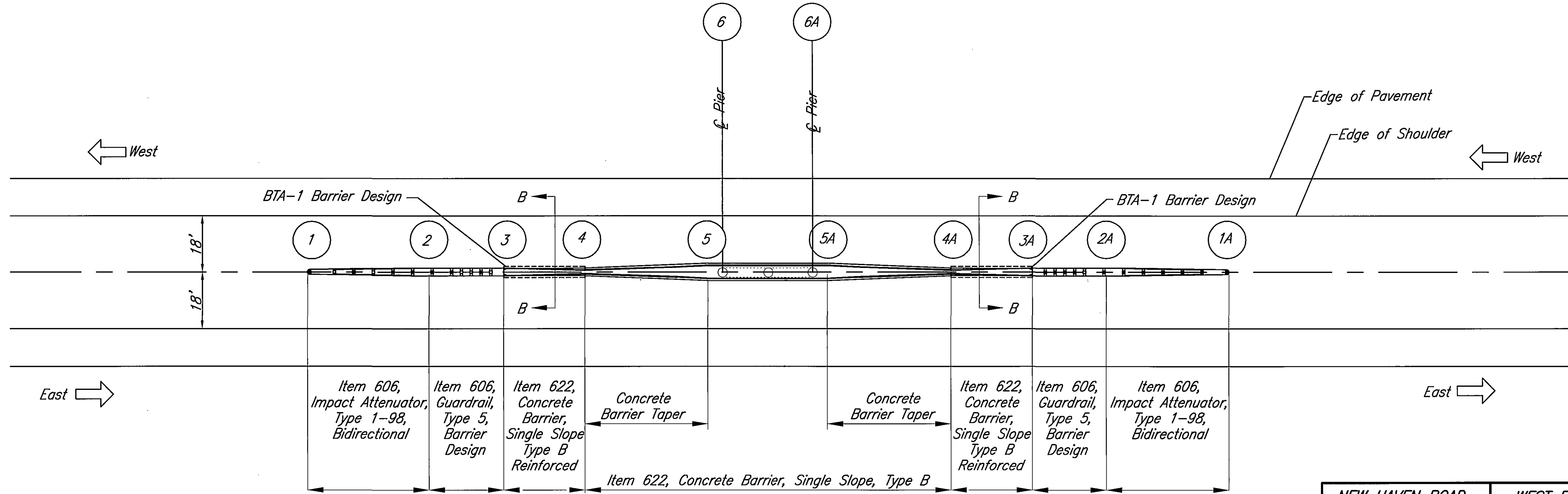
CALCULATED DAS

CHECKED JNR

U TURN MEDIAN OPENINGS

HAM-74-0.00

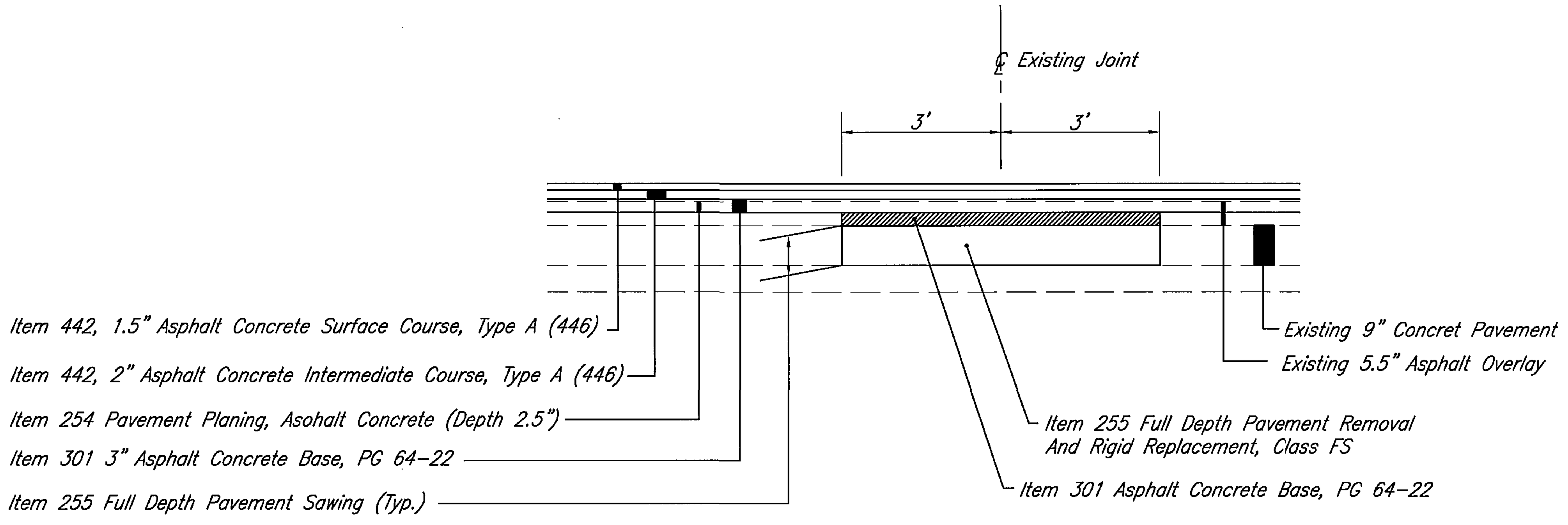
GM003020.DWG 18 AUG 2003



BARRIER AT MEDIAN PIERS DETAILS

	NEW HAVEN ROAD	WEST ROAD
	Overpass	Overpass
1	Sta 93+46.09	Sta 130+24.41
2	Sta 93+77.34	Sta 130+55.66
3	Sta 94+06.49	Sta 130+84.81
4	Sta 94+32.74	Sta 131+11.06
5	Sta 94+72.74	Sta 131+51.06
6	℄ Sta 94+77.74	℄ Sta 131+56.06
6A	℄ Sta 95+06.63	℄ Sta 131+79.99
5A	Sta 95+11.63	Sta 131+84.99
4A	Sta 95+51.63	Sta 132+24.99
3A	Sta 95+77.88	Sta 132+51.24
2A	Sta 96+07.03	Sta 132+80.39
1A	Sta 96+38.28	Sta 133+11.64

3 3A – Designate end of concrete barrier



Note:
1 See Standard Drawing BP-2.5 For Dowel Bars And Other Details Not Shown
2 See Typical Sections

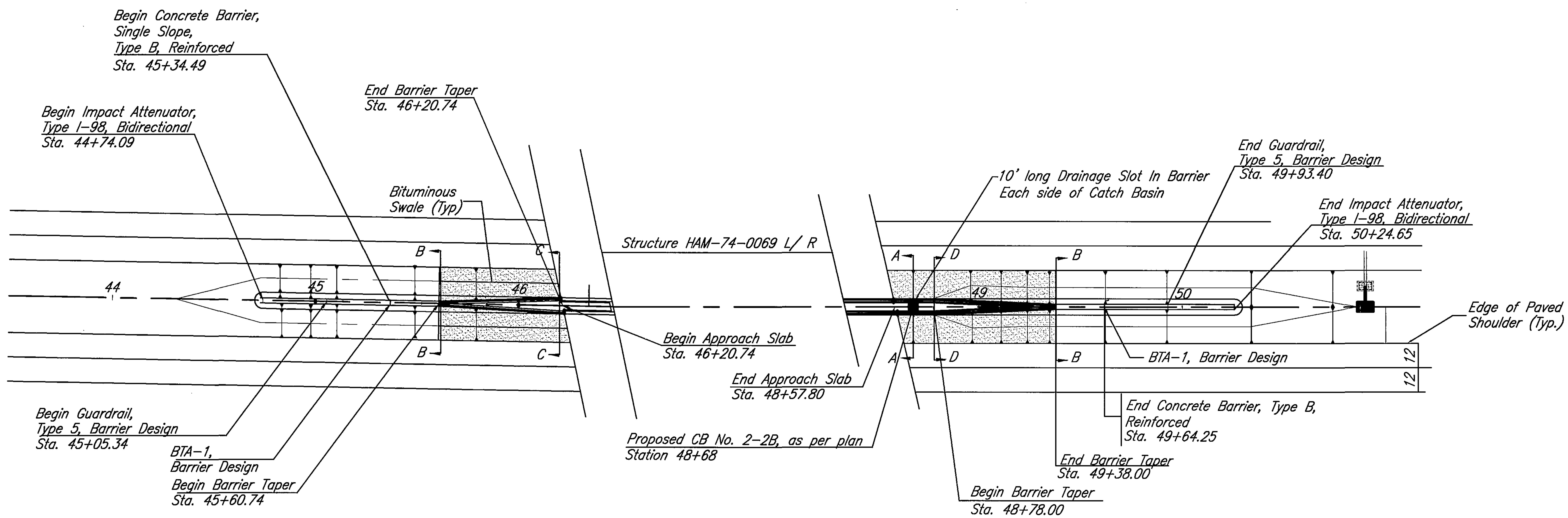
ITEM 255 FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS FS

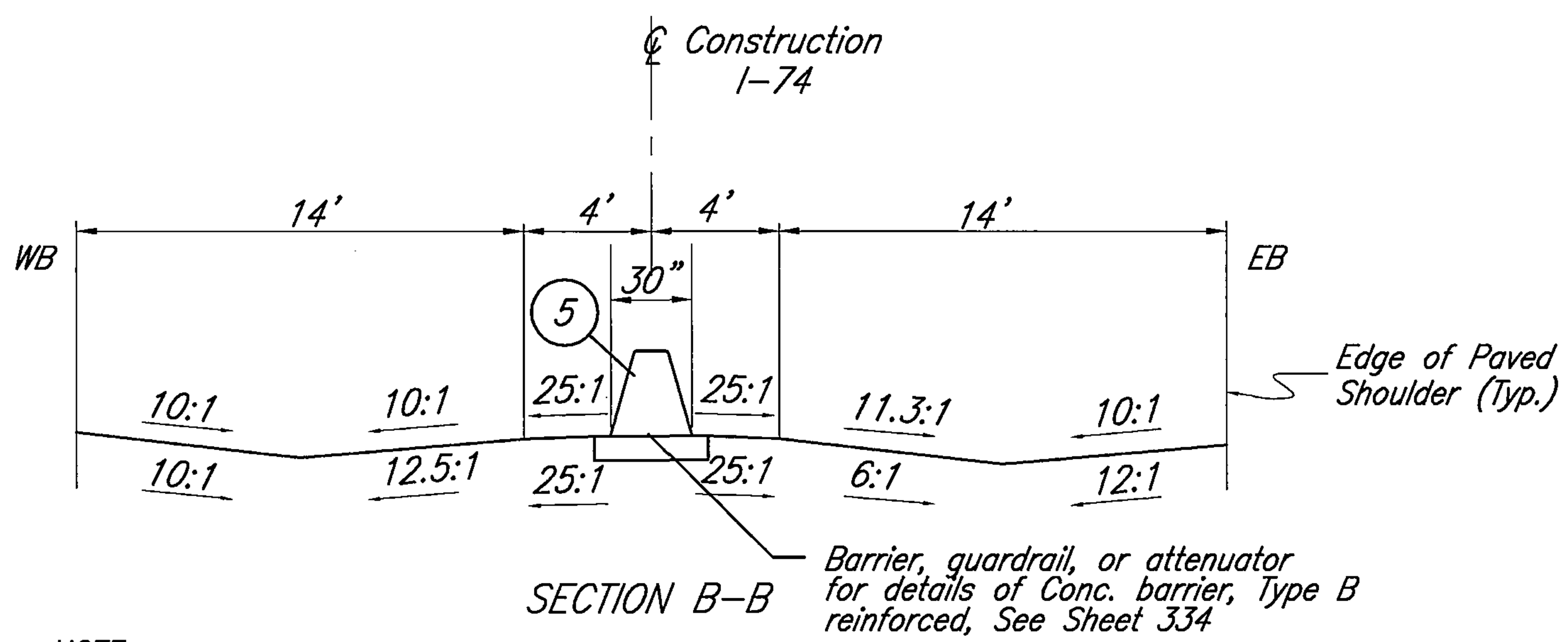
CALCULATED GAB CHECKED ENM

MISCELLANEOUS DETAILS

HAM-74-0.00

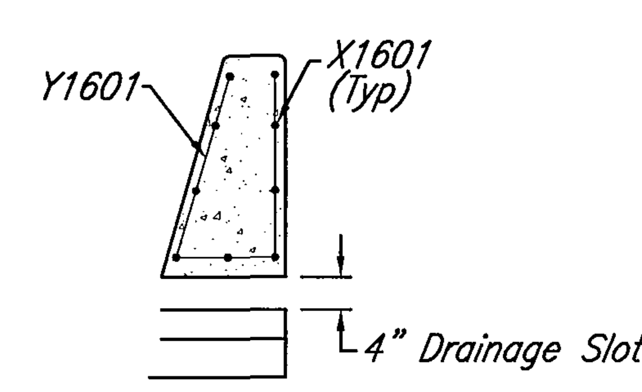
GM004020.DWG 18 AUG 2003

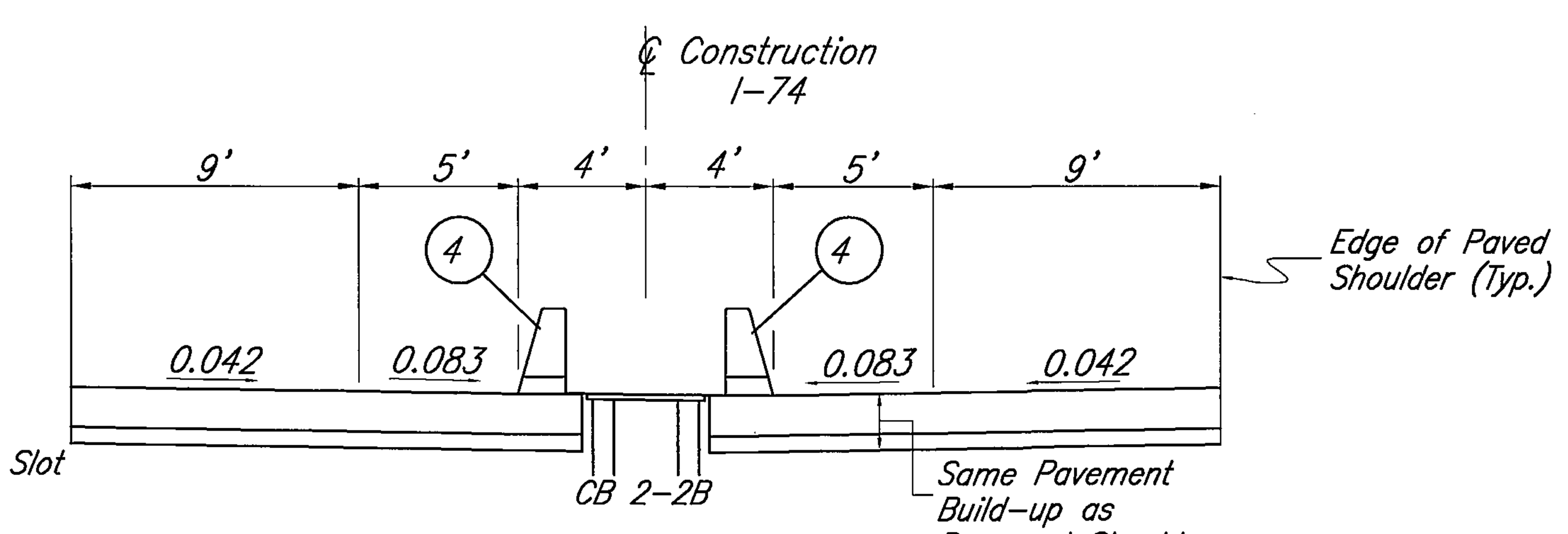




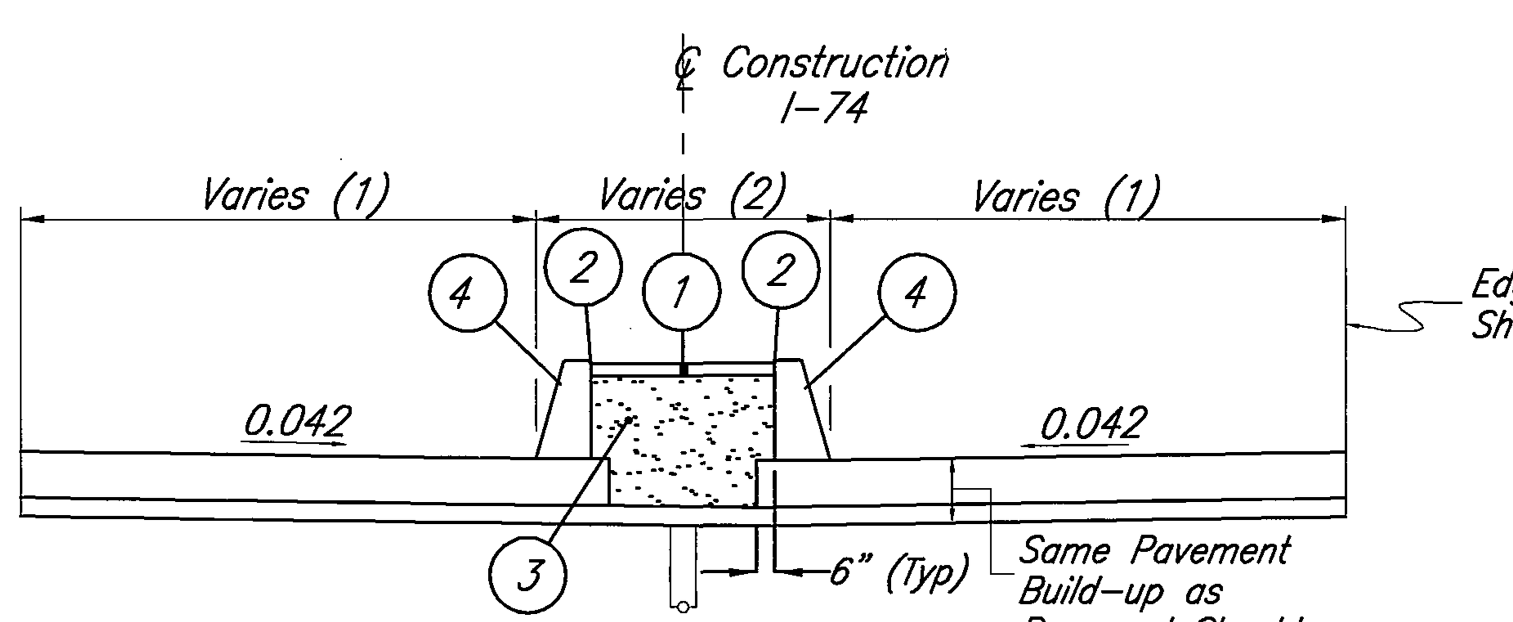
SECTION B-B

NOTE:
Slopes shown are for Sta 45+60.74 (Opp. Hand), top of line and Sta. 49+38.00, bottom of line. For slopes at other locations see Cross Sections.



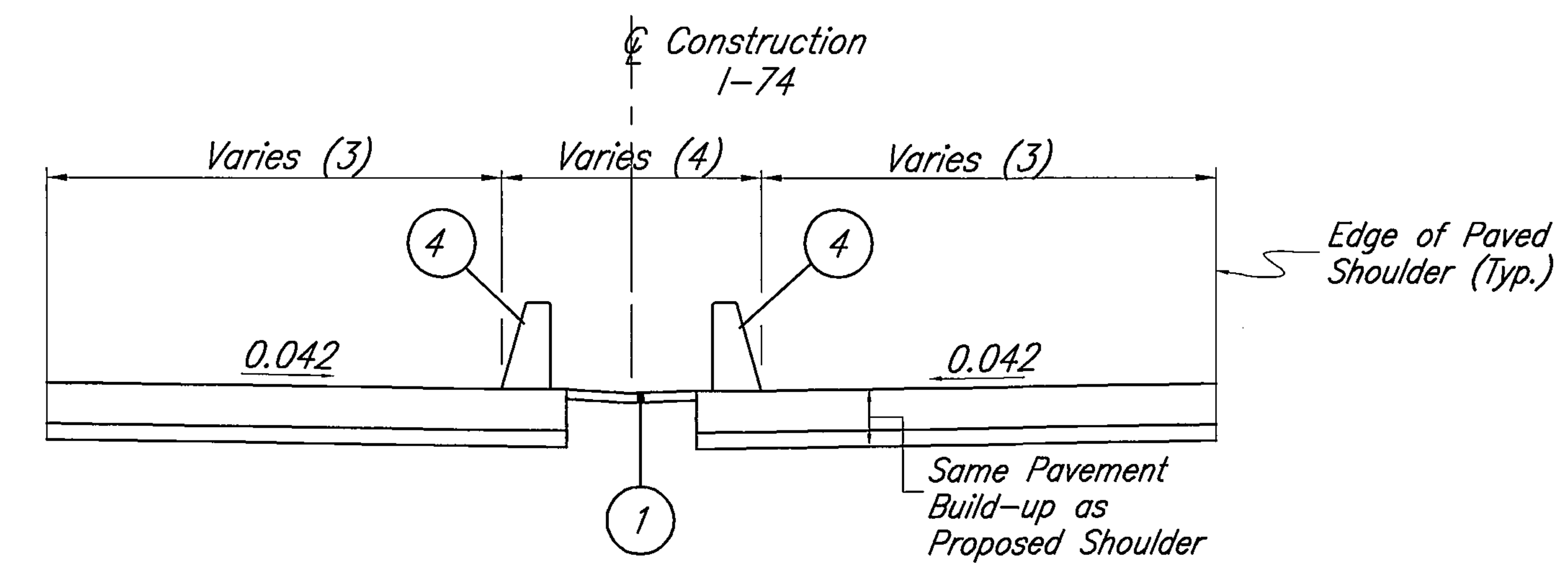


SECTION A-A



SECTION C-C

Note:
(1) Width Varies from 14' @ 46+20.74 to 16.75' @ 45+60.74
(2) Width Varies from 8' @ 46+20.74 to 2.5' @ 45+60.74



SECTION D-D

Note:
(3) Width Varies from 14' @ 48+78.00 to 16.75' @ 49+38.00
(4) Width Varies from 8' @ 48+78.00 to 2.5' @ 49+38.00

LEGEND

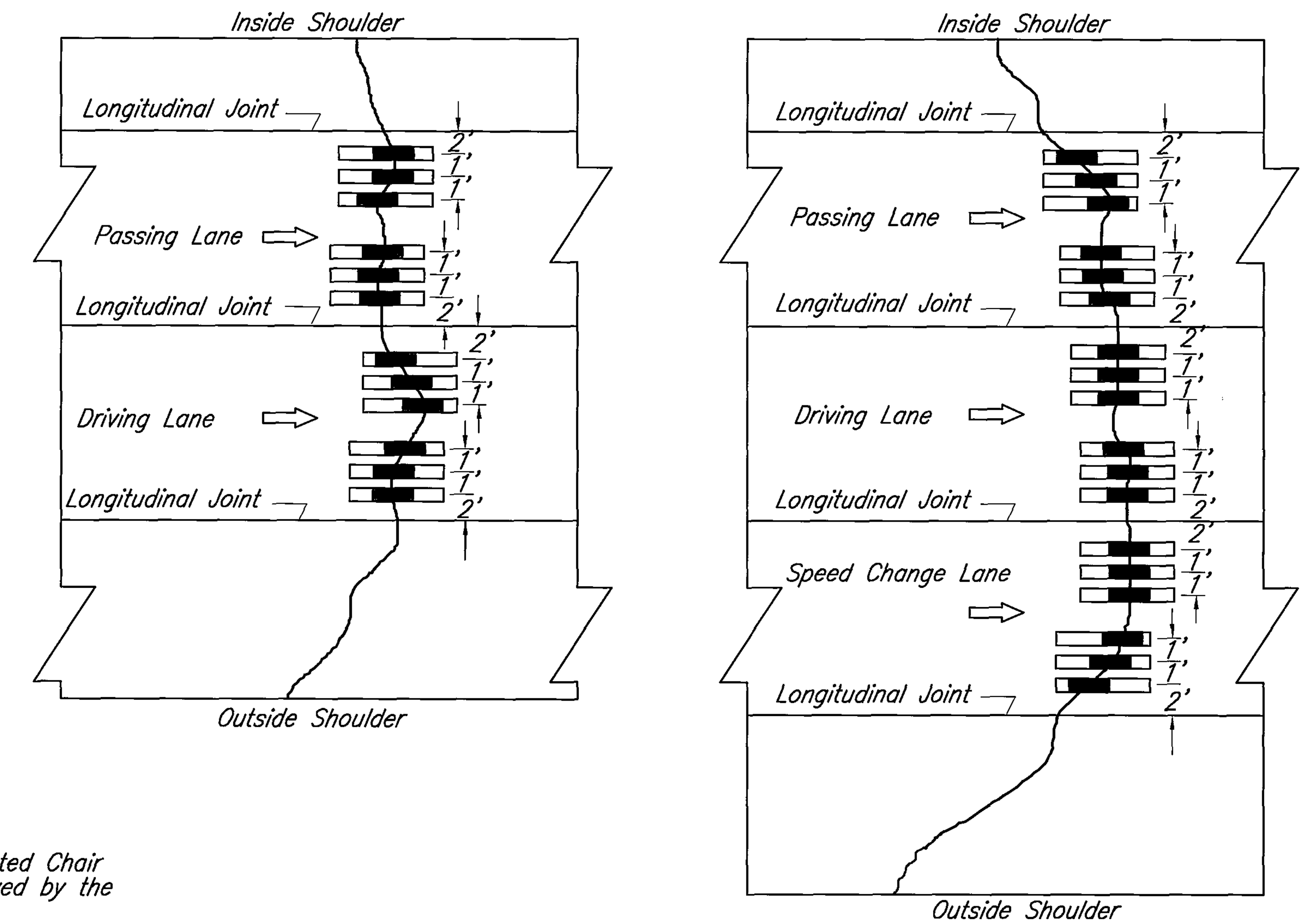
NO.	ITEM	DESCRIPTION
1	452	4" Non-Reinforced Concrete Pavement
2	516	3/4" Preformed Expansion Joint filler
3	518	Porous Backfill
4	622	Concrete barrier, single slope, Type D
5	622	Concrete barrier, single slope, Type B, Reinforced

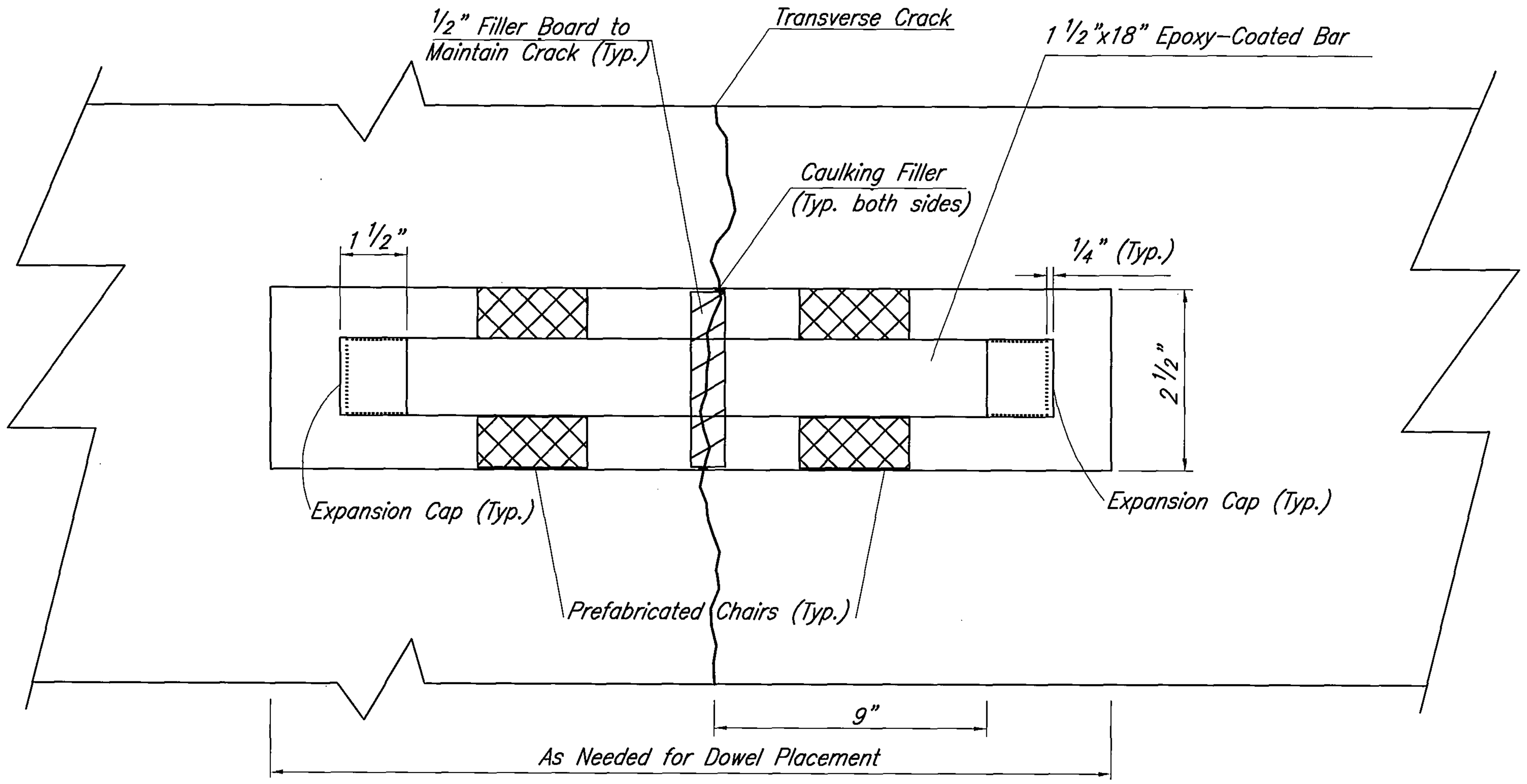
GM007020.DWG 18 AUG 2003

MISCELLANEOUS DETAILS

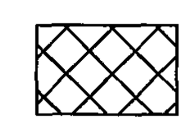
HAM-74-0.00

RETROFIT DOWEL BAR SPACING

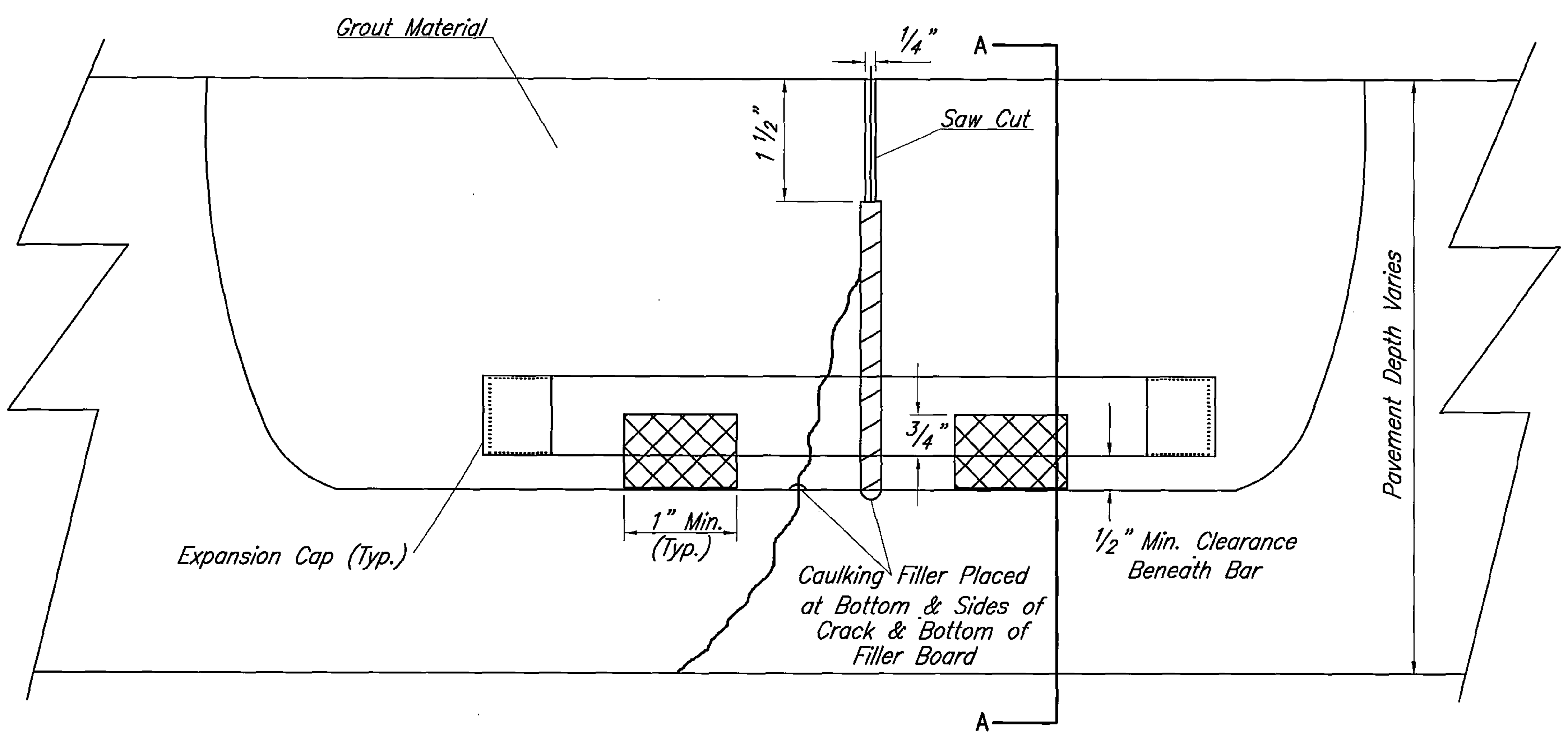




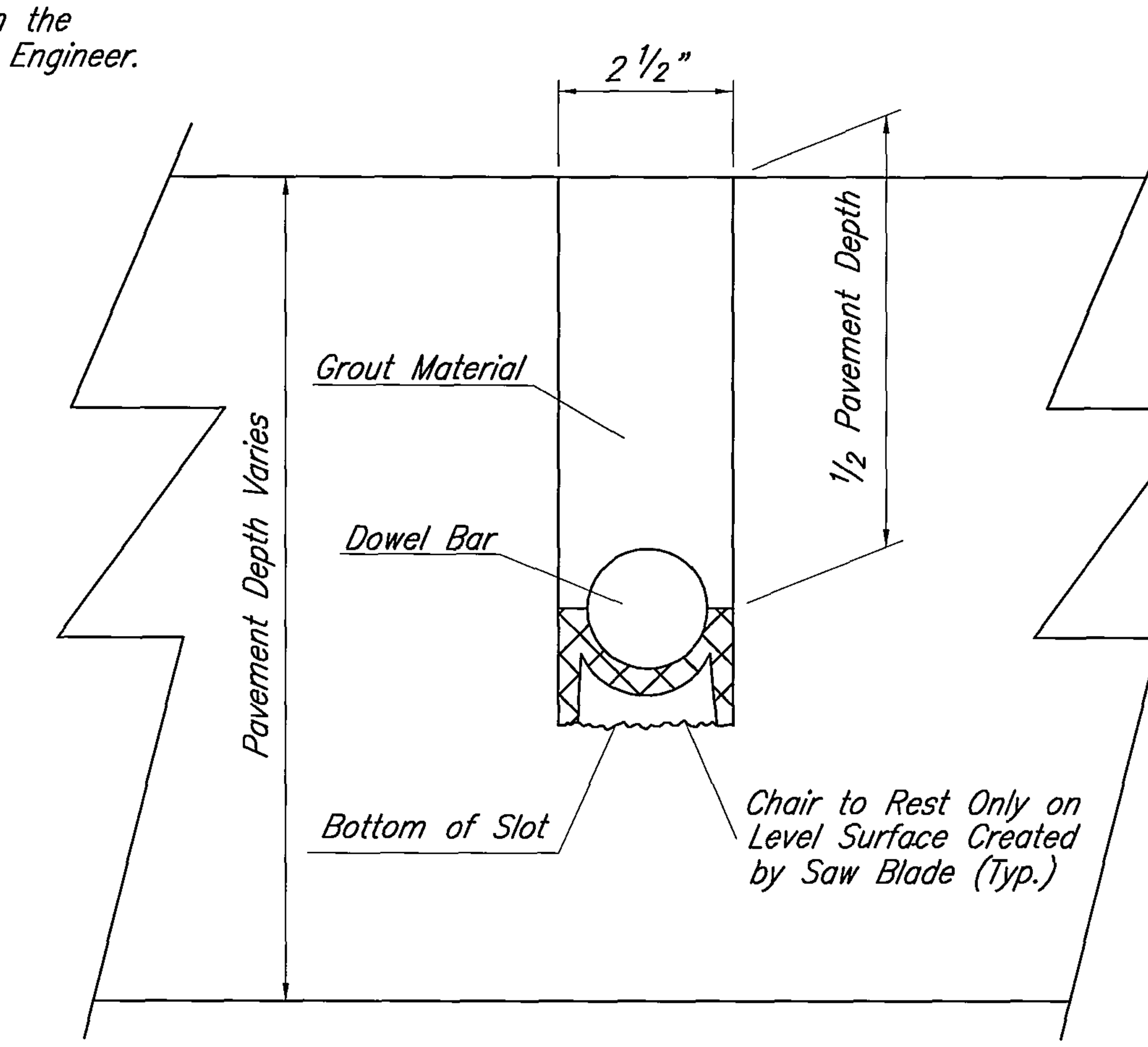
PLAN

 – Prefabricated Chair as Approved by the Engineer.

NOTES: – Cracks to be Retrofitted Will be Marked on the Pavement by the Engineer.



ELEVATION



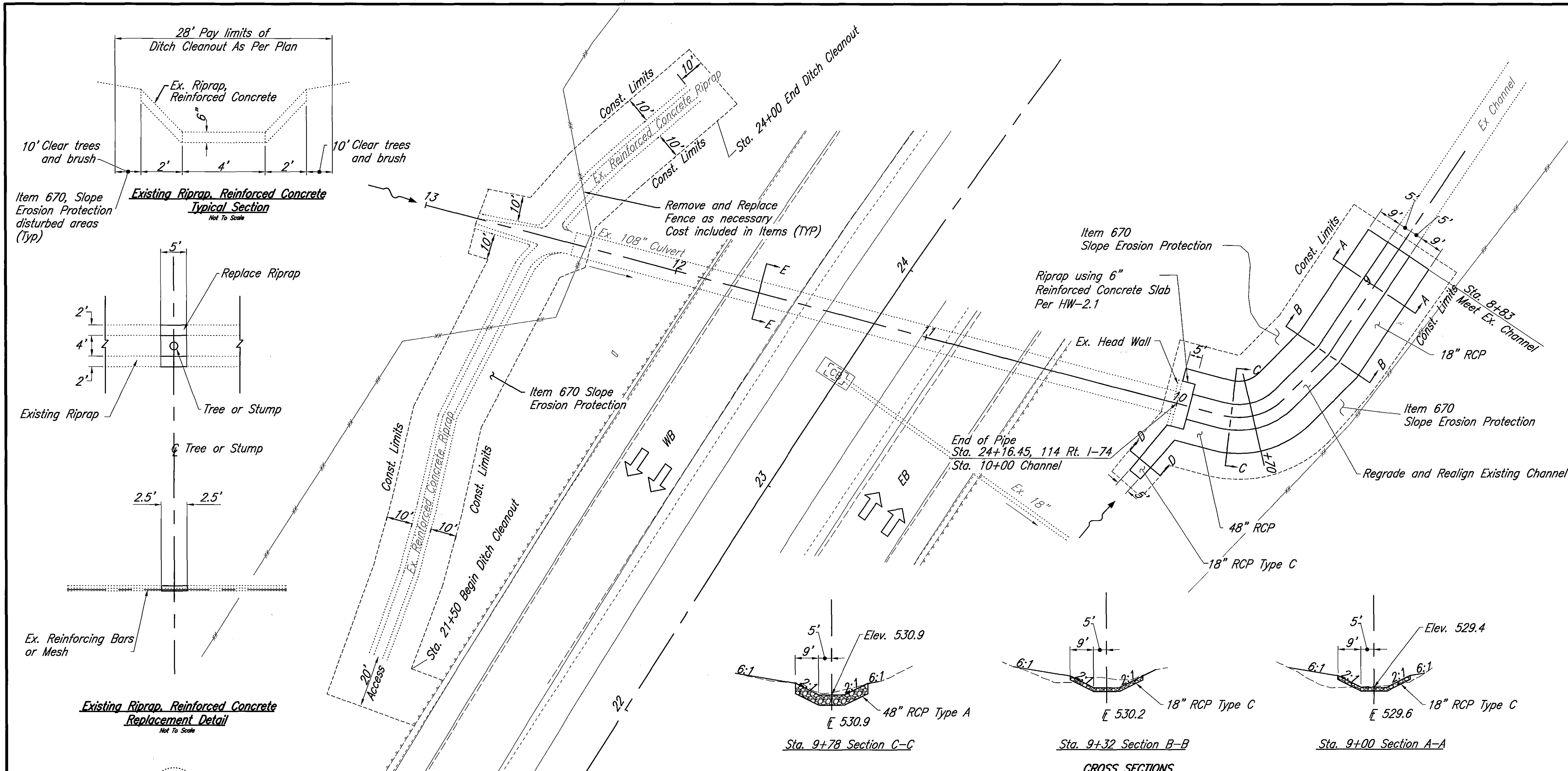
SECTION A-A

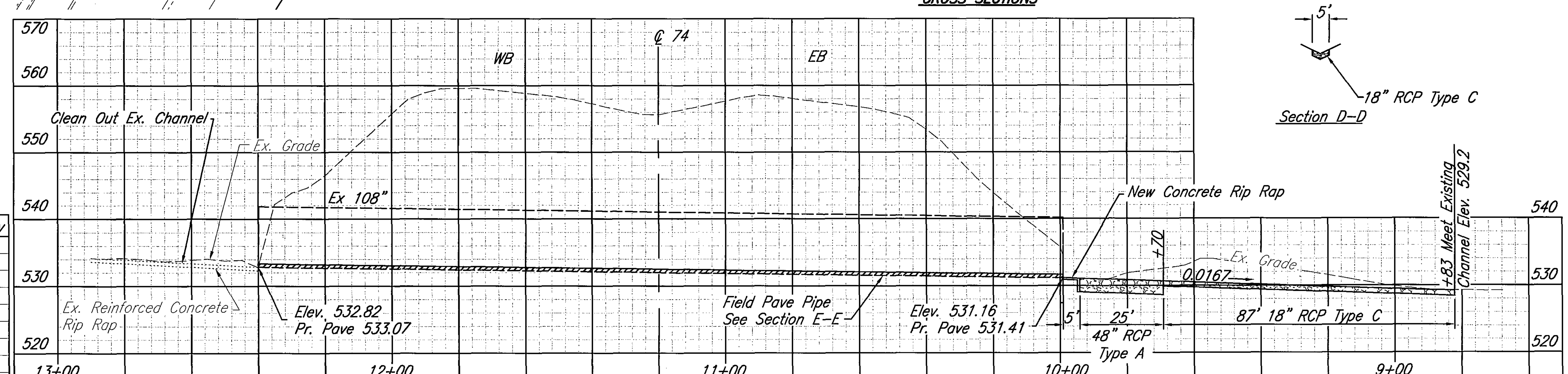
CALCULATED JNR
CHECKED DAS

SS 819 – DOWEL BAR RETROFIT DETAILS

HAM-74-0.00

GM009020.DWG 19 AUG 2003





Item	Description	Unit	Quantity
201	Clearing And Grubbing		LUMP
203	Excavation	CU YD	463
209	Ditch Cleanout, As Per Plan	FT	300
601	Rock Channel Protection, Type A W/Filter	CU YD	104
601	Rock Channel Protection, Type C W/Filter	CU YD	142
601	Riprap Using 6" Reinforced Concrete Slab	SQ YD	10
603	Field Paving of Existing Pipe, 108" CMP	FT	240
670	Slope Erosion Protection	SQ YD	622

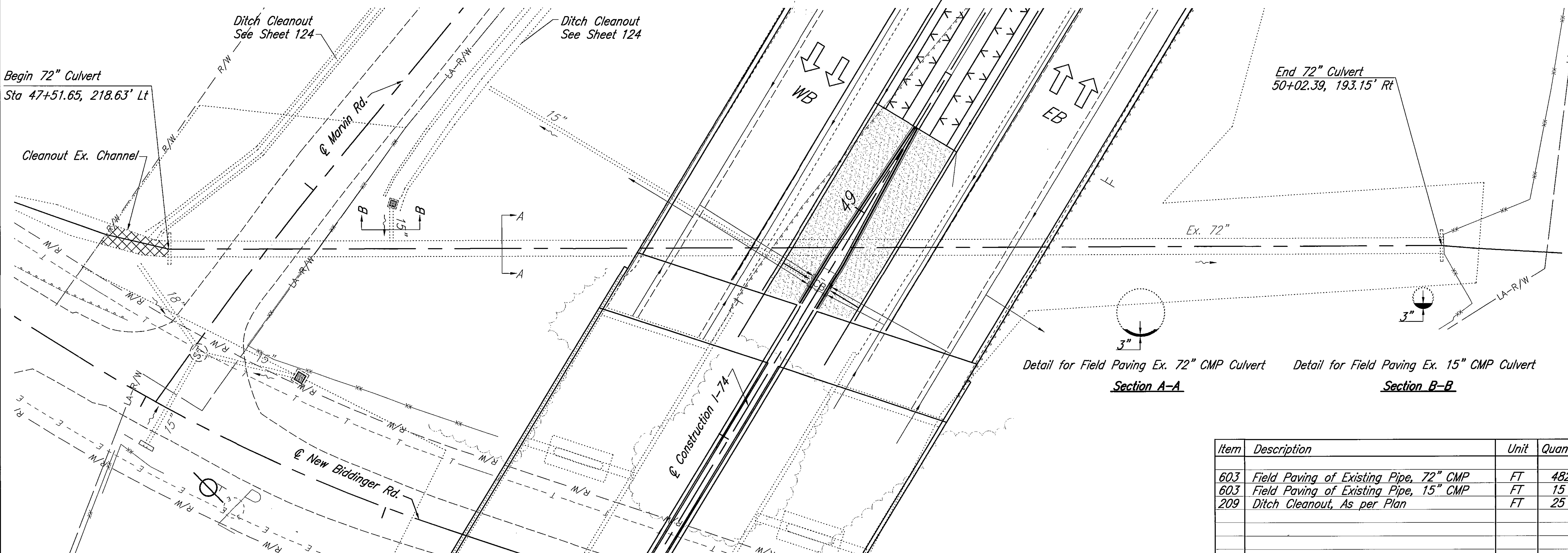
GM005020.DWG 18 AUG 2003

HORIZONTAL SCALE IN FEET 0 10 20 40

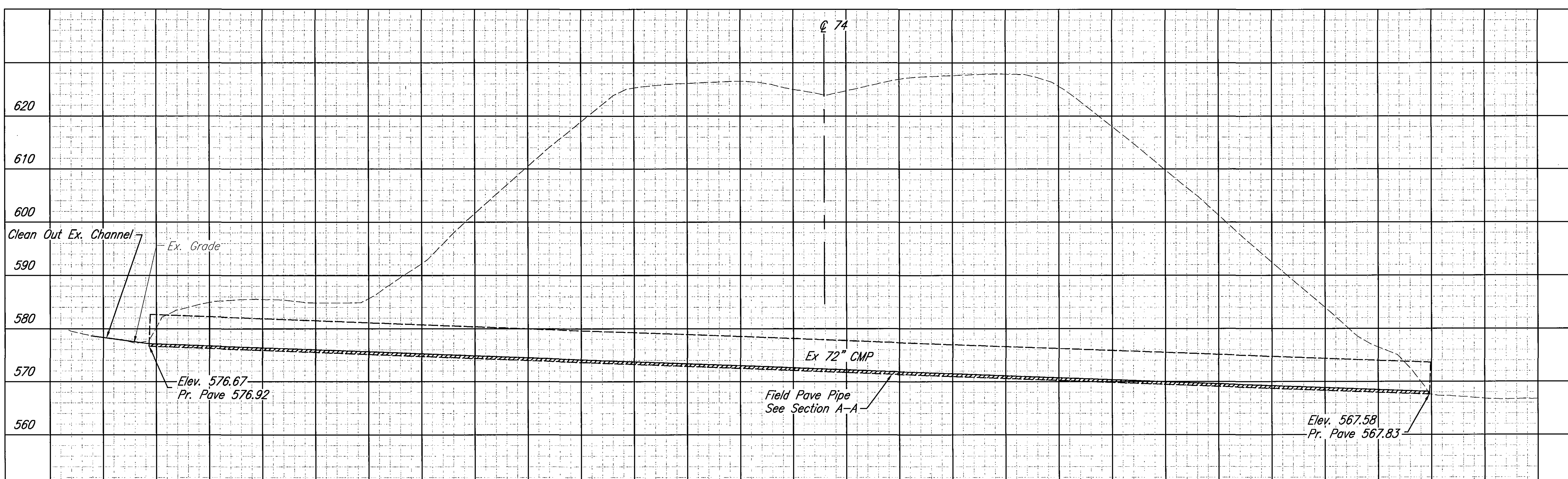
CALCULATED GAB
CHECKED REF

CULVERT DETAIL STA. 23+74

HAM–74–0.00



Item	Description	Unit	Quantity
603	Field Paving of Existing Pipe, 72" CMP	FT	482
603	Field Paving of Existing Pipe, 15" CMP	FT	15
209	Ditch Cleanout, As per Plan	FT	25



HORIZONTAL SCALE IN FEET

CALCULATED GAB
CHECKED REF

CULVERT DETAIL STA. 48+85

HAM-74-0.00

GM006020.DWG 18 AUG 2003

ITEM 630 TRAFFIC SIGNING – DESCRIPTION OF WORK

THE FOLLOWING SIGNING WORK SHALL BE ACCOMPLISHED:

ALL EXISTING FLAT SHEET AND EXTRUSHEET SIGNS ON MAINLINE I–74, ALL I–74 RAMPS AND CROSSROADS, INCLUDING LEAD–IN SIGNS, WITHIN THE PROJECT LIMITS SHALL BE REMOVED AND REPLACED WITH NEW FLAT SHEET AND EXTRUSHEET SIGNS RESPECTIVELY AT THE LOCATIONS SPECIFIED IN THESE PLANS. EXISTING ODOT FLAT SHEET SIGNS SHALL BE REMOVED FOR DISPOSAL. EXISTING ODOT EXTRU SHEET SIGNS SHALL BE REMOVED FOR DISPOSAL. SEE PLAN NOTE BELOW REGARDING REMOVAL OF EXTRUSHEET SIGNS FOR STORAGE FOR FURTHER DETAILS.

ALL EXISTING GROUND MOUNTED YIELDING POST SUPPORTS SHALL BE REMOVED AND REPLACED WITH NEW GROUND MOUNTED YIELDING POST SUPPORTS AS SPECIFIED HEREIN.

ALL GROUND MOUNTED BEAM SUPPORTS THAT HAVE NOT BEEN SPECIFIED FOR REPLACEMENT MEET CURRENT DESIGN CRITERIA. ALL GROUND MOUNTED BEAM SUPPORTS NOT PROTECTED BY GUARDRAIL SHALL BE ERECTED WITH BREAKAWAY BEAM CONNECTIONS AS PRESCRIBED HEREIN.

ALL EXISTING OVERHEAD MOUNTED SIGNS SHALL BE REMOVED AND REPLACED.

ALL SUPPORTS AND SIGNS WILL BE FURNISHED BY THE CONTRACTOR INCLUDING MISCELLANEOUS HARDWARE, LABOR, AND EQUIPMENT REQUIRED TO COMPLETE THE SIGNING WORK ITEMS DESIGNATED IN THE PLANS, EXCEPT THE "WELCOME TO OHIO" SIGN (GT–276) SIGN PANELS. THIS SIGN SHALL BE FURNISHED BY ODOT FOR ERECTION BY THE CONTRACTOR. THE CONTRACTOR SHALL SUPPLY ALL ADDITIONAL MOUNTING MATERIALS, HARDWARE AND INCIDENTALS. SEE PLAN NOTE BELOW FOR FURTHER DETAILS.

ITEM 630 SIGNING, MISC. "WELCOME TO OHIO" SIGN

THIS ITEM SHALL CONSIST OF THE INSTALLATION ONLY OF THE "WELCOME TO OHIO" SIGN. THE SIGN S–1, GT–276, STA. 10+98.4 EB I–74 SHALL BE INSTALLED ON THE OVERHEAD BOX SIGN TRUSS. IT IS THE STATE LINE SIGN, SIZE 276" X 78" WITH ODOT SIGN CODE NUMBER GT–276. THE SIGN SHALL BE FABRICATED BY ODOT AND FURNISHED TO THE CONTRACTOR FOR ERECTION. THE CONTRACTOR SHALL PICK UP THE SIGN AT THE DISTRICT 8 HEADQUARTERS IN LEBANON, OHIO. CONTACT THE TRAFFIC MAINTENANCE DEPARTMENT AT (513) 932–3030, EXT. 315 TO ARRANGE A PICK UP TIME. THE CONTRACTOR SHALL PROVIDE THE EQUIPMENT AND PERSONNEL NECESSARY TO LOAD AND TRANSPORT THE SIGN. ALL WORK INCLUDING, BUT NOT LIMITED TO, THE BRACKETS, HARDWARE, EQUIPMENT, AND LABOR NECESSARY FOR THE COMPLETE INSTALLATION OF THE SIGN WILL BE INCLUDED IN THE PAY ITEM, ITEM 630 SIGNING MISC.: EXTRUSHEET SIGN, INSTALLATION ONLY.

SIGN ERECTION

AN EXISTING SIGN SHALL NOT BE REMOVED UNTIL THE REPLACEMENT SIGN IS EITHER ERECTED, OR AVAILABLE FOR IMMEDIATE ERECTION. A REPLACEMENT SIGN TO BE INSTALLED ON A NEW SUPPORT SHALL BE ERECTED FOR NO MORE THAN 24 HOURS PRIOR TO THE REMOVAL OF THE EXISTING SIGN.

ITEM 630 SIGN, OVERHEAD EXTRUSHEET
ITEM 630 SIGN, GROUND MOUNTED EXTRUSHEET

THE BACKGROUNDS OF ALL PERMANENT EXTRUSHEET SIGNS SHALL BE REFLECTORIZED WITH TYPE G REFLECTIVE SHEETING. REFLECTORIZED LEGENDS, SHIELDS AND SYMBOLS (E.G., ROUTE SHIELDS, HAZARDOUS CARGO PLAQUE, AIRPORT SYMBOL, ARROWS, BORDERS, ETC.) USED ON GROUND MOUNTED PERMANENT TRAFFIC CONTROL SIGNS SHALL BE TYPE G REFLECTIVE SHEETING. REFLECTORIZED LEGENDS, SHIELDS, AND SYMBOLS USED ON OVERHEAD MOUNTED PERMANENT TRAFFIC CONTROL SIGNS SHALL BE TYPE H OR TYPE J REFLECTIVE SHEETING. ALL REFLECTIVE SHEETING MATERIALS SHALL BE CONTAINED ON THE ODOT LIST OF PREQUALIFIED REFLECTIVE SIGN SHEETING MATERIALS.

ALL WORK INCLUDING, BUT NOT LIMITED TO, THE BRACKETS, HARDWARE, EQUIPMENT, AND LABOR NECESSARY FOR THE COMPLETE INSTALLATION OF THESE SIGNS WILL BE INCLUDED IN THE PAY ITEMS, ITEM 630 SIGN, OVERHEAD EXTRUSHEET AND ITEM 630 SIGN, GROUND MOUNTED EXTRUSHEET.

PREPASS AND LOGO SIGNING

WEIGH–IN–MOTION "PRE–PASS" SIGNING IS THE PROPERTY OF PRE–PASS, INC. AND SHALL NOT BE DISTURBED. MAINLINE AND/OR RAMP "PRE–PASS" SIGNS REQUIRING RELOCATIONS SHALL BE PERFORMED BY PRE–PASS, INC.

LOGO SIGNING IS THE PROPERTY OF OHIO LOGOS, INC. AND SHALL NOT BE DISTURBED. MAINLINE AND/OR RAMP LOGO SIGNS REQUIRING RELOCATIONS SHALL BE PERFORMED BY OHIO LOGOS, INC.

MILE MARKER LOCATION

THE LOCATION OF MILE MARKERS ON THE PLANS ARE APPROXIMATE AND A MORE PRECISE LOCATION WILL BE PROVIDED BY THE DEPARTMENT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 30 DAYS IN ADVANCE OF THE PLANNED DATE OF INSTALLATION. THE ENGINEER WILL CONTACT THE OFFICE OF TECHNICAL SERVICES, WHICH WILL LOCATE THE LONGITUDINAL POSITION OF MILE MARKERS BY MEANS OF A PAINT MARK ON THE PAVEMENT EDGE. ALTERNATE MARKS WILL NOT BE PROVIDED ON DIVIDED HIGHWAYS AND THE CONTRACTOR SHALL SET MARKERS FOR THE OPPOSITE ROADWAY ACROSS FROM THE PROVIDED MARK. DELINEATORS WHOSE NORMAL POSITION FALLS WITHIN 50 FEET OF A MILE MARKER SHALL BE NON–PERFORMED.

ITEM 621 RPM

THE QUANTITY, TYPE AND NUMBER OF RPMs NEEDED FOR THIS PROJECT, HAM–74–0.00, ARE PROVIDED IN THE TABLE BELOW. THESE QUANTITIES HAVE BEEN DERIVED FROM THE PAVEMENT MARKING SUB–SUMMARIES AND WERE CARRIED TO THE GENERAL SUMMARY AND ARE RESTATED HERE FOR INFORMATION ONLY.

DESCRIPTION:		
RAISED PAVEMENT MARKER	TWO–WAY: WHITE–RED	95
RAISED PAVEMENT MARKER	TWO–WAY: YELLOW–RED	62
RAISED PAVEMENT MARKER	ONE–WAY: WHITE	320
TOTAL RPMs	==========================>	477

ITEM 631 – REMOVAL OF LUMINAIRE AND DISPOSAL, AS PER PLAN

THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL LUMINAIRES, BALLASTS, LUMINAIRE SUPPORT ASSEMBLIES, BRACKET ARMS, SIGN WIRING, SIGN SERVICE, CONDUIT AND WIRING. THE SIGN SERVICE CABLE SHALL BE REMOVED TO THE SERVICE PULL BOX. THE DISCONNECT SWITCH CAN REMAIN IN PLACE ON EXISTING SUPPORTS. CONNECTION OF THE REMAINING CABLES SHALL CONFORM TO 625.15 TO INSURE CIRCUIT CONTINUITY. THE EXISTING HIGHWAY LIGHTING CIRCUIT SHOULD BE OPERATIONAL AFTER THE CORRECTIONS HAVE BEEN MADE. THIS PAY ITEM SHALL INCLUDE ALL WORK ASSOCIATED WITH THE REMOVAL OF THE SIGN LIGHTING. THE UNIT BID PRICE SHALL BE ONE (1) PER SIGN WITH NO OTHER PAYMENT MADE.

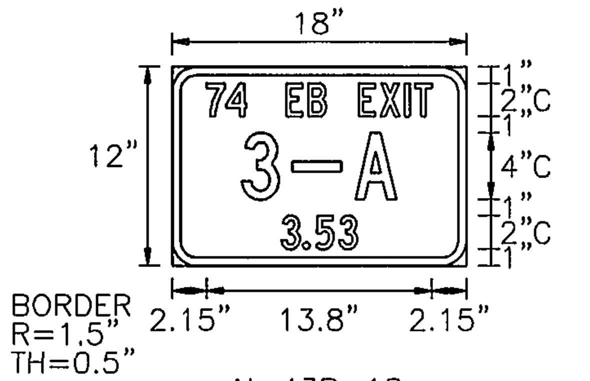
ITEM 630 – SIGN, FLAT SHEET, AS PER PLAN

LOCATION IDENTIFICATION MARKER

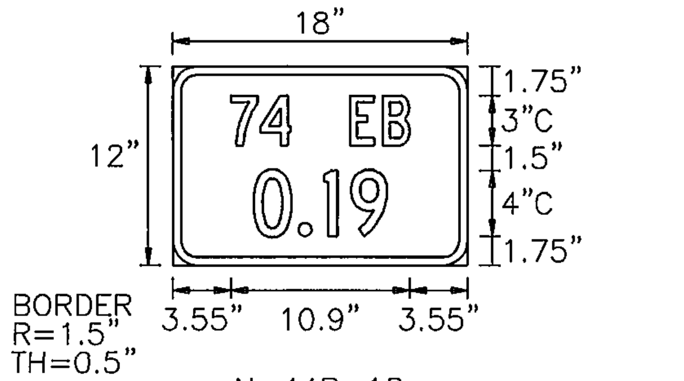
THIS ITEM SHALL CONSIST OF THE FURNISHING AND INSTALLATION OF THE IDENTIFICATION MARKER TO THE EXISTING AND PROPOSED SIGN STRUCTURES, INCLUDING THE NECESSARY SIGN BACKING ASSEMBLIES AND SIGN SUPPORT ASSEMBLIES, POLE MOUNTED, AND SHALL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM 630 – SIGN FLAT SHEET, AS PER PLAN.

THE TYPE OF MARKERS SHALL BE "RAMP" (N–43B–18) AND "MAINLINE HIGHWAY" (N–44B–18).

REF. NO.	LOCATION	STATION	SIDE	SIGN CODE NUMBER	LEGEND			MOUNTING TYPE	
					1ST LINE	2ND LINE	3RD LINE	TYPE I	TYPE II
S–1	I–74 ML	11+00	RT.	N–44B–18	74 EB	0.02	–		X
S–9	I–74 ML	19+87	RT.	N–44B–18	74 EB	0.19	–	X	
S–10/10A	I–74 ML	33+13	RT.	N–44B–18	74 EB	0.44	–	X	
S–11	I–74 ML	36+83	RT.	N–44B–18	74 EB	0.51	–	X	
S–17/17A	I–74 ML	55+64	RT.	N–44B–18	74 EB	0.86	–	X	
S–22/22A	I–74 ML	72+72	RT.	N–44B–18	74 EB	1.19	–	X	
S–23	I–74 ML	86+07	RT.	N–44B–18	74 EB	1.44	–	X	
S–24	I–74 ML	86+64	RT.	N–44B–18	74 EB	1.45	–	X	
S–25	I–74 ML	94+41	RT.	N–44B–18	74 EB	1.60	–	X	
S–29	I–74 ML	121+63	RT.	N–44B–18	74 EB	2.11	–	X	
S–35	I–74 ML	149+19	RT.	N–44B–18	74 EB	2.64	–	X	
S–42/42A	I–74 ML	154+01	RT.	N–44B–18	74 EB	2.73	–	X	
S–47/47A	I–74 ML	160+00	RT.	N–44B–18	74 EB	2.84	–	X	
S–56/56A	I–74 ML	181+51	RT.	N–44B–18	74 EB	3.25	–	X	
S–57/57A S–58/58A	I–74 ML	191+45	RT.	N–44B–18	74 EB	3.44	–		X
S–59	I–74 ML	194+65	RT.	N–44B–18	74 EB	3.50	–	X	
S–62 S–63	RAMP FA	7+53	RT.	N–43B–18	74 EB EXIT	3–A	3.53	X	
S–68	RAMP FA	10+20	RT.	N–43B–18	74 EB EXIT	3–A	3.58	X	
S–73 S–74	RAMP FB	12+25	RT.	N–43B–18	74 WB EXIT	3–B	3.62	X	
S–84	I–74 ML	165+33	LT.	N–44B–18	74 WB	2.94	–	X	
S–85/85A	I–74 ML	157+04	LT.	N–44B–18	74 WB	2.78	–	X	
S–86/86A	I–74 ML	131+98	LT.	N–44B–18	74 WB	2.31	–	X	
S–89/89A	I–74 ML	117+60	LT.	N–44B–18	74 WB	2.04	–	X	
S–91	I–74 ML	104+00	LT.	N–44B–18	74 WB	1.78	–	X	
S–100	I–74 ML	55+92	LT.	N–44B–18	74 WB	0.87	–	X	
S–103	I–74 ML	44+26	LT.	N–44B–18	74 WB	0.65	–	X	
							TOTAL	24	2



N–43B–18
WHITE ON BLUE



N–44B–18
WHITE ON BLUE

THE MARKERS SHOWN ABOVE ARE TYPICAL DESIGN. FOR EACH STRUCTURE THE LEGEND ON THE EACH MARKER WILL READ AS SHOWN IN THE ABOVE TABLE.

THE TYPE OF MOUNTING APPARATUS FOR DIFFERENT TYPES OF EXISTING AND PROPOSED STRUCTURES MAY BE AS FOLLOWS:

TYPE	SIGN SUPPORTS	QUANTITY	METHOD OF ATTACHMENT
I	BEAMS	24	BOLT MARKER (2 BOLTS) TO RIGHT BEAM OF SIGN SUPPORT PER TC 42.10 (NOTE 1)
II	OVERHEAD SIGN SUPPORTS	2	BOLT MARKER ON THE RIGHT FRAME OF OVERHEAD STRUCTURES OR MARKER SHALL BE APPROXIMATELY 7 FT. ABOVE EDGE OF PAVEMENT. MARKER SHALL BE INSTALLED PER TC–41.40 (SIGN SUPPORT ASSEMBLY, POLE MOUNTED).

SEE SIGNING SUBSUMMARY, SHEETS 373–374 FOR SIGN, FLAT SHEET, AS PER PLAN FOR QUANTITIES.

CALC. BY: SMM
CHKD. BY: MOW

SIGNING AND PAVEMENT MARKING PLAN
GENERAL NOTES

HAM–74–0.00

PLOTTED VIEW = PLAN XREF#1 = NONE XREF#1 = PLOT SCALE = N.T.S. SERVER1 SIGNS_MARKING_RPM_NOTES.DWG JULY 18, 2002 MOW
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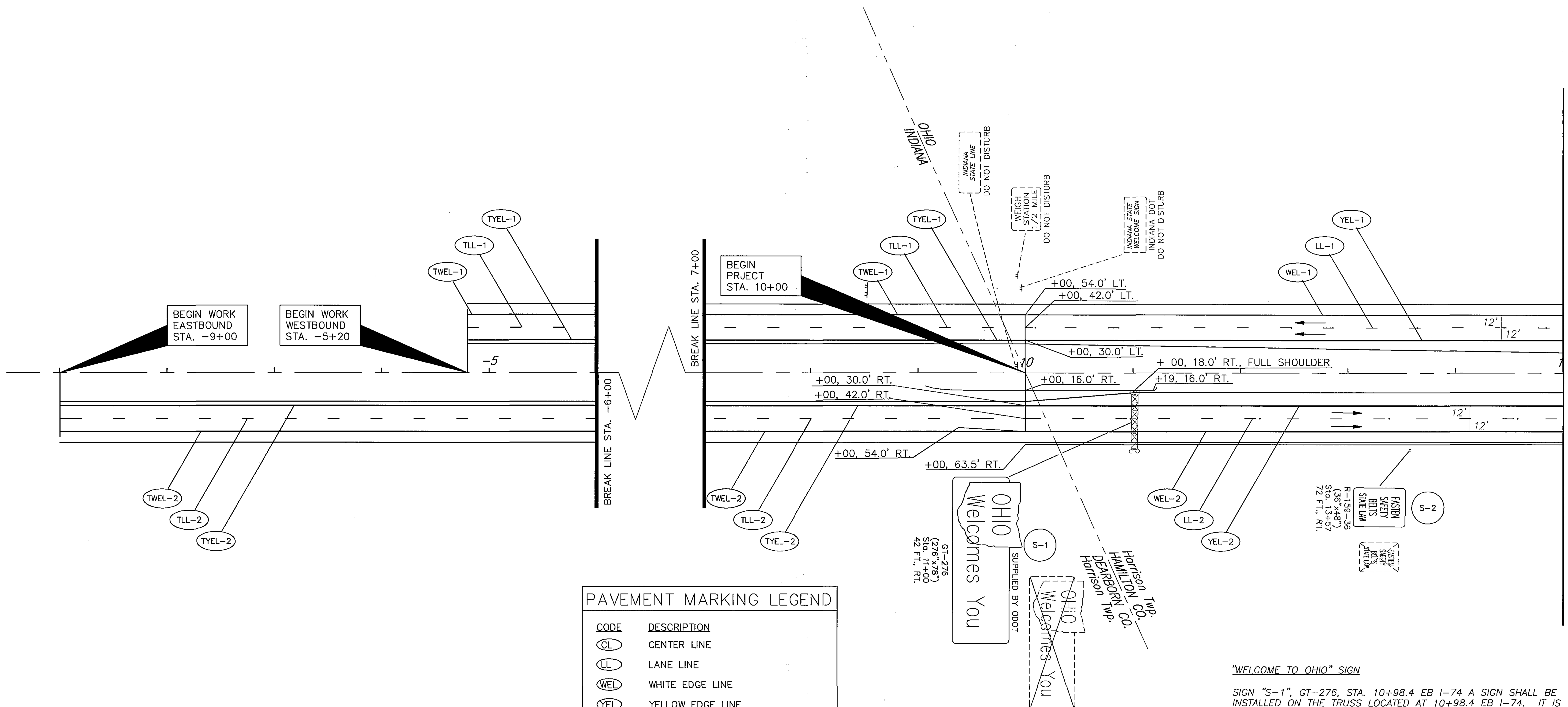
SHEET NUMBER													ITEM	ITEM EXTENSION	GRAND TOTAL	UNIT	ITEM DESCRIPTION	SEE SHEET NO.
367	368	369	370	371	372		373	374		375		376						
54	94	94	93	70	72								202	54000	477	EA	RAISED PAVEMENT MARKER REMOVED AND DISPOSED	
	11	15	7	9	11								620	10300	53	EA	DELINEATOR, TYPE C, POST MOUNTED	
		8	10	15	13								620	15300	46	EA	DELINEATOR, TYPE D, POST MOUNTED	
	11	23	17	24	24								620	31200	99	EA	DELINEATOR REMOVED FOR DISPOSAL	
							4	4					620	40300	8	EA	REFLECTOR, TYPE D	
54	94	94	93	70	72								621	00100	477	EA	RAISED PAVEMENT MARKER	
												4	625	32000	4	EA	GROUND ROD	
							428	198					630	03100	626	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
							75						630	04100	75	FT	GROUND MOUNTED SUPPORT, NO. 4 POST	
							75.2						630	06400	75.2	FT	GROUND MOUNTED SUPPORT, S4X7.7 BEAM	
							88.6						630	07000	88.6	FT	GROUND MOUNTED SUPPORT, W8X18 BEAM	
							46.3	37.5					630	07500	83.8	FT	GROUND MOUNTED SUPPORT, W10X22 BEAM	
								47					630	08100	47	FT	ONE-WAY SUPPORT, NO. 4 POST	
							12	2					630	09000	14	EA	BREAKAWAY BEAM CONNECTION	
												1	630	35500	1	EA	OVERHEAD SIGN SUPPORT, TYPE TC-7.65 DESIGN 6	
												1	630	45500	1	EA	OVERHEAD SIGN SUPPORT, TYPE 7.65, DESIGN 8	
								2					630	75000	2	EA	SIGN ATTACHMENT ASSEMBLY	
							302	340					630	80100	642	SQ FT	SIGN, FLAT SHEET	
							21	18					630	80101	39	SQ FT	SIGN, FLAT SHEET, AS PER PLAN	339
							1080	771					630	80200	1851	SQ FT	SIGN, GROUND MOUNTED EXTRUSHEET	
								312					630	80224	312	SQ FT	SIGN, OVERHEAD EXTRUSHEET	
							9	7					630	82000	16	EA	SIGN BACKING ASSEMBLY	
							12	2					630	84500	14	EA	GROUND MOUNTED BEAM SUPPORT FOUNDATION	
												4	630	84510	4	EA	RIGID OVERHEAD SIGN SUPPORT FOUNDATION	
							50	43					630	84900	93	EA	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
							1						630	85100	1	EA	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
							10	7					630	85400	17	EA	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL	
							36	20					630	86002	56	EA	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
							14	2					630	86102	16	EA	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL	
							1	4					630	87400	5	EA	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL	
												2	630	88400	2	EA	REMOVAL OF OVERHEAD SIGN SUPPORT AND STORAGE, TYPE TC-7.65	
							1						630	97700	1	EA	SIGNING, MISC: EXTRUSHEET SIGN, INSTALLATION ONLY	
												5	631	94201	5	EA	REMOVAL OF LUMINAIRE AND DISPOSAL, AS PER PLAN	339
			0.34										642	00090	0.34	MI	EDGE LINE	
			0.17										642	00290	0.17	MI	CENTER LINE	
3.80	3.15	2.92	3.57	3.44	3.06								644	00100	19.94	MI	EDGE LINE	
1.90	1.61	1.20	1.62	0.53	1.27								644	00200	8.13	MI	LANE LINE	
	580	917	734	208	811								644	00400	3250	FT	CHANNELIZING LINE	
				16	46								644	00500	62	FT	STOP LINE	
	110	450	400		338								644	00700	1298	FT	TRANSVERSE LINE	
	0.18												645	00110	0.18	MI	EDGE LINE, TYPE A3	
	0.09												645	00210	0.09	MI	LANE LINE, TYPE A3	

CALC. BY: SMM
CHKD. BY: MOW

SIGNING AND MARKING GENERAL SUMMARY

HAM-74-0.00



PAVEMENT MARKING LEGEND

CODE	DESCRIPTION
CL	CENTER LINE
LL	LANE LINE
WEL	WHITE EDGE LINE
YEL	YELLOW EDGE LINE
TL	TRANSVERSE LINE
CH	CHANNELIZING LINE
SL	STOP LINE
A	LANE ARROW
WP	WORD ON PAVEMENT
PWEL-X	PAINTED WHITE EDGE LINE
PYEL-X	PAINTED YELLOW EDGE LINE
PSL-X	PAINTED STOP LINE
PCL-X	PAINTED CENTER LINE
WEL-PX	PREFORMED WHITE EDGE LINE
YEL-PX	PREFORMED YELLOW EDGE LINE
LL-PX	PREFORMED LANE LINE
·	RPM, ONE-WAY OR TWO-WAY REFLECTOR
○	DELINEATOR, TYPE C
●	DELINEATOR, TYPE D

TRANSITION PAVEMENT MARKING LEGEND-*

CODE	DESCRIPTION
TWEL	TRANSITION WHITE EDGE LINE
TYEL	TRANSITION YELLOW EDGE LINE
TLL	TRANSITION LANE LINE

*-TRANSITION MARKINGS ARE DEFINED AS THOSE MARKINGS THAT FALL BETWEEN THE BEGIN WORK AND THE BEGIN PROJECT LIMITS AND THE END PROJECT AND END WORK LIMITS.

SINCE THESE MARKINGS ARE OUTSIDE THE PROJECT LIMITS BUT INSIDE THE WORK LIMITS, THEY HAVE BEEN ASSIGNED A BALLOON REFERENCE NUMBER BEGINNING WITH "T" FOR TRANSITION MARKINGS.

THE PROCESS OF APPLYING, REMOVING AND ALTERING EXISTING STRIPING PATTERNS IN ADVANCE OF THE PROJECT TERMINI, SO THAT APPROPRIATE WORK ZONE STRIPING PATTERNS CAN BE APPLIED, MANDATES THAT THE MARKINGS WITHIN THESE TRANSITION LIMITS NEED TO BE RESTORED BY THE CONTRACTOR.

"WELCOME TO OHIO" SIGN

SIGN "S-1", GT-276, STA. 10+98.4 EB I-74 A SIGN SHALL BE INSTALLED ON THE TRUSS LOCATED AT 10+98.4 EB I-74. IT IS THE STATE LINE SIGN, SIZE 276" x 78", CODE GT-276. THE SIGN SHALL BE FABRICATED BY ODOT AND FURNISHED TO THE CONTRACTOR FOR ERECTION. THE CONTRACTOR SHALL PICK UP THE SIGN AT THE DISTRICT 8 HEADQUARTERS IN LEBANON, OHIO. CONTACT JOE BASSIL AT 513-932-3030, EXT. 315 TO ARRANGE PICK UP TIME. SEE SIGNING AND MARKING GENERAL NOTES FOR MORE DETAILS.

SIGNING LEGEND

EXISTING SIGN TO REMAIN (DO NOT DISTURB)	NEW SIGN
EXISTING SIGN TO BE REMOVED AND STORED FOR ODOT	NEW GROUND-MOUNTED SUPPORT (2)
	NEW GROUND-MOUNTED SUPPORT (1)
EXISTING SIGN TO BE REMOVED AND DISPOSED	NEW BACK-TO-BACK SIGN ASSEMBLY

HORIZONTAL SCALE IN FEET 0 50 100

CALC. BY: SMM
CHKD. BY: MOW

SIGNING AND PAVEMENT MARKING PLAN
Sta.7+25 to Sta. 15+00

HAM-74-0.00

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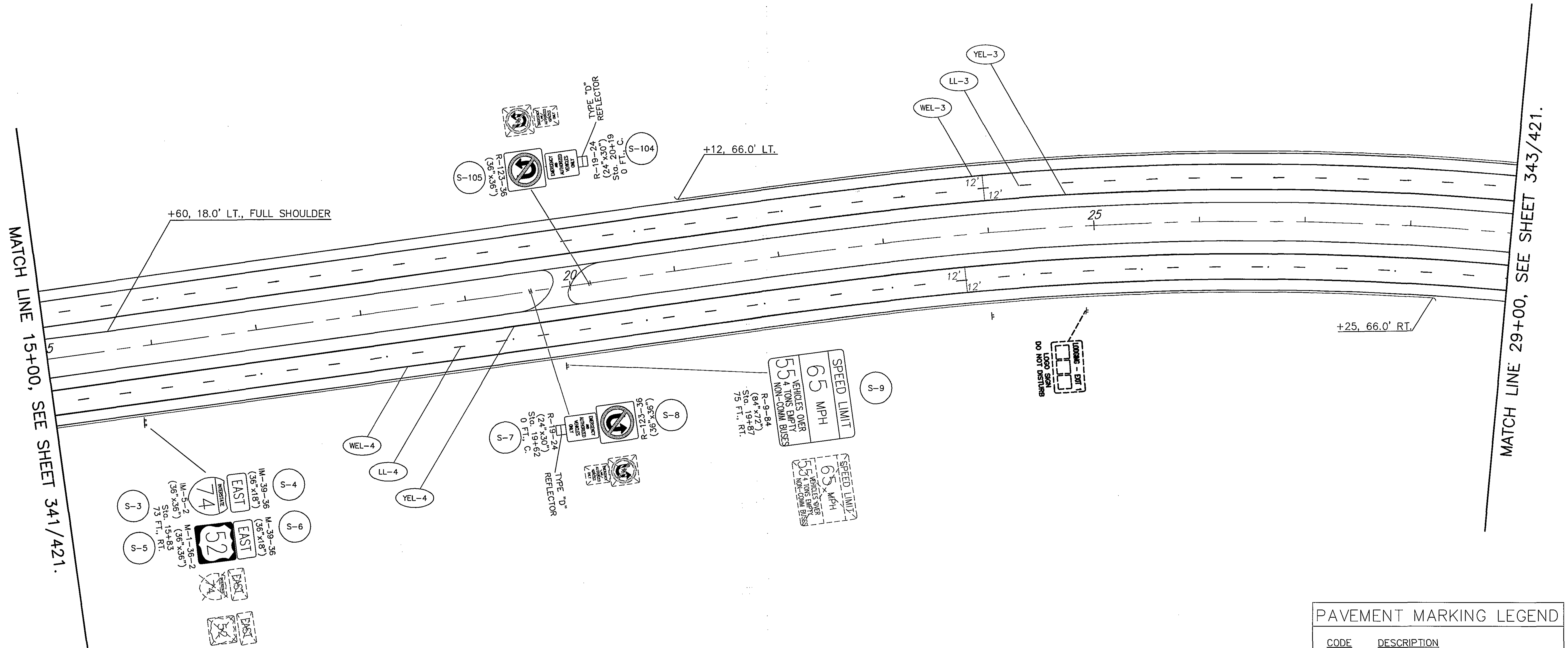

SIGNING LEGEND

EXISTING SIGN TO REMAIN (DO NOT DISTURB)	NEW SIGN
EXISTING SIGN TO BE REMOVED AND STORED FOR ODOT	NEW GROUND-MOUNTED SUPPORT (2)
	NEW GROUND-MOUNTED SUPPORT (1)
EXISTING SIGN TO BE REMOVED AND DISPOSED	NEW BACK-TO-BACK SIGN ASSEMBLY

TRANSITION PAVEMENT MARKING LEGEND-*

CODE	DESCRIPTION
TWEL	TRANSITION WHITE EDGE LINE
TYEL	TRANSITION YELLOW EDGE LINE
TLL	TRANSITION LANE LINE

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THE PROCESS OF APPLYING, REMOVING AND ALTERING EXISTING STRIPING PATTERNS IN ADVANCE OF THE PROJECT TERMINI, SO THAT APPROPRIATE WORK ZONE STRIPING PATTERNS CAN BE APPLIED, MANDATES THAT THE MARKINGS WITHIN THESE TRANSITION LIMITS NEED TO BE RESTORED BY THE CONTRACTOR.

PAVEMENT MARKING LEGEND

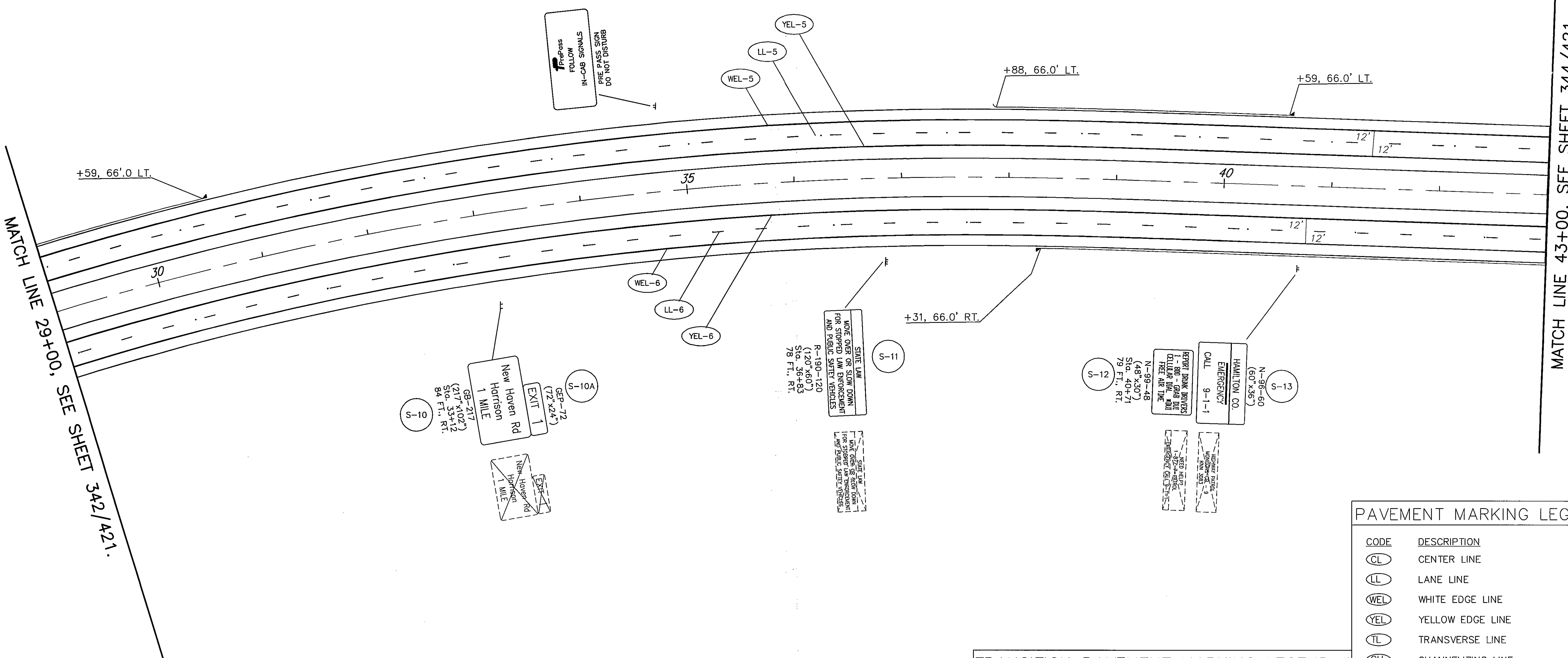
CODE	DESCRIPTION
CL	CENTER LINE
LL	LANE LINE
WEL	WHITE EDGE LINE
YEL	YELLOW EDGE LINE
TL	TRANSVERSE LINE
CH	CHANNELIZING LINE
SL	STOP LINE
A	LANE ARROW
WP	WORD ON PAVEMENT
PWEL-X	PAINTED WHITE EDGE LINE
PYEL-X	PAINTED YELLOW EDGE LINE
PSL-X	PAINTED STOP LINE
PCL-X	PAINTED CENTER LINE
WEL-PX	PREFORMED WHITE EDGE LINE
YEL-PX	PREFORMED YELLOW EDGE LINE
LL-PX	PREFORMED LANE LINE
·	RPM, ONE-WAY OR TWO-WAY REFLECTOR
○	DELINEATOR, TYPE C
●	DELINEATOR, TYPE D

0 50 100
HORIZONTAL SCALE IN FEET

CALC. BY: SMM
CHKD. BY: MOW

SIGNING AND PAVEMENT MARKING PLAN Sta. 15+00 to Sta. 29+00

HAM-74-0.00



SIGNING LEGEND

EXISTING SIGN TO REMAIN (DO NOT DISTURB)	NEW SIGN
EXISTING SIGN TO BE REMOVED AND STORED FOR ODOT	NEW GROUND-MOUNTED SUPPORT (2)
	NEW GROUND-MOUNTED SUPPORT (1)
EXISTING SIGN TO BE REMOVED AND DISPOSED	NEW BACK-TO-BACK SIGN ASSEMBLY

TRANSITION PAVEMENT MARKING LEGEND-*

CODE	DESCRIPTION
TWEL	TRANSITION WHITE EDGE LINE
TYEL	TRANSITION YELLOW EDGE LINE
TLL	TRANSITION LANE LINE

*-TRANSITION MARKINGS ARE DEFINED AS THOSE MARKINGS THAT FALL BETWEEN THE BEGIN WORK AND THE BEGIN PROJECT LIMITS AND THE END PROJECT AND END WORK LIMITS.

SINCE THESE MARKINGS ARE OUTSIDE THE PROJECT LIMITS BUT INSIDE THE WORK LIMITS, THEY HAVE BEEN ASSIGNED A BALLOON REFERENCE NUMBER BEGINNING WITH "T" FOR TRANSITION MARKINGS.

THE PROCESS OF APPLYING, REMOVING AND ALTERING EXISTING STRIPING PATTERNS IN ADVANCE OF THE PROJECT TERMINI, SO THAT APPROPRIATE WORK ZONE STRIPING PATTERNS CAN BE APPLIED, MANDATES THAT THE MARKINGS WITHIN THESE TRANSITION LIMITS NEED TO BE RESTORED BY THE CONTRACTOR.

PAVEMENT MARKING LEGEND

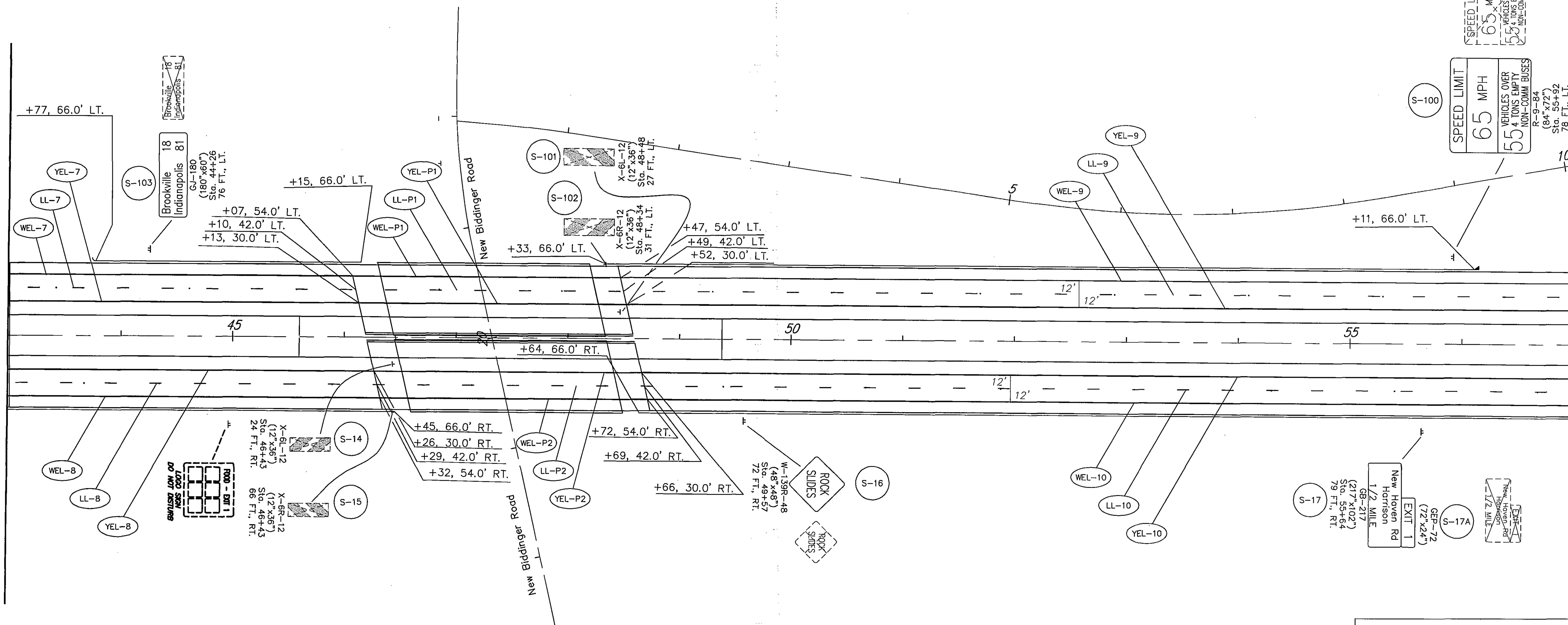
CODE	DESCRIPTION
CL	CENTER LINE
LL	LANE LINE
WEL	WHITE EDGE LINE
YEL	YELLOW EDGE LINE
TL	TRANSVERSE LINE
CH	CHANNELIZING LINE
SL	STOP LINE
A	LANE ARROW
WP	WORD ON PAVEMENT
PWEL-X	PAINTED WHITE EDGE LINE
PYEL-X	PAINTED YELLOW EDGE LINE
PSL-X	PAINTED STOP LINE
PCL-X	PAINTED CENTER LINE
WEL-PX	PREFORMED WHITE EDGE LINE
YEL-PX	PREFORMED YELLOW EDGE LINE
LL-PX	PREFORMED LANE LINE
·	RPM, ONE-WAY OR TWO-WAY REFLECTOR
○	DELINEATOR, TYPE C
●	DELINEATOR, TYPE D

0 50 100
HORIZONTAL SCALE IN FEET

CALC. BY: SMM
CHKD. BY: MOW

SIGNING AND PAVEMENT MARKING PLAN Sta. 29+00 to Sta. 43+00

HAM-74-0.00



PAVEMENT MARKING LEGEND

CODE	DESCRIPTION
CL	CENTER LINE
LL	LANE LINE
WEL	WHITE EDGE LINE
YEL	YELLOW EDGE LINE
TL	TRANSVERSE LINE
CH	CHANNELIZING LINE
SL	STOP LINE
A	LANE ARROW
WP	WORD ON PAVEMENT
PWEL-X	PAINTED WHITE EDGE LINE
PYEL-X	PAINTED YELLOW EDGE LINE
PSL-X	PAINTED STOP LINE
PCL-X	PAINTED CENTER LINE
WEL-PX	PREFORMED WHITE EDGE LINE
YEL-PX	PREFORMED YELLOW EDGE LINE
LL-PX	PREFORMED LANE LINE
·	RPM, ONE-WAY OR TWO-WAY REFLECTOR
○	DELINEATOR, TYPE C
●	DELINEATOR, TYPE D

TRANSITION PAVEMENT MARKING LEGEND-*

CODE	DESCRIPTION
TWEL	TRANSITION WHITE EDGE LINE
TYEL	TRANSITION YELLOW EDGE LINE
TLL	TRANSITION LANE LINE

*-TRANSITION MARKINGS ARE DEFINED AS THOSE MARKINGS THAT FALL BETWEEN THE BEGIN WORK AND THE BEGIN PROJECT LIMITS AND THE END PROJECT AND END WORK LIMITS.

SINCE THESE MARKINGS ARE OUTSIDE THE PROJECT LIMITS BUT INSIDE THE WORK LIMITS, THEY HAVE BEEN ASSIGNED A BALLOON REFERENCE NUMBER BEGINNING WITH "T" FOR TRANSITION MARKINGS.

THE PROCESS OF APPLYING, REMOVING AND ALTERING EXISTING STRIPING PATTERNS IN ADVANCE OF THE PROJECT TERMINI, SO THAT APPROPRIATE WORK ZONE STRIPING PATTERNS CAN BE APPLIED, MANDATES THAT THE MARKINGS WITHIN THESE TRANSITION LIMITS NEED TO BE RESTORED BY THE CONTRACTOR.

SIGNING LEGEND

EXISTING SIGN TO REMAIN (DO NOT DISTURB)

NEW SIGN

EXISTING SIGN TO BE REMOVED AND STORED FOR ODOT

NEW GROUND-MOUNTED SUPPORT (2)

NEW GROUND-MOUNTED SUPPORT (1)

EXISTING SIGN TO BE REMOVED AND DISPOSED

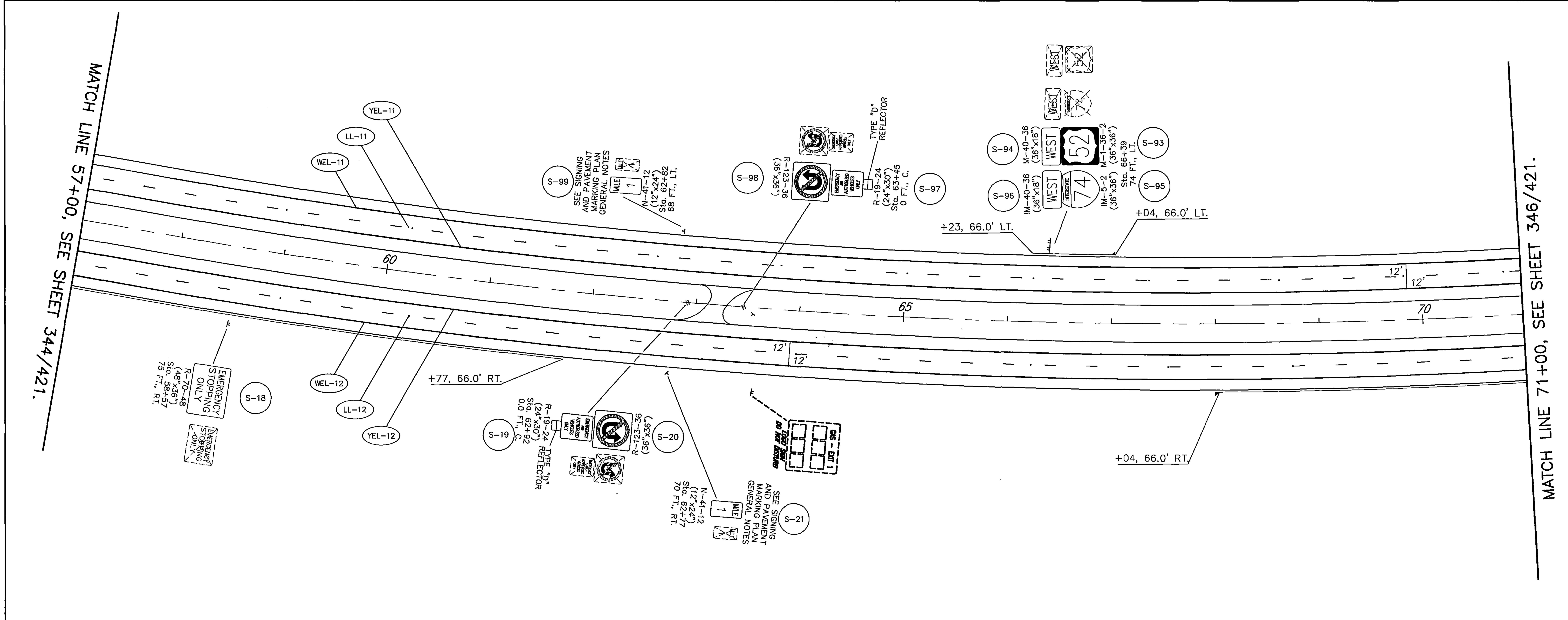
NEW BACK-TO-BACK SIGN ASSEMBLY

0 50 100
HORIZONTAL SCALE IN FEET

CALC. BY: SMM
CHKD. BY: MQW

SIGNING AND PAVEMENT MARKING PLAN
Sta. 43+00 to Sta. 57+00

HAM-74-0.00



SIGNING LEGEND

EXISTING SIGN TO REMAIN (DO NOT DISTURB)	NEW SIGN
EXISTING SIGN TO BE REMOVED AND STORED FOR ODOT	NEW GROUND–MOUNTED SUPPORT (2)
	NEW GROUND–MOUNTED SUPPORT (1)
EXISTING SIGN TO BE REMOVED AND DISPOSED	NEW BACK–TO–BACK SIGN ASSEMBLY

TRANSITION PAVEMENT MARKING LEGEND–*

CODE	DESCRIPTION
TWEL	TRANSITION WHITE EDGE LINE
TYEL	TRANSITION YELLOW EDGE LINE
TLL	TRANSITION LANE LINE

*–TRANSITION MARKINGS ARE DEFINED AS THOSE MARKINGS THAT FALL BETWEEN THE BEGIN WORK AND THE BEGIN PROJECT LIMITS AND THE END PROJECT AND END WORK LIMITS.

