

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
Section No.	4	Right of Way Plat
Section No.	5	Plan and Profile
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
Section No.	8	Structure Plans
Section No.	9	Computer Earthwork Data
Section No.	9	Gross Sections

TOTAL SHEETS = 58

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

TOMAH - PORTAGE

CAMP DOUGLAS TO SEVEN MILE CREEK

IH-90/94

JUNEAU COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1016-01-61	WISC 2023135	1

STATE PROJECT NUMBER
1016-01-61

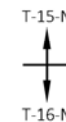
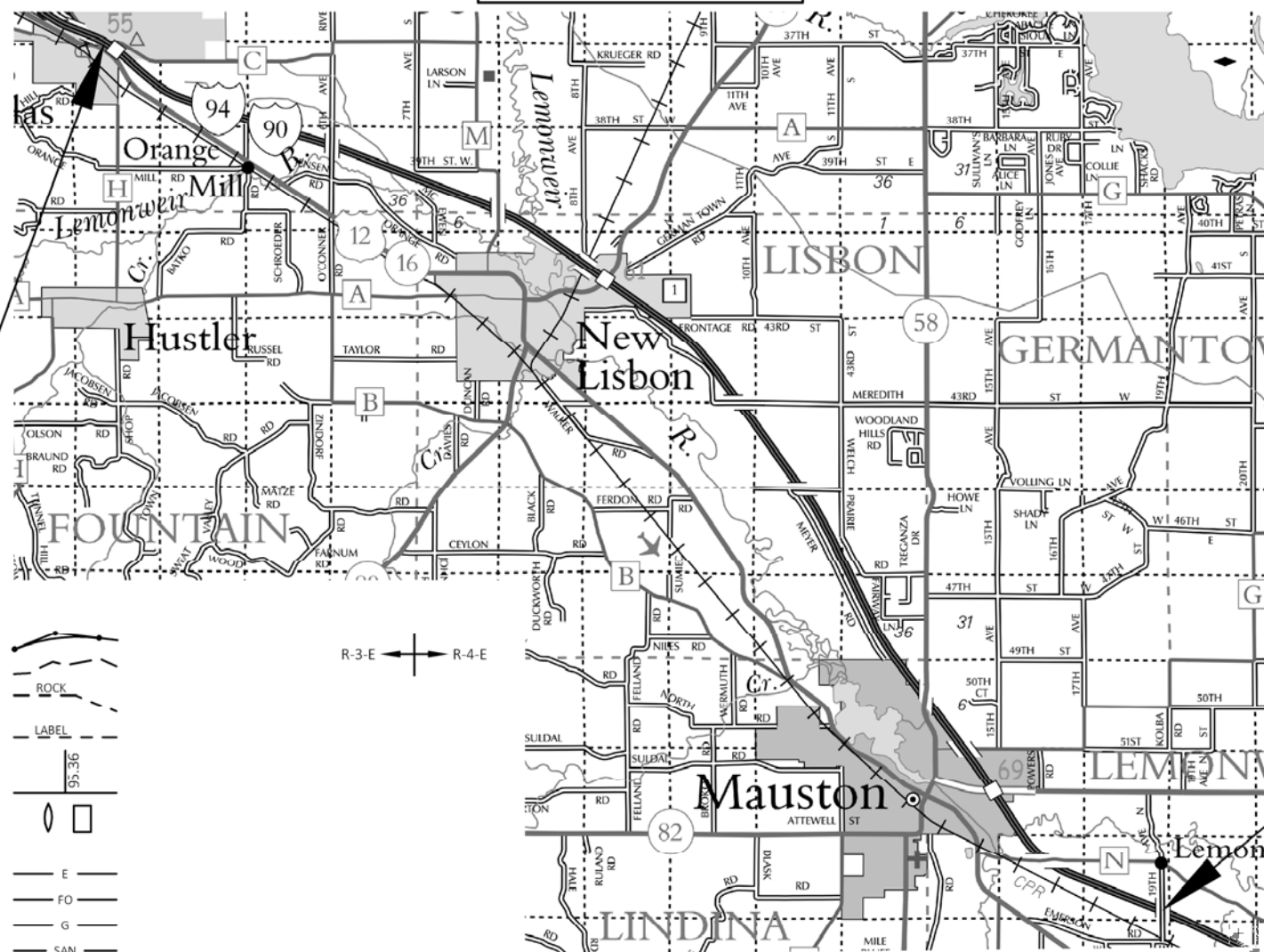


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DESIGN DESIGNATION

A.A.D.T. 2016	=	33,700
A.A.D.T. 2044	=	43,300
D.H.V.	=	17.4
D.D.	=	53/47
T.	=	32.5%
DESIGN SPEED	=	70 M.P.H.
ESALS	=	61,000,000

BEGIN PROJECT
STA 235+01
X= 413020.5
Y= 203027.5



END PROJECT
STA 1170+00

CONVENTIONAL SYMBOLS

PLAN	
CORPORATE LIMITS	
PROPERTY LINE	
LOT LINE	
LIMITED HIGHWAY EASEMENT	
EXISTING RIGHT OF WAY	
PROPOSED OR NEW R/W LINE	
SLOPE INTERCEPT	
REFERENCE LINE	
EXISTING CULVERT	
PROPOSED CULVERT (Box or Pipe)	
COMBUSTIBLE FLUIDS	
MARSH AREA	
WOODED OR SHRUB AREA	

PROFILE	
GRADE LINE	
ORIGINAL GROUND	
MARSH OR ROCK PROFILE (To be noted as such)	
SPECIAL DITCH	
GRADE ELEVATION	
CULVERT (Profile View)	
UTILITIES	
ELECTRIC	
FIBER OPTIC	
GAS	
SANITARY SEWER	
STORM SEWER	
TELEPHONE	
WATER	
UTILITY PEDESTAL	
POWER POLE	
TELEPHONE POLE	

LAYOUT
SCALE 0 2 MI
TOTAL NET LENGTH OF CENTERLINE = 0.000

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), JUNEAU COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 18.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	WISDOT
Surveyor	BRIAN DAHL
Designer	JOHN BANTER
Project Manager	SW REGION
Regional Examiner	JAMES SAVOLDELLI
Regional Supervisor	

APPROVED FOR THE DEPARTMENT
DATE: 7/29/2022

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GENERAL NOTES

- THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.
- HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.
- PLACE THE 3.5" HMA PAVEMENT IN A SINGLE LAYER
- APPLY TACK COAT AT A RATE OF 0.07 GAL/SY TO MILLED PAVEMENT SURFACES AND EXISTING PAVEMENT SURFACES (INCLUDING CONCRETE) AND 0.05 GAL/SY BETWEEN LAYERS OF NEW HMA PAVEMENT
- STATIONING OF CONCRETE PAVEMENT REPAIR AND REPLACEMENT LOCATIONS IN THE PLAN ARE APPROXIMATE. VERIFY LOCATIONS WITH ENGINEER
- SAWING CONCRETE WILL BE MEASURED AND PAID FOR ONLY ONCE WHEN REPAIRS ARE ADJACENT ALONG THE CENTERLINE OF THE LANES
- OVER-SAWING INTO PAVEMENT THAT IS TO REMAIN TO FACILITATE REMOVAL OF REPAIR AREAS SHALL BE SEALED WITH AN APPROVED EPOXY. THE OVER-SAWING AND EPOXY ARE INCIDENTAL TO BID ITEMS 416.1715, 416.1725.
- WITHIN CONCRETE PAVEMENT REPLACEMENT SECTIONS, THE NEW CONTRACTION JOINTS MAY NOT MATCH ABUTTING EXISTING JOINTS BECAUSE OF CHANGES TO STANDARDS AND PRIOR REPAIRS. ADJUST NEW JOINTS TO MATCH EXISTING JOINTS WHERE PRACTICAL. DO NOT EXCEED THE MAXIMUM CONTRACTION JOINT SPACING OF 15'.
- THE NEW TINING SHOULD MATCH THE ADJACENT PAVEMENT PATTERN.
- THE QUANTITY OF THE ITEMS FOR EROSION PROTECTION INCLUDES AN UNDISTRIBUTED AMOUNT FOR PROTECTION, CONTROL AND ABATEMENT OF WATER POLLUTION RESULTING FROM SOIL EROSION. THE DISTRIBUTION AND LOCATION OF THESE MATERIALS ARE TO BE DETERMINED BY THE ENGINEER.
- DISTURBED AREAS WITHIN THE RIGHT OF WAY ARE TO BE TOPSOILED (SALVAGED), FERTILIZED, SEEDED, AND MULCHED OR SODDED AS DIRECTED BY THE ENGINEER.