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PAVEMENT MARKING LEGEND

CODE	DESCRIPTION
CL	CENTER LINE
LL	LANE LINE
WEL	WHITE EDGE LINE
YEL	YELLOW EDGE LINE
TL	TRANSVERSE LINE
CH	CHANNELIZING LINE
SL	STOP LINE
A	LANE ARROW
WP	WORD ON PAVEMENT
PWEL–X	PAINTED WHITE EDGE LINE
PYEL–X	PAINTED YELLOW EDGE LINE
PSL–X	PAINTED STOP LINE
PCL–X	PAINTED CENTER LINE
WEL–PX	PREFORMED WHITE EDGE LINE
YEL–PX	PREFORMED YELLOW EDGE LINE
LL–PX	PREFORMED LANE LINE
·	RPM, ONE–WAY OR TWO–WAY REFLECTOR
○	DELINEATOR, TYPE C
●	DELINEATOR, TYPE D

HORIZONTAL SCALE IN FEET 0 50 100

CALC. BY: SMM
CHKD. BY: MOW

SIGNING AND PAVEMENT MARKING PLAN Sta. 57+00 to Sta. 71+00

HAM–74–0.00

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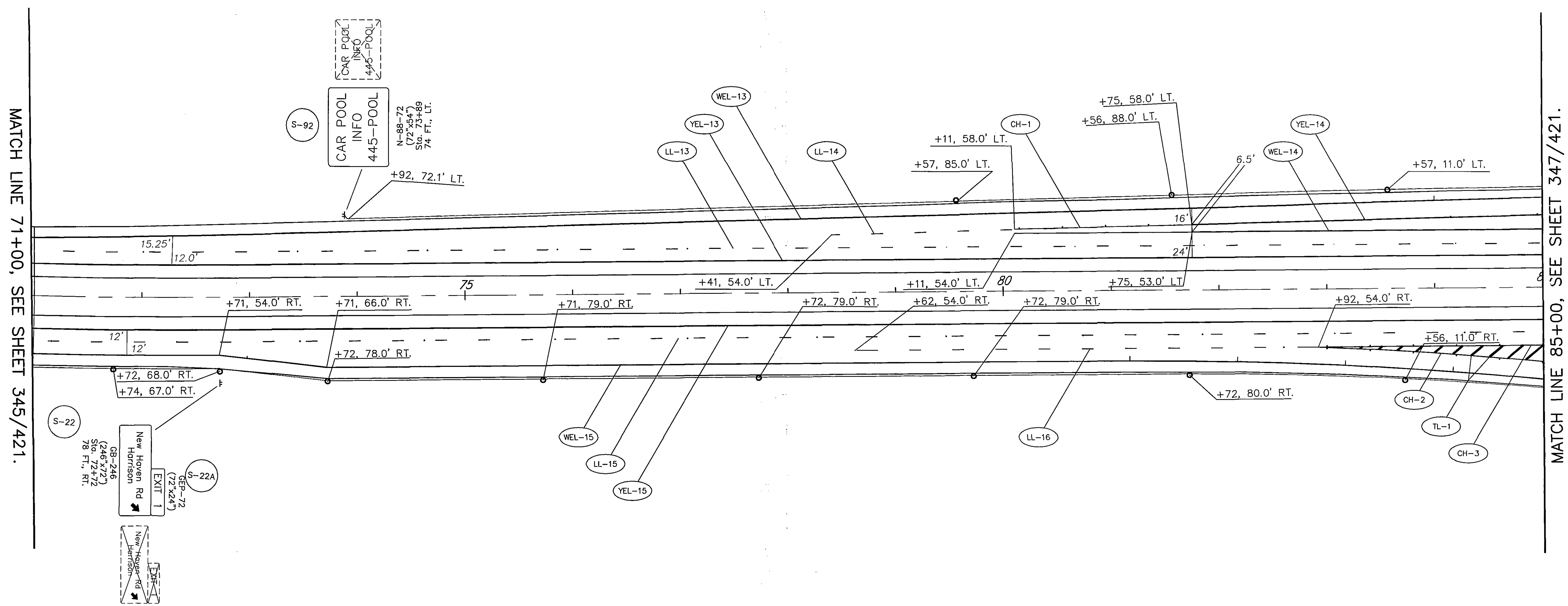

SIGNING LEGEND

- EXISTING SIGN TO REMAIN (DO NOT DISTURB)
- NEW SIGN
- EXISTING SIGN TO BE REMOVED AND STORED FOR ODOT
- NEW GROUND-MOUNTED SUPPORT (2)
- NEW GROUND-MOUNTED SUPPORT (1)
- EXISTING SIGN TO BE REMOVED AND DISPOSED
- NEW BACK-TO-BACK SIGN ASSEMBLY

TRANSITION PAVEMENT MARKING LEGEND-*

CODE	DESCRIPTION
TWEL	TRANSITION WHITE EDGE LINE
TYEL	TRANSITION YELLOW EDGE LINE
TLL	TRANSITION LANE LINE

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PAVEMENT MARKING LEGEND

CODE	DESCRIPTION
CL	CENTER LINE
LL	LANE LINE
WEL	WHITE EDGE LINE
YEL	YELLOW EDGE LINE
TL	TRANSVERSE LINE
CH	CHANNELIZING LINE
SL	STOP LINE
A	LANE ARROW
WP	WORD ON PAVEMENT
PWEL-X	PAINTED WHITE EDGE LINE
PYEL-X	PAINTED YELLOW EDGE LINE
PSL-X	PAINTED STOP LINE
PCL-X	PAINTED CENTER LINE
WEL-PX	PREFORMED WHITE EDGE LINE
YEL-PX	PREFORMED YELLOW EDGE LINE
LL-PX	PREFORMED LANE LINE
·	RPM, ONE-WAY OR TWO-WAY REFLECTOR
○	DELINEATOR, TYPE C
●	DELINEATOR, TYPE D

0 50 100
HORIZONTAL SCALE IN FEET

CALC. BY: SMM
CHKD. BY: MDW

SIGNING AND PAVEMENT MARKING PLAN Sta. 71+00 to Sta. 85+00

HAM-74-0.00

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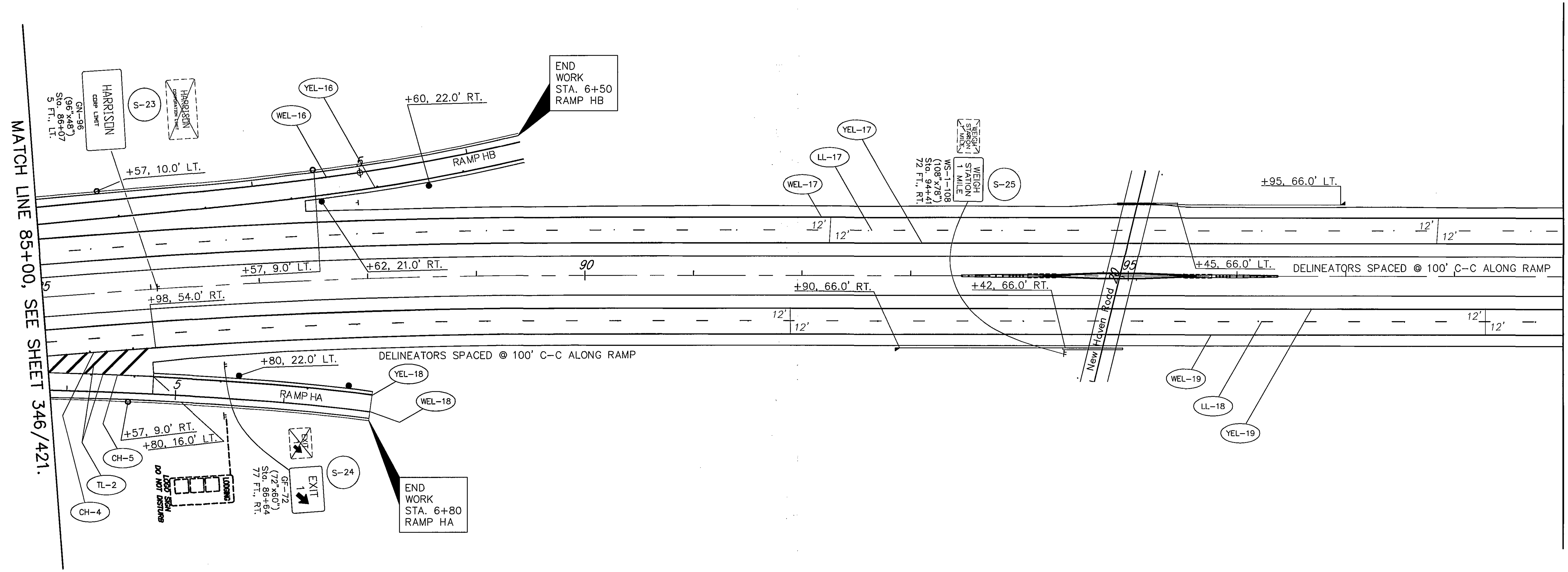

PAVEMENT MARKING LEGEND

CODE	DESCRIPTION
CL	CENTER LINE
LL	LANE LINE
WEL	WHITE EDGE LINE
YEL	YELLOW EDGE LINE
TL	TRANSVERSE LINE
CH	CHANNELIZING LINE
SL	STOP LINE
A	LANE ARROW
WP	WORD ON PAVEMENT
PWEL-X	PAINTED WHITE EDGE LINE
PYEL-X	PAINTED YELLOW EDGE LINE
PSL-X	PAINTED STOP LINE
PCL-X	PAINTED CENTER LINE
WEL-PX	PREFORMED WHITE EDGE LINE
YEL-PX	PREFORMED YELLOW EDGE LINE
LL-PX	PREFORMED LANE LINE
·	RPM, ONE-WAY OR TWO-WAY REFLECTOR
○	DELINEATOR, TYPE C
●	DELINEATOR, TYPE D

TRANSITION PAVEMENT MARKING LEGEND-*

CODE	DESCRIPTION
TWEL	TRANSITION WHITE EDGE LINE
TYEL	TRANSITION YELLOW EDGE LINE
TLL	TRANSITION LANE LINE

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SIGNING LEGEND

⬚	*EXISTING SIGN TO REMAIN (DO NOT DISTURB)*
☒	*EXISTING SIGN TO BE REMOVED AND STORED FOR ODOT*
☒	*EXISTING SIGN TO BE REMOVED AND DISPOSED*
▭	*NEW SIGN*
⊧	*NEW GROUND-MOUNTED SUPPORT (2)*
⊢	*NEW GROUND-MOUNTED SUPPORT (1)*
⧺	*NEW BACK-TO-BACK SIGN ASSEMBLY*

0 50 100
HORIZONTAL SCALE IN FEET

CALC. BY: *SMM*
CHKD. BY: *MOW*

SIGNING AND PAVEMENT MARKING PLAN
Sta. 85+00 to Sta. 99+00

HAM-74-0.00

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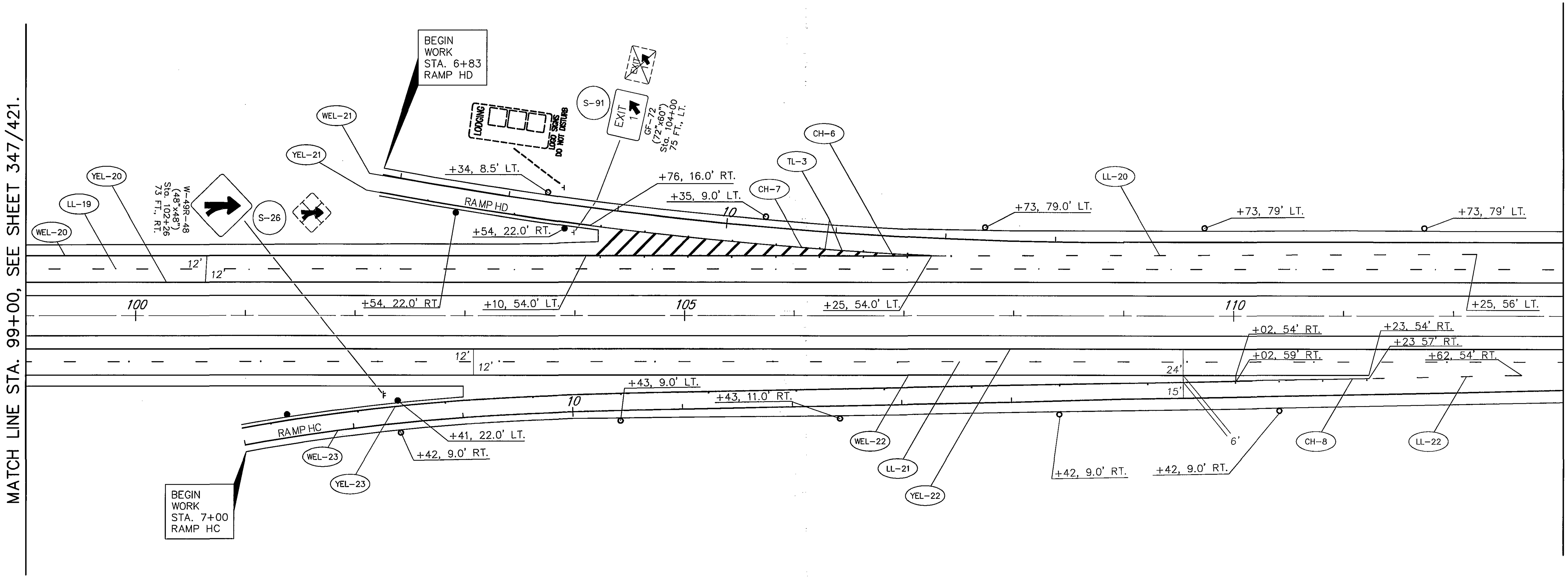

PAVEMENT MARKING LEGEND

CODE	DESCRIPTION
CL	CENTER LINE
LL	LANE LINE
WEL	WHITE EDGE LINE
YEL	YELLOW EDGE LINE
TL	TRANSVERSE LINE
CH	CHANNELIZING LINE
SL	STOP LINE
A	LANE ARROW
WP	WORD ON PAVEMENT
PWEL-X	PAINTED WHITE EDGE LINE
PYEL-X	PAINTED YELLOW EDGE LINE
PSL-X	PAINTED STOP LINE
PCL-X	PAINTED CENTER LINE
WEL-PX	PREFORMED WHITE EDGE LINE
YEL-PX	PREFORMED YELLOW EDGE LINE
LL-PX	PREFORMED LANE LINE
·	RPM, ONE-WAY OR TWO-WAY REFLECTOR
○	DELINEATOR, TYPE C
●	DELINEATOR, TYPE D

TRANSITION PAVEMENT MARKING LEGEND-*

CODE	DESCRIPTION
TWEL	TRANSITION WHITE EDGE LINE
TYEL	TRANSITION YELLOW EDGE LINE
TLL	TRANSITION LANE LINE

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SIGNING LEGEND

EXISTING SIGN TO REMAIN (DO NOT DISTURB)

NEW SIGN

EXISTING SIGN TO BE REMOVED AND STORED FOR ODOT

NEW GROUND-MOUNTED SUPPORT (2)

NEW GROUND-MOUNTED SUPPORT (1)

EXISTING SIGN TO BE REMOVED AND DISPOSED

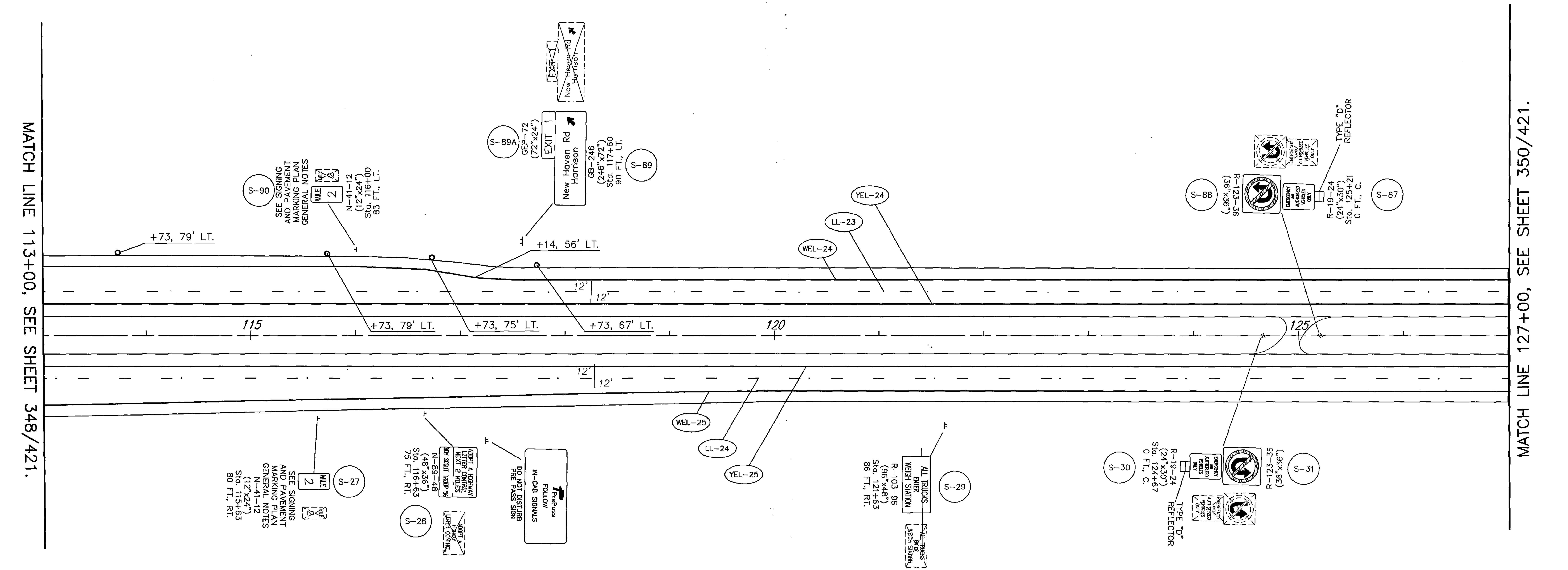
NEW BACK-TO-BACK SIGN ASSEMBLY

0 50 100
HORIZONTAL SCALE IN FEET

CALC. BY: *SMM*
CHKD. BY: *MOW*

SIGNING AND PAVEMENT MARKING PLAN
Sta. 99+00 to Sta. 113+00

HAM-74-0.00



PAVEMENT MARKING LEGEND

CODE	DESCRIPTION
CL	CENTER LINE
LL	LANE LINE
WEL	WHITE EDGE LINE
YEL	YELLOW EDGE LINE
TL	TRANSVERSE LINE
CH	CHANNELIZING LINE
SL	STOP LINE
A	LANE ARROW
WP	WORD ON PAVEMENT
PWEL-X	PAINTED WHITE EDGE LINE
PYEL-X	PAINTED YELLOW EDGE LINE
PSL-X	PAINTED STOP LINE
PCL-X	PAINTED CENTER LINE
WEL-PX	PREFORMED WHITE EDGE LINE
YEL-PX	PREFORMED YELLOW EDGE LINE
LL-PX	PREFORMED LANE LINE
·	RPM, ONE-WAY OR TWO-WAY REFLECTOR
○	DELINEATOR, TYPE C
●	DELINEATOR, TYPE D

TRANSITION PAVEMENT MARKING LEGEND-*

CODE	DESCRIPTION
TWEL	TRANSITION WHITE EDGE LINE
TYEL	TRANSITION YELLOW EDGE LINE
TLL	TRANSITION LANE LINE

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SIGNING LEGEND

[dashed box]	*EXISTING SIGN TO REMAIN (DO NOT DISTURB)*
[solid box]	*NEW SIGN*
[dashed box with X]	*EXISTING SIGN TO BE REMOVED AND REERECTED*
⊧	*NEW GROUND-MOUNTED SUPPORT (2)*
⊢	*NEW GROUND-MOUNTED SUPPORT (1)*
⊞	*NEW BACK-TO-BACK SIGN ASSEMBLY*
[dashed box with dashed X]	*EXISTING SIGN TO BE REMOVED AND DISPOSED*

0 50 100
HORIZONTAL SCALE IN FEET

CALC. BY: SMM
CHKD. BY: MDW

SIGNING AND PAVEMENT MARKING PLAN
Sta. 113+00 to Sta. 127+00

HAM-74-0.00

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PAVEMENT MARKING LEGEND

CODE	DESCRIPTION
CL	CENTER LINE
LL	LANE LINE
WEL	WHITE EDGE LINE
YEL	YELLOW EDGE LINE
TL	TRANSVERSE LINE
CH	CHANNELIZING LINE
SL	STOP LINE
A	LANE ARROW
WP	WORD ON PAVEMENT
PWEL-X	PAINTED WHITE EDGE LINE
PYEL-X	PAINTED YELLOW EDGE LINE
PSL-X	PAINTED STOP LINE
PCL-X	PAINTED CENTER LINE
WEL-PX	PREFORMED WHITE EDGE LINE
YEL-PX	PREFORMED YELLOW EDGE LINE
LL-PX	PREFORMED LANE LINE
·	RPM, ONE-WAY OR TWO-WAY REFLECTOR
○	DELINEATOR, TYPE C
●	DELINEATOR, TYPE D

TRANSITION PAVEMENT MARKING LEGEND-*

CODE	DESCRIPTION
TWEL	TRANSITION WHITE EDGE LINE
TYEL	TRANSITION YELLOW EDGE LINE
TLL	TRANSITION LANE LINE

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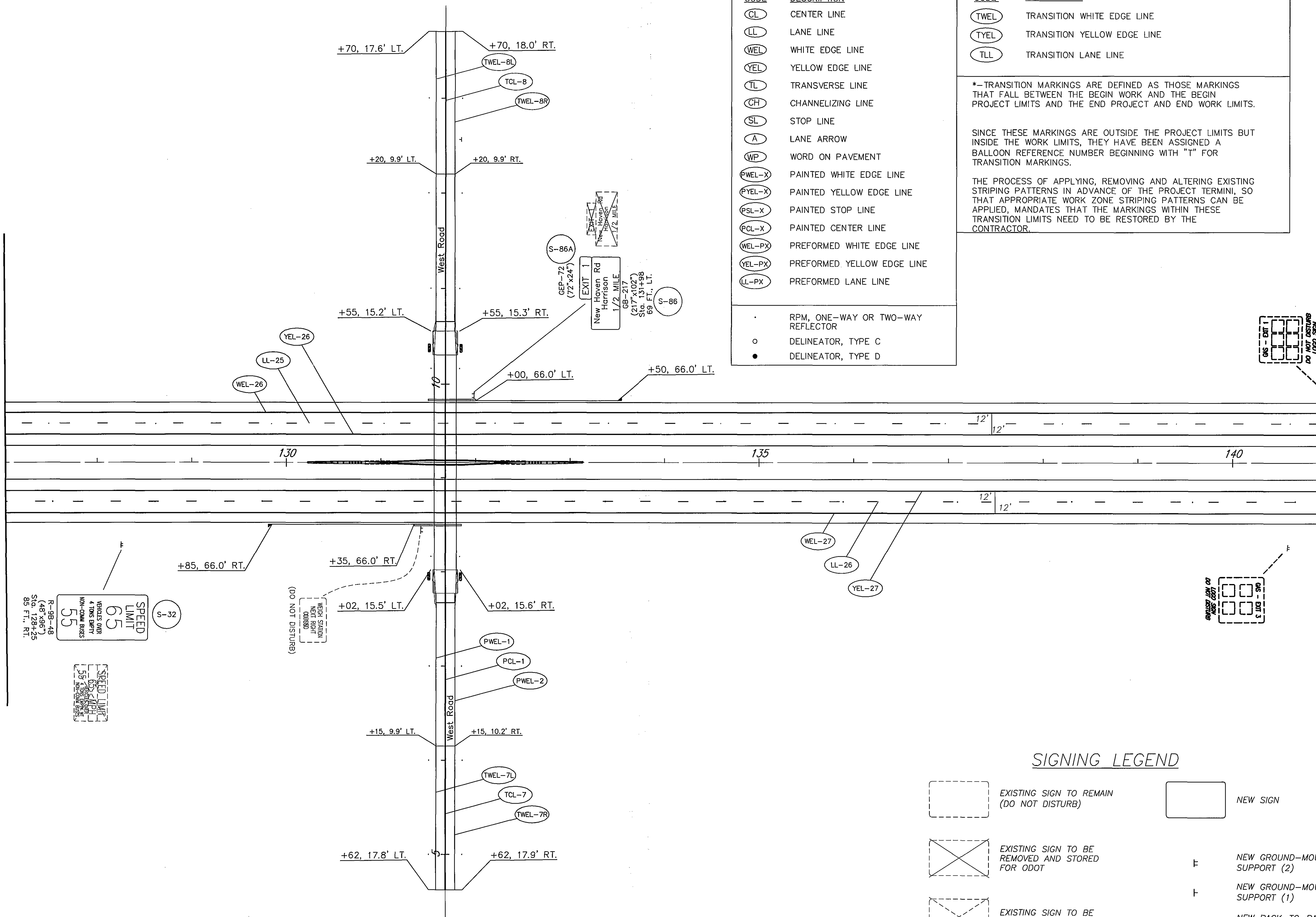

SIGNING LEGEND

EXISTING SIGN TO REMAIN (DO NOT DISTURB)	NEW SIGN
EXISTING SIGN TO BE REMOVED AND STORED FOR ODOT	NEW GROUND-MOUNTED SUPPORT (2)
	NEW GROUND-MOUNTED SUPPORT (1)
EXISTING SIGN TO BE REMOVED AND DISPOSED	NEW BACK-TO-BACK SIGN ASSEMBLY

0 50 100
HORIZONTAL SCALE IN FEET

CALC. BY: SMM
CHKD. BY: MDW

SIGNING AND PAVEMENT MARKING PLAN
Sta. 127+00 to Sta. 141+00

HAM-74-0.00

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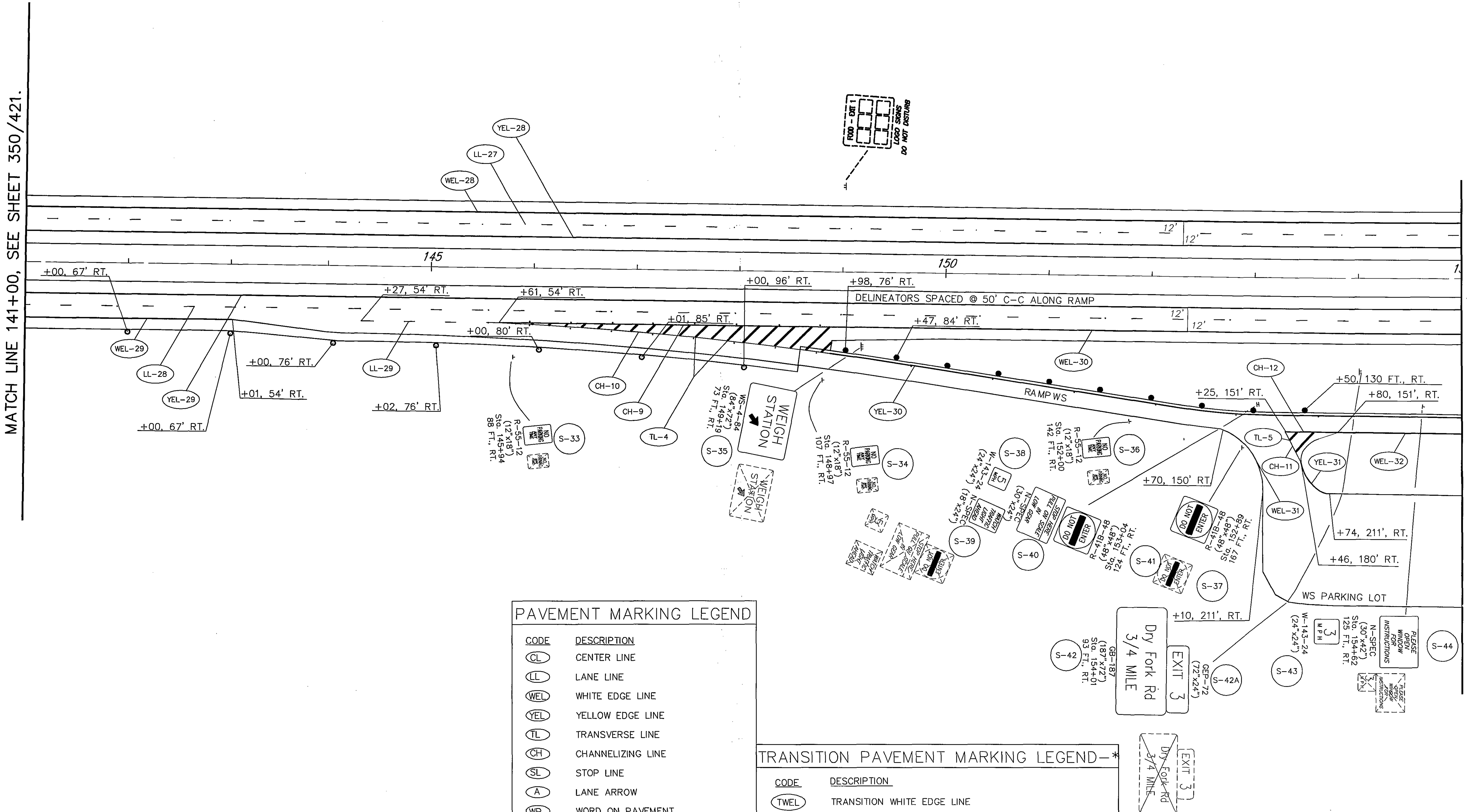
SIGNING AND PAVEMENT MARKING PLAN
Sta. 141+00 to Sta. 155+00



PAVEMENT MARKING LEGEND

CODE	DESCRIPTION
CL	CENTER LINE
LL	LANE LINE
WEL	WHITE EDGE LINE
YEL	YELLOW EDGE LINE
TL	TRANSVERSE LINE
CH	CHANNELIZING LINE
SL	STOP LINE
A	LANE ARROW
WP	WORD ON PAVEMENT
PWEL-X	PAINTED WHITE EDGE LINE
PYEL-X	PAINTED YELLOW EDGE LINE
PSL-X	PAINTED STOP LINE
PCL-X	PAINTED CENTER LINE
WEL-PX	PREFORMED WHITE EDGE LINE
YEL-PX	PREFORMED YELLOW EDGE LINE
LL-PX	PREFORMED LANE LINE
·	RPM, ONE-WAY OR TWO-WAY REFLECTOR
○	DELINEATOR, TYPE C
●	DELINEATOR, TYPE D

TRANSITION PAVEMENT MARKING LEGEND-*

CODE	DESCRIPTION
TWEL	TRANSITION WHITE EDGE LINE
TYEL	TRANSITION YELLOW EDGE LINE
TLL	TRANSITION LANE LINE

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SIGNING LEGEND

- EXISTING SIGN TO REMAIN (DO NOT DISTURB)
- NEW SIGN
- EXISTING SIGN TO BE REMOVED AND STORED FOR ODOT
- NEW GROUND-MOUNTED SUPPORT (2)
- NEW GROUND-MOUNTED SUPPORT (1)
- EXISTING SIGN TO BE REMOVED AND DISPOSED
- NEW BACK-TO-BACK SIGN ASSEMBLY

HORIZONTAL SCALE IN FEET 0 50 100

CALC. BY: SMM
CHKD. BY: MOW

HAM-74-0.00

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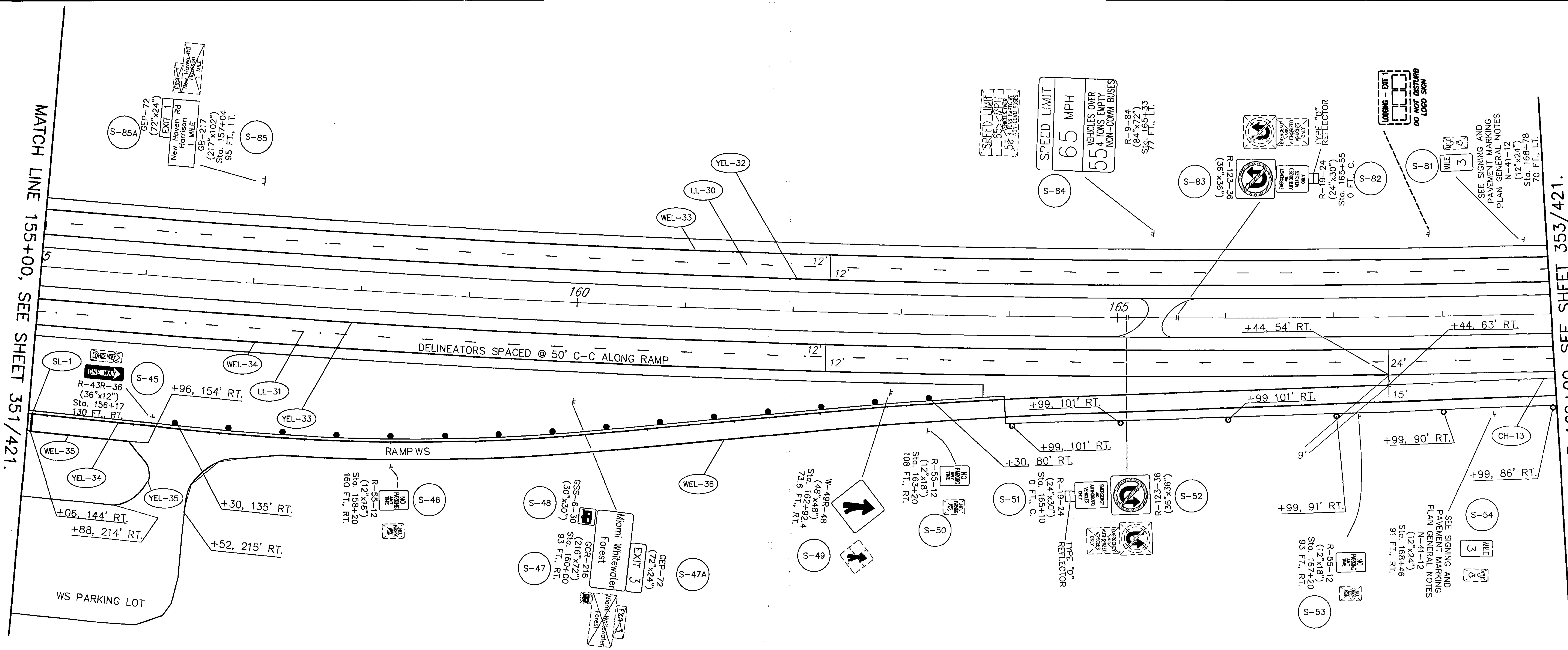

SIGNING LEGEND

	EXISTING SIGN TO REMAIN (DO NOT DISTURB)		NEW SIGN
	EXISTING SIGN TO BE REMOVED AND STORED FOR ODOT		NEW GROUND-MOUNTED SUPPORT (2)
			NEW GROUND-MOUNTED SUPPORT (1)
	EXISTING SIGN TO BE REMOVED AND DISPOSED		NEW BACK-TO-BACK SIGN ASSEMBLY

TRANSITION PAVEMENT MARKING LEGEND-*

CODE	DESCRIPTION
TWEL	TRANSITION WHITE EDGE LINE
TYEL	TRANSITION YELLOW EDGE LINE
TLL	TRANSITION LANE LINE

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PAVEMENT MARKING LEGEND

CODE	DESCRIPTION
CL	CENTER LINE
LL	LANE LINE
WEL	WHITE EDGE LINE
YEL	YELLOW EDGE LINE
TL	TRANSVERSE LINE
CH	CHANNELIZING LINE
SL	STOP LINE
A	LANE ARROW
WP	WORD ON PAVEMENT
PWEL-X	PAINTED WHITE EDGE LINE
PYEL-X	PAINTED YELLOW EDGE LINE
PSL-X	PAINTED STOP LINE
PCL-X	PAINTED CENTER LINE
WEL-PX	PREFORMED WHITE EDGE LINE
YEL-PX	PREFORMED YELLOW EDGE LINE
LL-PX	PREFORMED LANE LINE
·	RPM, ONE-WAY OR TWO-WAY REFLECTOR
○	DELINEATOR, TYPE C
●	DELINEATOR, TYPE D

HORIZONTAL SCALE IN FEET
0 50 100

CALC. BY: SMM
CHKD. BY: MOW

SIGNING AND PAVEMENT MARKING PLAN
Sta. 155+00 to Sta. 169+00

HAM-74-0.00

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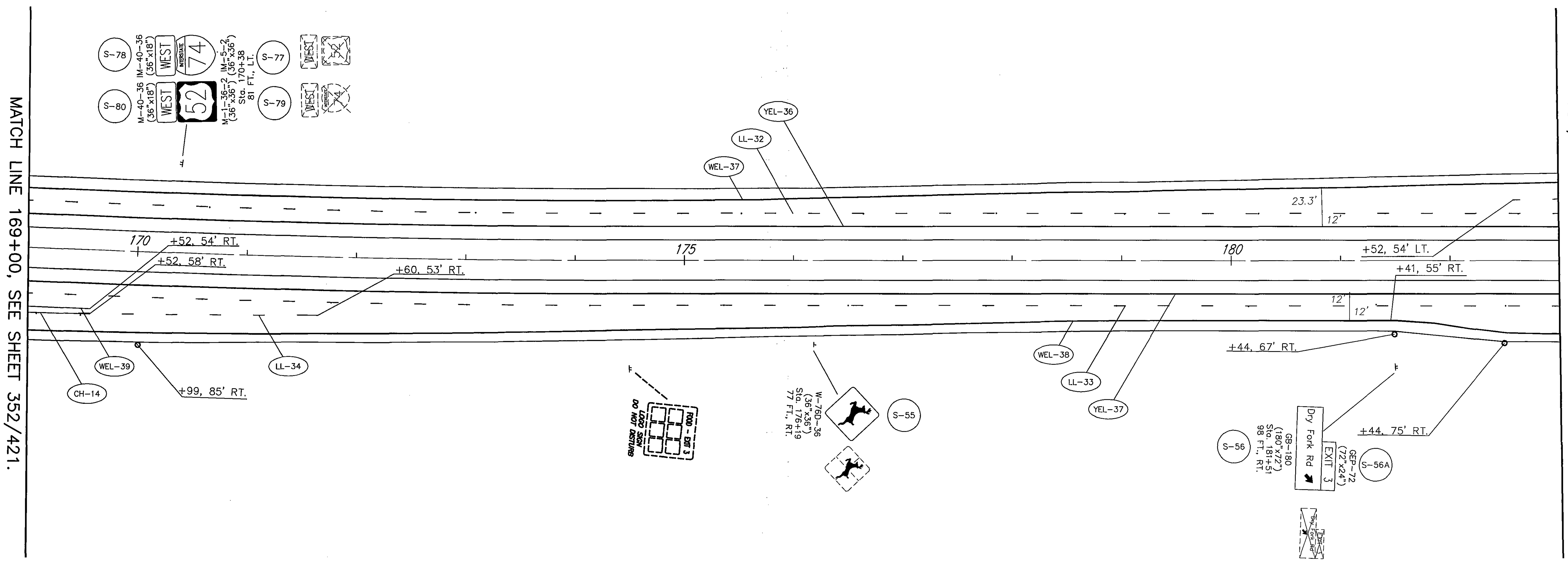


PAVEMENT MARKING LEGEND

CODE	DESCRIPTION
CL	CENTER LINE
LL	LANE LINE
WEL	WHITE EDGE LINE
YEL	YELLOW EDGE LINE
TL	TRANSVERSE LINE
CH	CHANNELIZING LINE
SL	STOP LINE
A	LANE ARROW
WP	WORD ON PAVEMENT
PWEL-X	PAINTED WHITE EDGE LINE
PYEL-X	PAINTED YELLOW EDGE LINE
PSL-X	PAINTED STOP LINE
PCL-X	PAINTED CENTER LINE
WEL-PX	PREFORMED WHITE EDGE LINE
YEL-PX	PREFORMED YELLOW EDGE LINE
LL-PX	PREFORMED LANE LINE
·	RPM, ONE-WAY OR TWO-WAY REFLECTOR
○	DELINEATOR, TYPE C
●	DELINEATOR, TYPE D

TRANSITION PAVEMENT MARKING LEGEND-*

CODE	DESCRIPTION
TWEL	TRANSITION WHITE EDGE LINE
TYEL	TRANSITION YELLOW EDGE LINE
TLL	TRANSITION LANE LINE

*-TRANSITION MARKINGS ARE DEFINED AS THOSE MARKINGS THAT FALL BETWEEN THE BEGIN WORK AND THE BEGIN PROJECT LIMITS AND THE END PROJECT AND END WORK LIMITS.

SINCE THESE MARKINGS ARE OUTSIDE THE PROJECT LIMITS BUT INSIDE THE WORK LIMITS, THEY HAVE BEEN ASSIGNED A BALLOON REFERENCE NUMBER BEGINNING WITH "T" FOR TRANSITION MARKINGS.

THE PROCESS OF APPLYING, REMOVING AND ALTERING EXISTING STRIPING PATTERNS IN ADVANCE OF THE PROJECT TERMINI, SO THAT APPROPRIATE WORK ZONE STRIPING PATTERNS CAN BE APPLIED, MANDATES THAT THE MARKINGS WITHIN THESE TRANSITION LIMITS NEED TO BE RESTORED BY THE CONTRACTOR.

SIGNING LEGEND

EXISTING SIGN TO REMAIN (DO NOT DISTURB)

NEW SIGN

EXISTING SIGN TO BE REMOVED AND STORED FOR ODOT

NEW GROUND-MOUNTED SUPPORT (2)

NEW GROUND-MOUNTED SUPPORT (1)

EXISTING SIGN TO BE REMOVED AND DISPOSED

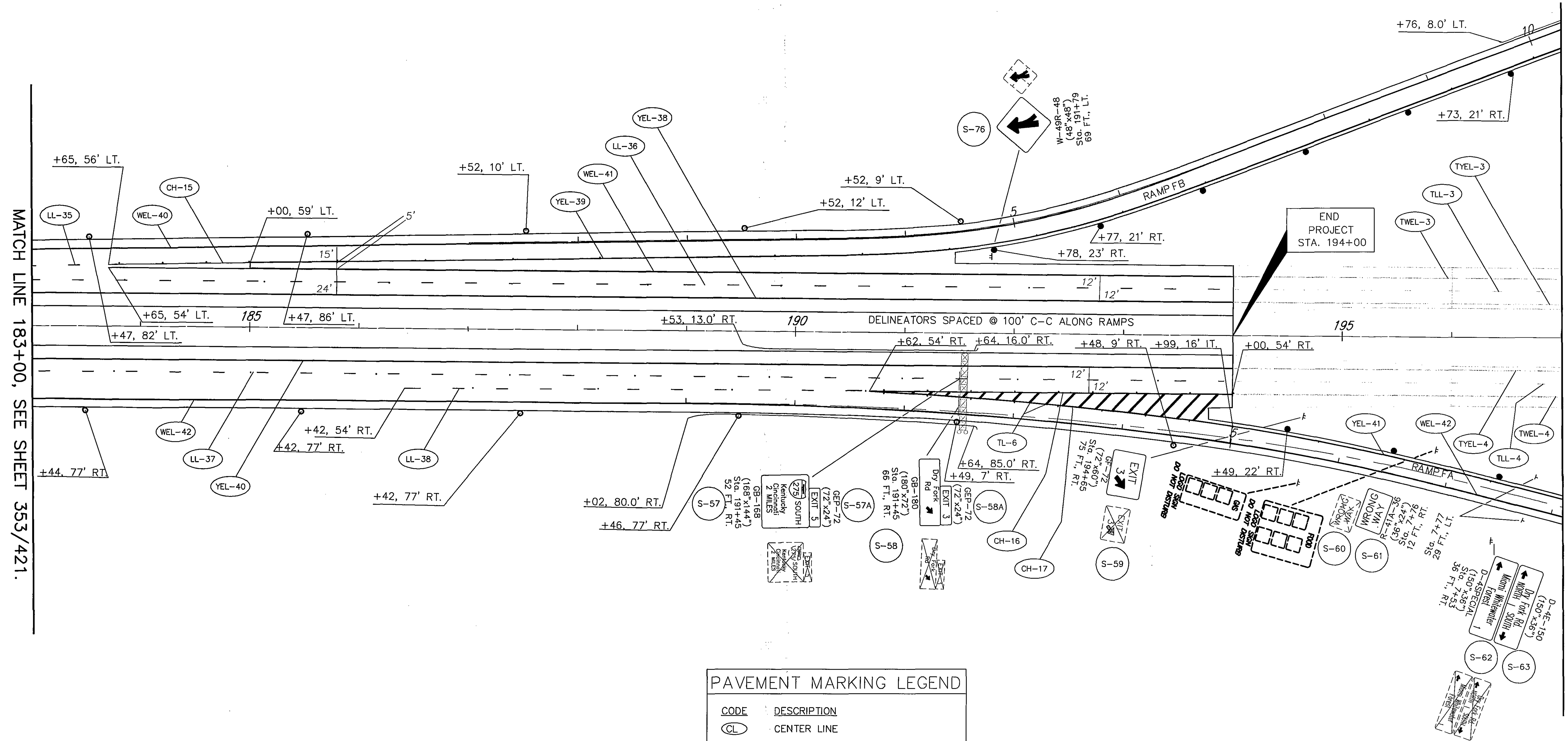
NEW BACK-TO-BACK SIGN ASSEMBLY

HORIZONTAL SCALE IN FEET 0 50 100

CALC. BY: SMM
CHKD. BY: MOW

SIGNING AND PAVEMENT MARKING PLAN
Sta. 169+00 to Sta. 183+00

HAM-74-0.00



SIGNING LEGEND

EXISTING SIGN TO REMAIN (DO NOT DISTURB)	NEW SIGN
EXISTING SIGN TO BE REMOVED AND STORED FOR ODOT	NEW GROUND-MOUNTED SUPPORT (2)
	NEW GROUND-MOUNTED SUPPORT (1)
EXISTING SIGN TO BE REMOVED AND DISPOSED	NEW BACK-TO-BACK SIGN ASSEMBLY

PAVEMENT MARKING LEGEND

CODE	DESCRIPTION
CL	CENTER LINE
LL	LANE LINE
WEL	WHITE EDGE LINE
YEL	YELLOW EDGE LINE
TL	TRANSVERSE LINE
CH	CHANNELIZING LINE
SL	STOP LINE
A	LANE ARROW
WP	WORD ON PAVEMENT
PWEL-X	PAINTED WHITE EDGE LINE
PYEL-X	PAINTED YELLOW EDGE LINE
PSL-X	PAINTED STOP LINE
PCL-X	PAINTED CENTER LINE
WEL-PX	PREFORMED WHITE EDGE LINE
YEL-PX	PREFORMED YELLOW EDGE LINE
LL-PX	PREFORMED LANE LINE
·	RPM, ONE-WAY OR TWO-WAY REFLECTOR
○	DELINEATOR, TYPE C
●	DELINEATOR, TYPE D

TRANSITION PAVEMENT MARKING LEGEND-*

CODE	DESCRIPTION
TWEL	TRANSITION WHITE EDGE LINE
TYEL	TRANSITION YELLOW EDGE LINE
TLL	TRANSITION LANE LINE

*-TRANSITION MARKINGS ARE DEFINED AS THOSE MARKINGS THAT FALL BETWEEN THE BEGIN WORK AND THE BEGIN PROJECT LIMITS AND THE END PROJECT AND END WORK LIMITS.

SINCE THESE MARKINGS ARE OUTSIDE THE PROJECT LIMITS BUT INSIDE THE WORK LIMITS, THEY HAVE BEEN ASSIGNED A BALLOON REFERENCE NUMBER BEGINNING WITH "T" FOR TRANSITION MARKINGS.

THE PROCESS OF APPLYING, REMOVING AND ALTERING EXISTING STRIPING PATTERNS IN ADVANCE OF THE PROJECT TERMINI, SO THAT APPROPRIATE WORK ZONE STRIPING PATTERNS CAN BE APPLIED, MANDATES THAT THE MARKINGS WITHIN THESE TRANSITION LIMITS NEED TO BE RESTORED BY THE CONTRACTOR.

0 50 100
HORIZONTAL SCALE IN FEET

CALC. BY: SMM
CHKD. BY: MOW

SIGNING AND PAVEMENT MARKING PLAN
Sta. 183+00 Sta. 197+00

HAM-74-0.00

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TRANSITION PAVEMENT MARKING LEGEND-*

CODE	DESCRIPTION
TWEL	TRANSITION WHITE EDGE LINE
TYEL	TRANSITION YELLOW EDGE LINE
TLL	TRANSITION LANE LINE

*-TRANSITION MARKINGS ARE DEFINED AS THOSE MARKINGS THAT FALL BETWEEN THE BEGIN WORK AND THE BEGIN PROJECT LIMITS AND THE END PROJECT AND END WORK LIMITS.

SINCE THESE MARKINGS ARE OUTSIDE THE PROJECT LIMITS BUT INSIDE THE WORK LIMITS, THEY HAVE BEEN ASSIGNED A BALLOON REFERENCE NUMBER BEGINNING WITH "T" FOR TRANSITION MARKINGS.

THE PROCESS OF APPLYING, REMOVING AND ALTERING EXISTING STRIPING PATTERNS IN ADVANCE OF THE PROJECT TERMINI, SO THAT APPROPRIATE WORK ZONE STRIPING PATTERNS CAN BE APPLIED, MANDATES THAT THE MARKINGS WITHIN THESE TRANSITION LIMITS NEED TO BE RESTORED BY THE CONTRACTOR.

PAVEMENT MARKING LEGEND

CODE	DESCRIPTION
CL	CENTER LINE
LL	LANE LINE
WEL	WHITE EDGE LINE
YEL	YELLOW EDGE LINE
TL	TRANSVERSE LINE
CH	CHANNELIZING LINE
SL	STOP LINE
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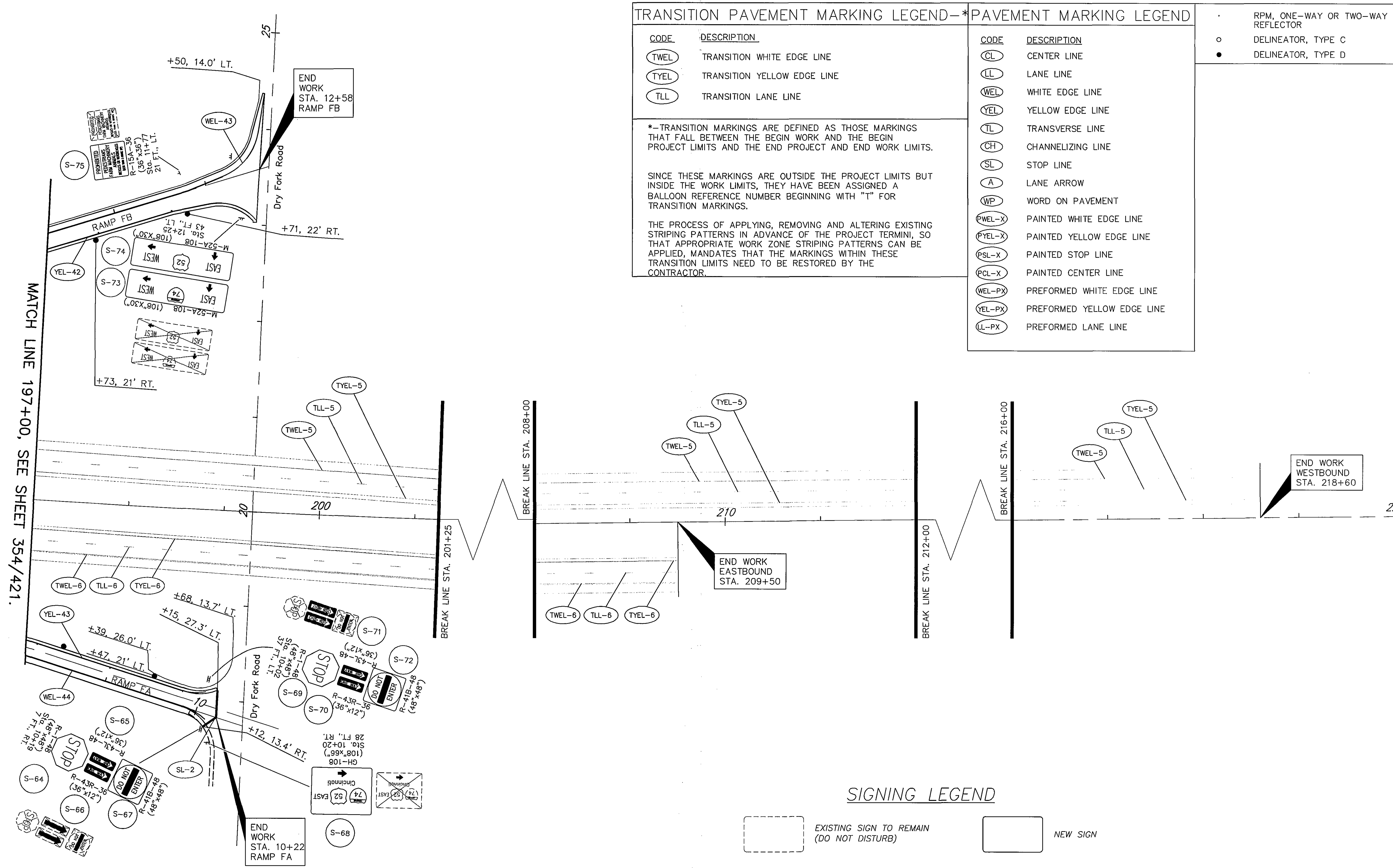
WP	WORD ON PAVEMENT
PWEL-X	PAINTED WHITE EDGE LINE
PYEL-X	PAINTED YELLOW EDGE LINE
PSL-X	PAINTED STOP LINE
PCL-X	PAINTED CENTER LINE
WEL-PX	PREFORMED WHITE EDGE LINE
YEL-PX	PREFORMED YELLOW EDGE LINE
LL-PX	PREFORMED LANE LINE

·	RPM, ONE-WAY OR TWO-WAY REFLECTOR
○	DELINEATOR, TYPE C
●	DELINEATOR, TYPE D



SIGNING LEGEND

EXISTING SIGN TO REMAIN (DO NOT DISTURB)	NEW SIGN
EXISTING SIGN TO BE REMOVED AND STORED FOR ODOT	NEW GROUND-MOUNTED SUPPORT (2)
	NEW GROUND-MOUNTED SUPPORT (1)
EXISTING SIGN TO BE REMOVED AND DISPOSED	NEW BACK-TO-BACK SIGN ASSEMBLY

HORIZONTAL SCALE IN FEET
0 50 100

CALC. BY: SMM
CHKD. BY: MOW

SIGNING AND PAVEMENT MARKING PLAN
Sta. 197+00 to Sta. 201+25

HAM-74-0.00

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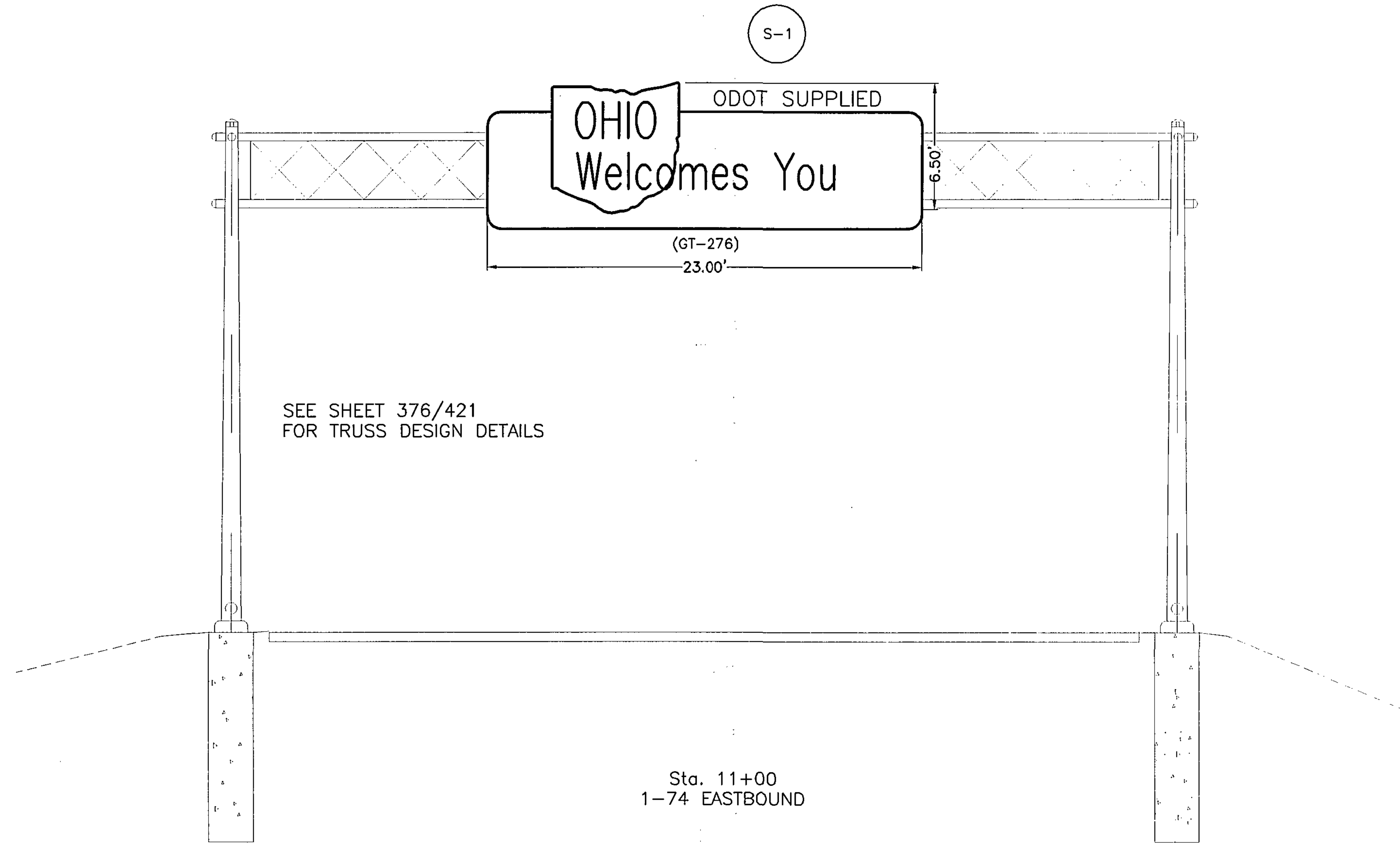
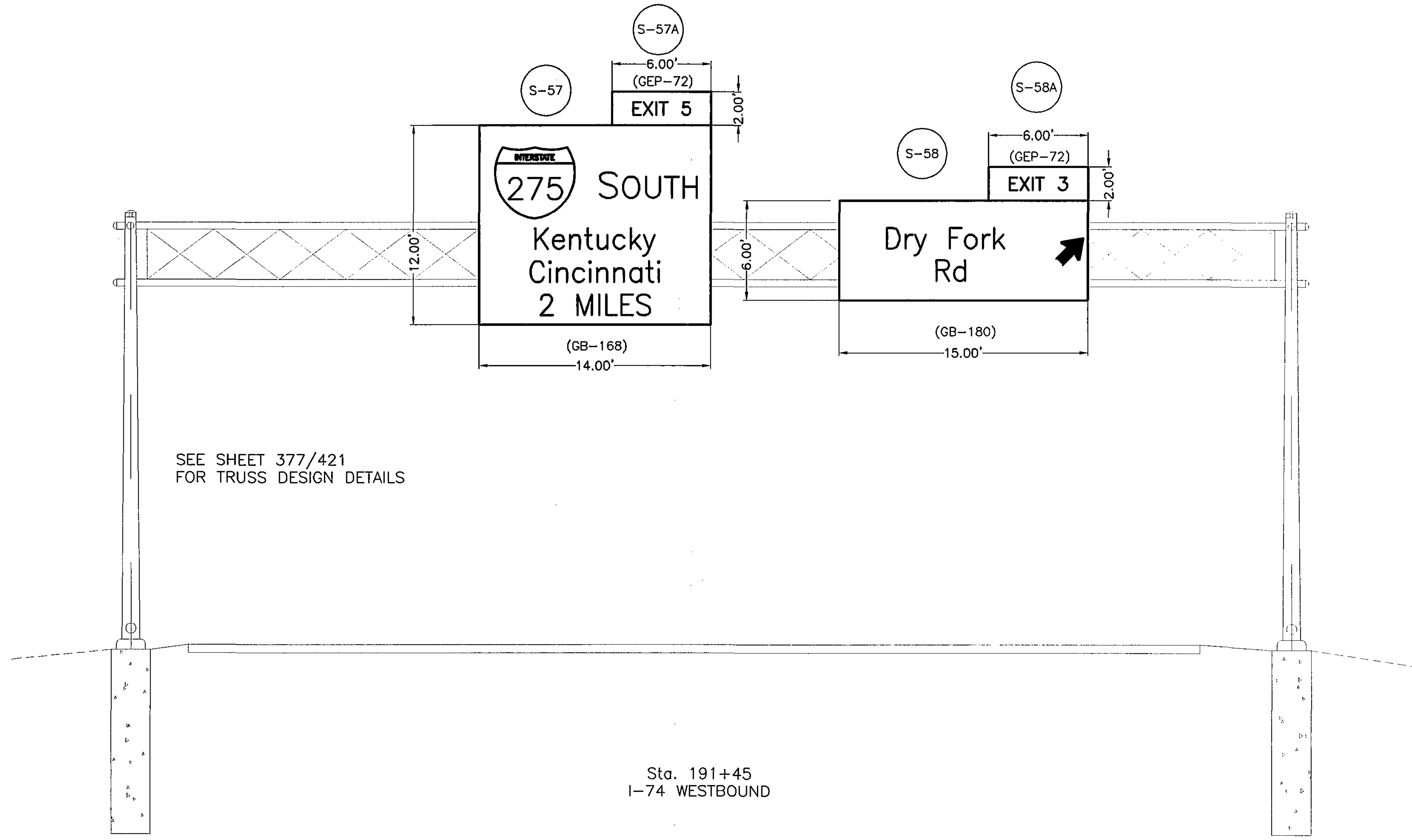


SEE SHEET 376/421
FOR TRUSS DESIGN DETAILS

Sta. 11+00
1-74 EASTBOUND



SEE SHEET 377/421
FOR TRUSS DESIGN DETAILS

Sta. 191+45
I-74 WESTBOUND

CALC. BY: SMM
CHKD. BY: MOW

MAJOR OVERHEAD MOUNTED GUIDE SIGN DETAILS

HAM 74-0.00

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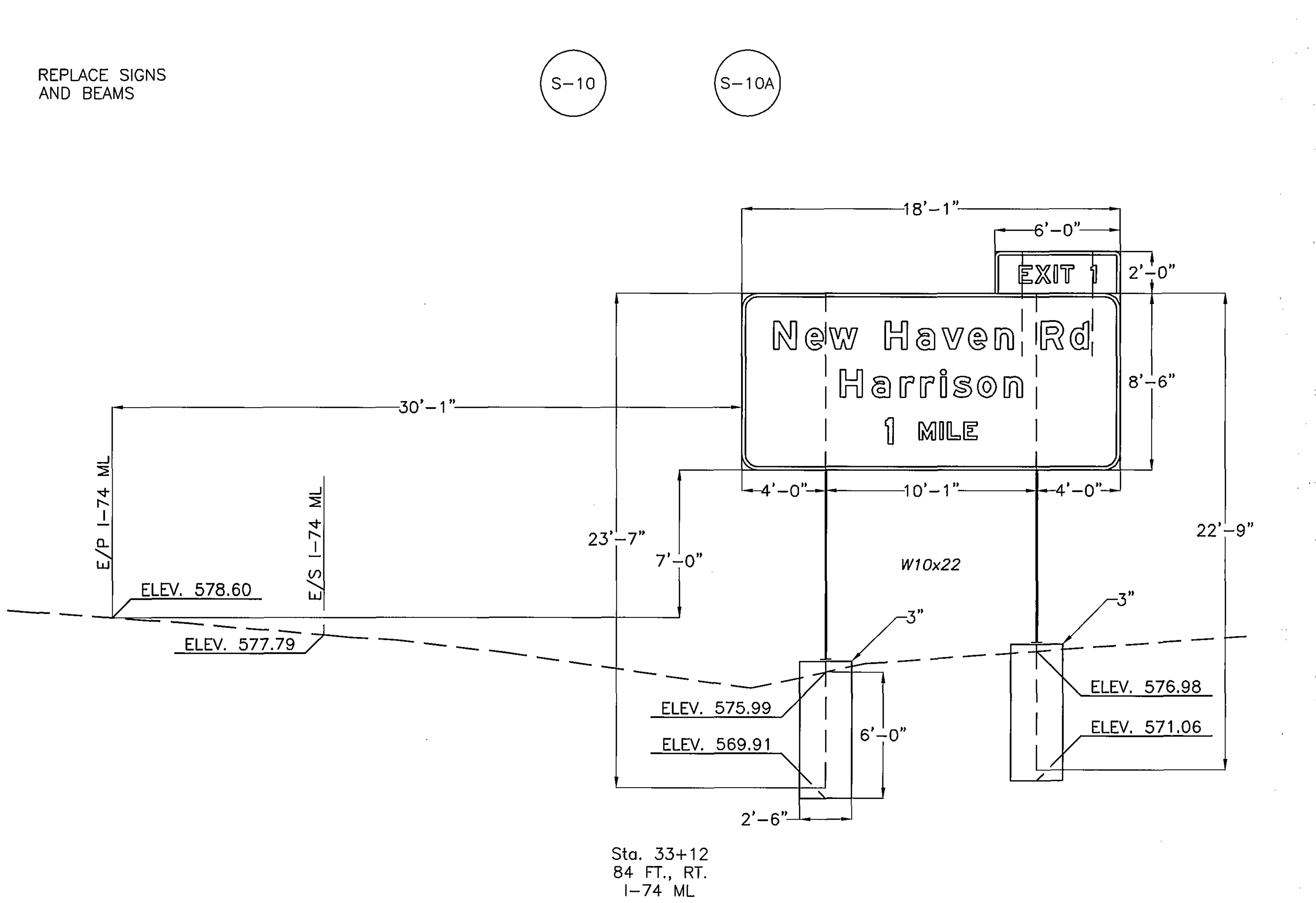

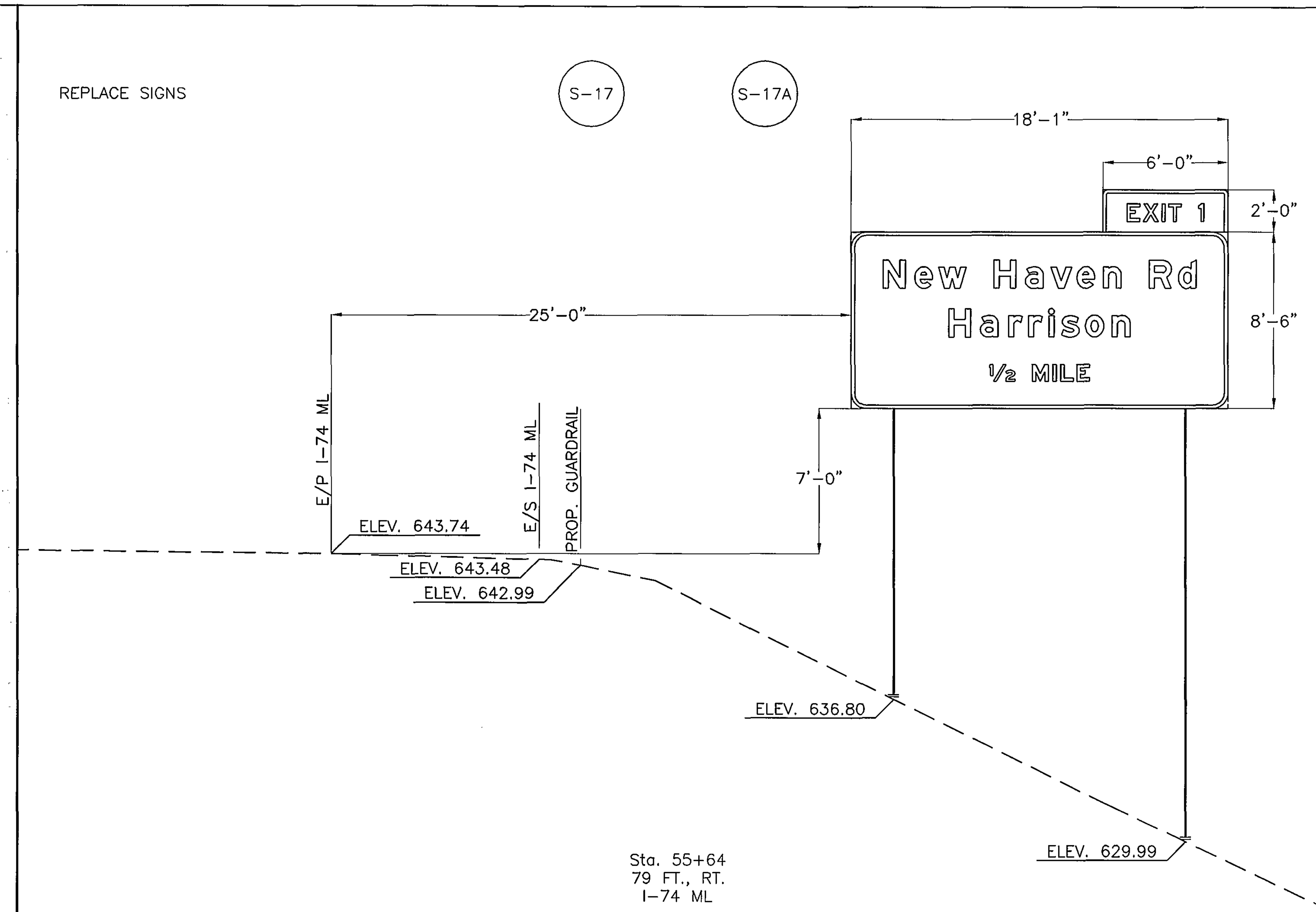

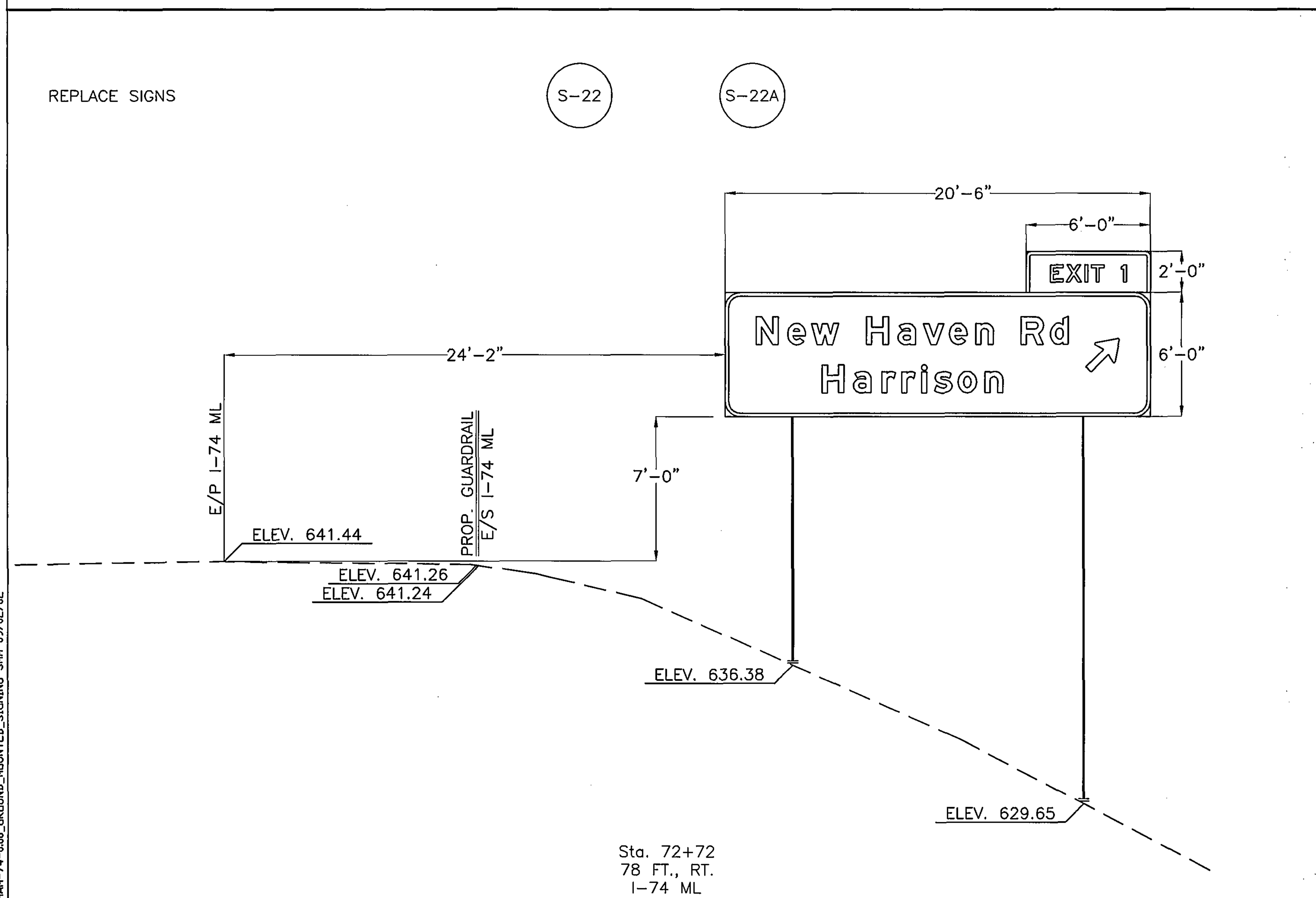

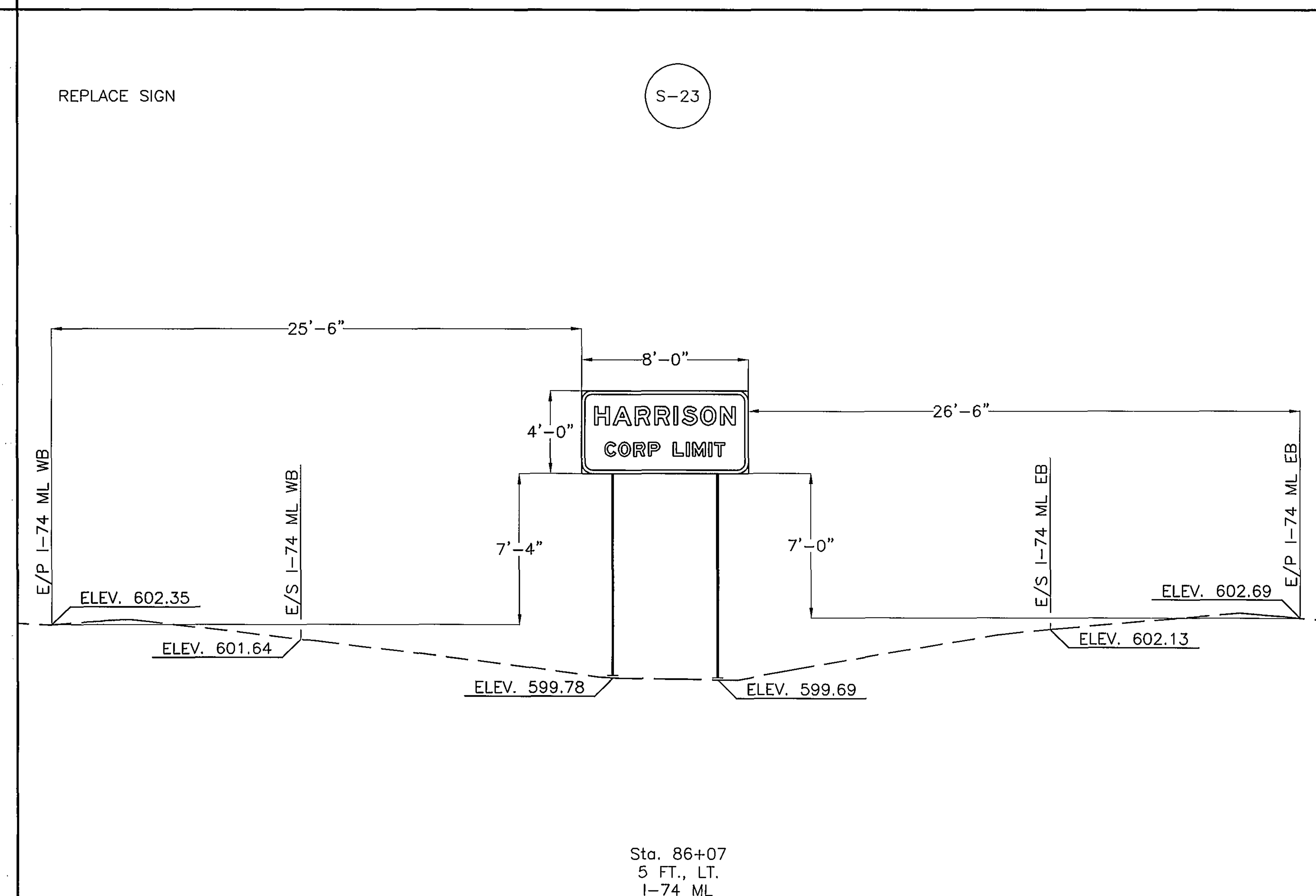

0 25 50 100
HORIZONTAL SCALE IN FEET

CALC. BY: SMM
CHKD. BY: MOW

GROUND MOUNTED SIGNS
ELEVATION VIEWS

HAM-74-0.00

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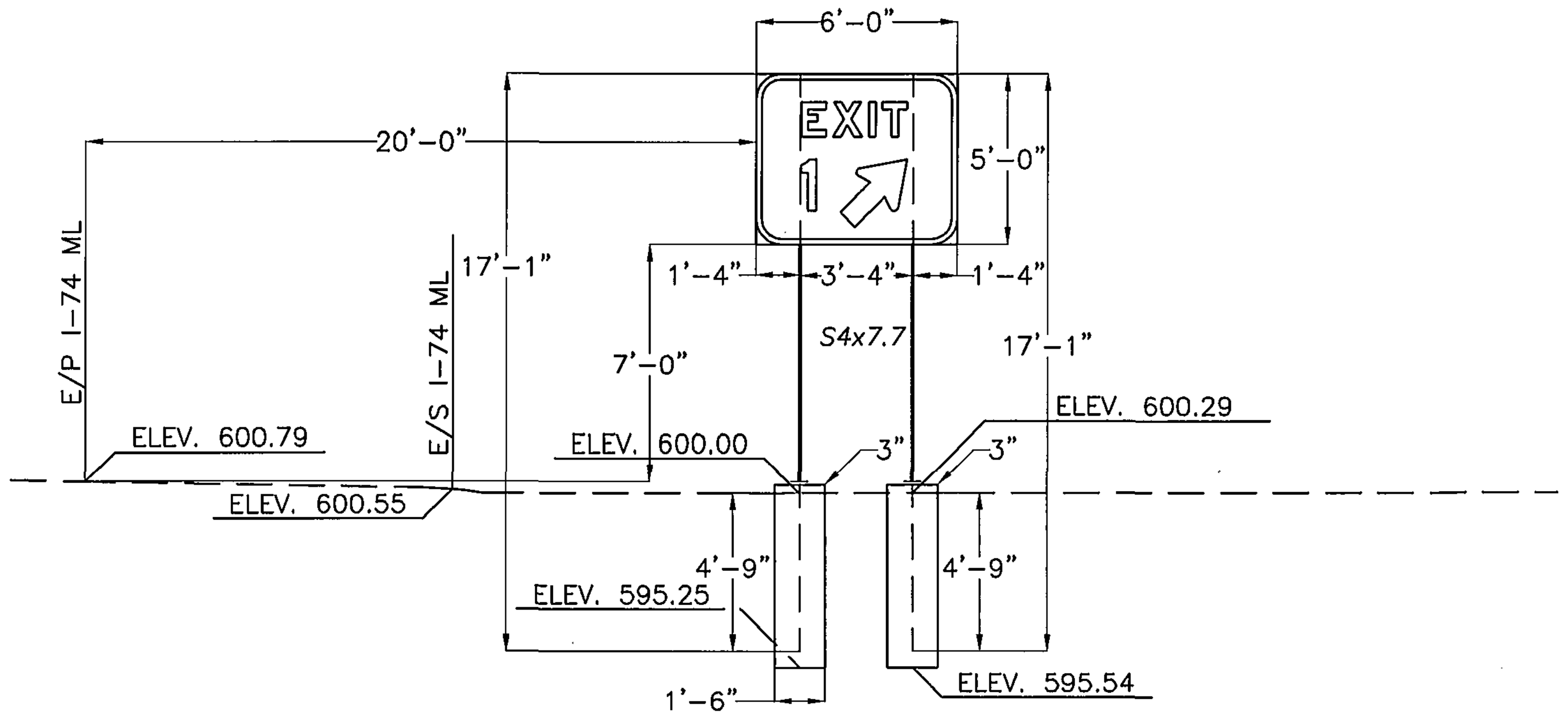
HAM-74-0.00_GROUND_MOUNTED_SIGNING SMM 09/02/02

REPLACE SIGN
AND BEAMS

S-24

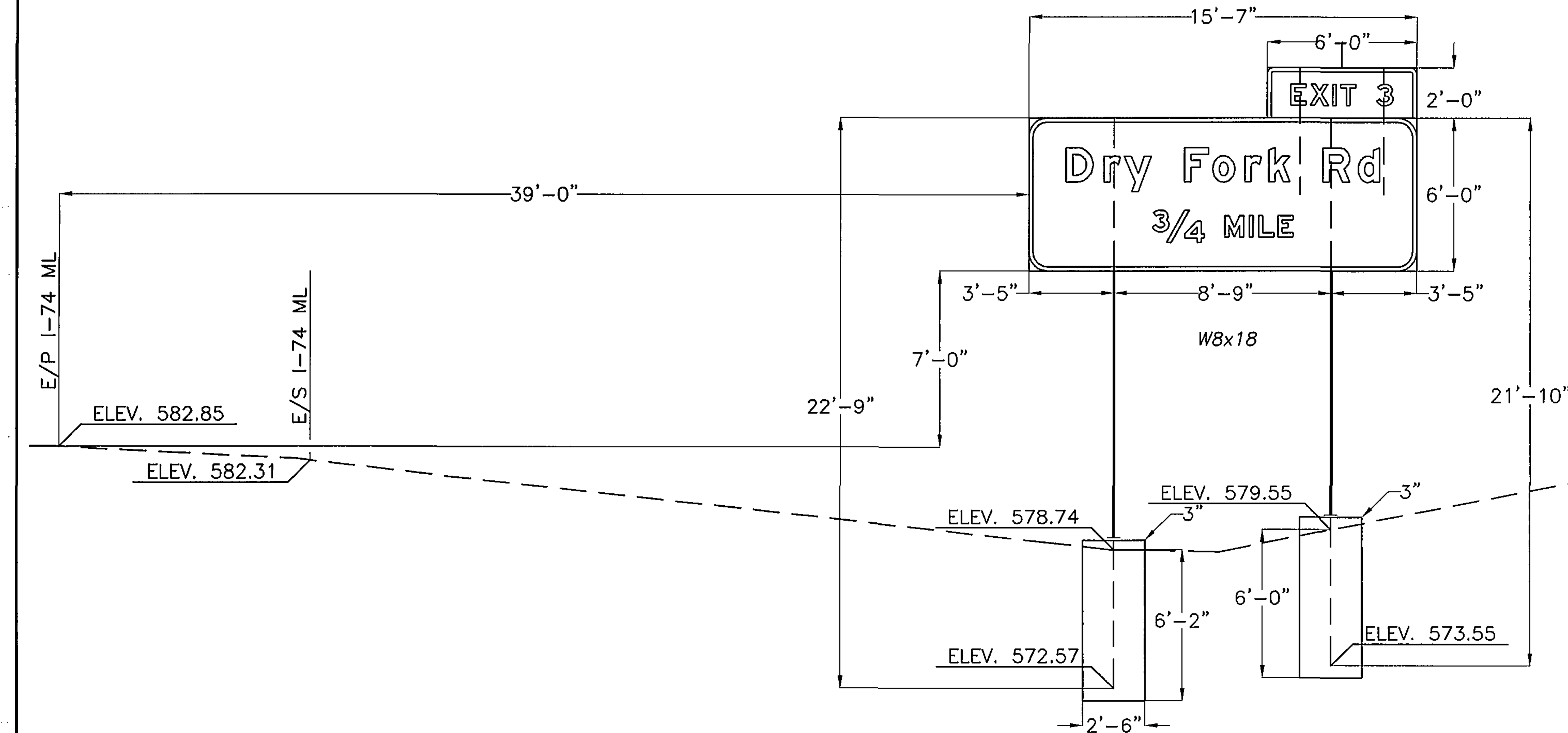


Sta. 86+64
77 FT., RT.
I-74 ML

REPLACE SIGNS
AND BEAMS

S-42

S-42A

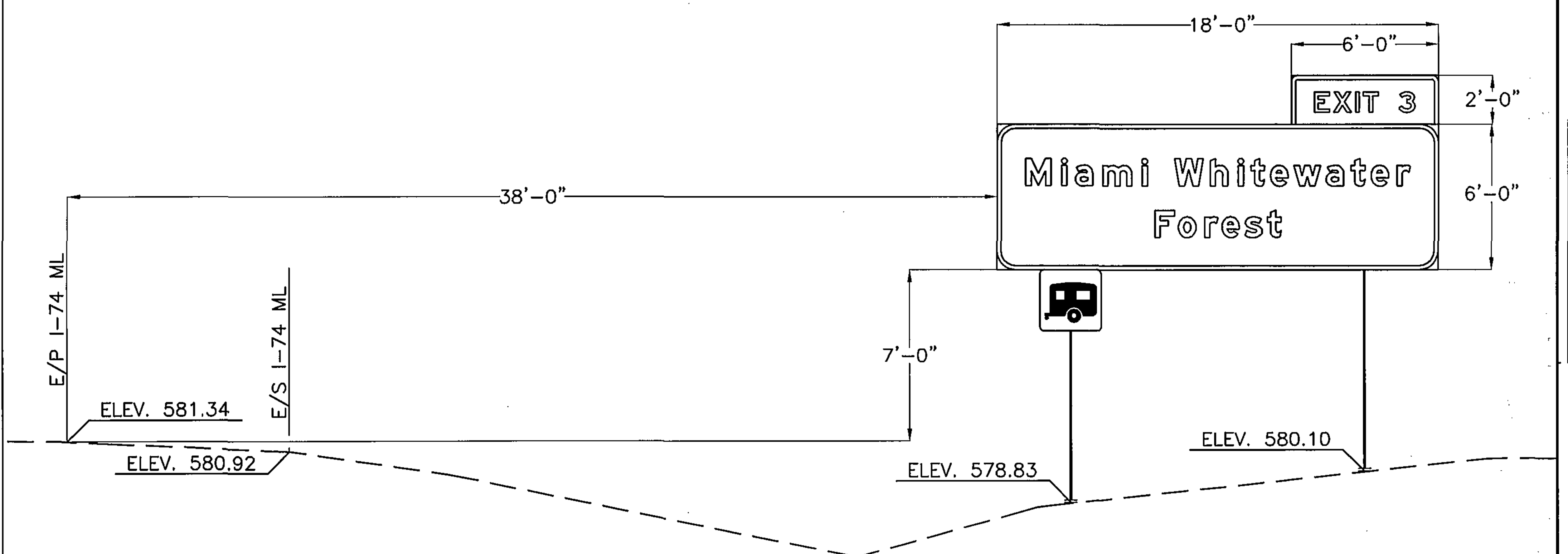


Sta. 154+01
93 FT., RT.
I-74 ML

REPLACE SIGNS

S-47

S-47A

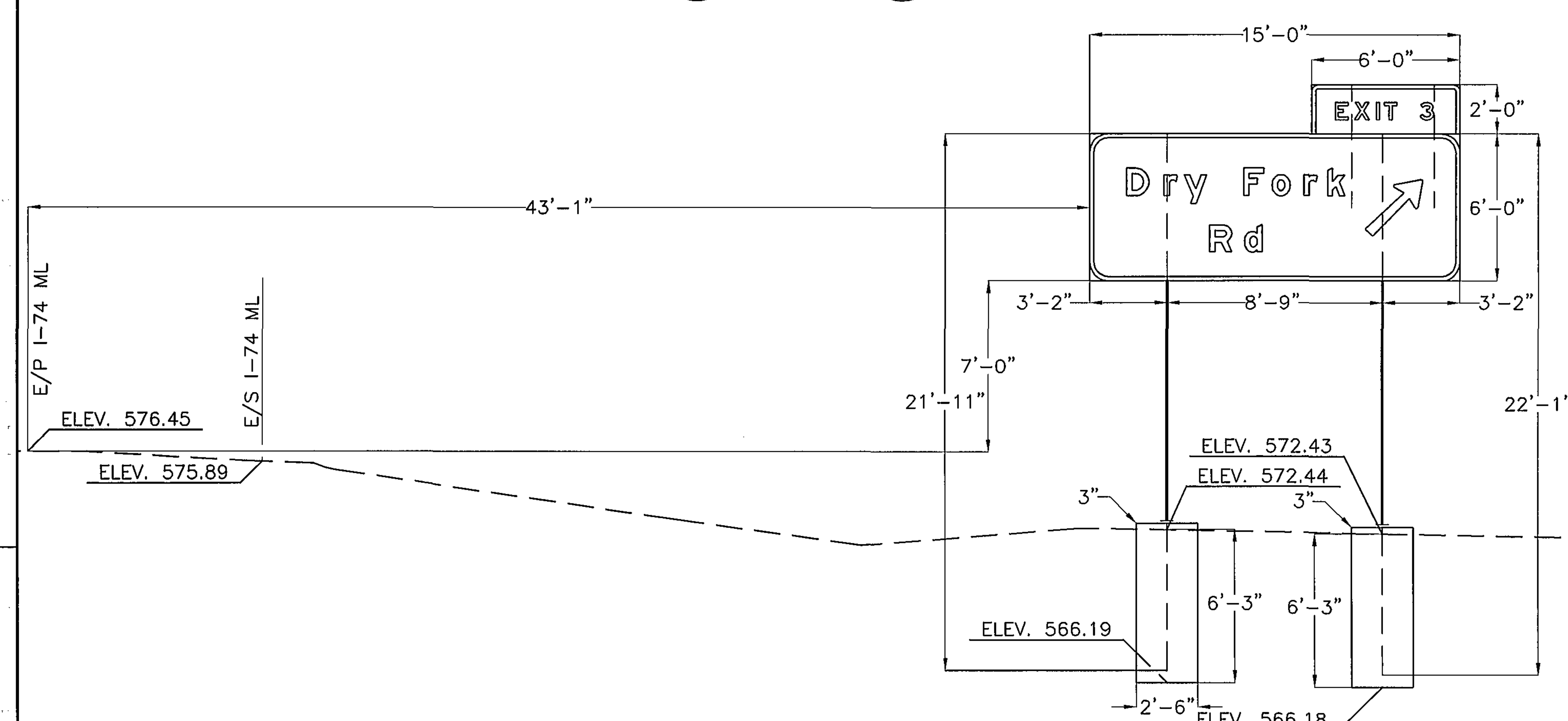


Sta. 160+00
93 FT., RT.
I-74 ML

REPLACE SIGNS
AND BEAMS

S-56

S-56A



Sta. 181+51
98 FT., RT.
I-74 ML

0 25 50 100
HORIZONTAL
SCALE IN FEET

CALC. BY: SMM
CHKD. BY: MOW

GROUND MOUNTED SIGNS
ELEVATION VIEWS

HAM-74-0.00

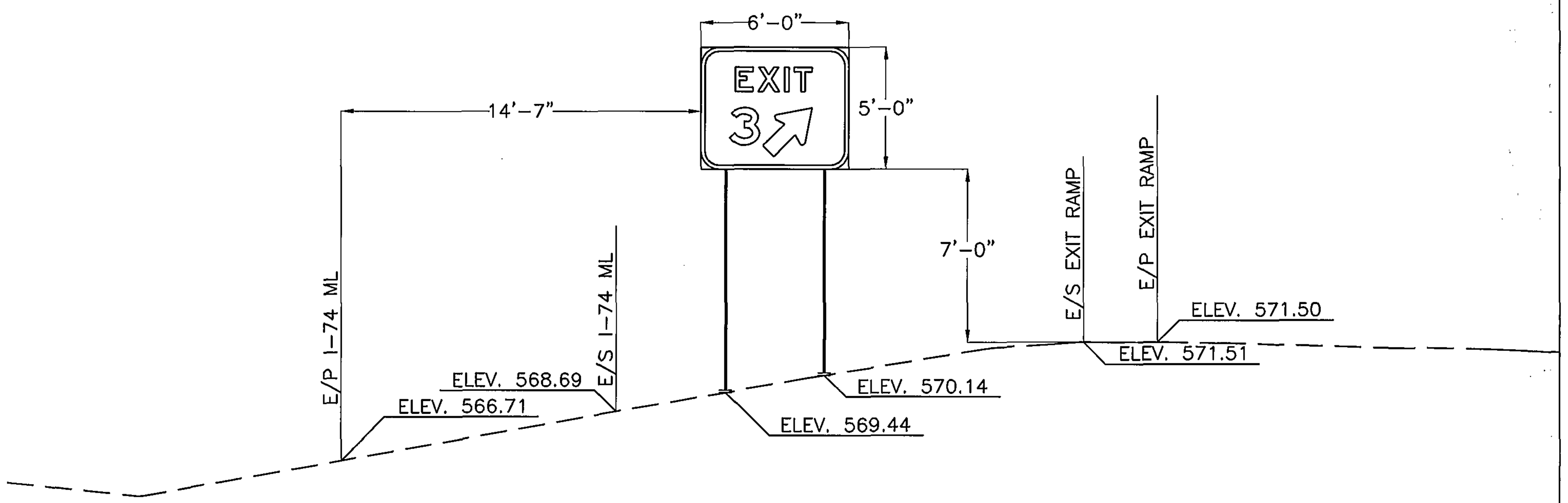
358
421

F:\Ham-74-0.00\Traffic\Designed Signs\Ground Mounted Details_REV.dwg, 08/14/2003 03:17:18 PM

HAM-74-0.00_GROUND_MOUNTED_SIGNING SMM 09/02/02

REPLACE SIGN

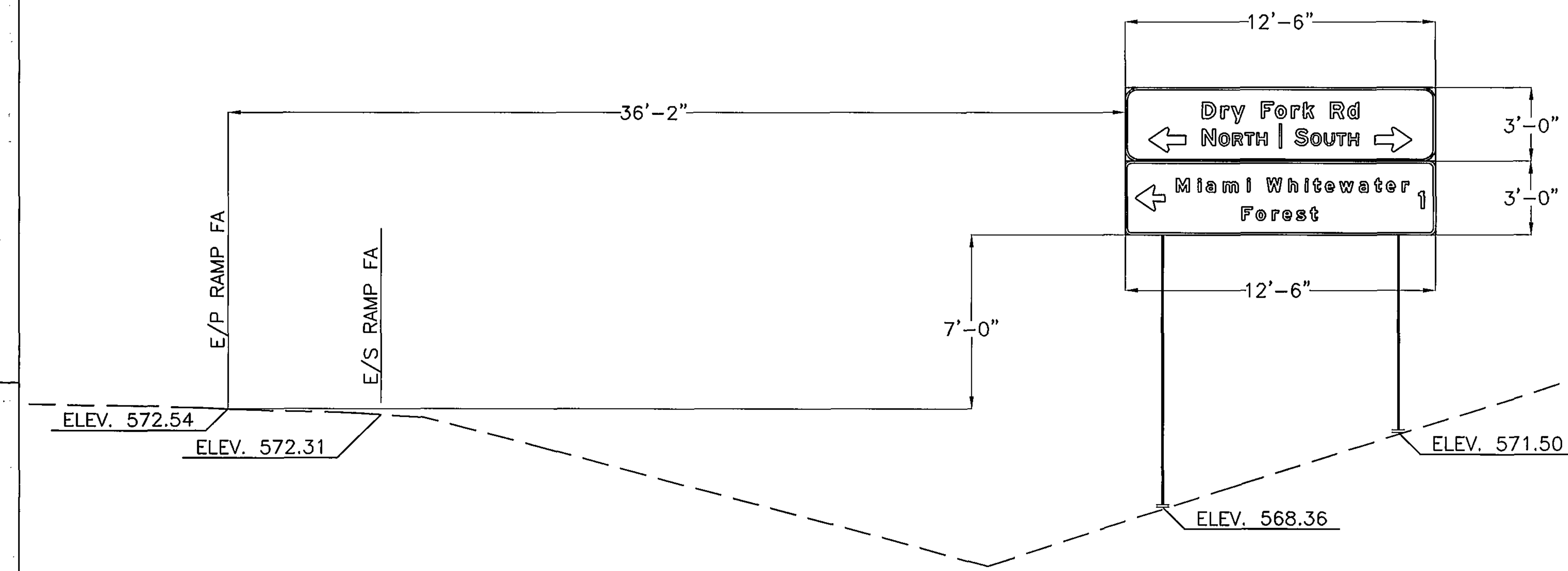
S-59



Sta. 194+65
75 FT., RT.
I-74 ML

REPLACE SIGNS

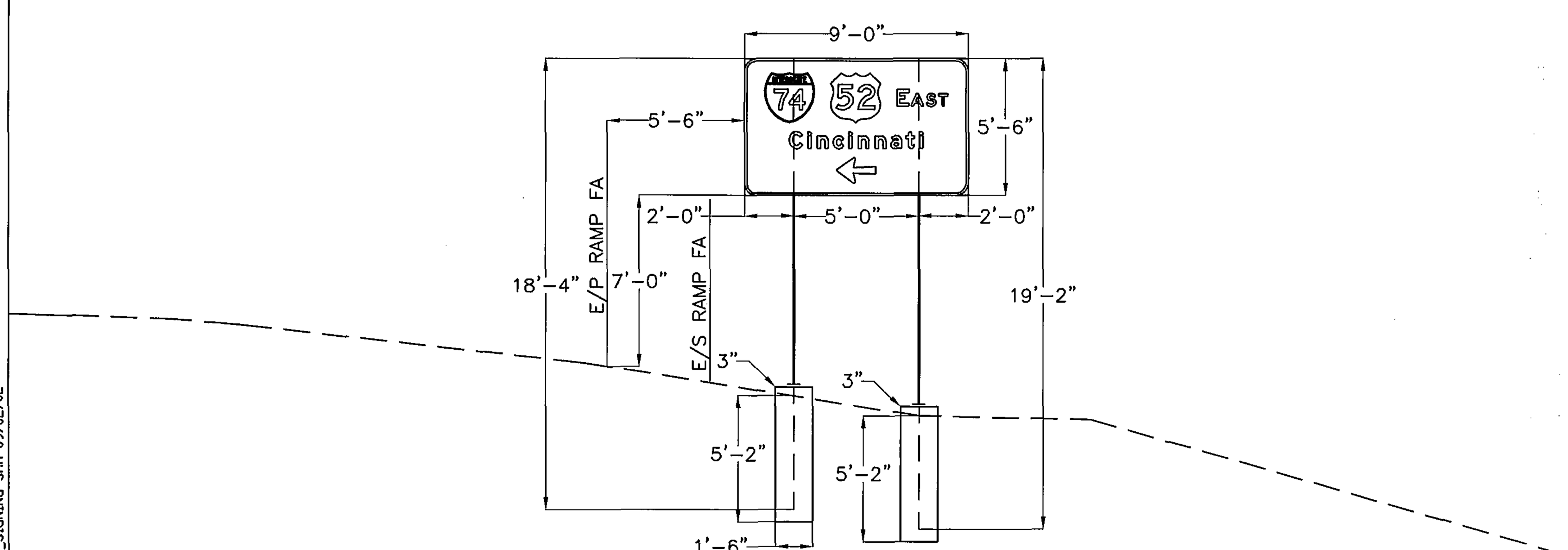
S-62 S-63



Sta. 7+53
36 FT., RT.
RAMP FA

REPLACE SIGNS
AND BEAMS

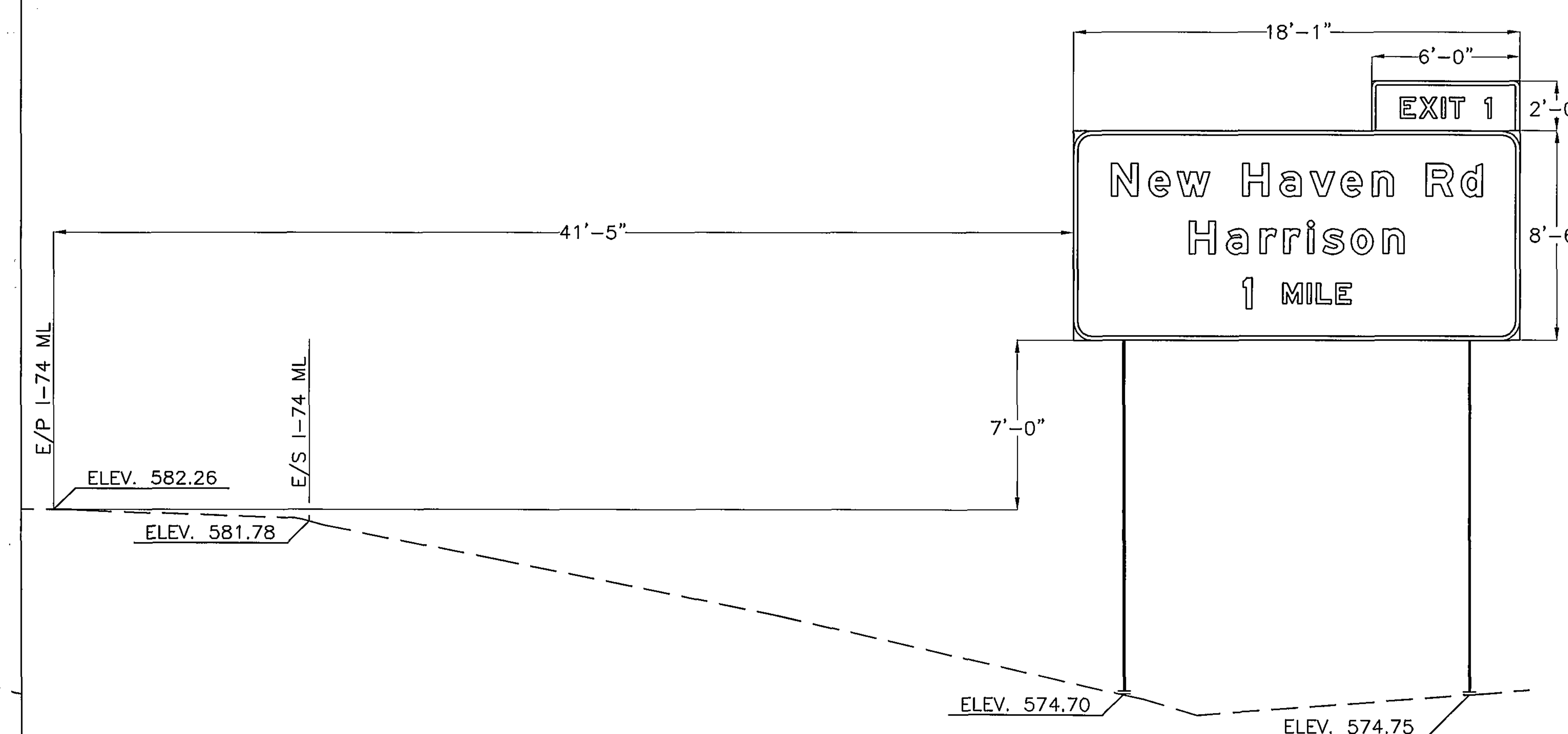
S-68



Sta. 10+20
28 FT., RT.
RAMP FA

REPLACE SIGNS

S-85 S-85A



Sta. 157+04
95 FT., LT.
I-74 ML

0 25 50 100
HORIZONTAL
SCALE IN FEET

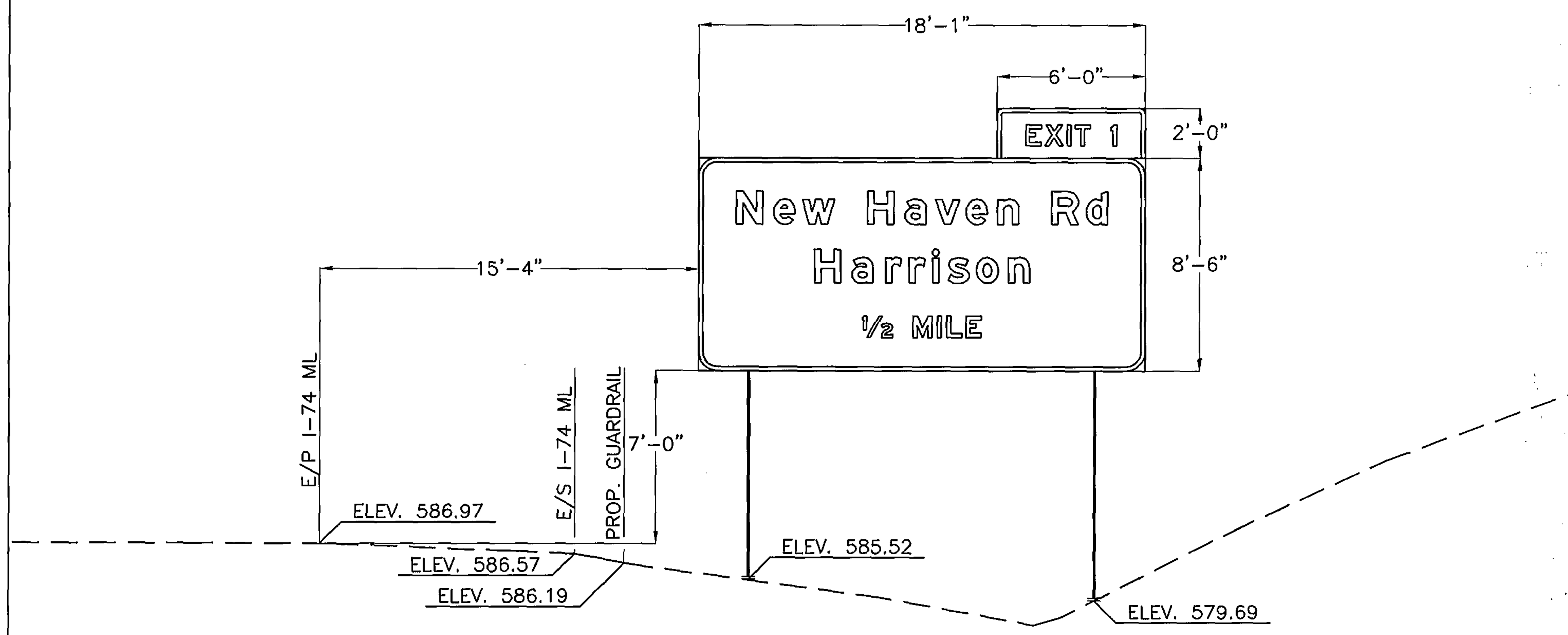
CALC. BY: SMM
CHKD. BY: MOW

GROUND MOUNTED SIGNS
ELEVATION VIEWS

HAM-74-0.00

REPLACE SIGNS

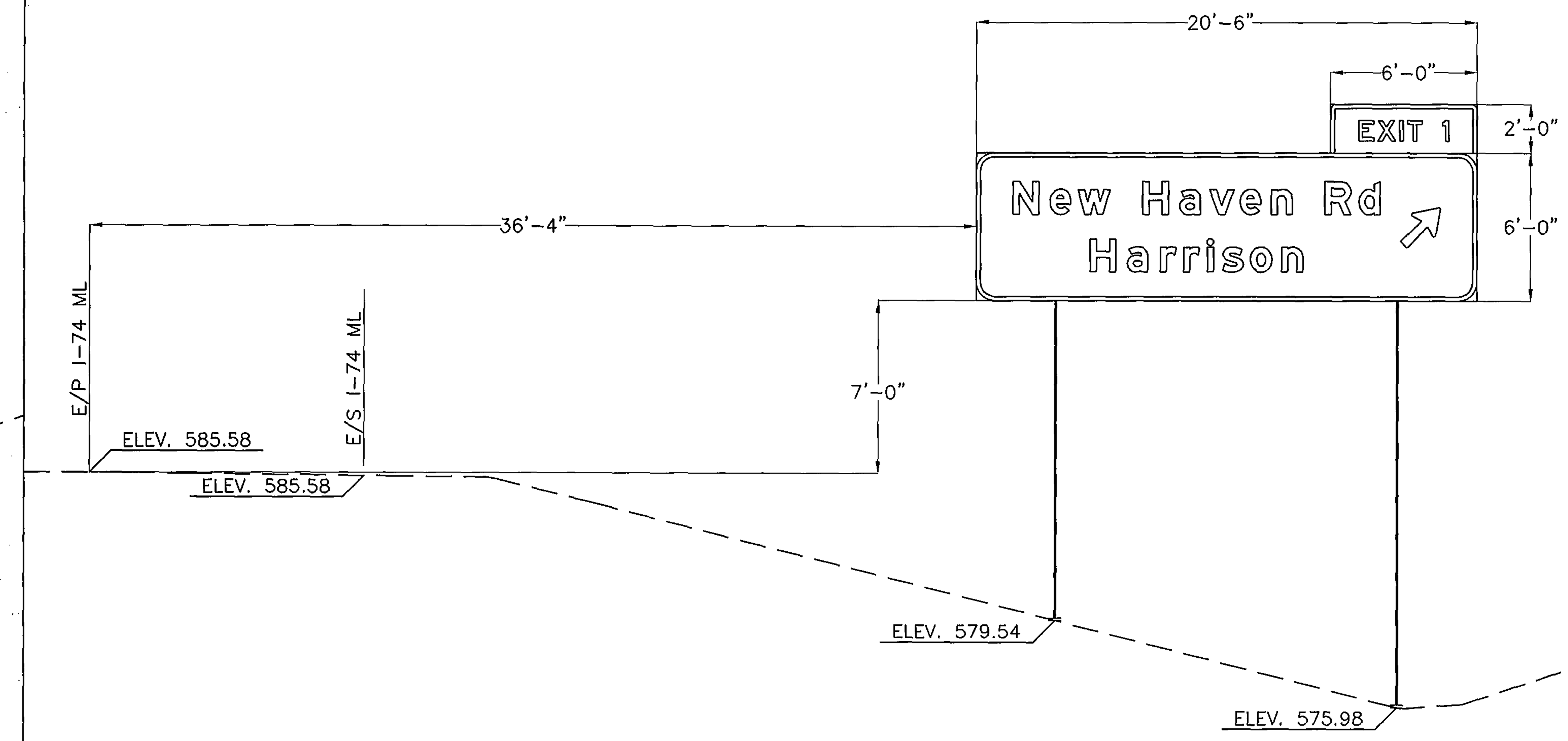
S-86 S-86A



Sta. 131+98
69 FT., LT.
I-74 ML

REPLACE SIGNS

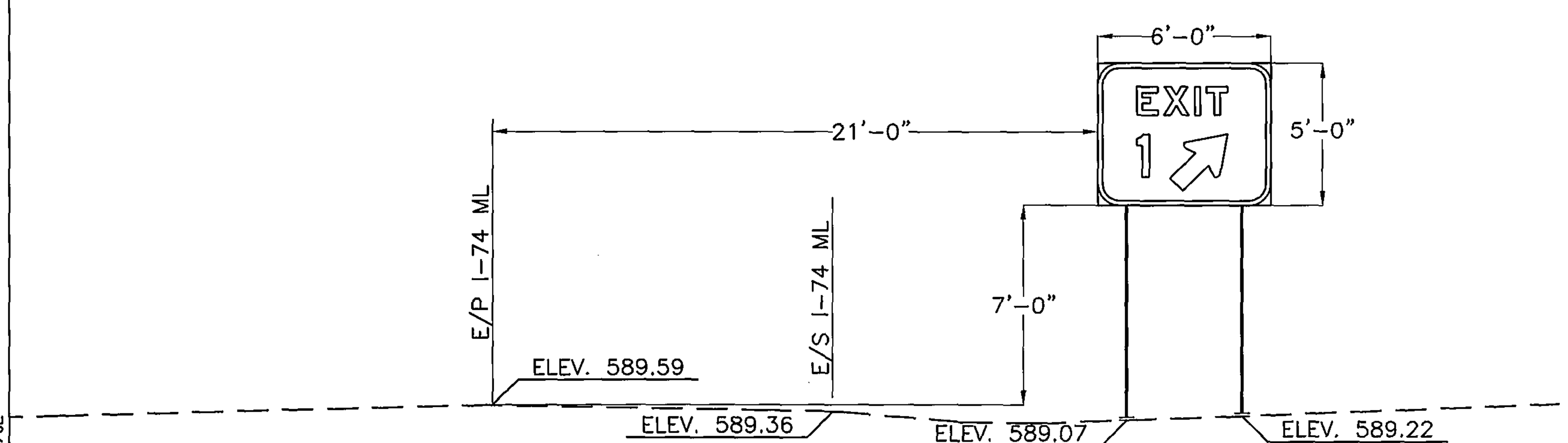
S-89 S-89A



Sta. 117+60
90 FT., LT.
I-74 ML

REPLACE SIGN

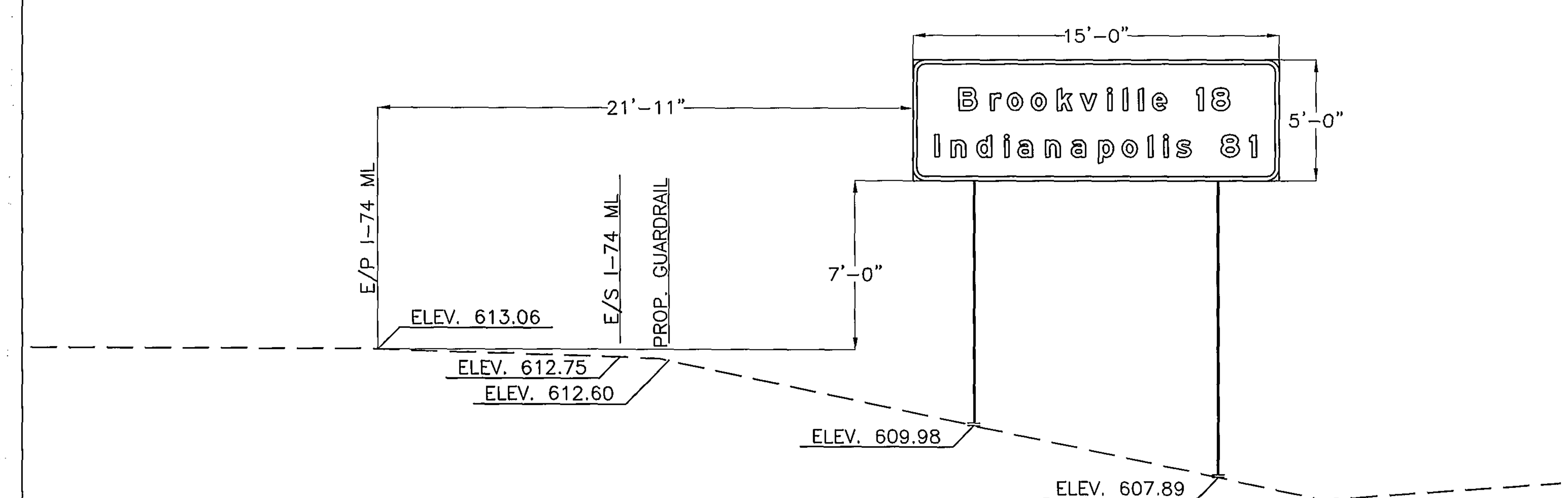
S-91



Sta. 104+00
75 FT., LT.
I-74 ML

REPLACE SIGN

S-103



Sta. 44+26
76 FT., LT.
I-74 ML

0 25 50 100
HORIZONTAL
SCALE IN FEET

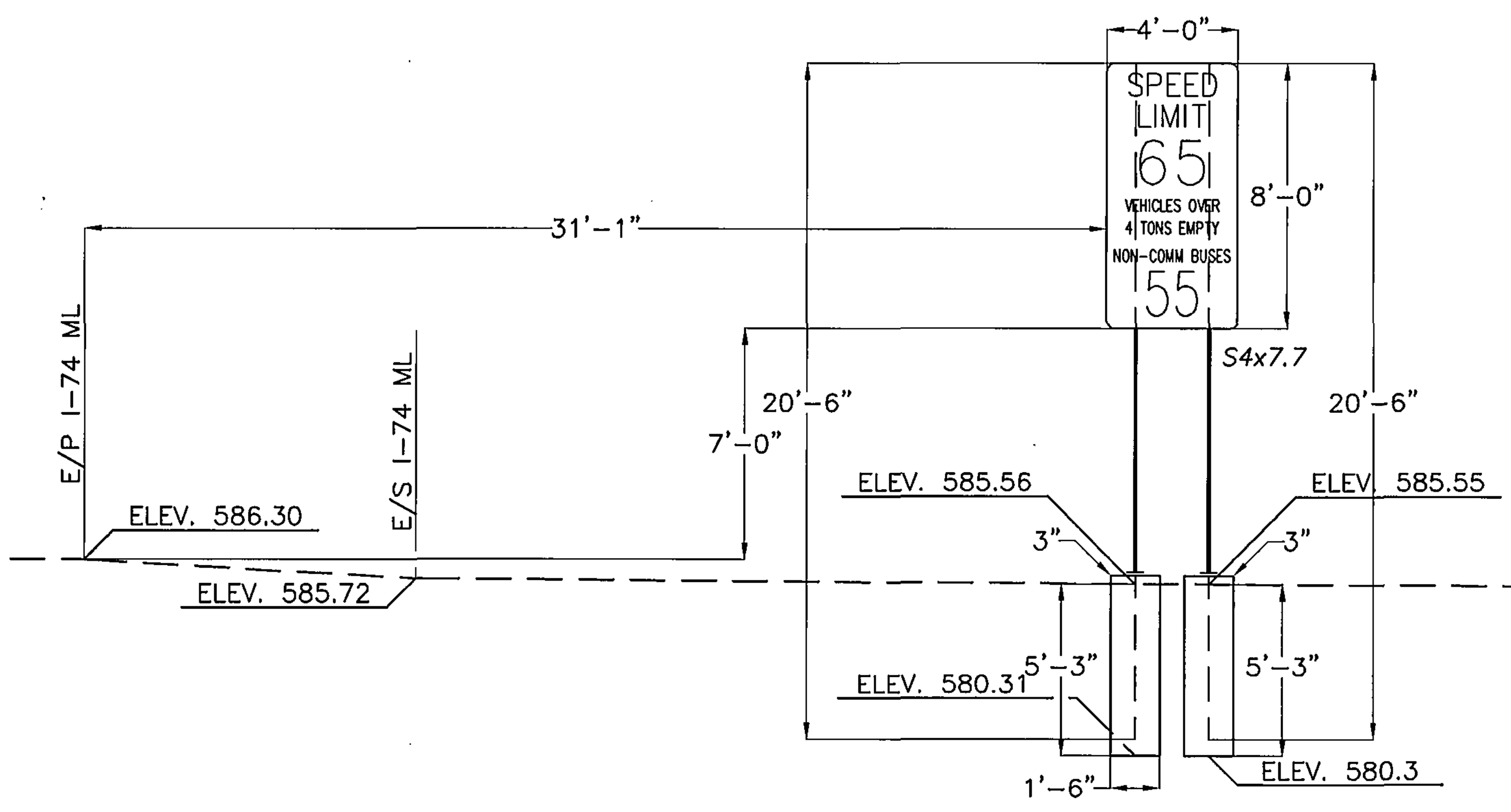
CALC. BY: SMM
CHKD. BY: MOW

GROUND MOUNTED SIGNS
ELEVATION VIEWS

HAM-74-0.00

REPLACE SIGN
AND BEAMS

S-32



Sta. 128+25
85 FT., RT.
I-74 ML

0 25 50 100
HORIZONTAL
SCALE IN FEET

CALC. BY: SMM
CHKD. BY: MOW

GROUND MOUNTED SIGNS
ELEVATION VIEWS

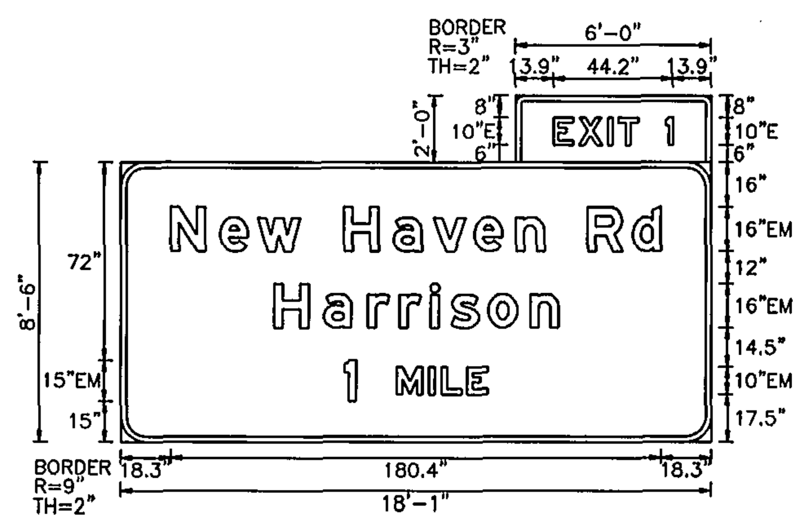
HAM-74-0.00

361
421

F:\Ham-74-0.00\Traffic\Designed Signs\Ground Mounted Details_REV.dwg, 08/14/2003 03:18:41 PM

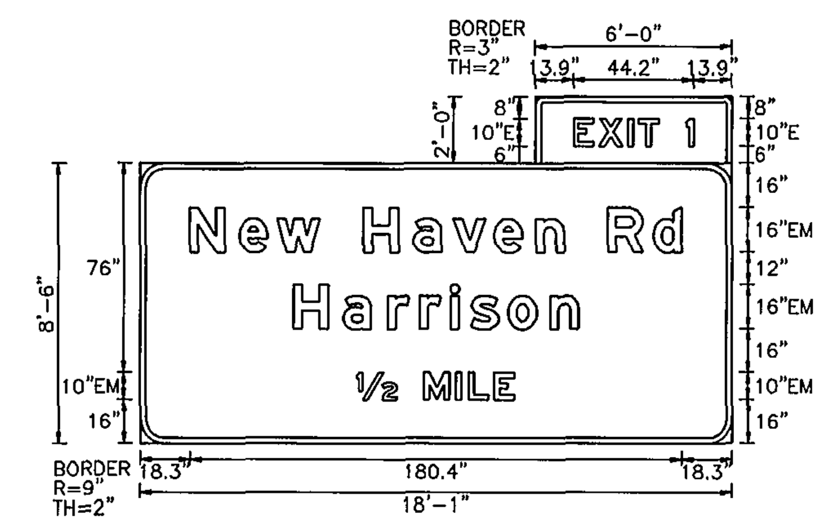
HAM-74-0.00_GROUND_MOUNTED_SIGNING SMH 09/02/02

SIGN NUMBER	S-10/10A
QUANTITY	1
WIDTH	18'-1"
HEIGHT	8'-6"
BORDER WIDTH	2"
BORDER RADII	9"
BACKGROUND COLOR	Green
LEGEND & BORDER COLOR	White
STATION(S)	33+12, 84' RT.



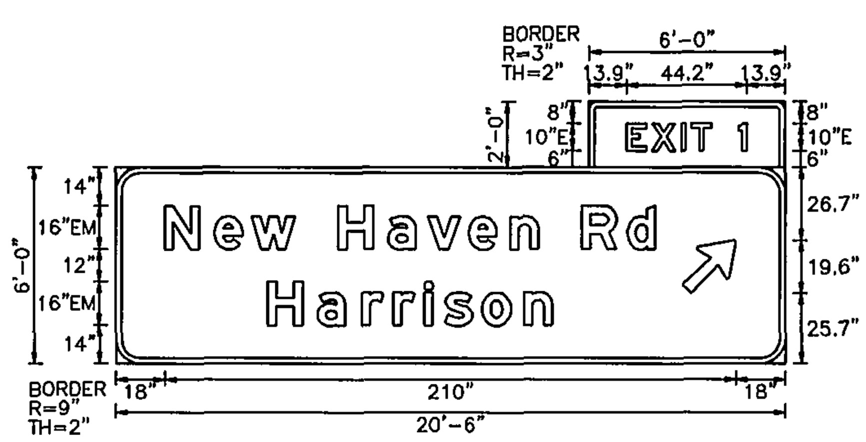
COPY	E	X	I	T	1		L							
SPACE	158.9	168.3	179	182.8	200.1		44.2							
COPY	N	e	w		H	a	v	e	n		R	d		L
SPACE	18.3	36.6	50.3		82.1	100.3	115	130	145.3		171.5	188.4		180.4
COPY	H	a	r	r	i	s	o	n		L				
SPACE	56.3	74.5	90.8	102.4	113.8	121.4	135	150.5		104.5				
COPY	1	M	I	L	E		L							
SPACE	82.3	101.7	113.5	118	127.4		52.5							
COPY														
SPACE														

SIGN NUMBER	S-17/17A
QUANTITY	1
WIDTH	18'-1"
HEIGHT	8'-6"
BORDER WIDTH	2"
BORDER RADII	9"
BACKGROUND COLOR	Green
LEGEND & BORDER COLOR	White
STATION(S)	55+64, 79' RT.



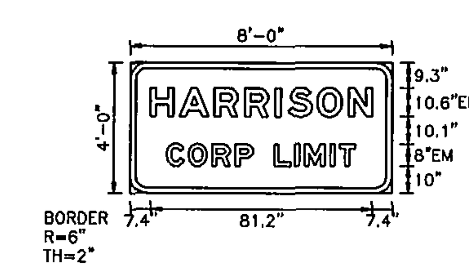
COPY	E	X	I	T	1		L							
SPACE	158.9	168.3	179	182.8	200.1		44.2							
COPY	N	e	w		H	a	v	e	n		R	d		L
SPACE	18.3	36.6	50.3		82.1	100.3	115	130	145.3		171.5	188.5		180.4
COPY	H	a	r	r	i	s	o	n		L				
SPACE	56.3	74.5	90.8	102.4	113.8	121.4	135	150.5		104.5				
COPY	1/2	M	I	L	E		L							
SPACE	79.7	104.3	116.1	120.6	130		57.7							
COPY														
SPACE														

SIGN NUMBER	S-22/22A
QUANTITY	1
WIDTH	20'-6"
HEIGHT	6'-0"
BORDER WIDTH	2"
BORDER RADII	9"
BACKGROUND COLOR	Green
LEGEND & BORDER COLOR	White
STATION(S)	72+72, 78' RT.



COPY	E	X	I	T	1		L							
SPACE	187.9	197.3	208	211.8	229.1		44.2							
COPY	N	e	w		H	a	v	e	n		R	d		L
SPACE	18	36.3	50		81.8	100	114.7	129.7	145		171.2	188.1		180.4
COPY	H	a	r	r	i	s	o	n		L				
SPACE	56	74.2	90.5	102.1	113.5	121.1	134.7	150.2		104.5				
COPY														
SPACE														
COPY														
SPACE														

SIGN NUMBER	S-23
QUANTITY	1
WIDTH	8'-0"
HEIGHT	4'-0"
BORDER WIDTH	2"
BORDER RADII	6"
BACKGROUND COLOR	Green
LEGEND & BORDER COLOR	White
STATION(S)	86+07, 5.3' LT.



COPY	H	A	R	R	I	S	O	N		L		
SPACE	7.4	18.1	30.9	42	53.2	58	68.7	80.1		81.2		
COPY	C	O	R	P		L	I	M	I	T		L
SPACE	13.4	21.4	30.1	38.6		52.9	60.5	64.1	73.5	76.7		69.2
COPY												
SPACE												
COPY												
SPACE												
COPY												
SPACE												

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

GUIDE SIGN WORK SHEET

MAJOR GROUND MOUNTED GUIDE SIGN DESIGN PANELS

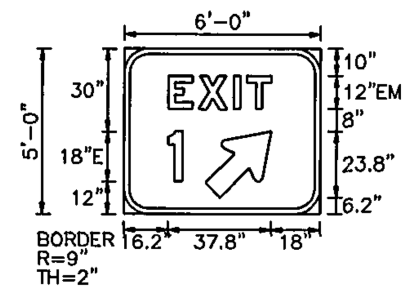
HAM-74-0.00

CALC. BY: SMM
CHKD. BY: MOW

F:\Ham-74-0.00\Traffic\Designed Signs\Design Signs_REV.dwg, 08/14/2003 03:25:13 PM

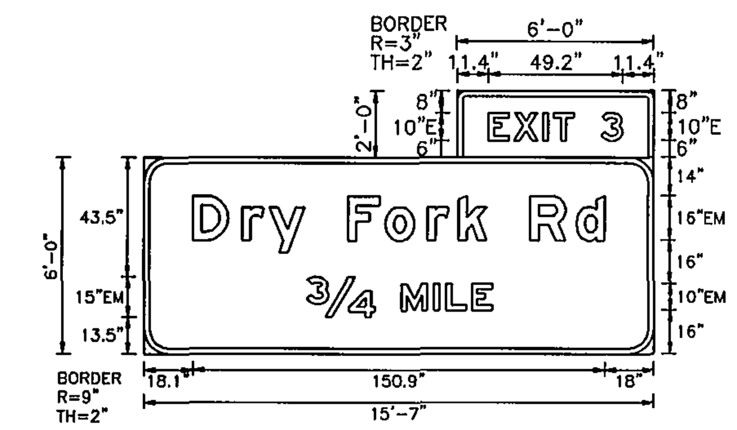
GUIDE SIGN WORK SHEET

SIGN NUMBER	S-24
QUANTITY	1
WIDTH	6'-0"
HEIGHT	5'-0"
BORDER WIDTH	2"
BORDER RADII	9"
BACKGROUND COLOR	Green
LEGEND & BORDER COLOR	White
STATION(S)	86+64, 77' RT.



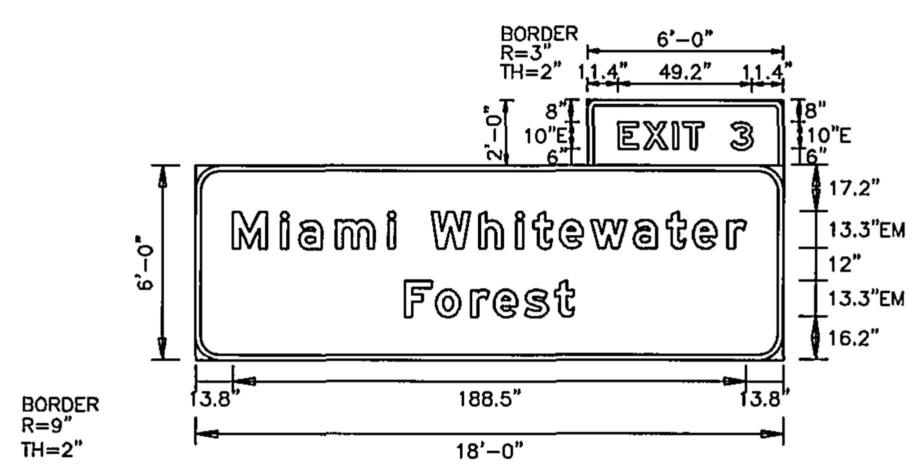
COPY	E	X	I	T		L
SPACE	16.2	27.5	40.4	45.2		37.8
COPY	1		L			
SPACE	16.2		5.3			

SIGN NUMBER	S-42/42A
QUANTITY	1
WIDTH	15'-7"
HEIGHT	6'-0"
BORDER WIDTH	2"
BORDER RADII	9"
BACKGROUND COLOR	Green
LEGEND & BORDER COLOR	White
STATION(S)	154+01, 93' RT.



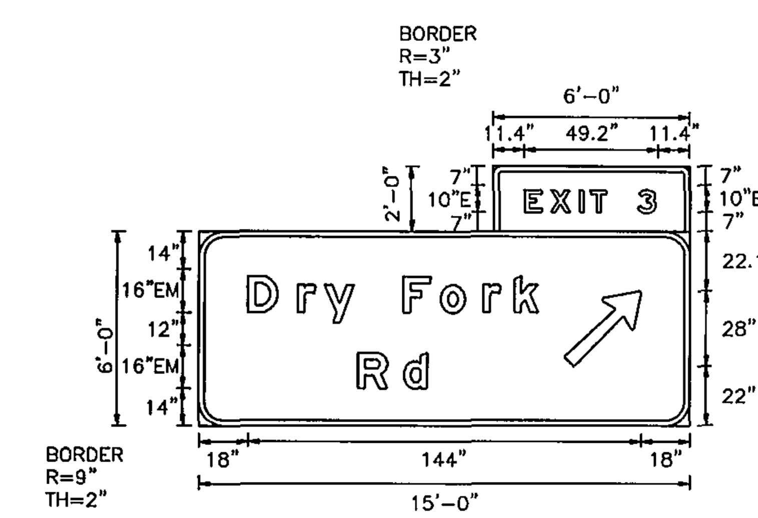
COPY	E	X	I	T	3		L						
SPACE	126.4	135.8	146.5	150.3	167.6		49.2						
COPY	D	r	y		F	o	r	k		R	d		L
SPACE	18	36.2	46		74.9	88.7	104.1	115.7		141.8	158.7		150.9
COPY	3/4	M	I	L	E		L						
SPACE	39.5	94.5	106.3	110.8	120.2		68						

SIGN NUMBER	S-47/47A
QUANTITY	1
WIDTH	22'-0"
HEIGHT	6'-0"
BORDER WIDTH	2"
BORDER RADII	9"
BACKGROUND COLOR	Brown
LEGEND & BORDER COLOR	White
STATION(S)	160+00, 93' RT.



COPY	E	X	I	T	3		L									
SPACE	155.4	164.8	175.5	179.3	196.6		49.2									
COPY	M	i	a	m	i		W	h	i	t	e	w	a	t	e	r		L
SPACE	13.8	31.4	38.1	51.6	70.8		86.7	104.2	117.8	124.4	133.8	145.3	161.1	173.3	183	195.7		188.5
COPY	F	o	r	e	s	t		L								
SPACE	77	88.5	101.4	109.9	121.2	132.3		61.9								

SIGN NUMBER	S-56/56A
QUANTITY	1
WIDTH	15'-0"
HEIGHT	6'-0"
BORDER WIDTH	2"
BORDER RADII	9"
BACKGROUND COLOR	Green
LEGEND & BORDER COLOR	White
STATION(S)	181+51, 98' RT.



COPY	E	X	I	T	3		L			
SPACE	119.4	128.8	139.5	143.3	160.6		49.2			
COPY	D	r	y		F	o	r	k		L
SPACE	18	36.1	46		74.9	88.6	104.1	115.6		107.8
COPY	R	d		L						
SPACE	58.3	75.2		27.2						

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

GUIDE SIGN WORK SHEET

MAJOR GROUND MOUNTED GUIDE SIGN DESIGN PANELS

HAM-74-0.00

CALC. BY: SMM
CHKD. BY: MOW

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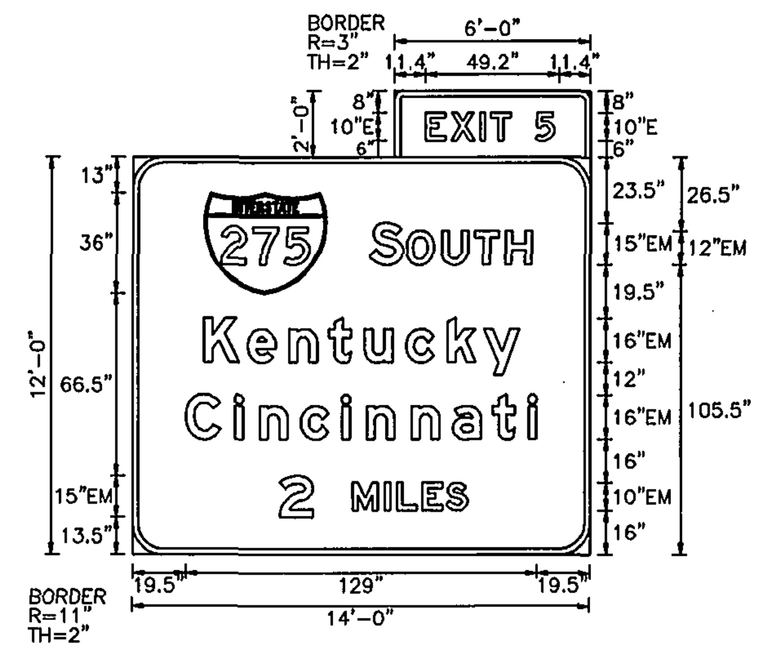
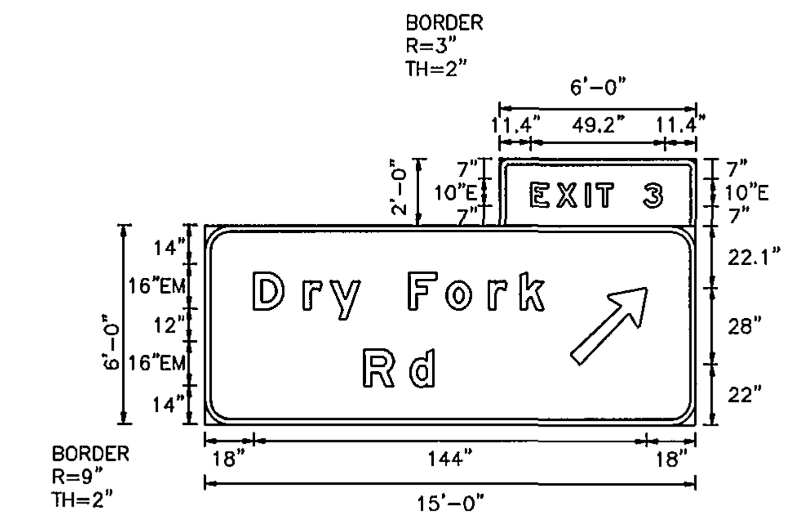
SIGN NUMBER	S-57/57A
QUANTITY	1
WIDTH	14'-0"
HEIGHT	12'-0"
BORDER WIDTH	2"
BORDER RADII	11"
BACKGROUND COLOR	Green
LEGEND & BORDER COLOR	White
STATION(S)	191+45, 52' RT.



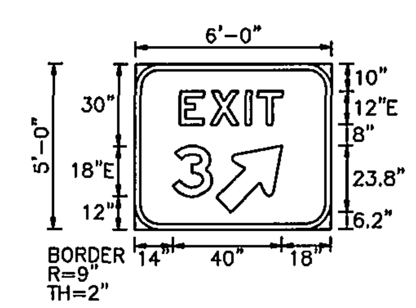
COPY	E	X	I	T	5		L	
SPACE	107.4	116.8	127.5	131.3	148.6		49.2	
COPY	S	O	U	T	H		L	
SPACE	87	100.5	113.5	125.5	136.8		59.4	
COPY	K	e	n	t	u	c	k	y		L
SPACE	26.1	42.3	57.6	72.3	85.4	100.5	115.7	129		115.9
COPY	C	i	n	c	i	n	n	a	t	i
SPACE	19.5	37.4	46.7	61.8	76.9	86.1	102.5	117.7	132.3	145.3
COPY	2	M	I	L	E	L		L		
SPACE	54.1	80.9	92.7	97.2	106.6	115.8		69.9		

SIGN NUMBER	S-58/58A
QUANTITY	1
WIDTH	15'-0"
HEIGHT	6'-0"
BORDER WIDTH	2"
BORDER RADII	9"
BACKGROUND COLOR	Green
LEGEND & BORDER COLOR	White
STATION(S)	191+45, 66' RT.



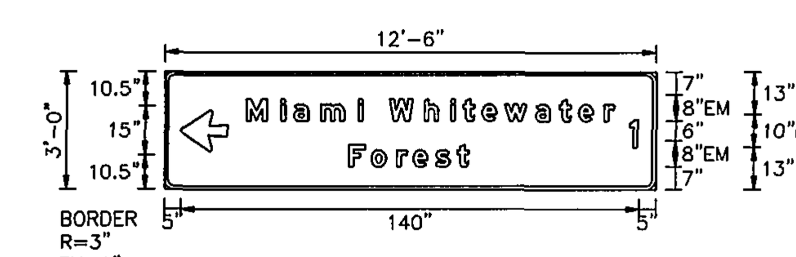
COPY	E	X	I	T	3		L			
SPACE	119.4	128.8	139.5	143.3	160.6		49.2			
COPY	D	r	y		F	o	r	k		L
SPACE	18	36.1	46		74.9	88.6	104.1	115.6		107.8
COPY	R	d		L						
SPACE	58.3	75.2		27.2						
COPY										
SPACE										
COPY										
SPACE										

SIGN NUMBER	S-59
QUANTITY	1
WIDTH	6'-0"
HEIGHT	5'-0"
BORDER WIDTH	2"
BORDER RADII	9"
BACKGROUND COLOR	Green
LEGEND & BORDER COLOR	White
STATION(S)	194+65, 75' RT.



COPY	E	X	I	T		L
SPACE	16.5	27.8	40.6	45.2		37.5
COPY	3		L			
SPACE	14		14.4			
COPY						
SPACE						
COPY						
SPACE						
COPY						
SPACE						

SIGN NUMBER	S-62
QUANTITY	1
WIDTH	12'-6"
HEIGHT	3'-0"
BORDER WIDTH	1"
BORDER RADII	3"
BACKGROUND COLOR	Brown
LEGEND & BORDER COLOR	White
STATION(S)	7+53, 36' RT.



COPY	M	i	a	m	i		W	h	i	t	e	w	a	t	e	r		L
SPACE	24.9	35.4	39.4	47.6	59.1		68.6	79.2	87.3	91.1	96.9	103.8	113.3	120.6	126.4	134.1		113.1
COPY	1		L															
SPACE	142.3		3															
COPY	F	o	r	e	s	t		L										
SPACE	56.4	63.3	71	76.1	82.9	89.6		37.2										
COPY																		
SPACE																		
COPY																		
SPACE																		

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

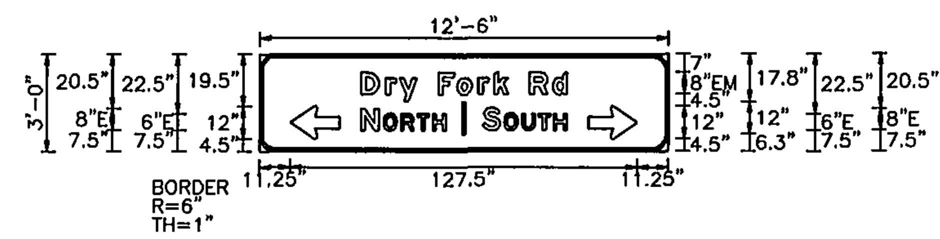
GUIDE SIGN WORK SHEET

CALC. BY: SMM
CHKD. BY: MOW

MAJOR GROUND MOUNTED GUIDE SIGN DESIGN PANELS

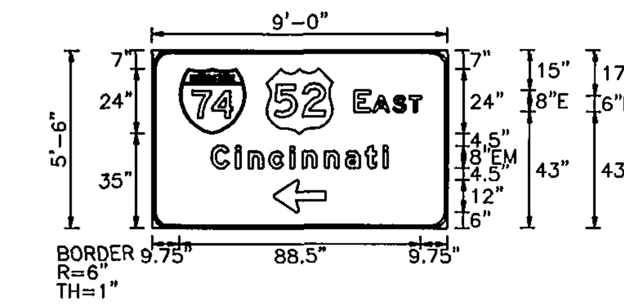
HAM-74-0.00

SIGN NUMBER	S-63
QUANTITY	1
WIDTH	12'-6"
HEIGHT	3'-0"
BORDER WIDTH	1"
BORDER RADII	6"
BACKGROUND COLOR	Green
LEGEND & BORDER COLOR	White
STATION(S)	7+53, 36' RT.



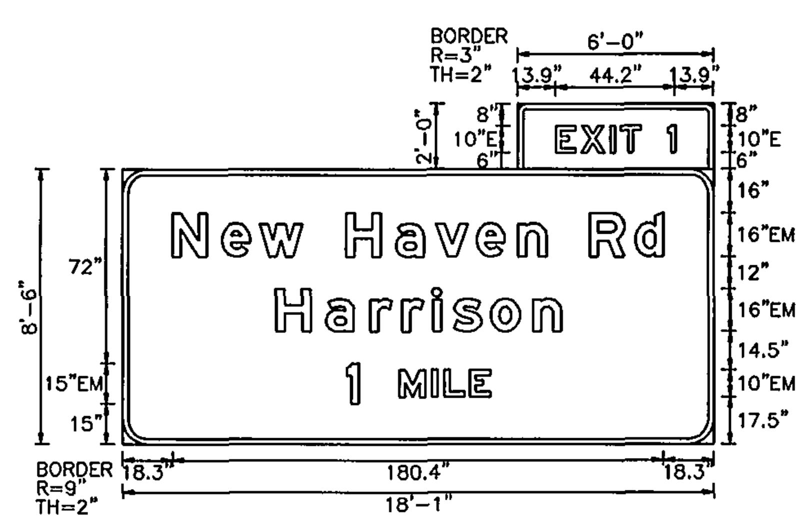
COPY	D	r	y		F	o	r	k		R	d		L
SPACE	37.3	46.3	51.3		65.7	72.6	80.3	86.1		99.2	107.6		75.5
COPY	N	O	R	T	H		L						
SPACE	37.3	45.4	51.9	58	63.6		31.1						
COPY	S	O	U	T	H		L						
SPACE	82	89.8	96.3	102.3	108		30.8						
COPY													
SPACE													
COPY													
SPACE													

SIGN NUMBER	S-68
QUANTITY	1
WIDTH	10'-0"
HEIGHT	5'-6"
BORDER WIDTH	1"
BORDER RADII	6"
BACKGROUND COLOR	Green
LEGEND & BORDER COLOR	White
STATION(S)	17+56, 35' LT.



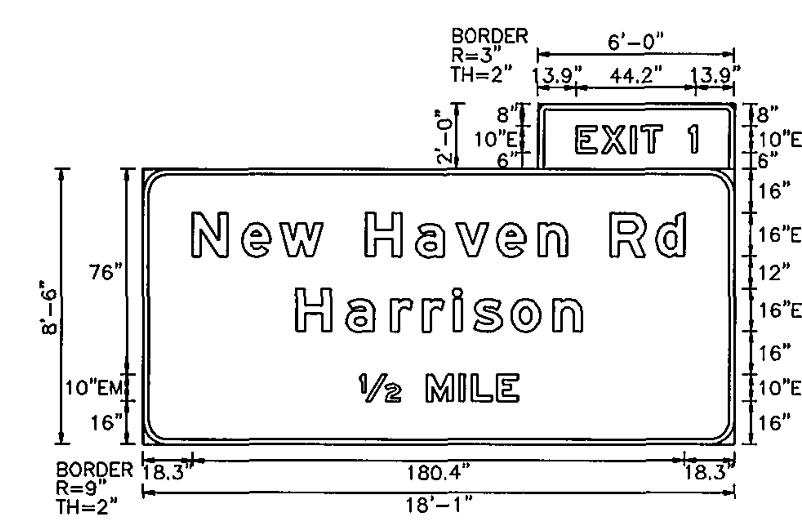
COPY	E	A	S	T		L						
SPACE	73.8	80.6	87.8	93.9		24.5						
COPY	C	i	n	c	i	n	n	a	t	i		L
SPACE	21.5	30.5	35.1	42.7	50.2	54.9	63	70.6	78	84.4		64.5
COPY												
SPACE												
COPY												
SPACE												
COPY												
SPACE												

SIGN NUMBER	S-85/85A
QUANTITY	1
WIDTH	18'-1"
HEIGHT	8'-6"
BORDER WIDTH	2"
BORDER RADII	9"
BACKGROUND COLOR	Green
LEGEND & BORDER COLOR	White
STATION(S)	157+04, 95' LT.



COPY	E	X	I	T	1		L						
SPACE	158.9	168.3	179	182.8	200.1		44.2						
COPY	N	e	w		H	a	v	e	n		R	d		L
SPACE	18.3	36.6	50.3		82.1	100.3	115	130	145.3		171.5	188.4		180.4
COPY	H	a	r	r	i	s	o	n		L				
SPACE	56.3	74.5	90.8	102.4	113.8	121.4	135	150.5		104.5				
COPY	1	M	I	L	E		L							
SPACE	82.3	101.7	113.5	118	127.4		52.5							
COPY														
SPACE														

SIGN NUMBER	S-86/86A
QUANTITY	1
WIDTH	18'-1"
HEIGHT	8'-6"
BORDER WIDTH	2"
BORDER RADII	9"
BACKGROUND COLOR	Green
LEGEND & BORDER COLOR	White
STATION(S)	131+98, 69' LT.



COPY	E	X	I	T	1		L						
SPACE	158.9	168.3	179	182.8	200.1		44.2						
COPY	N	e	w		H	a	v	e	n		R	d		L
SPACE	18.3	36.6	50.3		82.1	100.3	115	130	145.3		171.5	188.5		180.4
COPY	H	a	r	r	i	s	o	n		L				
SPACE	56.3	74.5	90.8	102.4	113.8	121.4	135	150.5		104.5				
COPY	1/2	M	I	L	E		L							
SPACE	79.7	104.3	116.1	120.6	130		57.7							
COPY														
SPACE														

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

GUIDE SIGN WORK SHEET

CALC. BY: SMM
CHKD. BY: MOW

MAJOR GROUND MOUNTED GUIDE SIGN DESIGN PANELS

HAM-74-0.00

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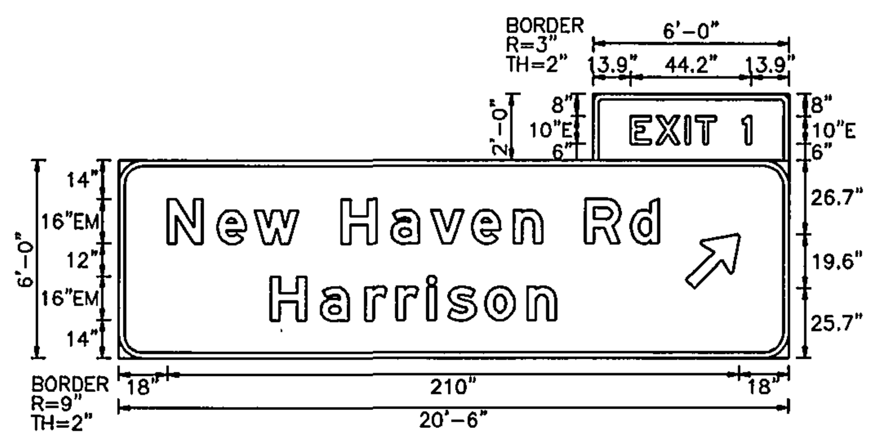
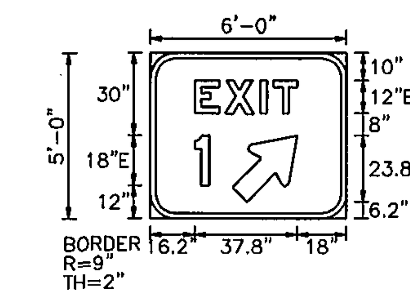
SIGN NUMBER	S-89/89A
QUANTITY	1
WIDTH	20'-6"
HEIGHT	6'-0"
BORDER WIDTH	2"
BORDER RADII	9"
BACKGROUND COLOR	Green
LEGEND & BORDER COLOR	White
STATION(S)	117+60, 90' LT.



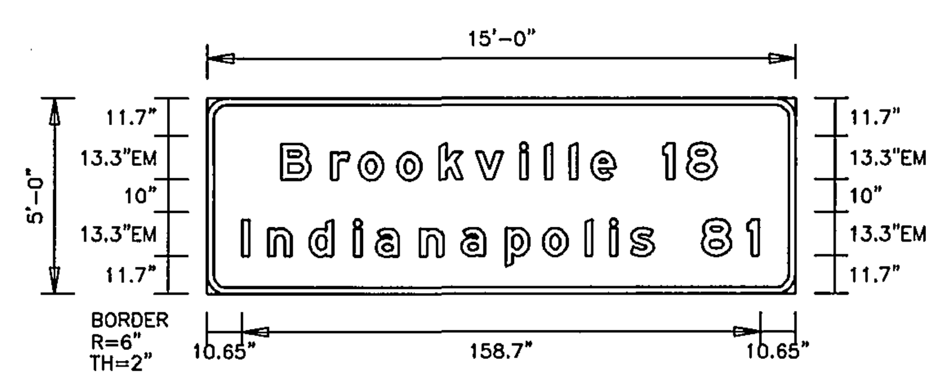
COPY	E	X	I	T	1		L										
SPACE	187.9	197.3	208	211.8	229.1		44.2										
COPY	N	e	w		H	a	v	e	n		R	d		L			
SPACE	18	36.3	50		81.8	100	114.7	129.7	145		171.2	188.1		180.4			
COPY	H	a	r	r	i	s	o	n		L							
SPACE	56	74.2	90.5	102.1	113.5	121.1	134.7	150.2		104.5							
COPY																	
SPACE																	
COPY																	
SPACE																	

SIGN NUMBER	S-91
QUANTITY	1
WIDTH	6'-0"
HEIGHT	5'-0"
BORDER WIDTH	2"
BORDER RADII	9"
BACKGROUND COLOR	Green
LEGEND & BORDER COLOR	White
STATION(S)	104+00, 75' LT.



COPY	E	X	I	T		L
SPACE	16.2	27.5	40.4	45.2		37.8
COPY	1		L			
SPACE	16.2		5.3			
COPY						
SPACE						
COPY						
SPACE						
COPY						
SPACE						

SIGN NUMBER	S-103
QUANTITY	1
WIDTH	15'-0"
HEIGHT	5'-0"
BORDER WIDTH	2"
BORDER RADII	6"
BACKGROUND COLOR	Green
LEGEND & BORDER COLOR	White
STATION(S)	44+26, 76' LT.



COPY	B	r	o	o	k	v	i	l	l	e		1	8		L		
SPACE	22.6	38	46.4	58.1	71	82.1	95.7	103.4	111	117.6		139.4	146.8		134.9		
COPY	I	n	d	i	a	n	a	p	o	l	i	s		8	1		L
SPACE	10.7	18.7	31.3	44.9	51.6	65.2	77.8	91.4	102.8	115.7	123.2	129.6		151.3	165.4		158.7
COPY																	
SPACE																	
COPY																	
SPACE																	
COPY																	
SPACE																	

SIGN NUMBER	
QUANTITY	
WIDTH	
HEIGHT	
BORDER WIDTH	
BORDER RADII	
BACKGROUND COLOR	
LEGEND & BORDER COLOR	
STATION(S)	

COPY	
SPACE	
COPY	
SPACE	
COPY	
SPACE	
COPY	
SPACE	
COPY	
SPACE	

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

GUIDE SIGN WORK SHEET

CALC. BY: SMM
CHKD. BY: MOW

MAJOR GROUND MOUNTED GUIDE SIGN DESIGN PANELS

HAM-74-0.00

PAVEMENT MARKINGS SUBSUMMARY

SHEET NO.	REF NO.	LOCATION	STATION FROM	STATION TO	SIDE	202 RPM REMOVED FOR STORAGE, AS PER PLAN	620 DELINEATOR TYPE C POST MOUNTED	620 DELINEATOR TYPE D POST MOUNTED	620 DELINEATOR REMOVED FOR DISPOSAL	621 RPM, INSTALLATION ONLY, 1-WAY, WHITE, AS PER PLAN	621 RPM, INSTALLATION ONLY, 2-WAY, YELLOW-RED, AS PER PLAN	621 RPM, INSTALLATION ONLY, 2-WAY, WHITE-RED, AS PER PLAN	642 CENTER LINE	642 EDGE LINE	644 LANE LINE	644 EDGE LINE, WHITE	644 EDGE LINE, YELLOW	644 TRANSVERSE LINE	644 CHANNELIZING LINE	644 STOP LINE	645 LANE LINE, TYPE A3	645 EDGE LINE, WHITE, TYPE A3	645 EDGE LINE, YELLOW, TYPE A3
						EA	EA	EA	EA	EA	EA	EA	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT
341	TLL-1	I-74ML	-5+20	10+00	LT.										1520								
341	TLL-2	I-74ML	-9+00	10+00	RT.										1900								
341	TWEL-1	I-74ML	-5+20	10+00	LT.											1520							
341	TWEL-2	I-74ML	-9+00	10+00	RT.											1900							
341	TYEL-1	I-74ML	-5+20	10+00	LT.												1520						
341	TYEL-2	I-74ML	-9+00	10+00	RT.												1900						
341	LL-1	I-74ML	10+00	15+00	LT.										500								
341	LL-2	I-74ML	10+00	15+00	RT.										500								
341	RPM	I-74ML	10+00	15+00	LT.	4				4													
341	RPM	I-74ML	10+00	15+00	RT.	4				4													
341	WEL-1	I-74ML	10+00	15+00	LT.											500							
341	WEL-2	I-74ML	10+00	15+00	RT.											500							
341	YEL-1	I-74ML	10+00	15+00	LT.												500						
341	YEL-2	I-74ML	10+00	15+00	RT.												500						
342	LL-3	I-74ML	15+00	29+00	LT.										1400								
342	LL-4	I-74ML	15+00	29+00	RT.										1400								
342	RPM	I-74ML	15+00	29+00	LT.	11				11													
342	RPM	I-74ML	15+00	29+00	RT.	11				11													
342	WEL-3	I-74ML	15+00	29+00	LT.											1400							
342	WEL-4	I-74ML	15+00	29+00	RT.											1400							
342	YEL-3	I-74ML	15+00	29+00	LT.												1400						
342	YEL-4	I-74ML	15+00	29+00	RT.												1400						
343	LL-5	I-74ML	29+00	43+00	LT.										1400								
343	LL-6	I-74ML	29+00	43+00	RT.										1400								
343	RPM	I-74ML	29+00	43+00	LT.	12				12													
343	RPM	I-74ML	29+00	43+00	RT.	12				12													
343	WEL-5	I-74ML	29+00	43+00	LT.											1400							
343	WEL-6	I-74ML	29+00	43+00	RT.											1400							
343	YEL-5	I-74ML	29+00	43+00	LT.												1400						
343	YEL-6	I-74ML	29+00	43+00	RT.												1400						
TOTALS IN FEET FOR CENTER LINE, EDGE LINE, AND LANE LINE													0	0	10020	10020	10020				0	0	0
TOTALS IN MILES FOR CENTER LINE, EDGE LINE AND LANE LINE													0	0	1.90	1.90	1.90				0	0	0
TOTALS CARRIED TO GENERAL SUMMARY						54	0	0	0	54	0	0	0	0	1.90	3.80 MI		0	0	0	0	0 MI	

CALCULATED MGW 07-29-03
CHECKED SJW 07-29-03

HAM-74-0.00

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SHEET NO.	REF NO.	LOCATION	STATION FROM	STATION TO	SIDE	202 RPM REMOVED FOR STORAGE, AS PER PLAN	620 DELINEATOR TYPE C POST MOUNTED	620 DELINEATOR TYPE D POST MOUNTED	620 DELINEATOR REMOVED FOR DISPOSAL	621 RPM, INSTALLATION ONLY, 1-WAY, WHITE, AS PER PLAN	621 RPM, INSTALLATION ONLY, 2-WAY, YELLOW-RED, AS PER PLAN	621 RPM, INSTALLATION ONLY, 2-WAY, WHITE-RED, AS PER PLAN	642 CENTER LINE	642 EDGE LINE	644 LANE LINE	644 EDGE LINE, WHITE	644 EDGE LINE, YELLOW	644 TRANSVERSE LINE	644 CHANNELIZING LINE	644 STOP LINE	645 LANE LINE, TYPE A3	645 EDGE LINE, WHITE, TYPE A3	645 EDGE LINE, YELLOW, TYPE A3
						EA	EA	EA	EA	EA	EA	EA	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT
344	LL-10	I-74 ML	48+69	57+00	RT.										831								
344	LL-7	I-74 ML	43+00	46+10	LT.										310								
344	LL-8	I-74 ML	43+00	46+29	RT.										329								
344	LL-9	I-74 ML	48+49	57+00	LT.										851								
344	LL-P1	I-74 ML	46+10	48+49	LT.																239		
344	LL-P2	I-74 ML	46+29	48+69	RT.																240		
344	RPM	I-74 ML	43+00	57+00	LT.	12				12													
344	RPM	I-74 ML	43+00	57+00	RT.	12				12													
344	WEL-10	I-74 ML	48+72	57+00	RT.											828							
344	WEL-7	I-74 ML	43+00	46+07	LT.											307							
344	WEL-8	I-74 ML	43+00	46+32	RT.											332							
344	WEL-9	I-74 ML	48+47	57+00	LT.											853							
344	WEL-P1	I-74 ML	46+07	48+47	LT.																	240	
344	WEL-P2	I-74 ML	46+32	48+72	RT.																	240	
344	YEL-10	I-74 ML	48+66	57+00	RT.												834						
344	YEL-7	I-74 ML	43+00	46+13	LT.												313						
344	YEL-8	I-74 ML	43+00	46+26	RT.												326						
344	YEL-9	I-74 ML	48+52	57+00	LT.												848						
344	YEL-P1	I-74 ML	46+13	48+52	LT.																		239
344	YEL-P2	I-74 ML	46+26	48+66	RT.																		240
345	LL-11	I-74 ML	57+00	71+00	LT.										1400								
345	LL-12	I-74 ML	57+00	71+00	RT.										1400								
345	RPM	I-74 ML	43+00	57+00	LT.	12				12													
345	RPM	I-74 ML	43+00	57+00	RT.	12				12													
345	WEL-11	I-74 ML	57+00	71+00	LT.											1400							
345	WEL-12	I-74 ML	57+00	71+00	RT.											1400							
345	YEL-11	I-74 ML	57+00	71+00	LT.												1400						
345	YEL-12	I-74 ML	57+00	71+00	RT.												1400						
346	CH-1	I-74 ML	80+11	81+75	LT.														164				
346	CH-2	I-74 ML	82+92	85+00	RT.														208				
346	CH-3	I-74 ML	82+92	85+00	RT.														208				
346	DEL	RAMP HA	71+00	85+00	RT.		8		8														
346	DEL	RAMP HB	71+00	85+00	LT.		3		3														
346	LL-13	I-74 ML	71+00	85+00	LT.										1400								
346	LL-14	I-74 ML	78+41	80+11	LT.										170								
346	LL-15	I-74 ML	71+00	85+00	RT.										1400								
346	LL-16	I-74 ML	78+62	82+92	RT.										430								
346	RPM	RAMP HA	71+00	85+00	RT.	13						13											
346	RPM	I-74 ML	71+00	85+00	LT.	12				12													
346	RPM	I-74 ML	71+00	85+00	RT.	12				12													
346	RPM	RAMP HB	71+00	85+00	LT.	9					4	5											
346	TL-1	I-74 ML	82+92	85+00	RT.													110					
346	WEL-13	I-74 ML	71+00	85+00	LT.											1400							
346	WEL-14	I-74 ML	80+11	85+00	LT.											489							
346	WEL-15	I-74 ML	71+00	85+00	RT.											1400							
346	YEL-13	I-74 ML	71+00	85+00	LT.												1400						
346	YEL-14	I-74 ML	81+75	85+00	LT.												325						
346	YEL-15	I-74 ML	71+00	85+00	RT.												1400						
TOTALS IN FEET FOR CENTER LINE, EDGE LINE, AND LANE LINE													0	0	8521	8409	8246				479	480	479
TOTALS IN MILES FOR CENTER LINE, EDGE LINE AND LANE LINE													0	0	1.61	1.59	1.56				0.09	0.09	0.09
TOTALS CARRIED TO GENERAL SUMMARY						94	11	0	11	72	4	18	0	0	1.61	3.15 MI		110	580	0	0.09	0.18 MI	

CALCULATED MDW 07-29-03
CHECKED SJW 07-29-03

PAVEMENT MARKINGS SUBSUMMARY

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368
421

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SHEET NO.	REF NO.	LOCATION	STATION		SIDE	202	620			621			642		644						645		
			FROM	TO		RPM REMOVED FOR STORAGE, AS PER PLAN	DELINEATOR TYPE C POST MOUNTED	DELINEATOR TYPE D POST MOUNTED	DELINEATOR REMOVED FOR DISPOSAL	RPM, INSTALLATION ONLY, 1-WAY, WHITE, AS PER PLAN	RPM, INSTALLATION ONLY, 2-WAY, YELLOW-RED, AS PER PLAN	RPM, INSTALLATION ONLY, 2-WAY, WHITE-RED, AS PER PLAN	CENTER LINE	EDGE LINE	LANE LINE	EDGE LINE, WHITE	EDGE LINE, YELLOW	TRANSVERSE LINE	CHANNELIZING LINE	STOP LINE	LANE LINE, TYPE A3	EDGE LINE, WHITE, TYPE A3	EDGE LINE, YELLOW, TYPE A3
						EA	EA	EA	EA	EA	EA	EA	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT
347	CH-4	I-74 ML	85+00	85+98	RT.														98				
347	CH-5	I-74 ML	85+00	85+98	RT.														98				
347	DEL	RAMP HA	3+84	6+80	RT.		1		1														
347	DEL	RAMP HA	3+84	6+80	LT.			2	2														
347	DEL	RAMP HB	2+00	6+50	LT.		2		2														
347	DEL	RAMP HB	2+00	6+50	RT.			2	2														
347	LL-17	I-74 ML	85+00	99+00	LT.										1400								
347	LL-18	I-74 ML	85+00	99+00	RT.										1400								
347	RPM	RAMP HA	3+84	6+80	LT.	2					2												
347	RPM	RAMP HA	3+84	6+80	LT.	4						4											
347	RPM	RAMP HB	2+00	6+50	LT.	5					5												
347	RPM	I-74 ML	85+00	99+00	LT.	12				12													
347	RPM	I-74 ML	85+00	99+00	RT.	12				12													
347	TL-2	RAMP HA	85+00	85+98	RT.													150					
347	WEL-16	RAMP HB	2+00	6+50	LT.											450							
347	WEL-17	I-74 ML	85+00	99+00	LT.											1400							
347	WEL-18	RAMP HA	3+84	6+80	RT.											296							
347	WEL-19	I-74 ML	85+00	99+00	RT.											1400							
347	YEL-16	RAMP HB	2+00	6+50	LT.												450						
347	YEL-17	I-74 ML	85+00	99+00	LT.												1400						
347	YEL-18	RAMP HA	3+84	6+80	RT.												296						
347	YEL-19	I-74 ML	85+00	99+00	RT.												1400						
348	CH-6	I-74 ML	104+25	107+25	LT.														300				
348	CH-7	I-74 ML	104+25	107+25	LT.														300				
348	CH-8	RAMP HC	110+02	111+23	RT.														121				
348	DEL	RAMP HC	7+00	9+00	RT.		1	2	3														
348	DEL	RAMP HC	101+00	113+00	RT.		5		5														
348	DEL	RAMP HD	102+25	113+00	LT.		5		5														
348	DEL	RAMP HD	6+84	8+90	LT.		1	2	3														
348	LL-19	I-74 ML	99+00	113+00	LT.										1400								
348	LL-20	I-74 ML	107+42	113+00	LT.										558								
348	LL-21	I-74 ML	99+00	113+00	RT.										1400								
348	LL-22	I-74 ML	111+23	113+00	RT.										177								
348	RPM	RAMP HD	6+84	8+90	LT.	2					2												
348	RPM	RAMP HD	104+25	107+42	LT.	17						17											
348	RPM	RAMP HC	7+00	9+00	LT.	3					3												
348	RPM	RAMP HC	103+00	111+23	RT.	13						13											
348	RPM	I-74 ML	99+00	113+00	LT.	12				12													
348	RPM	I-74 ML	99+00	113+00	RT.	12				12													
348	TL-3	I-74 ML	104+25	107+25	LT.													300					
348	WEL-20	I-74 ML	99+00	107+25	LT.											825							
348	WEL-21	I-74 ML	102+25	113+00	LT.											1075							
348	WEL-22	I-74 ML	99+00	111+23	RT.											1223							
348	WEL-23	I-74 ML	101+00	113+00	RT.											1200							
348	YEL-20	I-74 ML	99+00	113+00	LT.												1400						
348	YEL-21	I-74 ML	6+84	8+90	LT.												206						
348	YEL-22	I-74 ML	99+00	113+00	RT.												1400						
348	YEL-23	I-74 ML	101+00	111+23	RT.												1023						
TOTALS IN FEET FOR CENTER LINE, EDGE LINE, AND LANE LINE													0	0	6335	7869	7575				0	0	0
TOTALS IN MILES FOR CENTER LINE, EDGE LINE AND LANE LINE													0	0	1.20	1.49	1.43				0	0	0
TOTALS CARRIED TO GENERAL SUMMARY						94	15	8	23	48	12	34	0	0	1.20	2.92 MI		450	917	0	0	0 MI	

CALCULATED MDW 07-29-03
CHECKED SJW 07-29-03

PAVEMENT MARKINGS SUBSUMMARY

HAM-74-0.00

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SHEET NO.	REF NO.	LOCATION	STATION FROM	STATION TO	SIDE	202 RPM REMOVED FOR STORAGE, AS PER PLAN	620 DELINEATOR TYPE C POST MOUNTED	620 DELINEATOR TYPE D POST MOUNTED	620 DELINEATOR REMOVED FOR DISPOSAL	621 RPM, INSTALLATION ONLY, 1-WAY, WHITE, AS PER PLAN	621 RPM, INSTALLATION ONLY, 2-WAY, YELLOW-RED, AS PER PLAN	621 RPM, INSTALLATION ONLY, 2-WAY, WHITE-RED, AS PER PLAN	642 CENTER LINE	642 EDGE LINE	644 LANE LINE	644 EDGE LINE, WHITE	644 EDGE LINE, YELLOW	644 TRANSVERSE LINE	644 CHANNELIZING LINE	644 STOP LINE	645 LANE LINE, TYPE A3	645 EDGE LINE, WHITE, TYPE A3	645 EDGE LINE, YELLOW, TYPE A3
						EA	EA	EA	EA	EA	EA	EA	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT
349	DEL	I-74 ML	113+00	127+00	LT.		4		4														
349	LL-23	I-74 ML	113+00	127+00	LT.										1400								
349	LL-24	I-74 ML	113+00	127+00	RT.										1400								
349	RPM	I-74 ML	113+00	127+00	LT.	12				12													
349	RPM	I-74 ML	113+73	117+73	RT.	12				12													
349	WEL-24	I-74 ML	113+00	127+00	LT.											1400							
349	WEL-25	I-74 ML	113+00	127+00	RT.											1400							
349	YEL-24	I-74 ML	113+00	127+00	LT.												1400						
349	YEL-25	I-74 ML	113+00	127+00	RT.												1400						
350	LL-25	I-74 ML	127+00	141+00	LT.										1400								
350	LL-26	I-74 ML	127+00	141+00	RT.										1400								
350	TCL-7	WEST ROAD	4+62	6+15	C.								153										
350	TWEL-7R	WEST ROAD	4+62	6+15	RT.									153									
350	TWEL-7L	WEST ROAD	4+62	6+15	LT.									153									
350	TCL-8	WEST ROAD	12+20	13+70	C.								150										
350	TWEL-8R	WEST ROAD	12+20	13+70	RT.									150									
350	TWEL-8L	WEST ROAD	12+20	13+70	LT.									150									
350	PCL-1	WEST ROAD	6+15	12+20	C.								605										
350	PWEL-1	WEST ROAD	6+15	12+20	LT.									605									
350	PWEL-2	WEST ROAD	6+15	12+20	RT.									605									
350	RPM	I-74 ML	127+00	141+00	LT.	12				12													
350	RPM	I-74 ML	127+00	141+00	RT.	12				12													
350	WEL-26	I-74 ML	127+00	141+00	LT.											1400							
350	WEL-27	I-74 ML	127+00	141+00	RT.											1400							
350	YEL-27	I-74 ML	127+00	141+00	RT.												1400						
350	YEL-28	I-74 ML	127+00	141+00	LT.												1400						
351	CH-9	RAMP WS	145+61	148+90	RT.														329				
351	CH-10	RAMP WS	145+61	148+90	RT.														329				
351	CH-11	RAMP WS	153+25	153+46	RT.														21				
351	CH-12	RAMP WS	153+25	153+80	RT.														55				
351	DEL	RAMP WS	142+00	148+00	RT.		7		7														
351	DEL	RAMP WS	148+98	153+50	RT.			10	10														
351	LL-27	I-74 ML	141+00	155+00	LT.										1400								
351	LL-28	I-74 ML	141+00	155+00	RT.										1400								
351	LL-29	I-74 ML	144+27	145+61	RT.										134								
351	RPM	I-74 ML	141+00	155+00	LT.	11				11													
351	RPM	I-74 ML	141+00	155+00	RT.	11				11													
351	RPM	RAMP WS	148+90	153+50	RT.	6					6												
351	RPM	RAMP WS	145+61	148+90	RT.	17						17											
351	TL-4	RAMP WS	145+61	148+90	RT.													360					
351	TL-5	RAMP WS	153+25	153+80	RT.													40					
351	WEL-28	I-74 ML	141+00	155+00	LT.											1400							
351	WEL-29	RAMP WS	141+00	153+70	RT.											1270							
351	WEL-30	I-74 ML	141+00	155+00	RT.											1400							
351	WEL-31	RAMP WS	153+70	154+10	RT.											40							
351	WEL-32	WEIGH STATION SCALES	153+80	155+00	RT.											120							
351	YEL-28	I-74 ML	141+00	155+00	LT.												1400						
351	YEL-29	I-74 ML	141+00	155+00	RT.												1400						
351	YEL-30	RAMP WS	148+90	155+00	RT.												610						
351	YEL-31	RAMP WS	153+46	153+74	RT.												28						
TOTALS IN FEET FOR CENTER LINE, EDGE LINE, AND LANE LINE													908	1816	8534	9830	9038				0	0	0
TOTALS IN MILES FOR CENTER LINE, EDGE LINE AND LANE LINE													0.17	0.34	1.62	1.86	1.71				0	0	0
TOTALS CARRIED TO GENERAL SUMMARY						93	7	10	17	70	6	17	0.17	0.34	1.62	3.57 MI		400	734	0	0	0 MI	

PAVEMENT MARKINGS SUBSUMMARY

HAM-74-0.00

CALCULATED MDW 07-29-03
CHECKED SJW 07-29-03

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CALCULATED MDW 07-29-03
CHECKED SJM 07-29-03

PAVEMENT MARKINGS SUBSUMMARY

SHEET NO.	REF NO.	LOCATION	STATION FROM	STATION TO	SIDE	202 RPM REMOVED FOR STORAGE, AS PER PLAN (EA)	620 DELINEATOR TYPE C POST MOUNTED (EA)	620 DELINEATOR TYPE D POST MOUNTED (EA)	620 DELINEATOR REMOVED FOR DISPOSAL (EA)	621 RPM, INSTALLATION ONLY, 1-WAY, WHITE, AS PER PLAN (EA)	621 RPM, INSTALLATION ONLY, 2-WAY, YELLOW-RED, AS PER PLAN (EA)	621 RPM, INSTALLATION ONLY, 2-WAY, WHITE-RED, AS PER PLAN (EA)	642 CENTER LINE (FT)	642 EDGE LINE (FT)	644 LANE LINE (FT)	644 EDGE LINE, WHITE (FT)	644 EDGE LINE, YELLOW (FT)	644 TRANSVERSE LINE (FT)	644 CHANNELIZING LINE (FT)	644 STOP LINE (FT)	645 LANE LINE, TYPE A3 (FT)	645 EDGE LINE, WHITE, TYPE A3 (FT)	645 EDGE LINE, YELLOW, TYPE A3 (FT)
352	CH-13	RAMP WS	167+44	169+00	RT.														156				
352	DEL	RAMP WS	156+30	163+30	RT.			15	15														
352	DEL	RAMP WS	163+99	168+99	RT.		6		6														
352	LL-30	I-74 ML	155+00	169+00	LT.										1400								
352	LL-31	I-74 ML	155+00	169+00	LT.										1400								
352	RPM	I-74 ML	155+00	169+00	LT.	12				12													
352	RPM	I-74 ML	155+00	169+00	RT.	12				12													
352	RPM	RAMP WS	155+00	167+44	RT.	16					16												
352	RPM	RAMP WS	167+44	169+00	RT.	4						4											
352	SL-1	WEIGH STATION	155+06	155+06	RT.															16			
352	WEL-33	I-74 ML	155+00	169+00	LT.											1400							
352	WEL-34	I-74 ML	155+00	169+00	LT.											1400							
352	WEL-35	WEIGH STATION	155+00	155+96	RT.											96							
352	WEL-36	RAMP WS	156+52	169+00	RT.											1248							
352	YEL-32	I-74 ML	155+00	169+00	LT.												1400						
352	YEL-33	I-74 ML	155+00	169+00	RT.												1400						
352	YEL-34	RAMP WS	155+00	167+44	RT.												1244						
352	YEL-35	WEIGH STATION	155+88	155+96	RT.												80						
353	CH-14	RAMP WS	169+00	169+52	RT.														52				
353	DEL	RAMP WS	169+00	169+99	RT.		1		1														
353	DEL	RAMP FA	181+44	183+00	RT.		2		2														
353	LL-32	I-74 ML	169+00	183+00	LT.												1400						
353	LL-33	I-74 ML	169+00	183+00	RT.												1400						
353	LL-34	RAMP WS	169+52	171+60	RT.												1400						
353	RPM	I-74 ML	169+00	183+00	LT.	12				12													
353	RPM	I-74 ML	169+00	183+00	RT.	12				12													
353	RPM	RAMP WS	169+00	169+52	RT.	2						2											
353	WEL-37	I-74 ML	169+00	183+00	LT.											1400							
353	WEL-38	I-74 ML	169+00	183+00	RT.											1400							
353	WEL-39	RAMP WS	169+00	169+52	RT.											52							
353	YEL-36	I-74 ML	169+00	183+00	LT.												1400						
353	YEL-37	I-74 ML	169+00	183+00	RT.												1400						
TOTALS IN FEET FOR CENTER LINE, EDGE LINE, AND LANE LINE													0	0	2800	6996	11124				0	0	0
TOTALS IN MILES FOR CENTER LINE, EDGE LINE AND LANE LINE													0	0	0.53	1.33	2.11				0	0	0
TOTALS CARRIED TO GENERAL SUMMARY						70	9	15	24	48	16	6	0	0	0.53	3.44 MI.		0	208	16	0	0 MI	

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371/421

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SHEET NO.	REF NO.	LOCATION	STATION FROM	STATION TO	SIDE	202	620			621			642		644						645		
						RPM REMOVED FOR STORAGE, AS PER PLAN	DELINEATOR TYPE C POST MOUNTED	DELINEATOR TYPE D POST MOUNTED	DELINEATOR REMOVED FOR DISPOSAL	RPM, INSTALLATION ONLY, 1-WAY, WHITE, AS PER PLAN	RPM, INSTALLATION ONLY, 2-WAY, YELLOW-RED, AS PER PLAN	RPM, INSTALLATION ONLY, 2-WAY, WHITE-RED, AS PER PLAN	CENTER LINE	EDGE LINE	LANE LINE	EDGE LINE, WHITE	EDGE LINE, YELLOW	TRANSVERSE LINE	CHANNELIZING LINE	STOP LINE	LANE LINE, TYPE A3	EDGE LINE, WHITE, TYPE A3	EDGE LINE, YELLOW, TYPE A3
			FROM	TO		EA	EA	EA	EA	EA	EA	EA	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT
354	CH-15	RAMP FB	183+65	185+00	LT.														135				
354	CH-16	RAMP FA	190+62	194+00	RT.														338				
354	CH-17	RAMP FA	190+62	194+00	RT.														338				
354	DEL	RAMP FA	183+77	193+40	RT.		6		6														
354	DEL	RAMP FA	194+50	197+00	RT.			3	3														
354	DEL	RAMP FB	4+78	9+73	RT.			6	6														
354	DEL	RAMP FB	183+47	191+52	LT.		5		5														
354	LL-35	RAMP FB	183+00	183+65	LT.										65								
354	LL-36	I-74 ML	183+00	194+00	LT.										1100								
354	LL-37	I-74 ML	183+00	194+00	RT.										1100								
354	LL-38	RAMP FA	186+42	190+62	RT.										420								
354	RPM	RAMP FA	194+00	197+00	RT.	4					4												
354	RPM	RAMP FA	190+62	194+00	RT.	16						16											
354	RPM	RAMP FB	183+65	185+00	LT.	4						4											
354	RPM	RAMP FB	185+00	197+00	LT.	15					15												
354	RPM	I-74 ML	183+00	197+00	RT.	12				12													
354	RPM	I-74 ML	183+00	197+00	LT.	12				12													
354	RPM	I-74 ML	186+42	190+62	RT.	4				4													
354	TL-6	RAMP FA	190+62	194+00	RT.													338					
354	WEL-40	RAMP FB	183+00	194+00	LT.											1100							
354	WEL-41	I-74 ML	183+65	194+00	LT.											1035							
354	WEL-42	I-74 ML	183+00	197+00	RT.											1400							
354	YEL-38	I-74 ML	183+00	194+00	LT.												1100						
354	YEL-39	RAMP FB	185+00	197+00	LT.												1200						
354	YEL-40	I-74 ML	183+00	194+00	RT.												1100						
354	YEL-41	RAMP FA	194+00	197+00	RT.												300						
354	TLL-3	I-74 ML	194+00	197+00	LT.										300								
354	TLL-4	I-74 ML	194+00	197+00	RT.										300								
354	TWEL-3	I-74 ML	194+00	197+00	LT.											300							
354	TWEL-4	I-74 ML	194+00	197+00	RT.											300							
354	TYEL-3	I-74 ML	194+00	197+00	LT.												300						
354	TYEL-4	I-74 ML	194+00	197+00	RT.												300						
355	DEL	RAMP FB	10+30	12+86	LT.			2	2														
355	DEL	RAMP FA	8+12	10+12	RT.			2	2														
355	RPM	RAMP FB	10+30	12+86	LT.	2					2												
355	RPM	RAMP FA	8+12	10+12	RT.	3					3												
355	SL-2	RAMP FA	10+12	10+15	RT.															46			
355	WEL-43	RAMP FB	10+30	12+86	LT.											256							
355	WEL-44	RAMP FA	8+12	10+12	RT.											200							
355	YEL-42	RAMP FB	10+30	12+40	LT.												210						
355	YEL-43	RAMP FA	8+12	10+12	RT.												200						
355	TLL-5	I-74 ML	197+00	218+60	LT.										2160								
355	TLL-6	I-74 ML	197+00	209+50	RT.										1250								
355	TWEL-5	I-74 ML	197+00	218+60	LT.											2160							
355	TWEL-6	I-74 ML	197+00	209+50	RT.											1250							
355	TYEL-5	I-74 ML	197+00	218+60	LT.												2160						
355	TYEL-6	I-74 ML	197+00	209+50	RT.												1250						
TOTALS IN FEET FOR CENTER LINE, EDGE LINE, AND LANE LINE													0	0	6695	8001	8120				0	0	0
TOTALS IN MILES FOR CENTER LINE, EDGE LINE AND LANE LINE													0	0	1.27	1.52	1.54				0	0	0
TOTALS CARRIED TO GENERAL SUMMARY						72	11	13	24	28	24	20	0	0	1.27	3.06		338	811	46	0	0 MI	

CALCULATED MDW 07-28-03
CHECKED SJW 07-29-03

PAVEMENT MARKINGS SUBSUMMARY

HAM-74-0.00

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SHEET NO.	REFERENCE NO.	LOCATION	STATION	OFFSET	SIDE	CODE	SIZE	ITEM 620 REFLECTOR, TYPE D	ITEM 630 GROUND MOUNTED SUPPORT, NO. 3 POST	GROUND MOUNTED SUPPORT, NO. 4 POST	GROUND MOUNTED SUPPORT, S4X7.7 BEAM	GROUND MOUNTED SUPPORT, W8X18 BEAM	GROUND MOUNTED SUPPORT, W10X22 BEAM	ONE WAY SUPPORT, NO. 4 POST	BREAKAWAY BEAM CONNECTION	SIGN ATTACHMENT ASSEMBLY	SIGN, FLAT SHEET	SIGN, FLAT SHEET, AS PER PLAN	SIGN, GROUND MOUNTED EXTRUSHEET	SIGN, OVERHEAD EXTRUSHEET	SIGN BACKING ASSEMBLY	GROUND MOUNTED BEAM SUPPORT FOUNDATION	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL	SIGNING, MISC.: EXTRUSHEET SIGN, INSTALLATION ONLY
				FT			IN	EACH	FT	FT	FT	FT	FT	FT	EACH	EACH	SQ FT	SQ FT	SQ FT	SQ FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
341	S-1	I-74 ML	11+00	42	RT.	GT-276	276x78											1.5										1	1
341	S-2	I-74 ML	13+57	72	RT.	R-159-36	36x48		32								12						1			2			
342	S-3	I-74 ML	15+83	73	RT.	IM-5-2	36x36		35								9				1		1			2			
	S-4					IM-39-36	36x18										4.5						1						
	S-5					M-1-36-2	36x36										9						1						
	S-6					M-36-36	36x18										4.5						1						
	S-7					R-19-24	24x30										5						1						
342		I-74 ML	19+62	0	C.			1	14																	1			
	S-8					R-123-36	36x36										9						1						
342	S-9	I-74 ML	19+87	75	RT.	R-9-84	84x72											1.5	42						1				
343	S-10	I-74 ML	33+12	84	RT.	GB-217	217x102						46.3		2			1.5	153.7			2			1		2		
	S-10A					GEP-72	72x24												12		1		1						
343	S-11	I-74 ML	36+83	78	RT.	R-190-120	120x60											1.5	50						1				
343	S-12	I-74 ML	40+71	79	RT.	N-99-48	48x30			34							10						1				2		
	S-13					N-96-60	60x36										15						1						
344	S-14	I-74 ML	46+43	24	RT.	X-6L-12																	1			1			
344	S-15	I-74 ML	46+43	66	RT.	X-6R-12																	1			1			
344	S-16	I-74 ML	49+57	72	RT.	W-139R-48	48x48			27							16						1			2			
344	S-17	I-74 ML	55+64	79	RT.	GB-217	217x102											1.5	153.7						1				
	S-17A					GEP-72	72x24												12		1		1						
345	S-18	I-74 ML	58+57	75	RT.	R-70-48	48x36		30								13						1			2			
	S-19					R-19-24	24x30										5						1						
345		I-74 ML	62+92	0	C.			1	14																	1			
	S-20					R-123-36	36x36										9						1						
345	S-21	I-74 ML	62+77	70	RT.	N-41-12	12x24		11								2						1			1			
346	S-22	I-74 ML	72+72	78	RT.	GB-246	246x72											1.5	123						1				
	S-22A					GEP-72	72x24												12		1		1						
347	S-23	I-74 ML	86+07	5	LT.	GN-96	96x48											1.5	32				1						
347	S-24	I-74 ML	86+64	77	RT.	GF-72	72x60				34.2				2			1.5	30			2	1				2		
347	S-25	I-74 ML	94+41	72	RT.	WS-1-108	108x78											1.5	58.5						1				
348	S-26	I-74 ML	102+26	73	RT.	W-49R-48	48x48		27								16						1			2			
349	S-27	I-74 ML	115+63	80	RT.	N-41-12	12x24		11								2						1			2			
349	S-28	I-74 ML	116+63	75	RT.	N-89-48	48x36		30															1					
349	S-29	I-74 ML	121+63	86	RT.	R-103-96	96x48											1.5	32				1						
	S-30					R-19-24	24x30										5						1						
349		I-74 ML	124+67	0	C.			1	14																	1			
	S-31					R-123-36	36x36										9						1						
350	S-32	I-74 ML	128+25	85	RT.	R-9B-48	48x96				41				2		32					2	1				2		
351	S-33	I-74 ML	145+94	88	RT.	R-55-12	12x18		11								1.5						1			1			
351	S-34	I-74 ML	148+97	107	RT.	R-55-12	12x18		11								1.5						1			1			
351	S-35	I-74 ML	149+19	73	RT.	WS-4-84	84x72								2			1.5	42			2			1		2		
351	S-36	I-74 ML	152+00	142	RT.	R-55-12	12x18		11								1.5						1			1			
351	S-37	I-74 ML	152+89	167	RT.	R-41B-48	48x48			14							16						1			1			
351	S-38	I-74 ML	153+04	124	RT.	W-143-24	24x24		32								4				1		1			2			
	S-39					N-SPEC	18x24										3						1						
	S-40					N-SPEC	30x24										5						1						
	S-41					R-41B-48	48x48										16						1						
351	S-42	I-74 ML	154+01	93	RT.	GB-187	187x72					44.6			2			1.5	93.5			2			1		2		
	S-42A					GEP-72	72x24												12		1		1						
351	S-43	I-74 ML	154+62	125	RT	W-143-24	24x24		14								4				1		1			2			
	S-44					N-SPEC	30x42										8.75						1						
352	S-45	I-74 ML	156+17	130	RT.	R-43R-36	36x12		12								3						1			1			
352	S-46	I-74 ML	158+20	160	RT.	R-55-12	12x18		11								1.5						1			1			
	S-47					GCR-216	216x72												108						1				
352	S-47A	I-74 ML	160+00	93	RT.	GEP-72	72x24											1.5	12		1		1						
	S-48					GSS-30	30x30										6.25				1		1						
352	S-49	I-74 ML	162+92	74	RT.	W-49R-48	48x48		27								16						1			2			
352	S-50	I-74 ML	163+20	108	RT.	R-55-12	12x18		11								1.5						1			1			
	S-51					R-19-24	24x30										5						1						
352		I-74 ML	165+10	0	C.			1	14																	1			
	S-52					R-123-36	36x36										9						1						
352	S-53	I-74 ML	167+20	93	RT.	R-55-12	12x18		11								1.5						1			1			
352	S-54	I-74 ML	168+46	91	RT.	N-41-12	12x24		11								2						1			1			
353	S-55	I-74 ML	176+19	77	RT.	W-76D-36	36x36		34								9						1			2			
353	S-56	I-74 ML	181+51	98	RT.	GB-180	180x72					44			2			1.5	90			2			1		2		
	S-56A					GEP-72	72x24												12		1		1						
TOTALS CARRIED TO GENERAL SUMMARY								4	428	75	75.2	88.6	46.3	–	12	–	302	21	1080	–	9	12	50	1	10	36	14	1	1

CALC. BY: SMM
CHKD. BY: MOW

SIGNING SUBSUMMARY

HAM-74-0.00

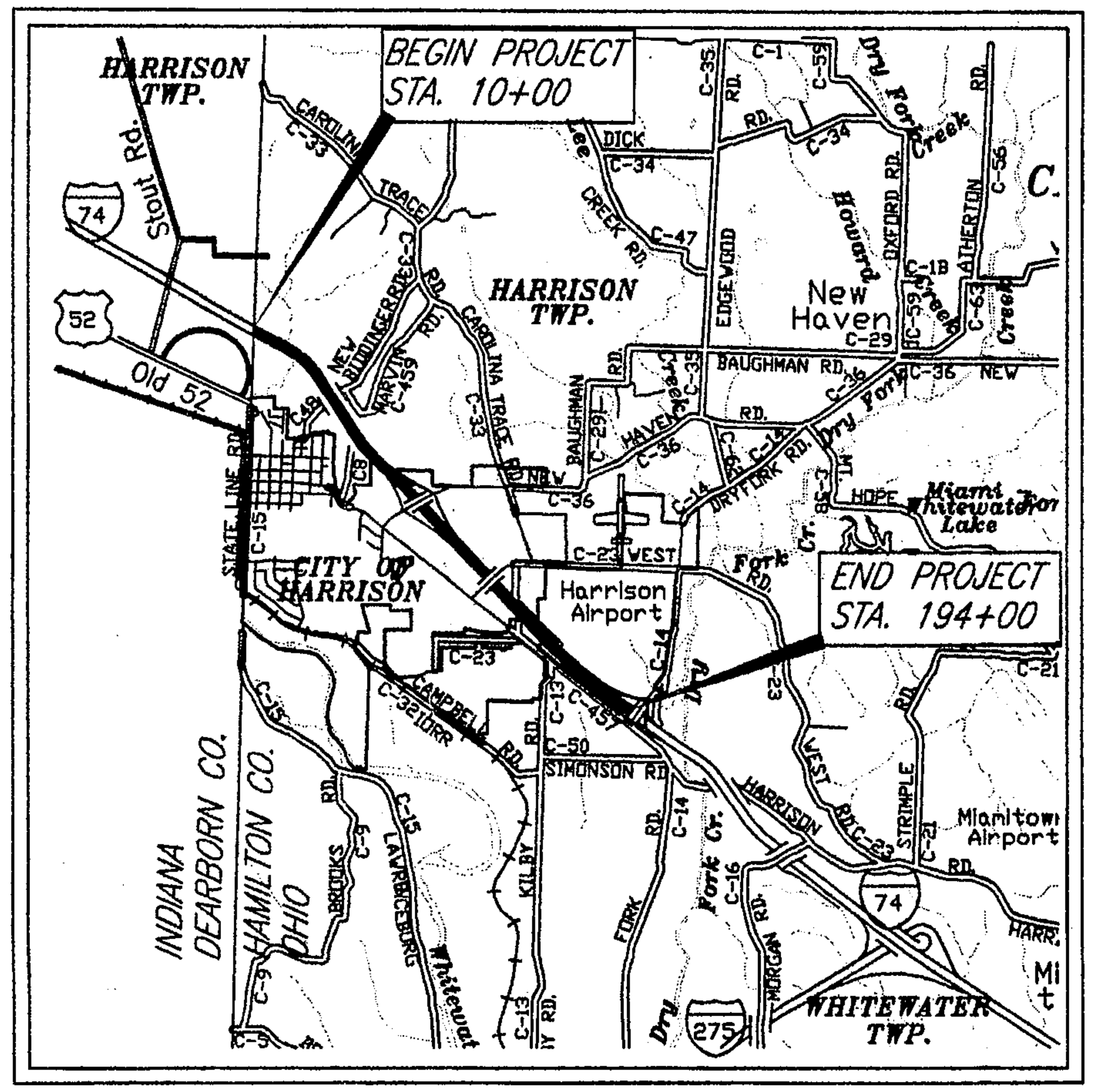
SHEET NO.	REFERENCE NO.	LOCATION	STATION	OFFSET	SIDE	CODE	SIZE	ITEM 620 REFLECTOR, TYPE D	ITEM 630 GROUND MOUNTED SUPPORT, NO. 3 POST	GROUND MOUNTED SUPPORT, NO. 4 POST	GROUND MOUNTED SUPPORT, S4X7.7 BEAM	GROUND MOUNTED SUPPORT, W8X18 BEAM	GROUND MOUNTED SUPPORT, W10X22 BEAM	ONE WAY SUPPORT, NO. 4 POST	BREAKAWAY BEAM CONNECTION	SIGN ATTACHMENT ASSEMBLY	SIGN, FLAT SHEET	SIGN, FLAT SHEET, AS PER PLAN	SIGN, GROUND MOUNTED EXTRUSHEET	SIGN, OVERHEAD EXTRUSHEET	SIGN BACKING ASSEMBLY	GROUND MOUNTED BEAM SUPPORT FOUNDATION	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL	SIGNING, MISC.: EXTRUSHEET SIGN, INSTALLATION ONLY
				FT			IN	EACH	FT	FT	FT	FT	FT	FT	EACH	EACH	SQ FT	SQ FT	SQ FT	SQ FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
354	S-57	I-74 ML	191+45	52	RT.	GB-168	168x144									1		1.5		168								1	
	S-57A					GEP-72	72x24													12	1							1	
354	S-58	I-74 ML	191+45	66	RT.	GB-180	180x36									1				90								1	
	S-58A					GEP-72	72x24													12	1							1	
354	S-59	I-74 ML	194+65	75	RT.	GF-72	72x60											1.5	30				1						
354	S-60	RAMP FA	7+76	12	RT.	R-41A-36	36x24		13								6						1			1			
354	S-61	RAMP FA	7+77	29	LT.	R-41A-36	36x24		13								6						1			1			
354	S-62	RAMP FA	7+53	36	RT.	D-4-SPEC	150x36											1.5	37.5				1						
	S-63					D-4E-150	150x36												37.5				1						
355	S-64	RAMP FA	10+19	7	RT.	R-1-48	48x48							16			16						1			1			
	S-65					R-43L-36	36x12										3						1						
	S-66					R-43R-36	36x12										3						1						
	S-67					R-41B-48	48x48										16						1						
355	S-68	RAMP FA	10+20	28	RT.	GH-108	108x66						37.5		2			1.5	49.5			2			1		2		
355	S-69	RAMP FA	10+02	37	LT.	R-1-48	48x48							16			16						1			1			
	S-70					R-43R-36	36x12										3						1						
	S-71					R-43L-36	36x12										3						1						
	S-72					R-41B-48	48x48										16						1						
355	S-73	RAMP FB	12+25	43	RT.	M-52A-108	108x30											1.5	22.5				1						
	S-74					M-52A-108	108x30												22.5				1						
355	S-75	RAMP FB	11+77	21	RT.	R-15A-36	36x36							15			9						1			1			
354	S-76	I-74 MIL	191+79	69	LT.	W-49R-48	48x48		13								16						1			2			
353	S-77	I-74 ML	170+38	81	LT.	IM-5-2	36x36		35								9				1		1			2			
	S-78					IM-40-36	36x18										4.5						1						
	S-79					M-1-36-2	36x36										9						1						
	S-80					M-40-36	36x18										4.5						1						
352	S-81	I-74 ML	168+78	70	LT.	N-41-12	12x24		11								2						1			1			
352	S-82	I-74 ML	165+55	0	C.	R-19-24	24x30	1	14								5						1			1			
	S-83					R-123-36	36x36										9						1						
352	S-84	I-74 ML	165+33	77	LT.	R-9-84	84x72											1.5	42						1				
352	S-85	I-74 ML	157+04	95	LT.	GB-217	217x102											1.5	153.7						1				
	S-85A					GEP-72	72x24												12		1		1						
350	S-86	I-74 ML	131+98	69	LT.	GB-217	217x102											1.5	153.7						1				
	S-86A					GEP-72	72x24												12		1		1						
349	S-87	I-74 ML	125+21	0	C.	R-19-24	24x30	1	14								5						1			1			
	S-88					R-123-36	36x36										9						1						
349	S-89	I-74 ML	117+60	90	LT.	GB-246	246x72											1.5	123						1				
	S-89A					GEP-72	72x24												12		1		1						
349	S-90	I-74 ML	116+00	83	LT.	N-41-12	12x24		11								2						1			1			
348	S-91	I-74 ML	104+00	75	LT.	GF-72	72x60											1.5	30				1						
346	S-92	I-74 ML	73+89	74	LT.	N-88-72	72x54										27						1						
345	S-93	I-74 ML	66+39	74	LT.	M-1-36-2	36x36		35								9				1		1			2			
	S-94					M-40-36	36x18										4.5						1						
	S-95					IM-5-2	36x36										9						1						
	S-96					IM-40-36	36x18										4.5						1						
345	S-97	I-74 ML	64+45	0	C.	R-19-21	24x30	1	14								5						1			1			
	S-98					R-123-36	36x36										9						1						
345	S-99	I-74 ML	62+82	68	LT.	N-41-12	12x24		11								2						1			1			
344	S-100	I-74 ML	55+92	78	LT.	R-9-84	84x72											1.5	42						1				
344	S-101	I-74 ML	48+48	27	LT.	X-6L-12																	1			1			
344	S-102	I-74 ML	48+34	31	LT.	X-6R-12																	1			1			
344	S-103	I-74 ML	44+26	76	LT.	GJ-180	180x60											1.5	75						1				
342	S-104	I-74 ML	20+19	0	C.	R-19-24	24x30	1	14								5						1			1			
	S-105					R-123-36	36x36										9						1						
TOTALS CARRIED TO GENERAL SUMMARY								4	198	–	–	–	37.5	47	2	2	340	18	771	312	7	2	43	–	7	20	2	4	–

CALC. BY: SMM
CHKD. BY: MOW

SIGNING SUBSUMMARY

HAM-74-0.00

F:\Ham-74-0.00\Traffic\Summaries\Signing_Sum_Rev.dwg, 08/20/2003 12:49:00 PM



LOCATION MAP

LATITUDE: 39°15'31"N LONGITUDE: 84°47'50"W

SCALE IN MILES

0 1 2 3 4

N

Portion to be improved
Interstate Highway
State & Federal Routes
Other Roads

DESIGN DESIGNATION

See Sheet 2

DESIGN EXCEPTIONS

Design Feature	Approval Dates	Sheet Numbers
None Required		

EARTH DISTURBED AREAS

Project Earth Disturbed Area	45 Acres
Estimated Contractor Earth Disturbed Area	4 Acres
NOI Earth Disturbed Area	49 Acres

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

25862 020

Plans Prepared By URS
36 East Seventh St.
Suite 2300
Cincinnati, OH 45202

PROJECT ____
DATE OF LETTING ____, 19__
CONTRACT NO. ____

HAM-IR 74-0.00
040581 PID-21801
DIST 8 11/17/2004

19 AUG 2003

0T001020.DWG

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

HAM-74-0.00

CITY OF HARRISON
HARRISON TOWNSHIP
(HARRISON TOWNSHIP, INDIANA)
HAMILTON COUNTY
(DEARBORN COUNTY, INDIANA)

INDEX OF SHEETS

STANDARD CONSTRUCTION DRAWINGS (SEE GENERAL NOTES)

										SUPPLEMENTAL SPECIFICATIONS	
BP-2.1	7-28-00	RM-1.1	4-18-03	HL-10.11	4-19-02	MT-35.10	4-20-01	TC-07.65	7-18-03	SS802	7-19-02
BP-2.2	7-28-00	RM-4.2	4-18-03	HL-10.12	4-19-02	MT-95.30	4-19-02	TC-21.10	1-19-01	SS832	4-17-04
BP-2.3	7-28-00	RM-4.3	4-18-03	HL-10.13	1-17-03	MT-95.40	7-18-03	TC-21.20	1-19-01	SS833	2-12-03
BP-2.5	7-28-00	RM-4.4	4-18-03	HL-20.11	4-19-02	MT-96.11	4-19-02	TC-22.10	1-19-01	SS841	4-19-02
BP-3.1	7-28-00	RM-4.5	4-18-03	HL-30.11	4-19-02	MT-96.21	4-19-02	TC-22.20	1-19-01	SS843	4-18-03
BP-5.1	7-28-00	RM-4.6	4-18-03	HL-30.21	4-19-02	MT-96.25	4-20-01	TC-41.10	1-19-01	SS846	4-19-02
BP-6.1	7-28-00	RM-5.1	4-18-03	HL-30.22	4-19-02	MT-97.10	4-19-02	TC-41.20	1-19-01	SS848	2-8-02
BP-8.1	7-28-00			HL-40.10	4-19-02	MT-98.12	4-19-02	TC-41.41	1-19-01	SS864	7-11-00
BP-9.1	7-28-00	CB-1.1	7-19-02	HL-50.11	07-20-01	MT-98.13	4-19-02	TC-41.50	7-18-03	SS880	10-18-02
		CB-3.1	7-19-02	HL-60.11	07-20-01	MT-98.14	4-19-02	TC-42.10	1-19-01	SS898	7-18-03
F-2.1	7-28-00	HW-2.1	7-19-02	HL-60.12	07-20-01	MT-98.15	4-19-02	TC-42.20	4-20-01	SS954	9-9-97
F-3.1	7-28-00			HL-60.31	07-20-01	MT-98.16	4-19-02	TC-51.11	4-20-01	SS1003	4-19-02
		DM-1.1	7-18-03			MT-98.17	10-18-02	TC-51.12	4-20-01	SS1008	4-19-02
GR-1.1	4-18-03	DM-1.2	7-19-02			MT-98.18	10-18-02	TC-52.10	4-20-01	SS1058	4-13-99
GR-2.1	4-18-03	DM-1.4	7-19-02			MT-99.20M	1-30-95	TC-52.20	4-20-01	SS1059	4-18-03
GR-3.1	4-18-03	DM-4.1	7-19-02			MT-99.60	10-18-02	TC-61.10	1-19-01	SS1063	4-19-02
GR-3.2	4-18-03	DM-4.2	7-19-02			MT-101.60	10-18-02	TC-65.10	10-19-01	SS1064	4-19-02
GR-3.5	4-18-03	DM-4.3	7-19-02			MT-101.70	10-18-02	TC-65.11	10-19-01		
GR-4.1	4-18-03	DM-4.4	7-19-02			MT-102.20	10-18-02	TC-65.12	10-19-01		
GR-4.2	4-18-03					MT-105.10	10-18-02	TC-71.10	4-19-02	SPECIAL PROVISIONS	
GR-5.1	4-18-03	AS-1-81	7-19-02			MT-105.11	10-18-02	TC-72.20	1-19-01		
GR-5.2	4-18-03	BS-1-93	7-19-02					TC-73.10	1-19-01		
GR-5.3	4-18-03	EXJ-4-87	7-19-02							NWP #3&13	
GR-6.1	4-18-03	GSD-1-96	7-19-02							11-12-03	
GR-6.2	4-18-03	ICD-1-82	7-19-02								
		PCB-91	7-19-02								
		SBR-1-99	7-19-02								
		VPF-1-90	7-19-02								

PROJECT DESCRIPTION

This project will provide 3.48 miles of pavement rehabilitation, interchange lighting upgrade, widening of median shoulders, and upgrading roadway items. Incidental construction includes drainage, lighting, maintenance of traffic, traffic control and replacement of structure over New Biddinger Road, and structure work.

LIMITED ACCESS

This improvement is especially designed for through traffic and has been declared a limited access highway or freeway by action of the Director in accordance with the provisions of Section 5511.02 of the Ohio Revised Code.

2002 SPECIFICATIONS

The Standard Specifications of the State of Ohio, Department of Transportation, including changes and Supplemental Specifications listed in the proposal shall govern this improvement.

I hereby approve these plans and declare that the making of this improvement will not require the closing to traffic of the highway and that provisions for maintenance and safety of traffic will be as set fourth on the plans and estimates.