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP-TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE-TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 0.1 ACRES
 TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.1 ACRES

STANDARD ABBREVIATIONS

AC	ACRE	LC.	LONG CHORD
AGG	AGGREGATE	LS	LUMP SUM
<	ANGLE	M.P.	MARKER POST
AE, AEW	APRON ENDWALL	MGAL	1000 GALLONS
ASPH.	ASPHALTIC	N.C.	NORMAL CROWN
A.D.T.	AVERAGE DAILY TRAFFIC	N	NORTH
A.A.D.T.	ANNUAL AVERAGE DAILY TRAFFIC	NB	NORTHBOUND
B.F.	BACK FACE	NOR	NORMAL
BM	BENCHMARK	NO.	NUMBER
BTWN	BETWEEN	PAVT	PAVEMENT
CTR.	CENTER	P.L.E.	PERMANENT LIMITED EASEMENT
C/L	CENTER LINE	P.C.	POINT OF CURVATURE
Δ	CENTRAL ANGLE OR DELTA	P.I.	POINT OF INTERSECTION
C.E.	COMMERCIAL ENTRANCE	P.T.	POINT OF TANGENCY
CONST.	CONSTRUCTION	PCC	PORTLAND CEMENT CONCRETE
CMCP	CORRUGATED METAL CULVERT PIPE	P.E.	PRIVATE ENTRANCE
CMP	CORRUGATED METAL PIPE	PGL	PROFILE GRADE LINE
CO.	COUNTY	P.L.	PROPERTY LINE
CTH	COUNTY TRUNK HIGHWAY	R	RADIUS OR RANGE
CR.	CREEK	R/L	REFERENCE LINE
CABC	CRUSHED AGGREGATE BASE COURSE	R.C.C.P.	REINFORCED CONCRETE CULVERT PIPE
CY	CUBIC YARD	REQ'D	REQUIRED
CP	CONTROL POINT OR CULVERT PIPE	RT	RIGHT
C&G	CURB AND GUTTER	R.H.F.	RIGHT HAND FORWARD
D	DEGREE OF CURVE	R/W	RIGHT OF WAY
D.H.V.	DESIGN HOURLY VOLUME	RD.	ROAD
DIA.	DIAMETER	SHLD.	SHOULDER(S)
D.D.	DIRECTIONAL DISTRIBUTION	SHR.	SHRINKAGE
DISCH.	DISCHARGE	S	SOUTH
DMS	DYNAMIC MESSAGE SIGN	SB	SOUTHBOUND
EA	EACH	S.F.	SQUARE FOOT (FEET)
E	EAST	SDD	STANDARD DETAIL DRAWING(S)
EB	EASTBOUND	STH	STATE TRUNK HIGHWAY
ELEC.	ELECTRIC(AL), ELEC. CABLE	STA.	STATION
EL., ELEV.	ELEVATION	S.E.	SUPERELEVATION
ESALS	EQUIVALENT SINGLE AXLE LOADS	S/L	SURVEY LINE
EXC.	EXCAVATION	SYM	SYMMETRICAL
EXIST	EXISTING	T.	PERCENT TRUCKS
F.F.	FACE TO FACE	TEL.	TELEPHONE
FERT.	FERTILIZER	TEMP.	TEMPORARY
F.E.	FIELD ENTRANCE	T.L.E.	TEMPORARY LIMITED EASEMENT
F/L, F.L.	FLOW LINE	T.O.C.	TOP OF CURB
GALV.	GALVANIZE	TYP	TYPICAL
H.S.	HIGH STRENGTH	UNCL.	UNCLASSIFIED
CWT	HUNDRED WEIGHT	U.G.	UNDERGROUND (CABLE)
INL	INLET	VAR	VARIABLE
INTER.	INTERSECTION	V.C.	VERTICAL CURVE
IH	INTERSTATE HIGHWAY	V.P.C.	VERTICAL POINT OF CURVATURE
JT.	JOINT	V.P.I.	VERTICAL POINT OF INTERSECTION
LT	LEFT	V.P.T.	VERTICAL POINT OF TANGENCY
L.H.F.	LEFT HAND FORWARD	Wt.	WEIGHT
L.	LENGTH OF CURVE	W	WEST
L.F.	LINEAR FOOT(FEET)	WB	WESTBOUND