Under authority of Section 4511.21, Division (I) of the Ohio Revised Code, the revised prima facie speed limits as indicated herein are determined to be reasonable and safe, and are hereby established for the duration of this project. The prima facie speed limit or limits hereby established shall become effective when appropriate signs giving notice thereof are erected.

Project Earth Disturbed Area	45 Acres
Estimated Contractor Earth Disturbed Area	4 Acres
NOI Earth Disturbed Area	49 Acres

ENGINEERS SEAL:	ENGINEERS SEAL:
SHEETS: 1-338 & 376-388	SHEETS: 389-413
STATE OF OHIO STEPHEN C. CURLESS 43785 REGISTERED PROFESSIONAL ENGINEER	STATE OF OHIO MICHAEL JOHN ZWICK 59572 REGISTERED PROFESSIONAL ENGINEER
SIGNED: Stephen C Curless	SIGNED: Michael J Zwick
DATE: 8/29/03	DATE: 08/29/03
ENGINEERS SEAL:	ENGINEERS SEAL:
SHEETS: 339-374	SHEETS: 414-421
STATE OF OHIO MARION ODELL WORLEY, JR. E-37915 REGISTERED PROFESSIONAL ENGINEER	STATE OF OHIO JAMES E. PREVOST E-64055 REGISTERED PROFESSIONAL ENGINEER
SIGNED: Marion O. Worley Jr.	SIGNED: James E. Prevost
DATE: 08/21/03	DATE: 08/21/03

Approved ____
Date Dec 4th 2003 District Deputy Director

Approved Gordon Proctor Jr.
Date 5-12-04 Director, Department of Transportation

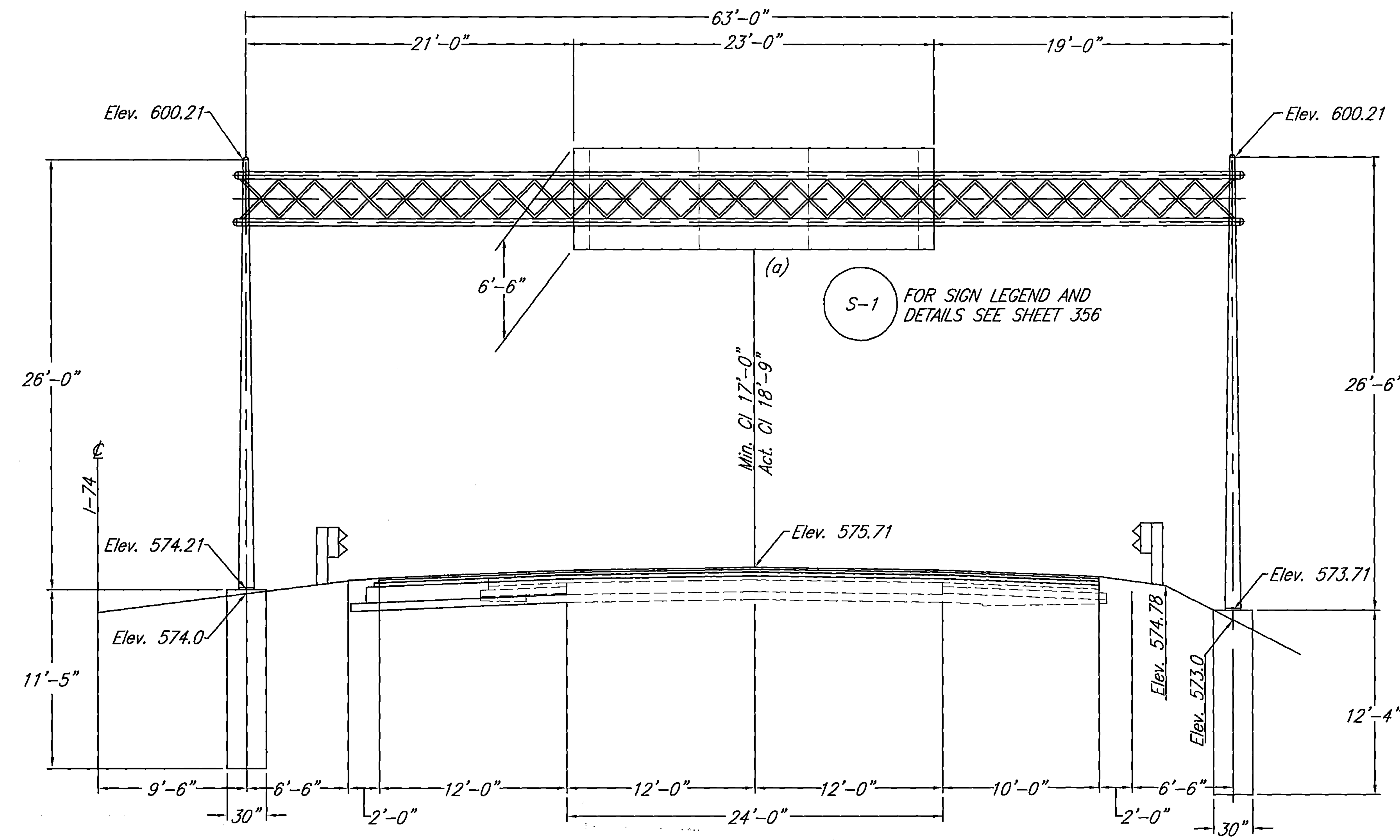
FEDERAL PROJECT NO. E036 (291)

PID NO. 21801

CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT NONE

HAM-74-0.00



STA. 11+00 EASTBOUND (I-74).

(6.5' x 23') = 149.5 S.F Sign Area
(2 lanes x 120 S.F./lane) = 240 S.F Sign Area Used for Design
TC-7.65, Design #6, 3' Box
(a) Bracket Spacing 1'-0", 3 at 7'-0", 1'-0"
Number of Brackets 4, Height 6'-6"

NOTE:
Ground Elevations at Foundations From Cross Sections

SIGNING SUBSUMMARY

SHEET NUMBER	STATION OR LOCATION	SIDE	CODE OR DESCRIPTION	GROUND ROD	OVERHEAD SIGN SUPPORT TYPE TC-7.65, DESIGN 6	OVERHEAD SIGN SUPPORT TYPE TC-7.65, DESIGN 8	REMOVAL OF OVERHEAD SIGN SUPPORT AND STORAGE, TYPE TC-7.65	RIGID OVERHEAD SIGN SUPPORT FOUNDATIONS	REMOVAL OF LUMINAIRE AND DISPOSAL, AS PER PLAN	REMARKS
			ITEM	625	630	630	630	630	631	
			UNIT	EACH	EACH	EACH	EACH	EACH	EACH	
376	11+00	RT		2	1		1	2		
377	191+45	RT		2		1	1	2	5	
TOTALS TO TRAFFIC CONTROL GENERAL SUMMARY				4	1	1	2	4	5	

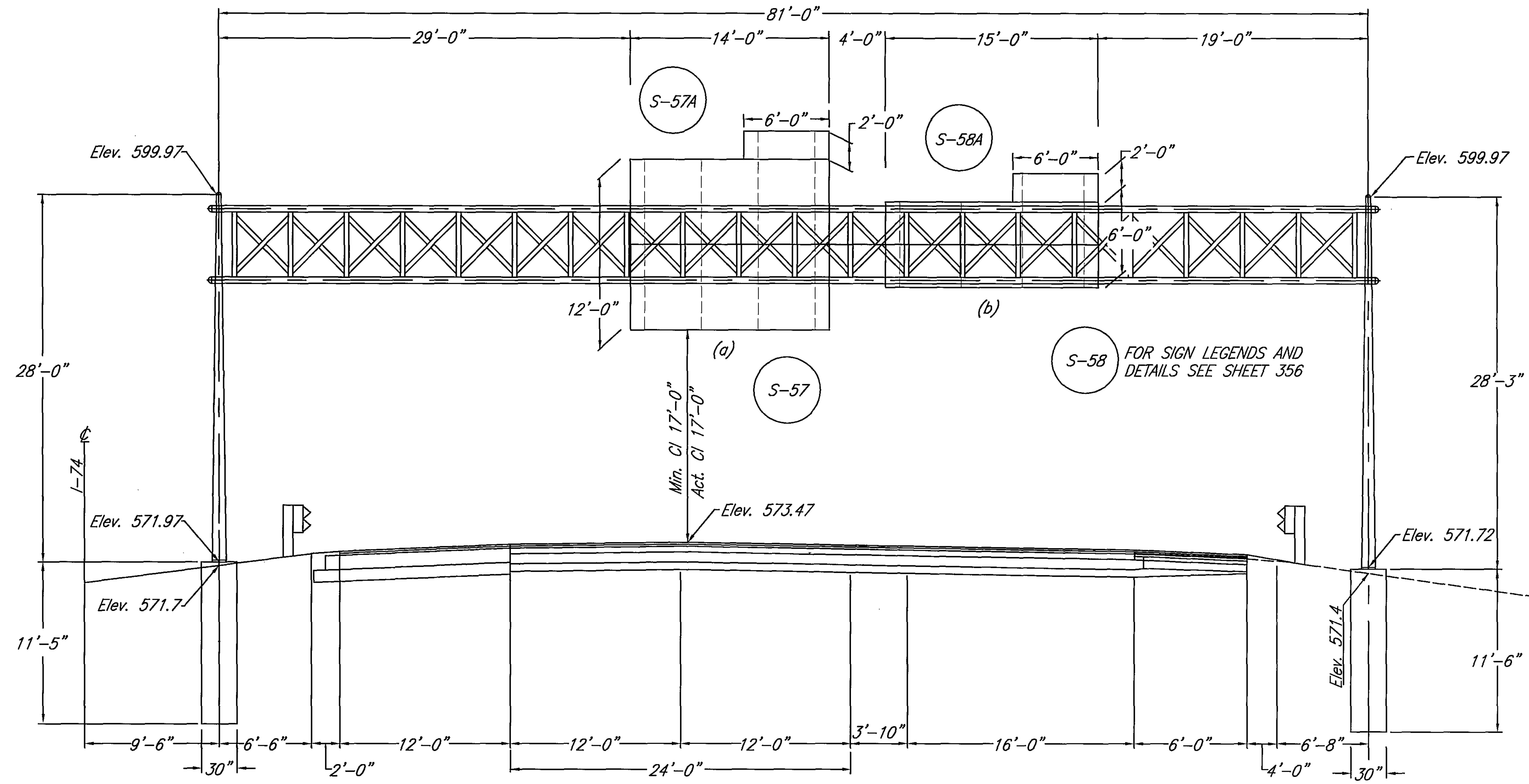
0 2.5 5 10
HORIZONTAL SCALE IN FEET

CALCULATED DAS
CHECKED JNR

OVERHEAD SIGN SUPPORTS
STA. 11+00 EASTBOUND, I-74

HAM-74-0.00

TD100020.DWG 18 AUG 2003



STA. 191+45 EASTBOUND (I-74).

(12' x 14') + (6' x 2') + (15' x 6') + (6' x 2') = 282 S.F Sign Area
TC-7.65, Design #8, 5' Box
(a) Bracket Spacing 1'-0", 3 @ 4'-0"
Number of Brackets 4, Height 2 at 12'-0", 2 at 14'-0"
(b) Bracket Spacing 1'-0", 3 at 4'-4"
Number of Brackets 4, Height 2 at 6'-0", 2 at 8'-0"

NOTE:
Ground Elevations at Foundations From Cross Sections

HORIZONTAL SCALE IN FEET

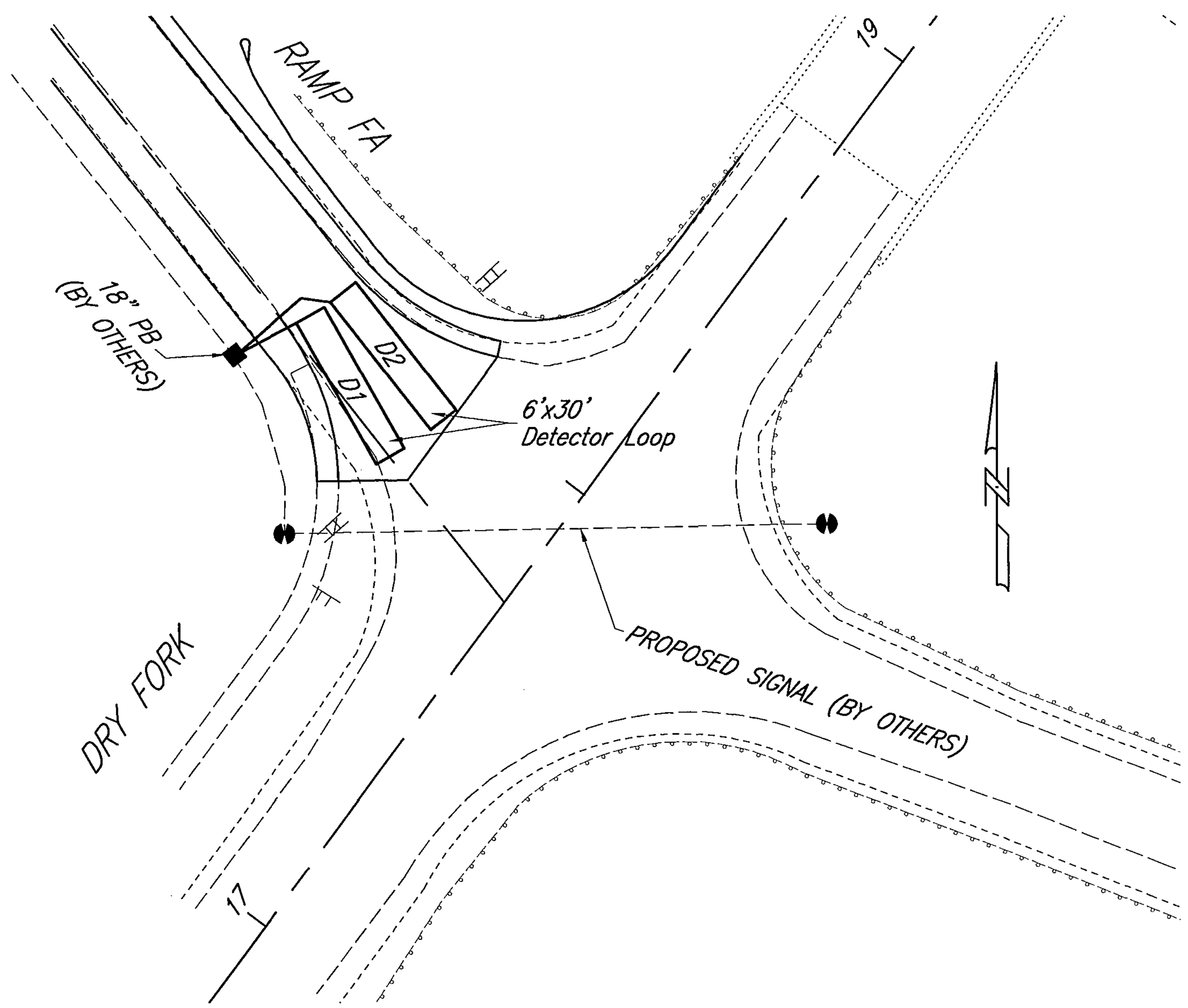
CALCULATED DAS

CHECKED JNR

OVERHEAD SIGN SUPPORTS
STA. 191+45 EASTBOUND, I-74

HAM-74-0.00

TD101020.DWG 18 AUG 2003



EXISTING DETAIL

MATERIAL SUB-SUMMARY				
ITEM	EXTENSION	DESCRIPTION	UNIT	QTY
632	26500	DETECTOR LOOP	EACH	2

TOTAL CARRIED TO GENERAL SUMMARY

NOTE:

Detector loops D1 and D2 are 3 turn, presence detectors.

Detector loops shown are replacements for detectors installed under a separate contract. Existing loops to be replaced. Detector loops shall be connected to existing pull boxes.

CALCULATED DAS CHECKED JNR

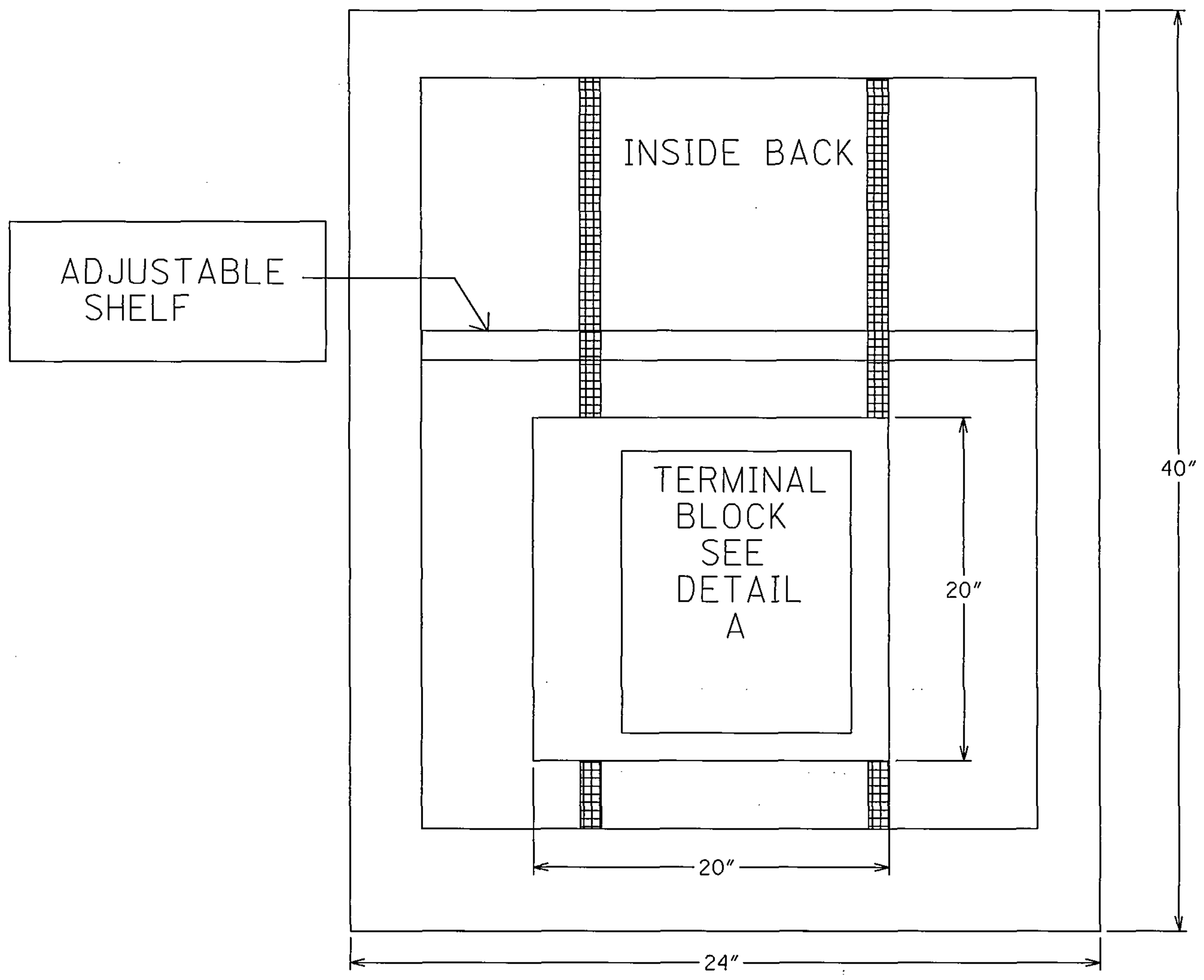
SIGNAL DETAILS

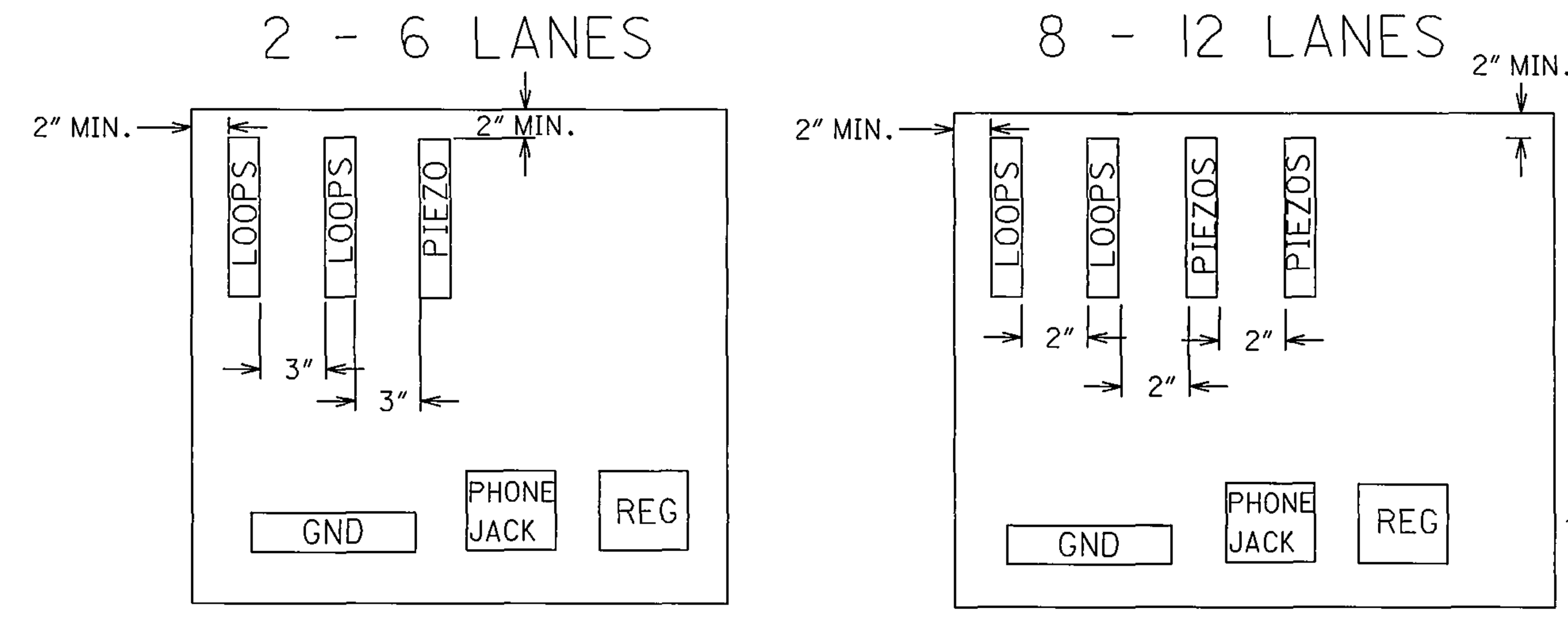
HAM-74-0.00

DF350020.DWG 18 AUG 2003

DETAIL A
DIFFERENT TERMINAL BLOCKS FOR CLASSIFICATION INSTALLATIONS

CABINET FRONT VIEW





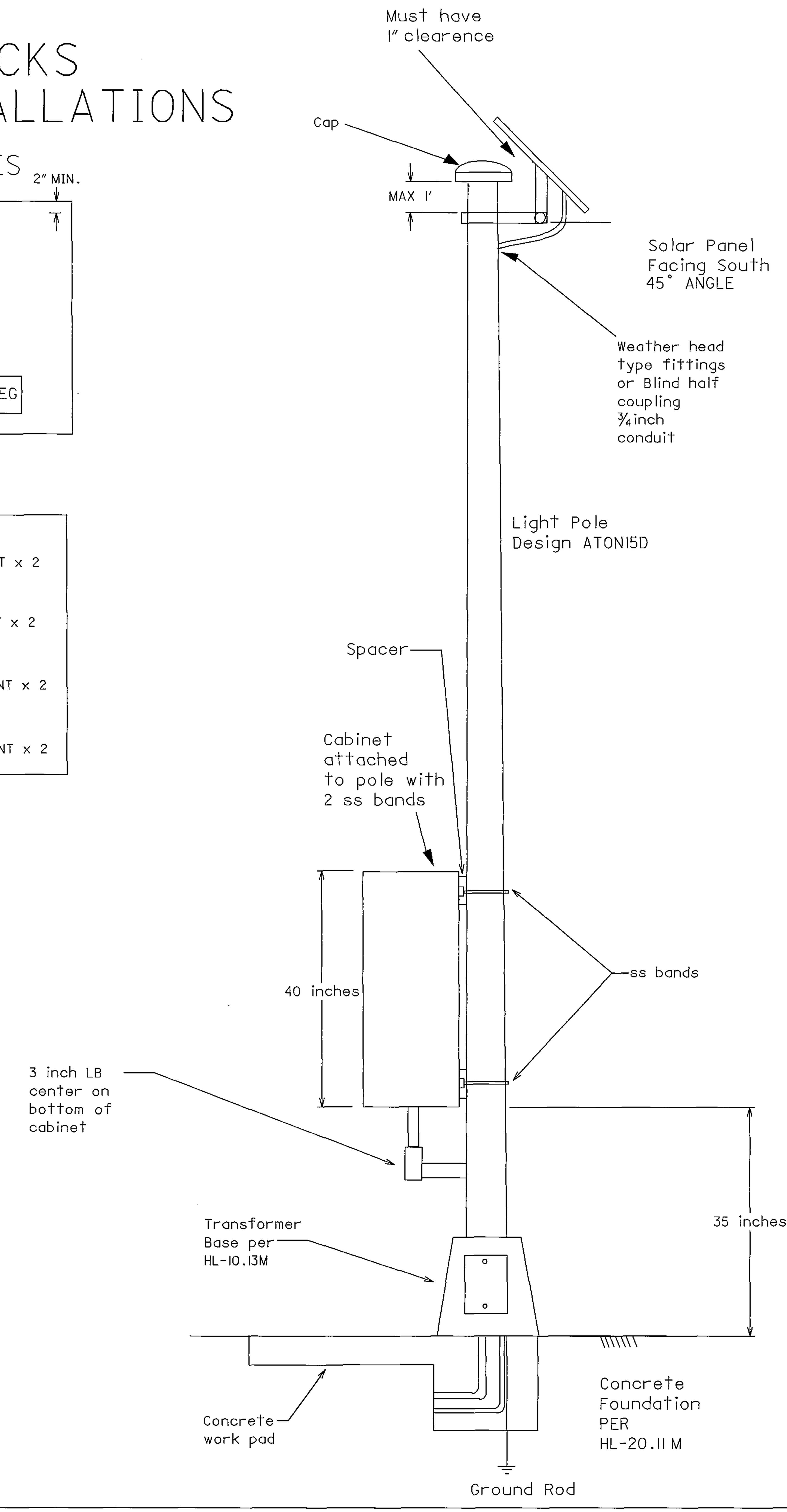
TERMINAL BLOCK DETAILS

2 LNS - 4 LOOPS - BEAU TYPE 78008 TERMINAL STRIP OR EQIVALENT
2 LNS - 4 LOOPS & 4 PIEZOS - BEAU TYPE 78008 TERMINAL STRIP OR EQIVALENT x 2

4 LNS - 8 LOOPS - BEAU TYPE 78016 TERMINAL STRIP OR EQIVALENT
4 LNS - 8 LOOPS & 8 PIEZOS - BEAU TYPE 78016 TERMINAL STRIP OR EQIVALENT x 2

6 LNS - 12 LOOPS - BEAU TYPE 78024 TERMINAL STRIP OR EQIVALENT
6 LNS - 12 LOOPS & 12 PIEZOS - BEAU TYPE 78024 TERMINAL STRIP OR EQIVALENT x 2

8 LNS - 16 LOOPS - BEAU TYPE 78024 TERMINAL STRIP OR EQIVALENT x 2
8 LNS - 16 LOOPS & 16 PIEZOS - BEAU TYPE 78024 TERMINAL STRIP OR EQIVALENT x 2



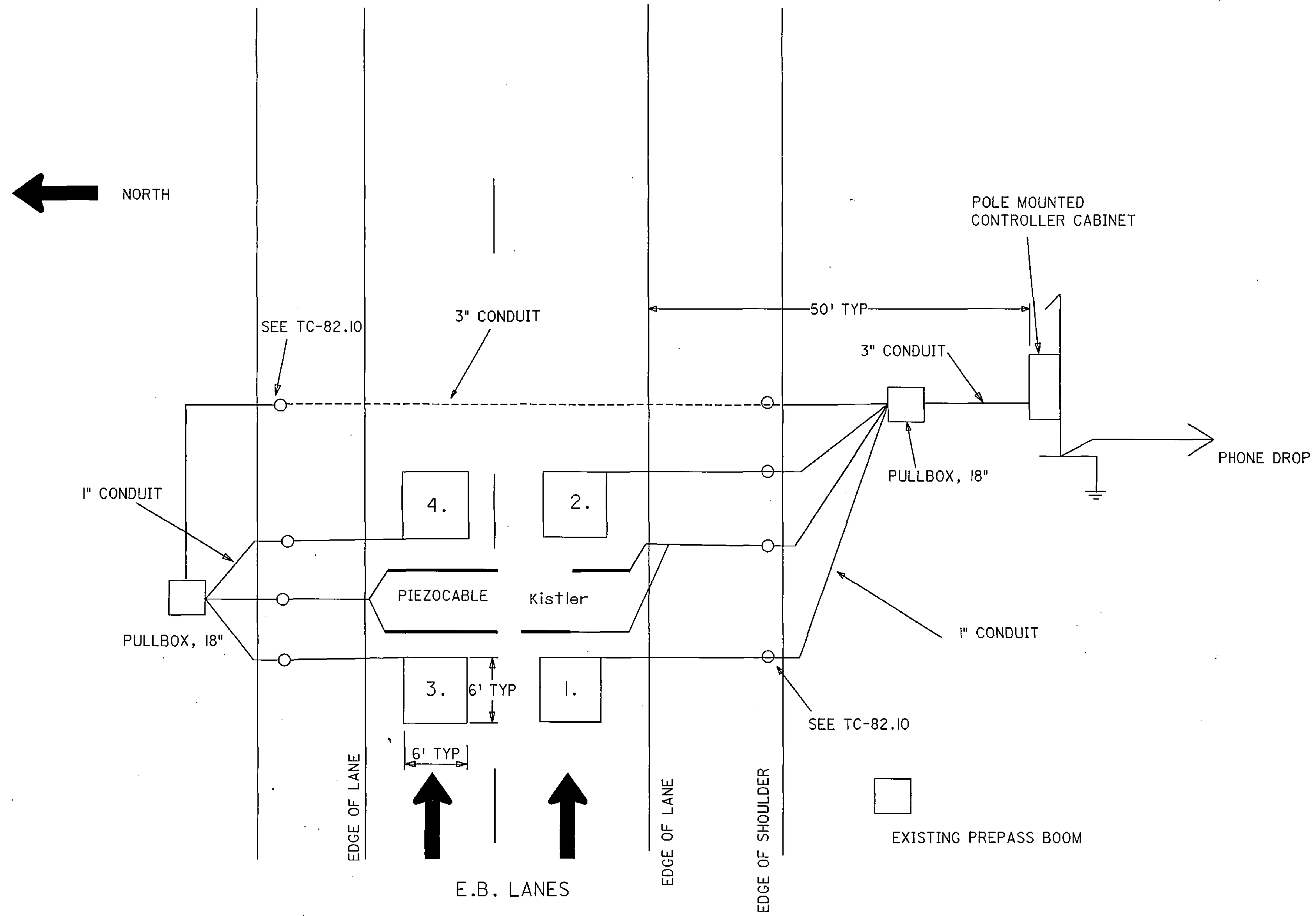
NOTES

1. THE ALUMINUM CABINET SHALL BE A SIZE 3 AS SHOWN IN TABLE 7.3-1 OF THE NEMA STANDARD PUBLICATION No TS 2-1992. THE NOMINAL DIMENSIONS ARE: 24 INCHES WIDE BY 40 INCHES HIGH BY 15 INCHES DEEP. IT SHALL BE SHEET ALUMINUM AS DETAILED IN SECTION 7.2.2.1 OR CAST ALUMINUM DETAILED IN SECTION 7.2.2.2. IT SHALL ALSO CONFORM TO SECTIONS: 7.4, 7.5 EXCEPT FOR 7.5.7, 7.6 WITH ONE SHELF, 7.7.3, 7.8.3 SIZE 5, 7.8.4.
   - A. IT SHALL BE EQUIPPED WITH TWO ADJUSTABLE "C" CHANNELS MOUNTED ON EACH OF THE THREE INTERIOR SIDES FOR THE PURPOSE OF MOUNTING TERMINAL STRIP PANELS AND SHELVING. FURNISH THE CABINETS WITH ONE ADJUSTABLE SHELF WHICH WILL NOT SAG WHEN LOADED WITH THE WIM ELECTRONICS. DESIGN THE SHELVING TO ALLOW FOR THE PASSAGE OF AIR. PLACE NO EQUIPMENT ON THE BOTTOM OF THE CABINET.
   - B. MOUNT A GROUNDING STRIP TO THE TERMINAL STRIP PANEL ON THE CABINET WALL FOR CONNECTION OF ALL COMMON CONDUCTORS WITH THE STRIP GROUNDING TO THE GROUND ROD.
   - C. INSTALL THE HOUSING CABINET AS TO ALLOW ALL EQUIPMENT TO STAND IN AN UPRIGHT POSITION WITH ALL EQUIPMENT AND DEVICES CAPABLE OF BEING REMOVED BY PULLING STRAIGHT OUT AND NOT TURNING SIDEWAYS AND WITHOUT RELOCATING OR DISCONNECTING ONE DEVICE TO REMOVE ANOTHER DEVICE.
   - D. THE CONTRACTOR SHALL COMPLETELY WIRE UP ALL CONNECTIONS TO THE TERMINAL BLOCKS OF THE BACK PANNEL USING SOLDERED SPADE TYPE CONNECTORS. PROVIDE THAT ALL HOUSING CABINET WIRING AND TERMINALS ARE CLEARLY MARKED AND LABELED AS SHOWN ON DETAIL A. PROVIDE THAT WIRING IS LACED OR BOUND TOGETHER WITH SELF-LOCKING NYLON TIE-WRAPS. MAKE A LOOP NUMBERING DIAGRAM WITH CORRESPONDING TERMINAL NUMBERS FOR EACH SITE AND STORE IN A PLASTIC WEATHER PROOF ENVELOP IN THE ENCLOSURE. PROVIDE A DUPLICATE DIAGRAM TO THE ODOT PROJECT INSPECTOR.
   - E. INSTALL ALL HOUSING CABINETS SO AS TO WITHSTAND ALL WEATHER CONDITIONS AND PREVENT THE INTRUSION OF REPTILES, RODENTS, AND INSECTS.
   - F. THE CABINET SHALL INCLUDE A VENT, BUT NO FAN.
   - G. MOUNTING FACILITIES SHALL INCLUDE ONE SURGE PROTECTED BACK PANEL.
   - H. TERMINAL STRIPS MOUNTED VERTICALLY ON BACK PANEL 2" FROM TOP AND SIDES EQUIDISTANTLY SPACED FOR 2 LANE APPLICATIONS. SOLAR PANEL AND GROUND BAR TO BE MOUNTED 2" FROM BOTTOM AND LEFT OF BACK PANEL FOR ALL APPLICATIONS. 4-6 LANE APPLICATIONS TO HAVE ONE ROW OF TWO TERMINAL STRIPS MOUNTED HORIZONTALLY 2" FROM TOP AND SIDES OF BACK PLATE AND ONE ROW OF TWO TERMINAL STRIPS MOUNTED 8" FROM TOP 2" FROM AND SIDES BACK PLATE EQUIDISTANTLY SPACED. 8 LANE APPLICATIONS TO HAVE TWO ROWS OF THREE TERMINAL BLOCKS W/ 1ST ROW 2" FROM TOP AND SIDES OF BACK PLATE AND SECOND ROW 8" FROM TOP AND 2" FROM SIDES OF BACK PLATE EQUIDISTANTLY SPACED.
   - I. LOCKS KEYED TO STATE MASTER #2.
2. THE CABINET SHALL BE ORIENTED SO THAT THE DOOR OPENS AWAY FROM THE ROADWAY, SO THAT THE FIELD TECHNICIAN CAN OBSERVE TRAFFIC WHILE WORKING ON THE SYSTEM.
3. ANY MODIFICATIONS TO POLE (HOLES DRILLED OR FITTINGS WELDED AFER FACTORY GALVANIZING) NEED TO BE COLD GALVANIZED OR ZINC COATED TO PREVENT CORROSION
4. APPLY ANTI-SEIZE TO ALL THREADED FASTENERS ASSOCIATED WITH THE POLE OR CABINET IF THEY ARE NOT STAINLESS STEEL
5. FOR WIM INSTALLATIONS REPLACE TERMINAL BLOCK WITH ONE WIM BACKPANEL MANUFACTURED BY PEEK TRAFFIC INC., PART NUMBER 82-1344, MODEL NUMBER LP 16L/16P.

CALCULATED | CHECKED

DATE 11/26/02

POLE AND CABINET DETAILS



AUTOMATIC TRAFFIC RECORDER INSTALLATION
4 LANE WIM SECTION
I-74 Hamilton Cnty Log 2.10

* WITHOUT CONTROLLER,
** SIGNALIZATION, MISC.:

ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION
603	00400	40	FT.	4" CONDUIT, TYPE E
625	25100	40	FT.	CONDUIT, 1", 725.04
625	02890	1	EACH	LIGHT POLE, DESIGN ATON15
625	25500	80	FT.	CONDUIT, 3", 725.04
625	25900	50	FT.	CONDUIT, JACKED OR DRILLED UNDER PAVEMENT, 3"
625	29000	60	FT.	TRENCH
625	30700	2	EACH	PULL BOX, 725.08, 18"
625	32000	1	EACH	GROUND ROD
632	26501	4	EACH	DETECTOR LOOP, AS PER PLAN
633	68500	1	EACH	TELEPHONE SERVICES
632	64020	1	EACH	PEDESTAL FOUNDATION
632	89800	1	EACH	PEDESTAL, 3' TRANSFORMER BASE
632	65200	160	FT.	LOOP DETECTOR LEAD-IN CABLE
632	90400	2	EACH	SIGNALIZATION, MISC. : PIEZOCABLE AXLE SENSOR CLASS I (11' IN LENGTH TYPICAL)
633	67200	1	EACH	CONTROLLER WORK PAD
633	65001	1	EACH	CABINET * NEMA 5 WITH SURGE PANEL, AS PER PLAN
633	99000	1	EACH	CONTROLLER ITEM, MISC. : SOLAR PANEL
633	85000	1	EACH	WIM BACK PANEL, PART No. 82-1344, MODEL No. LP-16L/16P
632	90400	2	EACH	** KISTLER SENSORS 3/ 4 METER
632	90400	2	EACH	** KISTLER SENSORS 1 METER

NOTES

1. CONTRACTOR SHALL CONTACT THE OFFICE OF TECH. SERVICES AT 614-466-3727 FIVE (5) WORKING DAYS PRIOR TO THE SCHEDULED SITE INSTALLATION.
2. ALL SENSORS ARE TO BE TESTED BY TECHNICAL SERVICES PERSONNEL AFTER THE INSTALLATION IS COMPLETE TO VERIFY THAT THE STATION IS OPERATING PROPERLY. IF THE ELECTRONIC EQUIPMENT DOES NOT PERFORM PROPERLY BECAUSE OF AN IMPROPERLY FUNCTIONING SENSOR, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF THE FAULTY SENSOR(S), AS SOON AS POSSIBLE AT THEIR OWN COST.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND TESTING THE PHONE DROP INSIDE OF THE CONTROLLER CABINET. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CHARGES INCURRED PRIOR TO THE TRANSFER OF THE TELEPHONE ACCOUNT. THE CONTRACTOR SHALL COORDINATE WITH ODOT, TELECOMMUNICATIONS, MR. MIKE WIGGINS (614-466-4452) TO TRANSFER THE TELEPHONE ACCOUNT AND THE BILLING RESPONSIBILITY FROM THE CONTRACTOR TO ODOT. PAYMENT WILL BE AT THE CONTRACT UNIT PRICE PER EACH ITEM 633 TELEPHONE SERVICE AND SHALL INCLUDE ALL MATERIAL, LABOR, TOOLS, EQUIPMENT, INCIDENTALS AND PAYMENT OF ALL PHONE COMPANY FEES NECESSARY FOR EACH INSTALLATION, IN PLACE COMPLETE AND ACCEPTED.
4. ALL LOOPS SHALL BE 6' X 6'. LOOPS SHALL BE SPACED 16' FROM LEADING EDGE TO LEADING EDGE. INSTALLATION OF LOOPS SHALL CONFORM TO TC-82.10 EXCEPT THAT LOOPS SHALL BE INSTALLED WITH FOUR (4) TURNS, AND HAVE A MINIMUM EPOXY OR SEALANT COVER OF 3 INCHES FOR ASPHALT OR -3/4 INCH FOR CONCRETE.
5. LOOPS AND PIEZOCABLES SHALL BE CUT IN THE SURFACE ASPHALT COURSE. THEY SHALL NOT BE INSTALLED BETWEEN THE INTERMEDIATE AND SURFACE COURSES, UNLESS APPROVED BY THE PROJECT ENGINEER.
6. LOOP INDUCTANCE READING SHALL BE BETWEEN 70 AND 300 MICROHENRIES. THE LOOP INDUCTANCE BETWEEN TWO LOOPS IN THE SAME LANE SHALL BE WITHIN 20 MICROHENRIES OF EACH OTHER.

NOTES
(continued)

7. THE PIEZOCABLE SENSOR SHALL BE MADE BY MEASUREMENT SPECIALITIES INC. AND BE A ROADTRAX BRASS LINGUINI (BL) CLASS I AXLE SENSOR OR EQUIVALENT. THE SENSOR WITH A LENGTH 1' SHORTER THAN THE ONSITE LANE WIDTH SHALL BE CENTERED IN THE LANE. PAYMENT WILL BE AT THE CONTRACT UNIT PRICE PER EACH ITEM SIGNALIZATION, MISC.: PIEZOCABLE AXLE SENSOR, CLASS I AND SHALL INCLUDE ALL MATERIAL, LABOR, TOOLS, EQUIPMENT AND INCIDENTALS NECESSARY FOR EACH INSTALLATION, IN PLACE COMPLETE AND ACCEPTED.
   PIEZOCABLES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS AND SHALL MEET THE VOLTAGE REQUIREMENTS SHOWN IN THE INSTRUCTIONS. THE VENDER SHALL ENSURE THAT THE COMPLETE CURING OF EPOXY OR SEALANT TAKES PLACE PRIOR TO OPENING THE LANE TO TRAFFIC. USE IRD AS475 ACRYLIC GROUT
   AFTER THE INSTALLATION IS COMPLETE, THE MINIMUM OUTPUT VOLTAGES OF EACH PIEZOCABLE, WITH A 200 FOOT LEAD-IN, SHALL MEET THE FOLLOWING: 1.5 VOLTS (PEAK) FOR A 10,000 POUND AXLE, AND 200 MILLIVOLTS (PEAK) FOR AXLE OF A CAR.
   THE PIEZOCABLE LEAD-IN CABLE IS ORDERED IN DIFFERENT LENGTHS AS PART OF SENSOR AND SHALL NOT BE SPLICED. INCLUDED WITH THIS ITEM SHALL BE PAVEMENT CUTTING OF SLOTS, PLACEMENT OF LEAD-IN WIRE, AND THE APPLICATION OF EPOXY OR SEALANT AS RECOMMENDED BY SENSOR MANUFACTURER. CONDUIT, DRILLING, TRENCHING, BACKFILLING, AND SURFACE RESTORATION FROM THE EDGE OF THE PAVEMENT TO THE PULLBOX SHALL ALSO BE INCLUDED.
8. CABLE AND WIRE SHALL BE IDENTIFIED IN ACCORDANCE WITH 632.04. IDENTIFICATION SHALL INCLUDE THE DIRECTION OF TRAVEL (i.e., NB, EB) AND THE LOOP NUMBER AS SHOWN. NORTH AND EAST ARE THE PREVAILING DIRECTION OF TRAVEL. EACH LOOP AND PIEZO CABLE SHALL HAVE A SEPARATE LEAD-IN CABLE ROUTED TO THE CONTROLLER CABINET TERMINAL BLOCK AND TAGGED. ONE FOOT OF EXTRA CABLE SHALL REMAIN IN THE CABINET AFTER THE CONNECTION, WITH NO OBSTRUCTION TO THE TERMINAL BLOCK CONNECTIONS.
9. THE NEMA ALUMINUM CABINET SHALL BE POLE MOUNTED AS SHOWN ON THE PLAN SHEET. THE PREFERED LOCATION SHALL BE 50' FROM THE CLOSEST LANE. ALLOWANCES SHALL BE MADE FOR A VIEW OF ALL LANES IF POSSIBLE. AS A MINIMUM, THE CABINET SHALL BE AT LEAST 30' AWAY FROM THE CLOSEST LANE. IF PLACED BEHIND A GAURDRAIL, THE CABINET TO GAURDRAIL CLEARANCE MUST BE AT LEAST 5'. THE CABINET SHALL NOT BE PLACED IN A DITCH OR ANY AREA SUBJECT TO FLOODING.
10. THE CABINET WORK PAD SHALL BE 3 FOOT BY 4 FOOT BY 4 INCHES DEEP AND SHALL BE LEVEL. THE WORK PAD SHALL BE POURED SIMULTANEOUSLY WITH THE CABINET FOUNDATION SO THEY WILL FORM ONE UNIT.
11. REFERENCE IS MADE TO STANDARD DRAWING HL-30.11 FOR DETAILS OF DRAINING PULLBOXES. UNDERDRAINS FOR PULLBOXES SHALL BE USED AS DIRECTED BY THE ENGINEER AND SHALL BE PROVIDED WHERE THE LENGTH REQUIRED FOR A SATISFACTORY OUTLET DOES NOT EXCEED APPROXIMATELY 20'.
12. ALL ITEMS SHALL CONFORM TO C&M SPECIFICATIONS 625, 725, 632, 732, 633 AND 733, UNLESS OTHERWISE SPECIFIED.
13. THE SOLAR PANEL SHALL BE INSTALLED ON THE POLE. THE SOLAR PANEL OUTPUT CABLE SHALL BE SECURED AND ROUTED TO THE INSIDE OF THE CABINET FOR CONNECTION TO THE TERMINAL BLOCK. THE SOLAR PANEL SHALL BE MOUNTED AT A 45° ANGLE MIN FACING SOUTH AND UNIMPEDED BY ANY OBSTACLES.
14. THE SOLAR PANEL SHALL BE A MINIMUM OF 50 WATT - 12 VOLT SYSTEM WITH STAINLESS STEEL MOUNTING HARDWARE, APPROPREATE REGULATOR (AXC PREFERRED) AND CABLES. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, TOOLS, EQUIPMENT, AND INCIDENTALS NECESSARY FOR EACH INSTALLATION, IN PLACE COMPLETE AND ACCEPTED.
15. IF APPROPRIATE, THE PULL BOX COVERS IN THE ASPHALT SHOULDER SHALL BE A HEAVY DUTY FRAME AND LID (NEENAH R-6686 OR APPROVED EQUAL). THIS ITEM SHALL INCLUDE ALL COSTS OF LABOR, MATERIALS AND EQUIPMENT NECESSARY TO INSTALL EACH ITEM 625 - PULL BOX, 713.08, 18 & 24 IN. AS PER PLAN

CALCULATED
CHECKED
DATE 1/6/03

4 LANE WIM PLAN INSERT SHEET

JDH

GENERAL NOTES

202, LUMINAIRE REMOVED
This item of work shall consist of removing an existing luminaire. The luminaire shall become property of the Contractor and shall be properly disposed of off of the project site.

Payment will be made at the unit price bid under CMS Item 202, "Luminaire Removed" for each luminaire removed which shall be full compensation for all labor, materials and incidentals required to complete this item in a satisfactory and workmanlike manner.

202, LIGHT POLE REMOVED
This item of work shall consist of removing an existing light pole. The light pole shall become the property of the Contractor and shall be properly disposed of off of the project site.

Payment will be made at the unit price bid under CMS Item 202, "Light Pole Removed" for each pole removed which shall be full compensation for all labor, materials and incidentals required to complete this item in a satisfactory and workmanlike manner.

202, LIGHT POLE FOUNDATION REMOVED
This item of work shall consist of removing an existing light pole foundation to a minimum of 1 foot below finished grade, or removing the foundation completely, backfilling the resultant depression with compacted soil and restoring the disturbed area.

Payment shall be made at the unit price bid under CMS Item 202, "Light Pole Foundation Removed" for each foundation removed which shall be full compensation for all labor, materials and incidentals required to complete this item in a satisfactory and workmanlike manner.

202, PULL BOX REMOVED
This item of work will consist of removing and properly disposing of an existing pull box. The resultant opening shall then be backfilled to grade with suitable compacted soil and restored to match the surrounding area.

Payment will be made at the unit price bid under CMS Item 202, "Pull Box Removed" for each pull box removed which shall be full compensation for all labor, materials and incidentals required to complete this item in a satisfactory and workmanlike manner.

202, DISCONNECT EXISTING CIRCUIT, AS PER PLAN
This item of work shall consist of the disconnection of an existing light circuit at a pull box.

Disconnection at a pull box shall involve cutting the existing circuit and removing all splice kits. Any cable that is to be abandoned shall be terminated from the pull box so that no cable is left in the box. The line portion of cable to be reconnected shall remain undamaged. Those wires that are to remain on active circuits shall have a water-resistant seal at the cut end. The water-resistant seal shall be accomplished by plugging the deactivated port of an existing connector kit or by installing a cable splice kit on the cut end of the cable.

Payment shall be made at the unit bid price under CMS Item 202, "Disconnect Existing Circuit, As Per Plan" at each location where disconnection is required which shall be full compensation for all labor, materials and incidentals required to complete this item in a satisfactory and workmanlike manner.

625, LUMINAIRE, CONVENTIONAL, AS PER PLAN
In addition to the requirements of the ODOT's Construction and Material Specifications, luminaires for conventional lighting units shall be as follows:

Luminaires for conventional lighting units with an IES II-M-SC distribution and 200 Watt high pressure sodium lamps shall be American Electric "Series 126" with photometric distribution AE38491, Cooper "OVD" with photometric distribution OVD2S2F, General Electric "M-400" with photometric distribution 1014, or equal as approved by the Engineer.

Payment will be made at the unit bid price for each CMS Item 625, "Luminaire, Conventional, Style B, Type II, 200 Watt, HPS, As Per Plan" for each luminaire which shall be full compensation for all labor, materials and incidentals required to complete this item in a satisfactory and workmanlike manner.

LAMPS
High pressure sodium lamps shall be General Electric "Lucalox," Osram Sylvania "Lumalux," Philips "Ceramalux," or equal approved by the Engineer.

UNDERDRAINS FOR PULL BOXES

Reference is made to the standard drawings for details of draining pull boxes. Underdrains for pull boxes shall be used as directed by the Engineer and shall be provided where the length required for a satisfactory outlet does not exceed approximately 20 feet. An animal guard shall be included at the outlet end of the drain. An estimated quantity of CMS Item 603, "4" Conduit, Type E" is included at each pull box for this purpose.

625, POWER SERVICE, AS PER PLAN
In addition to the requirements of the Specifications, the following is added.

The power supplying agency for the Highway Lighting portion of this project is:
Ohio Department of Transportation
505 South State Route 741
Lebanon, OH 45036
Phone # 513-933-6692

The Contractor shall install a new wood pole at the location shown in the plans, and shall mount onto that pole a fused disconnect, a 480 volt dry transformer, photocell, and a new lighting control center. All new lighting circuits shall be connected to the new control center. The new control center shall be connected to the existing control center line that is located inside the Weigh Station Building on the lower level, using (1) new 20A-2P circuit breaker and 240 volt, single phase circuit between the existing control center cabinet and the new transformer. The equipment inside the existing control center cabinet shall be abandoned in place, except that the Contractor shall disconnect the existing lighting circuits from the existing control center and shall remove all unused cables from any existing conduit to be reused.

The Contractor shall be responsible for any charges made by the power company for work by the company in conjunction with the establishment of the required service.

Electrical energy from existing power services shall continue to be charged to the maintaining agency. The Contractor shall pay electrical energy charges for new power services established by this project. After acceptance of the lighting, the power service electrical energy account shall be transferred to the maintaining agency noted in the plans.

This shall include new power service established by this project as well as reassignment of existing service due to work performed by this project.

Payment will be made at the unit bid price for each CMS Item 625, "Power Service, As Per Plan" which shall be full compensation for all labor, materials and incidentals required to complete this item in a satisfactory and workmanlike manner.

625, HIGH VOLTAGE TEST
A lump sum for performing the high voltage test required by CMS 625.19.E has been included in the general summary.

PADLOCKS AND KEYS
Padlocks furnished shall be either brass or bronze, equal to Master No. 4BKA or Wilson Bohannan 660A, and shall be keyed in accordance with CMS 631.06. Payment shall be included in the bid for the item(s) being locked.

SPECIAL, MAINTAIN EXISTING LIGHTING
Existing roadways which are to remain open to traffic during construction of this project and which are lighted shall have the lighting maintained as described herein.

Before any work is started in the immediate vicinity of the existing lighting circuits, representatives of ODOT, the Maintaining Agency and the Contractor shall make a visual inspection of the existing roadway lighting circuits to be maintained. During this inspection, a written record of the condition of existing lighting shall be made by ODOT's representative. This written report shall note individual luminaires which are not in working order, individual poles which are standing, and individual circuits which are not in working order. The completed report shall be signed by the representatives of ODOT, the Maintaining Agency and the Contractor.

If, as a result of this inspection, it is determined that the condition of the existing system is below that required for the safety of the traveling public, then the Maintaining Agency shall make the repairs necessary to return the system to an acceptable condition. Following these repairs, the system shall again be inspected and a report shall be made and signed as outlined herein.

When the existing system is in an acceptable condition, it shall be turned over to the Contractor who shall then be required to maintain the existing lighting to the condition outlined in this report with the exception of knockdowns due to traffic accidents.

Replacement of knocked downed units shall be done only when the Engineer has determined that the replacement of the knocked down unit is necessary and shall be paid separately on a unit basis.

Betterments shall be covered in items of work pertaining to the construction of permanent improvement.

When the sequence of construction activities requires, or should the Contractor desire, the removal of the existing lighting before the new lighting is operational, the Contractor shall be responsible for providing temporary lighting of this portion of the roadway.

Prior to installing such lighting, the Contractor shall prepare and submit four sets of the temporary lighting plan to the Engineer for review and approval.

This plan shall show locations of poles, lengths of bracket arms, styles of luminaires, mounting heights, wiring methods and other pertinent information. The temporary lighting shall provide an average initial intensity of 1.2 footcandles with an average to minimum uniformity not to exceed 3:1. Mounting height of temporary luminaires shall not be less than 30 feet, and the minimum overhead conductor clearance shall be 20 feet. Temporary overhead construction shall not be less than Grade "A" for strength requirements as defined by the National Electric Safety Code. Wood poles with overhead wiring may be used. However, temporary lighting shall meet Federal and State safety criteria. If breakaway poles are used to meet these criteria, then underground wiring shall be used. Reconditioned or used materials may be furnished for temporary lighting.

All materials necessary to complete the temporary lighting shall be furnished and installed by the Contractor. When no longer needed, the temporary lighting installation shall be removed and properly disposed of by the Contractor.

The Maintaining Agency will pay for electrical energy consumed by existing power services and by proposed permanent power services after acceptance of the lighting work. The Contractor will pay for electrical energy, installation, removal and maintenance of any temporary power services.

The lump sum price bid for Item Special "Maintain Existing Lighting" shall include payment for all labor, equipment, materials and incidentals necessary to maintain the existing lighting as specified herein.

The unit price bid for Item Special "Replacement of Existing Lighting Unit" shall be full payment for the replacement of an existing lighting unit which has been knocked down after the aforementioned inspection and shall include all labor, equipment, materials and incidentals necessary to provide a replacement for such unit.

ITEM SPECIAL - PLASTIC CAUTION TAPE
All locations of underground duct cable or non-metallic conduit shall be marked by the use of a continuous identifying tape buried in the trench above the line. If the Contractor elects to install duct-cable by plowing in lieu of trenching, the cable shall also be marked by continuous identifying tape.

The identifying tape shall be an inert material, approximately 6" wide, composed of polyethylene plastic, highly resistant to alkalis, acid or other chemical components likely to be encountered in soils. The tape shall be bright red with identifying printing "ELECTRIC" in black letters, one side only. Tapes shall be supplied in continuous rolls with the identifying lettering repeated continuously the full length of the tape. Tape shall be Allen System's, Terra Tape, TECTA Tape, or equal as approved by the Engineer.

Identifying tapes shall be buried in the electric line trench with one strip placed approximately along the centerline and shall be located essentially parallel with the finished surface approximately 8" to 12" below the final finished grade. The tape shall be placed with the printed side up. The Contractor shall take necessary precautions to insure that the tape is not pulled, distorted, or otherwise misplaced in completing the trench backfill.

Payment shall be made at the unit price bid per foot of Item Special "Plastic Caution Tape," which shall be full compensation for all labor, materials and incidentals required to complete this item in a satisfactory and workmanlike manner.

ITEM SPECIAL - BOLLARD
At locations shown in the plans, the Contractor shall furnish and install Permanent Steel Bollards in accordance with SCD RM-5.1M except spacing between bollards shall be as detailed.

Payment shall be made at the unit price bid per each of Item Special "Bollard," which shall be full compensation for all labor, materials and incidentals required to complete this item in a satisfactory and workmanlike manner.

CALCULATED ENM
CHECKED SCC

HIGHWAY LIGHTING
GENERAL NOTES

HAM-74-0.00

LN001020.DWG 18 AUG 2003

CALC'D SCC CHK'D JK

HIGHWAY LIGHTING GENERAL SUMMARY

SHEET NUMBER 381	383	384	PARTICIPATION	ITEM	ITEM EXTEN.	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET
	4			202	75300	4	EACH	PULL BOX REMOVED	402
	12			202	75400	12	EACH	LIGHT POLE REMOVED	402
	12			202	75500	12	EACH	LIGHT POLE FOUNDATION REMOVED	402
	12			202	75506	12	EACH	LUMINAIRE REMOVED	402
	3			202	75801	3	EACH	DISCONNECT EXISTING CIRCUIT, AS PER PLAN	402
		120		603	00400	120	FT	4" CONDUIT, TYPE E	402
		28		625	00500	28	EACH	CONNECTOR KIT, TYPE II	
		27		625	01500	27	EACH	CABLE SPLICING KIT	
		6		625	04300	6	EACH	LIGHT POLE, DESIGN AT12B34.2	
		3		625	04400	3	EACH	LIGHT POLE, DESIGN AT15B34.2	
		3		625	04500	3	EACH	LIGHT POLE, DESIGN AT18B34.2	
		2		625	04600	2	EACH	LIGHT POLE, DESIGN AT20B34.2	
		14		625	14000	14	EACH	LIGHT POLE FOUNDATION, 24" X 6' DEEP	
		1593		625	23200	1593	FT	NO. 4 AWG 5000 VOLT DISTRIBUTION CABLE	
		1374		625	23400	1374	FT	NO. 10 AWG POLE AND BRACKET CABLE	
		4365		625	24320	4365	FT	1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 5000 VOLT CABLES	
		28		625	25500	28	FT	CONDUIT, 3", 725.04	
		14		625	26251	14	EACH	LUMINAIRE, CONVENTIONAL, STYLE B, TYPE II, 200 WATT, HPS, AS PER PLAN	402
		4081		625	29002	4081	FT	TRENCH, 24" DEEP	
		2		625	30700	2	EACH	PULL BOX, 725.08, 18"	
		3		625	30706	3	EACH	PULL BOX, 725.08, 24"	
		1		625	30720	1	EACH	PULL BOX, 725.08, 36"	
		15		625	32000	15	EACH	GROUND ROD	
		1		625	34001	1	EACH	POWER SERVICE, AS PER PLAN	402
		4060		SPEC	62536000	4060	FT	SPECIAL - PLASTIC CAUTION TAPE	402
LUMP				625	38000	LUMP	LUMP	HIGH VOLTAGE TEST	402
LUMP				SPEC	62540000	LUMP	LUMP	SPECIAL - MAINTAIN EXISTING LIGHTING	402
3				SPEC	62540010	3	EACH	SPECIAL - REPLACEMENT OF EXISTING LIGHTING UNIT	402
		6		SPEC	69050600	6	EACH	SPECIAL - BOLLARD	402

HAM-74-0.00

CALC'D SCC CHK'D JK

HIGHWAY LIGHTING SUBSUMMARY - REMOVALS

SHEET NUMBER	REFERENCE NUMBER	ROADWAY	FROM STATION	TO STATION	SIDE	PULL BOX REMOVED	LIGHT POLE REMOVED	LIGHT POLE FOUNDATION REMOVED	LUMINAIRE REMOVED	DISCONNECT EXISTING CIRCUIT, AS PER PLAN	REMARKS
					ITEM	202	202	202	202	202	
					UNIT	EACH	EACH	EACH	EACH	EACH	
386	A	I-74	144+05		R		1	1	1		
386	B	RAMP	4+16		R		1	1	1		
386	C	I-74	149+69		R		1	1	1		
386	D	RAMP	5+58		R	1					
386	E	RAMP	5+95		R		1	1	1		
386	F	RAMP	8+85		L		1	1	1		
386	G	RAMP	10+81		L		1	1	1		
387	P	I-74	179+00		R		1	1	1		
386	Q	RAMP	13+60		R		1	1	1		
386	R	RAMP	12+95		R	1					
386	S	RAMP	12+95		L	1					
386	T	RAMP	12+01		L		1	1	1		
386	U	RAMP	11+70		L	1					
386	X	RAMP	12+18		R		1	1	1		
386	Y	RAMP	10+84		R		1	1	1		
386	Z	RAMP	9+50		R		1	1	1		
388	CC1	RAMP	11+50 +/-		R					3	Ex. Lighting Circuits from Ex. CC1
TOTALS TO HIGHWAY LIGHTING GENERAL SUMMARY						4	12	12	12	3	

HAM-74-0.00

CALC'D SCC
CHK'D JK

HIGHWAY LIGHTING SUBSUMMARY - PROPOSED

							603	625																					SPEC	SPEC
REFERENCE NUMBER	FIXTURE NUMBER	SHEET NO.	SIDE	ROADWAY	FROM STATION	TO STATION	4" CONDUIT, TYPE E	CONNECTOR KIT, TYPE II	CABLE SPLICING KIT	LIGHT POLE, DESIGN AT12B34.2	LIGHT POLE, DESIGN AT15B34.2	LIGHT POLE, DESIGN AT18B34.2	LIGHT POLE, DESIGN AT20B34.2	LIGHT POLE FOUNDATION, 24" X 6' DEEP	NO. 4 AWG 5000 VOLT DISTRIBUTION CABLE	NO. 2 AWG 5000 VOLT DISTRIBUTION CABLE	NO. 10 AWG POLE AND BRACKET CABLE	1-1/2" DUCT CABLE WITH THREE NO. 4 AWG 5000 VOLT CABLES	CONDUIT, 3", 725.04	LUMINAIRE, CONVENTIONAL, STYLE B, TYPE II, 200 WATT, HPS, AS PER PLAN	TRENCH, 24" DEEP	PULL BOX, 725.08, 18"	PULL BOX, 725.08, 24"	PULL BOX, 725.08, 36"	GROUND ROD	POWER SERVICE, AS PER PLAN	SPECIAL - PLASTIC CAUTION TAPE	SPECIAL - BOLLARD
							FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	FT	FT	FT	FT	FT	EACH	FT	EACH	EACH	EACH	EACH	EACH	FT	EACH
				CIRCUIT D																								
11	CC2	388	R	Ramp	11+75	11+74									66				12		5				1	1		
10	PB7	388	R	Ramp	11+74	11+70	20								78				16		16		1					
9	PB1	388	R	Ramp	11+70	11+50+/- (CC1)									150													
				CIRCUIT A																								
1	A5	387	R	I-74	178+90	175+90		2					1	1			108	310		1	300				1		300	
2	A4	387	R	I-74	175+90	172+90		2				1		1			104	311		1	301				1		301	
3	A3	387,386	R	I-74	172+90	13+65		2				1		1			104	1557		1	1547				1		1547	
4	A2	386	R	Ramp	13+65	12+95		2			1			1			98	80		1	70				1		70	
5	PB4	386	R-L	Ramp	12+95	12+95	20		3						138						-		1					
6	PB3	386	L	Ramp	12+95	12+08	20		3									97			87		1				87	
7	A1	386	L	Ramp	12+08	11+70		2		1				1			92	48		1	38				1		38	
8	PB2	386	L-R	Ramp	11+70	11+70	20		3						147						-			1				
10	PB7				See Above										78													
11	CC2				See Above										66													
				CIRCUIT B																								
21	B6	386	R	Ramp	0+06	4+08		2				1		1			104	412		1	402				1		402	
22	B5	386	R	Ramp	4+08	5+58		2			1			1			98	160		1	150				1		150	
23	B4	386	R	Ramp	6+03	5+58		2			1			1			98	55		1	45				1		45	
24	PB6	386	R-L	Ramp	5+58	5+57	20		3						150						-	1					-	
25	B3	386	R	I-74	149+54	5+57		2					1	1			108	24		1	14				1		14	
26	PB5	386	L	Ramp	5+57	8+92	20		3									345			335	1					335	
27	B2	386	L	Ramp	8+92	10+74		2		1				1			92	192		1	182				1		182	
28	B1	386	L	Ramp	10+74	11+70		2		1				1			92	106		1	96				1		96	
8	PB2				See Above				3						147													
10	PB7				See Above										78													
11	CC2				See Above										66													
				CIRCUIT C																								
41	C1	386	R	Ramp	9+43	10+77		2		1				1			92	144		1	134				1		134	2
42	C2	386	R	Ramp	10+77	12+11		2		1				1			92	144		1	134				1		134	2
43	C3	386	R	Ramp	12+11	12+95		2		1				1			92	235		1	225				1		225	2
5	PB4				See Above				3						138													
6	PB3				See Above				3									97										
7	A1				See Above													48										
8	PB2				See Above				3						147													
10	PB7				See Above										78													
11	CC2				See Above										66													
	TOTALS TO HIGHWAY LIGHTING GENERAL SUMMARY						120	28	27	6	3	3	2	14	1593	0	1374	4365	28	14	4081	2	3	1	15	1	4060	6

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lr101e20.xls

CONTROL CENTER DATA

Control Center	Connected Load KVA	Service Entrance Conductor Size-AWG	Enclosure Rating Amps.	Circuit Number	Circuit Load Amps	Circuit Cable Size AWG
CC2	6.9	4	60	A	3.0	4
				B	3.6	4
				C	1.8	4
Ex. CC1				D	8.4	4

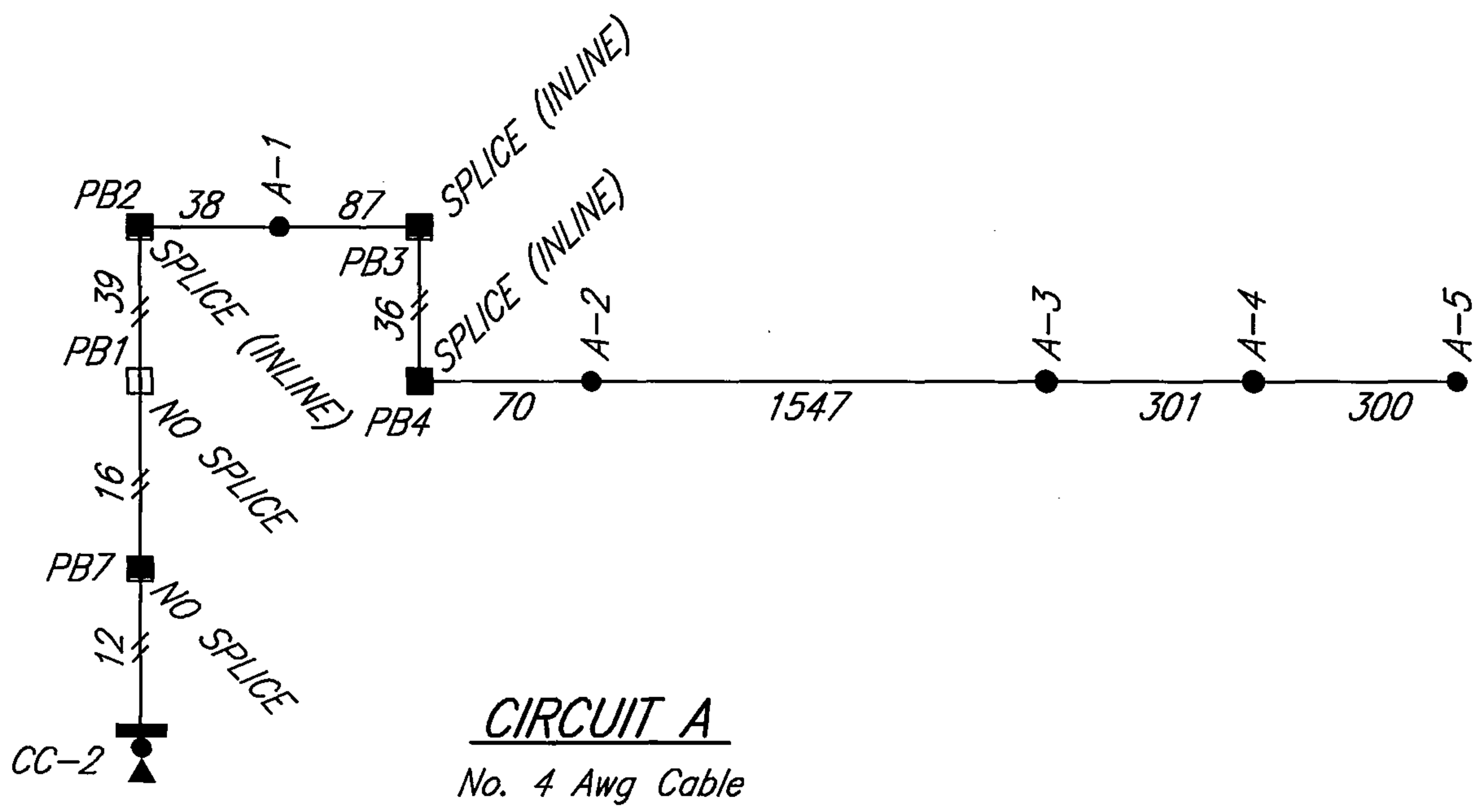
LIGHTING LOAD TABLE

Circuit A	Circuit B	Circuit C
5 x 240W	6 x 240W	3 x 240W
1200W	1440W	720W

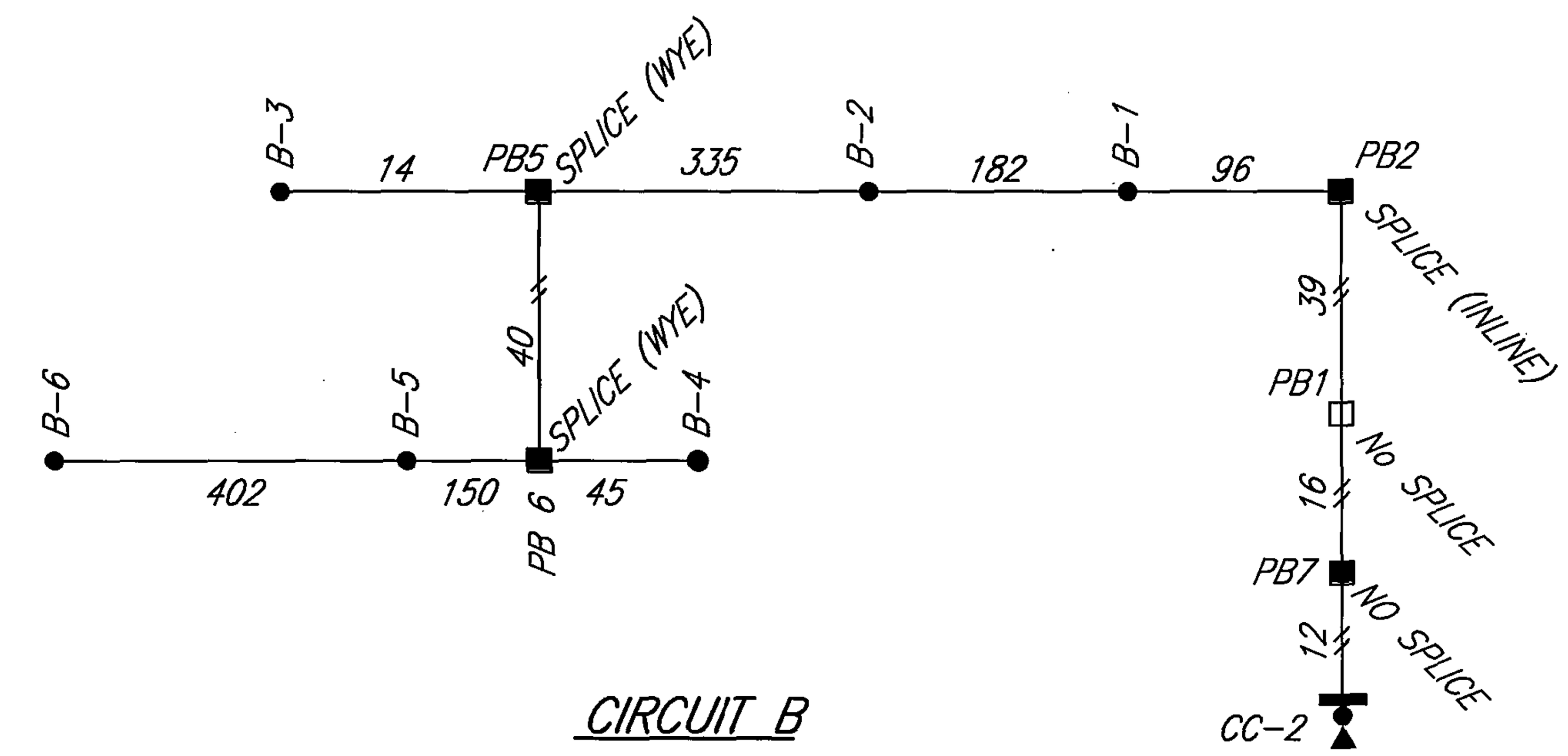
200W HPS (lamp wattage)
240(input watts), 6amp(input current)
Assuming standard luminare operating
at 480volts, single phase.

LEGEND

- Prop. Light Pole with 200 Watt HPS (On Plan Sheets)
- Proposed Light Pole (On Schematic & Details)
- Ex. Light Pole (On Plan Sheets)
- Ex. Light Pole (On Details)
- Proposed Pull Box
- Ex. Pull Box
- Proposed Service and Control Center
- Ex. Service and Control Center
- Proposed Duct Cable or Distribution Cable
- UGE Ex. Underground Electric
- Proposed Conduit
- Ex. 3" Conduit
- Guardrail, Type 5
- Ex/Prop Storm Drainage
- XX XX Ex. Fence



CIRCUIT A
No. 4 Awg Cable



CIRCUIT B
No. 4 AWG Cable

VOLTAGE DROP CALCULATIONS

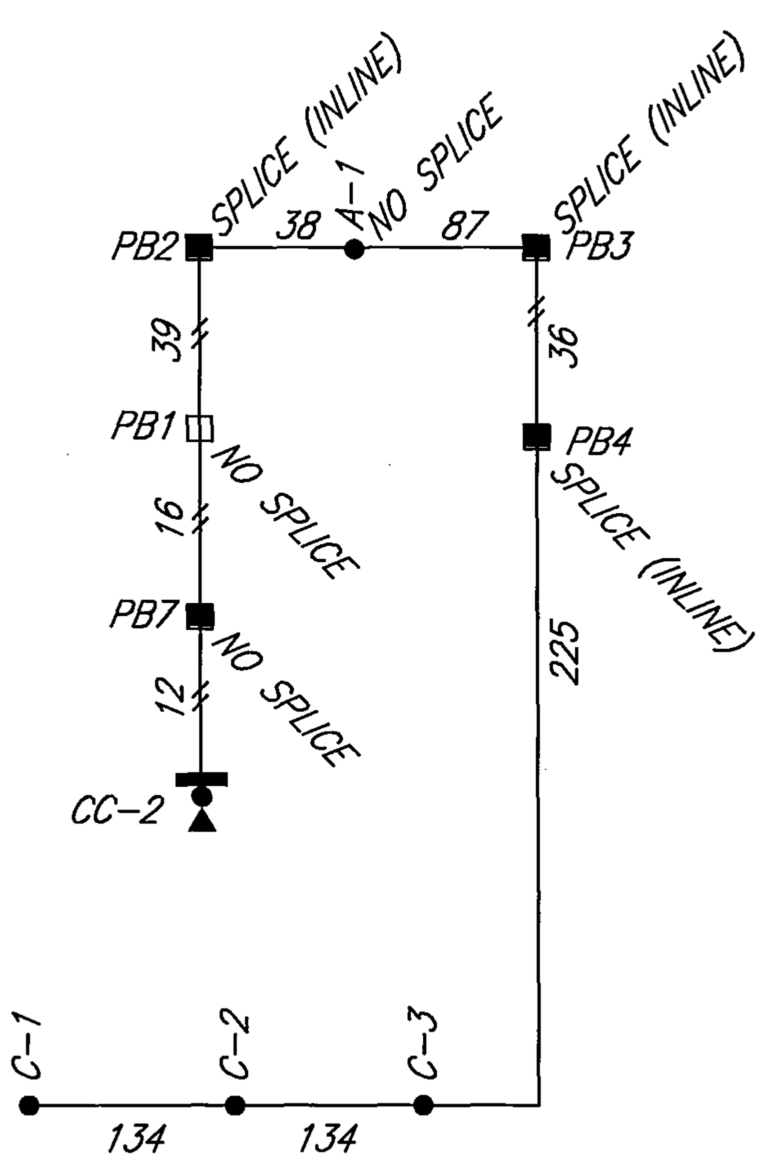
VOLTAGE=480
5% x V=24
No. 4 AWG(ohms/ft) = 0.0005174

CIRCUIT A

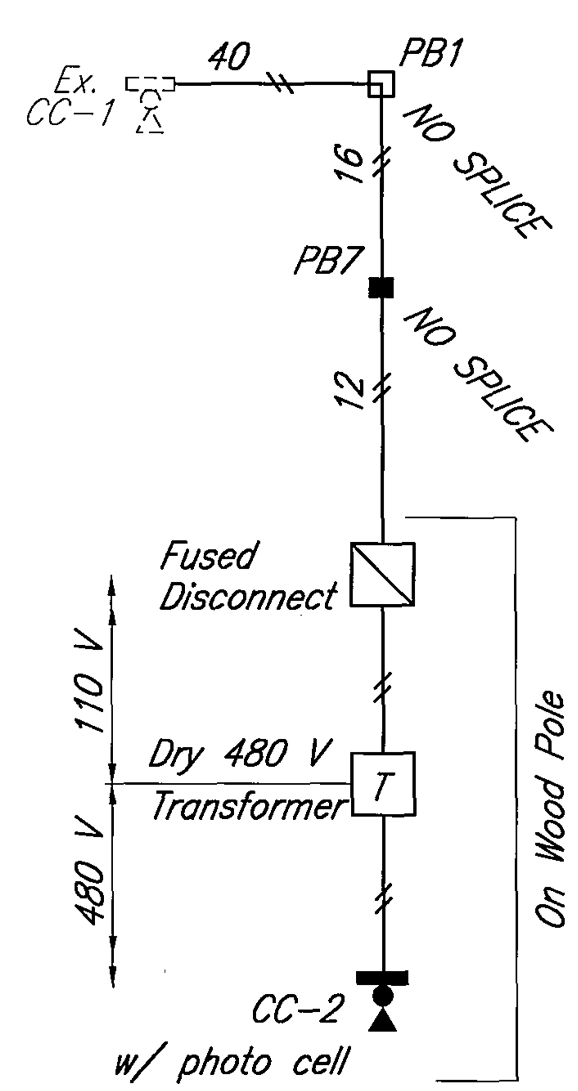
SECTION From	SECTION To	Feet	AMPERES At Point	AMPERES Accum	Ampere-Feet	AWG	VOLTAGE DROP In Sec	VOLTAGE DROP Accum	Percent Drop	At Point
A5	A4	310	1.1	1.1	341	4	0.18	4.11	0.86	A5
A4	A3	311	1.1	2.2	684	4	0.35	3.93	0.82	A4
A3	A2	1557	1.1	3.3	5138	4	2.66	3.58	0.75	A3
A2	PB4	80	1.1	4.4	352	4	0.18	0.92	0.19	A2
PB4	PB3	46		4.4	202	4	0.10	0.74	0.15	PB4
PB3	A1	97		4.4	427	4	0.22	0.63	0.13	PB3
A1	PB2	48	1.1	5.5	264	4	0.14	0.41	0.09	A1
PB2	PB1	49		5.5	270	4	0.14	0.28	0.06	PB2
PB1	PB7	26		5.5	143	4	0.07	0.14	0.03	PB1
PB7	CC2	22		5.5	121	4	0.06	0.06	0.01	PB7

CIRCUIT B

SECTION From	SECTION To	Feet	AMPERES At Point	AMPERES Accum	Ampere-Feet	AWG	VOLTAGE DROP In Sec	VOLTAGE DROP Accum	Percent Drop	At Point
B6	B5	412	1.1	1.1	453	4	0.23	2.53	0.53	B6
B5	PB6	160	1.1	2.2	352	4	0.18	2.29	0.48	B5
B4	PB6	55	1.1	1.1	61	4	0.03	2.14	0.45	B4
PB6	PB5	50		3.3	165	4	0.09	2.11	0.44	PB6
B3	PB5	24	1.1	1.1	26	4	0.01	2.04	0.42	B3
PB5	B2	345		4.4	1518	4	0.79	2.03	0.42	PB5
B2	B1	192	1.1	5.5	1056	4	0.55	1.24	0.26	B2
B1	PB2	106	1.1	6.6	700	4	0.36	0.69	0.14	B1
PB2	PB1	49		6.6	323	4	0.17	0.33	0.07	PB2
PB1	PB7	26		6.6	172	4	0.09	0.16	0.03	PB1
PB7	CC2	22		6.6	145	4	0.08	0.08	0.02	PB7



CIRCUIT C
No. 4 AWG Cable



CIRCUIT D
No. 4 AWG Cable

CIRCUIT C

SECTION From	SECTION To	Feet	AMPERES At Point	AMPERES Accum	Ampere-Feet	AWG	VOLTAGE DROP In Sec	VOLTAGE DROP Accum	Percent Drop	At Point
C1	C2	144	1.1	1.1	158	4	0.08	1.14	0.24	C1
C2	C3	144	1.1	2.2	317	4	0.16	1.06	0.22	C2
C3	PB4	235	1.1	3.3	776	4	0.40	0.89	0.19	C3
PB4	PB3	46		3.3	152	4	0.08	0.49	0.10	PB4
PB3	PB2	145		3.3	479	4	0.25	0.41	0.09	PB3
PB2	PB1	49		3.3	162	4	0.08	0.17	0.03	PB2
PB1	PB7	26		3.3	86	4	0.04	0.08	0.02	PB1
PB7	CC2	22		3.3	73	4	0.04	0.04	0.01	PB7

CIRCUIT D

SECTION From	SECTION To	Feet	AMPERES At Point	AMPERES Accum	Ampere-Feet	AWG	VOLTAGE DROP In Sec	VOLTAGE DROP Accum	Percent Drop	At Point
							Volts =	480		
A, B, C	CC2			15.4						
CC2	Discon	8		15.4	123	4	0.06	0.22	0.05	CC2
							Volts =	110		
Discon	Transform	10		15.4	154	4	0.08	0.16	0.14	Discon
Transform	CC1	10		15.4	154	4	0.08	0.08	0.07	Transform

CALCULATED ENM
CHECKED SCC

HIGHWAY LIGHTING
CIRCUIT SCHEMATIC & LEGEND

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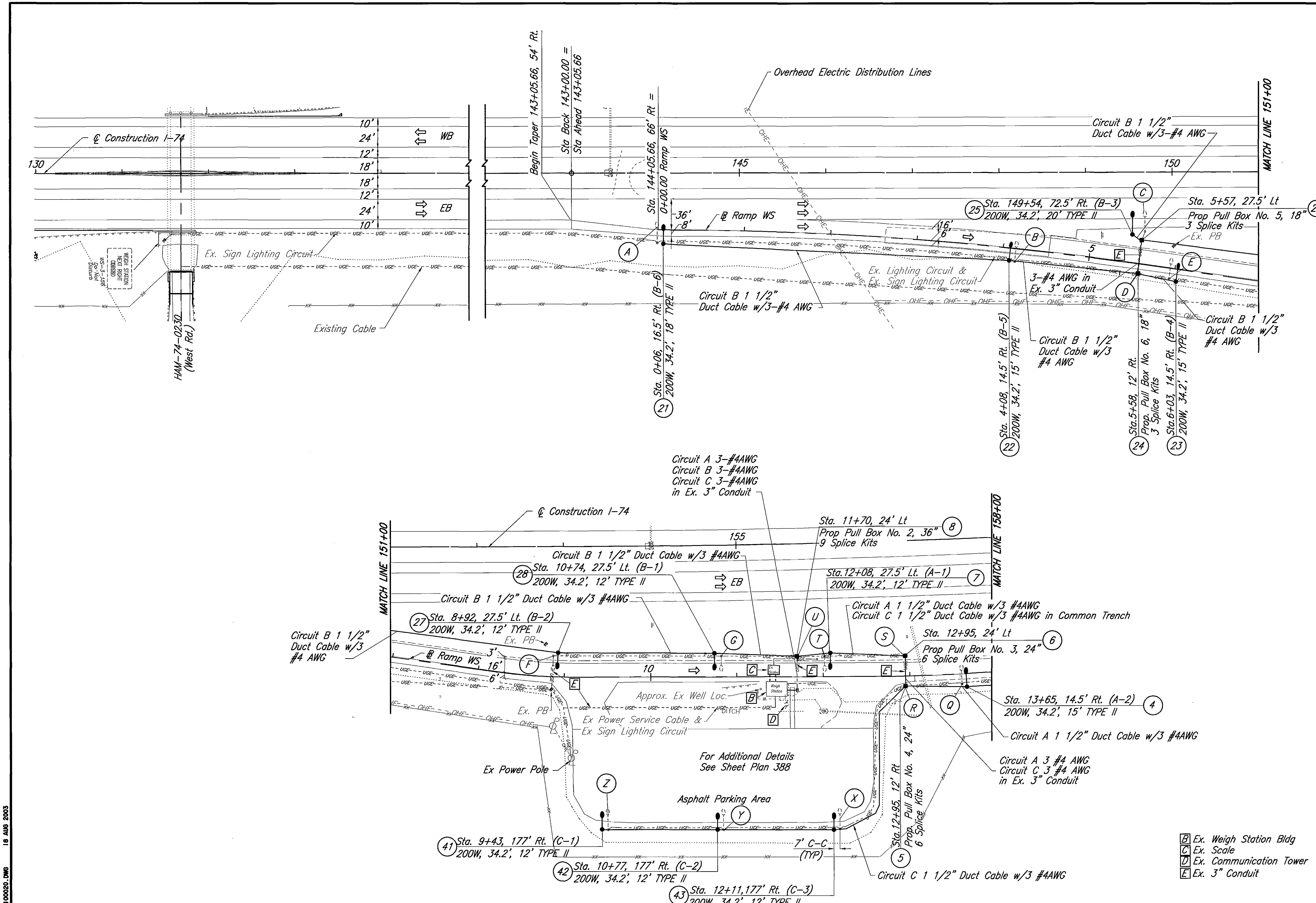
LC101020.DWG 18 AUG 2003



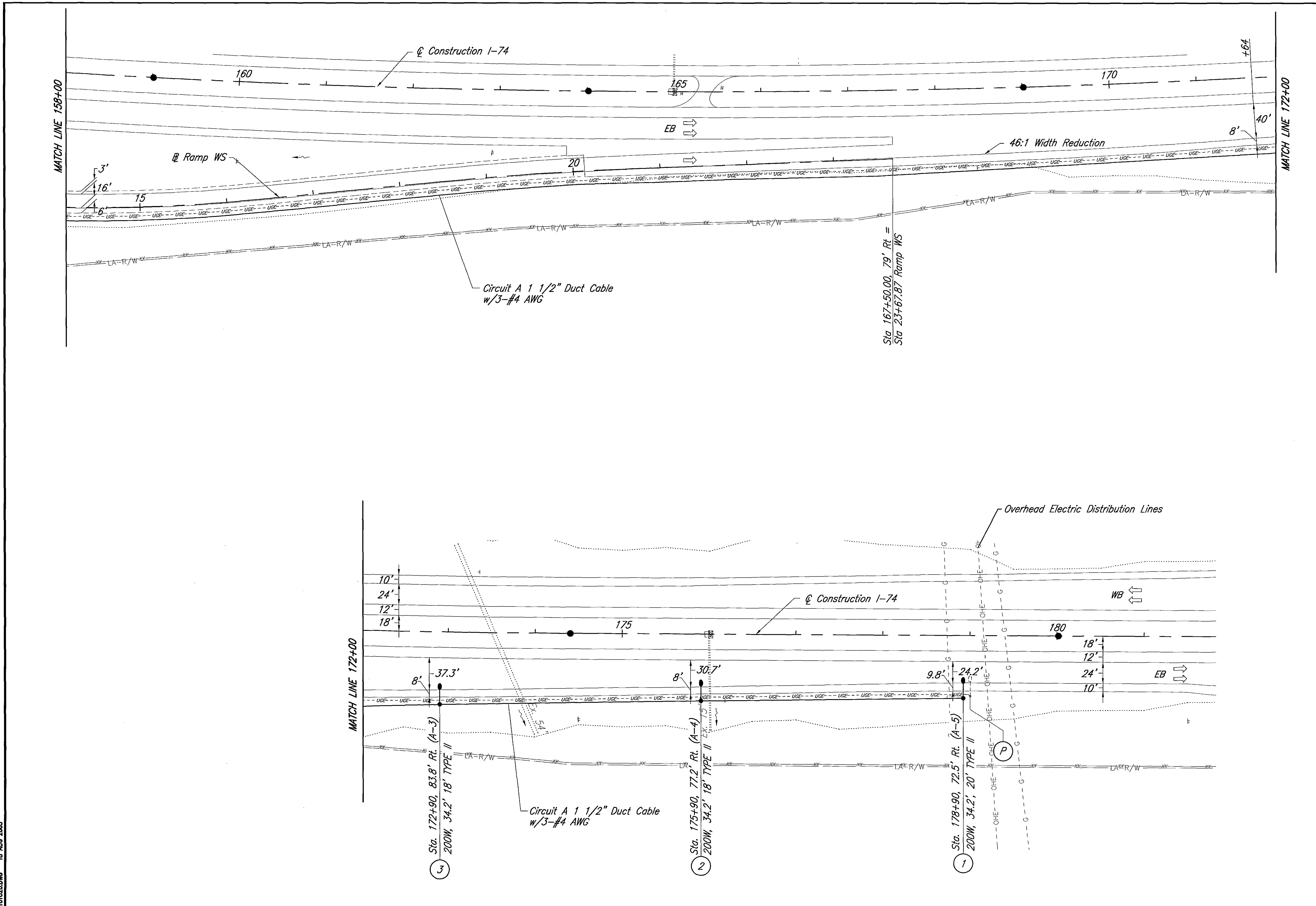
0 25 50 100
HORIZONTAL SCALE IN FEET

CALCULATED ENM
CHECKED SCC

HIGHWAY LIGHTING
PLAN STA. 158+00 BACK

HAM-74-0.00

LP100020.DWG 18 AUG 2003



LP101020.DWG 18 AUG 2003

N

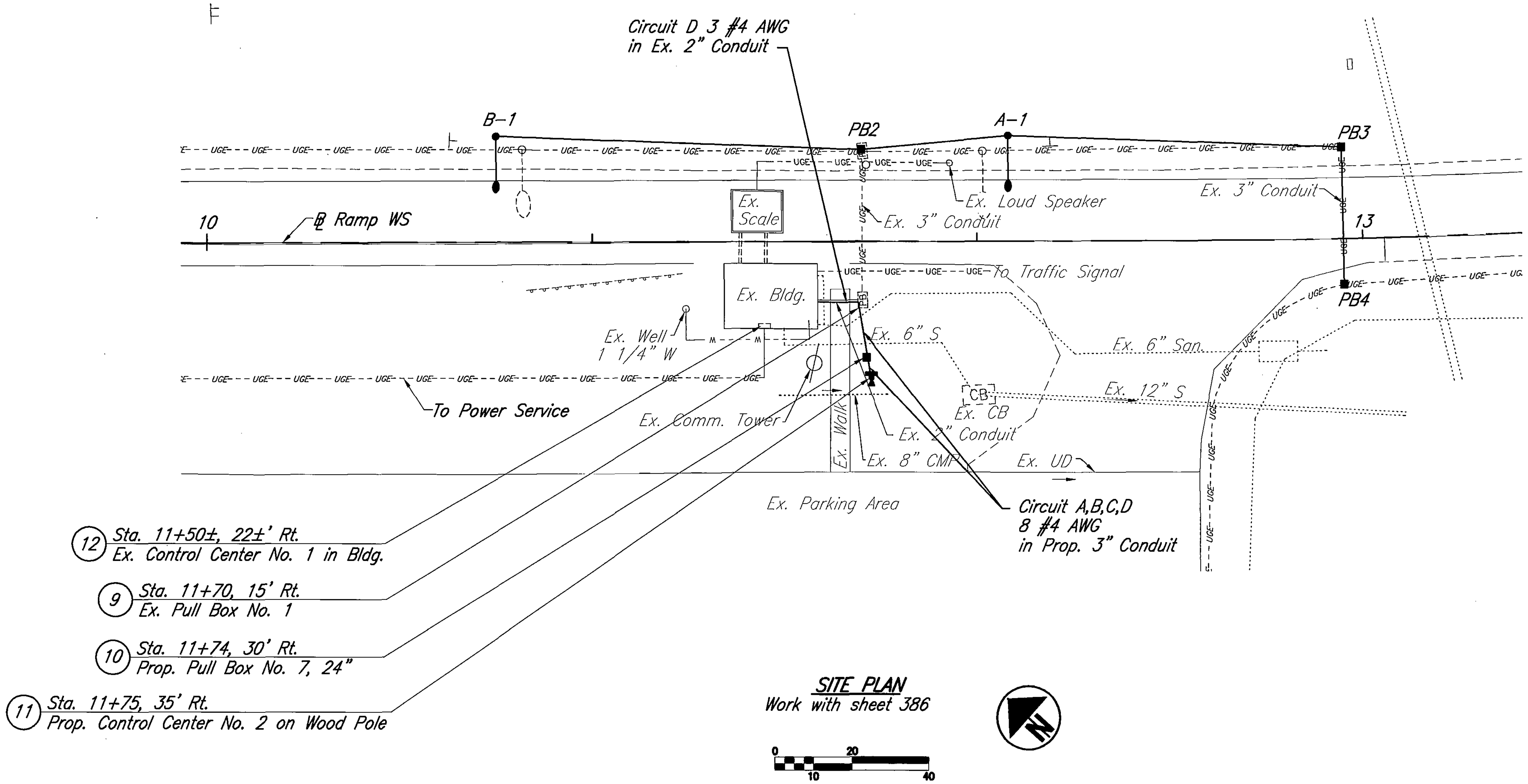
0 25 50 100
HORIZONTAL SCALE IN FEET

CALCULATED ENM
CHECKED SCC

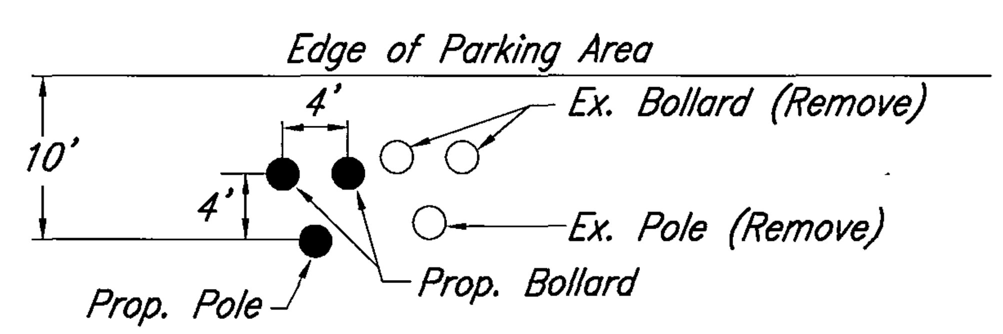
HIGHWAY LIGHTING
PLAN STA. 158+00 AHEAD

HAM-74-0.00

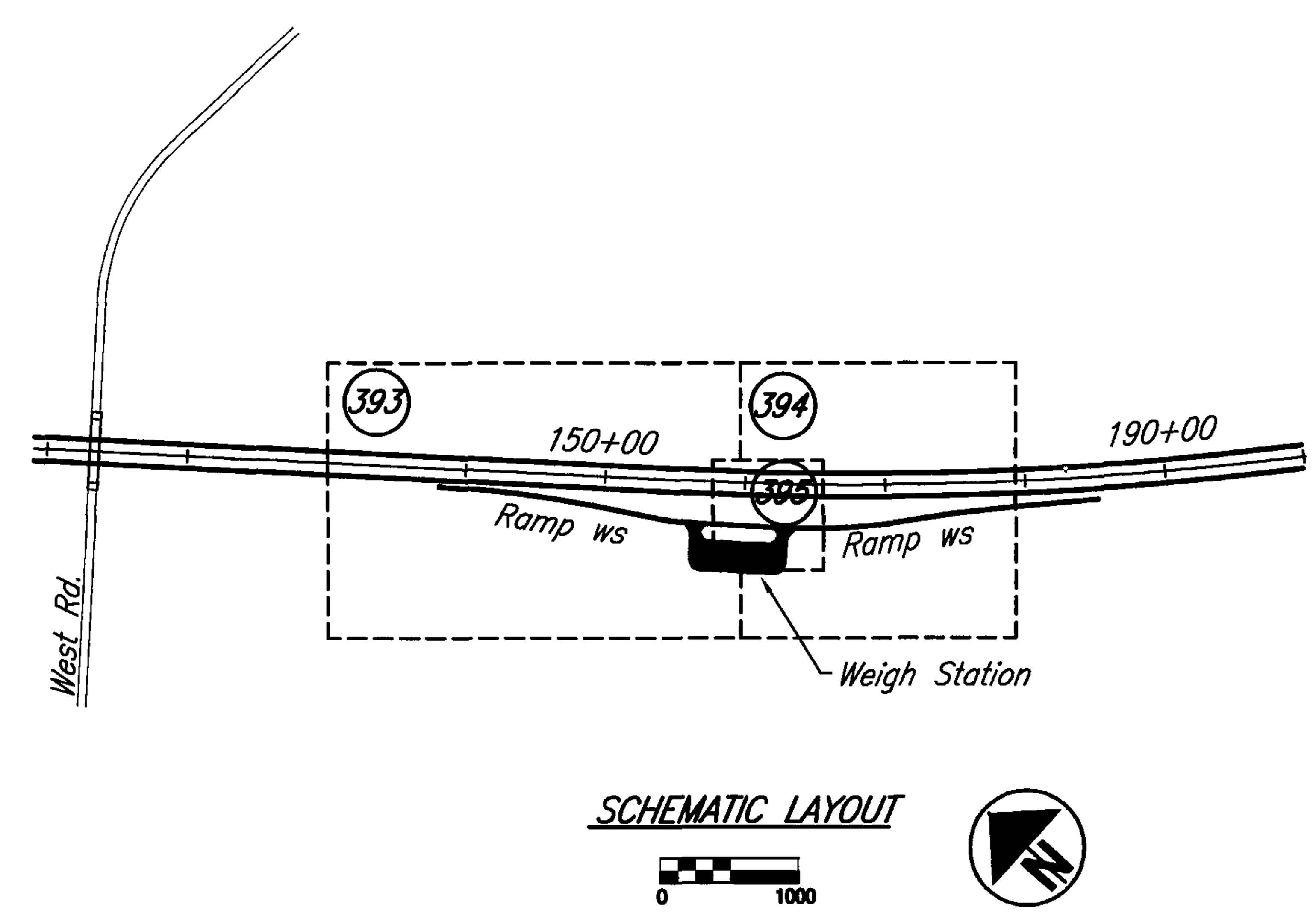
387
421



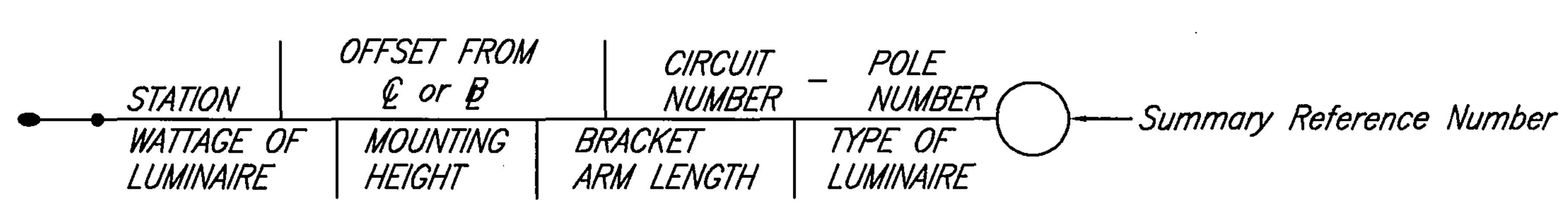
SITE PLAN
Work with sheet 386



BOLLARD DETAIL
At (C-1),(C-2), & (C-3)



SCHEMATIC LAYOUT



POLE LEGEND

CALCULATED ENM
CHECKED SCC

HIGHWAY LIGHTING DETAILS

HAM-74-0.00

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421

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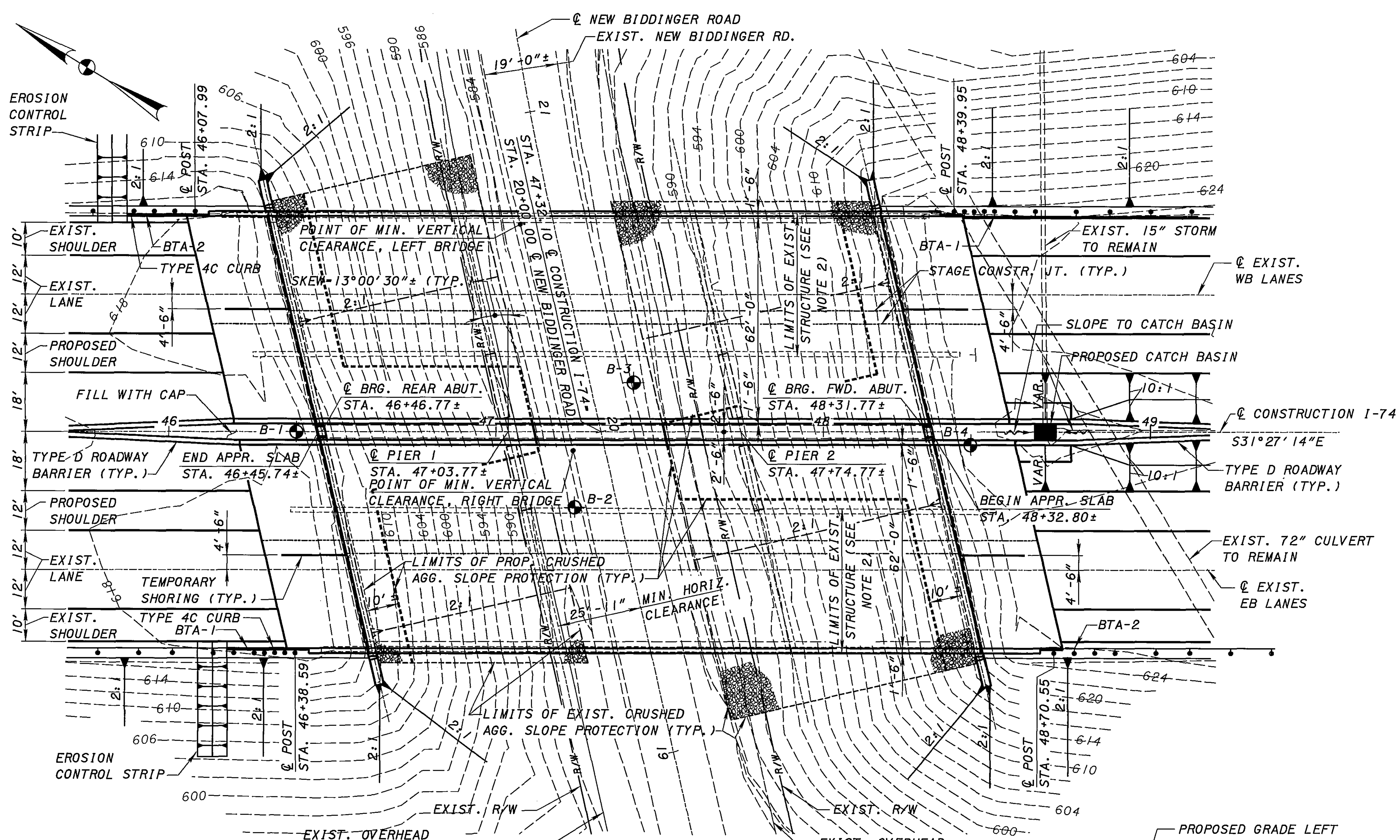
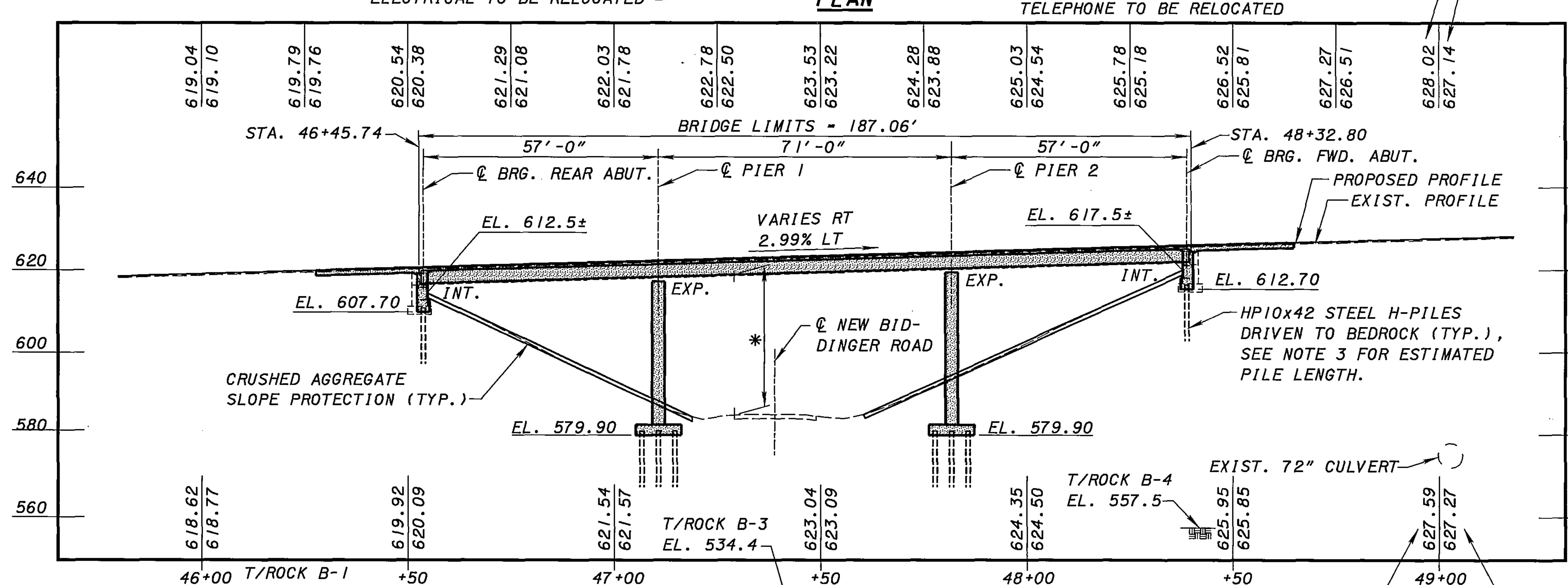


PLAN



PROFILE
(RIGHT BRIDGE SHOWN, LEFT BRIDGE SIMILAR)

*VERTICAL CLEARANCE

LEFT BRIDGE
PROP. - 33'-8"
EXIST. - 33'-6"±
MIN. - 15'-0

RIGHT BRIDGE
PROP. - 33'-9"
EXIST. - 34'-1¾"±
MIN. - 15'-0

BENCH MARK #3
CENTERLINE CONCRETE MONUMENT STA. 40+04.74 ELEV. 597.27
BENCH MARK #5
CENTERLINE CONCRETE MONUMENT STA. 57+82.25 ELEV. 643.66

LEGEND

- BORING LOCATION
BTA-1 - BRIDGE TERMINAL ASSEMBLY TYPE 1
BTA-2 - BRIDGE TERMINAL ASSEMBLY TYPE 2

NOTES

1. EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO ROADWAY PLAN CROSS-SECTIONS.
2. EXISTING DECK, FRAMING AND ABUTMENTS ARE TO BE REMOVED.
3. ESTIMATED PILE LENGTHS:

	LEFT BRIDGE	RIGHT BRIDGE
REAR ABUT.	85'	90'
PIER 1	55'	60'
PIER 2	45'	40'
FWD. ABUT.	65'	65'

EXISTING STRUCTURE

TYPE: 3 SPAN HINGED CANTILEVER STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE.
SPANS: 57'-0"±, 71'-0"± & 57'-0"± C/C BEAM BEARINGS.
LOAD FREQUENCY: CF-2000 (57) ADEQUATE FOR AASHO ALTERNATE LOADING
ROADWAY: 41'-0"± TOE/TOE PARAPET
ALIGNMENT: TANGENT
SKEW: 13°00'30"± RF
WEARING SURFACE: 1½" CONCRETE OVERLAY
APPROACH SLABS: AS-1-54 (25' LONG)
DATE BUILT: 1961±
DATE REFURBISHED: 1991±

PROPOSED STRUCTURE

PROPOSED WORK: NEW REINFORCED CONCRETE DECK ON NEW STEEL BEAM SUPERSTRUCTURE, WITH WIDENED CONCRETE PIERS, AND NEW CONCRETE INTEGRAL ABUTMENTS.
SPANS: 57'-0", 71'-0" & 57'-0" C/C BEAM BEARINGS.
LOADING: HS25 (CASE I) & THE ALTERNATE MILITARY LOADING
ROADWAY: 62'-0" F/F PARAPET
ALIGNMENT: TANGENT
SKEW: 13°00'30" RF
CROWN: 3/16"/FT
WEARING SURFACE: MONOLITHIC CONCRETE
APPROACH SLABS: AS-1-81 (25' LONG)
I-74 TRAFFIC:
2005 ADT - 26590
2025 ADT - 33330
T - 19%
LATITUDE - 39°16'12"N
LONGITUDE - 84°48'36"W

DESIGN AGENCY: URS, 36 EAST 7TH STREET, SUITE 2300, CINCINNATI, OHIO 45202

DESIGNED	CHECKED	DRAWN	REVISED	REVIEWED	DATE	STRUCTURE FILE NUMBER
CEJ	MJZ	GJW		MJZ	1-03	3107833 LT 3107868 RT

HAMILTON COUNTY
STA. 46+45.74
STA. 48+32.80

SITE PLAN

BRIDGE NO. HAM-74-0069 L/R
I-74 OVER NEW BIDDINGER ROAD

HAM-74-0.00

1/25

389/421

R:\Bridge\DGN\25862 020 HAM74\BIDDINGER RD\sp.dgn
07/23/2003
02:25:59 PM

GENERAL NOTES

REFERENCE SHALL BE MADE TO STANDARD BRIDGE DRAWINGS:

AS-1-81, REVISED 7-19-02　　BS-1-93, REVISED 7-19-02
GSD-1-96, REVISED 7-19-02　　ICD-1-82, REVISED 7-19-02
PCB-91, REVISED 7-19-02　　SBR-1-99, REVISED 7-19-02

AND TO SUPPLEMENTAL SPECIFICATIONS:

843 DATED 4-19-02　　846 DATED 4-19-02
864 DATED 7-11-00　　898 DATED 1-17-03
954 DATED 9-9-97

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 17TH. EDITION 2002 AND THE ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING: HS25, CASE I AND THE ALTERNATE MILITARY LOADING.
FUTURE WEARING SURFACE (FWS) OF 60 LBS/SQ. FT.