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DESIGN CONTACTS

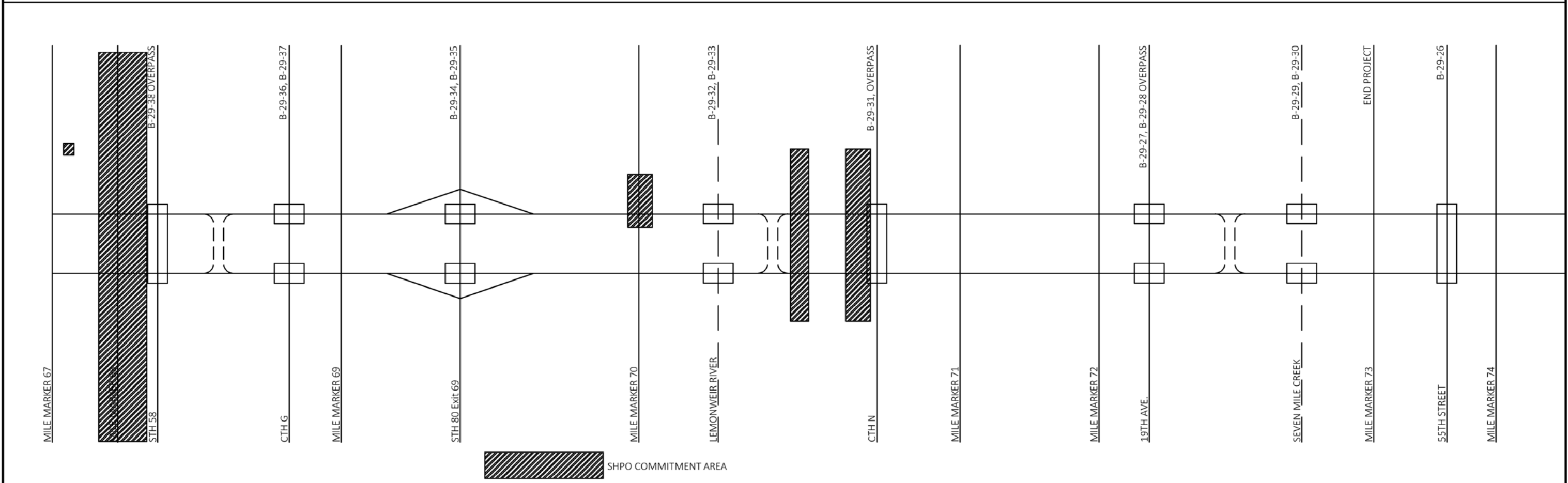
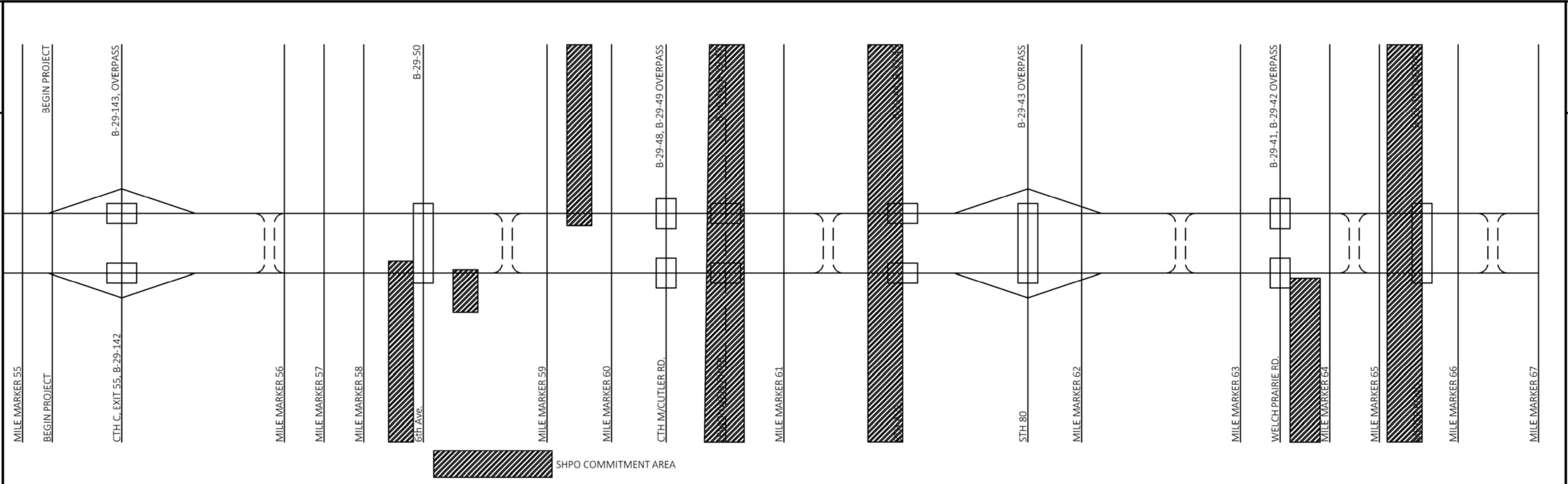
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