DESIGN DATA:
CONCRETE CLASS QSC2 - COMPRESSIVE STRENGTH 4500 PSI (SUPERSTRUCTURE)
CONCRETE CLASS C - COMPRESSIVE STRENGTH 4000 PSI (SUBSTRUCTURE)
REINFORCING STEEL - ASTM A615 OR A996
GRADE 60 MINIMUM YIELD STRENGTH 60,000 PSI
STRUCTURAL STEEL - ASTM A709 - GRADE 50 - YIELD STRENGTH 50, 000 PSI

DECK PROTECTION METHOD: EPOXY COATED REINFORCING STEEL AND 2½" CONCRETE COVER.

MONOLITHIC WEARING SURFACE IS ASSUMED, FOR DESIGN PURPOSES, TO BE 1" THICK.

ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN: INCLUDED IN THIS ITEM IS THE REMOVAL OF THE SUPERSTRUCTURE, REMOVAL OF ABUTMENTS TO BOTTOM OF FOOTINGS, AND REMOVAL OF PORTIONS OF PIER CAP BEARING SEATS. EXISTING PIERS SHALL REMAIN FOR USE IN THE PROPOSED CONSTRUCTION.

THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SEPARATELY LISTED FOR PAYMENT, EXCEPT FOR WEARING COURSE REMOVAL. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE USE OF EXPLOSIVES, OR HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. ALL WORK SHALL BE DONE IN A MANNER THAT WILL NOT CUT, ELONGATE OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. HOE-ROMS WIILL BE PERMITTED ON THE EXISTING DECK AND BACKWALL REMOVALS.

PROTECTION OF TRAFFIC: PRIOR TO DEMOLITION OF ANY PORTIONS OF THE EXISTING SUPERSTRUCTURE, SUBMIT PLANS FOR THE PROTECTION OF TRAFFIC (VEHICULAR, PEDESTRIAN, BOAT, ETC.) ADJACENT TO AND/OR UNDER THE STRUCTURE TO THE DIRECTOR AT LEAST 30 DAYS BEFORE CONSTRUCTION BEGINS. THESE PLANS SHALL INCLUDE PROVISIONS FOR ANY DEVICES AND STRUCTURES THAT MAY BE NECESSARY TO ENSURE SUCH PROTECTION. MAINTAIN TEMPORARY VERTICAL CLEARANCES SPECIFIED ON THE PLANS OR IN THE PROPOSAL AT ALL TIMES EXCEPT AS OTHERWISE APPROVED BY THE DIRECTOR. ALL COSTS ASSOCIATED WITH THIS TRAFFIC PROTECTION WILL BE INCLUDED WITH ITEM 202 FOR PAYMENT.

ITEM 503, UNCLASSIFIED EXCAVATION, AS PER PLAN: THE BACKFILL MATERIAL BEHIND THE ABUTMENTS SHALL BE TYPE B GRANULAR MATERIAL, 703.16.C, PLACED AND COMPACTED IN 6 INCH LIFTS.

PILES TO BEDROCK: DRIVE PILES TO REFUSAL ON BEDROCK. THE DEPARTMENT WILL CONSIDER REFUSAL TO BE OBTAINED BY PENETRATING SOFT BEDROCK FOR SEVERAL INCHES TO A MINIMUM RESISTANCE OF 20 BLOWS PER INCH OR BY CONTACTING HARD BEDROCK AND THE PILE RECEIVING AT LEAST 20 BLOWS. SELECT THE HAMMER SIZE TO ACHIEVE THE REQUIRED DEPTH TO BEDROCK AND REFUSAL.

THE ULTIMATE BEARING VALUE IS 92 TONS PER PILE FOR THE HP10x42 ABUTMENT PILES
THE ULTIMATE BEARING VALUE IS 109 TONS PER PILE FOR THE HP10x42 PIER PILES.

ABUTMENT PILES:
13 PILES 95 FEET LONG, ORDER LENGTH, REAR ABUTMENT, RIGHT BRIDGE
13 PILES 90 FEET LONG, ORDER LENGTH, REAR ABUTMENT, LEFT BRIDGE
13 PILES 70 FEET LONG, ORDER LENGTH, FORWARD ABUTMENT, RIGHT BRIDGE
13 PILES 70 FEET LONG, ORDER LENGTH, FORWARD ABUTMENT, LEFT BRIDGE

PIER PILES:
9 PILES 65 FEET LONG, ORDER LENGTH, PIER 1, RIGHT BRIDGE
9 PILES 60 FEET LONG, ORDER LENGTH, PIER 1, LEFT BRIDGE
9 PILES 45 FEET LONG, ORDER LENGTH, PIER 2, RIGHT BRIDGE
9 PILES 50 FEET LONG, ORDER LENGTH, PIER 2, LEFT BRIDGE

MAINTENANCE OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE ROADWAY MAINTENANCE OF TRAFFIC PLANS. SEE SHEET 5/25 AND ROADWAY PLANS FOR DETAILS.

UTILITY LINES: THE UTILITY(IES) SHALL BEAR ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES. THE CONTRACTOR AND UTILITY(IES) ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

EXISTING STRUCTURE VERIFICATION: DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

MECHANICAL CONNECTORS: AN APPROVED TYPE OF MECHANICAL CONNECTOR FOR REINFORCING BARS SHALL BE PROVIDED, INSTALLATION OF CONNECTORS SHALL CONFORM WITH MANUFACTURER'S PROCEDURES. MECHANICAL CONNECTORS SHALL DEVELOP A MINIMUM ULTIMATE STRENGTH OF 125 PERCENT OF THE REQUIRED YIELD STRENGTH OF THE REINFORCING STEEL. CONNECTORS SHALL BE EPOXY COATED. COATING FOR BOTH CONNECTORS AND REINFORCING BARS SHALL CONFORM TO THE SAME SPECIFICATIONS. COATINGS WHICH HAVE BEEN DAMAGED OR WHICH OTHERWISE DO NOT MEET THE SPECIFICATIONS MAY BE REPAIRED AS DIRECTED BY THE ENGINEER OR THEY SHALL BE REPLACED WITH MATERIAL WHICH MEETS THE SPECIFICATIONS. CONNECTORS SHALL CONFORM WITH ITEM 509 AND BE INCLUDED IN THE BID PRICE FOR ITEM 509: EPOXY COATED REINFORCING STEEL.

ITEM 516 INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN: INSTALL A 3 FOOT WIDE NEOPRENE SHEET AT LOCATIONS SHOWN IN THE PLANS. SECURE THE NEOPRENE SHEETING TO THE CONCRETE WITH 1¼"X #10 GAGE (LENGTH X SHANK DIAMETER) GALVANIZED BUTTON HEAD SPIKES THROUGH A 1 INCH OUTSIDE DIAMETER, #10 GAGE GALVANIZED WASHER. MAXIMUM FASTENER SPACING IS 9 INCHES. USE OF OTHER SIMILAR GALVANIZED DEVICES, WHICH WILL NOT DAMAGE EITHER THE NEOPRENE OR THE CONCRETE WILL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

CENTER THE NEOPRENE STRIPS ON ALL JOINTS. FOR HORIZONTAL JOINTS, SECURE THE HORIZONTAL NEOPRENE STRIP BY USING A SINGLE LINE OF FASTENERS, STARTING AT 6 INCHES, +/-, FROM THE TOP OF THE NEOPRENE STRIP. FOR THE VERTICAL JOINTS SECURE THE VERTICAL NEOPRENE STRIP BY USING A SINGLE VERTICAL LINE OF FASTENERS, STARTING AT 6 INCHES, +/-, FROM THE VERTICAL EDGE OF THE NEOPRENE STRIP NEAREST TO THE CENTERLINE OF ROADWAY. FOR VERTICAL JOINTS, INSTALL 2 ADDITIONAL FASTENERS AT 6 INCHES, CENTER TO CENTER, ACROSS THE TOP OF THE NEOPRENE STRIP ON THE SAME SIDE OF THE VERTICAL JOINT AS THE SINGLE VERTICAL ROW OF FASTENERS IS LOCATED.

THE VERTICAL NEOPRENE STRIPS SHALL COMPLETELY OVERLAP THE HORIZONTAL STRIPS. LAP LENGTHS OF THE HORIZONTAL STRIPS THAT ARE NOT VULCANIZED OR ADHESIVE BONDED, SHALL BE AT LEAST 1 FOOT IN LENGTH, OR 6 INCHES IN LENGTH IF THE LAP IS VULCANIZED OR ADHESIVE BONDED. NO LAPS ARE ACCEPTABLE IN VERTICALLY INSTALLED NEOPRENE STRIPS.

THE NEOPRENE SHEETING SHALL BE 3/32" THICK GENERAL PURPOSE, HEAVY DUTY NEOPRENE SHEET WITH NYLON FABRIC REINFORCEMENT. THE SHEETING SHALL BE "FAIRPRENE NUMBER NN-0003", BY E. I. DUPONT DE NEMOURS AND COMPANY, INC., "WINGPRENE" BY THE GOODYEAR TIRE AND RUBBER COMPANY, OR AN APPROVED ALTERNATE. THE NEOPRENE SHEETING SHALL CONFORM TO THE FOLLOWING:

DESCRIPTION OF TEST	ASTM METHOD	REQUIREMENT
THICKNESS, INCHES	D751	0.094±0.01
BREAKING STRENGTH, GRAB, LBS, MINIMUM (LONG. X TRANS.)	D751	700 x 700
ADHESIVE STRIP, 1" WIDE X 2" LONG, LBS MINIMUM	D751	9
BURST STRENGTH, PSI MINIMUM	D751	1400
HEAT AGING, 70 HR, 212 °F, 180° BEND WITHOUT CRACKING	D2136	NO CRACKING OF COATING
LOW TEMP. BRITTLENESS, 1 HR, -40°F, BEND AROUND ¼" MANDREL	D2136	NO CRACKING OF COATING

IN LIEU OF THE NEOPRENE SHEETING THE CONTRACTOR MAY SUPPLY TYPE 3 MEMBRANE, 711.29.

METHOD OF MEASUREMENT: THE DEPARTMENT WILL MEASURE THE TOTAL LENGTH OF JOINT TO BE SEALED BY THE NUMBER OF FEET.

BASIS OF PAYMENT: THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN.

ITEM 511 CLASS C CONCRETE, ABUTMENT INCLUDING FOOTING, AS PER PLAN
IN ADDITION TO THE REQUIREMENTS OF ITEM 555, A REFERENCE DISK SHALL BE CAST IN THE ABUTMENT CONCRETE. THE DISK WILL BE CENTERED ON THE TOP HORIZONTAL SURFACE OF THE FORWARD ABUTMENT RIGHT WING WALL. THE DISK WILL BE PROVIDED BY THE DISTRICT EIGHT SURVEY MANAGER.

THE CONTRACTOR WILL MARK THE DISK WITH THE NAVD88 PROJECT ELEVATION UNDER THE SUPERVISION OF A PROFESSIONAL SURVEYOR REGISTERED IN THE STATE OF OHIO

NON-USE OF ASBESTOS-CONTAINING MATERIALS
THE CONTRACTOR SHALL AT NO TIME INCORPORATE ANY MATERIALS WHICH ARE COMPOSED OF OR CONTAIN ANY AMOUNTS OF ASBESTOS. THE SUBSTITUTION OF MATERIALS WHICH CONTAIN ANY AMOUNTS OF ASBESTOS WILL IN NO CIRCUMSTANCES BE ACCEPTABLE. UPON COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL SUBMIT A WRITTEN STATMENT OF CERTIFICATION ASSERTING THAT NO ASBESTOS CONTAINING MATERIALS WERE USED IN ANY PORTION OF THE CONSTRUCTION.

PROPOSED WORK

1. WIDEN BRIDGE TO 62'-0" TOE TO TOE OF DEFLECTER PARAPET.
2. REPLACE EXISTING CONCRETE DECK AND BEAMS WITH NEW COMPOSITE CONCRETE DECK AND 42" DEFLECTOR PARAPETS ON NEW W33 BEAMS.
3. REPLACE EXISTING BEARINGS ON PIERS WITH ELASTOMERIC BEARING.
4. REMOVE EXISTING ABUTMENTS AND CONSTRUCT NEW INTEGRAL ABUTMENTS WITH STRAIGHT WINGWALLS.
5. CONSTRUCT WIDENED REINFORCED CONCRETE PIERS.
6. PATCH EXISTING SUBSTRUCTURE CONCRETE AS DIRECTED BY ENGINEER.
7. SEAL DEFLECTOR PARAPETS, ABUTMENTS, WINGWALLS AND PIERS WITH EPOXY-URETHANE SEALER.
8. REPLACE EXISTING APPROACH SLABS.
9. PATCH EXISTING CRUSHED AGGREGATE SLOPE PROTECTION AS DIRECTED BY ENGINEER.

DESIGN AGENCY: URS, 36 EAST 7TH STREET, SUITE 2300, CINCINNATI, OHIO 45202
DESIGNED CEJ　DRAWN GJW　REVIEWED MJZ　DATE 1-03
CHECKED BER　REVISED　STRUCTURE FILE NUMBER 3107833 LT, 3107868 RT

GENERAL NOTES
BRIDGE NO. HAM-74-0069 L/R
I-74 OVER NEW BIDDINGER ROAD

ESTIMATED QUANTITIES - LEFT BRIDGE

ITEM	ITEM EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPER-STRUCTURE	GENERAL	SEE SHEET NO.
202	11203	LUMP		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	LUMP		LUMP		2/25
202	22900	134	SQ YD	APPROACH SLAB REMOVED				134	
503	11100	LUMP		COFFERDAMS, CRIBS AND SHEETING	LUMP	LUMP			
503	21101	499	CU YD	UNCLASSIFIED EXCAVATION, AS PER PLAN	326	173			2/25
505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION	LUMP	LUMP			
507	00100	3070	FT	STEEL PILES HP10X42, FURNISHED	2080	990			
507	00150	2850	FT	STEEL PILES HP10X42, DRIVEN	1950	900			
509	10000	153514	POUND	EPOXY COATED REINFORCING STEEL	11668	23513	118333		
510	09950	172	EACH	DOWEL HOLES WITH CEMENT GROUT		172			
511	42000	82	CU YD	CLASS C CONCRETE, PIER ABOVE FOOTINGS		82			
511	43501	138	CU YD	CLASS C CONCRETE, ABUTMENT INCLUDING FOOTING, AS PER PLAN	138				2/25
511	46500	50	CU YD	CLASS C CONCRETE, FOOTING		50			
513	10260	250421	POUND	STRUCTURAL STEEL MEMBERS, LEVEL 3			250421		
513	20000	6312	EACH	WELDED STUD SHEAR CONNECTORS			6312		
514	00060	14141	SQ FT	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			14141		
514	00066	14141	SQ FT	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			14141		
514	10000	12	EACH	FINAL INSPECTION REPAIR			12		
516	13200	137	SQ FT	1/2" PREFORMED EXPANSION JOINT FILLER			137		
516	13600	168	SQ FT	1" PREFORMED EXPANSION JOINT FILLER			168		
516	14015	158	FT	INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN	158				2/25
516	44001	16	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE			16		14/25
				11 1/2"x18"x1 3/8" (NEOPRENE), AS PER PLAN					
518	21200	138	CU YD	POROUS BACKFILL WITH FILTER FABRIC	138				
518	40000	172	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	172				
518	40010	26	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS.	26				
526	25001	360	SQ YD	REINFORCED CONCRETE APPROACH SLAB (T=15"), AS PER PLAN				360	21/25
601*	20000	428	SQ YD	CRUSHED AGGREGATE SLOPE PROTECTION				428	
843	50001	5	SQ FT	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN		5			10 & 11/25
846	73000	83	SQ YD	TREATING CONCRETE BRIDGE DECKS WITH HMWM RESIN			83		
864	10100	1076	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY URETHANE)	78	522	476		
898	10200	410	CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK)			410		
898	11000	59	CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET)			59		

* AN ADDITIONAL 25 SQUARE YARDS OF CRUSHED AGGREGATE SLOPE PROTECTION IS INCLUDED IN ITEM 601 FOR PATCHING THE EXISTING SLOPE PROTECTION AS DIRECTED BY THE ENGINEER.

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DESIGN AGENCY
URS
36 EAST 7TH STREET
SUITE 2300
CINCINNATI, OHIO 45202

DATE 1-03
STRUCTURE FILE NUMBER 3107833 LT 3107868 RT
REVIEWED MJZ
DRAWN GJW
REVISED
DESIGNED CEJ
CHECKED BER

ESTIMATED QUANTITIES - LEFT BRIDGE
BRIDGE NO. HAM-74-0069 L/R
I-74 OVER NEW BIDDINGER ROAD

HAM-74-0.00

ESTIMATED QUANTITIES - RIGHT BRIDGE

ITEM	ITEM EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPER-STRUCTURE	GENERAL	SEE SHEET NO.
202	11203	LUMP		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	LUMP		LUMP		2/25
202	22900	134	SQ YD	APPROACH SLAB REMOVED				134	
503	11100	LUMP		COFFERDAMS, CRIBS AND SHEETING	LUMP	LUMP			
503	21101	499	CU YD	UNCLASSIFIED EXCAVATION, AS PER PLAN	326	173			2/25
505	11100	LUMP		PILE DRIVING EQUIPMENT MOBILIZATION	LUMP	LUMP			
507	00100	3135	FT	STEEL PILES HP10X42, FURNISHED	2145	990			
507	00150	2915	FT	STEEL PILES HP10X42, DRIVEN	2015	900			
509	10000	152288	POUND	EPOXY COATED REINFORCING STEEL	11693	22262	118333		
511	42000	75	CU YD	CLASS C CONCRETE, PIER ABOVE FOOTINGS		75			
511	43501	139	CU YD	CLASS C CONCRETE, ABUTMENT INCLUDING FOOTING, AS PER PLAN	139				2/25
511	46500	50	CU YD	CLASS C CONCRETE, FOOTING		50			
513	10260	250421	POUND	STRUCTURAL STEEL MEMBERS, LEVEL 3			250421		
513	20000	6312	EACH	WELDED STUD SHEAR CONNECTORS			6312		
514	00060	14141	SQ FT	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			14141		
514	00066	14141	SQ FT	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			14141		
514	10000	12	EACH	FINAL INSPECTION REPAIR			12		
516	13200	137	SQ FT	1/2" PREFORMED EXPANSION JOINT FILLER			137		
516	13600	173	SQ FT	1" PREFORMED EXPANSION JOINT FILLER			173		
516	14015	160	FT	INTEGRAL ABUTMENT EXPANSION JOINT SEAL, AS PER PLAN	160				2/25
516	44001	16	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE			16		14/25
				11 1/2"x18"x1 3/8" (NEOPRENE), AS PER PLAN					
518	21200	144	CU YD	POROUS BACKFILL WITH FILTER FABRIC	144				
518	40000	172	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	172				
518	40010	26	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS.	26				
526	25001	360	SQ YD	REINFORCED CONCRETE APPROACH SLAB (T=15"), AS PER PLAN				360	21/25
601*	20000	435	SQ YD	CRUSHED AGGREGATE SLOPE PROTECTION				435	
843	50001	20	SQ FT	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN		20			10 & 11/25
846	73000	83	SQ YD	TREATING CONCRETE BRIDGE DECKS WITH HMWM RESIN			83		
864	10100	1084	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY URETHANE)	76	524	484		
898	10200	412	CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (DECK)			412		
898	11000	59	CU YD	QC/QA CONCRETE, CLASS QSC2, SUPERSTRUCTURE (PARAPET)			59		

* AN ADDITIONAL 25 SQUARE YARDS OF CRUSHED AGGREGATE SLOPE PROTECTION IS INCLUDED IN ITEM 601 FOR PATCHING THE EXISTING SLOPE PROTECTION AS DIRECTED BY THE ENGINEER.

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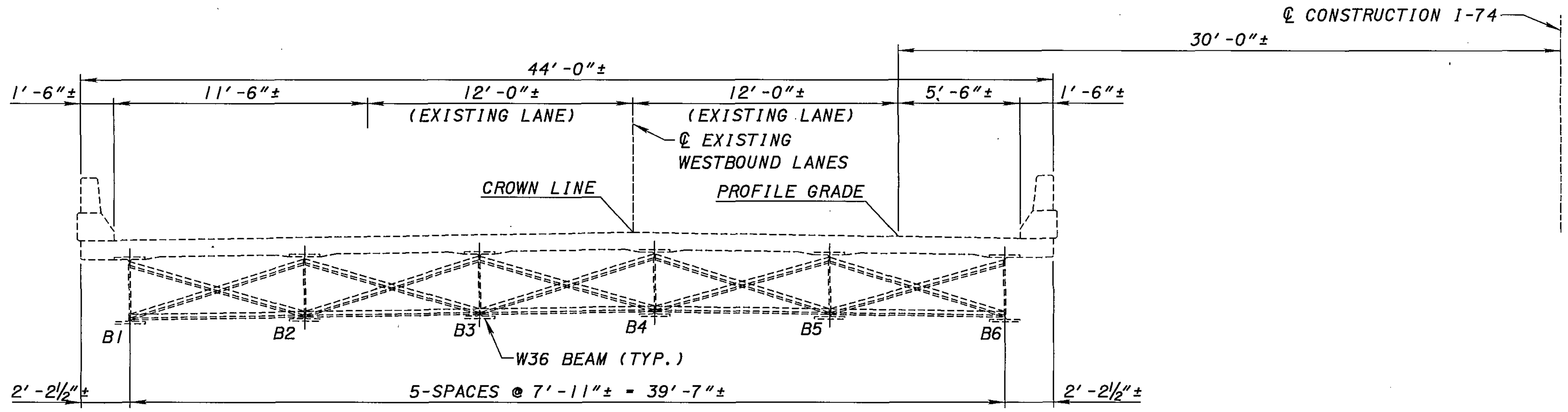
DESIGN AGENCY
URS
36 EAST 7TH STREET SUITE 2300 CINCINNATI OHIO 45202

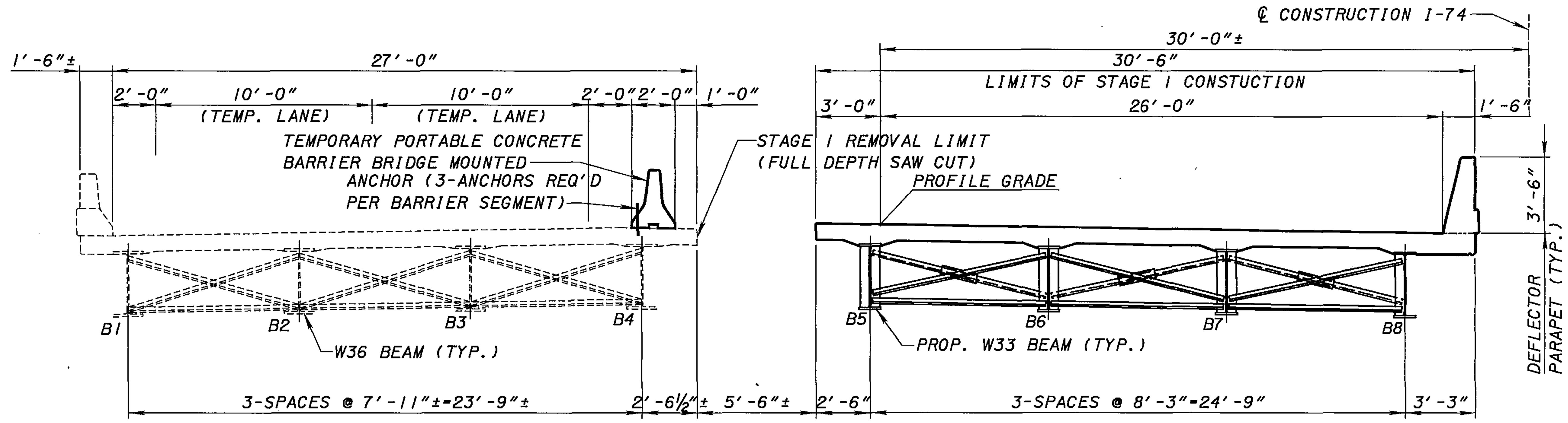
DESIGNED CEJ | DRAWN GJW | REVIEWED MJZ | DATE 1-03
CHECKED BER | REVISED | STRUCTURE FILE NUMBER 3107833 LT 3107868 RT

ESTIMATED QUANTITIES - RIGHT BRIDGE
BRIDGE NO. HAM-74-0069 L/R
I-74 OVER NEW BIDDINGER ROAD

HAM-74-0.00

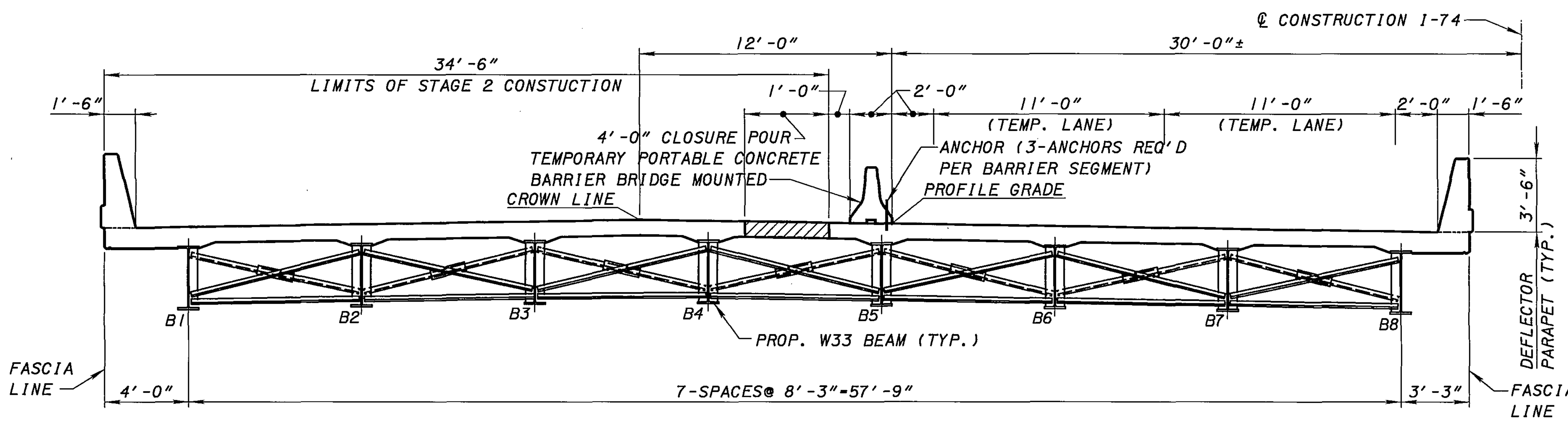


EXISTING TYPICAL SECTION



STAGE 1 - TYPICAL SECTION

(LEFT STRUCTURE SHOWN, RIGHT STRUCTURE SIMILAR)



STAGE 2 - TYPICAL SECTION

(LEFT STRUCTURE SHOWN, RIGHT STRUCTURE SIMILAR)

SEQUENCE OF CONSTRUCTION NOTES

STAGE 1

A) INSTALL TEMPORARY CONCRETE BARRIER AND MAINTAIN TRAFFIC ON EXIST BRIDGE AS SHOWN.
B) SAW CUT FULL DEPTH ALONG STAGE 1 REMOVAL LIMIT AND REMOVE RIGHT PORTION OF EXISTING CONCRETE DECK SLAB, DEFLECTOR PARAPET AND CORRESPONDING PORTIONS OF THE APPROACH SLAB.
C) REMOVE EXISTING BEAMS B5 AND B6 AND CORRESPONDING CROSS FRAMES.
D) REMOVE ABUTMENT AND RIGHT SIDE WINGWALLS UP TO STAGE 1 REMOVAL LIMIT OF EXISTING DECK AND APPROACH SLAB.
E) CONSTRUCT STAGE 1 PORTION OF ABUTMENTS AND PIERS.
F) ERECT PROPOSED BEAMS B5 THRU B8 AND INSTALL CROSS FRAMES BETWEEN BEAMS B5 THRU B8.
G) CONSTRUCT STAGE 1 PORTION OF COMPOSITE DECK SLAB, END DIAPHRAGMS AND APPROACH SLABS.
H) CONSTRUCT BRIDGE DEFLECTOR PARAPET ON RIGHT SIDE.

STAGE 2

A) INSTALL TEMPORARY CONCRETE BARRIER AND REROUTE TRAFFIC ONTO THE PORTION OF THE PROPOSED STRUCTURE COMPLETED IN STAGE 1
B) REMOVE REMAINDER OF EXISTING DECK SLAB, DEFLECTOR PARAPET AND ALL REMAINING BEAMS AND CROSS FRAMES.
C) REMOVE REMAINDER OF ABUTMENT AND LEFT SIDE WING WALLS.
D) CONSTRUCT STAGE 2 PORTION OF ABUTMENTS AND PIERS.
E) ERECT PROPOSED BEAMS B1 THRU B4 AND INSTALL CROSS FRAMES BETWEEN BEAMS B1 THRU B4.
F) CONSTRUCT STAGE 2 PORTION OF COMPOSITE DECK SLAB AND END DIAPHRAGMS UP TO CLOSURE POUR.
G) INSTALL CROSS FRAMES BETWEEN BEAMS B4 AND B5.
H) COMPLETE COMPOSITE DECK SLAB AND END DIAPHRAGMS BY CASTING CLOSURE POUR.
I) CONSTRUCT REMAINDER OF APPROACH SLABS.
J) CONSTRUCT BRIDGE DEFLECTOR PARAPET ON LEFT SIDE.

NOTES

1. CONSTRUCTION SEQUENCE FOR LEFT BRIDGE IS SHOWN, CONSTRUCTION SEQUENCE FOR RIGHT BRIDGE IS SIMILAR.
2. TEMPORARY PORTABLE CONCRETE BARRIER SHALL BE INCLUDED WITH ROADWAY QUANTITIES FOR PAYMENT.

DESIGN AGENCY
URS
36 EAST 7TH STREET
SUITE 2600
CINCINNATI, OHIO 45202

DESIGNED	DRAWN	REVIEWED	DATE
CEJ	GJW	MJZ	1-03
CHECKED	REVISED	STRUCTURE FILE NUMBER	
MJZ		3107833 LT 3107868 RT	

SEQUENCE OF CONSTRUCTION
BRIDGE NO. HAM-74-0069 L/R
I-74 OVER NEW BIDDINGER ROAD

HAM-74-0.00

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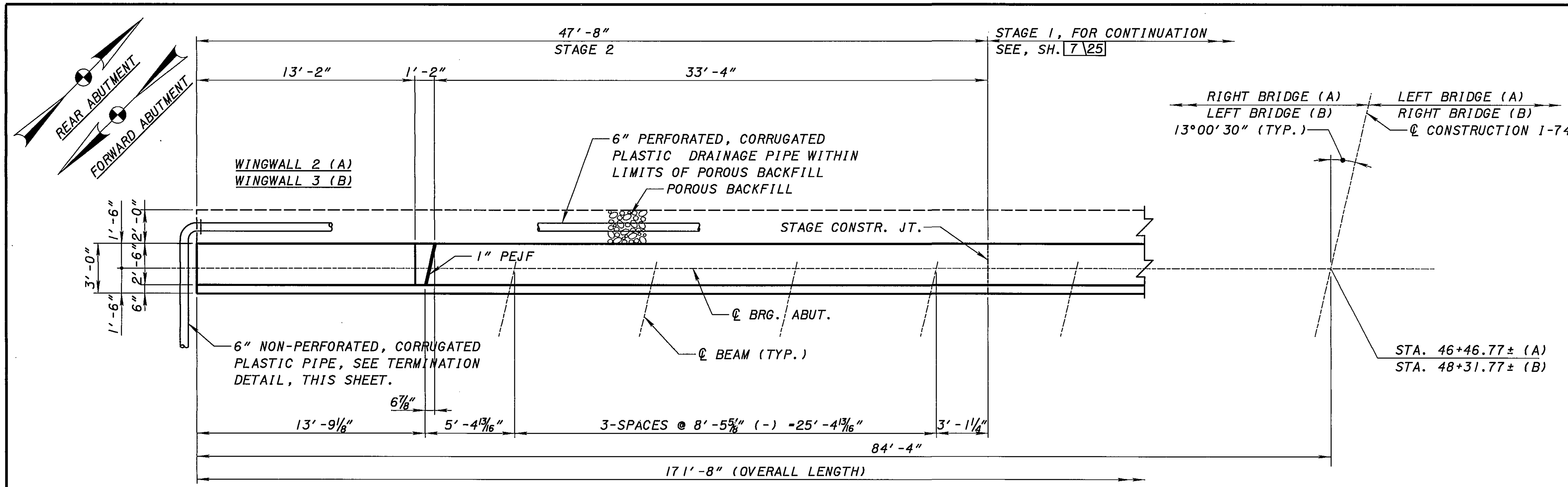
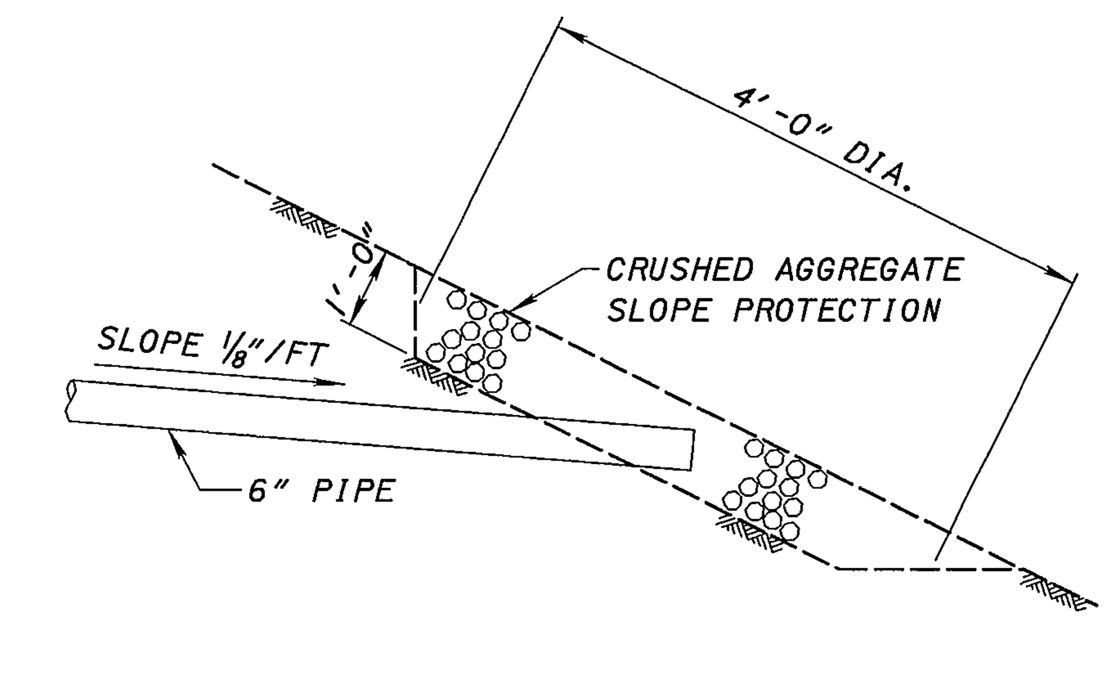
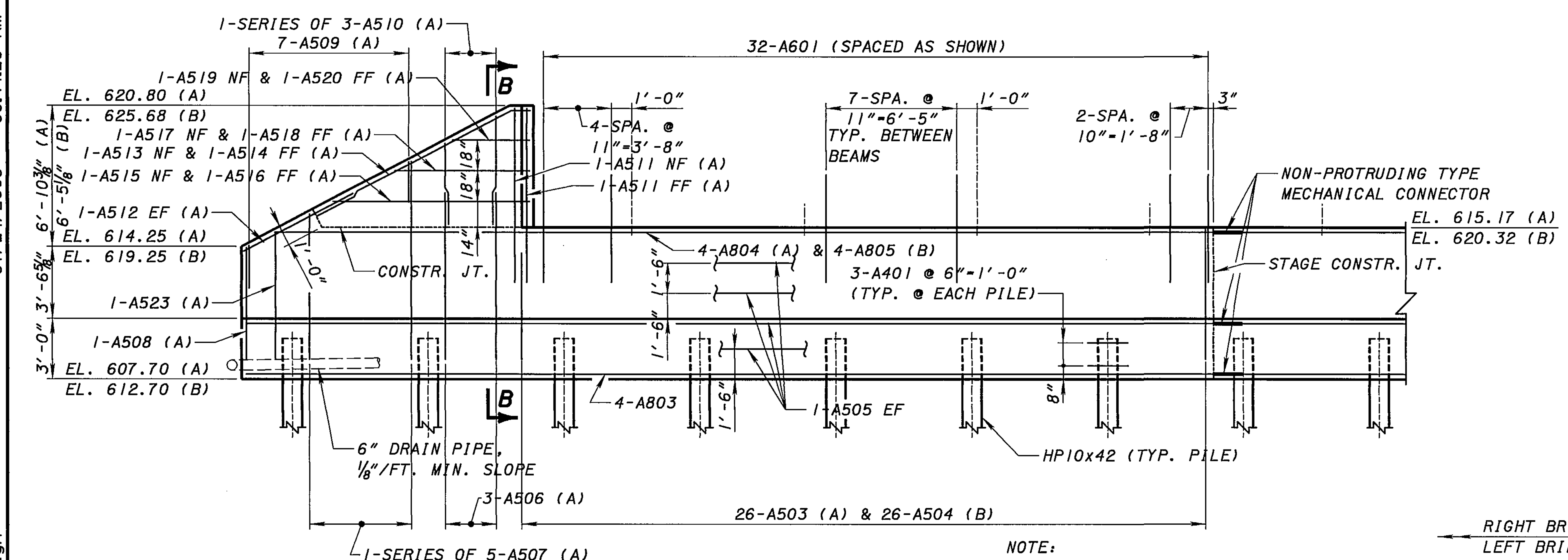


PLAN



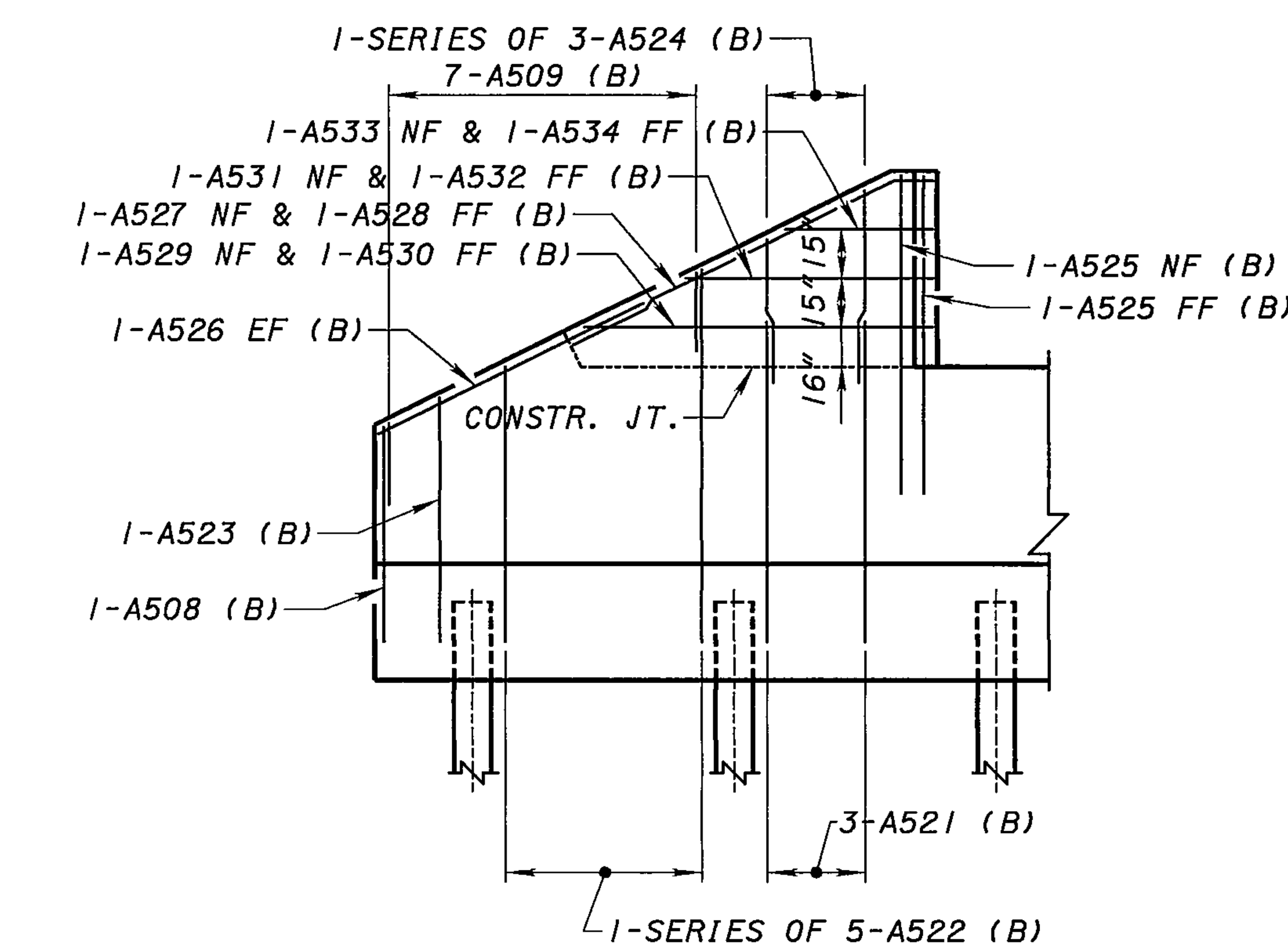
PLASTIC PIPE TERMINATION DETAIL



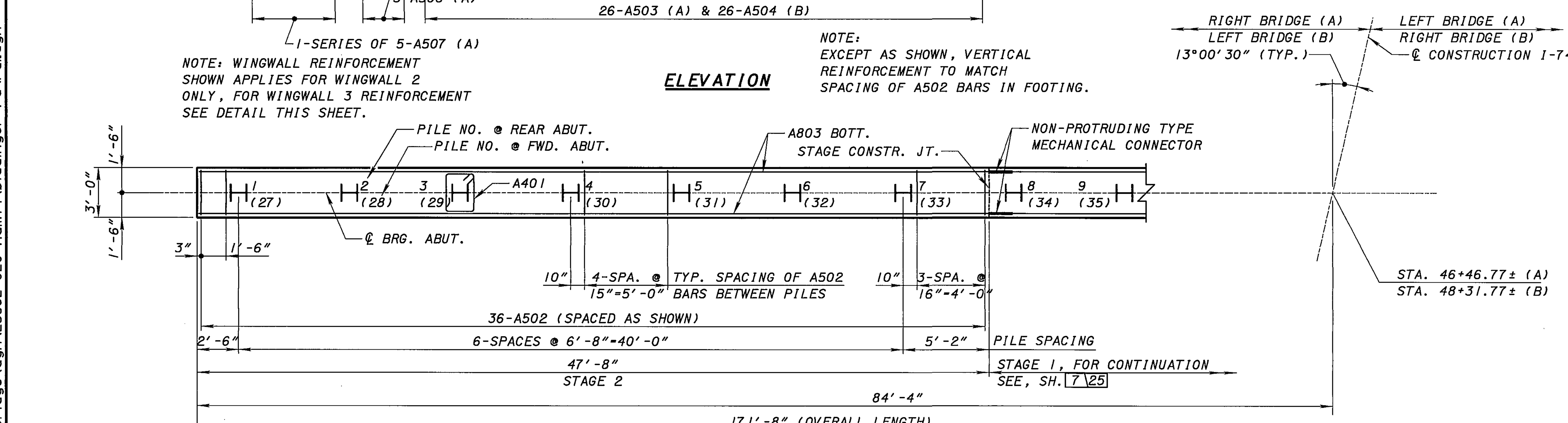
NOTE: WINGWALL REINFORCEMENT SHOWN APPLIES FOR WINGWALL 2 ONLY, FOR WINGWALL 3 REINFORCEMENT SEE DETAIL THIS SHEET.

ELEVATION

NOTE: EXCEPT AS SHOWN, VERTICAL REINFORCEMENT TO MATCH SPACING OF A502 BARS IN FOOTING.



WINGWALL 3 REINFORCEMENT



FOOTING PLAN

NOTES

1. FOR GENERAL NOTES, SEE SH. 2/25.
2. FOR REINFORCING STEEL LIST, SEE SH. 23/25.
3. FOR SECTION B-B, SEE SH. 9/25.
4. FOR END DIAPHRAGM, SEE SH. 16/25.
5. POROUS BACKFILL WITH FILTER FABRIC, 2 FEET THICK SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, TO 1 FOOT BELOW THE EMBANKMENT SURFACE, AND LATERALLY TO THE ENDS OF THE WINGWALLS.

LEGEND

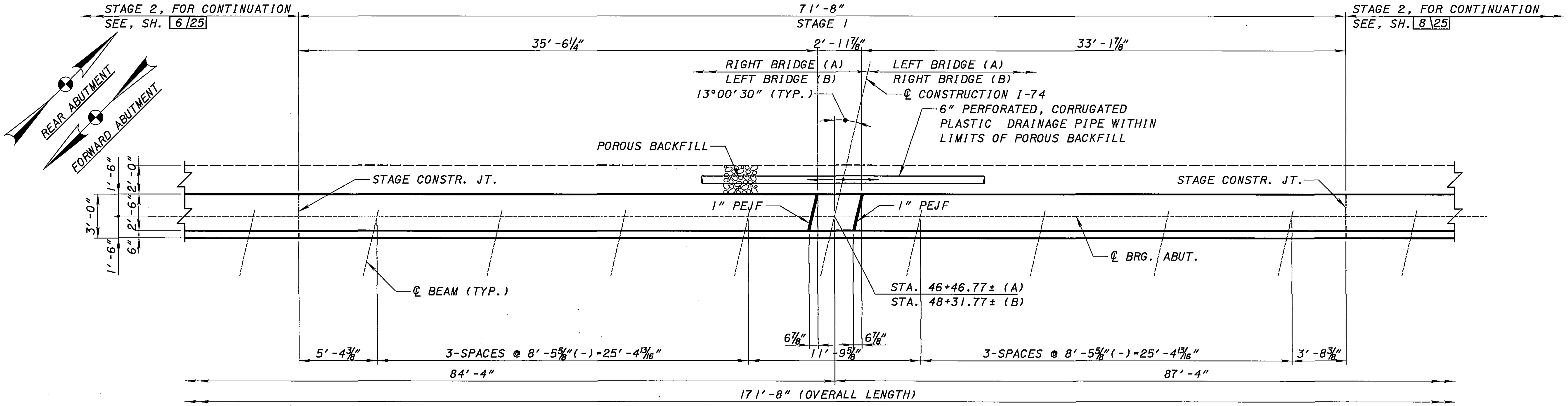
(A) - REAR ABUTMENT
(B) - FORWARD ABUTMENT
EF - EACH FACE
NF - NEAR FACE
FF - FAR FACE
PEJF - PREFORMED EXPANSION JOINT FILLER

DESIGN AGENCY
URS
36 EAST 7TH STREET SUITE 2300 CINCINNATI, OHIO 45202

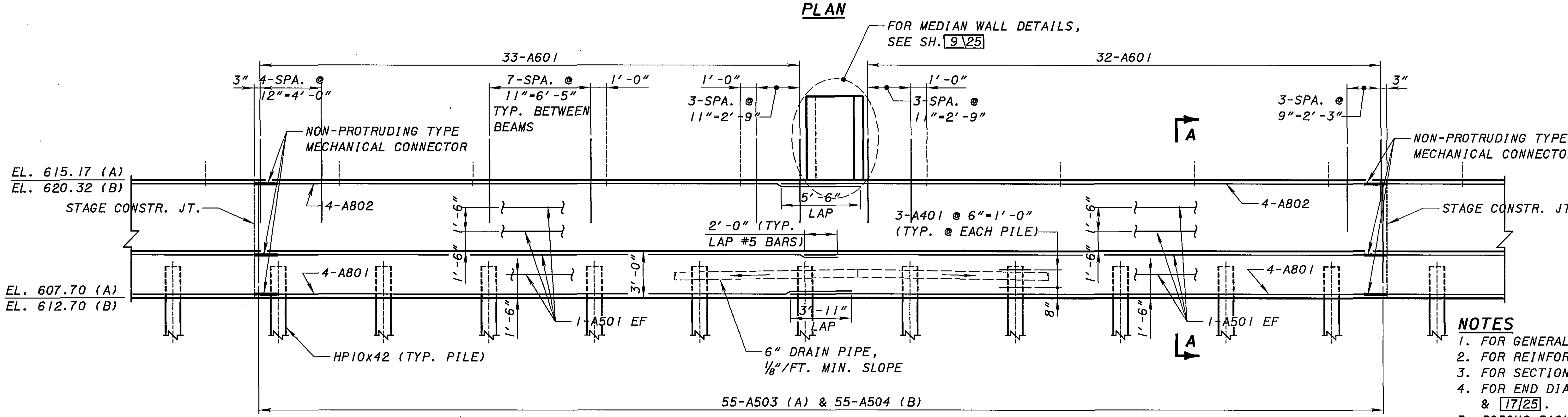
DESIGNED CEJ | CHECKED BER | DRAWN GJW | REVISED | REVIEWED MJZ | DATE 1-03 | STRUCTURE FILE NUMBER 3107833 LT 3107868 RT

REAR AND FORWARD ABUTMENTS (1)
BRIDGE NO. HAM-74-0069 L/R
I-74 OVER NEW BIDDINGER ROAD

HAM-74-0.00



PLAN

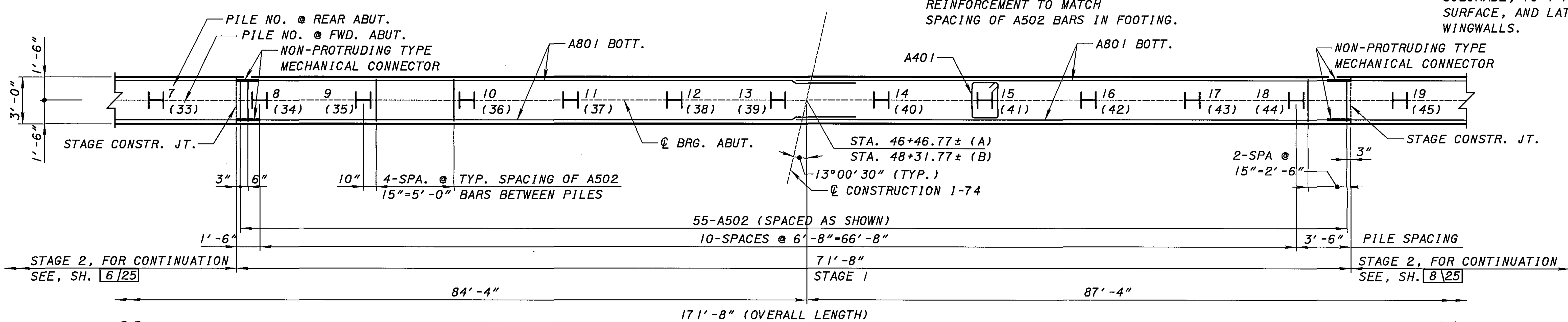


ELEVATION

NOTE:
EXCEPT AS SHOWN, VERTICAL REINFORCEMENT TO MATCH SPACING OF A502 BARS IN FOOTING.

NOTES

1. FOR GENERAL NOTES, SEE SH. 2/25.
2. FOR REINFORCING STEEL LIST, SEE SH. 23/25.
3. FOR SECTION A-A, SEE SH. 9/25.
4. FOR END DIAPHRAGM DETAILS, SEE SH. 16/25 & 17/25.
5. POROUS BACKFILL WITH FILTER FABRIC, 2 FEET THICK SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, TO 1 FOOT BELOW THE EMBANKMENT SURFACE, AND LATERALLY TO THE ENDS OF THE WINGWALLS.



FOOTING PLAN

LEGEND

(A) - REAR ABUTMENT
(B) - FORWARD ABUTMENT
EF - EACH FACE
NF - NEAR FACE
FF - FAR FACE
PEJF - PREFORMED EXPANSION JOINT FILLER

DESIGN AGENCY: URS, 36 EAST 7TH STREET, SUITE 2300, CINCINNATI, OHIO 45202

DESIGNED CEJ | CHECKED BER | DRAWN GJW | REVISED | REVIEWED MJZ | STRUCTURE FILE NUMBER 3107833 LT 3107868 RT | DATE 1-03

REAR AND FORWARD ABUTMENTS (2)
BRIDGE NO. HAM-74-0069 L/R
I-74 OVER NEW BIDDINGER ROAD

HAM-74-0.00

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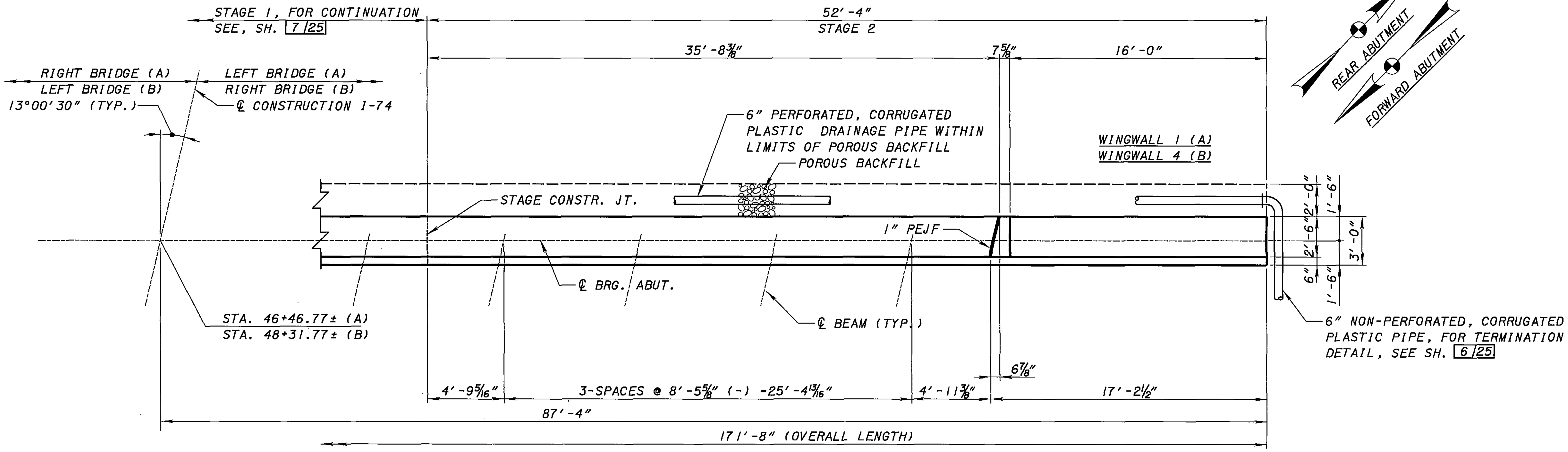
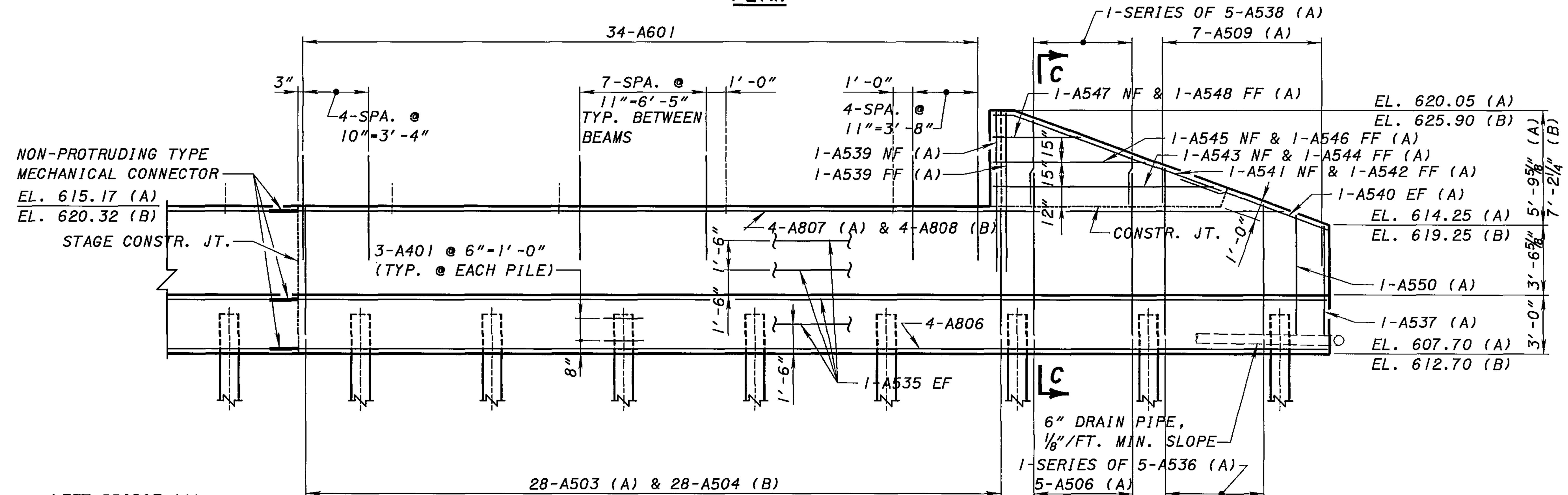


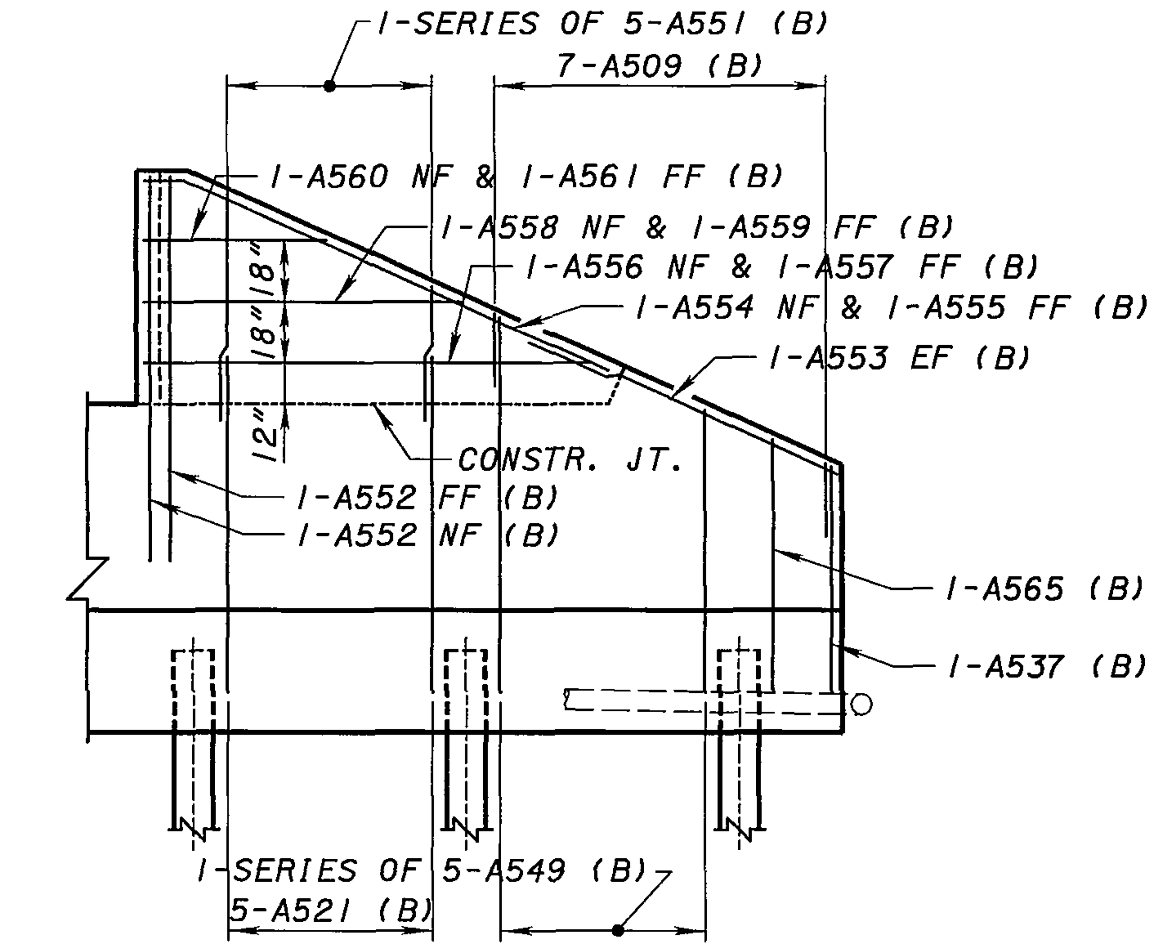
PLAN



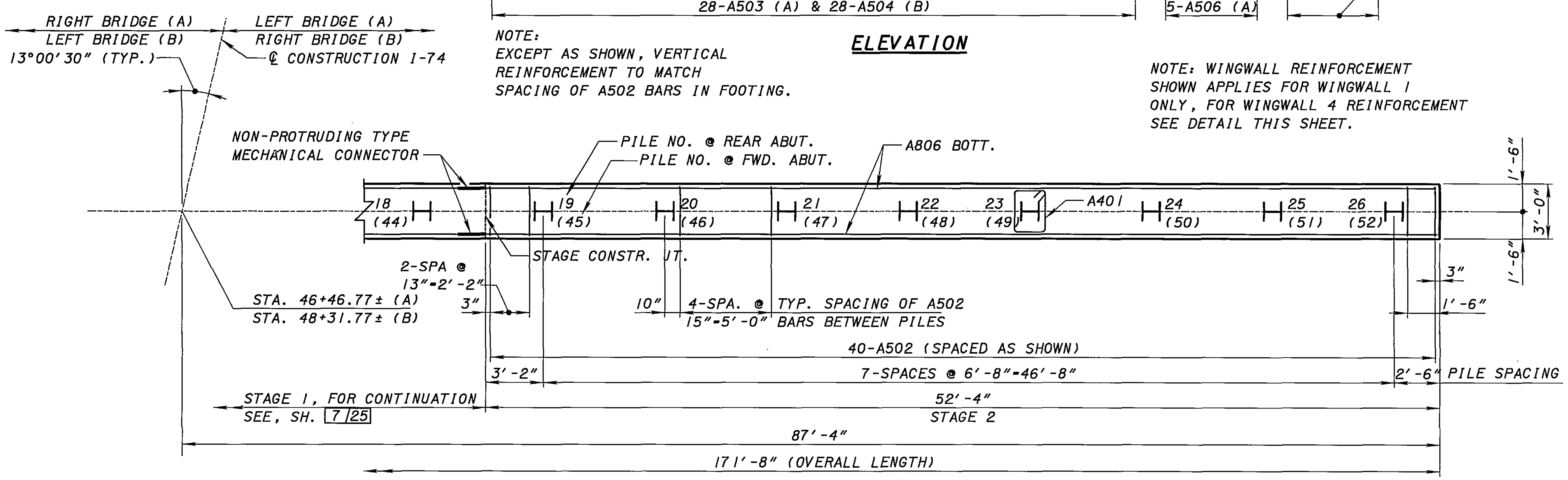
NOTE:
EXCEPT AS SHOWN, VERTICAL REINFORCEMENT TO MATCH SPACING OF A502 BARS IN FOOTING.

ELEVATION

NOTE: WINGWALL REINFORCEMENT SHOWN APPLIES FOR WINGWALL 1 ONLY, FOR WINGWALL 4 REINFORCEMENT SEE DETAIL THIS SHEET.



WINGWALL 4 REINFORCEMENT



FOOTING PLAN

NOTES

1. FOR GENERAL NOTES, SEE SH. 2/25.
2. FOR REINFORCING STEEL LIST, SEE SH. 23/25.
3. FOR SECTIONS C-C, SEE SH. 9/25.
4. FOR END DIAPHRAGM, SEE SH. 17/25.
5. POROUS BACKFILL WITH FILTER FABRIC, 2 FEET THICK SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE, TO 1 FOOT BELOW THE EMBANKMENT SURFACE, AND LATERALLY TO THE ENDS OF THE WINGWALLS.

LEGEND

(A) - REAR ABUTMENT
(B) - FORWARD ABUTMENT
EF - EACH FACE
NF - NEAR FACE
FF - FAR FACE
PEJF - PREFORMED EXPANSION JOINT FILLER

DESIGN AGENCY: URS, 36 EAST 7TH STREET, SUITE 2300, CINCINNATI, OHIO 45202

DESIGNED CEJ | DRAWN GJW | REVIEWED MJZ | DATE 1-03
CHECKED BER | REVISED | STRUCTURE FILE NUMBER 3107833 LT, 3107868 RT

REAR AND FORWARD ABUTMENTS (3)
BRIDGE NO. HAM-74-0069 L/R
I-74 OVER NEW BIDDINGER ROAD

HAM-74-0.00

8/25

396/421

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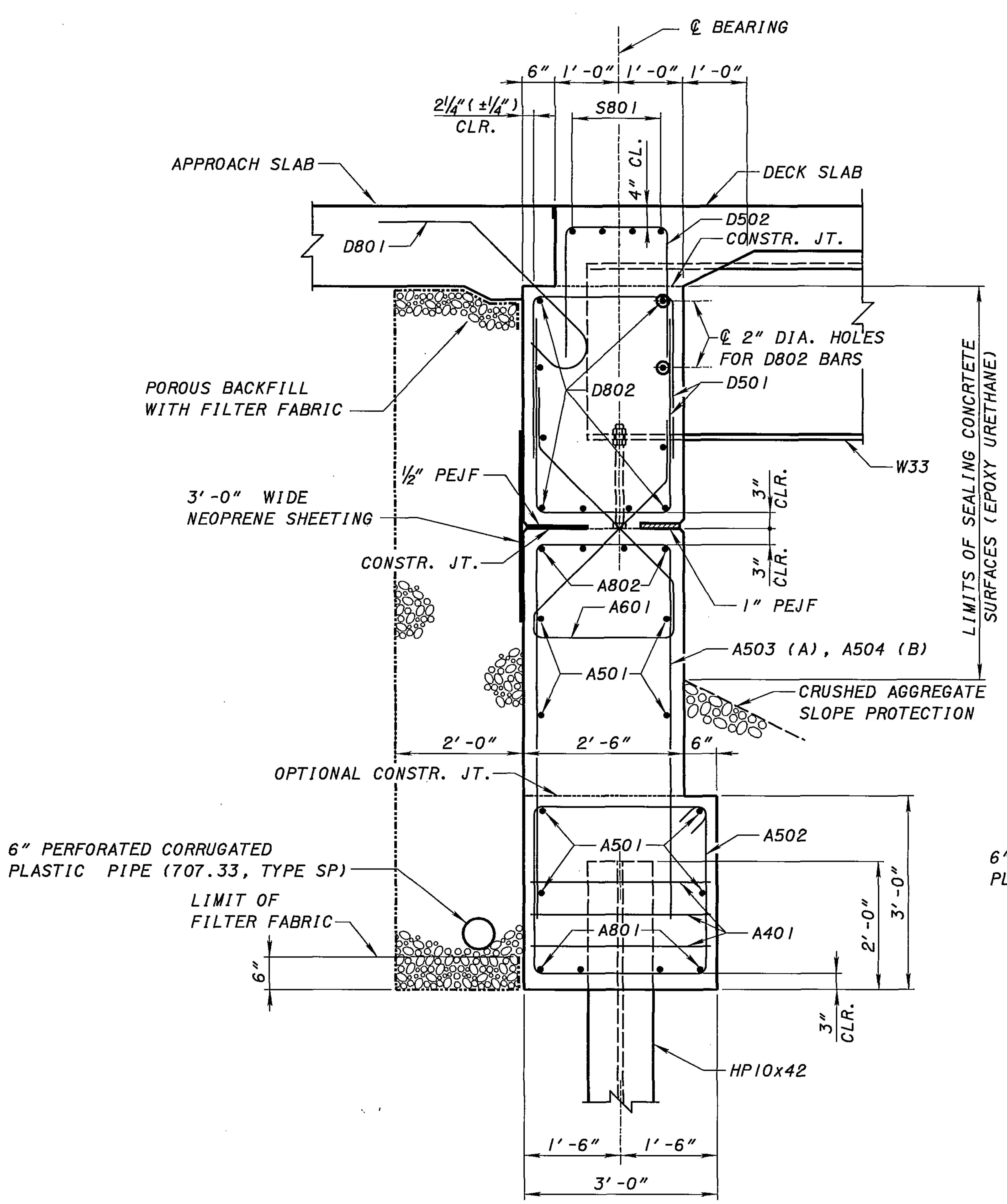
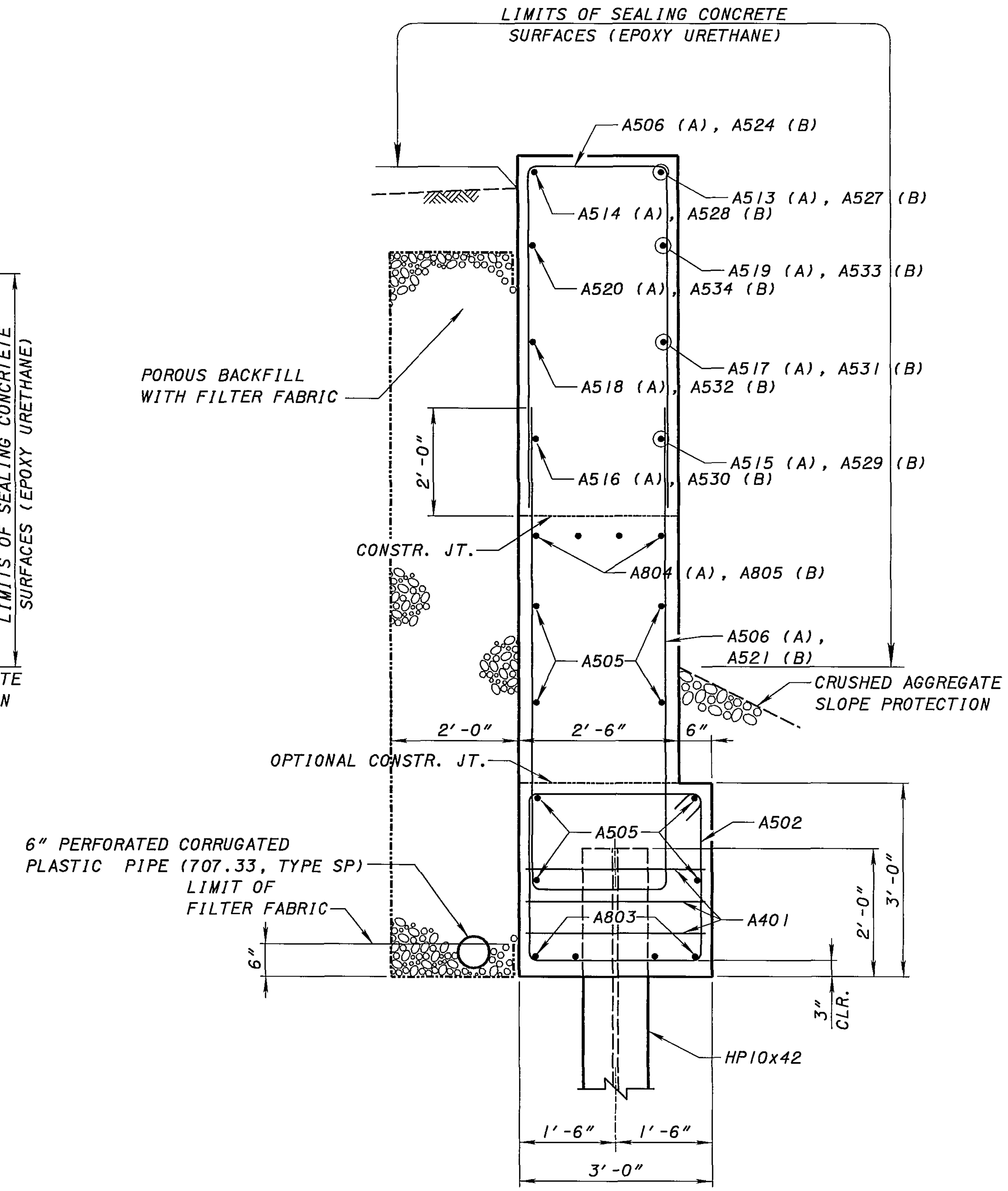
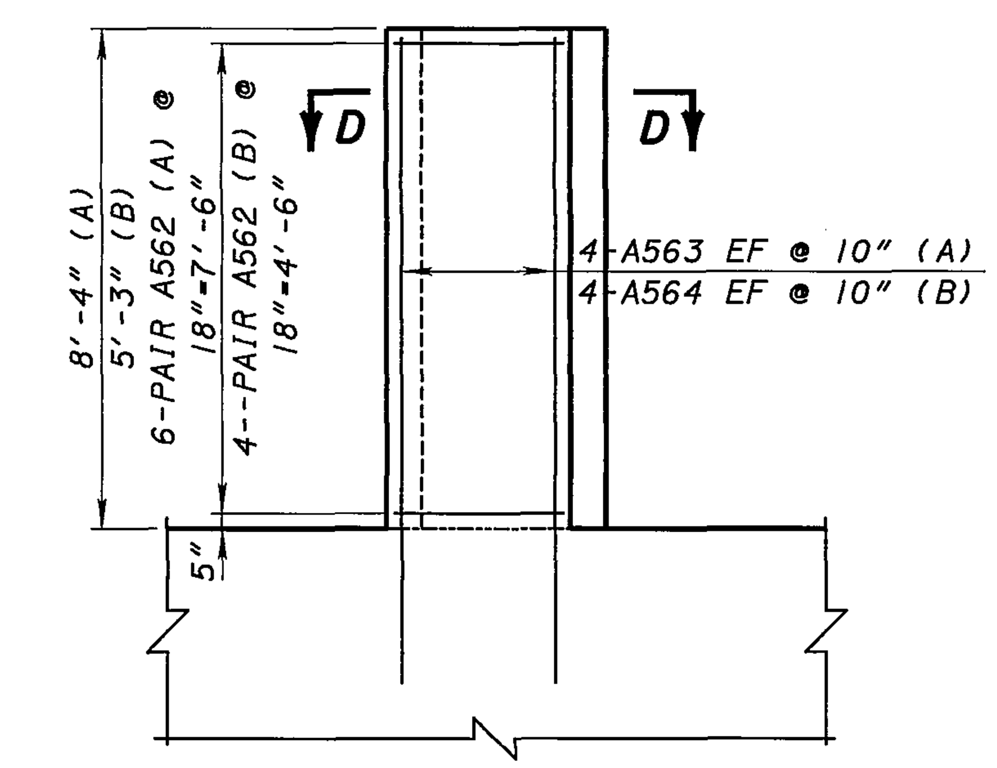


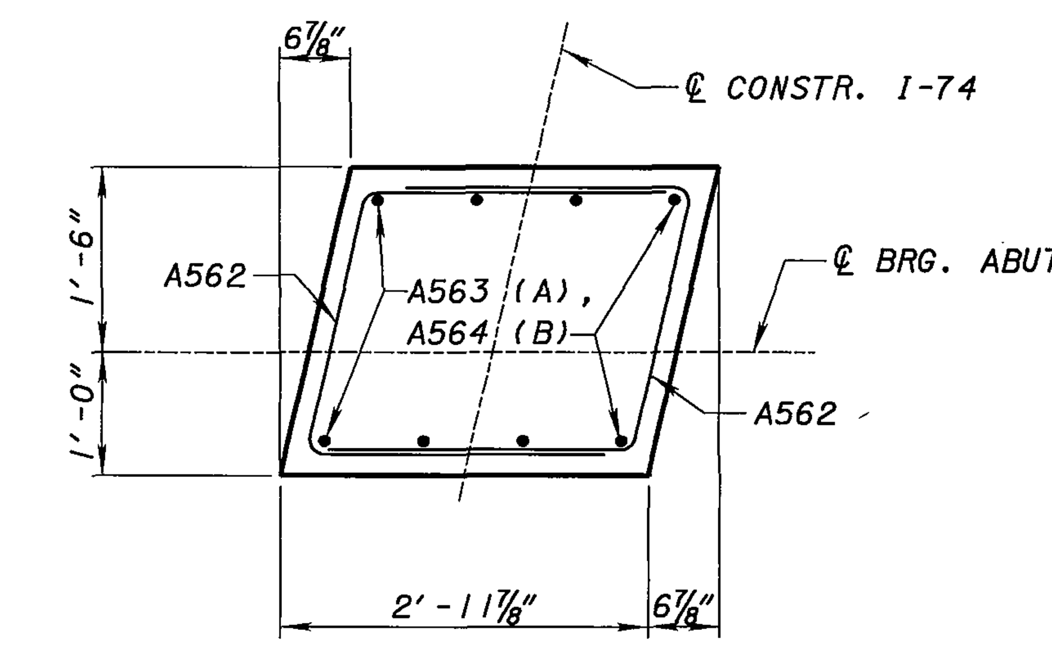
SECTION A-A



SECTION B-B
(SECTION C-C SIMILAR)



MEDIAN WALL ELEVATION



SECTION D-D

NOTES

1. FOR GENERAL NOTES, SEE SH. 2/25.
2. FOR REINFORCING STEEL LIST, SEE SH. 23/25.

LEGEND

(A) - REAR ABUTMENT
(B) - FORWARD ABUTMENT
EF - EACH FACE
PEJF - PREFORMED EXPANSION JOINT FILLER

DESIGN AGENCY: URS, 36 EAST 7TH STREET, SUITE 2300, CINCINNATI, OHIO 45202

DESIGNED	DRAWN	REVIEWED	DATE
CEJ	GJW	MJZ	1-03
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BER		3107833 LT 3107868 RT	

REAR AND FORWARD ABUTMENTS (4)

BRIDGE NO. HAM-74-0069 L/R
I-74 OVER NEW BIDDINGER ROAD

HAM-74-0.00

9/25

397/421

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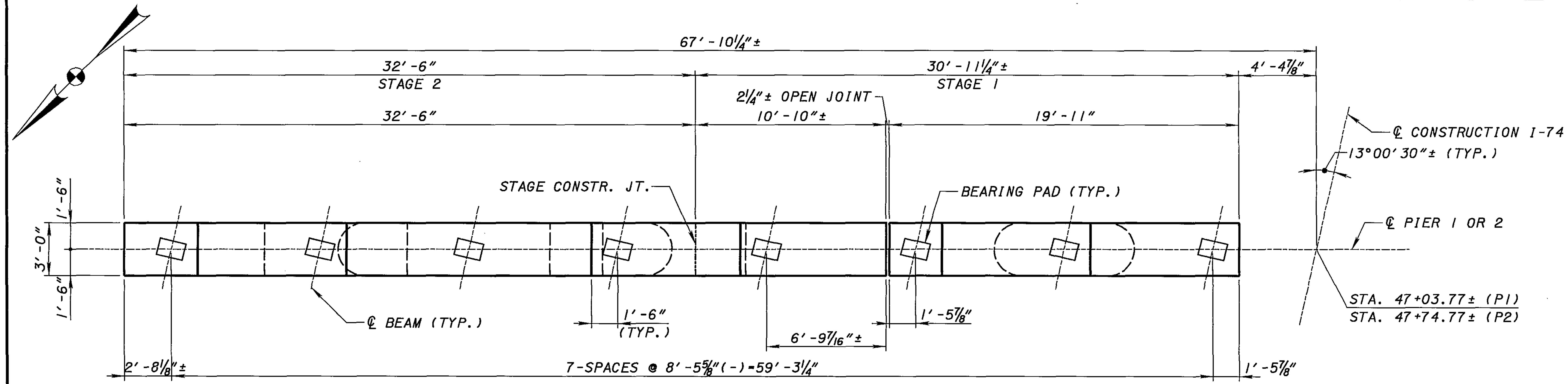
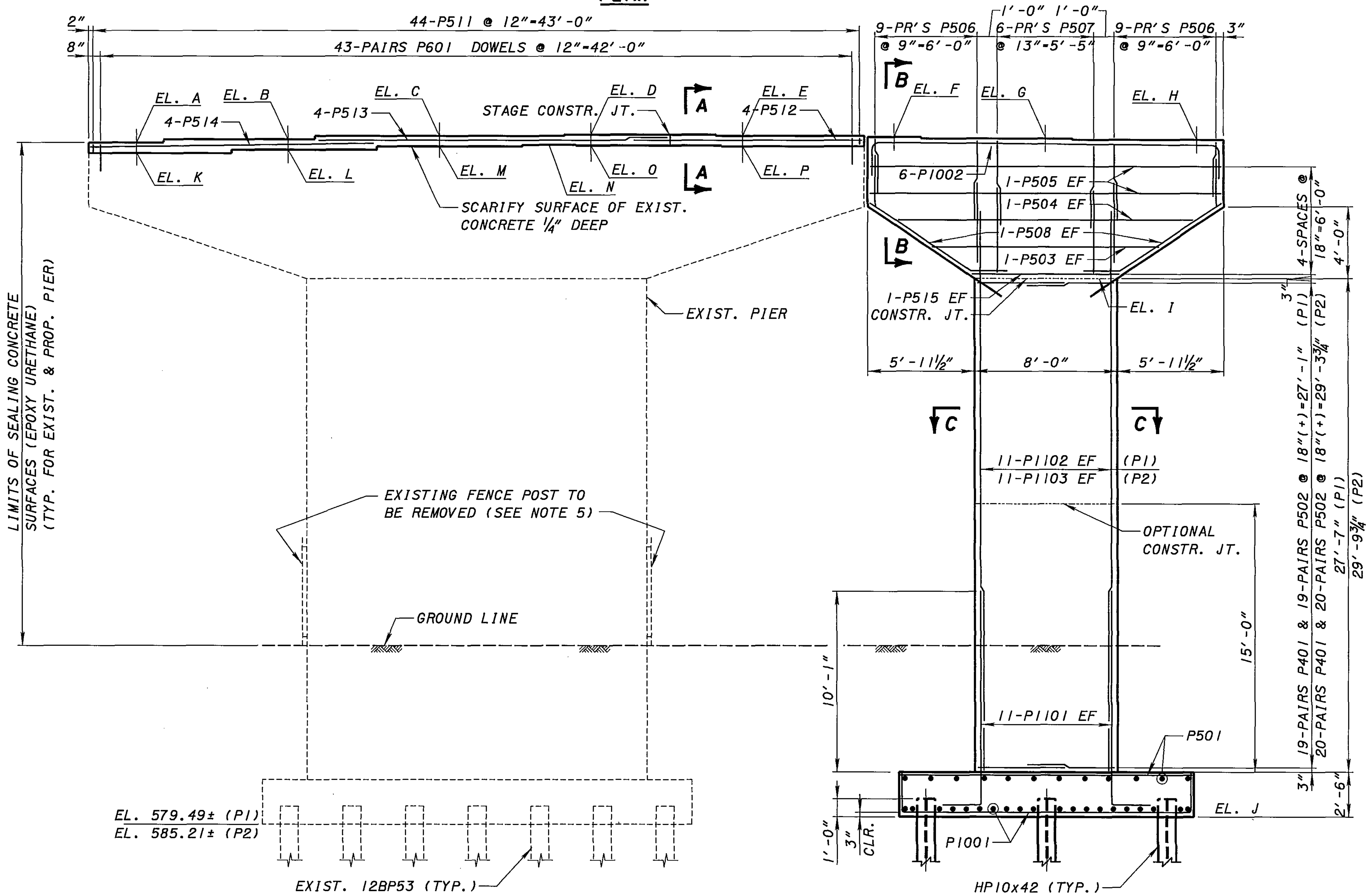
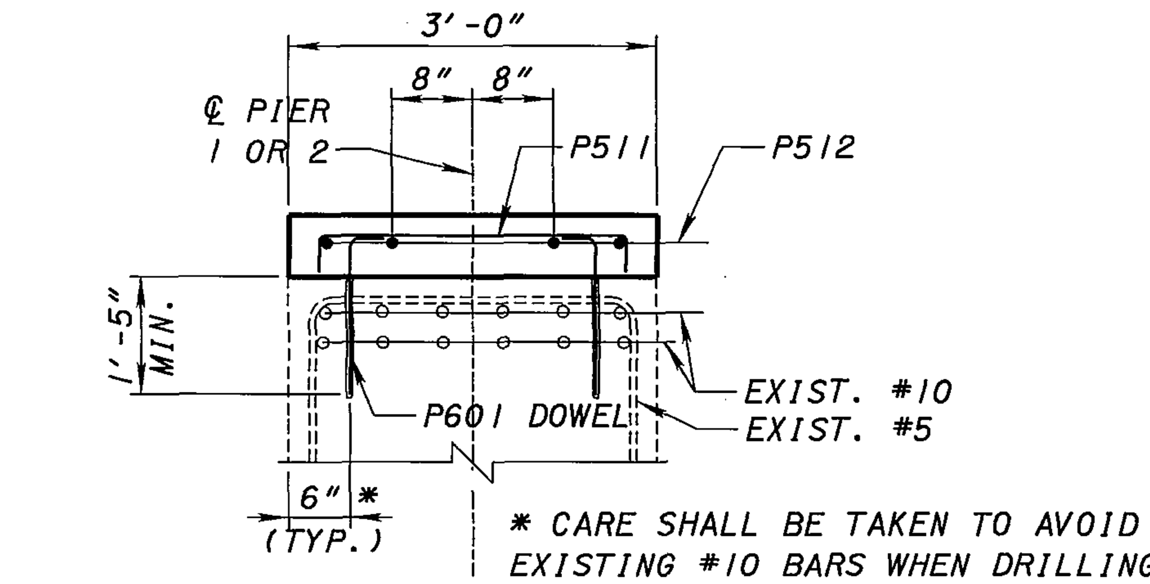


PLAN



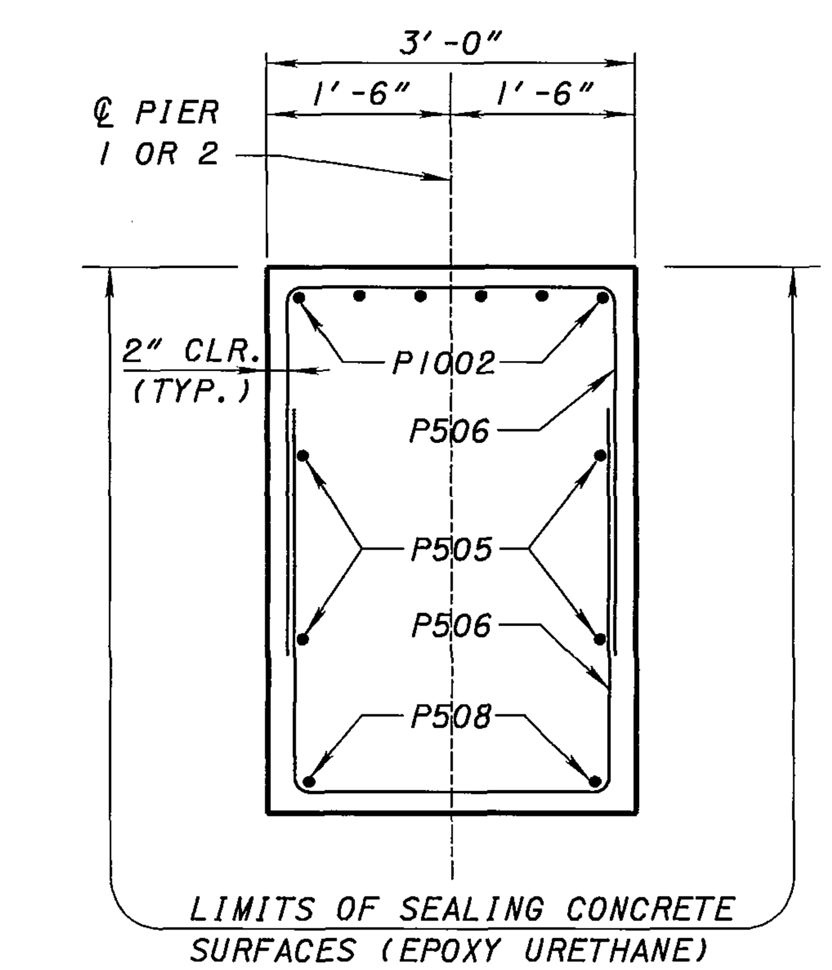
ELEVATION

	PROPOSED ELEVATIONS										EXIST. BEAM SEAT ELEVATIONS					
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
PIER 1	617.57	617.76	617.95	618.03	617.96	617.89	617.81	617.74	609.99	579.90	616.99±	617.17±	617.36±	617.50±	617.43±	617.37±
PIER 2	619.70	619.89	620.07	620.16	620.08	620.01	619.94	619.87	612.21	579.90	619.21±	619.39±	619.57±	619.72±	619.65±	619.58±

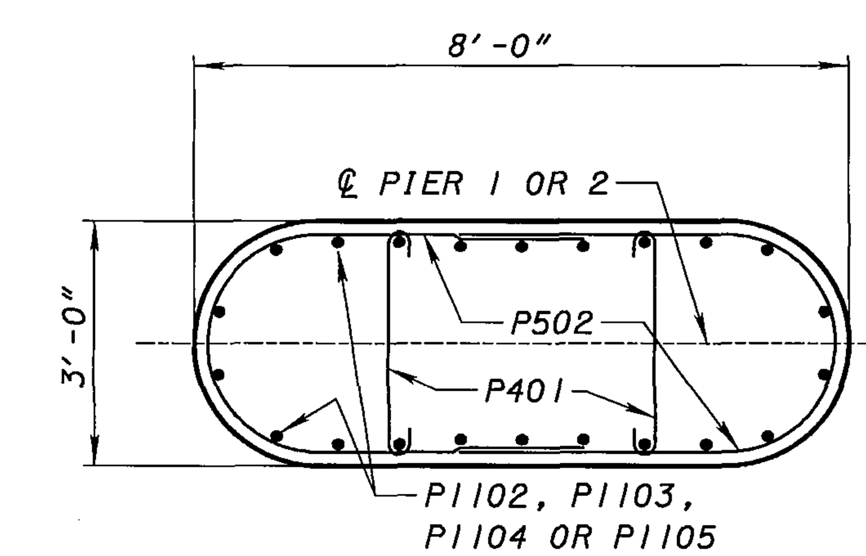


* CARE SHALL BE TAKEN TO AVOID EXISTING #10 BARS WHEN DRILLING HOLES FOR DOWELS. IF NECESSARY, LOCATION OF DOWEL SHALL BE MOVED TO AVOID INTERFERENCE.