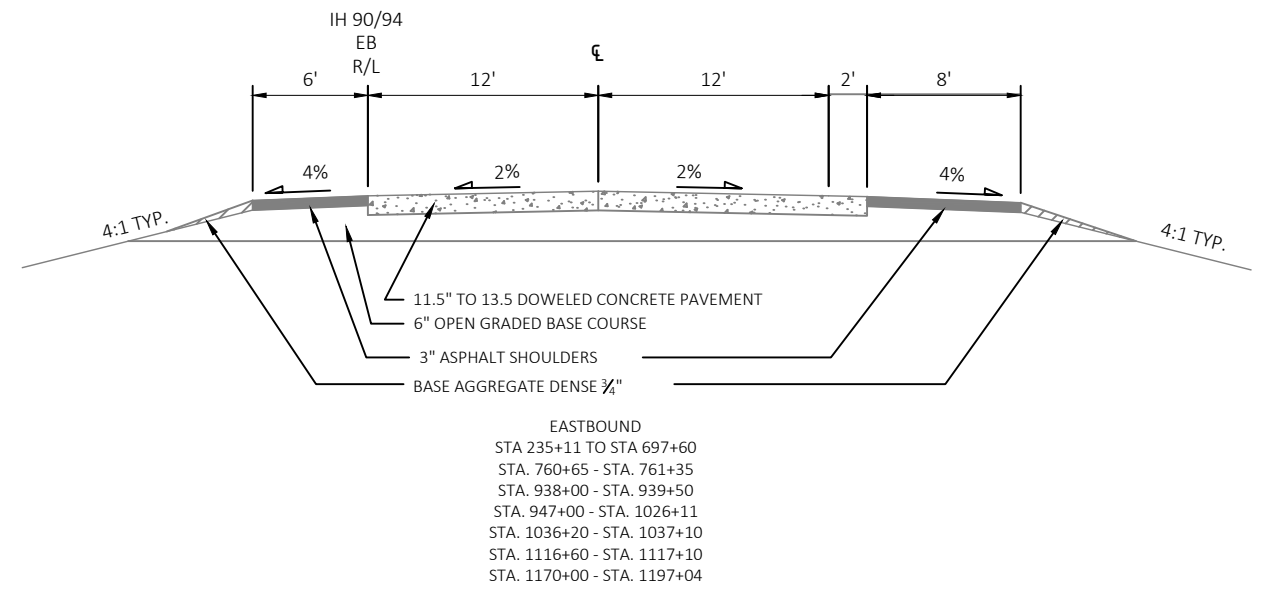
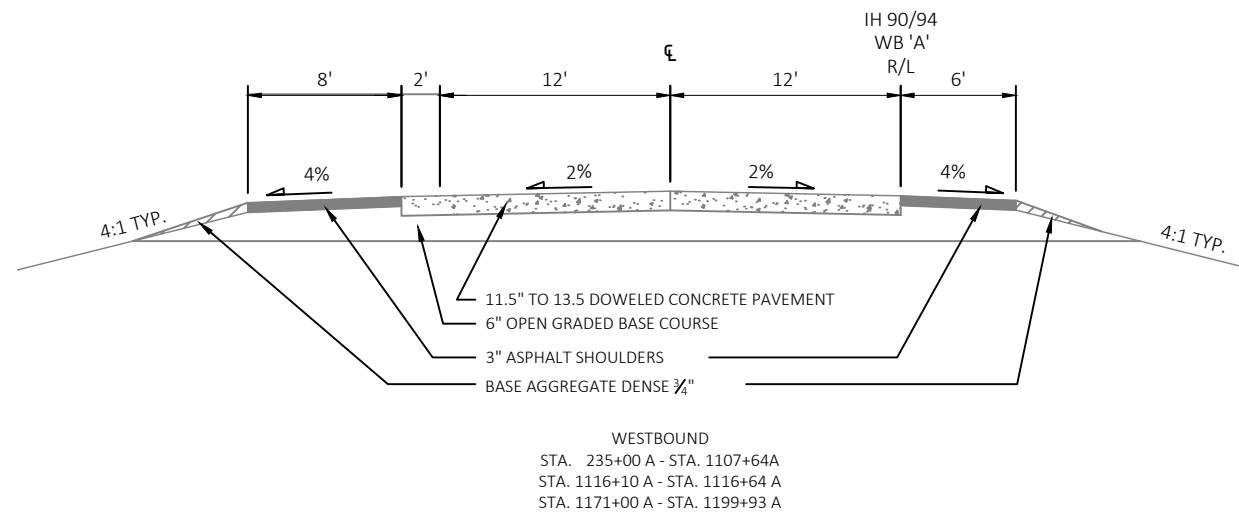
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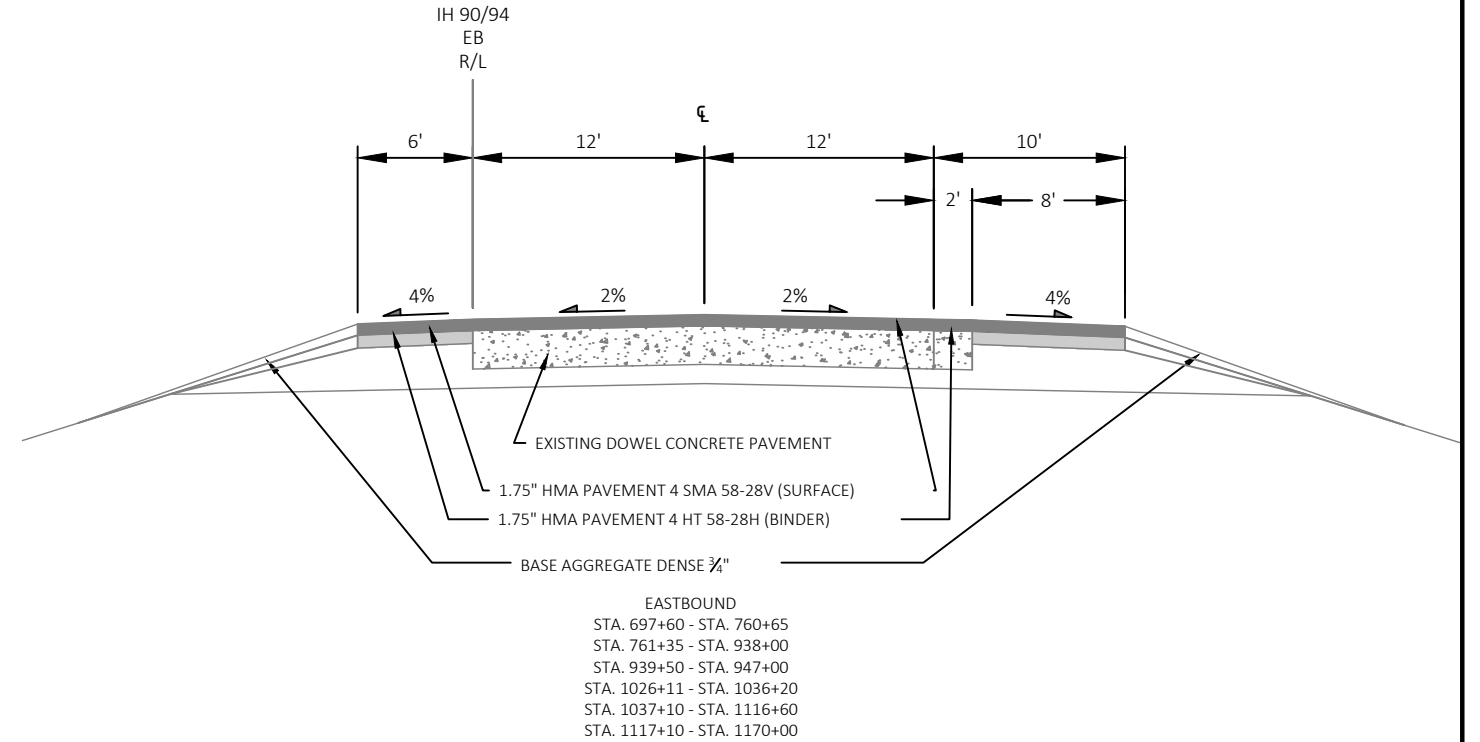
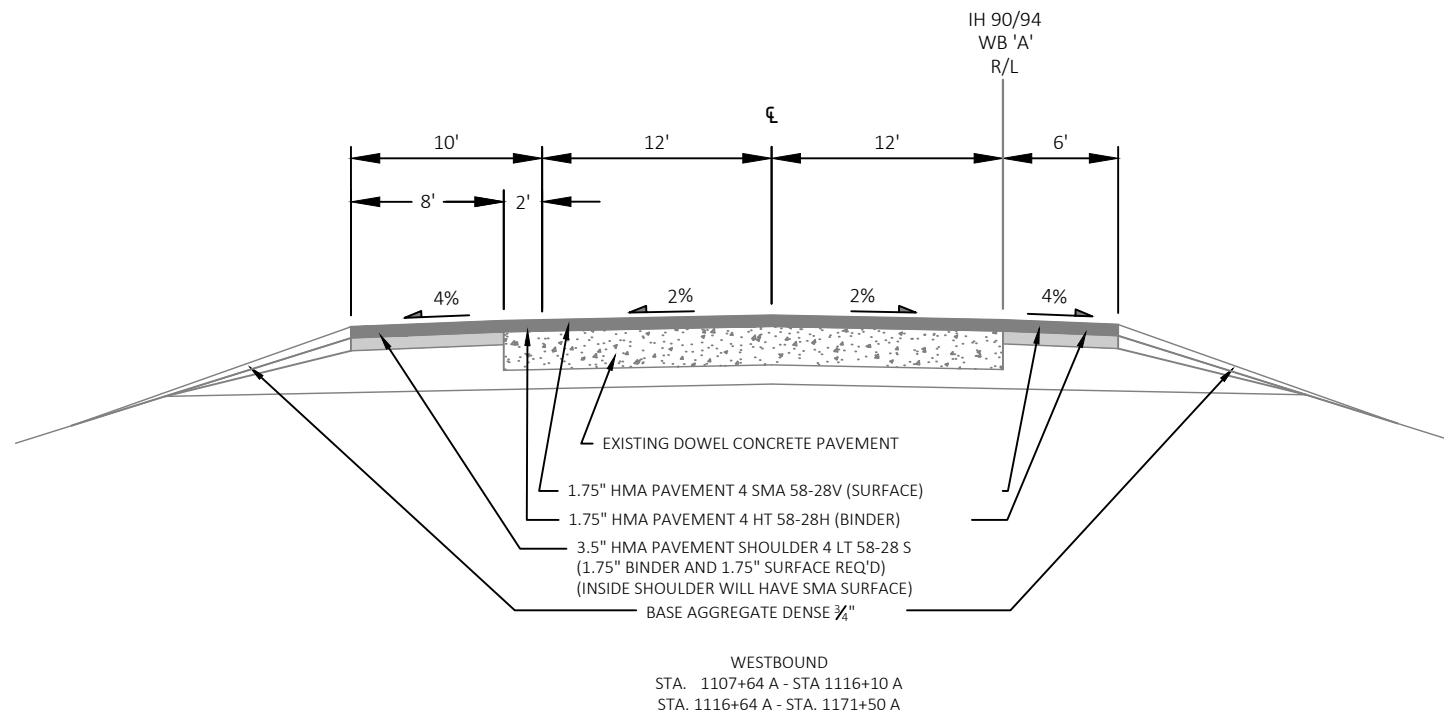