SECTION A-A



SECTION B-B



SECTION C-C

NOTES

1. FOR GENERAL NOTES, SEE SH. 2/25.
2. FOR REINFORCING STEEL LIST, SEE SH. 24/25.
3. FOR FOOTING PLAN, SEE SH. 12/25.
4. FOR BEARING PAD DETAILS, SEE SH. 14/25.
5. CONTRACTOR SHALL REMOVE EXISTING FENCE POSTS ATTACHED TO PIERS AND PATCH HOLES LEFT FROM REMOVAL OF ANCHORS WITH TROWELABLE MORTAR. IN ADDITION CONTRACTOR SHALL PATCH ANY OTHER AREARS AS DESIGNATED BY THE ENGINEER. 5 SQ. FT. HAVE BEEN PROVIDED FOR THIS TASK. PAYMENT SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 843 PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN.

LEGEND

(P1) - PIER 1
(P2) - PIER 2
EF - EACH FACE

DESIGN AGENCY
URS
35 EAST 7TH STREET
SUITE 2300
CINCINNATI, OHIO 45202

DESIGNED CEJ | DRAWN GJW | REVIEWED MJZ | DATE 1-03
CHECKED BER | REVISED | STRUCTURE FILE NUMBER 3107833 LT 3107868 RT

PIER 1 & 2 - LEFT BRIDGE

BRIDGE NO. HAM-74-0069 L/R
I-74 OVER NEW BIDDINGER ROAD

HAM-74-0.00

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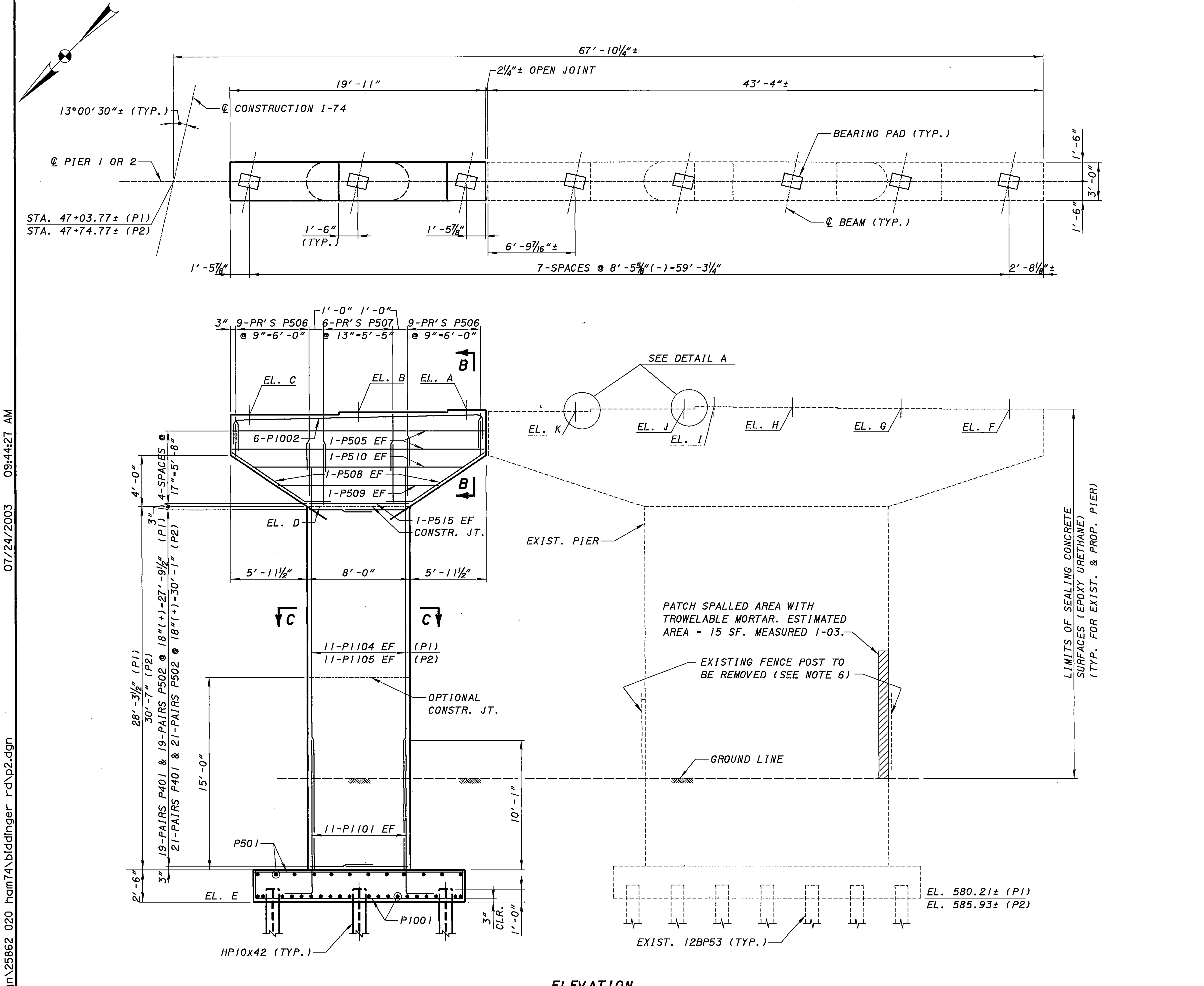
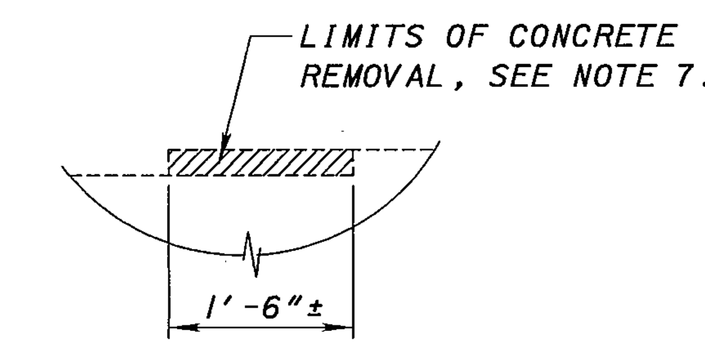


ELEVATION

	PROPOSED ELEVATIONS					EXIST. BEAM SEAT ELEVATIONS					
	A	B	C	D	E	F	G	H	I	J	K
PIER 1	617.93	617.75	617.56	610.69	579.90	617.89±	617.95±	618.03±	618.07±	617.89±	617.71±
PIER 2	619.90	619.72	619.55	612.98	579.90	620.11±	620.18±	620.25±	620.29±	620.11±	619.93±



DETAIL A

NOTES

1. FOR GENERAL NOTES, SEE SH. 2/25.
2. FOR REINFORCING STEEL LIST, SEE SH. 24/25.
3. FOR FOOTING PLAN, SEE SH. 12/25.
4. FOR SECTIONS A-A THRU C-C, SEE SH. 10/25.
5. FOR BEARING PAD DETAILS, SEE SH. 14/25.
6. CONTRACTOR SHALL REMOVE EXISTING FENCE POSTS ATTACHED TO PIERS AND PATCH HOLES LEFT FROM REMOVAL OF ANCHORS WITH TROWELABLE MORTAR. IN ADDITION CONTRACTOR SHALL PATCH ANY OTHER AREARS AS DESIGNATED BY THE ENGINEER. 5 SQ. FT. HAVE BEEN PROVIDED FOR THIS TASK. PAYMENT SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 843 PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN.
7. WHERE STEPS IN THE EXISTING PIER BEARING SEAT INTERFERE WITH PLACEMENT OF PROPOSED BEAM BEARINGS, CONCRETE SHALL BE REMOVED FROM THE BEARING SEAT TO PRODUCE A LEVEL SURFACE BELOW THE PROPOSED BEARINGS. A MINIMUM HORIZONTAL CLEARANCE OF 3 INCHES SHALL BE PROVIDED BETWEEN STEPS IN THE BEARING SEAT AND ANY PART OF THE BEARING LOAD PLATE. THE BEARING SEAT SHALL BE FINISHED TO A SMOOTH SURFACE WHERE CONCRETE IS IS REMOVED. THE CONTRACTOR SHALL MASK THE SURFACE AREAS BELOW THE PROPOSED BEARINGS AND APPLY AN EPOXY-URETHANE SEALANT TO THE ENTIRE BEARING SEAT, EXCEPT FOR MASKED AREAS.

LEGEND

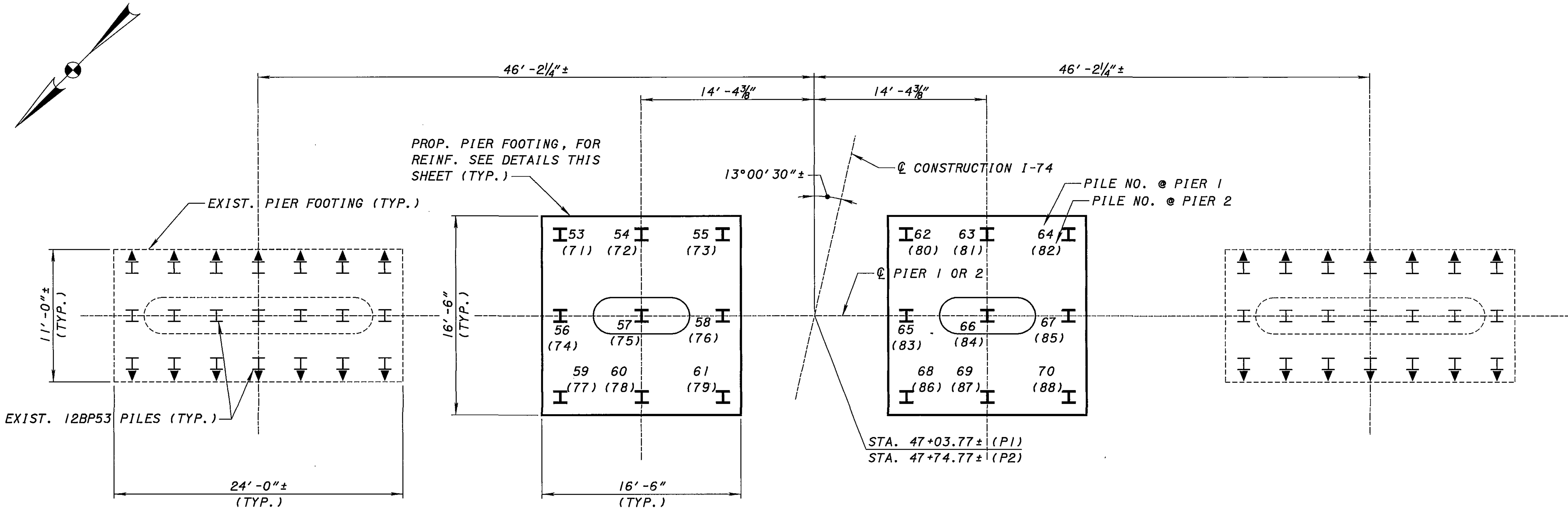
(P1) - PIER 1
(P2) - PIER 2
EF - EACH FACE

DESIGN AGENCY
URS
36 EAST 7TH STREET
SUITE 2300
CINCINNATI, OHIO 45202

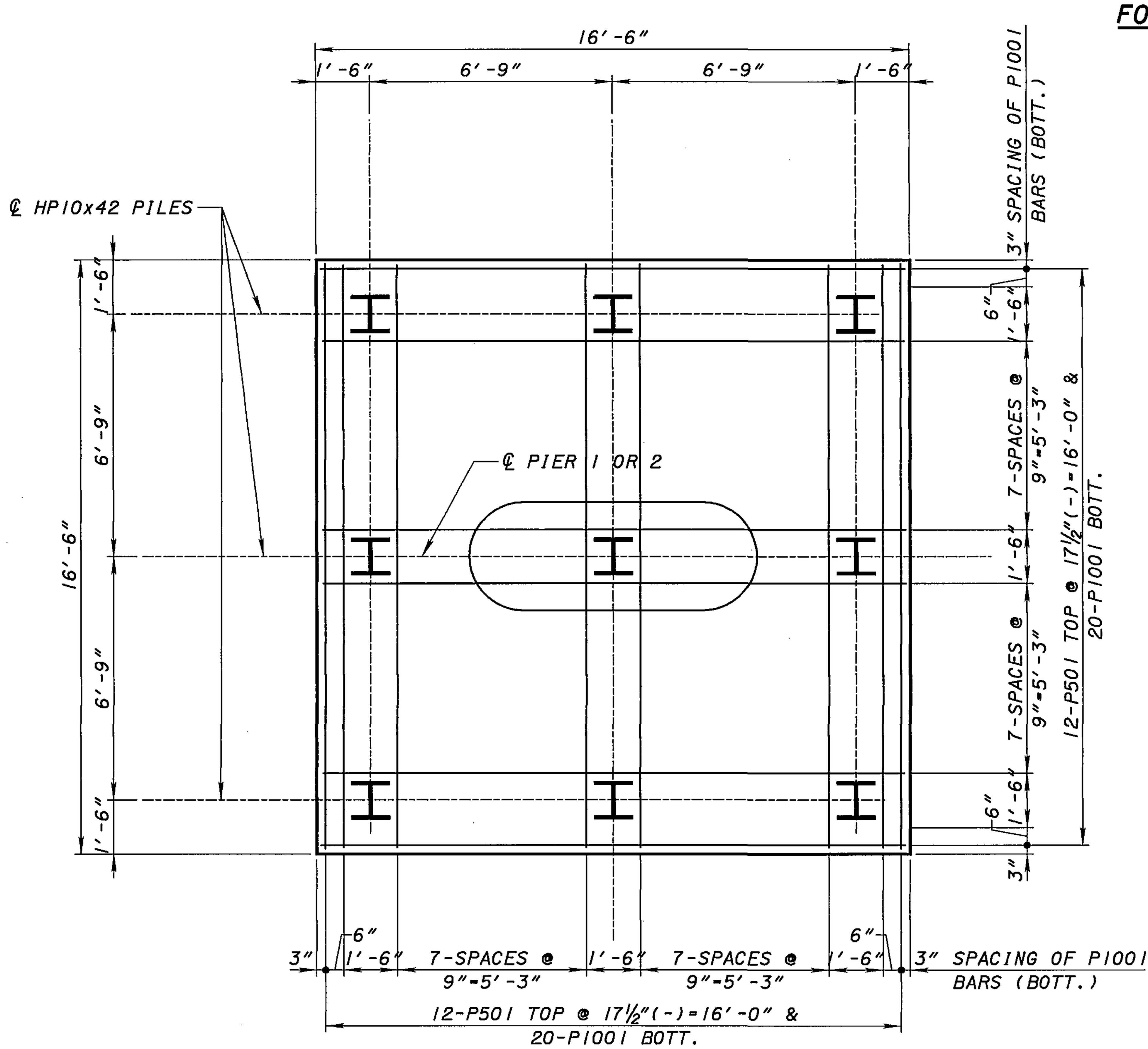
DESIGNED CEJ | CHECKED BER | DRAWN GJW | REVISED | REVIEWED MJZ | DATE 1-03 | STRUCTURE FILE NUMBER 3107833 LT 3107868 RT

PIER 1 & 2 - RIGHT BRIDGE
BRIDGE NO. HAM-74-0069 L/R
I-74 OVER NEW BIDDINGER ROAD

HAM-74-0.00



FOOTING PLAN



PROPOSED FOOTING

NOTES
1. FOR GENERAL NOTES, SEE SH. 2/25.
2. FOR REINFORCING STEEL LIST, SEE SH. 24/25.

LEGEND
- EXISTING 12BP53 PILE, VERTICAL
- EXISTING 12BP53 PILE, BATTERED 4 VERTICAL TO 1 HORIZONTAL
- PROPOSED HP10x42 PILE, VERTICAL

PIER 1 & 2 - FOOTING DETAILS
BRIDGE NO. HAM-74-0069 L/R
I-74 OVER NEW BIDDINGER ROAD

DESIGN AGENCY
URS
36 EAST 7TH STREET SUITE 2300 CINCINNATI, OHIO 45202
DESIGNED CEJ | DRAWN GJW | REVIEWED MJZ | DATE 1-03
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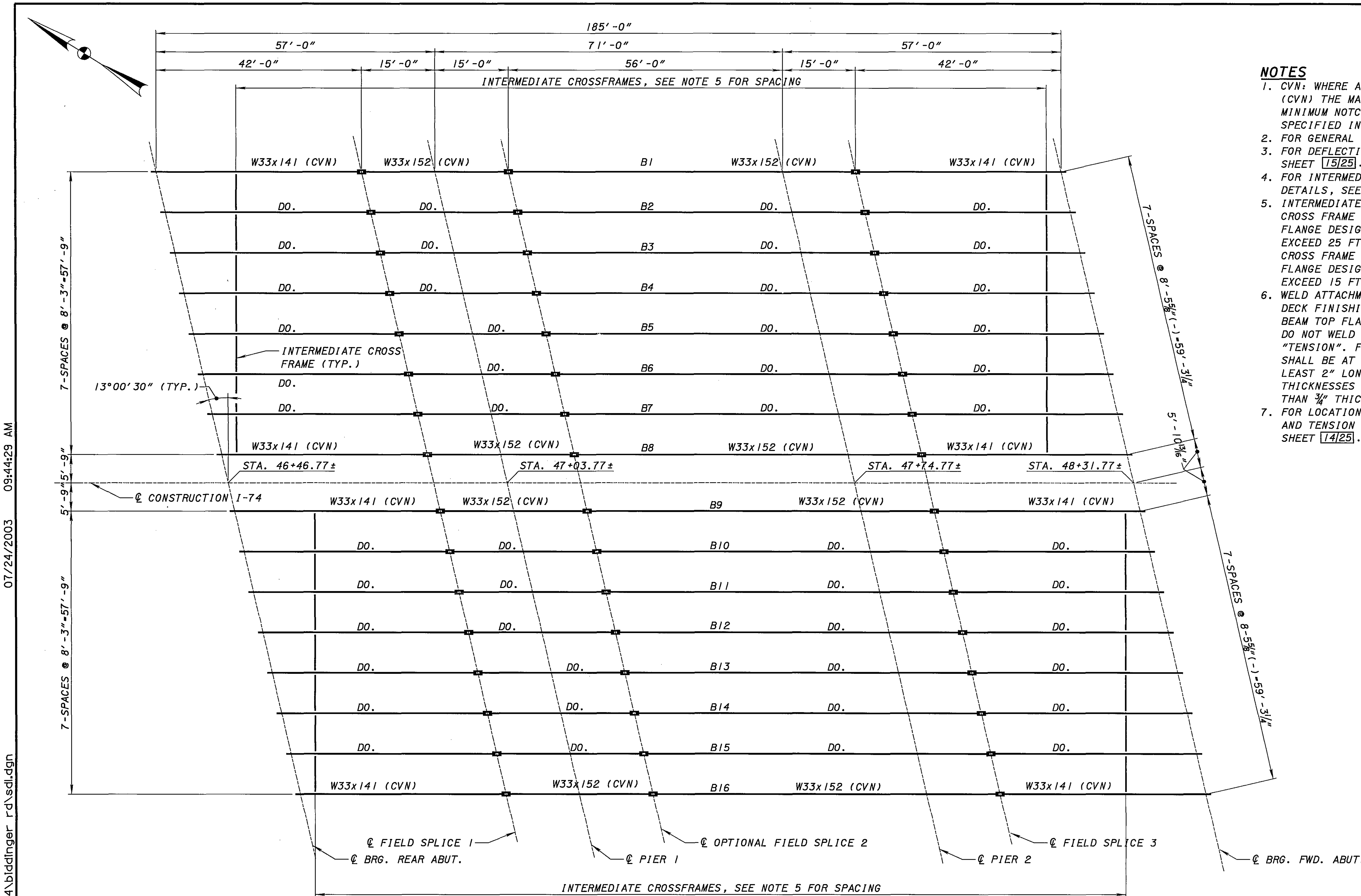
HAM-74-0.00



FRAMING PLAN

NOTES

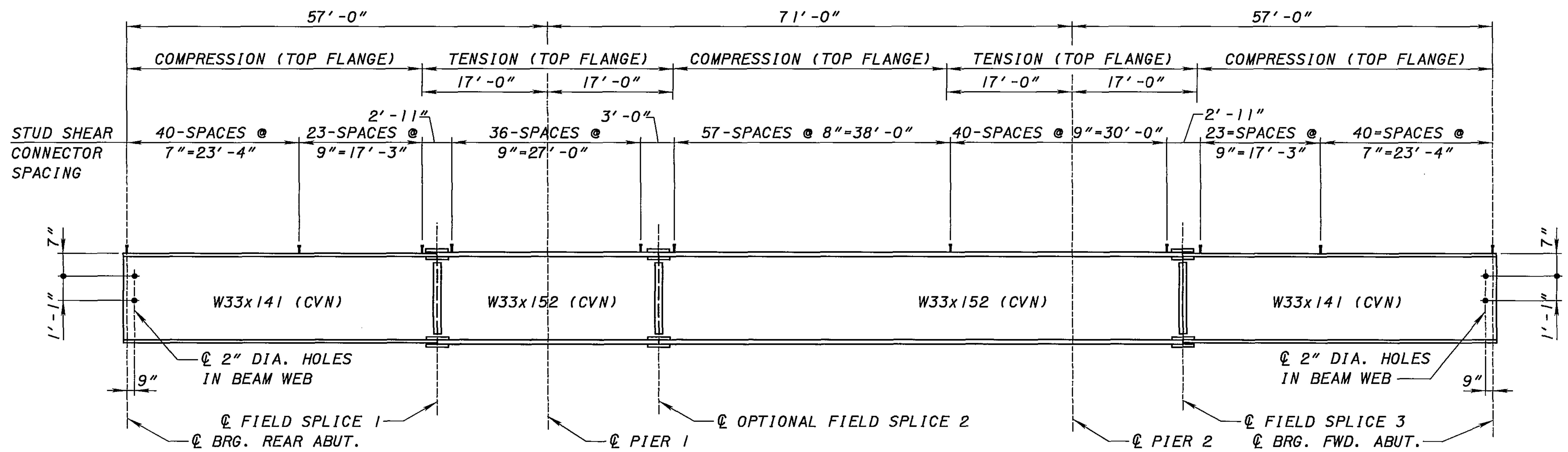
1. CVN: WHERE A SHAPE OR PLATE IS DESIGNATED (CVN) THE MATERIAL SHALL MEET THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.
2. FOR GENERAL NOTES, SEE SHEET 2/25.
3. FOR DEFLECTION AND CAMBER DIAGRAM, SEE SHEET 15/25.
4. FOR INTERMEDIATE CROSS FRAME AND FIELD SPLICE DETAILS, SEE SHEET 14/25.
5. INTERMEDIATE CROSSFRAME SPACING:
   CROSS FRAME SPACINGS IN REGIONS OF BEAM TOP FLANGE DESIGNATED "COMPRESSION" SHALL NOT EXCEED 25 FT.
   CROSS FRAME SPACINGS IN REGIONS OF BEAM TOP FLANGE DESIGNATED "TENSION" SHALL NOT EXCEED 15 FT.
6. WELD ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE TO REGIONS OF THE FASCIA BEAM TOP FLANGES DESIGNATED "COMPRESSION". DO NOT WELD ATTACHMENTS TO REGIONS DESIGNATED "TENSION". FILLET WELDS TO COMPRESSION FLANGES SHALL BE AT LEAST 1" FROM EDGE OF FLANGE, BE AT LEAST 2" LONG, AND BE AT LEAST ¼" FOR THICKNESSES UP TO ¾" OR $\frac{5}{16}$" FOR GREATER THAN ¾" THICK.
7. FOR LOCATION OF BEAM TOP FLANGE COMPRESSION AND TENSION REGIONS, SEE BEAM ELEVATION SHEET 14/25.

DESIGN AGENCY: URS, 36 EAST 7TH STREET, SUITE 2300, CINCINNATI, OHIO 45202

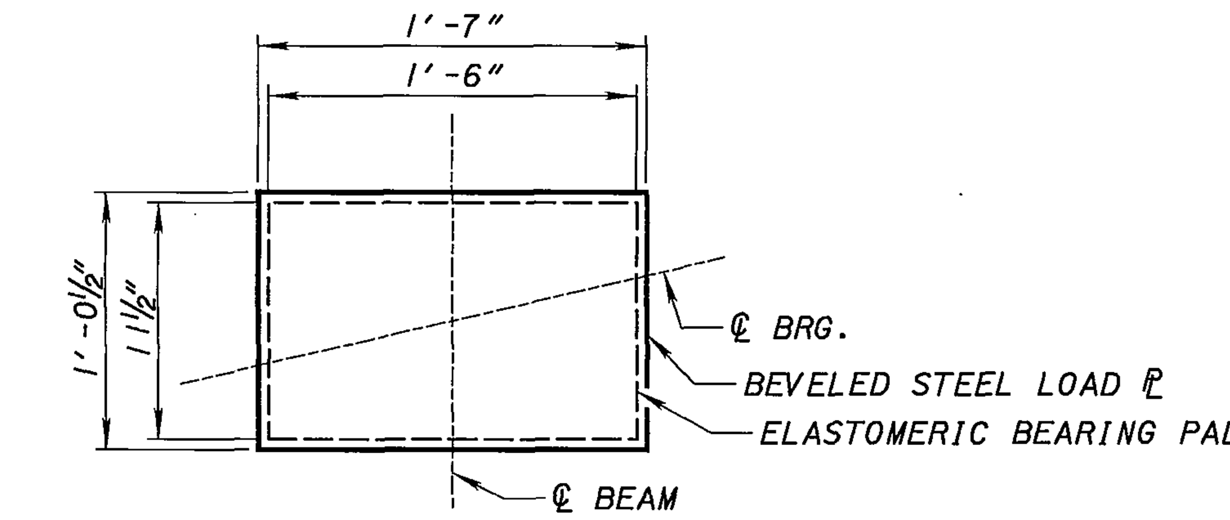
DESIGNED	CEJ
CHECKED	BER
DRAWN	GJW
REVISED	
REVIEWED	MJZ
DATE	1-03
STRUCTURE FILE NUMBER	3107833 LT 3107868 RT

FRAMING PLAN
BRIDGE NO. HAM-74-0069 L/R
I-74 OVER NEW BIDDINGER ROAD

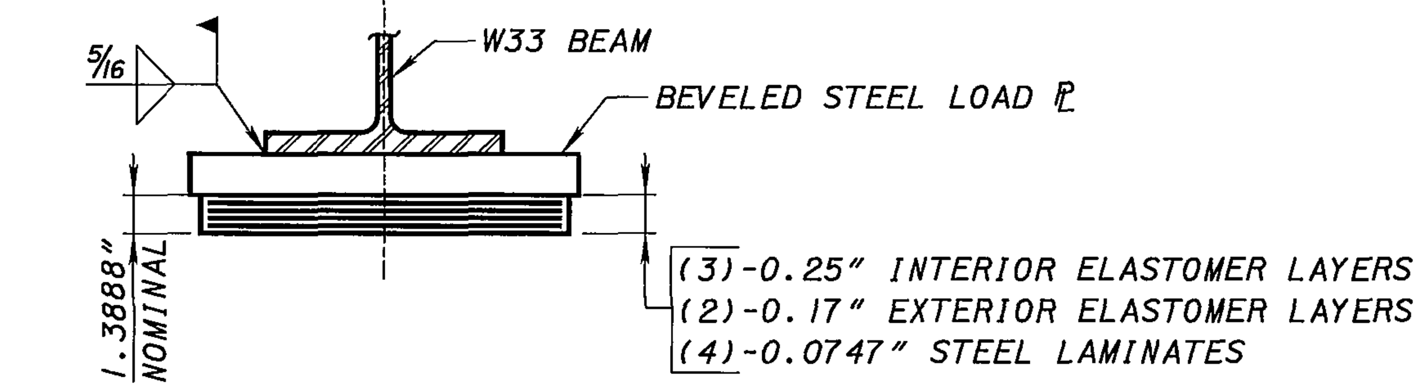
HAM-74-0.00



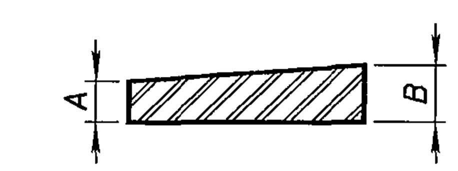
BEAM ELEVATION



PLAN



ELEVATION



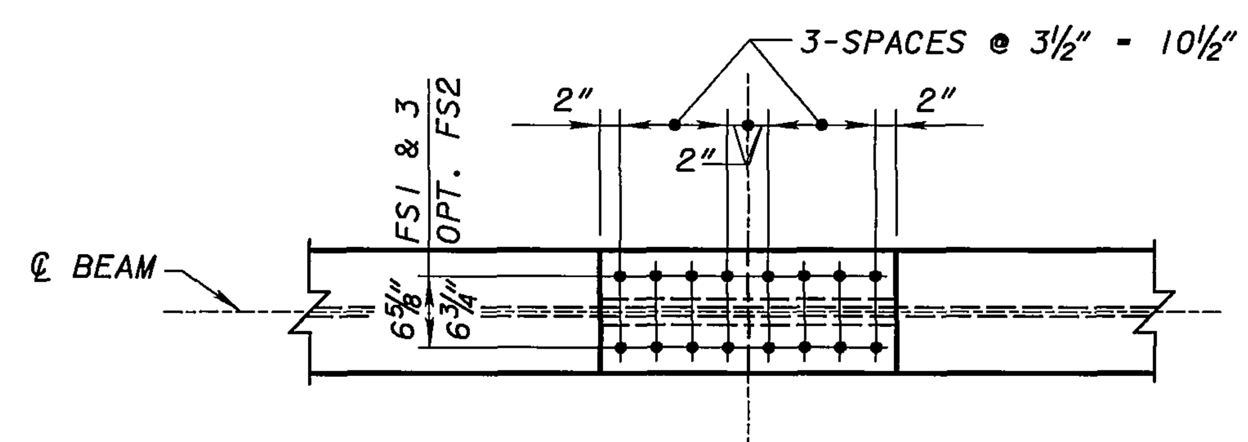
ELEVATION - BEVELED LOAD PLATE

LAMINATED ELASTOMERIC BEARING PAD DETAILS

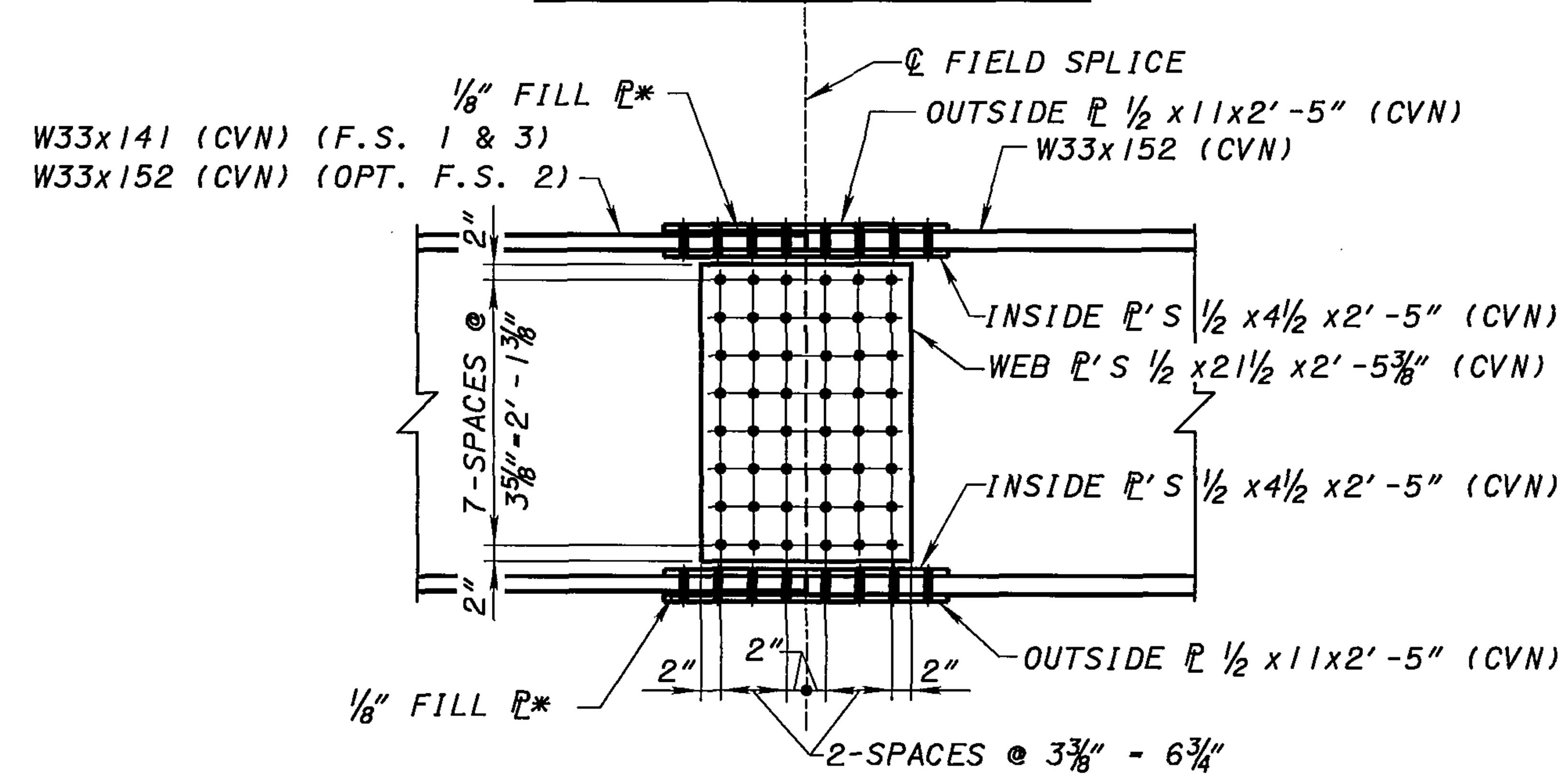
DUROMETER HARDNESS - 50

LIVE LOAD REACTION - 69.94 K
DEAD LOAD REACTION - 121.65 K
MAXIMUM DESIGN LOAD - 191.59 K

LOCATION	A	B
PIER 1, B1 THRU B11	2"	2⅜"
PIER 1, B12 THRU B13	6½"	6⅞"
PIER 1, B14 THRU B16	5"	5⅜"
PIER 2, B1 THRU B11	2"	2⅜"
PIER 2, B12 THRU B13	3½"	3⅞"
PIER 2, B14 THRU B16	2"	2⅜"



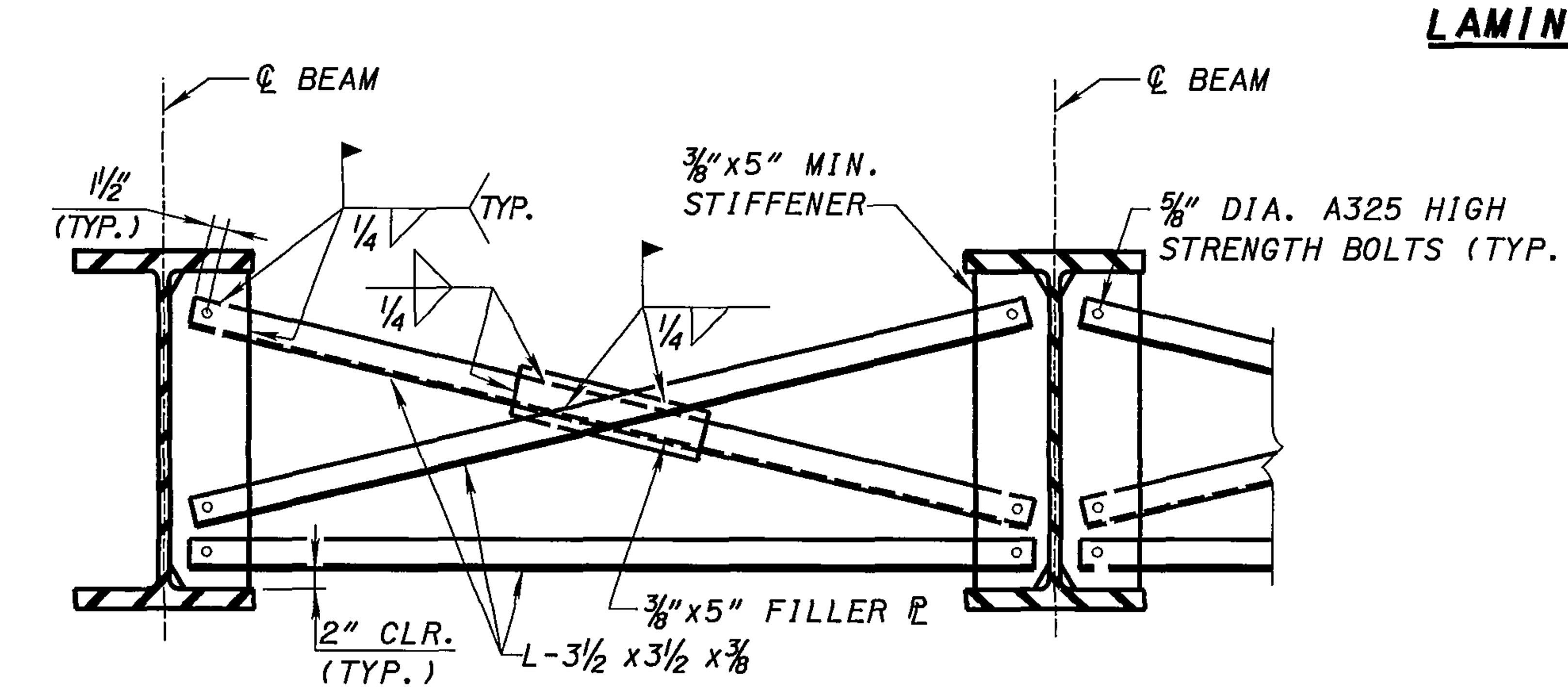
PLAN - FLANGE SPLICE



ELEVATION - WEB SPLICE

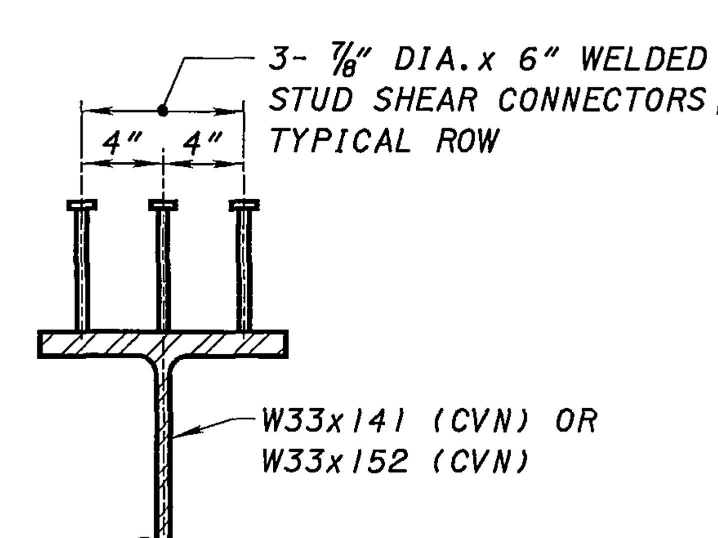
PROPOSED FIELD SPLICE DETAILS

SPLICE NOTES
1. ALL FASTENERS SHALL BE 1⅛" DIA. HIGH STRENGTH BOLTS, ASTM A-325.
2. FOR ADDITIONAL SPLICE DETAILS, SEE STD. DWG. BS-1-93.
3. * - FILL PLATES REQUIRED FOR FIELD SPLICES 1 & 3 ONLY.



INTERMEDIATE WELDED CROSS FRAME DETAIL

(FOR ADDITIONAL NOTES AND DETAILS, SEE STD. DWG. GSD-1-96)



STUD SHEAR CONNECTOR LAYOUT

NOTE: WELDING OF STUD SHEAR CONNECTOR IS TO BE IN ACCORDANCE WITH 513.22 OF CMS

ELASTOMERIC BEARING NOTES

ELASTOMERIC BEARINGS: THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED UNDER DIVISION I, SECTION 14.6.6 (METHOD A) OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.

BEARING REPOSITIONING: IF STEEL IS ERECTED AT AN AMBIENT TEMPERATURE HIGHER THAN 80°F OR LOWER THAN 40°F AND THE BEARING SHEAR DEFLECTION EXCEEDS 1/6 OF THE BEARING HEIGHT AT 60° F (±) 10° F THE BEAMS OR GIRDERS SHALL BE RAISED TO ALLOW THE BEARINGS TO RETURN TO THEIR UNDEFORMED SHAPE AT 60° F (±) 10° F .

WELDING: SHALL BE CONTROLLED SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE DOES EXCEED 300° F AS DETERMINED BY USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.

BEVELED STEEL LOAD PLATES IN EXCESS OF 3" MIN. THICKNESS MAY BE FABRICATED USING MULTIPLE PLATES. ALL PLATES SHALL HAVE A MINIMUM THICKNESS OF 1 INCH AND SHALL BE WELDED TOGETHER USING A ¼" V-GROOVE WELD AROUND THE PERIMETER OF THE PLATE.

BASIS OF PAYMENT: THE UNIT BID PRICE SHALL INCLUDE ALL MATERIALS, LABOR AND INCIDENTALS NECESSARY TO FURNISH AND INSTALL LAMINATED ELASTOMERIC BEARINGS, INCLUDE LOAD PLATES AND MISC HARDWARE. PAYMENT WILL BE AT THE UNIT PRICE BID FOR ITEM 516, EACH, ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE, AS PER PLAN.

DESIGN AGENCY
URS
36 EAST 7TH STREET
SUITE 2300
CINCINNATI, OHIO 45202

DATE	1-03
STRUCTURE FILE NUMBER	3107833 LT 3107868 RT
REVIEWED	MJZ
DRAWN	GJW
REVISED	
DESIGNED	CEJ
CHECKED	BER

FRAMING DETAILS
BRIDGE NO. HAM-74-0069 L/R
I-74 OVER NEW BIDDINGER ROAD

HAM-74-0.00

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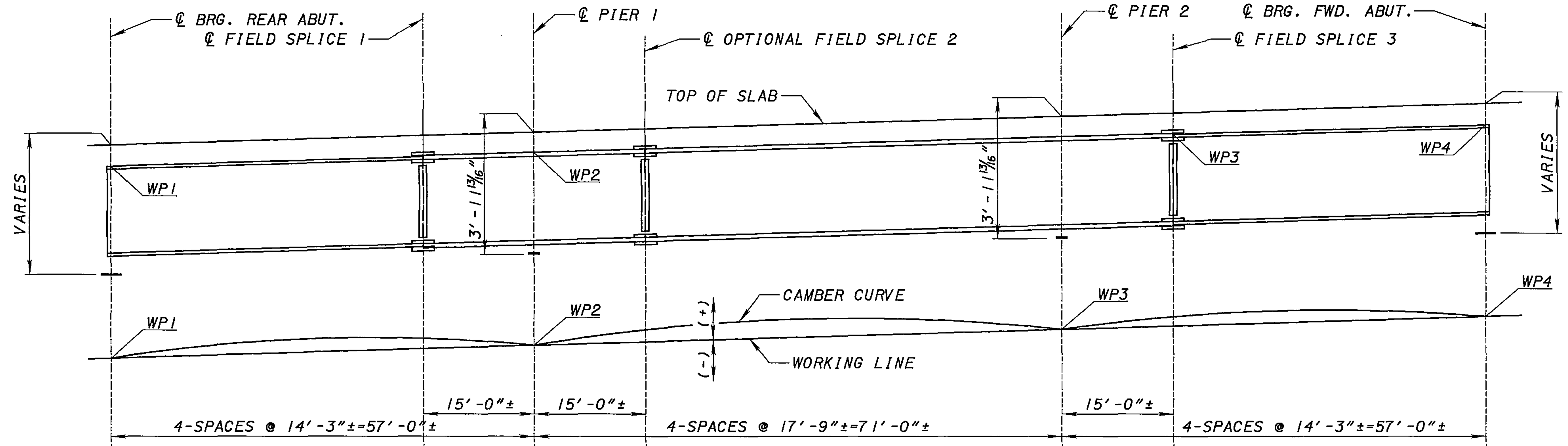
DEFLECTION AND CAMBER NOTES

1. WORKING POINTS (WP) ARE AT TOP OF TOP FLANGE AT ℄ BEARING.
2. THE WORKING LINE IS A STRAIGHT LINE BETWEEN INDICATED WORKING POINTS.
3. THE TABULATED DEFLECTION AND CAMBER DATA IS MEASURED FROM THE WORKING LINE.



DEFLECTION & CAMBER	REAR ABUT	1/4	1/2	FS1	3/4	P1	OPT. FS2	1/4	1/2	3/4	P2	1/4	FS3	1/2	3/4	FWD. ABUT
DEFLECTION FROM BEAM SELF-WEIGHT	0	-1/16"	-1/16"	0	0	0	-1/16"	-1/16"	-1/16"	-1/16"	0	0	0	-1/16"	-1/16"	0
DEFLECTION FROM NON-COMPOSITE DEAD LOAD	0	-5/16"	-3/8"	-3/16"	-3/16"	0	-3/16"	-1/4"	-7/16"	-1/4"	0	-3/16"	-3/16"	-3/8"	-5/16"	0
DEFLECTION FROM COMPOSITE DEAD LOAD	0	0	0	0	0	0	0	0	-1/16"	0	0	0	0	0	0	0
TOTAL DEFLECTION FROM DEAD LOAD	0	-3/8"	-7/16'	-3/16"	-3/16"	0	-1/4"	-5/16"	-9/16"	-5/16"	0	-3/16"	-3/16"	-7/16'	-3/8"	0
TOTAL CAMBER REQUIRED	0	3/8"	7/16"	3/16"	3/16"	0	1/4"	5/16"	9/16"	5/16"	0	3/16"	3/16"	7/16"	3/8"	0

CAMBER ELEVATION AND TABLE

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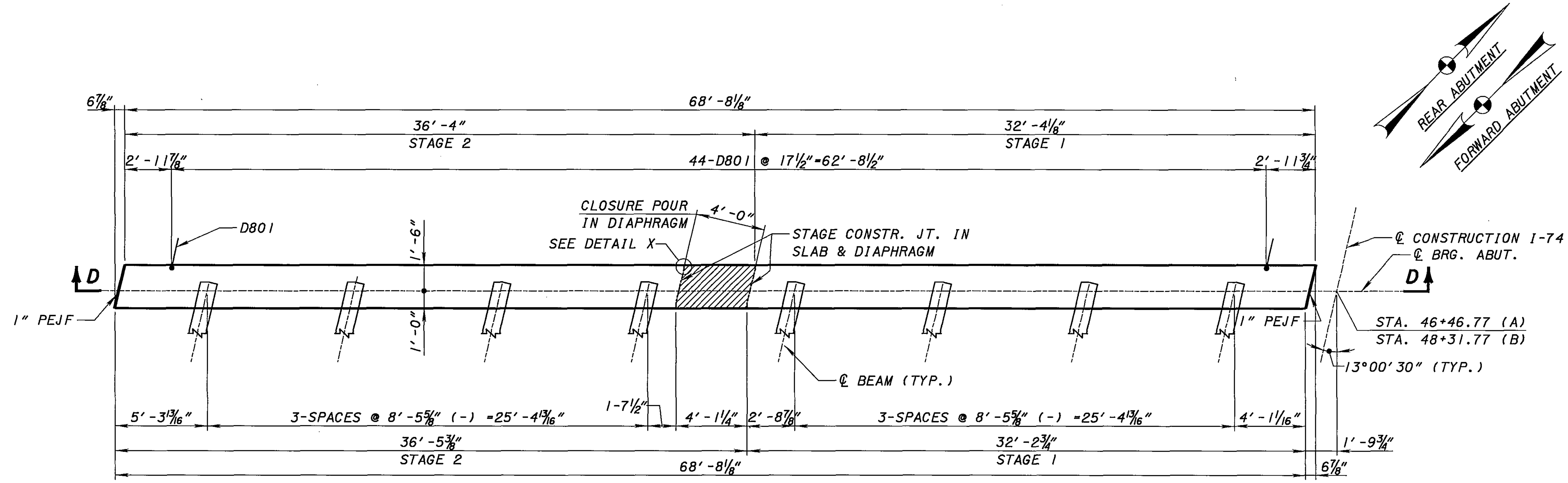
DESIGN AGENCY
URS
36 EAST 7TH STREET SUITE 2300 CINCINNATI, OHIO 45202

DESIGNED	DRAWN	REVIEWED	DATE
CEJ	GJW	MJZ	1-03
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BER		3107833 LT 3107868 RT	

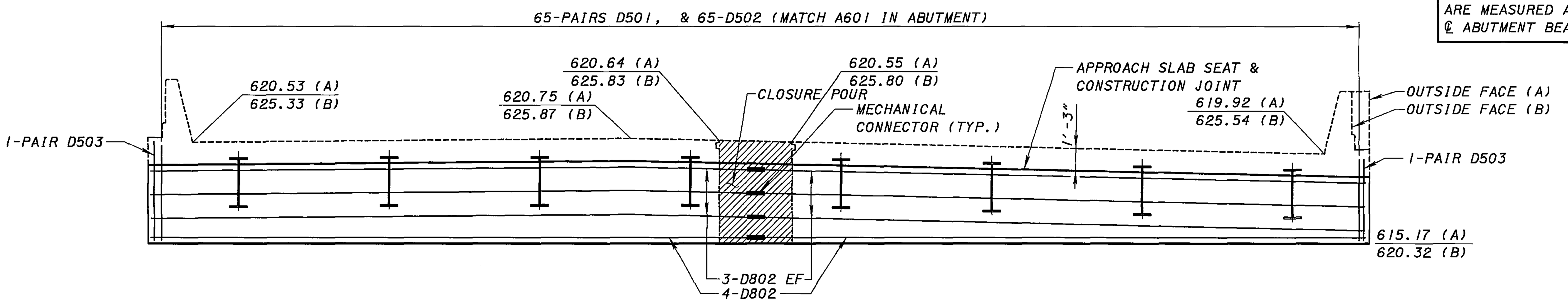
DEFLECTION AND CAMBER
BRIDGE NO. HAM-74-0069 L/R
I-74 OVER NEW BIDDINGER ROAD

HAM-74-0.00



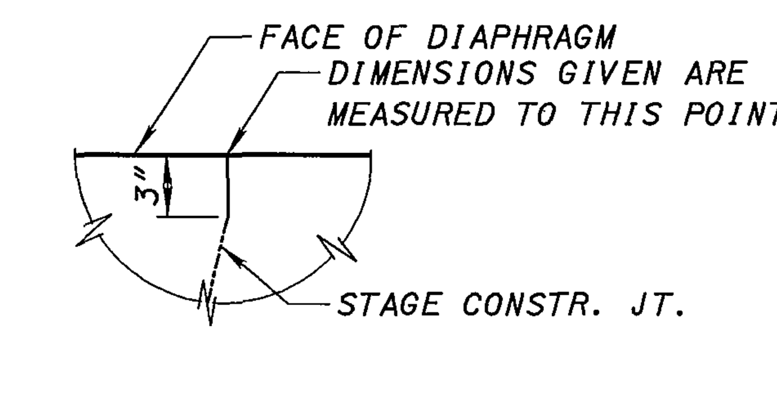
PLAN

NOTE:
ELEVATIONS GIVEN ARE MEASURED ALONG ℄ ABUTMENT BEARING.



SECTION D-D

END DIAPHRAGM DETAILS
RIGHT BRIDGE AT REAR ABUTMENT
LEFT BRIDGE AT FORWARD ABUTMENT



DETAIL X

LEGEND
(A) - REAR ABUTMENT
(B) - FORWARD ABUTMENT
EF - EACH FACE
PEJF - PREFORMED EXPANSION JOINT FILLER

NOTES
1. ABUTMENT DIAPHRAGM CONCRETE: PLACE THE CONCRETE IN THE ABUTMENT DIAPHRAGM ENCASING STRUCTURAL STEEL MEMBERS OF AN INDIVIDUAL PHASE SEPARATELY OR WITH THE DECK CONCRETE OF THAT PHASE. IF THE DIAPHRAGM CONCRETE IS PLACED SEPARATELY, ALLOW AT LEAST 48 HOURS OF SET TIME BEFORE PLACING DECK CONCRETE. LOCATE THE HORIZONTAL CONSTRUCTION JOINT BETWEEN THE DIAPHRAGM AND DECK CONCRETE AT THE APPROACH SLAB SEAT.
2. FOR ADDITIONAL NOTES AND DETAILS, SEE STANDARD DRAWING ICD-1-82.
3. FOR GENERAL NOTES, SEE SHEET 2/25.
4. FOR REINFORCING STEEL LIST, SEE SHEET 25/25.

DESIGN AGENCY: URS, 36 EAST 7TH STREET, SUITE 2300, CINCINNATI, OHIO 45202

DESIGNED	DRAWN	REVIEWED	DATE
CEJ	GJW	MJZ	1-03
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BER		3107833 LT 3107868 RT	

END DIAPHRAGM DETAILS (1)
BRIDGE NO. HAM-74-0069 L/R
I-74 OVER NEW BIDDINGER ROAD

HAM-74-0.00

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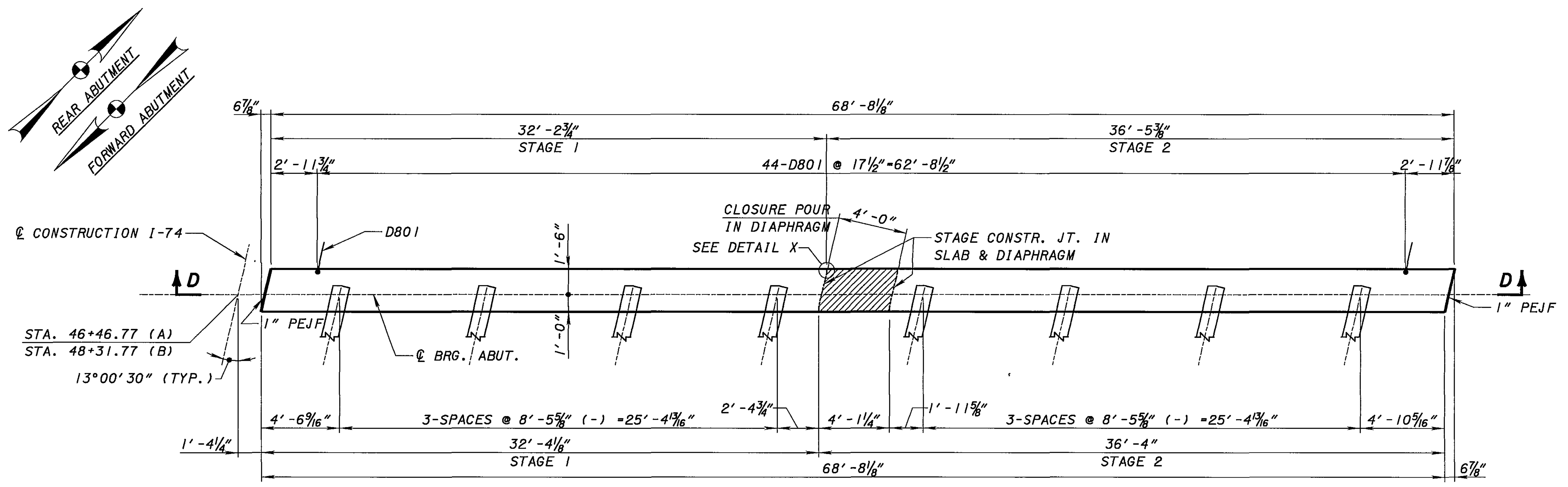
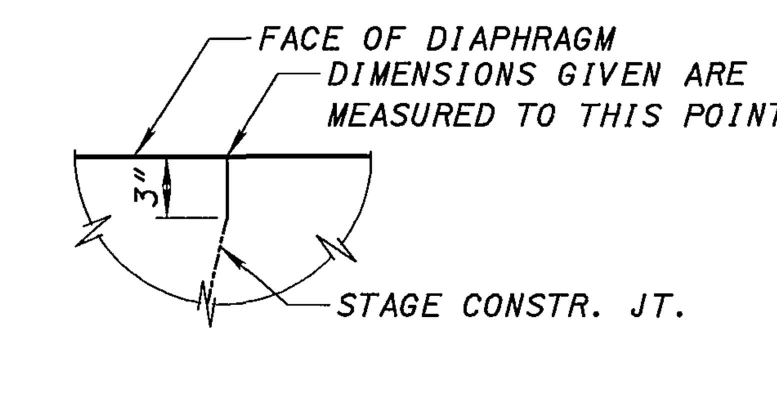
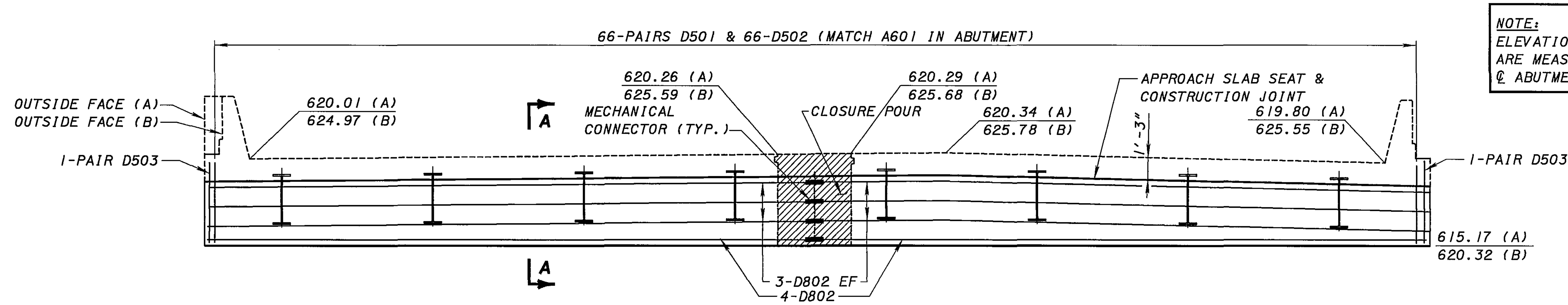


PLAN



DETAIL X



SECTION D-D

END DIAPHRAGM DETAILS
LEFT BRIDGE AT REAR ABUTMENT
RIGHT BRIDGE AT FORWARD ABUTMENT

NOTE:
ELEVATIONS GIVEN ARE MEASURED ALONG ℄ ABUTMENT BEARING.

LEGEND

(A) - REAR ABUTMENT
(B) - FORWARD ABUTMENT
EF - EACH FACE
PEJF - PREFORMED EXPANSION JOINT FILLER

NOTES

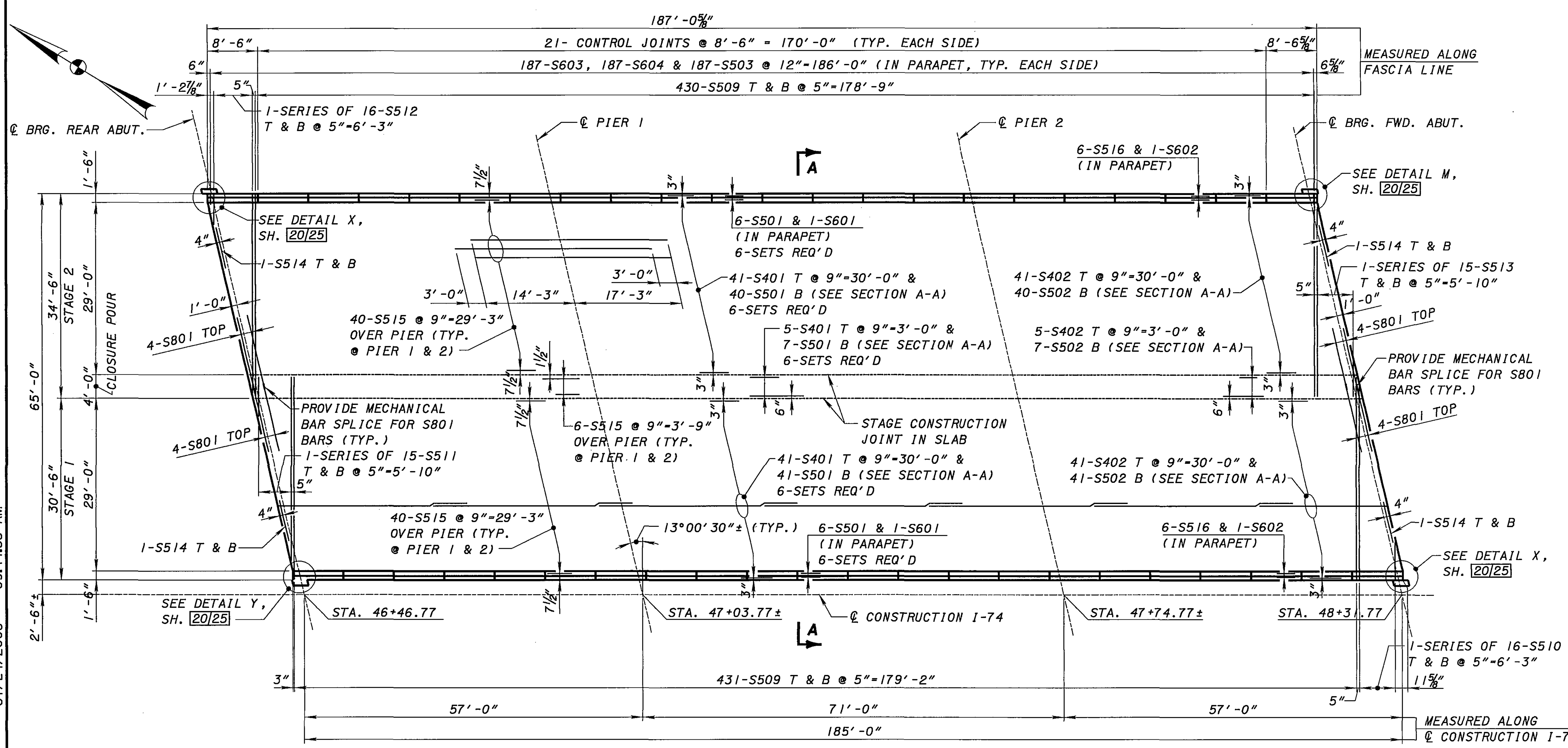
1. ABUTMENT DIAPHRAGM CONCRETE: PLACE THE CONCRETE IN THE ABUTMENT DIAPHRAGM ENCASING STRUCTURAL STEEL MEMBERS OF AN INDIVIDUAL PHASE SEPARATELY OR WITH THE DECK CONCRETE OF THAT PHASE. IF THE DIAPHRAGM CONCRETE IS PLACED SEPARATELY, ALLOW AT LEAST 48 HOURS OF SET TIME BEFORE PLACING DECK CONCRETE. LOCATE THE HORIZONTAL CONSTRUCTION JOINT BETWEEN THE DIAPHRAGM AND DECK CONCRETE AT THE APPROACH SLAB SEAT.
2. FOR ADDITIONAL NOTES AND DETAILS, SEE STANDARD DRAWING ICD-1-82.
3. FOR GENERAL NOTES, SEE SHEET 2/25.
4. FOR REINFORCING STEEL LIST, SEE SHEET 25/25.
5. FOR SECTION A-A, SEE SHEET 9/25.

DESIGN AGENCY: URS
36 EAST 7TH STREET
SUITE 2300
CINCINNATI, OHIO 45202

DESIGNED	DRAWN	REVIEWED	DATE
CEJ	GJW	MJZ	1-03
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BER		3107833 LT / 3107868 RT	

END DIAPHRAGM DETAILS (2)
BRIDGE NO. HAM-74-0069 L/R
I-74 OVER NEW BIDDINGER ROAD

HAM-74-0.00



SLAB PLAN - LEFT BRIDGE

BAR LAP SCHEDULE

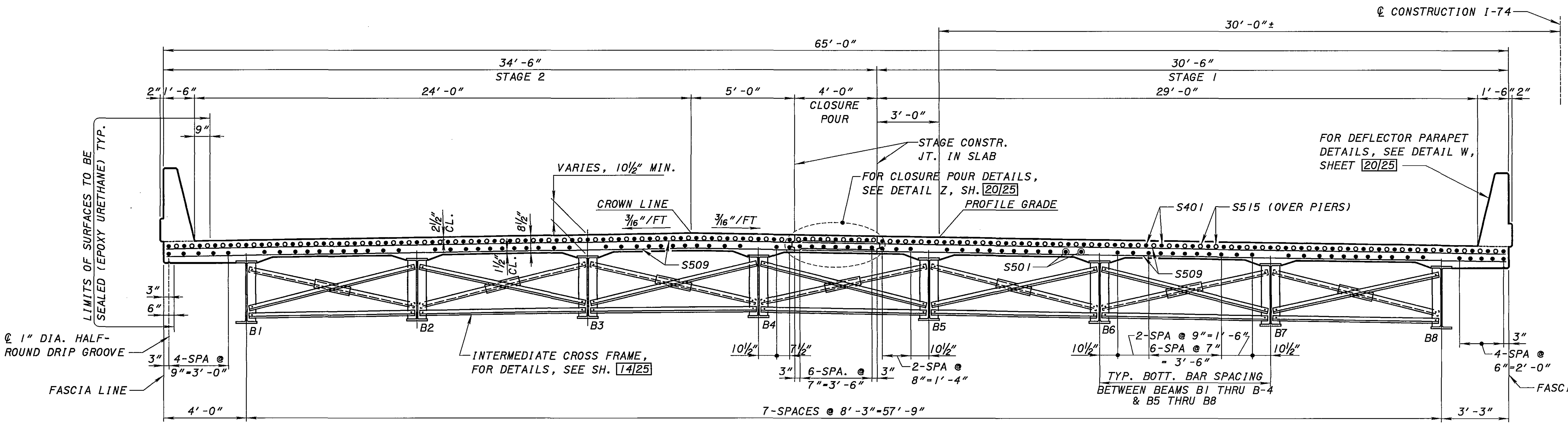
	BAR SIZE	MIN. LAP
SLAB	#4	1'-11"
	#5	2'-5"
PARAPET	#5	3'-5"
	#6	4'-1"

NOTES

1. FOR DETAILS M, W, X, Y & Z AND ADDITIONAL SLAB NOTES, SEE SHEET 20/25.
2. FOR REINFORCING STEEL LIST, SEE SHEET 25/25.
3. FOR CONTROL JOINT IN CONCRETE PARAPET DETAILS, SEE STD. DWG. SBR-1-99.

LEGEND

T - TOP
B - BOTTOM



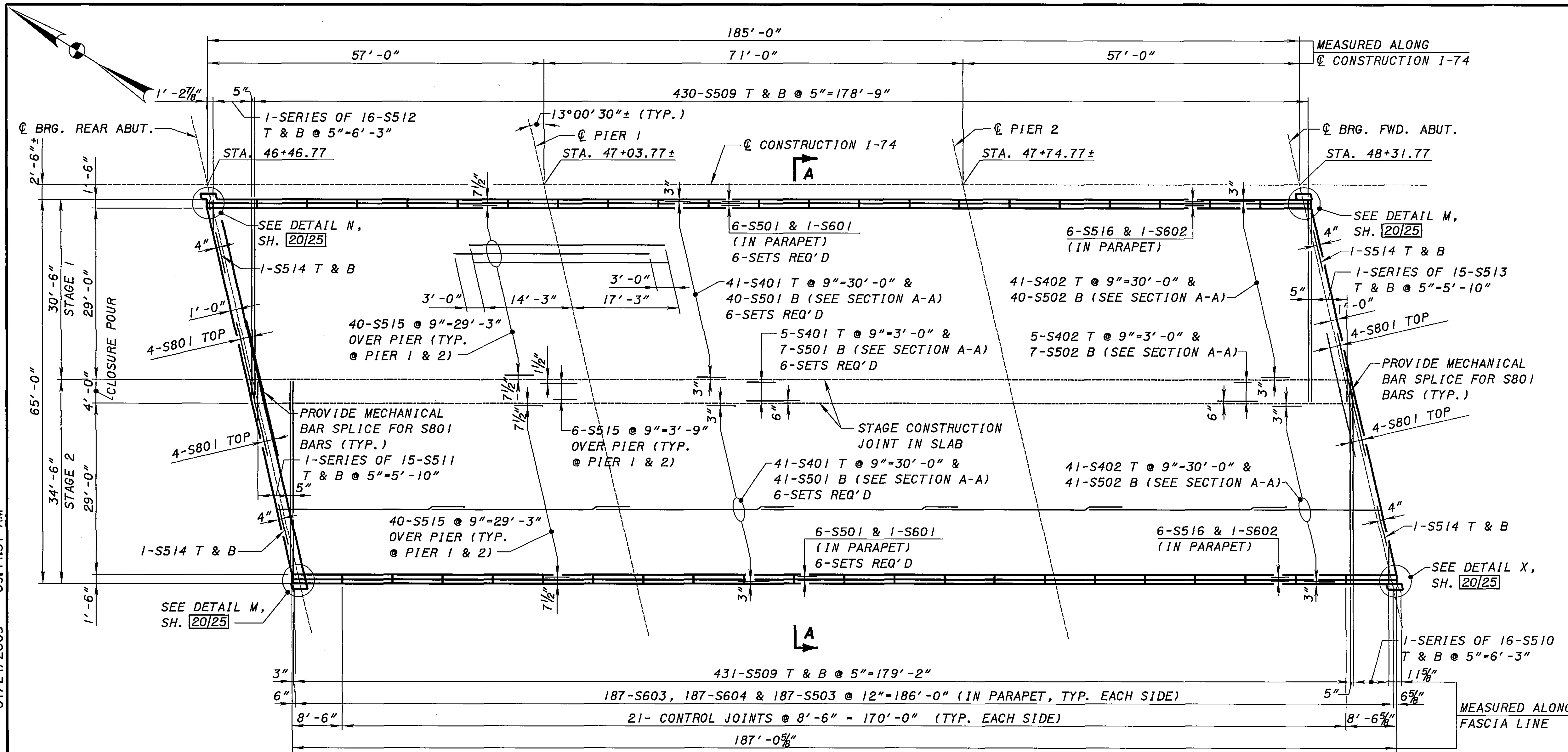
SECTION A-A

DESIGN AGENCY: URS, 36 EAST 7TH STREET, SUITE 2300, CINCINNATI, OHIO 45202

DESIGNED	DRAWN	REVIEWED	DATE
CEJ	GJW	MJZ	1-03
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BER		3107833 LT 3107868 RT	

SLAB PLAN - LEFT BRIDGE
BRIDGE NO. HAM-74-0069 L/R
I-74 OVER NEW BIDDINGER ROAD

HAM-74-0.00



SLAB PLAN - RIGHT BRIDGE

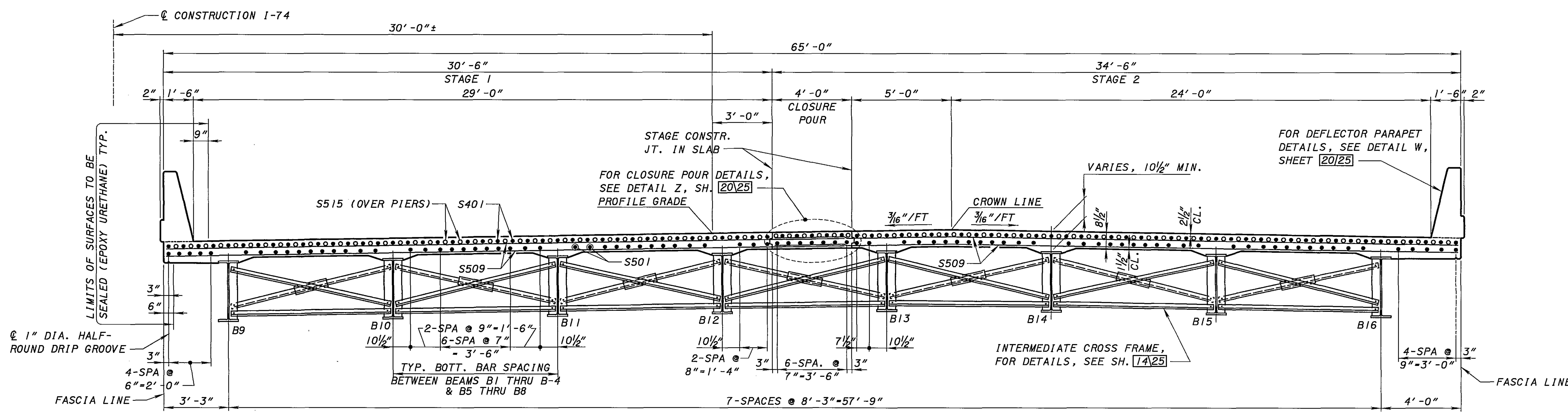
BAR LAP SCHEDULE		
	BAR SIZE	MIN. LAP
SLAB	#4	1'-11"
	#5	2'-5"
PARAPET	#5	3'-5"
	#6	4'-1"

NOTES

1. FOR DETAILS M, N, W, X, Y & Z AND ADDITIONAL SLAB NOTES, SEE SHEET 20/25.
2. FOR REINFORCING STEEL LIST, SEE SHEET 25/25.
3. FOR CONTROL JOINT IN CONCRETE PARAPET DETAILS, SEE STD. DWG. SBR-1-99.

LEGEND

T = TOP
B = BOTTOM



SECTION A-A

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DESIGN AGENCY

URS

36 EAST 7TH STREET
SUITE 2300
CINCINNATI, OHIO 45202

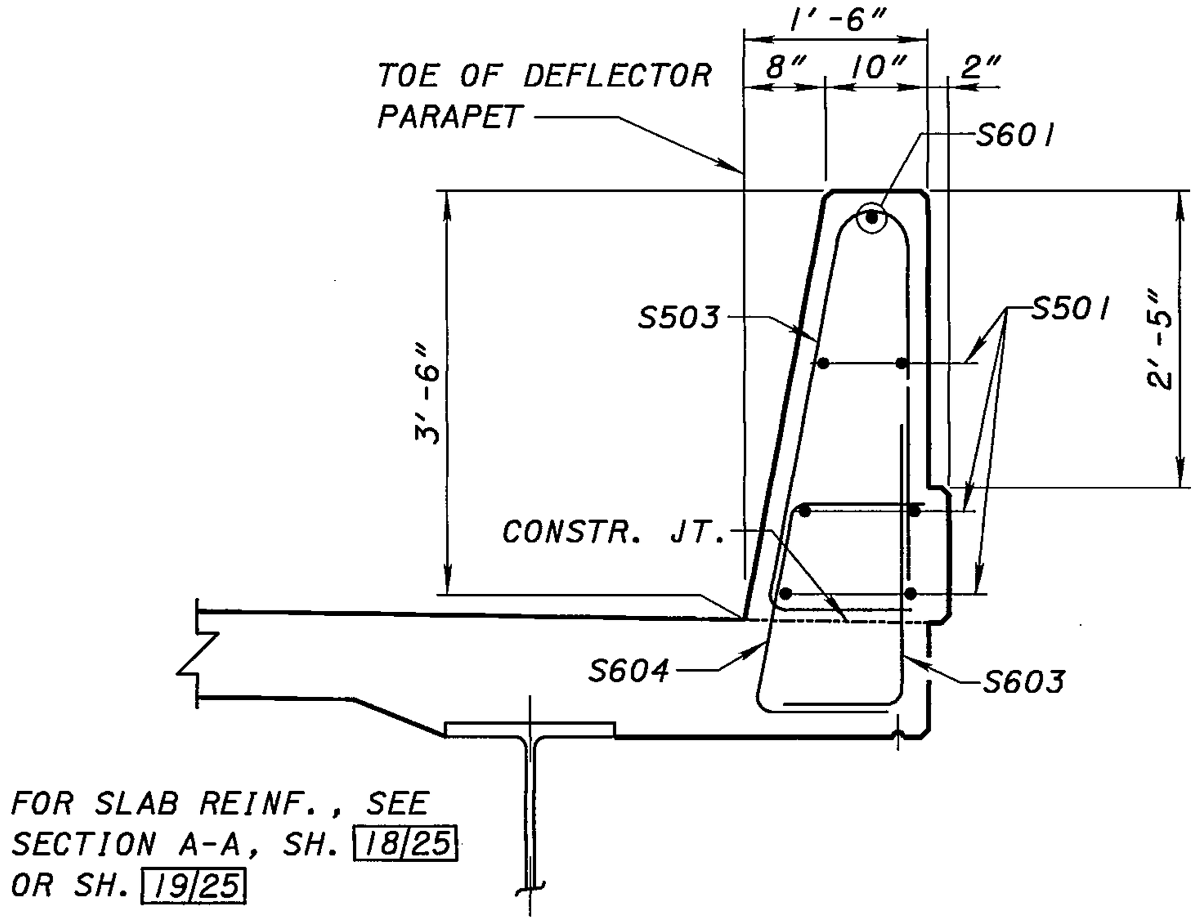
DESIGNED	CHECKED	DRAWN	REVISED	REVIEWED	DATE	STRUCTURE FILE NUMBER
CEJ	BER	GJW		MJZ	1-03	3107833 LT 3107868 RT

SLAB PLAN - RIGHT BRIDGE

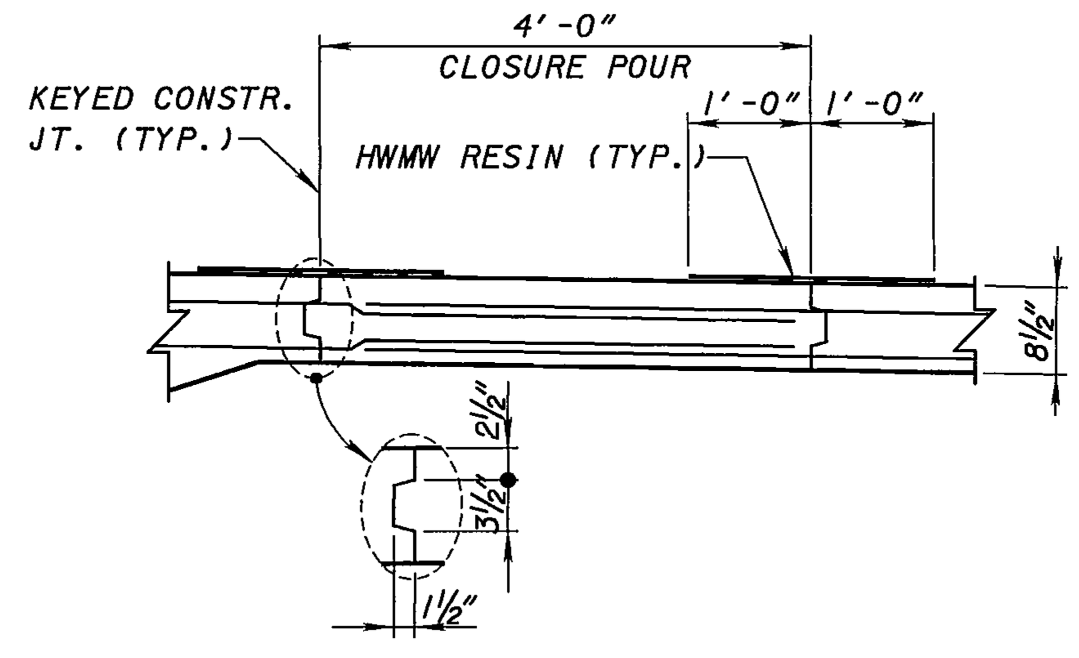
BRIDGE NO. HAM-74-0069 L/R

I-74 OVER NEW BIDDINGER ROAD

HAM-74-0.00



DETAIL W



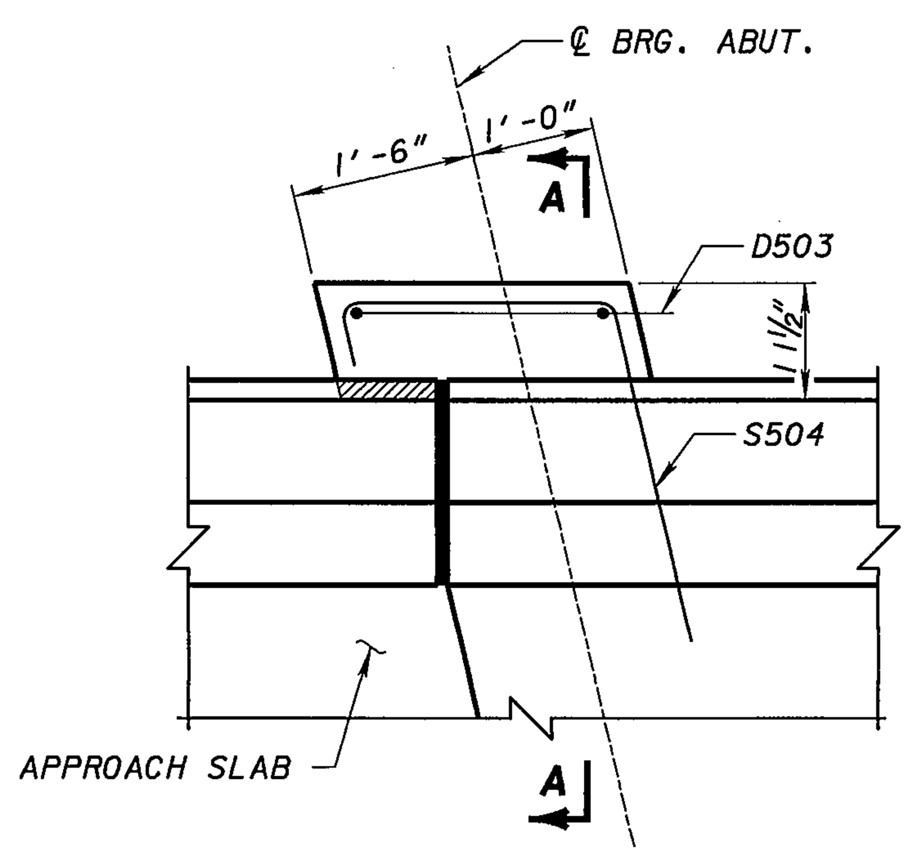
DETAIL Z

NOTES

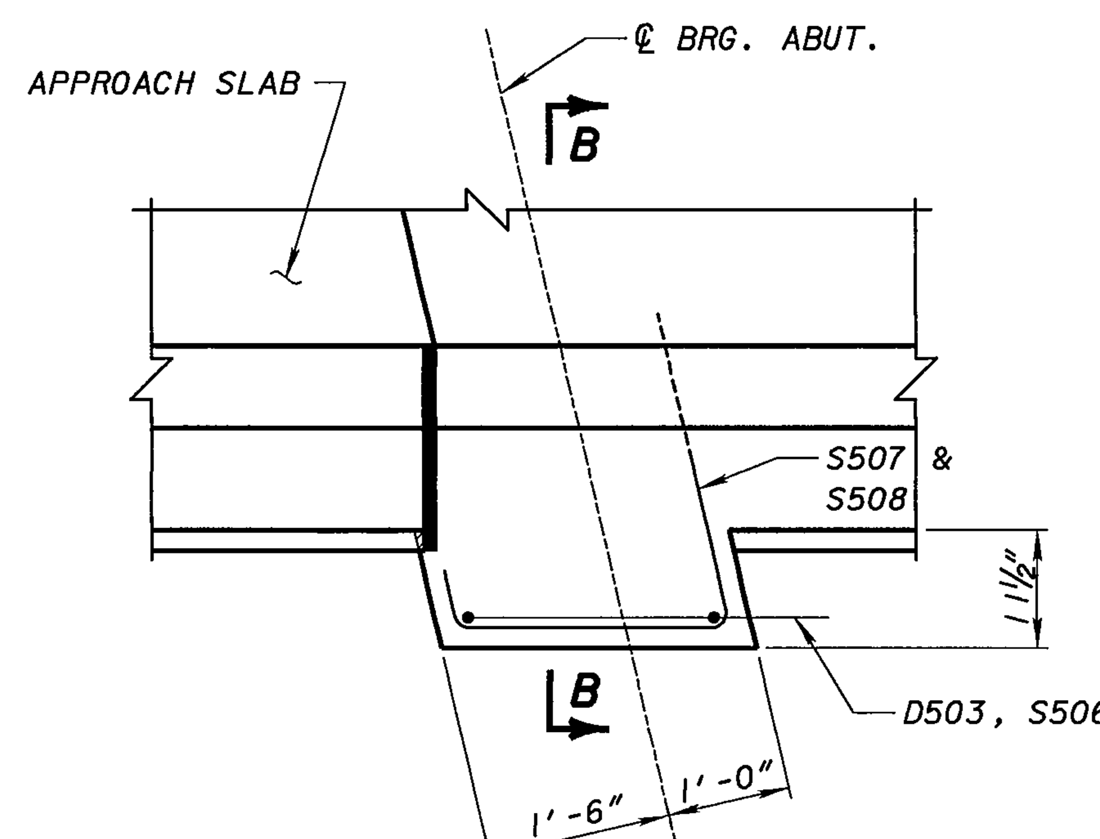
1. DECK SLAB CONCRETE QUANTITY: THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH BEAM HAUNCH. THE ESTIMATE ASSUMES A CONSTANT HAUNCH THICKNESS OF 2¼ INCHES AND A CONSTANT HAUNCH WIDTH OUTSIDE THE EDGE OF EACH BEAM FLANGE OF 9 INCHES. DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE. THE ALLOWABLE TOLERANCE FOR THE HAUNCH WIDTH OUTSIDE THE EDGE OF EACH BEAM FLANGE IS ±3 INCHES.
   THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF THE BEAM FROM THE SURFACE OF THE DECK TO THE TOP OF THE TOP FLANGE MINUS THE DECK SLAB THICKNESS. THE AREA OF ALL EMBEDDED BEAM FLANGES HAS BEEN DEDUCTED FROM THE HAUNCH QUANTITY IN ACCORDANCE WITH 511.24.
2. FOR GENERAL NOTES, SEE SHEET 2/25.
3. FOR SCREED ELEVATIONS, SEE SHEET 22/25.
4. FOR END DIAPHRAGM DETAILS, SEE SHEETS 16/25 & 17/25.
5. FOR REINFORCING STEEL LIST, SEE SHEET 25/25.
6. FOR APPROACH SLAB DEFLECTOR PARAPET DETAILS, SEE SHEET 21/25.

LEGEND

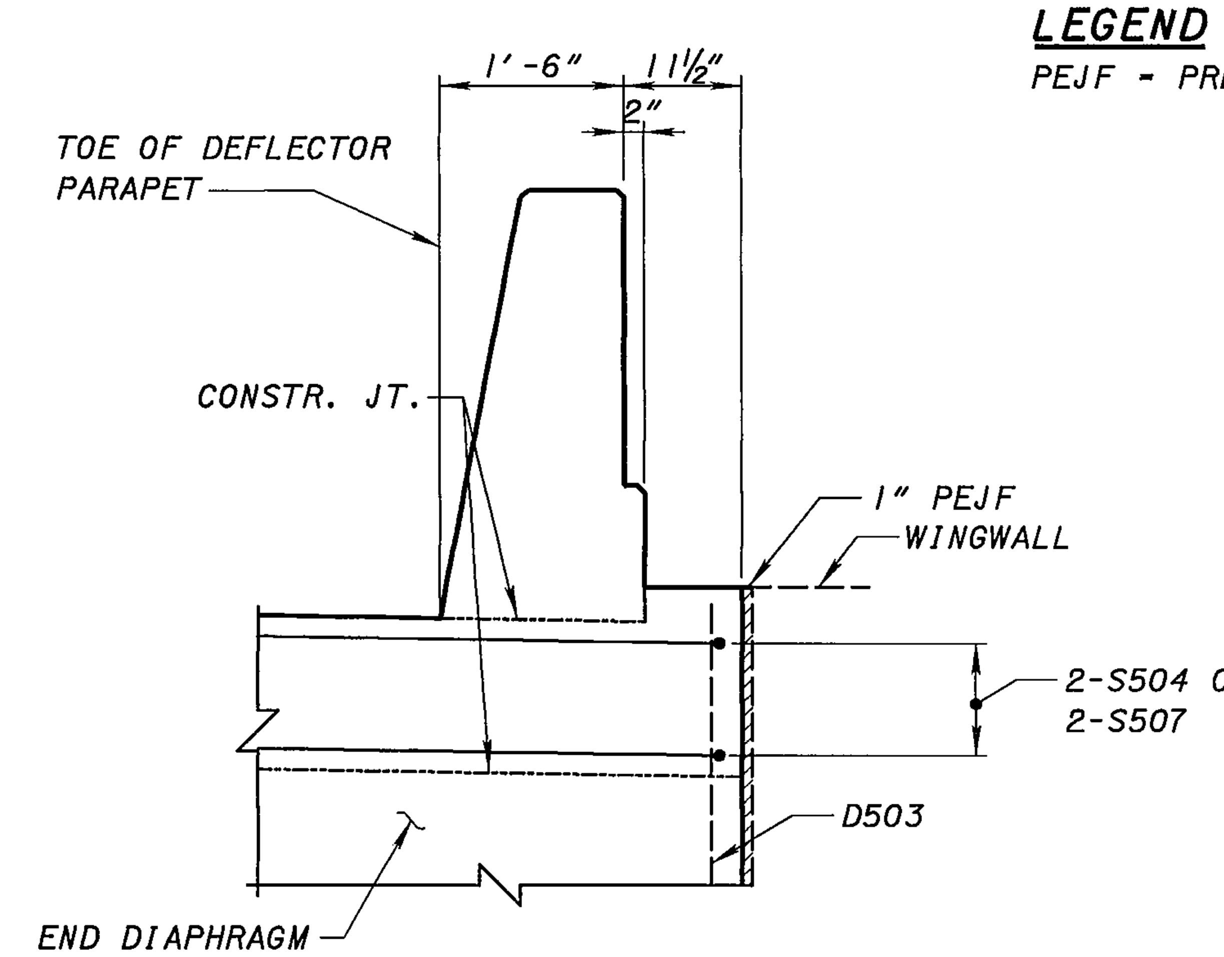
PEJF - PREFORMED EXPANSION JOINT FILLER



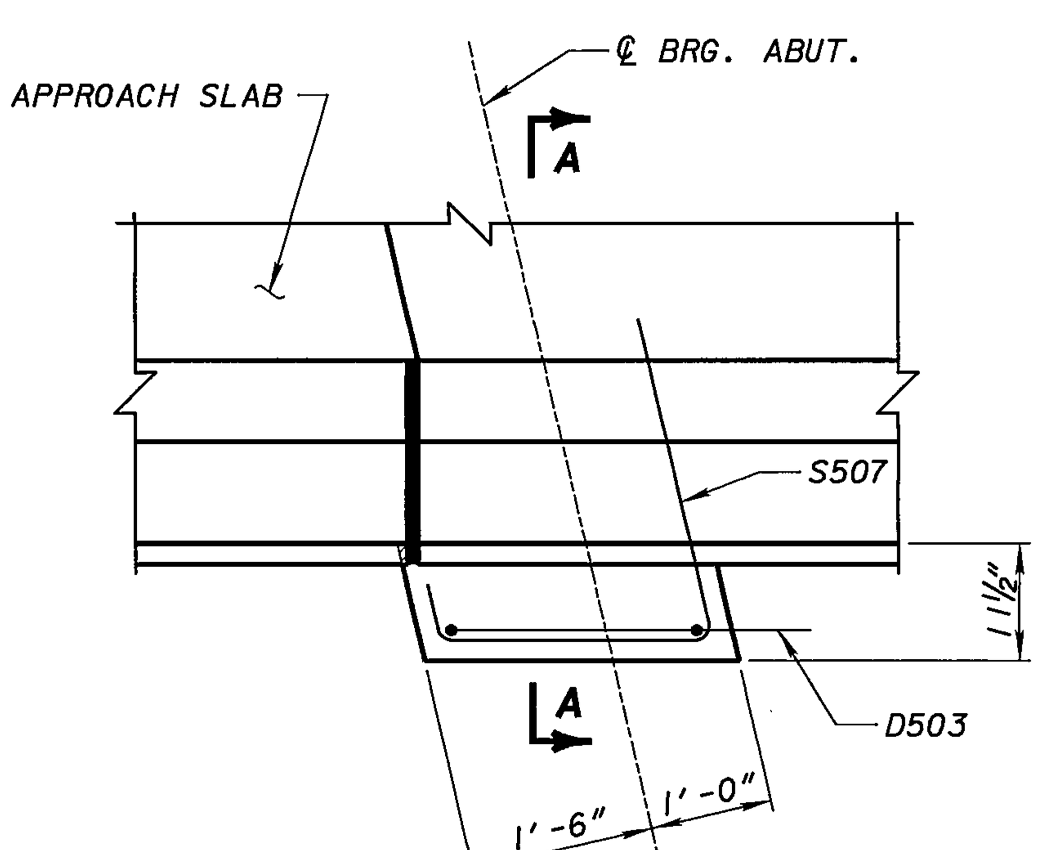
DETAIL X



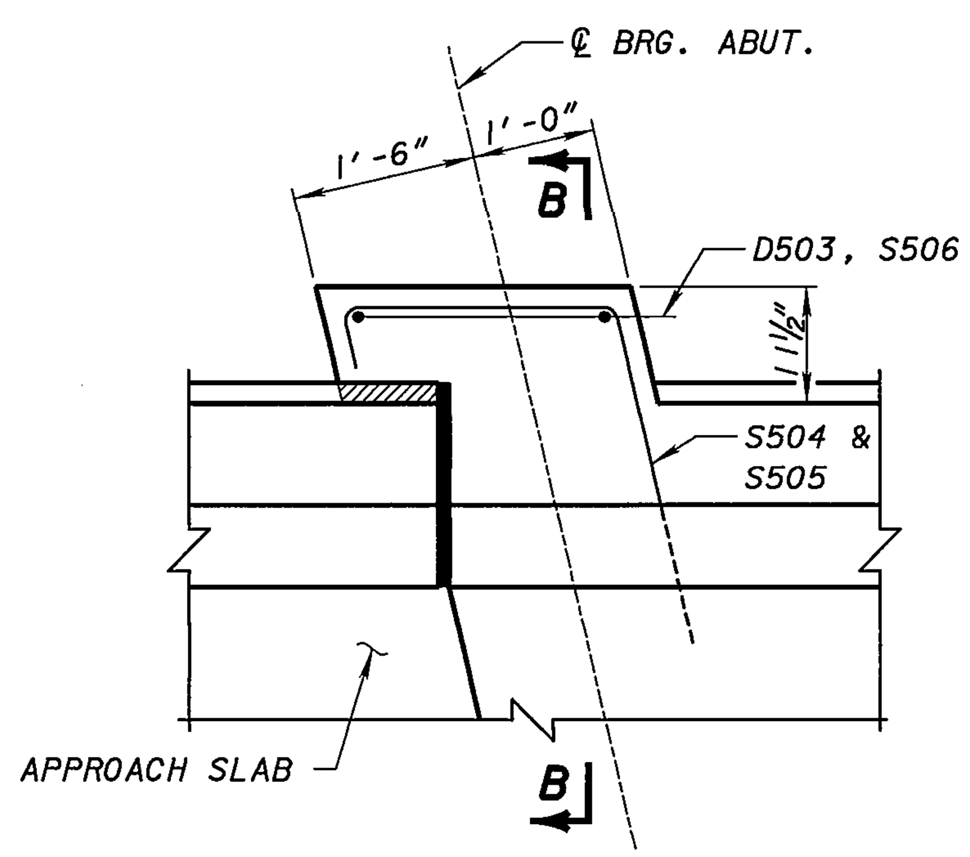
DETAIL Y



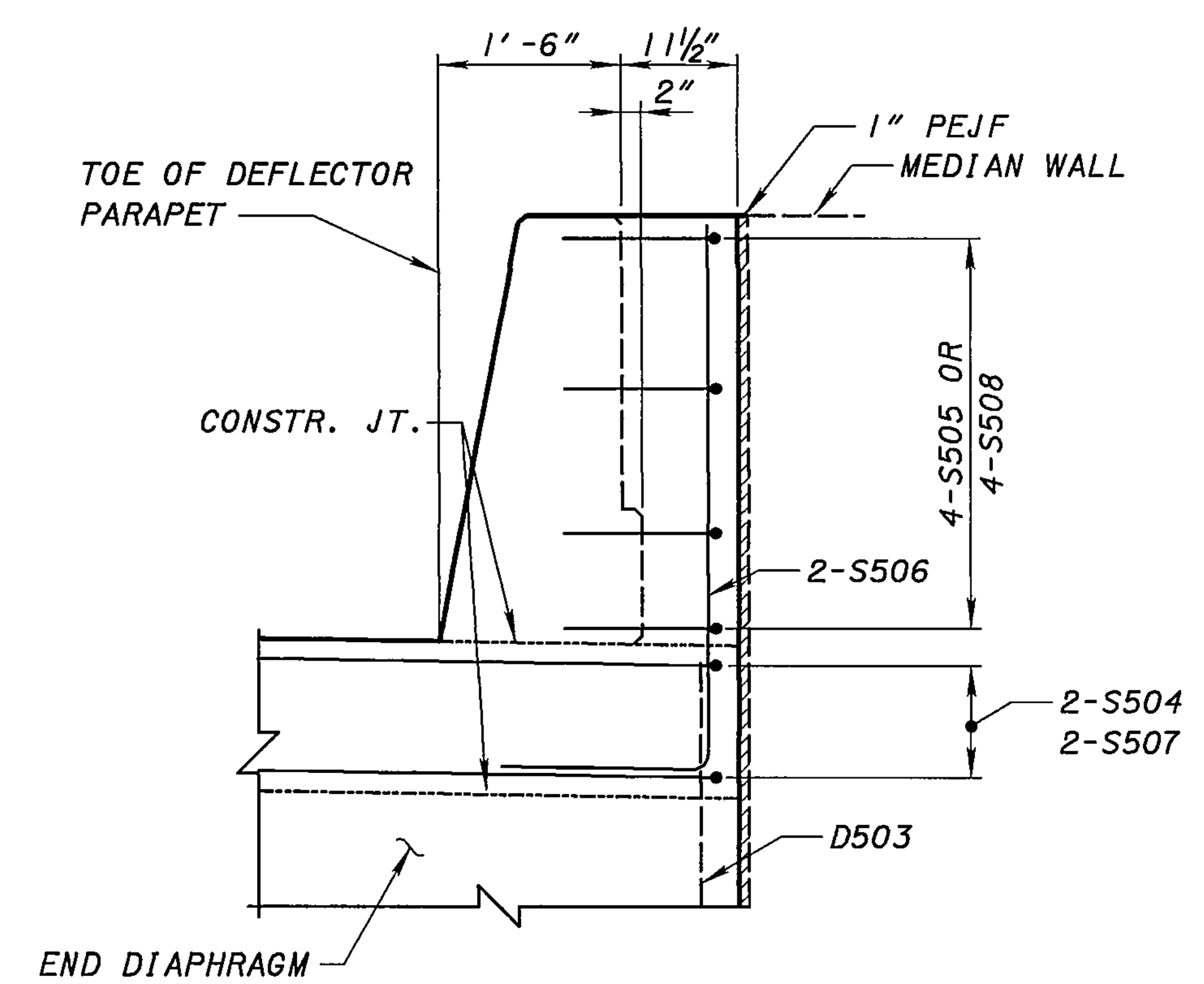
SECTION A-A



DETAIL M



DETAIL N



SECTION B-B

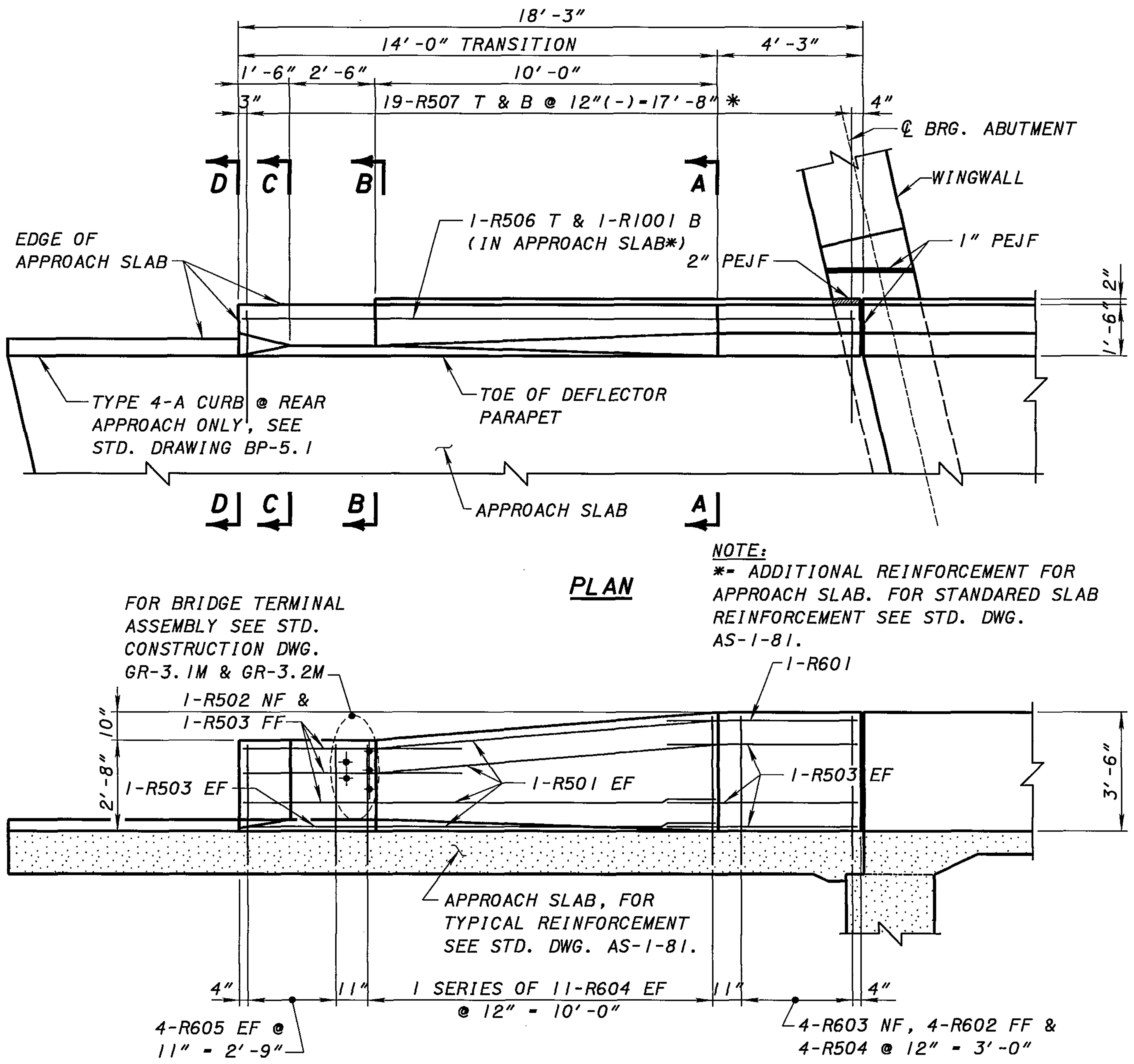
END OF SLAB DETAILS

DESIGN AGENCY: URS, 36 EAST 7TH STREET, SUITE 2300, CINCINNATI, OHIO 45202

DESIGNED	DRAWN	REVIEWED	DATE
CEJ	GJW	MJZ	1-03
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BER		3107833 LT, 3107868 RT	

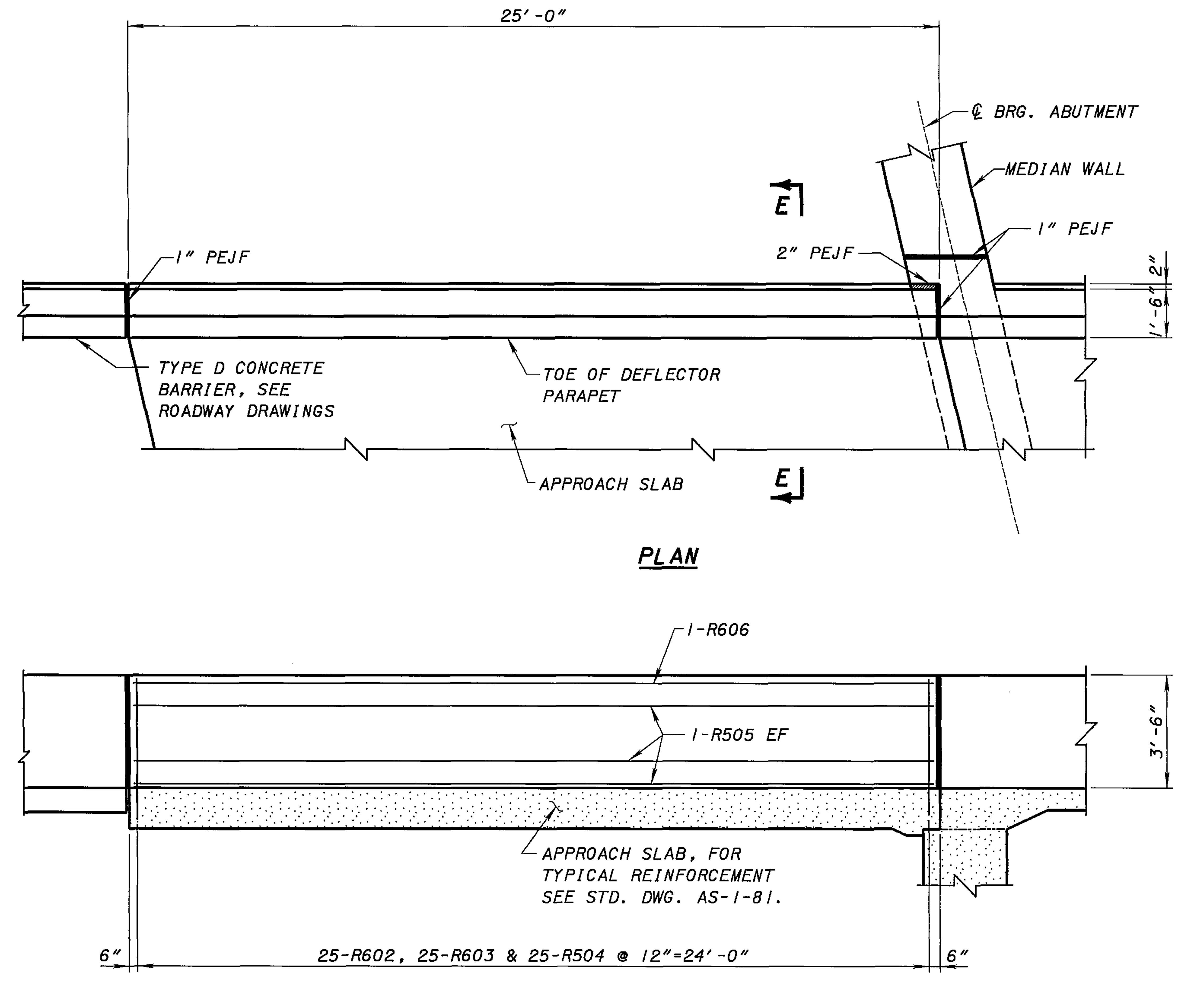
SLAB DETAILS
BRIDGE NO. HAM-74-0069 L/R
I-74 OVER NEW BIDDINGER ROAD

HAM-74-0.00



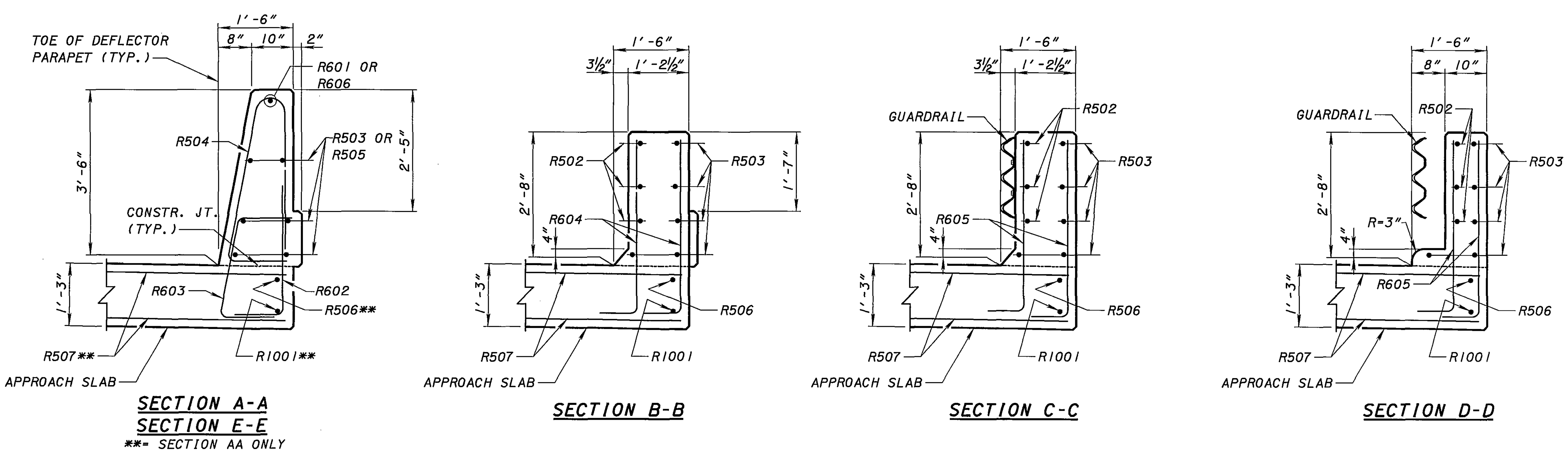
DEFLECTOR PARAPET END PANEL TRANSITION DETAILS

(4-REQ'D)



DEFLECTOR PARAPET TO TYPE D BARRIER

(4-REQ'D)



NOTES

1. FOR REINFORCING STEEL LIST, SEE SHEET 25/25.
2. FOR ADDITIONAL REINFORCING STEEL IN APPROACH SLAB, SEE STD. DWG. AS-1-81.
3. FOR GENERAL NOTES, SEE SHEET 2/25.
4. ALL MATERIALS AND LABOR NECESSARY TO CONSTRUCT THE BARRIER ON THE APPROACH SLABS SHALL BE INCLUDED IN ITEM 526, REINFORCED CONCRETE APPROACH SLAB (T=15 INCHES), AS PER PLAN.