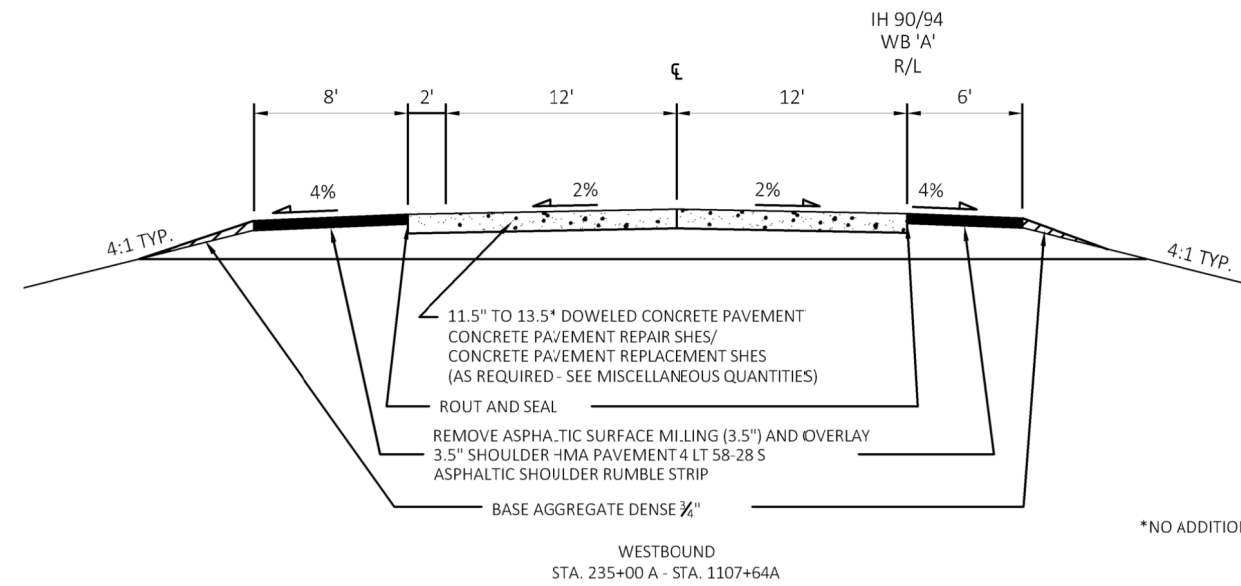


PROJECT NO: 1016-01-61	HWY: IH-90	COUNTY: JUNEAU	PROJECT OVERVIEW	SHEET	E
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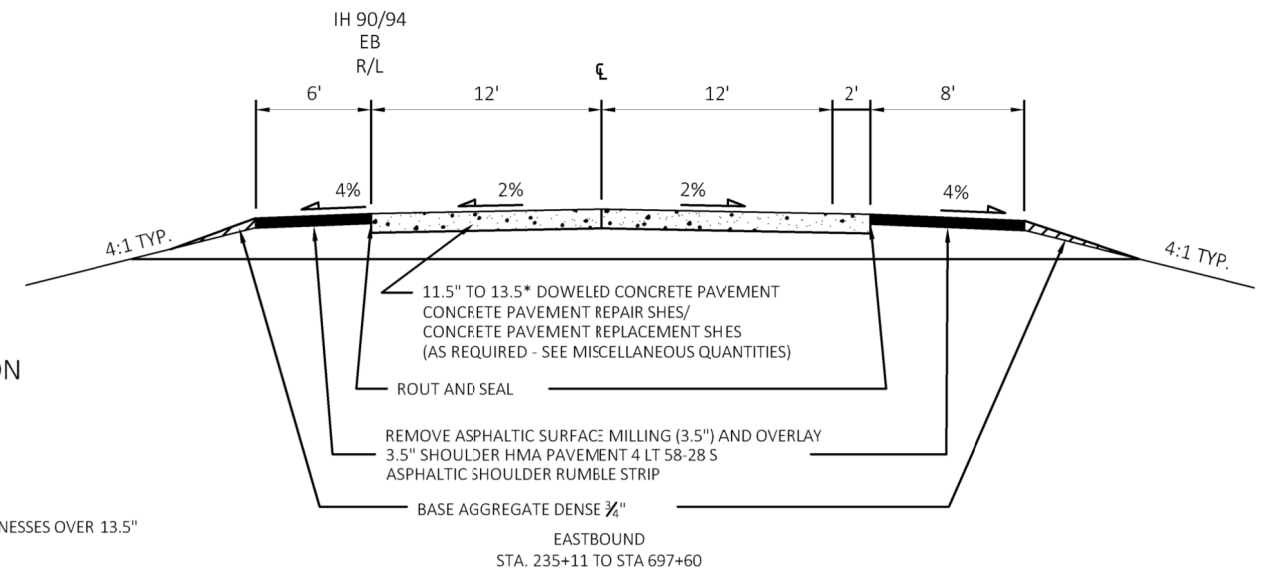