LEGEND

PEJF - PREFORMED EXPANSION JOINT FILLER
EF - EACH FACE
NF - NEAR FACE
FF - FAR FACE

DESIGN AGENCY: URS, 36 EAST 7TH STREET, SUITE 2300, CINCINNATI, OHIO 45202

DESIGNED	DRAWN	REVIEWED	DATE
CEJ	GJW	MJZ	1-03
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BER		3107833 LT, 3107868 RT	

APPROACH SLAB DEFLECTOR PARAPET

BRIDGE NO. HAM-74-0069 L/R
I-74 OVER NEW BIDDINGER ROAD

HAM-74-0.00

SCREED ELEVATIONS - LEFT BRIDGE

SPAN	LOCATION	LEFT FASCIA LINE	LEFT CURB	B1	B2	B3	CROWN LINE	B4	LEFT CONSTR. JOINT	RIGHT CONSTR. JOINT	B5	PROFILE GRADE	B6	B7	B8	RIGHT CURB	RIGHT FASCIA LINE
SPAN 1	℄ BRG. REAR ABUT.	619.76	619.80	619.85	620.04	620.22	620.34	620.31	620.29	620.26	620.24	620.23	620.17	620.09	620.02	620.01	619.99
	1/4	620.22	620.25	620.31	620.50	620.68	620.79	620.77	620.75	620.72	620.69	620.69	620.62	620.55	620.48	620.46	620.45
	1/2	620.65	620.68	620.74	620.93	621.11	621.23	621.20	621.18	621.15	621.13	621.12	621.05	620.98	620.91	620.89	620.88
	FS1	621.04	621.07	621.13	621.31	621.50	621.61	621.58	621.57	621.53	621.51	621.51	621.44	621.37	621.30	621.28	621.27
	3/4	621.06	621.09	621.15	621.33	621.52	621.63	621.60	621.59	621.55	621.53	621.53	621.46	621.39	621.32	621.30	621.29
	℄ PIER 1	621.47	621.50	621.56	621.74	621.93	622.04	622.01	622.00	621.96	621.94	621.94	621.87	621.80	621.73	621.71	621.70
SPAN 2	OPT. FS2	621.94	621.97	622.03	622.21	622.40	622.51	622.48	622.47	622.43	622.41	622.41	622.34	622.27	622.19	622.18	622.17
	1/4	622.02	622.06	622.11	622.30	622.48	622.60	622.57	622.55	622.52	622.50	622.49	622.43	622.35	622.28	622.27	622.25
	1/2	622.57	622.61	622.66	622.85	623.03	623.15	623.12	623.10	623.07	623.05	623.04	622.97	622.90	622.83	622.82	622.80
	3/4	623.09	623.12	623.18	623.36	623.55	623.66	623.63	623.62	623.58	623.56	623.56	623.49	623.42	623.34	623.33	623.32
	℄ PIER 2	623.59	623.63	623.68	623.87	624.06	624.17	624.14	624.12	624.09	624.07	624.06	624.00	623.92	623.85	623.84	623.82
SPAN 3	1/4	624.04	624.07	624.13	624.31	624.50	624.61	624.58	624.57	624.53	624.51	624.51	624.44	624.37	624.30	624.28	624.27
	FS3	624.06	624.09	624.15	624.34	624.52	624.64	624.61	624.59	624.56	624.53	624.53	624.46	624.39	624.32	624.30	624.29
	1/2	624.48	624.52	624.57	624.76	624.94	625.06	625.03	625.01	624.98	624.96	624.95	624.89	624.81	624.74	624.73	624.71
	3/4	624.90	624.94	624.99	625.18	625.37	625.48	625.45	625.43	625.40	625.38	625.37	625.31	625.23	625.16	625.15	625.13
	℄ BRG. FWD. ABUT.	625.30	625.33	625.39	625.58	625.76	625.87	625.85	625.83	625.80	625.77	625.77	625.70	625.63	625.56	625.54	625.53

SCREED ELEVATIONS - RIGHT BRIDGE

SPAN	LOCATION	LEFT FASCIA LINE	LEFT CURB	B9	B10	B11	PROFILE GRADE	B12	LEFT CONSTR. JOINT	RIGHT CONSTR. JOINT	B13	CROWN LINE	B14	B15	B16	RIGHT CURB	RIGHT FASCIA LINE
SPAN 1	℄ BRG. REAR ABUT.	619.88	619.92	619.95	620.13	620.31	620.48	620.49	620.55	620.64	620.68	620.75	620.70	620.63	620.55	620.53	620.52
	1/4	620.31	620.34	620.38	620.56	620.74	620.91	620.92	620.98	621.07	621.11	621.18	621.13	621.06	620.98	620.96	620.94
	1/2	620.71	620.74	620.78	620.96	621.15	621.32	621.33	621.38	621.47	621.51	621.58	621.54	621.46	621.39	621.36	621.35
	FS1	621.07	621.10	621.14	621.32	621.51	621.68	621.69	621.74	621.83	621.87	621.94	621.90	621.82	621.75	621.73	621.71
	3/4	621.09	621.12	621.16	621.34	621.53	621.70	621.71	621.76	621.85	621.89	621.96	621.92	621.84	621.77	621.75	621.73
	℄ PIER 1	621.48	621.51	621.55	621.73	621.92	622.09	622.10	622.16	622.24	622.28	622.36	622.31	622.24	622.16	622.14	622.13
SPAN 2	OPT. FS2	621.93	621.96	622.00	622.18	622.37	622.54	622.55	622.61	622.69	622.73	622.81	622.76	622.69	622.61	622.59	622.58
	1/4	622.01	622.04	622.08	622.27	622.45	622.62	622.63	622.69	622.78	622.82	622.89	622.84	622.77	622.70	622.67	622.66
	1/2	622.54	622.57	622.61	622.80	622.98	623.15	623.16	623.22	623.31	623.35	623.42	623.37	623.30	623.22	623.19	623.18
	3/4	623.01	623.05	623.08	623.26	623.44	623.61	623.62	623.68	623.76	623.80	623.87	623.82	623.75	623.67	623.64	623.63
	℄ PIER 2	623.46	623.49	623.53	623.71	623.89	624.06	624.07	624.12	624.21	624.25	624.32	624.27	624.19	624.11	624.09	624.07
SPAN 3	1/4	623.85	623.88	623.92	624.10	624.28	624.45	624.46	624.51	624.60	624.64	624.71	624.66	624.58	624.50	624.48	624.46
	FS3	623.87	623.91	623.94	624.12	624.30	624.47	624.48	624.54	624.62	624.66	624.73	624.68	624.60	624.52	624.50	624.48
	1/2	624.24	624.28	624.31	624.49	624.67	624.84	624.85	624.90	624.99	625.03	625.10	625.05	624.97	624.89	624.86	624.85
	3/4	624.60	624.64	624.67	624.85	625.03	625.20	625.21	625.26	625.35	625.38	625.45	625.40	625.32	625.24	625.22	625.20
	℄ BRG. FWD. ABUT.	624.94	624.97	625.01	625.18	625.36	625.53	625.54	625.59	625.68	625.71	625.78	625.73	625.65	625.57	625.55	625.53

NOTE:
SCREED ELEVATIONS SHOWN ARE FOR THE DECK SLAB SURFACE PRIOR TO CONCRETE PLACEMENT.
ALLOWANCE HAS BEEN MADE FOR ANTICIPATED CALCULATED DEAD LOAD DEFLECTIONS.

DESIGN AGENCY
URS
36 EAST 7TH STREET
SUITE 2600
CINCINNATI, OHIO 45202

DESIGNED CEJ
CHECKED BER
DRAWN GJW
REVISED
REVIEWED MJZ
DATE 1-03
STRUCTURE FILE NUMBER 3107833 LT 3107868 RT

SCREED ELEVATIONS
BRIDGE NO. HAM-74-0069 L/R
I-74 OVER NEW BIDDINGER ROAD

HAM-74-0.00

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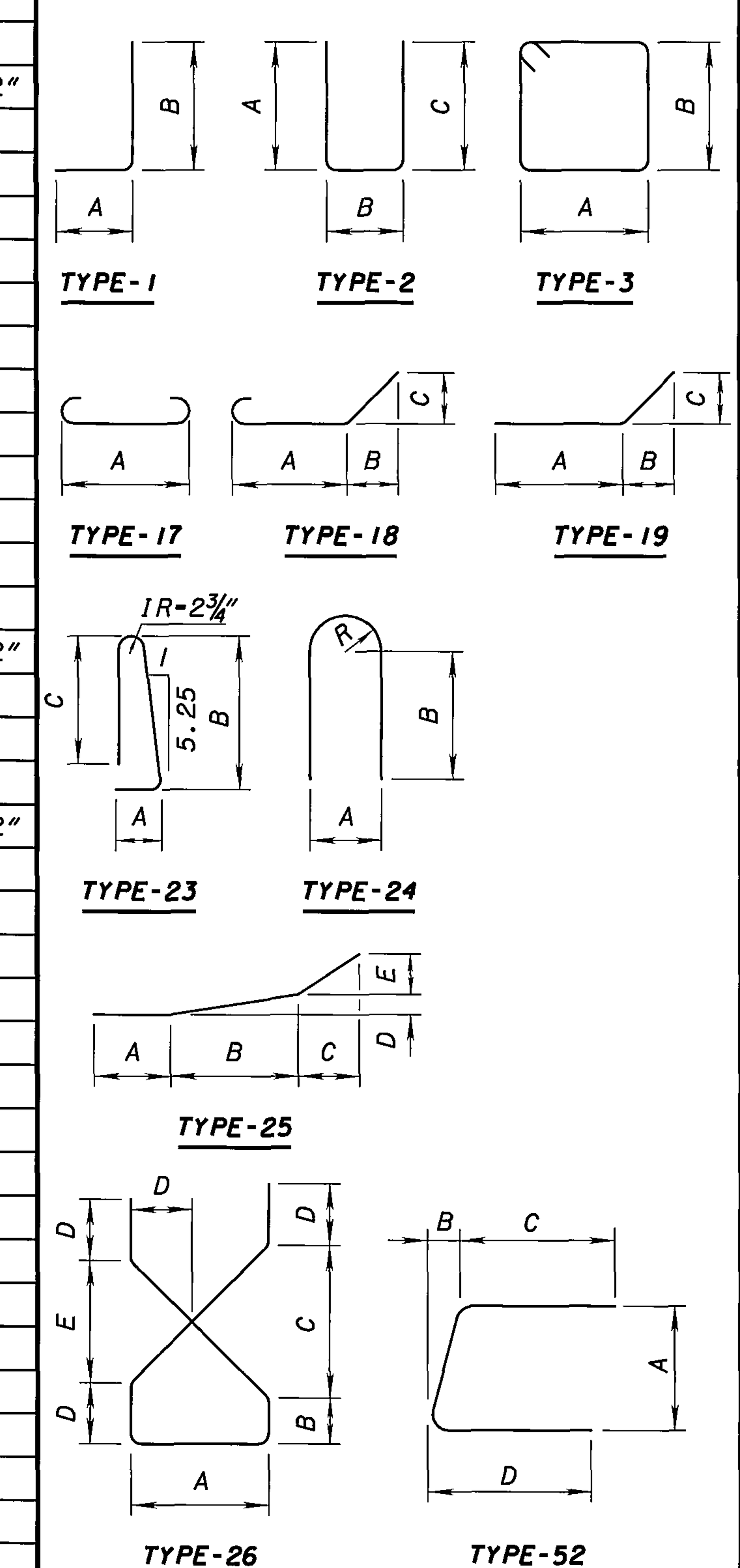
MARK	NUMBER REAR	NUMBER FWD	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC.
ABUTMENTS													
A401	78	78	156	9'-1"	947	3	2'-6¾"	1'-9"					
A501*	16	16	32	36'-8"	1224	STR							
A502	131	131	262	11'-0"	3006	3	2'-7"	2'-8"					
A503	109		109	13'-7"	1544	2	5'-10"	2'-2"	5'-10"				
A504		109	109	13'-11"	1582	2	6'-0"	2'-2"	6'-0"				
A505*	8	8	16	47'-4"	790	STR							
A506	8		8	18'-3"	152	2	8'-2"	2'-2"	8'-2"				
A507	1-SER		1-SER	15'-1"	93	2	6'-7"	2'-2"	6'-7"				16"
	OF		OF	TO			TO		TO				
	5-5		5-5	20'-5"			9'-3"		9'-3"				
A508	1	1	2	12'-3"	26	2	5'-2"	2'-2"	5'-2"				
A509	14	14	28	5'-11"	173	2	2'-0"	2'-2"	2'-0"				
A510	1-SER		1-SER	9'-7"	34	2	3'-10"	2'-2"	3'-10"				16"
	OF		OF	TO			TO		TO				
	3-3		3-3	12'-3"			5'-2"		5'-2"				
A511	2		2	7'-0"	15	STR							
A512	2		2	7'-6"	16	STR							
A513	1		1	11'-0"	11	19	10'-7"	4½"	2"				
A514	1		1	11'-5"	12	19	10'-7"	9½"	5"				
A515	1		1	9'-1"	9	STR							
A516	1		1	9'-7"	10	STR							
A517	1		1	6'-1"	6	STR							
A518	1		1	6'-7"	7	STR							
A519	1		1	3'-1"	3	STR							
A520	1		1	3'-7"	4	STR							
A521		8	8	18'-7"	155	2	8'-4"	2'-2"	8'-4"				
A522		1-SER	1-SER	14'-9"	91	2	6'-5"	2'-2"	6'-5"				16"
		OF	OF	TO			TO		TO				
		5-5	5-5	20'-1"			9'-1"		9'-1"				
A523	1	1	2	13'-7"	28	2	5'-10"	2'-2"	5'-10"				
A524		1-SER	1-SER	8'-9"	32	2	3'-5"	2'-2"	3'-5"				16"
		OF	OF	TO			TO		TO				
		3-3	3-3	11'-5"			4'-9"		4'-9"				
A525		2	2	6'-7"	14	STR							
A526		2	2	7'-11"	17	STR							
A527		1	1	10'-5"	11	19	10'-0"	5"	2½"				
A528		1	1	10'-11"	11	19	10'-0"	10"	5"				
A529		1	1	8'-2"	9	STR							
A530		1	1	8'-8"	9	STR							
A531		1	1	5'-7"	6	STR							
A532		1	1	6'-1"	6	STR							
A533		1	1	3'-1"	3	STR							
A534		1	1	3'-7"	4	STR							
A535*	8	8	16	52'-0"	868	STR							
A536	1-SER		1-SER	14'-1"	84	2	6'-1"	2'-2"	6'-1"				12"
	OF		OF	TO			TO		TO				
	5-5		5-5	18'-1"			8'-1"		8'-1"				
A537	1	1	2	12'-1"	25	2	5'-1"	2'-2"	5'-1"				

MARK	NUMBER REAR	NUMBER FWD	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC.
ABUTMENTS (CONT.)													
A538	1-SER		1-SER	6'-7"	45	2	2'-4"	2'-2"	2'-4"				12"
	OF		OF	TO			TO		TO				
	5-5		5-5	10'-7"			4'-4"		4'-4"				
A539	2		2	6'-2"	13	STR							
A540	2		2	8'-10"	18	STR							
A541	1		1	12'-5"	13	19	11'-5"	11½"	4"				
A542	1		1	11'-11"	12	19	11'-5"	6"	2"				
A543	1		1	11'-2"	12	STR							
A544	1		1	10'-8"	11	STR							
A545	1		1	7'-8"	8	STR							
A546	1		1	7'-3"	8	STR							
A547	1		1	4'-3"	4	STR							
A548	1		1	3'-9"	4	STR							
A549		1-SER	1-SER	14'-7"	86	2	6'-4"	2'-2"	6'-4"				12"
		OF	OF	TO			TO		TO				
		5-5	5-5	18'-7"			8'-4"		8'-4"				
A550	1		1	13'-1"	14	2	5'-7"	2'-2"	5'-7"				
A551		1-SER	1-SER	7'-9"	51	2	2'-11"	2'-2"	2'-11"				12"
		OF	OF	TO			TO		TO				
		5-5	5-5	11'-9"			4'-11"		4'-11"				
A552		2	2	6'-11"	14	STR							
A553		2	2	9'-7"	20	STR							
A554		1	1	13'-0"	14	19	12'-1"	10"	4½"				
A555		1	1	12'-7"	13	19	12'-1"	5½"	2½"				
A556		1	1	11'-3"	12	STR							
A557		1	1	10'-9"	11	STR							
A558		1	1	7'-8"	8	STR							
A559		1	1	7'-2"	7	STR							
A560		1	1	4'-1"	4	STR							
A561		1	1	3'-7"	4	STR							
A562	12	8	20	6'-5"	134	52	2'-2"	6"	2'-3"				
A563	8		8	9'-7"	80	STR							
A564		8	8	6'-6"	54	STR							
A565		1	1	13'-3"	14	2	5'-8"	2'-2"	5'-8"				
A601	131	131	262	10'-9"	4230	26	2'-2"	5"	2'-7"	10"	1'-9"		
A801*	8	8	16	37'-8"	1609	STR							
A802*	8	8	16	38'-5"	1641	STR							
A803*	4	4	8	47'-4"	1011	STR							
A804*	4		4	45'-9"	489	STR							
A805*		4	4	45'-4"	484	STR							
A806*	4	4	8	52'-0"	1111	STR							
A807*	4		4	49'-9"	531	STR							
A808*		4	4	49'-8"	530	STR							
				TOTAL -	23361								

BENDING DIAGRAMS



NOTES

1. FOR REINFORCING STEEL NOTES, SEE SH. 25/25.

DESIGN AGENCY: URS, 36 EAST 7TH STREET, SUITE 2300, CINCINNATI, OHIO 45202

DATE 1-03 | STRUCTURE FILE NUMBER 3107833 LT, 3107868 RT | REVIEWED MJZ | DRAWN GJW | REVISED | DESIGNED CEJ | CHECKED BER

REINFORCING STEEL LIST (1)
BRIDGE NO. HAM-74-0069 L/R
I-74 OVER NEW BIDDINGER ROAD

HAM-74-0.00

23/25

411/421

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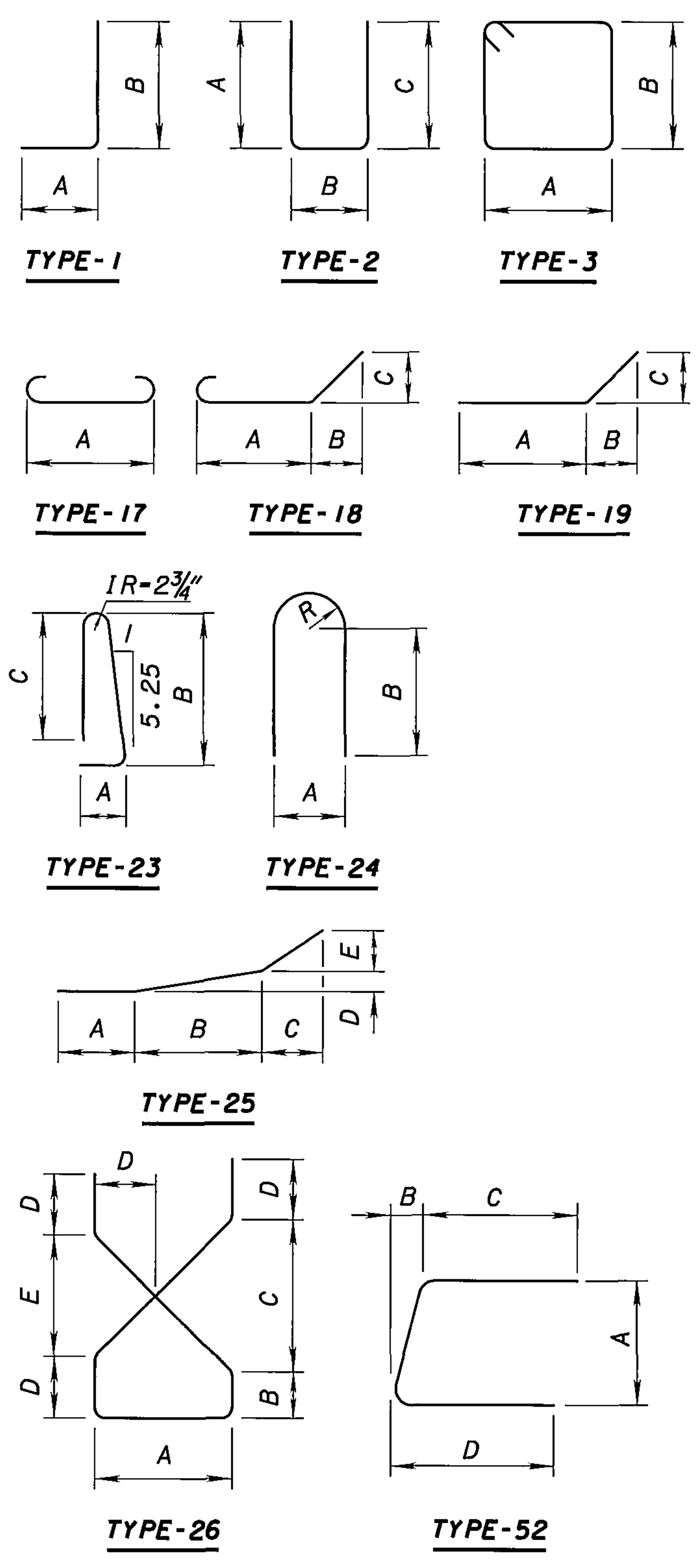
MARK	NUMBER					LENGTH	WEIGHT	TYPE	DIMENSIONS						
	P1L	P1R	P2L	P2R	TOTAL				A	B	C	D	E	R	INC.
PIERS															
P401	38	38	40	42	158	3'-8"	387	17	2'-8"						
P501	24	24	24	24	96	16'-2"	1619	STR							
P502	38	38	40	42	158	11'-1"	1826	24	2'-8"	3'-6"				1'-4"	
P503	2		2		4	12'-7"	52	STR							
P504	2		2		4	17'-1"	71	STR							
P505	4	4	4	4	16	19'-7"	327	STR							
P506	4-SER	4-SER	4-SER	4-SER	16-SER	8'-1"	1514	2	2'-10"	2'-8"	2'-10"				6"
	OF	OF	OF	OF	OF	TO			TO		TO				
	9-36	9-36	9-36	9-36	9-144	12'-1"			4'-10"		4'-10"				
P507	12	12	12	12	48	12'-1"	605	2	4'-10"	2'-8"	4'-10"				
P508	4	4	4	4	16	9'-5"	157	19	7'-1"	2'-0"	1'-4"				
P509		2		2	4	12'-4"	51	STR							
P510		2		2	4	16'-7"	69	STR							
P511	44		44		88	3'-1"	283	2	4"	2'-8"	4"				
P512	4		4		8	13'-1"	109	STR							
P513	4		4		8	19'-6"	163	STR							
P514	4		4		8	15'-9"	131	STR							
P515	2	2	2	2	8	8'-1"	67	STR							
P601	86		86		172	2'-7"	667	1	1'-0"	1'-9"					
P1001	40	40	40	40	160	19'-8"	13540	2	2'-1"	16'-2"	2'-1"				
P1002	6	6	6	6	24	22'-3"	2298	2	1'-9"	19'-5"	1'-9"				
P1101	22	22	22	22	88	13'-10"	6468	1	2'-0"	12'-2"					
P1102	22				22	31'-7"	3692	STR							
P1103			22		22	33'-10"	3955	STR							
P1104		22			22	32'-0"	3740	STR							
P1105				22	22	34'-1"	3984	STR							
						TOTAL =	45775								

BENDING DIAGRAMS



NOTES
1. FOR REINFORCING STEEL NOTES, SEE SH. 25/25.

LEGEND
P1L - PIER 1 LEFT
P1R - PIER 1 RIGHT
P2L - PIER 2 LEFT
P2R - PIER 2 RIGHT

DESIGN AGENCY: URS, 36 EAST 7TH STREET, SUITE 2300, CINCINNATI, OHIO 45202

DESIGNED CEJ | CHECKED BER | DRAWN GJW | REVISED | REVIEWED MJZ | DATE 1-03 | STRUCTURE FILE NUMBER 3107833 LT, 3107868 RT

REINFORCING STEEL LIST (2)
BRIDGE NO. HAM-74-0069 L/R
I-74 OVER NEW BIDDINGER ROAD

HAM-74-0.00

24/25

412/421

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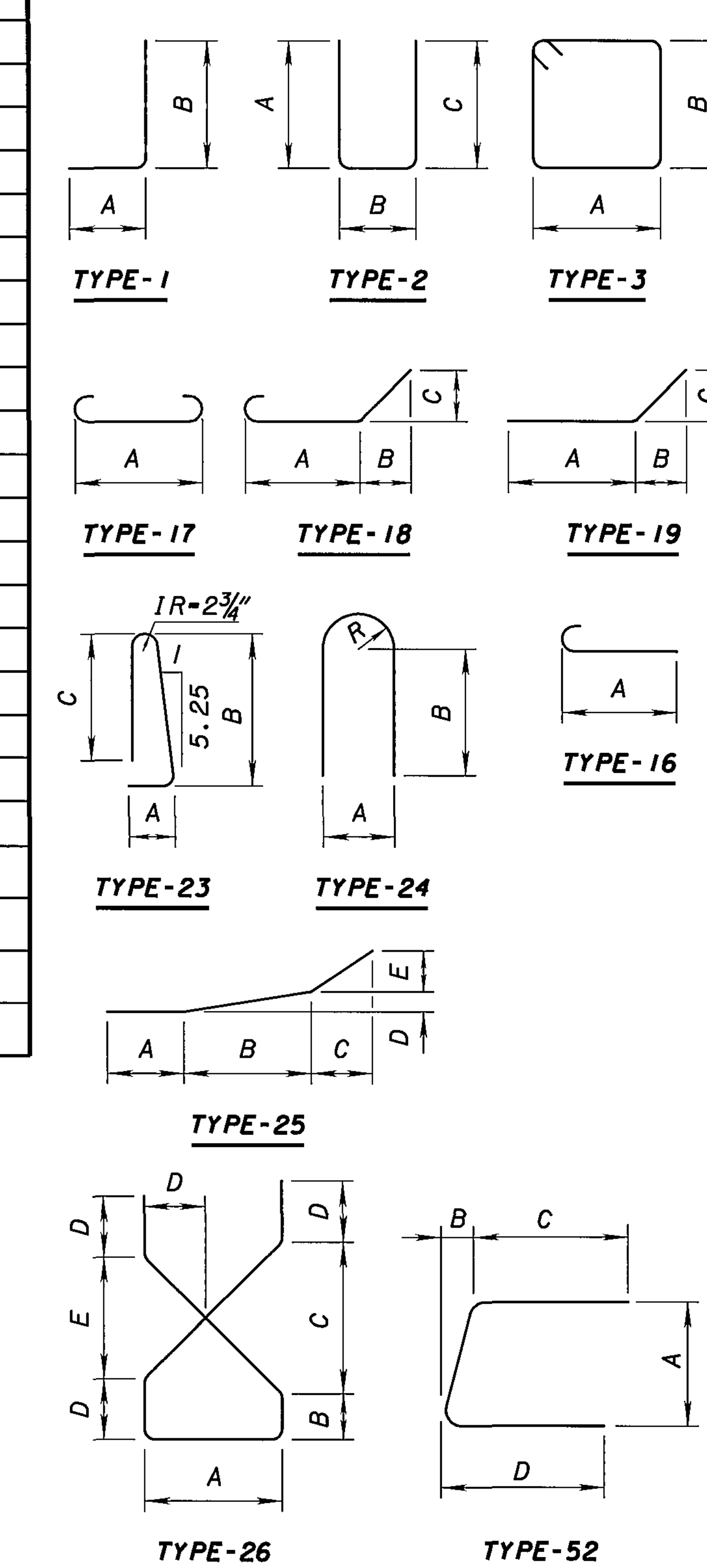
MARK	NUMBER LEFT	NUMBER RIGHT	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC.
SLAB													
S401	522	522	1044	30'-0"	20923	STR							
S402	87	87	174	18'-2"	2112	STR							
S501	600	600	1200	30'-0"	37548	STR							
S502	88	88	176	21'-2"	3886	STR							
S503	374	374	748	7'-5"	5786	23	1'-1"	3'-2"	3'-0"			2¾"	
S504	4	4	8	4'-11"	41	52	2'-2"	6"	2'-6"	5"			
S505		4	4	3'-9"	16	52	2'-2"	6"	1'-4"	5"			
S506	2	2	4	5'-5"	23	1	1'-1"	4'-5"					
S507	4	4	8	4'-11"	41	52	2'-2"	6"	5"	2'-6"			
S508	4		4	3'-9"	16	52	2'-2"	6"	5"	1'-4"			
S509	1722	1722	3444	33'-7"	120635	STR							
S510	2 SER	2 SER	4 SER	4'-11½"	1228	STR							2 1½"
	OF	OF	OF	TO									
	16-32	16-32	16-64	31'-10"									
S511	2 SER	2 SER	4 SER	5'-5"	1124	STR							2 1½"
	OF	OF	OF	TO									
	15-30	15-30	15-60	30'-6"									
S512	2 SER	2 SER	4 SER	6'-1½"	1306	STR							2 1½"
	OF	OF	OF	TO									
	16-32	16-32	16-64	33'-0"									
S513	2 SER	2 SER	4 SER	6'-1"	1166	STR							2 1½"
	OF	OF	OF	TO									
	15-30	15-30	15-60	31'-2"									
S514	8	8	16	34'-3"	572	STR							
S515	172	172	344	31'-6"	12485	STR							
S516	12	12	24	27'-2"	680	STR							
S601	12	12	24	30'-0"	1081	STR							
S602	2	2	4	31'-2"	187	STR							
S603	374	374	748	2'-8"	2996	1	1'-1"	1'-9"					
S604	374	374	748	3'-9"	4213	52	1'-9"	4"	1'-1"	1'-1"			
S801*	16	16	32	34'-0"	2905	STR							
				TOTAL -	220970								
END DIAPHRAGMS													
D501	262	262	524	8'-1"	4418	2	3'-1"	2'-2"	3'-1"				
D502	131	131	262	5'-11"	1617	2	2'-5"	1'-4"	2'-5"				
D503	8	8	16	10'-0"	167	2	4'-0"	2'-3"	4'-0"				
D801	88	88	176	4'-9"	2232	18	2'-8"	1'-0"	1'-0"				
D802*	40	40	80	34'-0"	7262	STR							
				TOTAL -	15696								

MARK	NUMBER LEFT	NUMBER RIGHT	NUMBER TOTAL	LENGTH	WEIGHT	TYPE	DIMENSIONS A	B	C	D	E	R	INC.
APPROACH SLAB DEFLECTOR PARAPETS **													
R501	16	16	32	10'-0"	334	STR							
R502	6	6	12	5'-6"	69	25	1'-8"	2'-5"	1'-4"	1½"	5"		
R503	22	22	44	5'-9"	264	STR							
R504	58	58	116	7'-5"	897	23	1'-1"	3'-2"	3'-0"			2¾"	
R505	12	12	24	24'-8"	617	STR							
R506	2	2	4	17'-10"	74	STR							
R507	38	38	76	3'-6"	277	STR							
R601	2	2	4	6'-6"	39	STR							
R602	58	58	116	3'-0"	523	1	1'-1"	2'-1"					
R603	58	58	116	4'-0"	697	52	2'-1"	4¾"	1'-1"	1'-1"			
R604	4-SER	4-SER	8-SER	4'-5"	639	1	1'-1"	3'-6"					1"
	OF	OF	OF	TO				TO					
	11-44	11-44	11-88	5'-3"				4'-4"					
R605	16	16	32	4'-5"	212	1	1'-1"	3'-6"					
R606	2	2	4	24'-8"	148	STR							
R1001	2	2	4	19'-3"	331	16	17'-10"						
				TOTAL -	5121								

** REINFORCING STEEL WEIGHTS FOR APPROACH SLAB DEFLECTOR PARAPETS ARE INCLUDED IN ITEM 526, REINFORCED CONCRETE APPROACH SLAB (T=15 INCHES), AS PER PLAN, FOR PAYMENT.

BENDING DIAGRAMS



NOTES

1. THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR DIGITS ARE USED, INDICATE THE BAR SIZE NUMBER. FOR EXAMPLE, A S601 IS A NUMBER 6 BAR.
2. ALL REINFORCING STEEL SHALL BE EPOXY COATED.
3. ALL DIMENSIONS ARE OUT TO OUT OF BAR, UNLESS OTHERWISE NOTED.
4. RADIUS DIMENSIONS ARE SHOWN TO THE OUTSIDE OF THE BAR, EXCEPT AS SHOWN ON THE BENDING DIAGRAM.
5. HOOKS AND BENDS SHOWN ON THE BENDING DIAGRAMS THAT ARE NOT DIMENSIONED SHALL BE AS SPECIFIED IN THE CMS.
6. * = BAR LENGTH GIVEN INCLUDES 2 INCHES CLEARANCE AT EACH END. CONTRACTOR SHALL ADJUST LENGTH AS REQUIRED FOR THE TYPE OF MECHANICAL SPLICE USED.

DESIGN AGENCY: URS, 36 EAST 7TH STREET, SUITE 2300, CINCINNATI, OHIO 45202

DESIGNED CEJ | CHECKED BER | DRAWN GJW | REVISED | REVIEWED MJZ | DATE 1-03 | STRUCTURE FILE NUMBER 3107833 LT, 3107868 RT

REINFORCING STEEL LIST (3)
BRIDGE NO. HAM-74-0069 L/R
I-74 OVER NEW BIDDINGER ROAD

HAM-74-0.00

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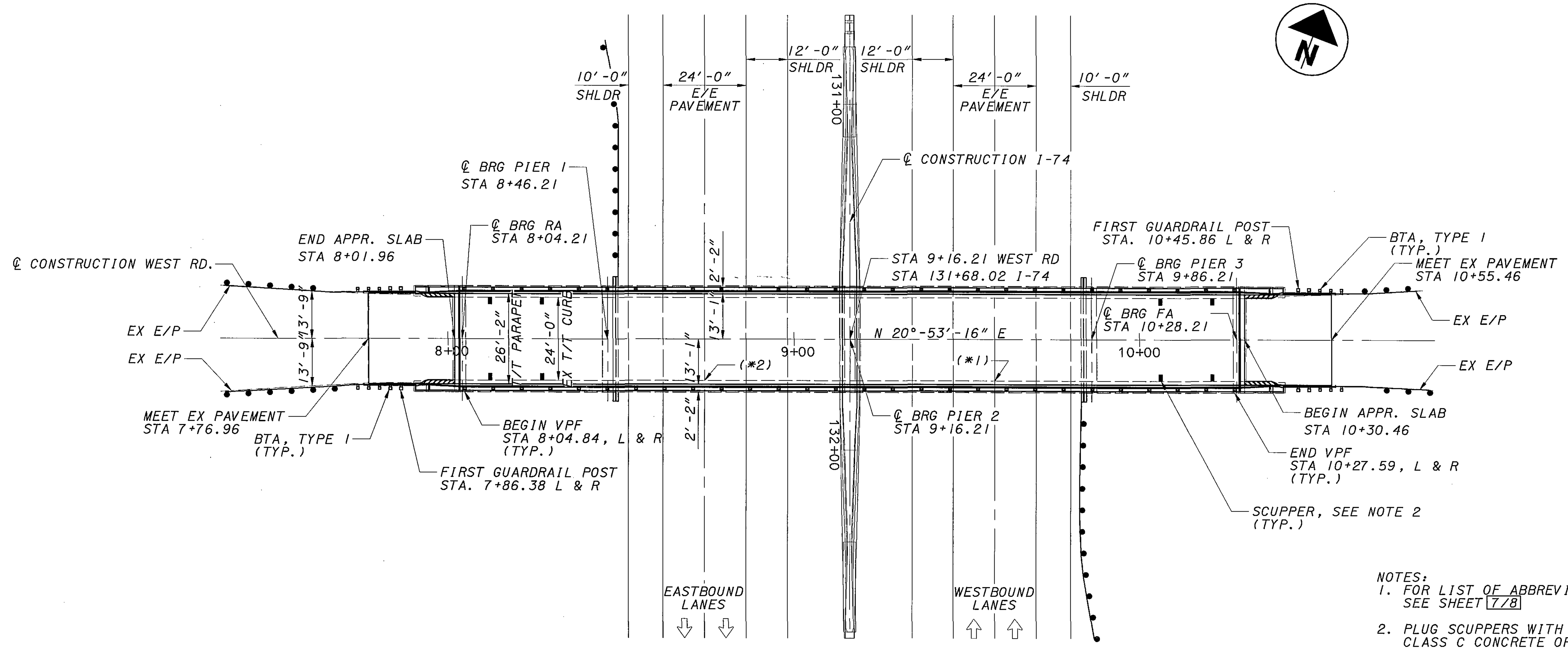
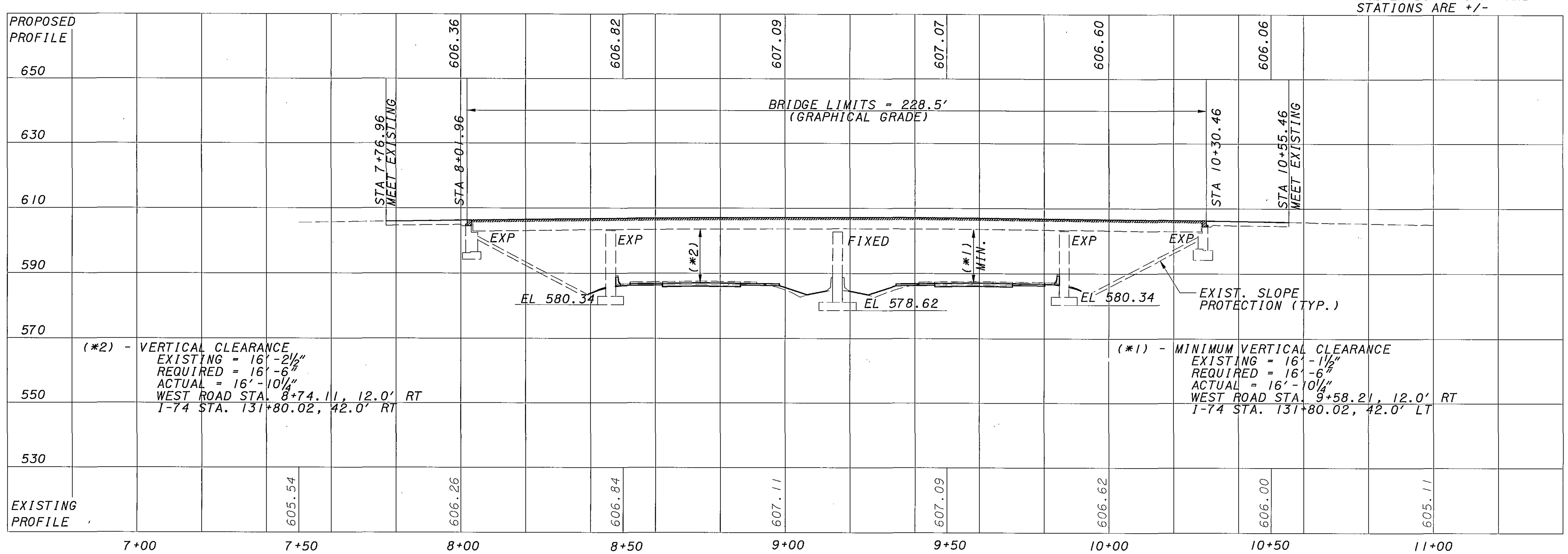


PLAN

NOTES:
1. FOR LIST OF ABBREVIATIONS SEE SHEET [7/8]
2. PLUG SCUPPERS WITH CLASS C CONCRETE OR MSC
3. FOR DRAINAGE DETAILS BEYOND APPR. SLABS, SEE ROADWAY PLANS
4. ALL EX DIMENSIONS AND STATIONS ARE +/-



(*2) - VERTICAL CLEARANCE
EXISTING = 16'-2½"
REQUIRED = 16'-6"
ACTUAL = 16'-10¼"
WEST ROAD STA. 8+74.11, 12.0' RT
I-74 STA. 131+80.02, 42.0' RT

(*1) - MINIMUM VERTICAL CLEARANCE
EXISTING = 16'-1½"
REQUIRED = 16'-6"
ACTUAL = 16'-10¼"
WEST ROAD STA. 9+58.21, 12.0' RT
I-74 STA. 131+80.02, 42.0' LT

PROFILE ALONG CENTERLINE OF WEST ROAD

BENCHMARKS

TBM #1 - NATIONAL GEODETIC SURVEY - Q141
STA. 151+10.25, 559.45' RT I-74,
EL 583.87

TBM #2 - ℄ MONUMENT
I-74 STA. 130+00, EL. 583.78

TRAFFIC DATA

OPENING YEAR ADT (2004): 937
DESIGN YEAR ADT (2024): 1,119
DESIGN YEAR ADTT (2024): 112

EXISTING STRUCTURE

TYPE: 4-SPAN CONTINUOUS ROLLED BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPANS: 42'-0", 70'-0", 70'-0", 42'-0" (= 224'-0") C/C BRGS.

ROADWAY: 24'-0" T/T OF 2'-3" SAFETY CURBS

DESIGN LOADING: H-15

SKEW: 00°-00'-00"

WEARING SURFACE: 1¾" SUPERPLASTICIZED DENSE CONCRETE OVERLAY

ALIGNMENT: TANGENT

CROWN: 0.0156

APPROACH SLABS: AS-1-54 (25' LONG)

YEAR BUILT: 1961

PROPOSED WORK

1. REFACE THE EXISTING CURB AND PARAPET WITH A CONCRETE DEFLECTOR SHAPE. SEE SHEET [7 / 8] AND [8 / 8] FOR DETAILS.
2. REFURBISH ALL ABUTMENT BEARINGS.
3. RESET ALL PIER EXPANSION BEARINGS.
4. PLUG SCUPPERS
5. INSTALL VANDAL PROTECTION FENCE.
6. LOWER MAINLINE, BOTH DIRECTIONS, TO PROVIDE A MINIMUM VERTICAL CLEARANCE OF 16.5'.
7. REPAIR CRACKS IN ABUTMENTS AND PATCH PIERS. SEE SHEET [4 / 8] AND [5 / 8] FOR DETAILS.
8. REMOVE BRUSH UNDER STRUCTURE AND FROM 20' OF EACH SIDE OF STRUCTURE.
9. SEAL PIERS, CAPS, ABUTMENTS, WINGWALLS, BACKWALLS, DECK EDGES, AND BRIDGE RAILING WITH EPOXY-URETHANE. COLOR SHALL BE FEDERAL COLOR NO. 17778, LIGHT NEUTRAL.
10. INSTALL NEW STRIP SEAL EXPANSION JOINTS. SEE SHEET [4 / 8] FOR DETAILS.
11. REMOVE EXISTING 1.75" SDC OVERLAY AND 1" OF THE ORIGINAL DECK USING HYDRO-DEMOLITION, AND PLACE 2.5" MSC OVERLAY.
12. SHIM ABUTMENTS: RA 1⅝", FA 3½"
13. TRIM FA BEAM ENDS, SEE SHEET [2 / 8] FOR DETAILS.

BARR ENGINEERING, INC.
1108 CITY PARK AVENUE, SUITE 200
COLUMBUS, OHIO 43206
TEL 614-224-1941 FAX 614-224-0907

DESIGNED	DRAWN	REVIEWED	DATE
SRR	SRR	ASB	04/2003
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JEP	---	3107957	

HAMILTON COUNTY
STA. 8+01.96
STA. 10+30.46

SITE PLAN
BRIDGE NO.: HAM-74-0230
WEST ROAD OVER I-74

HAM-74-0.00

GENERAL NOTES

REFERENCE SHALL BE MADE TO THE FOLLOWING STANDARD DRAWINGS:

EXJ-4-87 REVISED 07-19-02
VPF-1-90 REVISED 07-19-02

AND TO SUPPLEMENTAL SPECIFICATIONS:

843 DATED 4/18/03
848 DATED 2/8/02
864 DATED 7/11/00
954 DATED 9/9/97

DESIGN STRESSES:

CONCRETE CLASS S - COMPRESSIVE STRENGTH 4500 P.S.I. (SUPERSTRUCTURE)
CONCRETE CLASS C - COMPRESSIVE STRENGTH 4000 P.S.I. (SUBSTRUCTURE)

REINFORCING STEEL - ASTM A615 OR A996
GRADE 60 MINIMUM YIELD STRENGTH 60,000 P.S.I.

DECK PROTECTION METHOD:

EPOXY COATED REINFORCING STEEL
2½" [65 MM] CONCRETE COVER
MICRO SILICA MODIFIED CONCRETE OVERLAY

EXISTING STRUCTURE VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 513.04.

BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED IN THE FIELD.

ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN:

THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SEPERATELY LISTED FOR PAYMENT, EXCEPT FOR WEARING COURSE REMOVAL. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE, OR DAMAGE THE EXISTING REIFORCING STEEL TO BE PRESERVED. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND [41 KILOGRAM] CLASS. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

ITEM 509 REINFORCING STEEL REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN:

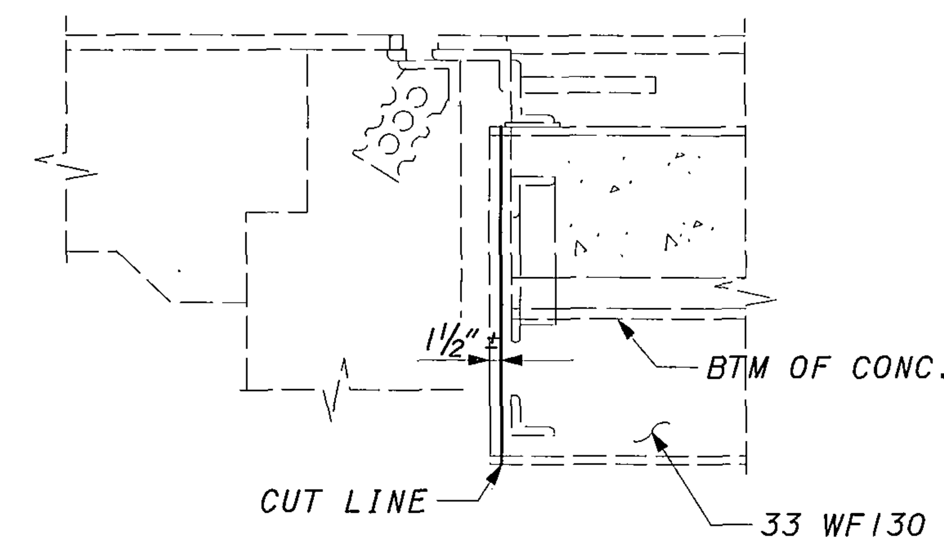
REPLACE ALL EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION. THE DEPARTMENT WILL MEASURE THE REPLACEMENT REINFORCING STEEL BY THE NUMBER OF POUNDS ACCEPTED IN PLACE.

REPLACE ALL EXISTING REINFORCING STEEL BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND ARE DEEMED BY THE ENGINEER TO BE MADE UNUSABLE BY CONCRETE REMOVAL OPERATIONS WITH NEW EPOXY COATED REINFORCING STEEL OF THE SAME SIZE AT NO COST TO THE DEPARTMENT.

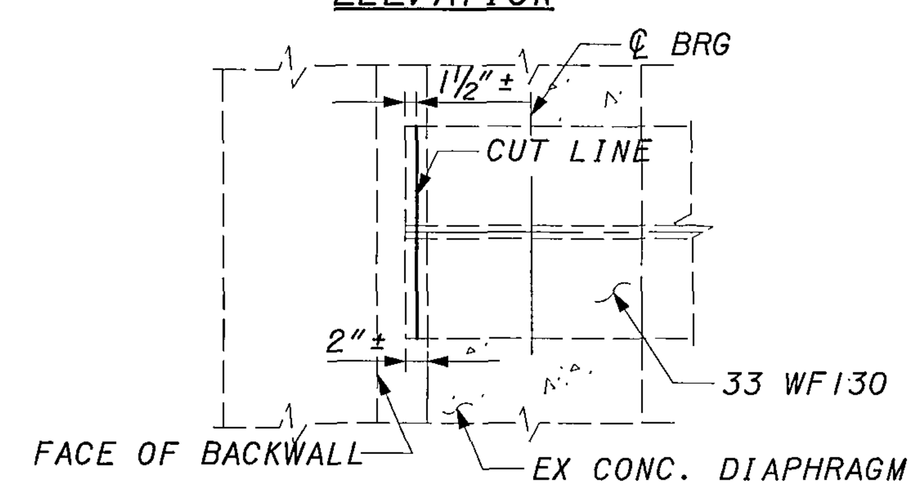
ITEM 509 - EPOXY COATED REINFORCING STEEL, AS PER PLAN:

IN ADDITION TO THE PROVISIONS OF ITEM 509, FIELD BEND AND/OR FIELD CUT THE REINFORCING STEEL DESIGNED IN THE PLANS (BAR MARK S503), AS NECESSARY, IN ORDER TO MAINTAIN THE REQUIRED CLEARANCES AND BAR SPACINGS. REPAIR ALL DAMAGE TO THE EPOXY COATING AS A RESULT OF THIS WORK, ACCORDING TO 709.00

ITEM 513 - TRIMMING OF BEAM END, AS PER PLAN



ELEVATION



PLAN

THE EXISTING END PORTION OF THE BEAM SHALL BE CUT ALONG A LINE 2" PARALLEL TO THE ADJACENT BACKWALL USING A MECHANICALIZED FLAME CUTTING DEVICE WITH A CUTTING TORCH MOUNTED ON A TRAVELLING CARRIAGE. THE TRAVELLING CARRIAGE SHALL RIDE ON A TRACK THAT IS ATTACHED MAGNETICALLY TO THE MEMBER. THE EDGE OF THE EXISTING BEAM SHALL BE PREPARED BY GRINDING TO A SMOOTH FINISH AS PER ITEM 513.12. CARE SHALL BE TAKEN NOT TO GOUGE OR OTHERWISE DAMAGE THE PORTION OF THE EXISTING STEEL BEAMS THAT ARE TO REMAIN. ONCE THE TRIMMING OF THE BEAM ENDS ARE COMPLETE, THE EFFECTED PORTION OF THE TRIMMED AREA SHALL BE PAINTED WITH SYSTEM OZEU. THE BEAMS AT THE FORWARD ABUTMENT SHALL BE TRIMMED AS DETAILED ABOVE..

PAYMENT SHALL BE MADE AT THE EACH PRICE FOR ITEM 513-TRIMMING OF BEAM ENDS, AS PER PLAN, AND SHALL INCLUDE EVERYTHING NEEDED TO REMOVE AND PAINT THE PORTION OF THE EXSTING BEAM.

ITEM 516 - STRUCTURAL EXPANSION JOINTS, INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN:

THIS ITEM SHALL INCLUDE THE COST OF ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO REMOVE EXISTING EXTENSION BARS, REMOVE OR GRIND PORTION OF EXISTING STEEL PLATES, TRIM EXISTING ANGLE IF NECESSARY, INSTALLATION OF ALL ANCHOR PLATES, STUDS, STEEL PLATES, BARS, STEEL RETAINERS, ELASTOMERIC STRIP SEAL GLANDS, PAINTING OF NEW STEEL AT EXPANSION JOINT AS PER STD. DWG. EXJ-4-87, REMOVAL AND REPLACEMENT OF A PORTION OF THE PARAPET AND SAFETY CURB FOR JOINT PLACEMENT WITH CLASS S CONCRETE, AND ANY OTHER INCIDENTALS AS PER DETAILS SHOWN ON THE STD. DWG. OR AS DETAILED IN THE PLAN. THE PROPOSED STEEL STRUCTURAL EXPANSION JOINTS SHALL BE ASTM A36 MATERIAL.

PAYMENT FOR LABOR, MATERIAL, AND EQUIPMENT SHALL BE MADE AT THE UNIT PRICE BID PER LIN. FT. FOR ITEM 516 - STRUCTURAL EXPANSION JOINTS, INCLUDING ELASTOMERIC STRIP SEALS, AS PER PLAN.

ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN:

GENERAL: THIS WORK CONSISTS OF RAISING OR RE-POSITIONING EXISTING STRUCTURES TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS.

SUBMITTAL REQUIREMENTS: AN OHIO REGISTERED ENGINEER SHALL PREPARE, SEAL, AND DATE PLANS FOR A JACKING SYSTEM, INCLUDING ANY TEMPORARY OR PERMANENT SUPPORTS, SUFFICIENT TO PERFORM THE WORK DESCRIBED IN THE PLANS. SUBMIT THREE SETS OF THESE PLANS TO THE DIRECTOR FOR APPROVAL AT LEAST THIRTY (30) DAYS BEFORE ACTUAL WORK IS TO BEGIN.

JACKING SUBMITTALS SHALL INCLUDE AT LEAST THE FOLLOWING:

1. THE SIGNATURE AND NUMBER, OR PROFESSIONAL SEAL, OF THE OHIO REGISTERED PROFESSIONAL ENGINEER WHO PREPARED THE SUBMITTAL.
2. CALCULATIONS AND ANALYSIS OF THE STRUCTURE TO DETERMINE AND DEFINE THE ACTUAL LOADING APPLIED AT THE JACKING POINTS.
3. A DRAWING SHOWING THE PHYSICAL AND DIMENSIONAL POSITION OF THE JACKS WITH RESPECT TO THE STRUCTURE INCLUDING CLEARANCES AND CENTER OF LIFT.
4. A SCHEMATIC LAYOUT OF JACKS, CHECK VALVES, PUMPS WITH 3 WAY RETRACTOR VALVE, PRESSURE GAGES, FLOW CONTROL VALVES, ETC. IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. ALL JACKS FOR EACH ABUTMENT OR PIER SHALL BE CONNECTED TOGETHER. ALL JACKS AT EACH ABUTMENT OR PIER SHALL BE THE SAME SIZE.
5. ANALYSIS AND CALCULATIONS OF THE STRESSES INDUCED OR CREATED IN THE STRUCTURE AND ANY TEMPORARY OR PERMANENT SUPPORTS. DESIGN CALCULATIONS FOR ANY TEMPORARY OR PERMANENT SUPPORTS.
6. PHYSICAL DIMENSIONS, MATERIALS, AND FABRICATION DETAILS OF ANY TEMPORARY OR PERMANENT SUPPORTS. HORIZONTAL AND VERTICAL MOVEMENT RESTRAINT SHALL BE PROVIDED.
7. A STEP BY STEP PROCEDURE DETAILING ALL STEPS IN THE JACKING OPERATION.
8. METHOD OF ATTACHMENT TO STRUCTURAL MEMBERS. WELDING TO TENSION AREAS WILL NOT BE PERMITTED.

JACKING SYSTEM REQUIREMENTS: THE ENTIRE SYSTEM, INCLUDING JACKS SHALL HAVE 20% MORE CAPACITY THAN REQUIRED BASED ON CALCULATED LOADS. FOR LIFTS GREATER THAN 1 INCH [25 MM], JACKS SHALL HAVE LOCKING NUTS TO POSITIVELY LOCK AND SUPPORT THE STRUCTURE DURING THE LIFT. JACK SHALL HAVE A SWIVEL LOAD CAP, A DOMED PISTON HEAD OR SOME OTHER DEVICE TO PROTECT AGAINST THE EFFECTS OF SIDE LOAD ON THE JACK. DO NOT USE JACKS ALONE TO SUPPORT LOADS EXCEPT DURING ACTUAL JACKING OPERATION. USE TEMPORARY SUPPORTS BLOCKING OR OTHER METHODS APPROVED BY THE DIRECTOR. DO NOT USE SINGLE ACTING RAMS WITH NO OVER-TRAVEL PROTECTION SYSTEM. HAVE SPARE EQUIPMENT AVAIABLE ON SITE IN ORDER TO PROCEED WITH THE JACKING IN THE EVENT OF BREAKDOWN. PROVIDE A LIST OF SPARE EQUIPMENT TO THE ENGINEER.

JACKING OPERATION REQUIREMENTS: AT A MINIMUM, A JACKING OPERATION SHALL LIFT ALL BEAMS AT ANY ONE ABUTMENT OR PIER SIMULTANEOUSLY. THE ONLY EXCEPTION IS THE SITUATION WHERE THE WORK INVOLVES REPLACING OR REHABILITATING INDIVIDUAL BEARINGS; NO PERMANENT SHIMMING IS REQUIRED AND THE HEIGHT OF THE LIFT SHALL NOT EXCEED ¼ INCH [6 MM]. THE MAXIMUM DIFFERENTIAL JACKING HEIGHT BETWEEN ANY ADJACENT ABUTMENTS OR PIERS SHALL BE 1 INCH [25 MM] OR LESS. IF THIS 1 INCH LIMIT IS TO BE EXCEEDED, PROVIDE CALCUALTIONS SHOWING THAT THE SUPERSTRUCTURE COMPONENTS WILL NOT BE TEMPORARILY STRESSED BEYOND ALLOWABLE STRESSES AND NO PERMANENT STRESSES WILL BE INDUCED IN THE COMPONENTS AFTER THEY OBTAIN THEIR FINAL POSITION. IF, DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPERATION OF THE CONCRETE DECK FROM THE STEEL STRINGERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, IMMEDIATELY CEASE THE JACKING OPERATION AND INSTALL SUPPORTS TO THE SARTISFACTION OF THE ENGINEER. ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. EPOXY INJECT ALL BEAMS THAT SEPERATE FROM THE DECK FOR THE DISTANCE OF THE SEPERATION IN ACCORDANCE WITH ODOT'S PROPOSAL NOTE "CONCRETE REPAIR BY EPOXY INJECTION". THE DEPARTMENT WILL NOT PAY FOR THE COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS. THE BRIDGE BEARINGS SHALL BE FULLY SEATED AT ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUBMIT A REPAIR PLAN TO THE ENGINEER. THE DEPARTMENT WILL NOT PAY FOR THE REPAIR COSTS TO ENSURE FULL SEATING ON BEARINGS.

METHOD OF MEASUREMENT: THE DEPARTMENT WILL MEASURE THIS WORK ON A LUMP SUM BASIS.

BASIS OF PAYMENT: THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN.

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REVIEWED GEA
DATE 4/2003
STRUCTURE FILE NUMBER 3107957
DRAWN KCS
REVISED
DESIGNED JEP
CHECKED ASB

GENERAL NOTES
BRIDGE NO.: HAM-74-0230
WEST ROAD OVER I-74

HAM-74-0.00

ITEM 516 - REFURBISHING BEARING DEVICES, AS PER PLAN:

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO PROPERLY ALIGN BRIDGE BEARINGS AS WELL AS THEIR CLEANING AND PAINTING. INCLUDED SHALL BE THE DISASSEMBLY OF THE BEARINGS, HAND TOOL CLEANING (GRINDING IF NECESSARY), PAINTING ACCORDING TO ITEM 514, REPLACEMENT OF ANY DAMAGED SHEET LEAD WITH PREFORMED BEARING PADS (711.21), INSTALLATION OF ANY NECESSARY STEEL SHIMS OF THE SAME SIZE AS THE BEARINGS TO PROVIDE A SNUG FIT, REALIGNMENT OF THE UPPER BEARING PLATE BY REMOVING EXISTING WELDS AND REWELDING SO THAT THE BEARINGS ARE VERTICALLY ALIGNED AT 60° F [15° C], LUBRICATING SLIDING SURFACES, AND REASSEMBLY OF THE BEARINGS. ASSURE ALL BEARINGS ARE SHIMMED ADEQUATELY AND THAT NO BEAMS AND/OR BEARING DEVICES ARE "FLOATING". AT NO ADDITIONAL COST TO THE STATE, THE CONTRACTOR MAY INSTALL NEW BEARINGS OF THE SAME TYPE AS THE EXISTING IN PLACE OF REFURBISHING THE BEARINGS. NEW BEARINGS SHALL BE PAINTED TO MATCH EXISTING COLOR. ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER. PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT CONTRACT PRICE BID FOR ITEM 516 - REFURBISH BEARING DEVICES, AS PER PLAN.

ITEM 517 - RAILING FACED AS PER PLAN:

DESCRIPTION: THIS WORK CONSISTS OF FACING CURB STYLE PARAPETS, USING CAST IN PLACE CONCRETE, TO OBTAIN THE DEFLECTOR SHAPE AS SHOWN AS IN THE PLANS.

REMOVAL: CAREFULLY REMOVE THE EXISTING ALUMINUM RAILING, POSTS, VANDAL PROTECTION FENCE, CURB PLATES, EXISTING CONCRETE CURB, AND BULB ANGLE GUTTER. REMOVE ALL LOOSE OR UNSOUND CONCRETE. REMOVE SOUND CONCRETE, AS NECESSARY, TO OBTAIN A MINIMUM 4 INCH [100 MM] THICKNESS OF NEW CONCRETE.

DOWEL HOLES AND REINFORCING STEEL: DRILL DOWEL HOLES WHERE SHOWN IN THE PLANS. INSTALL REINFORCING STEEL ACCORDING TO ITEM 510 USING EPOXY GROUT, 705.20. PRIOR TO DRILLING DOWEL HOLES, LOCATE ALL EXISTING REINFORCING STEEL BARS IN THE AREA OF THE HOLE WITH THE AID OF A REINFORCING STEEL BAR LOCATOR (PACHOMETER). IF AN EXISTING BAR IS ENCOUNTERED AT THE SAME LOCATION AS A PROPOSED DOWEL HOLE, MOVE THE DOWEL TO THE EITHER SIDE OF THE EXISTING BAR. THE DEPARTMENT WILL PAY FOR ALL REINFORCING STEEL, DOWEL HOLES, AND GROUTING WITH ITEM 517.

SURFACE PREPARATION: THOUROUGHLY CLEAN THE PARAPET SURFACE IN CONTACT WITH THE REFACING WITH DETERGENT TO REMOVE SURFACE CONTAMINANTS. AFTER DETERGENT CLEANING AND WITHIN 24 HOURS OF PLACING CONCRETE, BLAST CLEAN, AIR BROOM, OR POWER SWEEP ALL SURFACES IN CONTACT WITH THE REFACING TO REMOVE ALL SPALLS, LAITANCE, AND OTHER CONTAMINANTS DETRIMENTAL TO THE ACHIEVEMENT OF AN ADEQUATE BOND. ACCEPTABLE BLAST CLEANING METHODS ARE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN WATER, ABRASIVE BLASTING WITH CONTAINMENT OR VACUUM ABRASIVE BLASTING. USE HAND TOOLS AS NECESSARY TO REMOVE SCALE FROM ANY EXPOSED REINFORCING STEEL. MATERIALS: CONCRETE SHALL BE CLASS S WITH A COMPRESSIVE STENGTH OF 4500 PSI [31 MPA]. FURNISH REINFORCING STEEL ACCORDING TO 709.00, GRADE 60 [420], WITH A MINIMUM YIELD STRENGTH OF 60,000 PSI [420 MPA].

CONTROL JOINTS: SAWCUT 1¼ INCH [32 MM] DEEP CONTROL JOINTS ALONG THE PERIMETER OF THE PARAPET AS SOON AS THE SAW CAN BE OPERATED WITHOUT DAMAGING THE CONCRETE. PLACE THE JOINTSAW CUTS AT THE SAME LOCATION AS THE EXISTING DEFLECTION JOINTS. USE AN EDGE GUIDE, FENCE, OR JIG TO ENSURE THAT THE CUT JOINT IS STRAIGHT, TRUE, AND ALIGNED ON ALL FACES ON THE PARAPET. THE JOINT WIDTH SHALL BE THE WIDTH OF THE SAW BLADE, A NOMINAL WIDTH OF ¼ INCH [6 MM]. SEAL THE PERIMETER OF THE CONTROL JOINT TO A MINIMUM DEPTH ONE INCH [25 MM] WITH A POLYURETHANE OR POLYMETRIC MATERIAL CONFORMING TO ASTM C920, TYPE S. LEAVE THE BOTTOM ONE-HALF INCH [12 MM] OF BOTH THE INSIDE AND OUTSIDE FACES OF THE PARAPET UNSEALED TO ALLOW ANY WATER WHICH MAY ENTER THE JOINT TO ESCAPE.

METHOD OF MEASUREMENT: THE DEPARTMENT WILL MEASURE THIS ITEM IN FEET BY THE ACTUAL LENGTH OF RAILING FACED BETWEEN THE ENDS OF THE EXISTING CONCRETE PARAPET.

BASIS OF PAYMENT: PAYMENT FOR THIS ITEM INCLUDE ALL COSTS OF REMOVAL, DOWEL HOLES, REINFORCING STEEL, CONCRETE, SHRINKAGE CONTROL JOINTS, EPOXY INJECTION AND INSPECTION PLATEFORMS. THE DEPARTMENT WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 517, RAILING FACED, AS PER PLAN.

ITEM 518 - SCUPPER MODIFICATION, AS PER PLAN

THE EXISTING SCUPPERS SHALL BE UNCLOGGED AND FREE OF DEBRIS BEFORE BEING PLUGGED WITH OVERLAY MATERIAL. ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER BEFORE THE MSC OVERLAY IS PLACED. ALL LABOR, MATERIAL AND EQUIPMENT ASSOCIATED WITH THIS WORK SHALL BE INCLUDED IN: ITEM 518 - SCUPPER MODIFICATION, AS PER PLAN

ESTIMATED QUANTITIES

ITEM	ITEM EXT.	TOTAL	UNIT	DESCRIPTION	ABUTS.	PIER	SUPER	GEN	AS PER PLAN SHEET NO.
202	11203	LUMP		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LUMP	2 / 8
509	10001	364	POUND	EPOXY COATED REINFORCING STEEL, AS PER PLAN	364				2 / 8
509	20001	200	POUND	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN				200	2 / 8
513	21001	4	EACH	TRIMMING OF BEAM END, AS PER PLAN			4		2 / 8
516	11211	57	FT.	STRUCTURAL EXP. JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN			57		2 / 8
516	13600	34	SQ. FT.	1" PREFORMED EXPANSION JOINT FILLER				34	
516	45305	8	EACH	REFURBISH BEARING DEVICES, AS PER PLAN (ABUTMENTS)	8				3 / 8
516	46701	8	EACH	RESET BEARINGS, AS PER PLAN (PIER)		8			3 / 8
516	47001	LUMP		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN				LUMP	2 / 8
517	76201	502	FT.	RAILING FACED, AS PER PLAN			502		3 / 8
518	12801	8	EACH	SCUPPER MODIFICATION, AS PER PLAN			8		3 / 8
519	11101	50	SQ. FT.	PATCHING CONCRETE STRUCTURES, AS PER PLAN	1			49	3 / 8
SPECIAL	51912600	36	FT.	CONCRETE REPAIR BY EPOXY INJECTION	36				5 / 8
SPECIAL	60739900	440	FT.	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC			440		6 / 8
843	50000	10	SQ. FT.	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR		10			
848	10000	665	SQ. YD.	MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRO DEMOLITION (T=2½")			665		
848	20000	665	SQ. YD.	SURFACE PREPARATION USING HYDRODEMOLITION			665		
848	30000	18	CU. YD.	MICRO SILICA MODIFIED CONCRETE (VARIABLE THICKNESS) MATERIAL ONLY			18		
848	50000	24	SQ. YD.	HAND CHIPPING			24		
848	50100	LUMP		TEST SLAB				LUMP	
848	50200	8	CU. YD.	FULL DEPTH REPAIR			8		
848	50320	665	SQ. YD.	EXISTING CONCRETE OVERLAY REMOVED (T=1¾")			665		
848	50340	233	SQ. YD.	REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY			233		
864	10100	814	SQ. YD.	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	84	206	524		

ITEM 516 - RESET BEARINGS, AS PER PLAN

THIS ITEM SHALL INCLUDE ALL WORK NECESSARY TO PROPERLY ALIGN THE BRIDGE PIER BEARINGS. INCLUDED SHALL BE THE INSTALLATION OF ANY NECESSARY STEEL SHIMS OF THE SAME SIZE AS THE BEARINGS TO PROVIDE A SNUG FIT, REALIGNMENT OF THE UPPER BEARING PLATE BY REMOVING EXISTING WELDS AND REWELDING SO THAT THE BEARINGS ARE VERTICALLY ALIGNED AT 60°F [15°C], LUBRICATING SLIDING SURFACES, AND REASSEMBLY OF THE BEARINGS. ASSURE ALL BEARINGS ARE SHIMMED ADEQUATELY AND THAT NO BEAMS AND/OR BEARING DEVICES ARE "FLOATING". ALL WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER. PAYMENT FOR ALL OF THE ABOVE DESCRIBED LABOR AND MATERIALS WILL BE MADE AT THE CONTRACT PRICE BID FOR ITEM 516 - RESET BEARINGS, AS PER PLAN.

ITEM 519 - PATCHING OF CONCRETE STRUCTURE, AS PER PLAN:

PRIOR TO THE SURFACE CLEANIG SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

NON-USE OF ASBESTOS-CONTAINING MATERIALS:

THE CONTRACTOR SHALL AT NO TIME INCORPORATE ANY MATERIALS WHICH ARE COMPOSED OF OR CONTAIN ANY AMOUNTS OF ASBESTOS. THE SUBSTITUTION OF MATERIALS WHICH CONTAIN ANY AMOUNTS OF ASBESTOS WILL IN NO CIRCUMSTANCES BE ACCEPTABLE. UPON COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL SUBMIT A WRITTEN STATEMENT OF CERTIFICATION ASSERTING THAT NO ASBESTOS CONTAINING MATRIALS WERE USED IN ANY PORTION OF THE CONSTRUCTION.

CONSTRUCTION SEQUENCE:

FOR SEQUENCE OF CONSTRUCTION, SEE MAINTENANCE OF TRAFFIC PLANS, SHEETS 18-19 OF 421.

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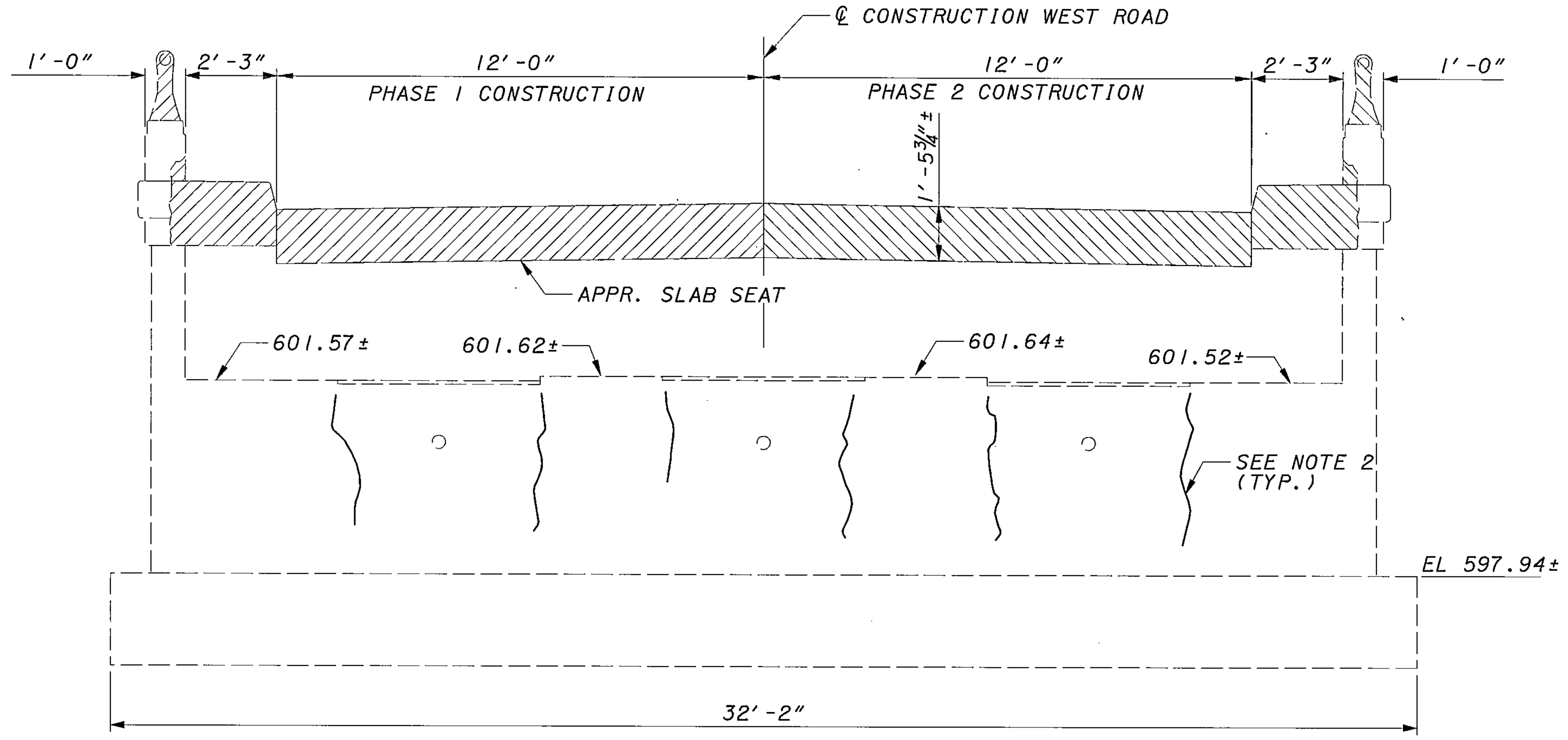
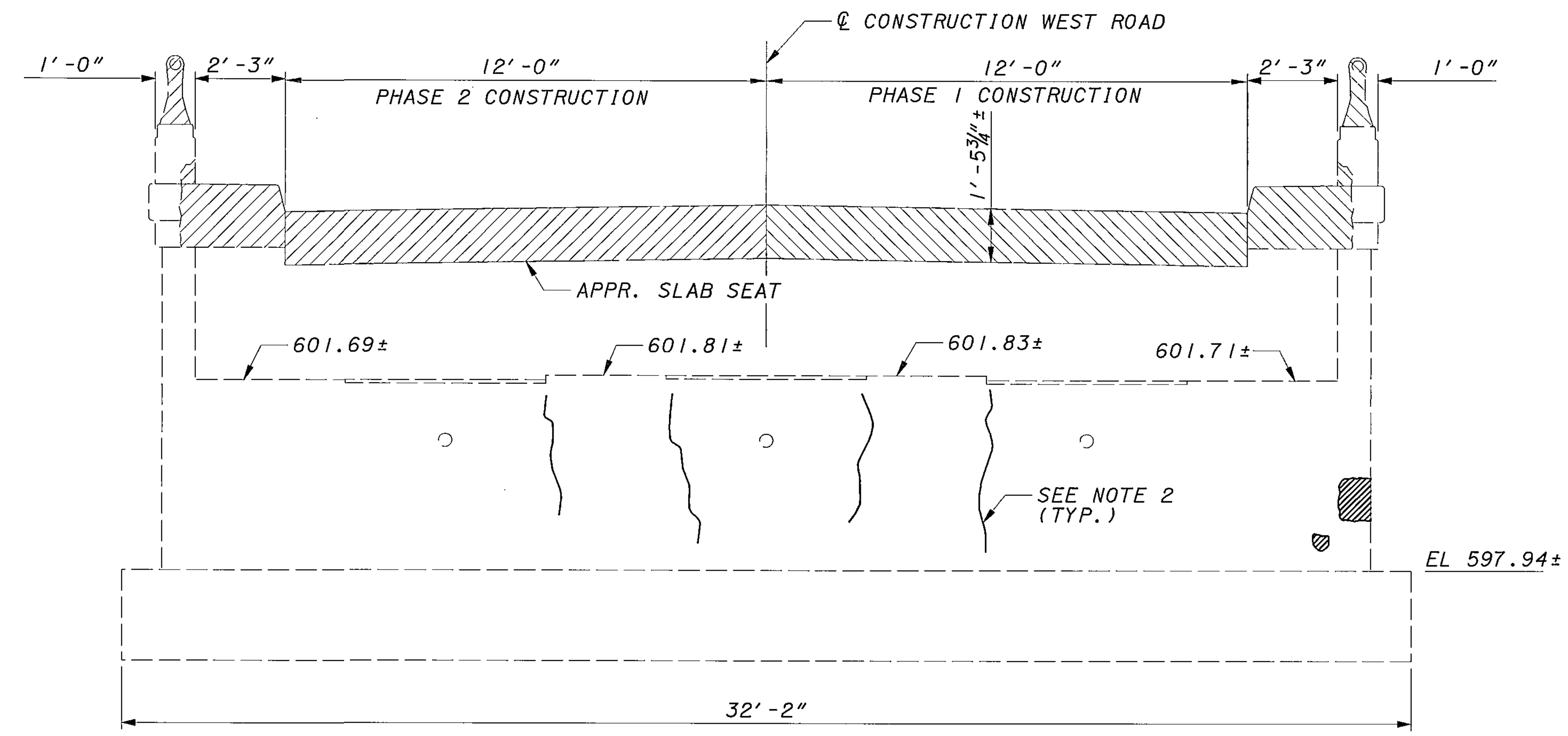
REVIEWED GEA DATE 4/2003
STRUCTURE FILE NUMBER 3107957
DRAWN KCS REVISED
DESIGNED JEP CHECKED ASB

ESTIMATED QUANTITIES AND REINFORCING STEEL LIST
BRIDGE NO.: HAM-74-0230
WEST ROAD OVER I-74

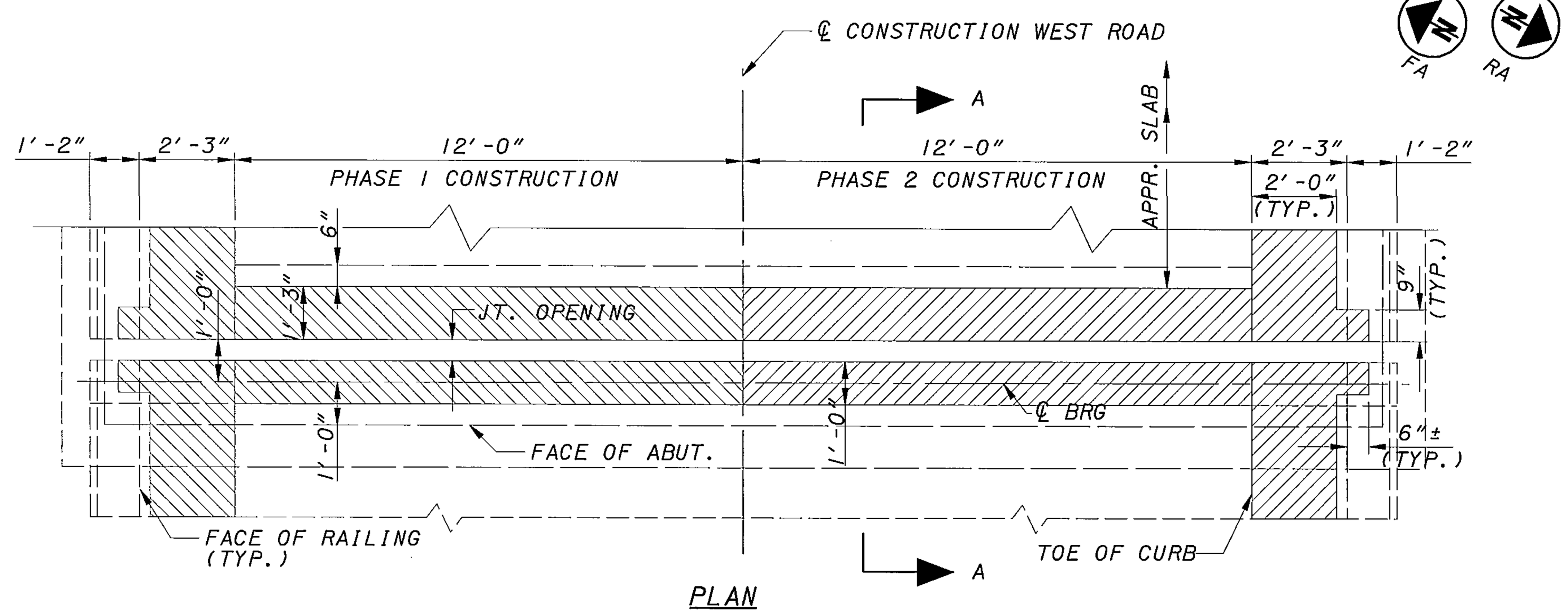
HAM-74-0.00



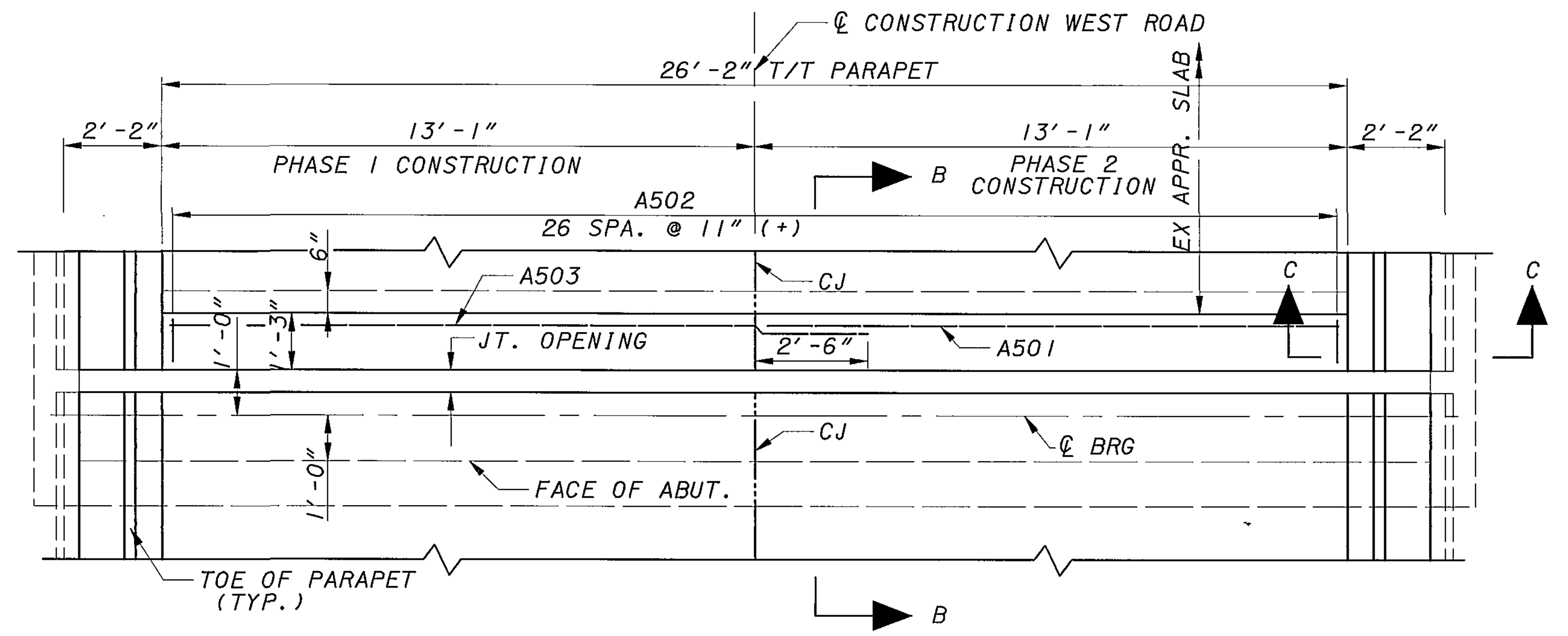
ELEVATION
(FORWARD ABUTMENT)



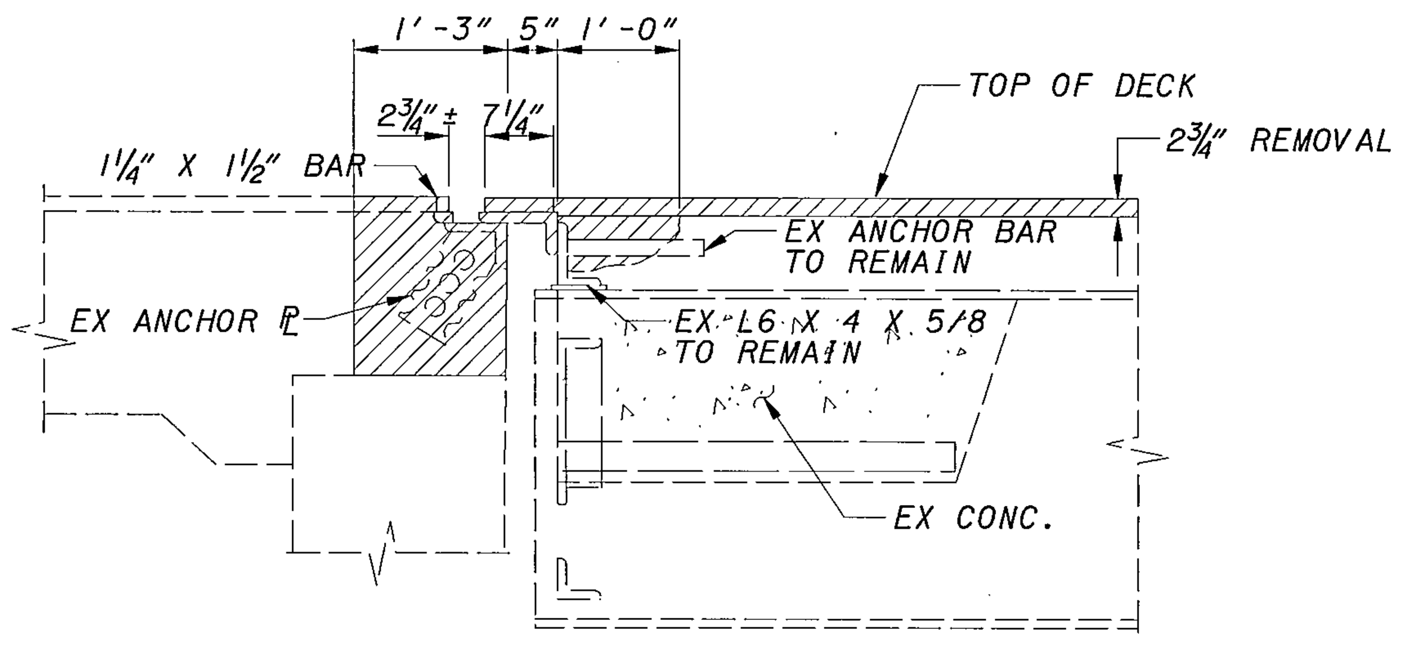
ELEVATION
(REAR ABUTMENT)



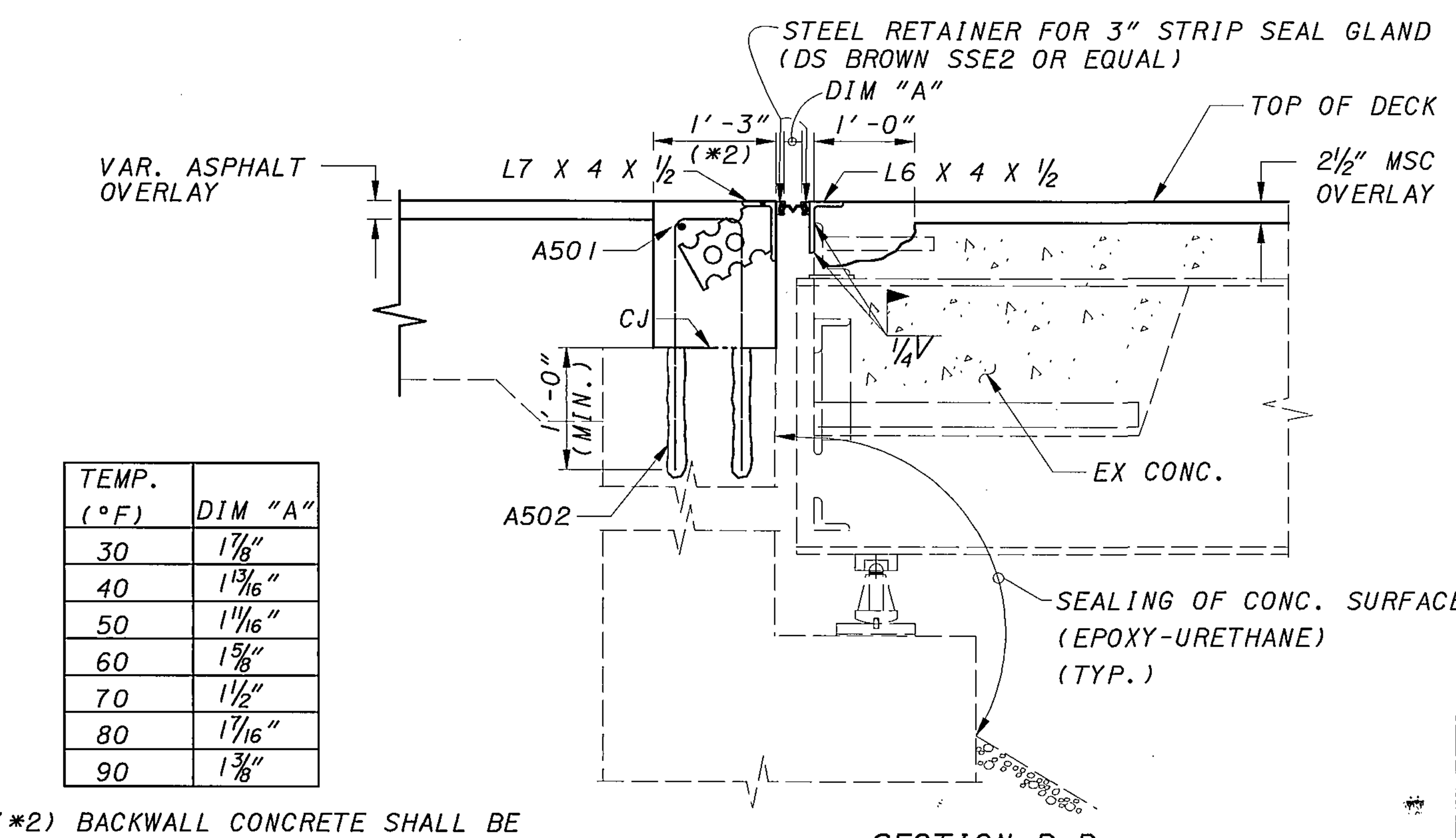
PLAN
(EX ABUTMENT, CURB AND RAILING REMOVAL)



PLAN
(MODIFIED ABUTMENT EXPANSION JOINT)



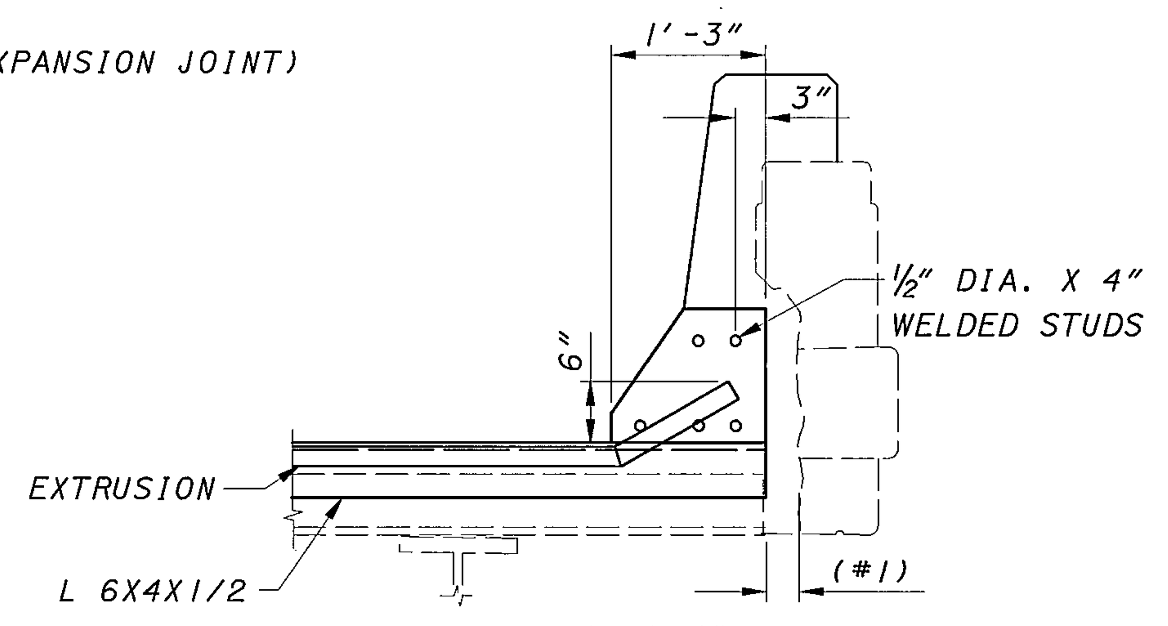
SECTION A-A



TEMP. (°F)	DIM "A"
30	1⅞"
40	1$\frac{13}{16}$"
50	1$\frac{11}{16}$"
60	1⅝"
70	1½"
80	1$\frac{7}{16}$"
90	1⅜"

(*2) BACKWALL CONCRETE SHALL BE BATTERED TO OBTAIN DIMENSION "A"

SECTION B-B
(FOR DETAILS NOT SHOWN, SEE STD.DWG. EXJ-4-87)



(#1) 3" CLR. (MIN.) BETWEEN ARMOR ℄ AND EX CONC. RAILING

SECTION C-C
(FOR DETAILS NOT SHOWN, SEE STD.DWG. EXJ-4-87)