TYPICAL EXISTING SECTION

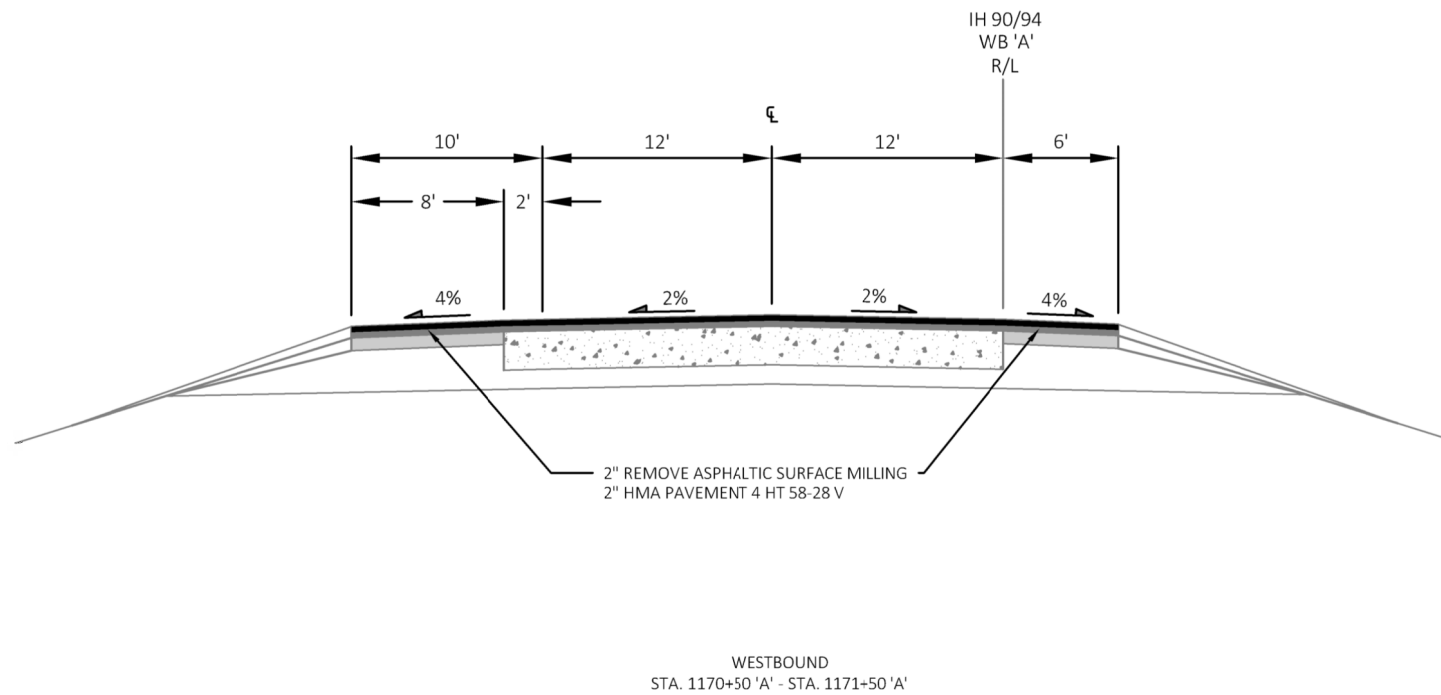


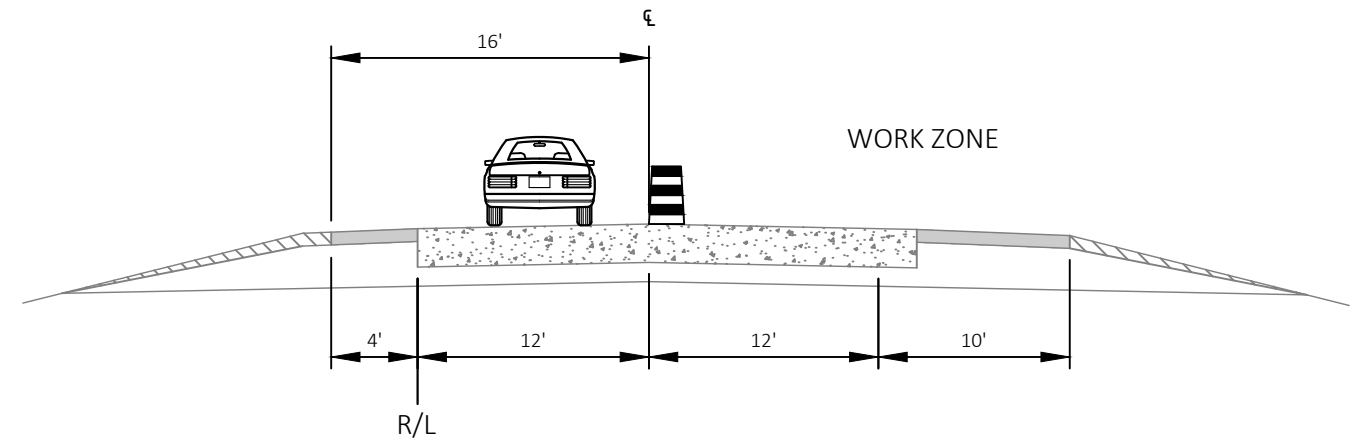
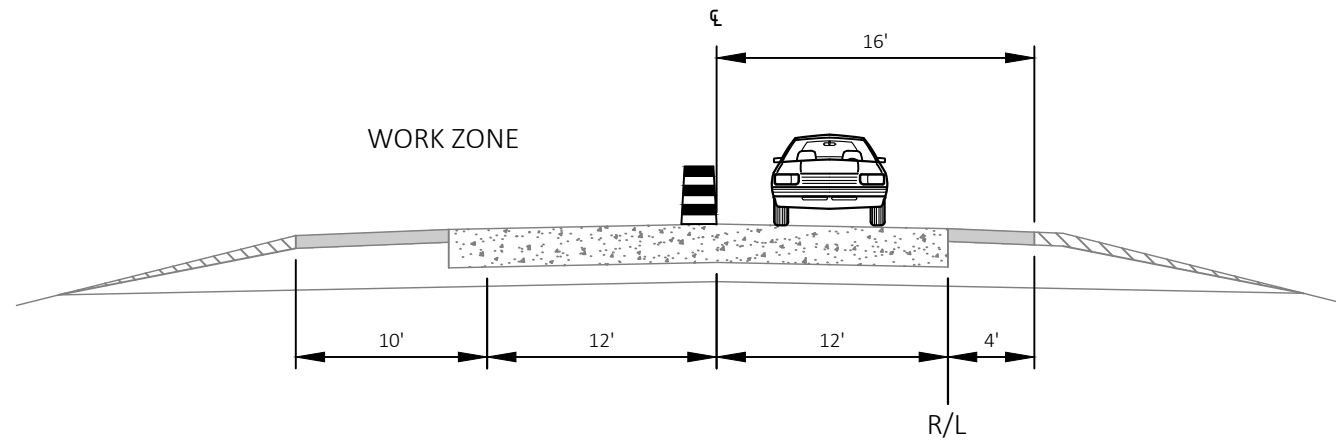


TYPICAL PROPOSED SECTION

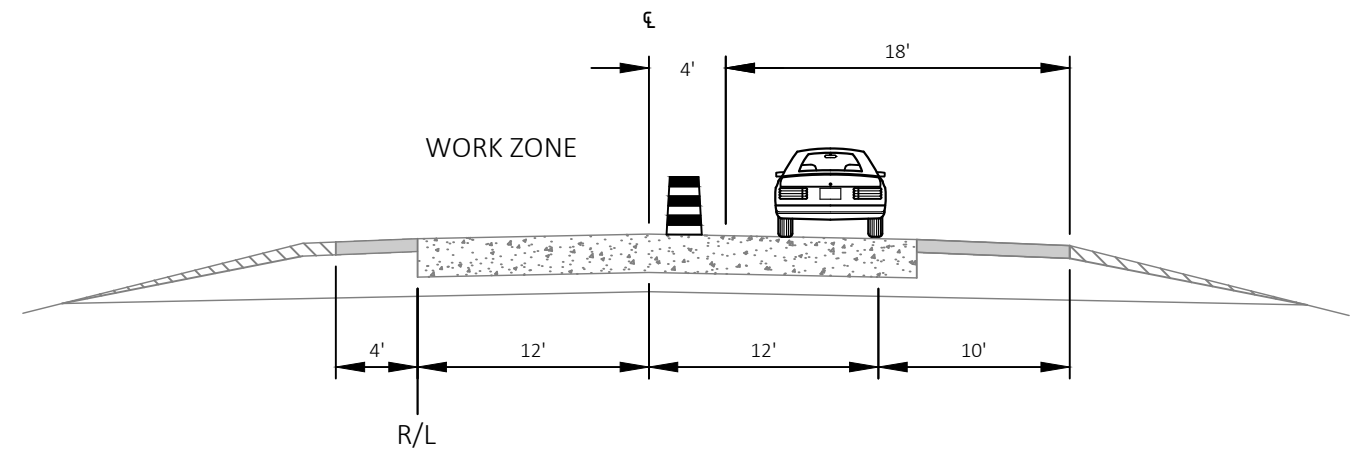
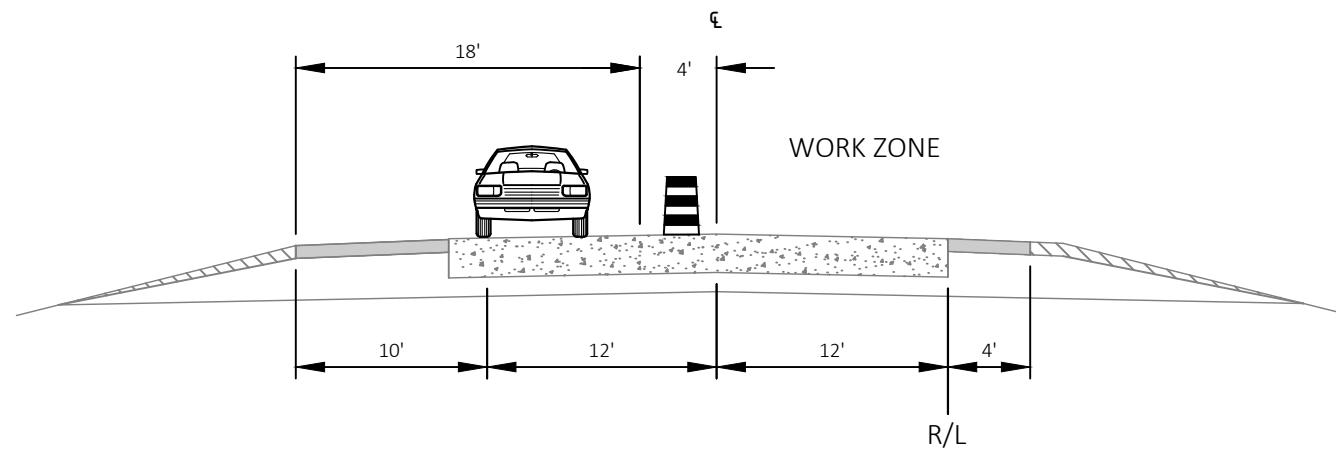


*NO ADDITIONAL COMPENSATION SHALL BE PAID FOR THICKNESSES OVER 13.5"





TYPICAL SECTION: OUTSIDE LANE CLOSED



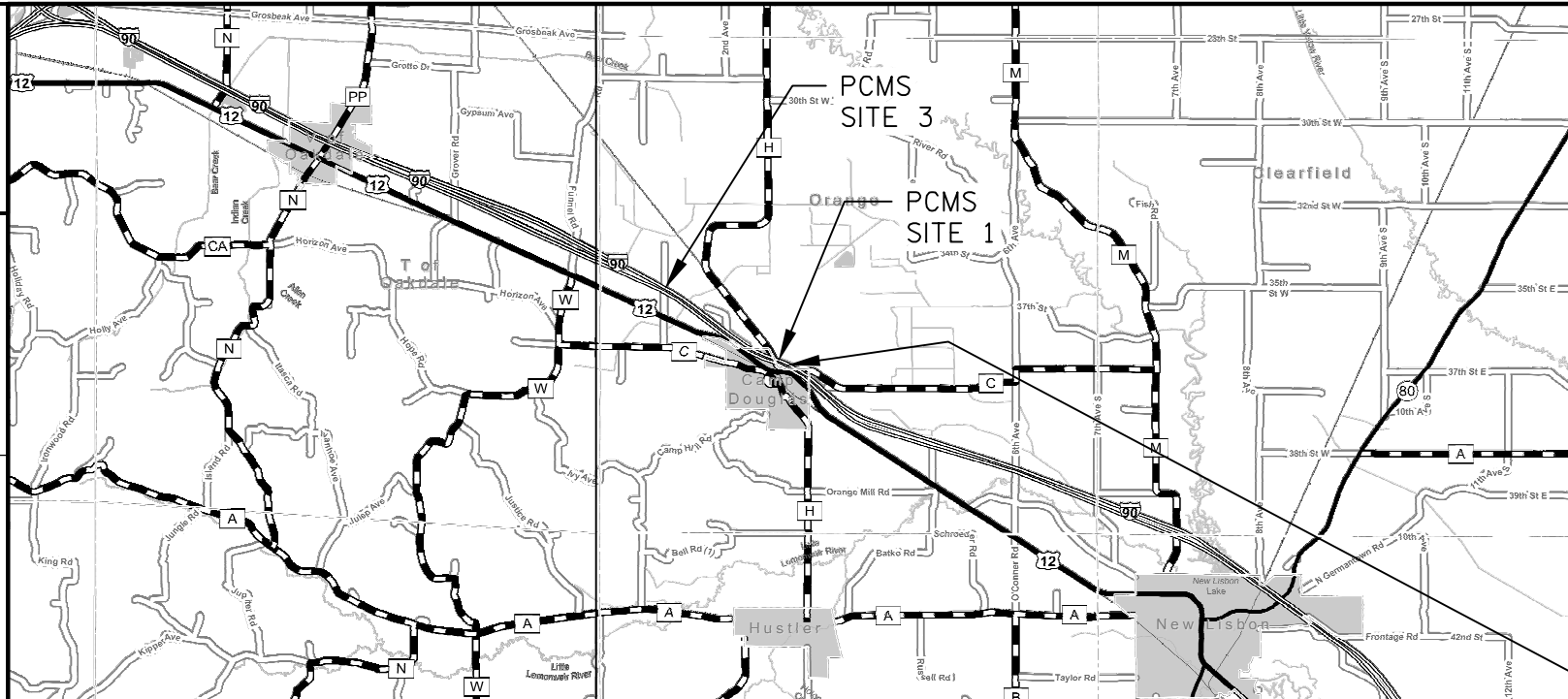
TYPICAL SECTION: MEDIAN LANE CLOSED

THE FIELD ENGINEER WILL MAKE THE FINAL DETERMINATION TO THE PLACEMENT OF PCMS BOARDS BASED UPON EXISTING CONDITIONS AND STAGING.