LEGEND

- AREA TO BE REMOVED PHASE 1 CONSTRUCTION
- AREA TO BE REMOVED PHASE 2 CONSTRUCTION
- AREA TO BE PATCHED

NOTES
1. FOR LIST OF STANDARD ABBREVIATIONS, SEE SHEET 7/8
2. REPAIR CRACKS IN CONCRETE BY EPOXY INJECTION
3. ALL EX DIMENSIONS ARE +/-

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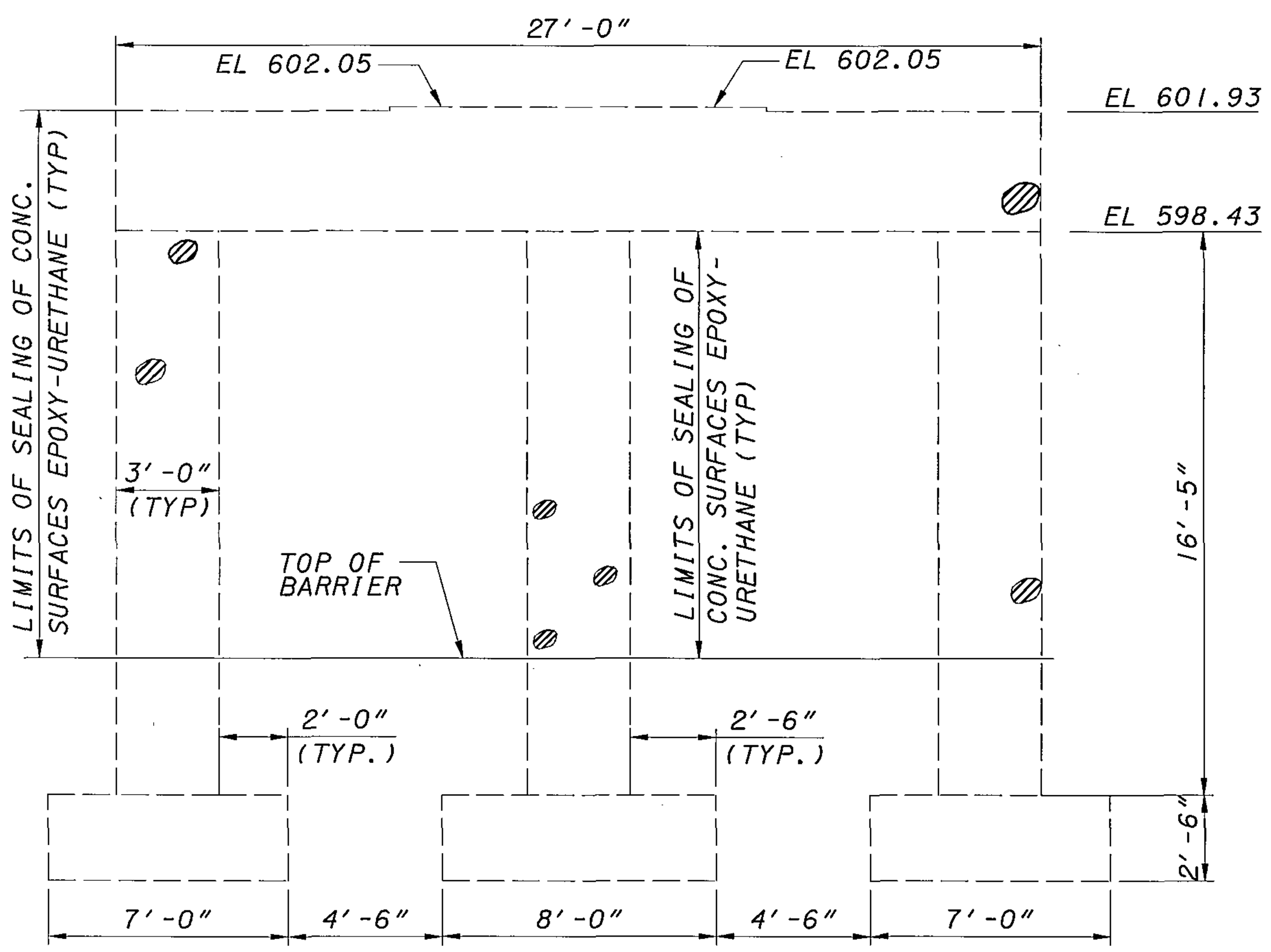
COLUMBUS, OHIO 43206
TEL 614-224-1941 FAX 614-224-0907

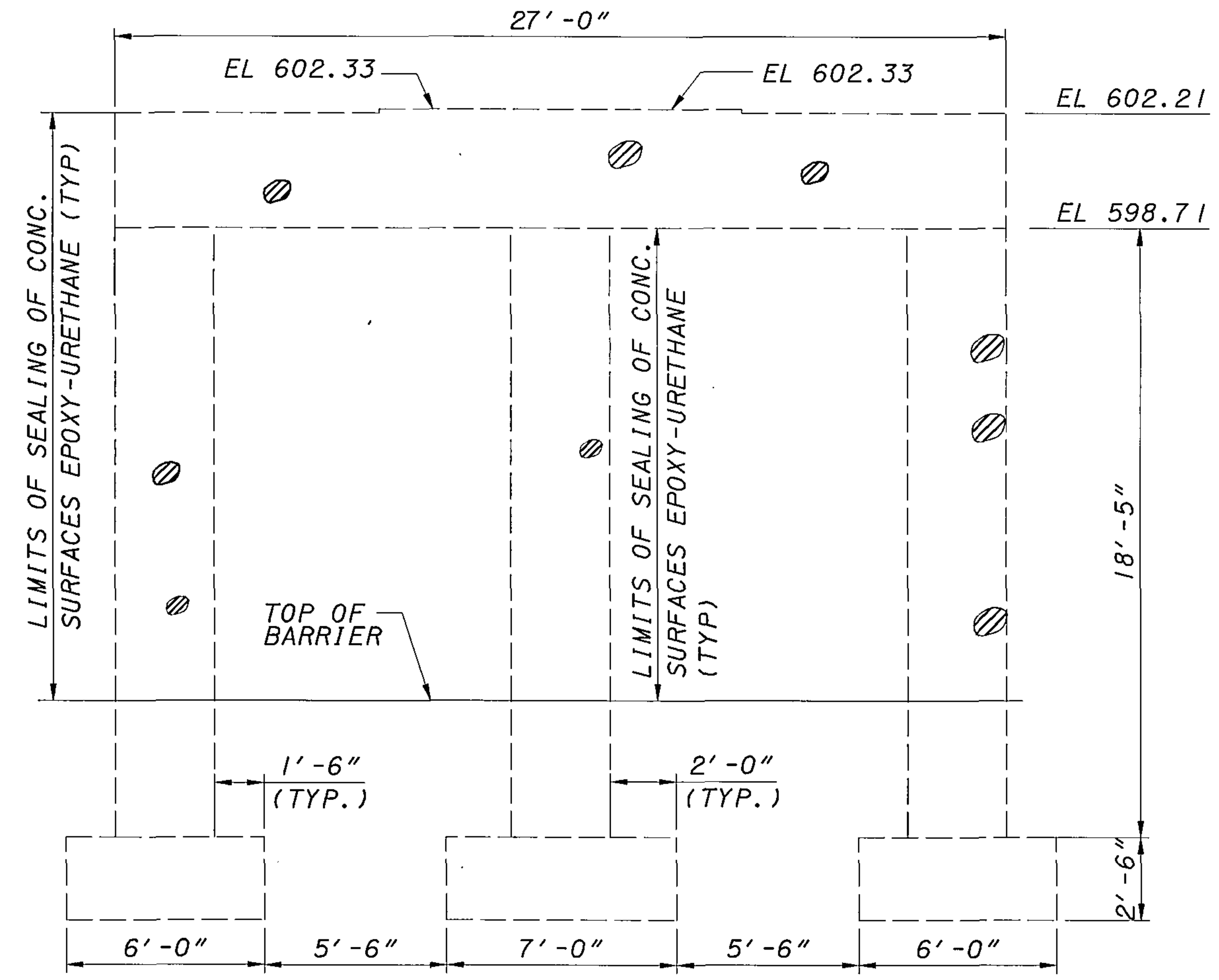
DESIGNED	DRAWN	REVIEWED	DATE
SRR	SRR	ASB	04/2003
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JEP	---	3107957	

ABUTMENT DETAILS
BRIDGE NO.: HAM-74-0230
WEST ROAD OVER I-74

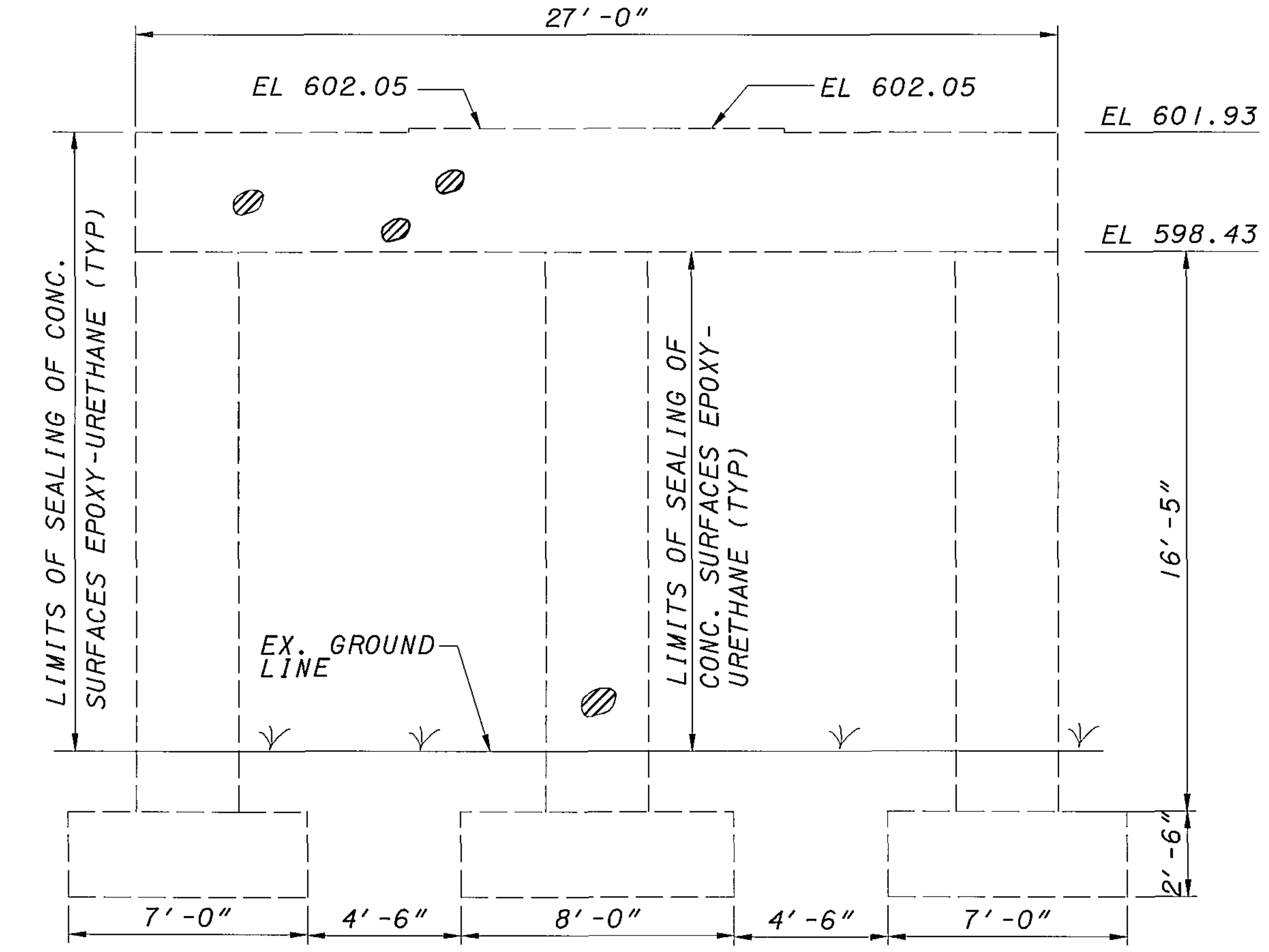
HAM-74-0.00



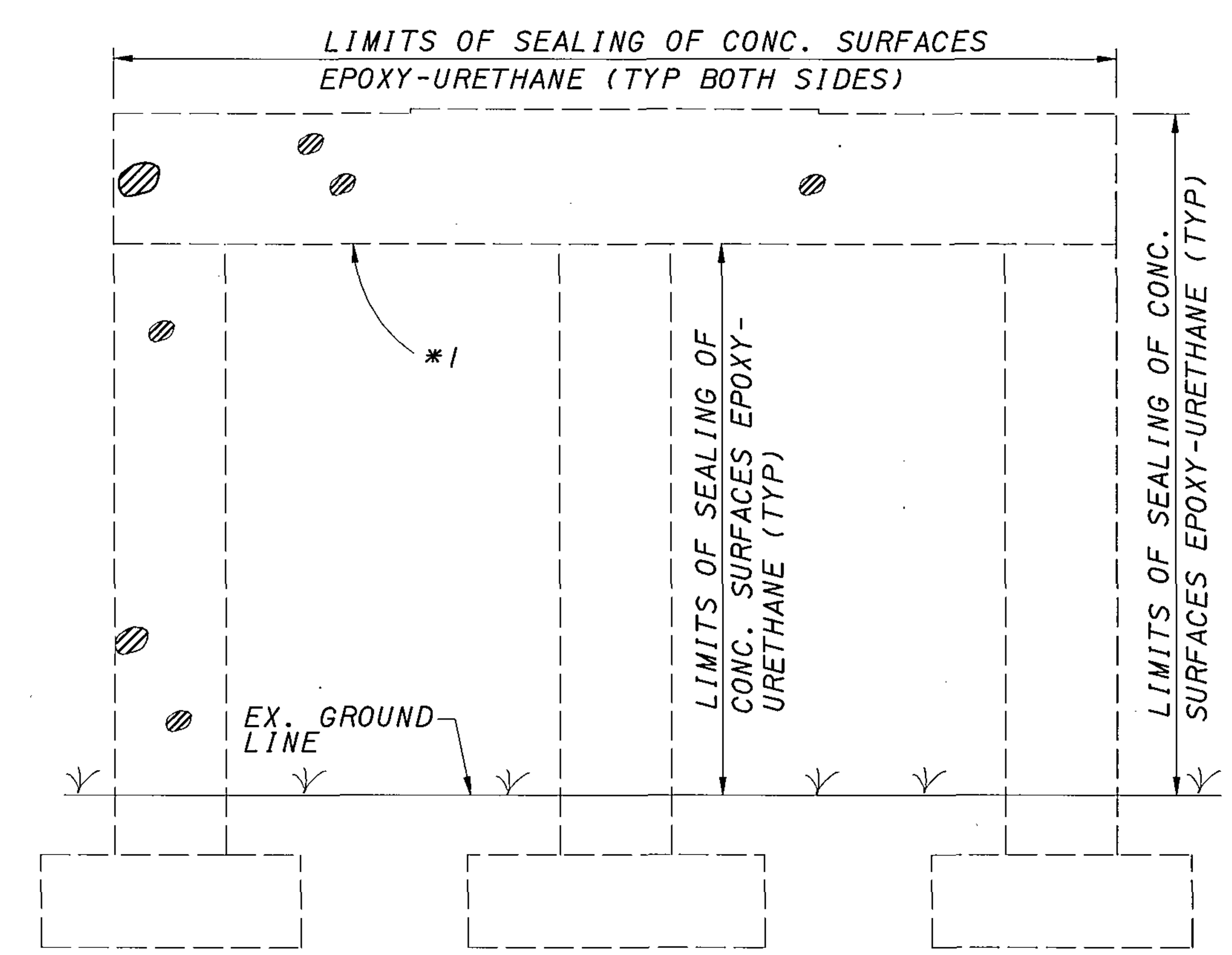
ELEVATION - PIER 1
(NORTH SIDE)



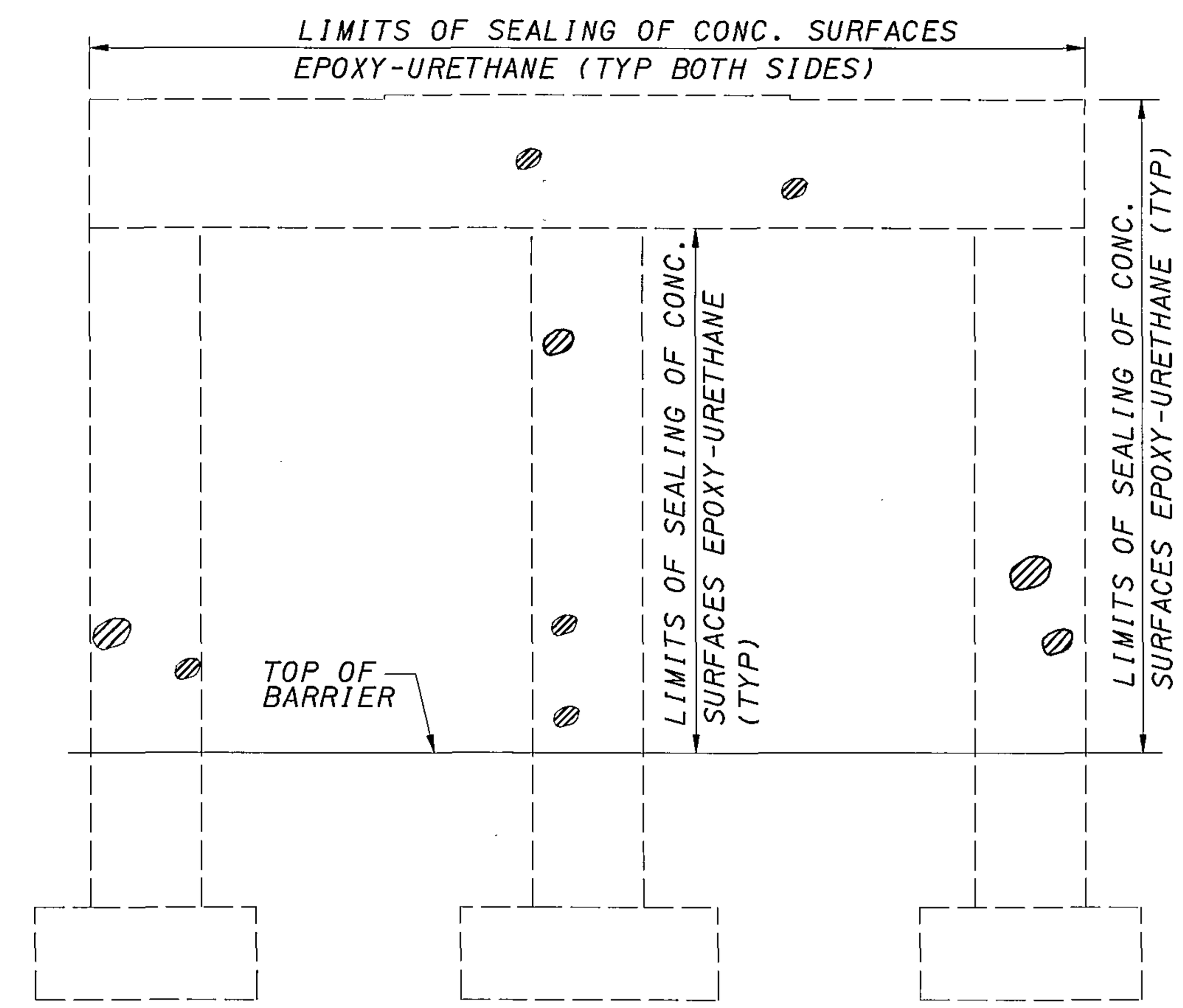
ELEVATION - PIER 2
(NORTH SIDE)



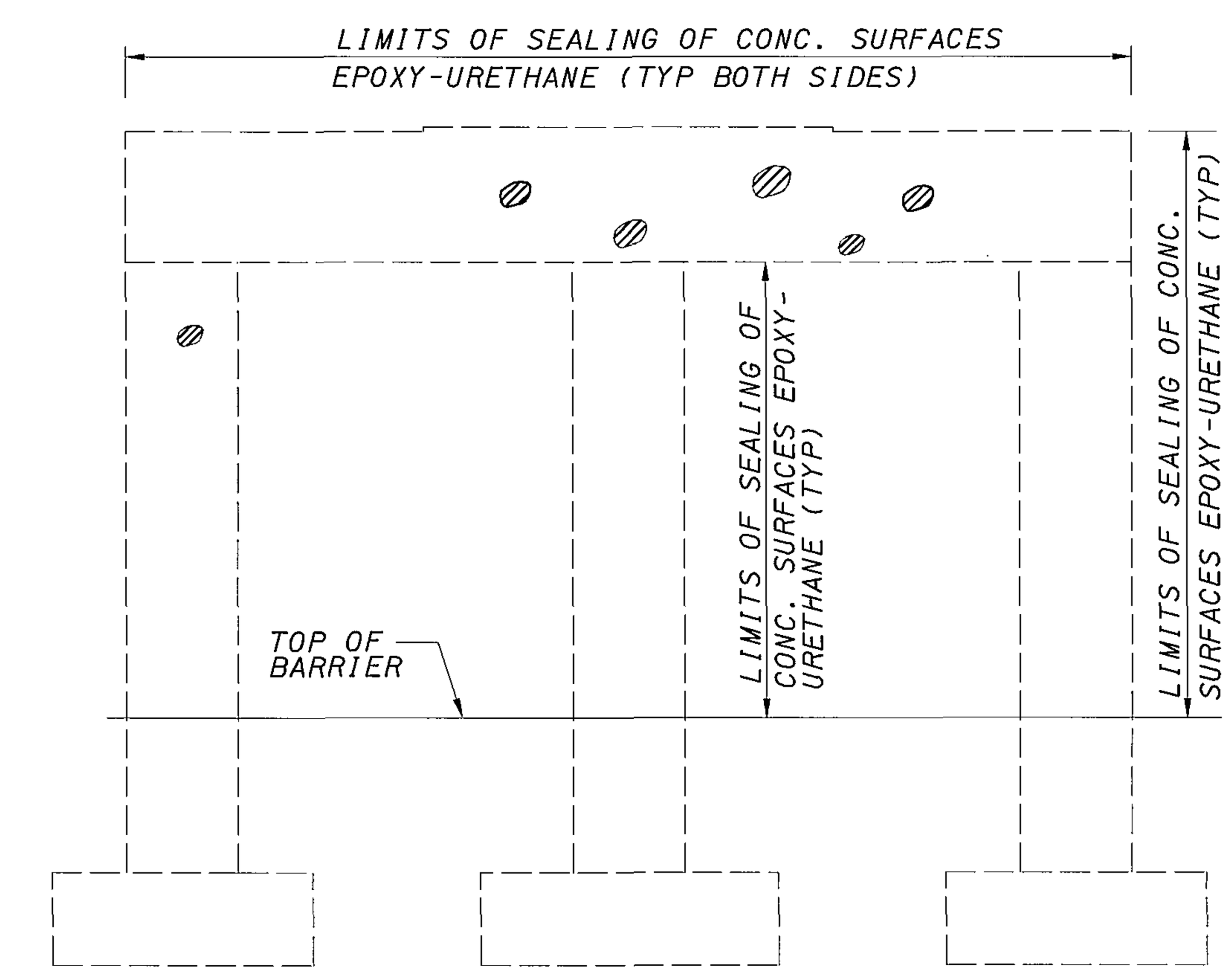
ELEVATION - PIER 3
(NORTH SIDE)



ELEVATION - PIER 1
(SOUTH SIDE)



ELEVATION - PIER 2
(SOUTH SIDE)



ELEVATION - PIER 3
(SOUTH SIDE)

*1 - SURFACE TO BE REPAIRED UNDER PILE CAP

SUMMARY OF REPAIR AREA		
LOCATION	MEASURED	ESTIMATED
PIER 1	1.62 SQ. FT.	3.24 SQ. FT.
PIER 2	2.20 SQ. FT.	4.40 SQ. FT.
PIER 3	1.03 SQ. FT.	2.06 SQ. FT.
TOTAL	4.85 SQ. FT.	9.70 SQ. FT.

NOTES:

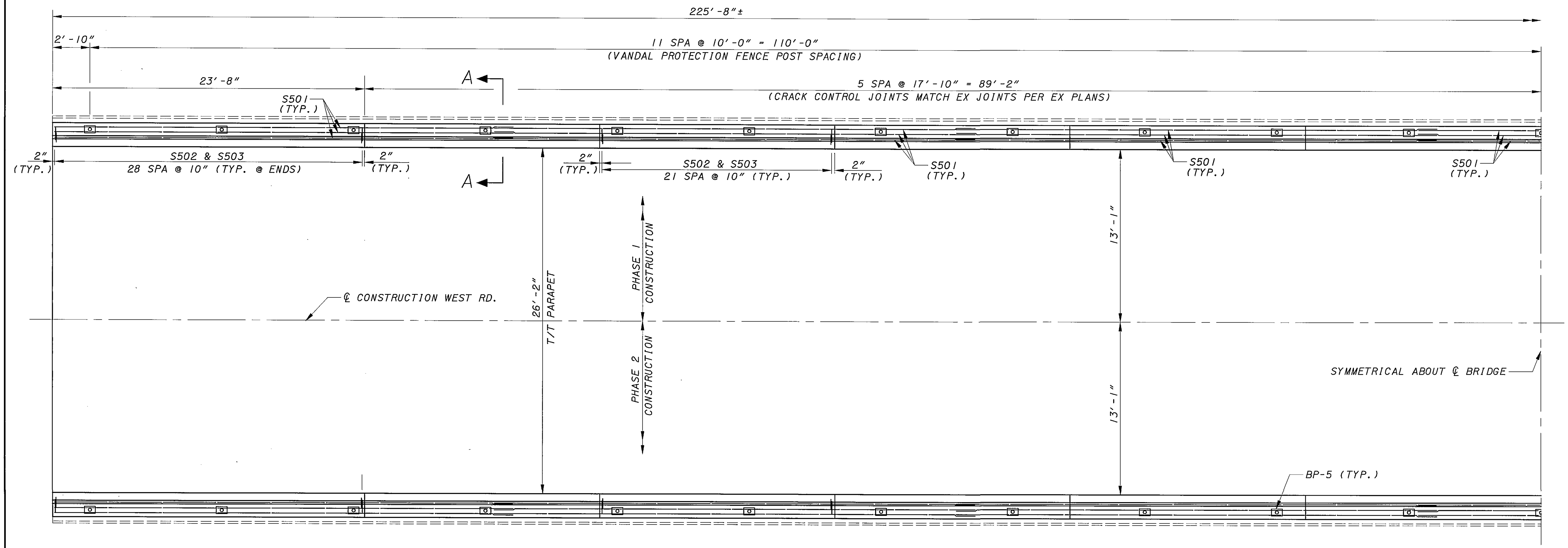
1. SURFACES REQUIRING REPAIR WITH A DEPTH LESS THAN 3" SHALL BE REPAIRED PER ITEM 843, PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR
   SURFACES REQUIRING REPAIR WITH A DEPTH GREATER THAN 3" SHALL BE REPAIRED PER ITEM 519, PATCHING CONCRETE STRUCTURES
2. REPAIR CRACKS IN CONCRETE BY EPOXY INJECTION
3. ELEVATION AND DIMENSIONS FROM AS-BUILT NOTES ON EXISTING PLANS
4. EPOXY-URETHANE SEALER SHALL BE FEDERAL COLOR NO. 17778, LIGHT NEUTRAL
5. FOR LIST OF STANDARD ABBREVIATIONS, SEE SHEET 7 / 8
6. ALL EX DIMENSIONS ARE +/-

DESIGN AGENCY
BARR ENGINEERING, INC.
1108 CITY PARK AVENUE, SUITE 200
COLUMBUS, OH 43206-3583
(614) 224-1941 FAX (614)224-0907

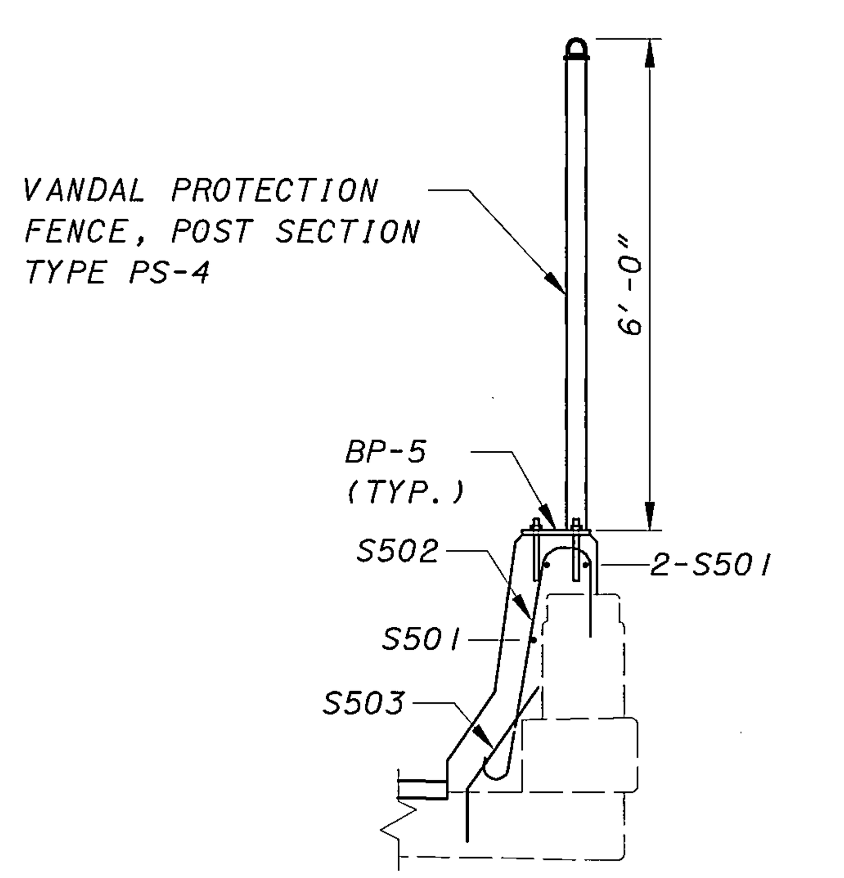
REVIEWED ASB DATE 4/2003
STRUCTURE FILE NUMBER 3107957
DESIGNED JEP DRAWN KCS
CHECKED JEP REVISED

PIER DETAILS
BRIDGE NO.: HAM-74-0230
WEST ROAD OVER I-74

HAM-74-0.00



PLAN



SECTION A-A

NOTES:

1. PRIOR TO FABRICATING THE VANDAL PROTECTION FENCE, THE CONTRACTOR MUST VERIFY THE PARAPET PANEL DIMENSIONS AND OVERALL PARAPET LENGTH. VANDAL FENCE POST SPACING SHALL BE ADJUSTED IF NECESSARY FOR POST ANCHORS TO HAVE A MINIMUM CLEARANCE OF 3" FROM PARAPET JOINT.

2. FOR 6'-0" VANDAL PROTECTION FENCE DETAILS, REFER TO STANDARD DRAWING VPF-1-90. FENCE POSTS AND BASE PLATES SHALL BE AS PER DETAILS BP-5 AND PS-4 SHOWN ON STANDARD DRAWINGS SHEETS 4 AND 5 RESPECTIVELY.

3. LAP LENGTH, NO. 5 BAR 2'-5"

4. FOR PARAPET TRANSITION DETAILS, SEE SHEET 8 / 8.

5. CONTRACTOR TO FIELD VERIFY LOCATION OF EX CRACK CONTROL JOINTS.

BARR ENGINEERING, INC.
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TEL 614-224-1941 FAX 614-224-0907

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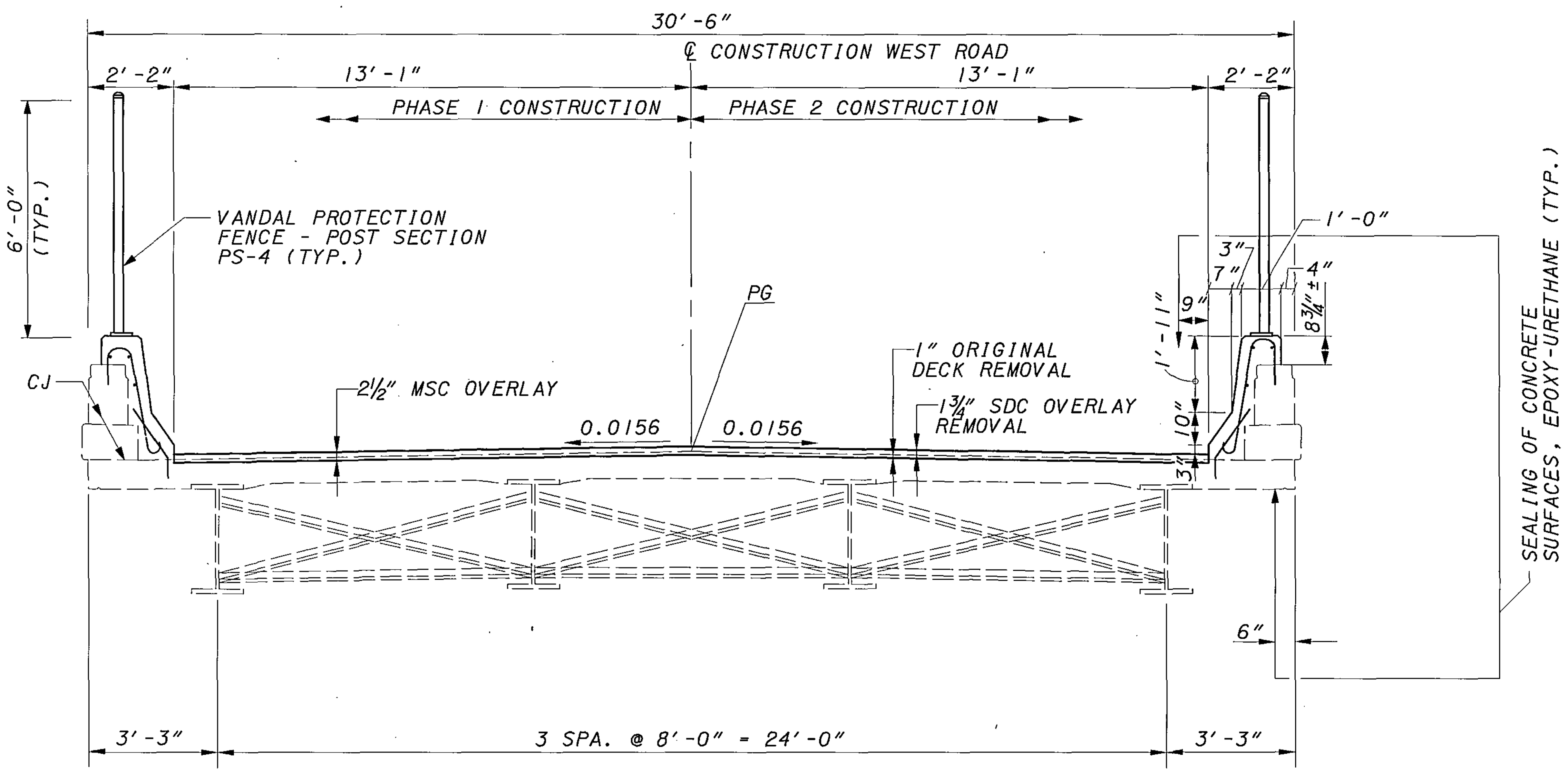
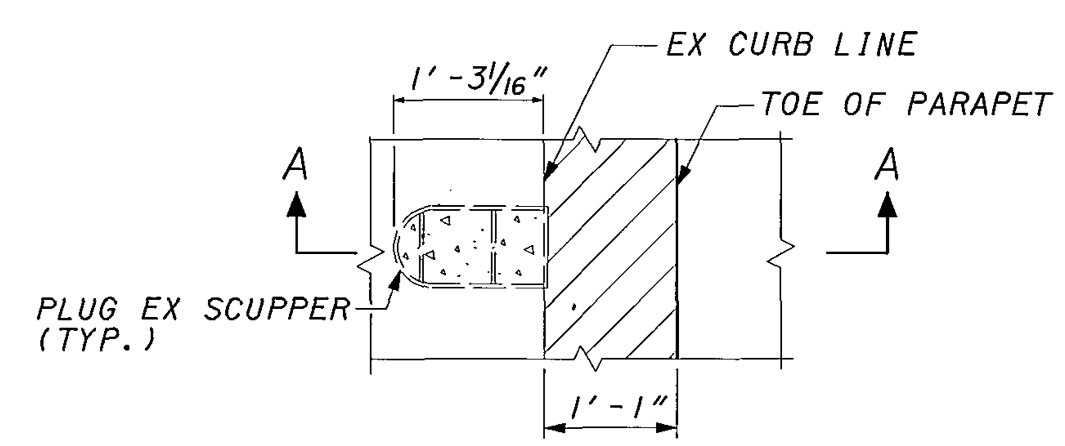
JEP	---	3107957	

SUPERSTRUCTURE DETAILS
BRIDGE NO.: HAM-74-0230
WEST ROAD OVER I-74

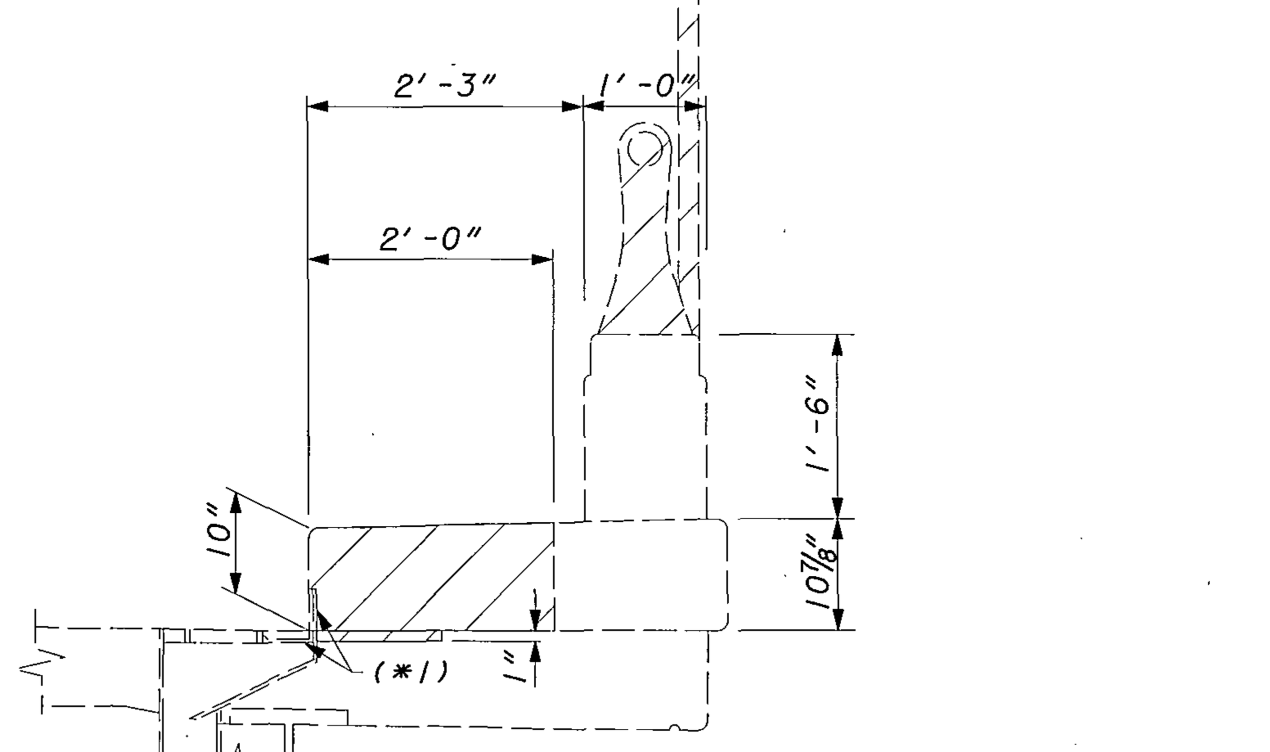
HAM-74-0.00



TRANSVERSE SECTION



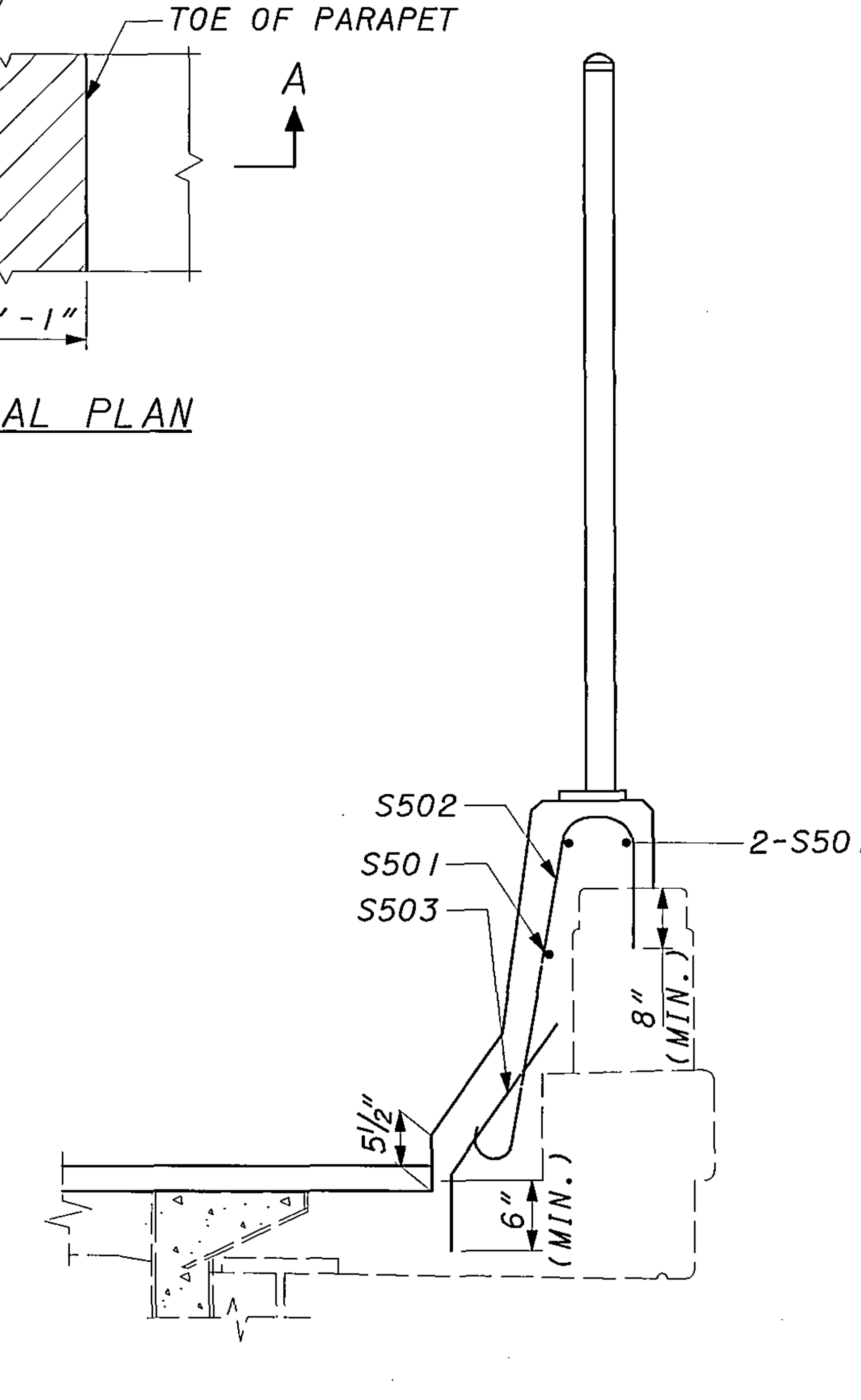
REMOVAL PLAN



(*1) - REMOVE EX BULB ANGLE AND ⅜" ℙ. ⅜" ℙ SHALL BE REMOVED TO EX DECK REMOVAL LIMITS.

PAYMENT INCLUDED WITH ITEM 517, RAILING FACED AS PER PLAN

SECTION A-A
(REMOVAL ONLY)

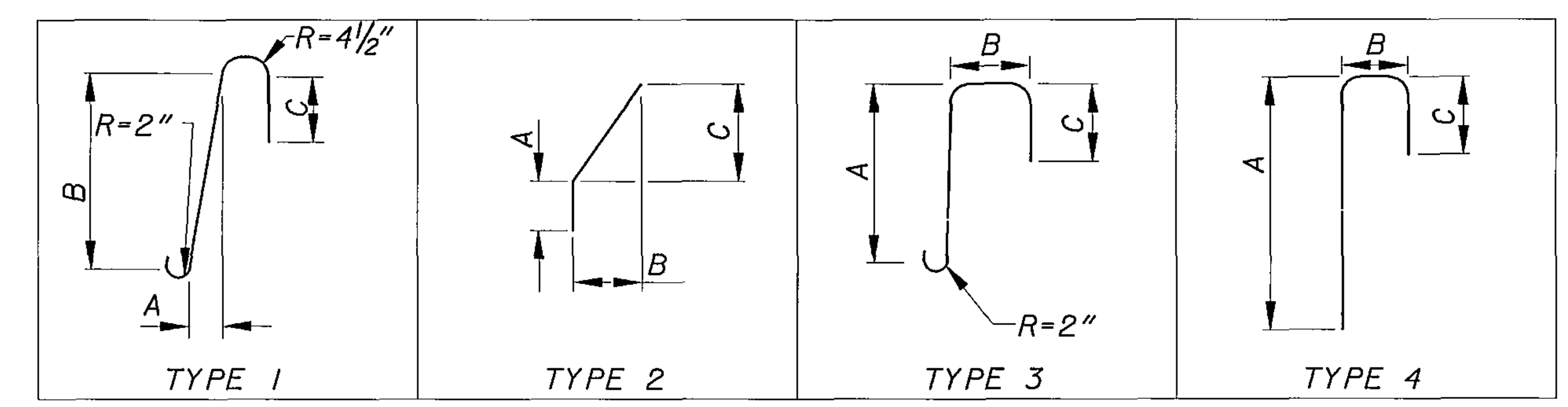


SECTION A-A
(SEE TRANSVERSE SECTION FOR DIMENSIONS)

REINFORCING STEEL LIST

MARK	NO.	LENGTH	WEIGHT	TYPE	A	B	C	D	INCR.
	PARAPETS								
S501	36	40'-0"	1502	STR					
S502	538	4'-1"	2291	1	5"	2'-5"	10"		
S503	550	2'-0"	1147	2	6"	10"	1'-3"		
S504	12	4'-5"	55	3	2'-4"	1'-0"	11"		
S505	16	12'-0"	200	STR					
S506	8	4'-6"	38	4	3'-0"	10"	11"		
TOTAL = 5,233 POUNDS (INCLUDED WITH ITEM 517 FOR PAYMENT)									
	ABUTMENTS								
A501	2	12'-10"	28	STR					
A502	54	5'-5"	305	4	2'-6"	8"	2'-6"		
A503	2	15'-5"	31	STR					
		TOTAL = 364 POUNDS							
		GRAND TOTAL = 5,597 POUNDS							

BENDING DIAGRAMS



REINFORCING STEEL NOTES:

1. THE BAR SIZE NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR ARE USED, INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, S501 IS A NO. 5 BAR. BAR DIMENSIONS SHOWN ARE OUT TO OUT UNLESS OTHERWISE NOTED. R INDICATES INSIDE RADIUS, UNLESS OTHERWISE NOTED.
2. ALL REINFORCING STEEL SHALL BE EPOXY COATED. PAYMENT FOR REINFORCING BARS SHALL BE INCLUDED WITH APPROPRIATE ITEM 509.
3. "STR." IN THE TYPE COLUMN INDICATES STRAIGHT BARS.
4. REFER TO C.M.S. SECTION 509.05 FOR STANDARD BEND DIMENSIONS.
5. ALL REINFORCING STEEL CLEARANCES ARE 2" UNLESS OTHERWISE NOTED.

STANDARD ABBREVIATIONS

APPR. - APPROACH
BOT. - BOTTOM
BRG - BEARING/BEARINGS
BTA - BRIDGE TERMINAL ASSEMBLY
CJ - CONSTRUCTION JOINT
CMP - CORRUGATED METAL PIPE
CONC. - CONCRETE
CSP - CONCRETE SLOPE PROTECTION
DIA. - DIAMETER
E/E - EDGE TO EDGE
EL - ELEVATION
EX - EXISTING
FA - FORWARD ABUTMENT
INV. - INVERT
JT. - JOINT
MIN. - MINIMUM
MSC - MICRO SILICA CONCRETE
PEJF - PREFORMED EXPANSION JOINT FILLER
PERF. - PERFORATED
PROP. - PROPOSED
RA - REAR ABUTMENT
SCH. - SCHEDULE
SDC - SUPERPLASTICIZED DENSE CONCRETE
STA - STATION
T/CURB - TOE OF CURB
T/S - TOP OF SLOPE
T/T - TOE TO TOE
TYP. - TYPICAL
VPF - VANDAL PROTECTION FENCE

NOTES:
1. EPOXY-URETHANE SHALL BE FEDERAL COLOR NO. 17778, LIGHT NEUTRAL.
2. FOR VPF DETAILS, SEE SHEET 6 / 8

LEGEND

▨ - REMOVAL AREA

BARR ENGINEERING, INC.
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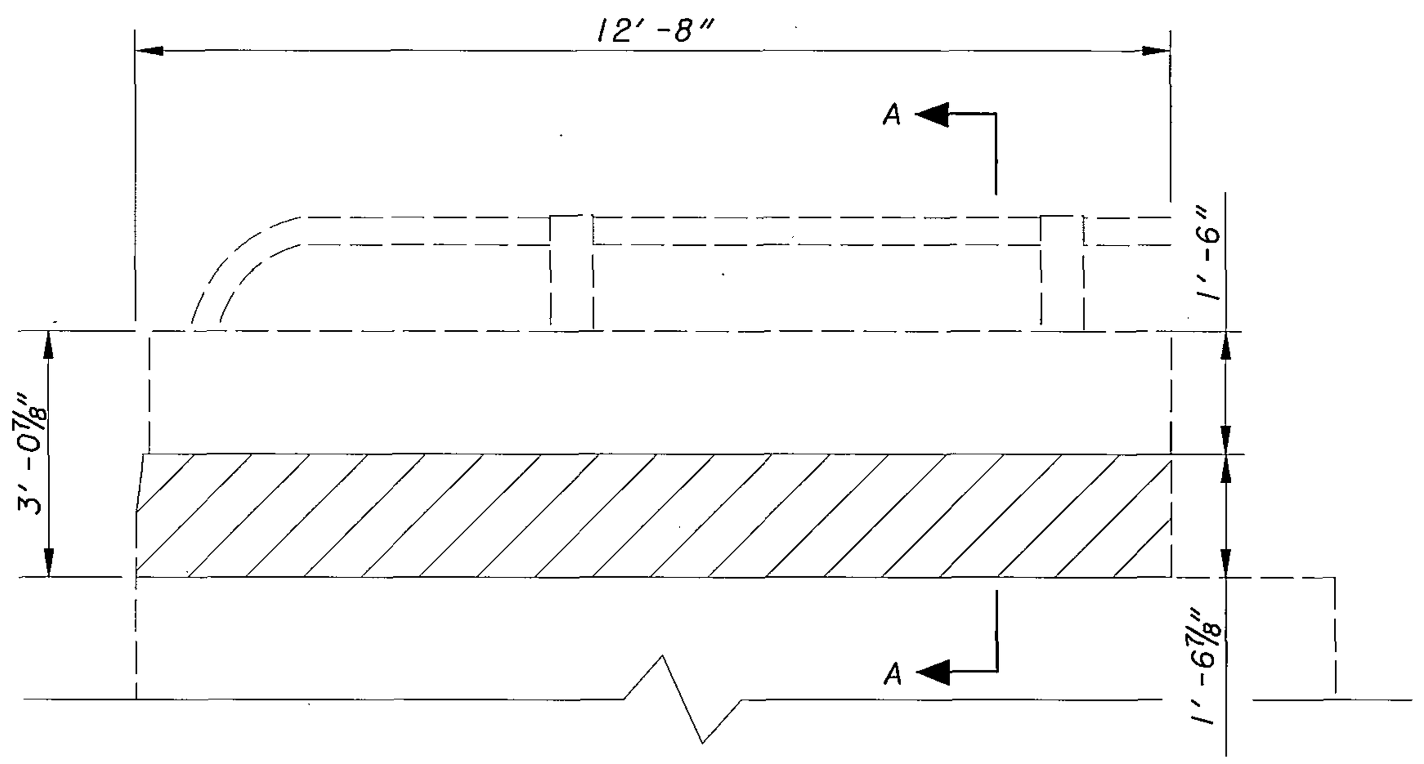
TEL 614-224-1941 FAX 614-224-0907

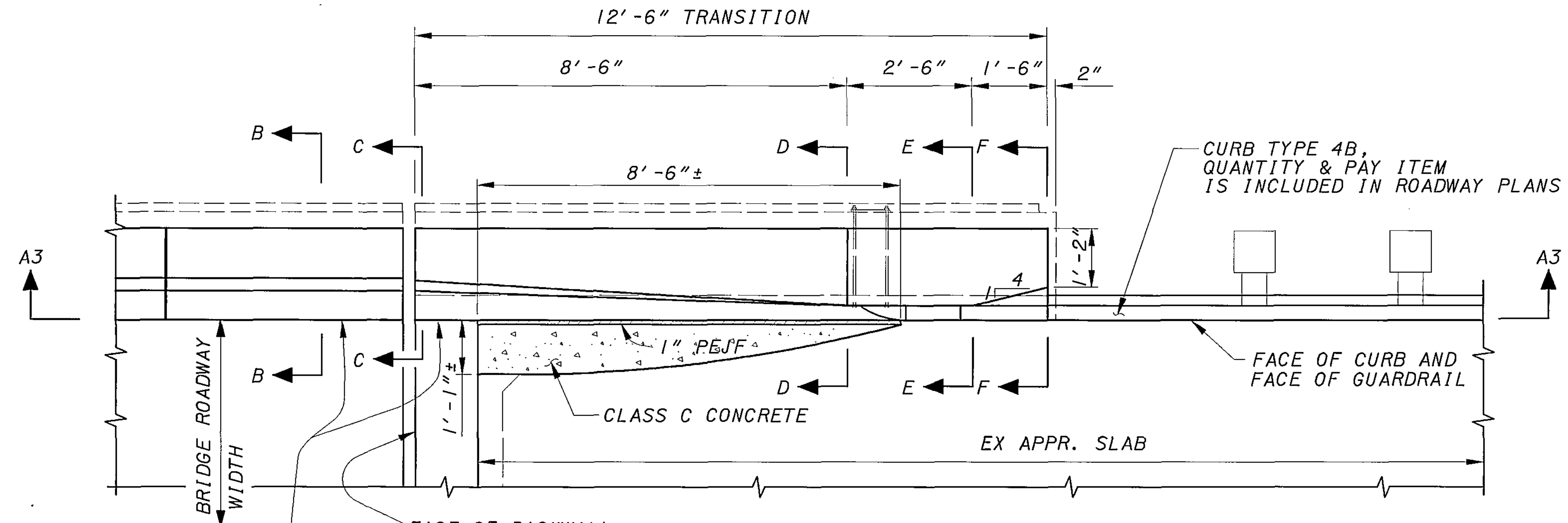
DESIGNED SRR | DRAWN SRR | REVIEWED ASB | DATE 04/2003
CHECKED JEP | REVISED --- | STRUCTURE FILE NUMBER 3107957

TRANSVERSE SECTION & SUPERSTRUCTURE DETAILS
BRIDGE NO.: HAM-74-0230
WEST ROAD OVER I-74

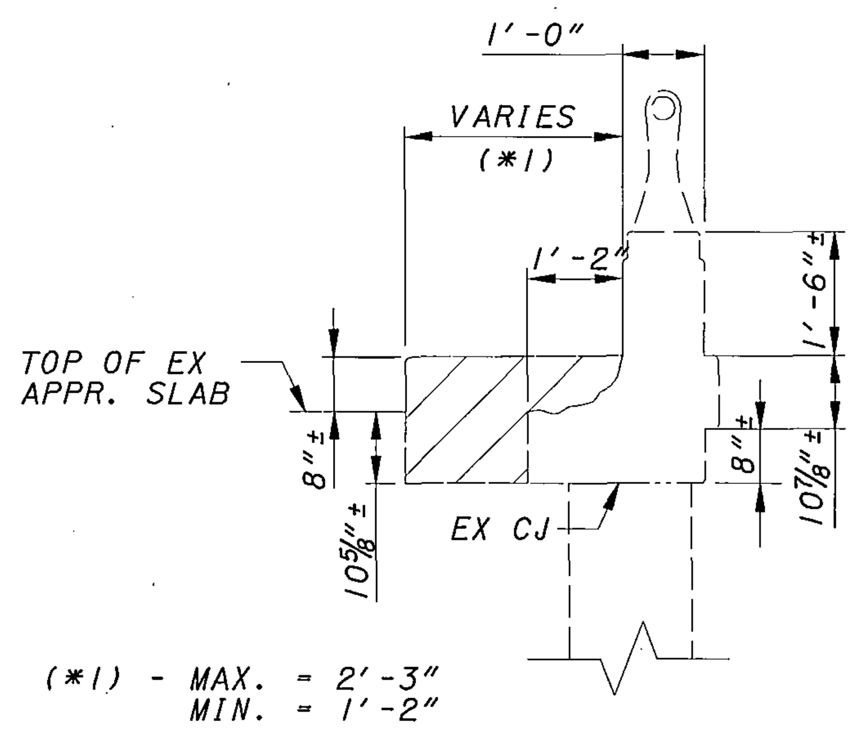
HAM-74-0.00



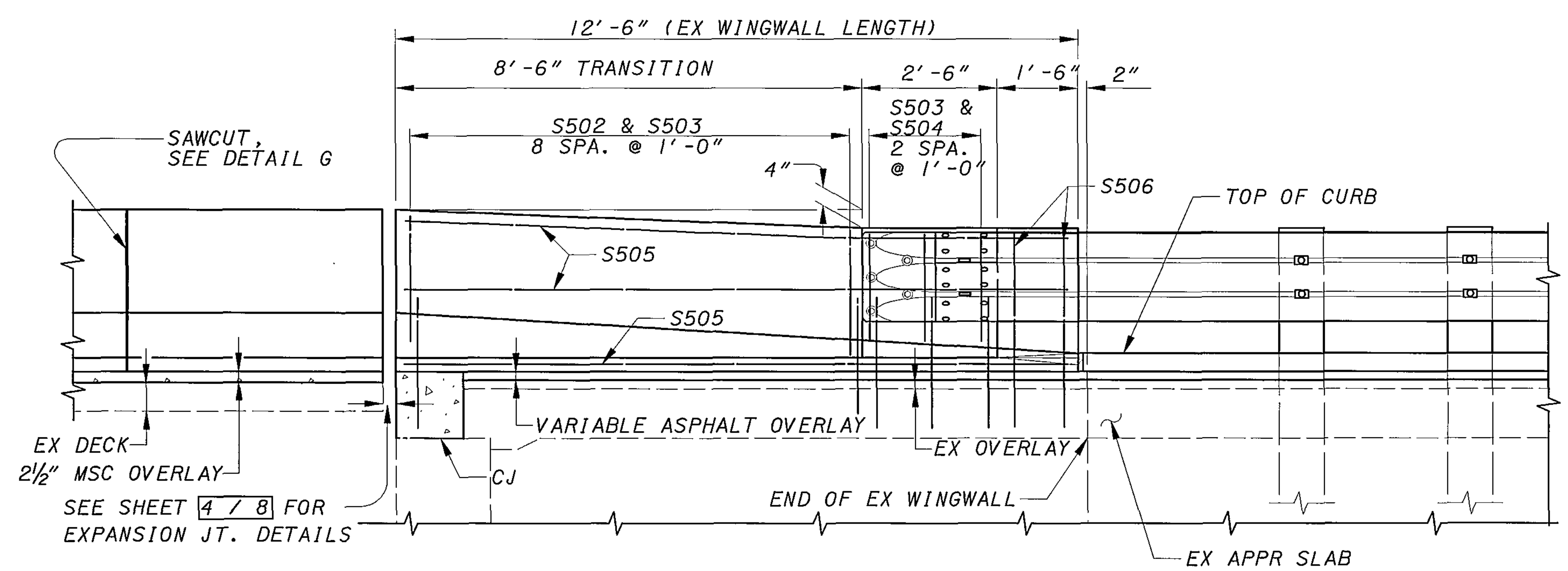
EX WINGWALL



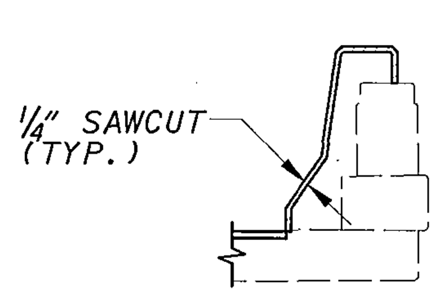
PLAN



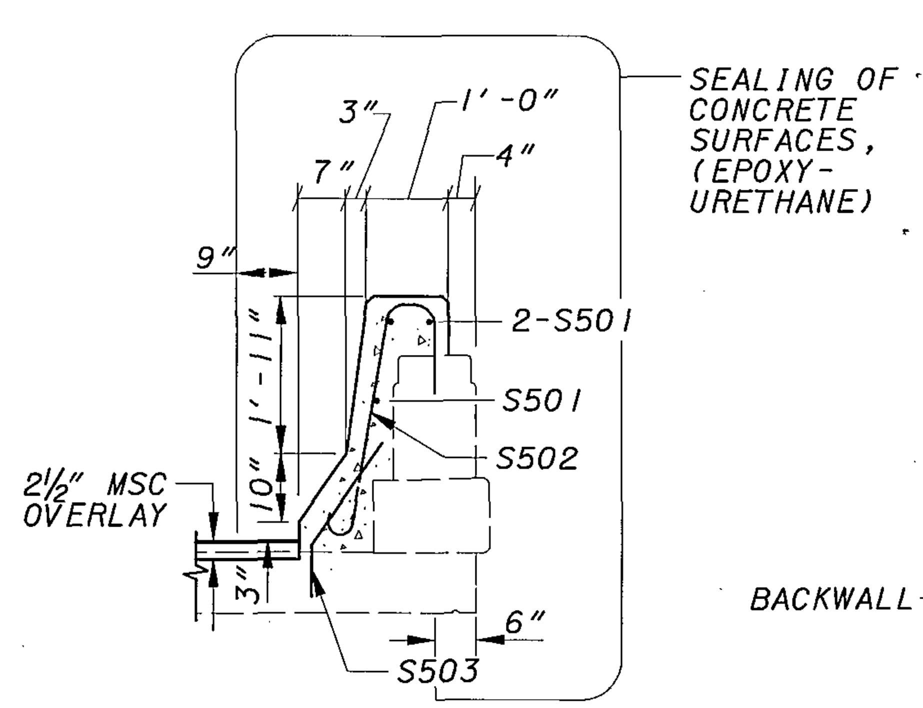
SECTION A-A



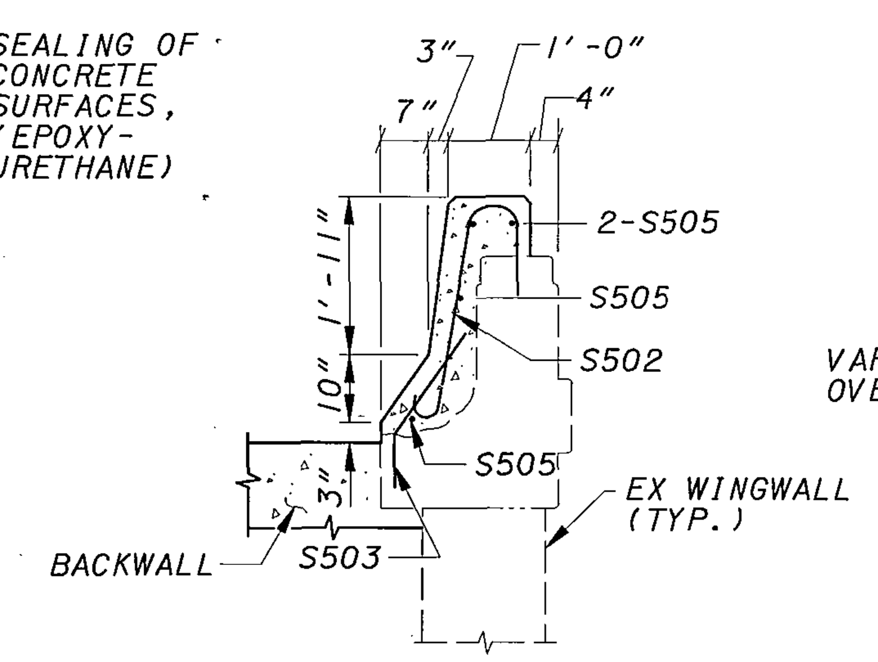
VIEW A3-A3



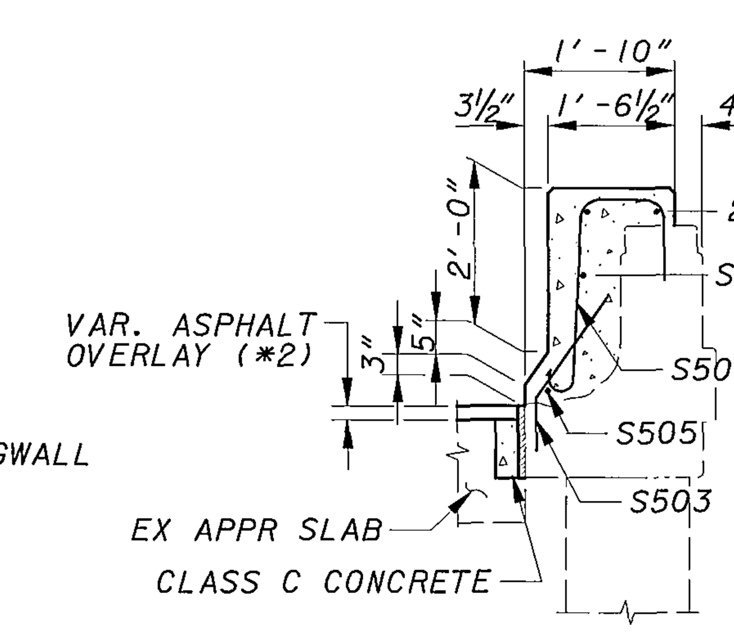
DETAIL G
(SECTION THROUGH SAWCUT)



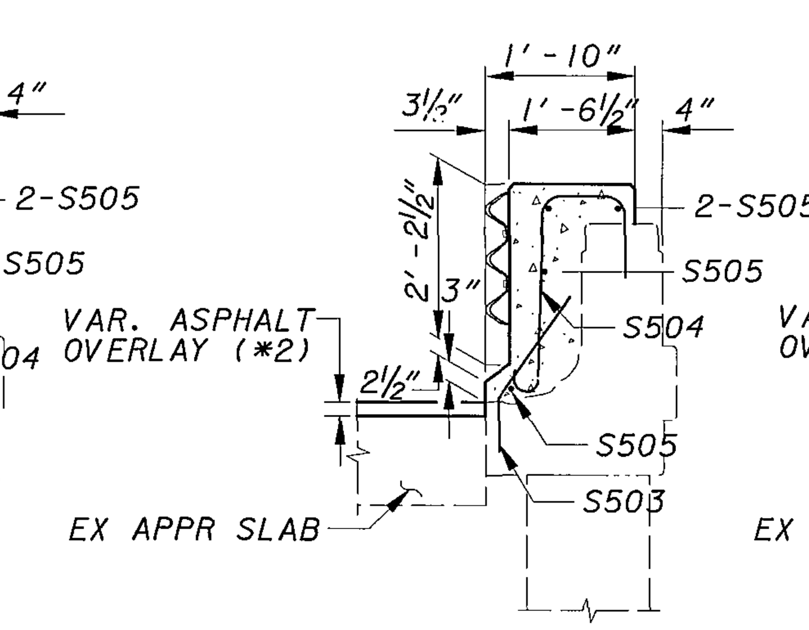
SECTION B-B



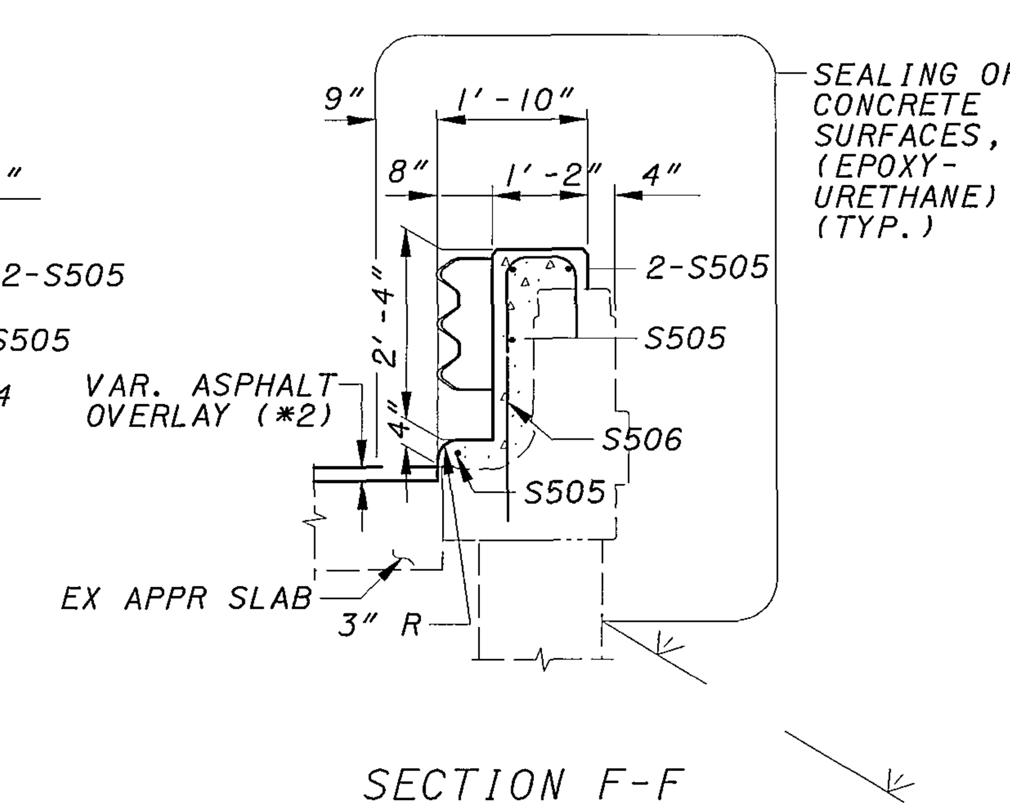
SECTION C-C



SECTION D-D



SECTION E-E



SECTION F-F

(*2) VAR. ASPHALT OVERLAY SHALL CONFORM TO PROPOSED PROFILE ELEVATIONS AND ROADWAY CROSS SLOPE

LEGEND

- AREA TO BE REMOVED

NOTES:

FOR LIST OF STANDARD ABBREVIATIONS, SEE SHEET 7 / 8

FOR BRIDGE TERMINAL ASSEMBLY CONNECTION DETAILS, SEE SCD GR-3.1M

BARR ENGINEERING, INC.
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COLUMBUS, OHIO 43206
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SRR	SRR	ASB	01/2003
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JEP	---	3107957	

PARAPET TRANSITION DETAILS
BRIDGE NO.: HAM-74-0230
WEST ROAD OVER I-74

HAM-74-0.00

GEOLOGY OF THE SITE

THE STRUCTURE SITE IS LOCATED WITHIN THE ILLINOIAN TILL PLAIN PHYSIOGRAPHIC REGION. THIS REGION IS COMPRISED OF A ROLLING GROUND MORAINE OF RELATIVELY OLD GLACIAL TILL WITH MODERATELY LOW (APPOXIMATELY 50 FEET) RELIEF. BURIED VALLEYS AND MODERN VALLEYS ALTERNATING BETWEEN BROAD FLOODPLAINS AND BEDROCK GORGES ARE COMMON IN THIS REGION. ILLINOIAN-AGE WEATHERED GLACIAL TILL OVERLIES SEDIMENTARY SHALE AND LIMESTONE BEDROCK OF THE KOPE FORMATION REPRESENTING THE ORDOVICIAN GEOLOGIC PERIOD.

EXPLORATION

THE EXPLORATION CONSISTED OF FOUR STRUCTURE BORINGS MADE BY MEANS OF HOLLOW-STEM AUGERS AND TWO INCH DIAMETER CORING EQUIPMENT POWERED BY A TRUCK-MOUNTED DRILL RIG. THE EXPLORATION WAS PERFORMED BETWEEN FEBRUARY 25 AND 27, 2002.

INVESTIGATIONAL FINDINGS AND OBSERVATIONS

FILL THICKNESS IS ON THE ORDER OF 35 AND 40 FEET BEHIND THE WEST AND EAST ABUTMENTS, RESPECTIVELY. THE FILL CONSISTS OF CLAY WITH SOME SILT AND SILTY CLAY THAT IS MEDIUM STIFF TO HARD. BELOW THE ORIGINAL GROUNDLINE (APPROXIMATE ELEVATION 585 FEET) IS A SURFACE LAYER OF SILTY CLAY THAT IS 10 TO 15 FEET THICK. BELOW THIS IS SEVERAL STRATA COMPOSED OF COARSE AND FINE SAND AND/OR GRAVEL WITH SAND. THESE LAYERS OF NON-COHESIVE SOILS COMPRISE A ZONE 35 FEET THICK AT THE WEST END OF THE BRIDGE SITE BUT DECREASES TO 10 FEET THICK AT THE EAST END. BEDROCK ELEVATION VARIES FROM APPROXIMATELY 530 FEET ON THE WEST END TO APPROXIMATELY 555 FEET ON THE EAST END. BEDROCK IS COMPOSED OF KOPE FORMATION SHALE AND LIMESTONE.

GROUNDWATER WAS NOT OBSERVED IN ANY OF THE BORINGS.

LEGEND

PRESS SAMPLE, DRIVE SAMPLE, AND/OR CORE BORING LOCATION

TR — TOP OF ROCK

W — INDICATES FREE WATER ELEVATION

HORIZONTAL BAR ON BORING INDICATES THE DEPTH THE SAMPLE WAS TAKEN – PROFILE VIEW

X/Y/Z — FIGURES BESIDE THE BORING IN PROFILE INDICATE THE NUMBER OF BLOWS FOR STANDARD PENETRATION TEST
X = NUMBER OF BLOWS FOR FIRST 6 INCHES
Y = NUMBER OF BLOWS FOR SECOND 6 INCHES
Z = NUMBER OF BLOWS FOR THIRD 6 INCHES

SYMBOLS OF ROCK TYPES

Shale With Interbedded Limestone

PARTICLE SIZE DEFINITIONS

12"	3"	0.1"	0.42 mm		0.074 mm	0.005 mm
Boulders	Cobbles	Gravel	Coarse Sand	Fine Sand	Silt	Clay
		No. 10 SIEVE	No. 40 SIEVE	No. 200 SIEVE		

NOTES

ALL AVAILABLE SOIL AND BEDROCK INFORMATION WHICH CAN BE CONVENIENTLY SHOWN ON THE STRUCTURE FOUNDATION INVESTIGATIONS SHEETS HAS BEEN SO REPORTED. ADDITIONAL SUBSURFACE INVESTIGATIONS MAY HAVE BEEN MADE TO STUDY SOME SPECIAL ASPECT OF THE PROJECT. COPIES OF THIS DATA, IF ANY, MAY BE INSPECTED IN THE DISTRICT DEPUTY DIRECTOR'S OFFICE, THE OFFICE OF MATERIALS MANAGEMENT AT 1600 WEST BROAD STREET, THE OFFICE OF ROADWAY ENGINEERING OR THE OFFICE OF STRUCTURAL ENGINEERING AT 1980 WEST BROAD STREET, COLUMBUS, OHIO 43215.

DRIVE SAMPLES

DRIVE SAMPLE BORINGS ARE MADE BY MEANS OF A MECHANICALLY-POWERED, ROTARY-TYPE DRILL RIG EMPLOYING A 2-INCH O.D., 1 5/8-INCH I.D., SPLIT-SPOON SAMPLER, AT CONTINUOUS, 2.5 FEET AND/OR 5 FEET DEPTH INTERVALS, DRIVEN BY MEANS OF A 140 LB. HAMMER WITH A FREE FALL OF 30 INCHES. THE NUMBER OF BLOWS REQUIRED TO DRIVE THE SAMPLER THREE 6-INCH INCREMENTS IS CONSIDERED THE STANDARD PENETRATION TEST.

CORE BORING

CORE BORINGS ARE MADE BY MEANS OF A MECHANICALLY POWERED, ROTARY-TYPE DRILL RIG, EMPLOYING AN NQ-SIZE BARREL WITH AN INDUSTRIAL DIAMOND CUTTING HEAD.

SAMPLING AND TESTING

THE BORING LOG SHEETS SHOW A GRAPHIC PLOT OF THE INFORMATION OBTAINED, INCLUDING DEPTH AND ELEVATION OF THE SAMPLE, TYPE OF SAMPLE, NUMBER OF BLOWS FOR THE STANDARD PENETRATION TEST IN THREE 6-INCH INCREMENTS, AND A SAMPLE DESCRIPTION BASED ON LABORATORY TEST RESULTS, UTILIZING THE ODOT CLASSIFICATION SYSTEM. RESULTS OF STRENGTH AND CONSOLIDATION TESTING, IF PERFORMED ON UNDISTURBED SAMPLES, APPEAR GRAPHICALLY ON SEPARATE ENCLOSURES. ROCK SAMPLES ARE DISPLAYED ON THE LOG SHEETS, INCLUDING DEPTH AND ELEVATION OF THE SAMPLE, AMOUNT OF RECOVERY, AND A VISUAL CLASSIFICATION BASED ON TYPE, COLOR, DEGREE OF HARDNESS, GRAIN SIZE, DETERIORATION, BEDDING, ACID REACTION AND OTHER QUALIFYING FACTORS.

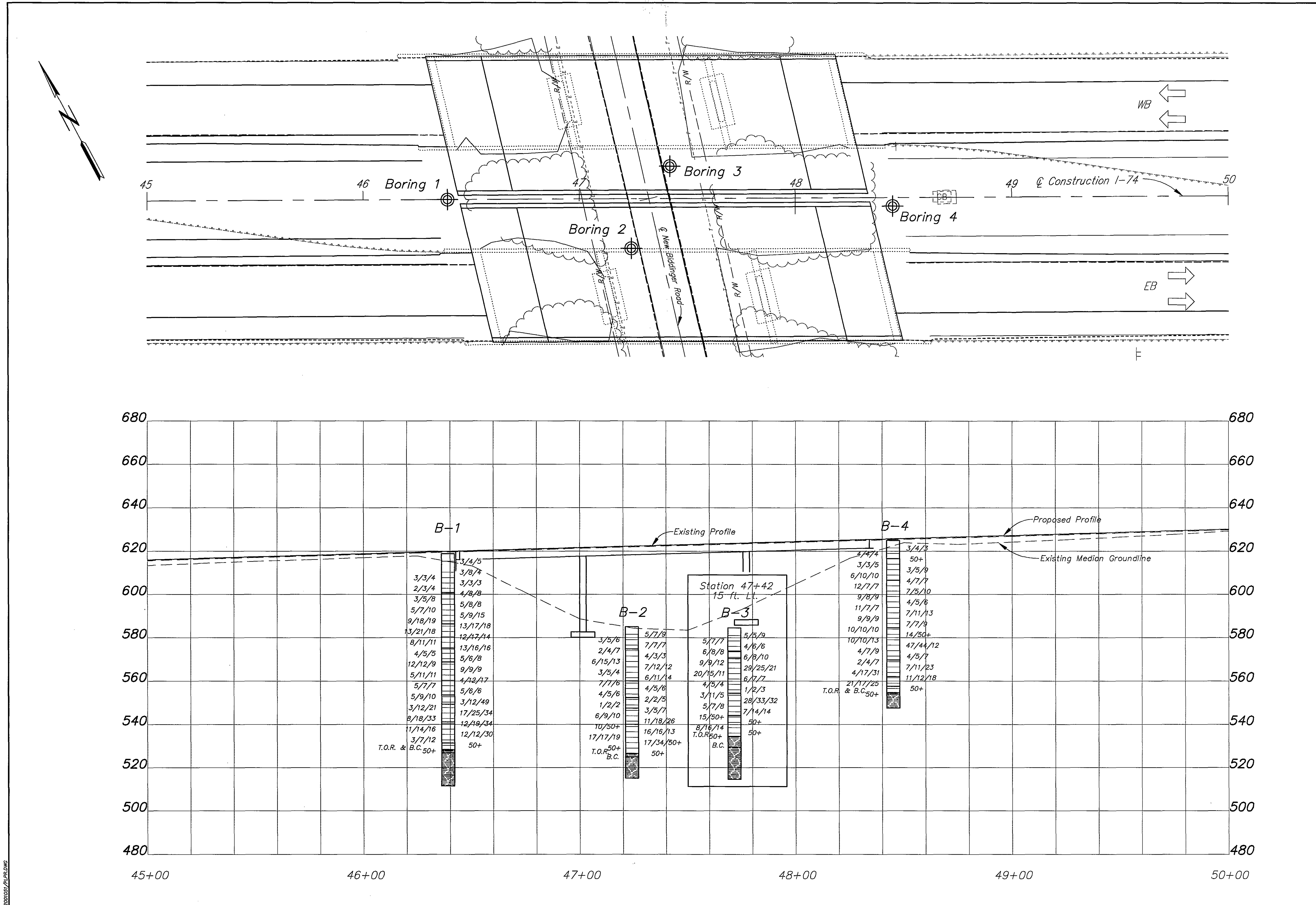
AT DEPTHS WHERE MATERIALS ARE BOULDERY OR GRAVELLY TO THE EXTENT THAT A SAMPLER CANNOT BE UTILIZED, A WASH SAMPLE IS PROCURED AND VISUALLY CLASSIFIED, IN ORDER TO DETERMINE THE GENERAL CHARACTERISTICS OF THE MATERIAL. THESE SAMPLES ARE NOT CONSIDERED SUFFICIENTLY REPRESENTATIVE TO WARRANT LABORATORY TESTING.

DESIGN AGENCY: URS/BRW, INC. CINCINNATI, OHIO
DATE: 4/02
REVIEWED: J.G.B.
DESIGNED
REVISED
DRAWN: M.S.J.
CHECKED: S.A.H.

STRUCTURE FOUNDATION INVESTIGATION
I-74 BRIDGE OVER NEW BIDDINGER ROAD

HAM-74-0069

CH2001051A74LEG.DWG



DESIGN AGENCY
URS/BRW, INC.
CINCINNATI, OHIO

DRAWN	CHECKED	CHECKED	CHECKED	DATE
M.S.J.	S.A.H.		J.G.B.	4/02

REVISED

STRUCTURE FILE NUMBER

STRUCTURE FOUNDATION INVESTIGATION

I-74 BRIDGE OVER NEW BIDDINGER ROAD

HAM-74-0069

2/9

CV2001051/PLPR.DWG

LOG OF BORING

Date Started 2/26/02
Date Completed 2/26/02
Boring No. B-1

Sampler Type SS Dia. 2"
Coring: Length 16.3 ft. Dia. 2"
Station & Offset 46+39, ℄

Water Elev. ______
Surface Elev. 618.8

Elev. (ft)	Depth (ft)	Std. Pen. /R.Q.D.	Rec. (ft)	Loss (ft)	Description	Sample No.	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	PI	WC	ODOT Class
618.8	0														
618.1					Topsoil										
	1				Fill; Clay With Some Silt And A Little Gravel And A Trace Of Sand, brown-gray, moist, mixed, medium stiff to stiff										
	2														
	3														
		3/4/5				1								23	
	4														
	5														
	6														
	7														
	8														
		3/8/4				2								18	
	9														
	10						10	4	3	32	51	41	22	19	A-7-6(13)
	11	3/3/4				3								20	
	12														
	13														
	14	3/3/3				4								18	
	15														
	16	2/3/4				5								20	
	17														
600.8	18				Fill; Clay With Some Silt And A Trace Of Gravel And Sand, gray to brown-gray, moist, mixed, stiff to hard										
	19	4/8/8				6								20	
	20														
	21	3/5/8				7								22	
	22														
	23														
	24	5/8/8				8								11	
	25						6	3	6	34	51	42	24	18	A-7-6(14)
	26	5/7/10				9								19	
	27														
	28														
	29	5/9/15				10								19	
	30														

LOG OF BORING (CONTINUED)

Boring No. B-1 (Cont.)
Station & Offset 46+39, ℄
Surface Elev. 618.8

Elev. (ft)	Depth (ft)	Std. Pen. /R.Q.D.	Rec. (ft)	Loss (ft)	Description	Sample No.	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	PI	WC	ODOT Class
	30				Fill; Clay With Some Silt And A Trace Of Gravel And Sand, gray to brown-gray, moist, mixed, stiff to hard										
	31	9/18/19				11								15	
	32														
586.3					Silty Clay With A Trace Of Fine And Coarse Sand, orange-brown, moist, very stiff to hard										
	33														
	34	13/17/18				12								23	
	35														
	36	13/21/18				13								24	
	37						0	1	10	48	41	38	22	23	A-6b(13)
	38														
	39	12/17/14				14								20	
	40														
	41	8/11/11				15								25	
	42														
	43														
574.8	44	13/16/16				16								25	
					Coarse And Fine Sand With A Trace Of Clay, Silt And Gravel, red-brown, moist, loose to medium dense										
	45														
	46	4/5/5				17								9	
	47						3	33	48	8	8	–	–	8	A-3a(0)
	48														
	49	5/6/8				18								7	
568.8	50				Gravel And/Or Stone Fragments With Sand With A Trace Of Silt And Clay, light brown, mixed, moist, medium dense										
	51	12/12/9				19								8	
	52														
	53														
	54	9/9/9				20								4	
	55						48	16	22	10	4	–	–	6	A-1-b(0)
	56	5/11/11				21								7	
	57														
561.3					Coarse And Fine Sand With A Trace Of Clay, Silt And Gravel, red-brown, moist, loose to medium dense										
	58														
	59	4/12/17				22								5	Visual
	60														

DESIGN AGENCY
URS/BRW, INC.
CINCINNATI, OHIO

CHECKED J.G.B.
DATE 4/02
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DRAWN M.S.J.
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STRUCTURE FOUNDATION INVESTIGATION
I-74 BRIDGE
OVER NEW BIDDINGER ROAD

HAM-74-0069

3/9

CN2001051/I74STRUCLOGS.DWG

LOG OF BORING (CONTINUED)

Boring No. B-1 (Cont.) Station & Offset 46+39, ℄ Surface Elev. 618.8

Elev. (ft)	Depth (ft)	Std. Pen. /R.Q.D.	Rec. (ft)	Loss (ft)	Description	Sample No.	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	PI	WC	ODOT Class
	60														
	61	5/7/7			Coarse And Fine Sand With A Trace Of Clay, Silt And Gravel, red-brown, moist, loose to medium dense	23								6	Visual
	62														
	63														
	64	5/6/6				24								16	
553.5	65														
	66	5/9/10			Silt And Clay With A Little Fine Sand, gray-brown, moist, very stiff to hard	25								22	
	67						0	0	3	56	41	26	11	21	A-6a(8)
	68														
	69	3/12/49				26								20	
549.3	70				Coarse And Fine Sand With A Little Silt And Clay, red-brown, moist, dense to very dense										
	71	3/12/21				27								20	
	72						0	9	64	17	10	–	–	19	A-3a(0)
	73														
	74	17/25/34				28								21	
	75														
	76	8/18/33				29								15	
	77														
541.1	78				Silt With Some Clay And A Trace Of Fine Sand, gray, moist, medium dense to dense										
	79	12/19/34				30								24	
	80														
	81	11/14/16				31								25	
	82						0	0	3	71	26	–	–	24	A-4b(8)
	83														
	84	12/12/30				32								20	
	85														
	86	3/7/12				33								26	
531.3	87				Top of Rock										
	88	50+			Weathered Shale With Interbedded Limestone (Augered)	34									No Recovery
	89														
	90														

LOG OF BORING (CONTINUED)

Boring No. B-1 (Cont.) Station & Offset 46+39, ℄ Surface Elev. 618.8

Elev. (ft)	Depth (ft)	Std. Pen. /R.Q.D.	Rec. (ft)	Loss (ft)	Description	Sample No.	Physical Characteristics (% Agg., % C.S., % F.S., % Silt, % Clay, LL, PI, WC)	ODOT Class
	90							
527.7	91	19/33/50+			Weathered Shale With Interbedded Limestone (Augered) Begin Core	35		No Recovery
	92	0	1.0	0.4	Shale With Interbedded Limestone		Core Loss = 20%	
	93–102	0	6.8	3.2	Shale (90%), gray, weathered, soft, to medium hard Limestone (10%), light gray, jointed, hard		Core Loss = 32%	
511.4	103–107	0	1.9	3.1			Core Loss = 62%	

Bottom of Boring

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STRUCTURE FOUNDATION INVESTIGATION
I-74 BRIDGE
OVER NEW BIDDINGER ROAD

HAM-74-0069

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LOG OF BORING

Date Started 2/27/02
Date Completed 2/27/02
Boring No. B-2

Sampler Type SS Dia. 2"
Coring: Length 10.0 ft. Dia. 2"
Station & Offset 47+24, 23 ft. Rt.

Water Elev. ____
Surface Elev. 585.0

Elev. (ft)	Depth (ft)	Std. Pen. /R.Q.D.	Rec. (ft)	Loss (ft)	Description	Sample No.	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	PI	WC	ODOT Class
585.0	0				Gravel And Sand										
584.3	1				Silty Clay With A Little Coarse And Fine Sand And A Trace Of Gravel, brown, moist, stiff to very stiff										
	4	5/7/9				1								23	
	5						1	5	8	48	38	37	20	22	A-6b(12)
	6	3/5/6				2								23	
	9	7/7/7				3								21	
574.7	10				Coarse And Fine Sand With A Trace Of Clay, Silt And Gravel, red-brown, moist, loose to medium dense										
	11	2/4/7				4								14	Visual
	14	4/3/3				5								6	
570.0	15				Gravel And/Or Stone Fragments With Sand With A Trace Of Silt And Clay, light brown, mixed, moist, loose to medium dense										
	16	6/15/13				6								4	Visual
	19	7/12/12				7								6	
	21	3/5/4				8								7	
	24	6/11/14				9								5	
560.0	25				Coarse And Fine Sand With A Trace Of Clay, Silt And Gravel, red-brown, moist, loose to medium dense										
	26	7/7/6				10								6	Visual
	29	4/5/6				11								7	
	30														

LOG OF BORING (CONTINUED)

Boring No. B-2 (Cont.)
Station & Offset 47+24, 23 ft. Rt.
Surface Elev. 585.0

Elev. (ft)	Depth (ft)	Std. Pen. /R.Q.D.	Rec. (ft)	Loss (ft)	Description	Sample No.	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	PI	WC	ODOT Class
	30				Coarse And Fine Sand With A Trace Of Clay, Silt And Gravel, red-brown, moist, loose to medium dense										
	31	4/5/6				12								12	Visual
552.3	33				Silt And Clay With A Little Fine Sand, gray-brown, moist, stiff to very stiff										
	34	2/2/5				13								24	Visual
	36	1/2/2				14								19	
547.5	38				Clay And Silt With A Trace Of Fine And Coarse Sand And A Trace Of Gravel, blue-gray, moist, stiff to hard										
	39	3/5/7				15								23	
	41	6/9/10				16								24	
	42						1	2	5	36	56	43	25	23	A-7-6 (15)
	44	11/18/26				17								22	
540.0	45				Clay With Some Silt And A Trace Of Fine And Coarse Sand And A Trace Of Gravel, gray to brown-gray, damp, hard										
	46	10/50+				18								18	
	49	16/16/13				19								22	
	51	17/17/19				20								19	
	52						5	3	2	27	63	48	29	21	A-7-6 (17)
	53	17/34/50+				21								22	
	55	50+				22									No Recovery
	58	50+			Top of Rock	23									No Recovery
526.5	59				Weathered Shale With Interbedded Limestone (Augered)										
	60														

DESIGN AGENCY
URS/BRW, INC.
CINCINNATI, OHIO

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STRUCTURE FOUNDATION INVESTIGATION
I-74 BRIDGE
OVER NEW BIDDINGER ROAD

HAM-74-0069

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LOG OF BORING (CONTINUED)

Boring No. B-2 (Cont.) Station & Offset 47+24, 23 ft. Rt. Surface Elev. 585.0

Elev. (ft)	Depth (ft)	Std. Pen. /R.Q.D.	Rec. (ft)	Loss (ft)	Description	Sample No.	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	PI	WC	ODOT Class
	60				Begin Core										
	61				Shale With Interbedded Limestone										
	62				Shale (90%), gray, weathered, soft to medium hard										
	63				Limestone (10%), light gray, jointed, hard										
	64														
	65						Core Loss = 20%								
	66														
	67														
	68														
	69														
515.0	70	40	8.0	2.0											

Bottom of Boring

DESIGN AGENCY URS/BRW, INC. CINCINNATI, OHIO

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STRUCTURE FOUNDATION INVESTIGATION
I-74 BRIDGE
OVER NEW BIDDINGER ROAD

HAM-74-0069

6/9

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LOG OF BORING

Date Started 2/27/02
Date Completed 2/27/02
Boring No. B-3

Sampler Type SS Dia. 2"
Coring: Length 6.7' Dia. 2"
Station & Offset 47+42, 15 ft. Lt.

Water Elev.
Surface Elev. 584.5

Elev. (ft)	Depth (ft)	Std. Pen. /R.Q.D.	Rec. (ft)	Loss (ft)	Description	Sample No.	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	PI	WC	ODOT Class
584.5	0														
583.8	1				Gravel And Sand										
	2				Silty Clay With A Trace Of Gravel, And Fine And Coarse Sand, brown, moist, stiff										
	3														
	4	5/5/9				1								23	
	5						10	7	10	36	37	40	22	26	A-6b(12)
	6	5/7/7				2								27	
	7														
	8														
	9	4/6/6				3								28	
	10														
573.8	11	6/8/8			Silty Clay With Some Fine Sand, A Little Coarse Sand And A Trace Of Gravel, brown, moist, very stiff	4								22	
	12						7	15	33	19	26	34	20	18	A-6b(5)
	13														
570.4	14	6/8/10				5								15	
	15				Gravel And/Or Stone Fragments With Sand, With A Trace Of Silt And Clay, light brown, mixed, moist, medium dense										
	16	9/9/12				6								11	Visual
	17														
	18														
	19	29/25/21				7								4	
	20														
	21	20/15/11				8								5	
	22														
562.0	23				Coarse And Fine Sand, With A Trace Of Clay, Silt And Gravel, red-brown, moist, loose to medium dense										
	24	6/7/7				9								11	Visual
	25														
	26	4/5/4				10								10	
	27														
	28														
	29	1/2/3				11								19	
	30														

LOG OF BORING (CONTINUED)

Boring No. B-3 (Cont.)
Station & Offset 47+42, 15 ft. Lt.
Surface Elev. 584.5

Elev. (ft)	Depth (ft)	Std. Pen. /R.Q.D.	Rec. (ft)	Loss (ft)	Description	Sample No.	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	PI	WC	ODOT Class
	30														
	31	3/11/5			Coarse And Fine Sand, With A Trace Of Clay, Silt And Gravel, red-brown, moist, loose to medium dense	12								22	Visual
	32														
	33														
	34	28/33/32				13								9	
	35														
	36	5/7/8				14								24	
	37														
	38														
	39	7/14/14				15								21	
544.2	40														
	41	15/50+			Clay And Silt With A Trace Of Gravel And Fine And Coarse Sand, blue-gray, damp, hard	16								25	
	42														
	43	50+				17									No Recovery
	44						1	2	6	35	56	41	24	23	A-7-6 (14)
	45														
	46	8/16/14				18								22	
	47														
	48	50+				19									No Recovery
	49														
534.4	50	50+			Top of Rock Shale With Interbedded Limestone (Augered)	20									No Recovery
	51														
	52														
	53														
	54														
529.5	55				Begin Core										
	56				Shale With Interbedded Limestone										
	57				Shale (80%), gray, weathered, soft to medium hard	Core Loss = 17%									
526.5	58	27	2.5	0.5	Limestone (20%), light gray, jointed, hard										
	59														
	60					Core Loss = 1%									
	61														
522.8		70	3.5	0.2											

Bottom of Boring

DESIGN AGENCY
URS/BRW, INC.
CINCINNATI, OHIO

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STRUCTURE FOUNDATION INVESTIGATION
I-74 BRIDGE
OVER NEW BIDDINGER ROAD

HAM-74-0069

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LOG OF BORING

Date Started 2/25/02
Date Completed 2/25/02
Boring No. B-4

Sampler Type SS Dia. 2"
Coring: Length 7.0 ft. Dia. 2"
Station & Offset 48+45, 4 ft. Rt.

Water Elev.
Surface Elev. 625.0

Elev. (ft)	Depth (ft)	Std. Pen. /R.Q.D.	Rec. (ft)	Loss (ft)	Description	Sample No.	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	PI	WC	ODOT Class
625.0	0														
624.3	1				Topsoil										
	2				Fill; Clay With Some Silt, A Little Gravel And A Trace Of Fine And Coarse Sand, gray-brown, moist, medium stiff										
	3														
	4	3/4/3				1								22	
	5						14	5	5	31	45	45	26	25	A-7-6(15)
	6	4/4/4				2								28	
	7														
	8				-Cobbles At 616.5'-617.3'										
616.5	9	50+			Fill; Clay And Silt With A Trace Of Gravel And Fine And Coarse Sand, gray, moist, medium stiff, to very stiff	3									No Recovery
	10														
	11	3/3/5				4								21	
	12						7	3	3	39	48	42	25	17	A-7-6(14)
	13														
	14	3/5/9				5								16	
	15														
	16	6/10/10				6								14	
	17														
	18														
606.6	19	4/7/7			Fill; Silty Clay With A Little Gravel And A Trace Of Fine And Coarse Sand, gray, moist, stiff to very stiff	7								16	
	20														
	21	12/7/7				8								17	
	22														
	23														
	24	7/5/10				9								18	
	25														
	26	9/8/9				10								16	
	27						14	3	3	30	50	39	20	17	A-6b(12)
	28														
	29	4/5/6				11								16	
	30														

LOG OF BORING (CONTINUED)

Boring No. B-4 (Cont.)
Station & Offset 48+45, 4 ft. Rt.
Surface Elev. 625.0

Elev. (ft)	Depth (ft)	Std. Pen. /R.Q.D.	Rec. (ft)	Loss (ft)	Description	Sample No.	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	PI	WC	ODOT Class
	30														
	31	11/7/7			Fill; Silty Clay With A Little Gravel And A Trace Of Fine And Coarse Sand, gray, moist, stiff to very stiff	12								18	
	32														
	33														
	34	7/11/13				13								16	
	35														
	36	9/9/9				14								16	
	37														
	38														
	39	7/7/9				15								19	
	40														
584.6	41	10/10/10			Silty Clay With A Little Fine Sand, A Trace Of Coarse Sand And A Trace Of Gravel, light brown to gray-brown, moist, stiff to hard	16								17	
	42														
	43														
	44	14/50+				17									No Recovery
	45														
	46	10/10/13				18								13	
	47						6	6	11	26	51	39	22	18	A-6b(13)
	48														
	49	47/44/12				19								20	
	50														
	51	4/7/9				20								21	
	52														
	53														
	54	4/5/7				21								21	
	55														
569.7	56	2/4/7			Gravel And/Or Stone Fragments With Sand, Silt And Clay, red-brown and gray, mottled, moist to hard	22								15	
	57						14	7	52	6	21	28	14	17	A-2-6(1)
	58														
	59	7/11/23				23								17	
	60														

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DESIGN AGENCY URS/BRW, INC. CINCINNATI, OHIO

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STRUCTURE FOUNDATION INVESTIGATION
I-74 BRIDGE
OVER NEW BIDDINGER ROAD

HAM-74-0069

LOG OF BORING (CONTINUED)

Boring No. B-4 (Cont.)   Station & Offset 48+45, 4 ft. Rt.   Surface Elev. 625.0

Elev. (ft)	Depth (ft)	Std. Pen. /R.Q.D.	Rec. (ft)	Loss (ft)	Description	Sample No.	% Agg.	% C.S.	% F.S.	% Silt	% Clay	LL	PI	WC	ODOT Class
	60														
	61	4/17/31			Gravel And/Or Stone Fragments With Sand, Silt And Clay, red-brown and gray, mottled, moist to hard	24								20	Visual
	62														
562.0	63														
	64	11/12/18			Clay With Some Silt A Little Gravel And A Trace Of Fine And Coarse Sand, gray and light brown, moist, very stiff to hard	25								17	Visual
	65														
	66	21/17/25				26								11	
	67														
557.5					Top of Rock										
	68	50+			Shale With Interbedded Limestone, Weathered (Augered)	27								10	
	69														
	70	50+			Begin Core	28								9	
554.6															
	71				Shale With Interbedded Limestone										
	72				Shale (80%), gray, weathered, soft to medium hard										
	73				Limestone (20%), light gray, jointed, hard										
	74					Core Loss = 7%									
	75														
	76														
	77														
547.6		50	6.5	0.5											

Bottom of Boring

DESIGN AGENCY
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STRUCTURE FOUNDATION INVESTIGATION
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