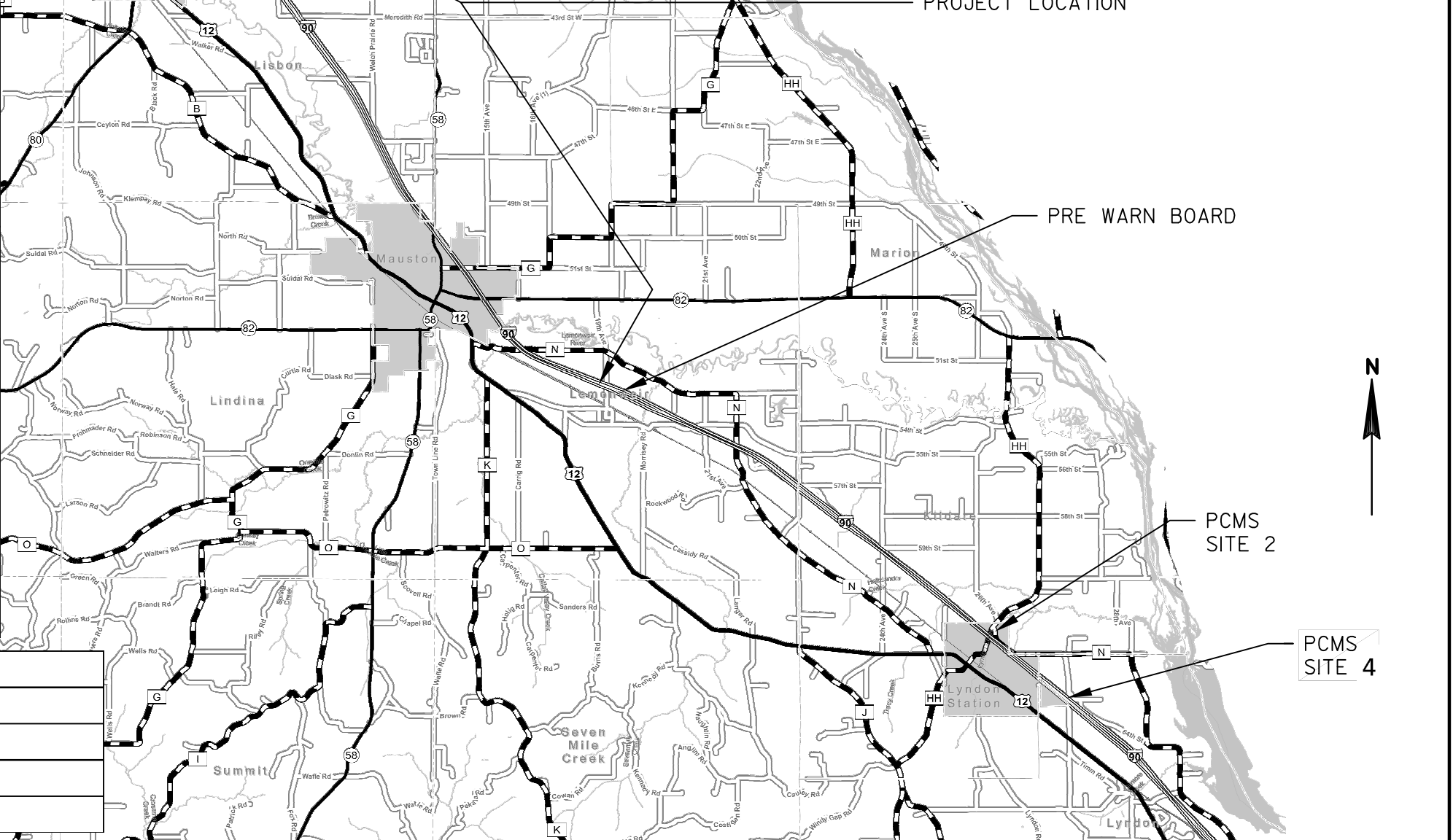
GENERAL NOTES FOR SIGNS PCMS

CONSIDER GEOMETRICS WHEN LOCATING PCMS SO THE DRIVER HAS A CLEAR VIEW OF THE BOARD FOR A MINIMUM OF 1000 FEET IN FRONT OF THE PCMS.

PCMS SHOULD BE PLACED AS FAR AWAY FROM LIVE TRAFFIC LANES AS POSSIBLE WITHOUT HAMPERING VISIBILITY. IN ADVANCE OF HIGHWAY CONSTRUCTION PROJECTS, THE SIGNS SHOULD BE PLACED ON THE BACKSLOPE BEYOND THE DITCH. THE LOCATION SELECTED SHOULD BE AT OR SLIGHTLY ABOVE THE ELEVATION OF THE ROADWAY. FOR INTERMITTENT WORK SUCH AS FREEWAY LANE CLOSURE, OR WHERE SITE CONDITIONS DO NOT ALLOW OTHERWISE, THE SIGNS MAY BE PLACED ON THE SHOULDER. THE SITE SHOULD BE VISITED TO ASSURE VISIBILITY, SAFETY, AND MAINTENANCE CONSIDERATIONS. A TAPER OF REFLECTORIZED DRUMS OR BARRICADES SHOULD BE PLACED AHEAD OF PCMS PLACED ON THE SHOULDER IF IT IS NOT SHIELDED BY A BARRIER.



SITE NO.	ROADWAY CONDITION CONSTRUCTION	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)
* SITES 1 & 2	WIDTH RESTRICTION	TRUCKS OVER 14 FEET	EXIT HERE
SITES 3 & 4	WIDTH RESTRICTION	TRUCKS OVER 14 FEET	USE ALT ROUTE EXIT XXX
SITES 3 & 4	INCIDENT	INCIDENT AHEAD	USE ALT ROUTE
SITES 3 & 4	BLOCKED HIGHWAY	INCIDENT AHEAD	ALT ROUTE EXIT XXX



* MESSAGE BOARD IN OPERATION A MINIMUM OF 7 DAYS PRIOR TO THE START OF WORK

SITE NO.	APPROXIMATE LOCATION
1	BEFORE EXIT 55
2	BEFORE EXIT 79
3	WEST OF KEICHNIGER ROAD OVERPASS
4	EAST OF KOVAL ROAD OVERPASS

Estimate Of Quantities

1016-01-61

Line	Item	Item Description	Unit	Total	Qty
0002	204.0120	Removing Asphaltic Surface Milling	SY	211,000.000	211,000.000
0004	204.0170	Removing Fence	LF	164,210.000	164,210.000
0006	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	2,672.000	2,672.000
0008	213.0100	Finishing Roadway (project) 01. 1016-01-61	EACH	1.000	1.000
0010	305.0110	Base Aggregate Dense 3/4-Inch	TON	5,800.000	5,800.000
0012	415.6000.S	Rout and Seal	LF	268,524.000	268,524.000
0014	416.0610	Drilled Tie Bars	EACH	4,086.000	4,086.000
0016	416.0620	Drilled Dowel Bars	EACH	17,104.000	17,104.000
0018	416.1715	Concrete Pavement Repair SHES	SY	9,306.000	9,306.000
0020	416.1725	Concrete Pavement Replacement SHES	SY	13,198.000	13,198.000
0022	455.0605	Tack Coat	GAL	32.000	32.000
0024	460.2000	Incentive Density HMA Pavement	DOL	22,530.000	22,530.000
0026	460.5224	HMA Pavement 4 LT 58-28 S	TON	35,500.000	35,500.000
0028	460.7624	HMA Pavement 4 HT 58-28 V	TON	90.000	90.000
0030	465.0400	Asphaltic Shoulder Rumble Strips	LF	268,724.000	268,724.000
0032	616.0100	Fence Woven Wire (height) 01. 4-FT	LF	164,210.000	164,210.000
0034	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1016-01-61	EACH	1.000	1.000
0036	619.1000	Mobilization	EACH	1.000	1.000
0038	624.0100	Water	MGAL	650.000	650.000
0040	625.0500	Salvaged Topsoil	SY	200.000	200.000
0042	628.1504	Silt Fence	LF	200.000	200.000
0044	628.1520	Silt Fence Maintenance	LF	200.000	200.000
0046	628.1905	Mobilizations Erosion Control	EACH	1.000	1.000
0048	628.1910	Mobilizations Emergency Erosion Control	EACH	1.000	1.000
0050	628.2004	Erosion Mat Class I Type B	SY	750.000	750.000
0052	629.0210	Fertilizer Type B	CWT	0.100	0.100
0054	630.0120	Seeding Mixture No. 20	LB	6.000	6.000
0056	630.0130	Seeding Mixture No. 30	LB	3.000	3.000
0058	630.0200	Seeding Temporary	LB	3.000	3.000
0060	642.5201	Field Office Type C	EACH	1.000	1.000
0062	643.0300	Traffic Control Drums	DAY	57,510.000	57,510.000
0064	643.0420	Traffic Control Barricades Type III	DAY	4,350.000	4,350.000
0066	643.0705	Traffic Control Warning Lights Type A	DAY	8,700.000	8,700.000
0068	643.0715	Traffic Control Warning Lights Type C	DAY	320.000	320.000
0070	643.0800	Traffic Control Arrow Boards	DAY	160.000	160.000
0072	643.0900	Traffic Control Signs	DAY	1,280.000	1,280.000
0074	643.1051	Traffic Control Signs PCMS with Cellular Communications	DAY	160.000	160.000
0076	643.4100.S	Traffic Control Interim Lane Closure	EACH	70.000	70.000
0078	643.5000	Traffic Control	EACH	1.000	1.000
0080	646.1020	Marking Line Epoxy 4-Inch	LF	305,400.000	305,400.000
0082	646.3020	Marking Line Epoxy 8-Inch	LF	4,100.000	4,100.000
0084	646.9400	Marking Removal Plowable Raised Pavement Markers	EACH	1,400.000	1,400.000
0086	650.8000	Construction Staking Resurfacing Reference	LF	133,512.000	133,512.000
0088	650.9911	Construction Staking Supplemental Control (project) 01. 1016-01-61	EACH	1.000	1.000
0090	690.0250	Sawing Concrete	LF	43,498.000	43,498.000
0092	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	1,150.000	1,150.000
0094	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	950.000	950.000

CONCRETE REPAIR SUMMARY

CONCRETE REPAIR SUMMARY (CONTINUED)

EB MILE MARKER	PLUS	EASTBOUND LOCATION		416.0610	416.0620	416.1715	416.1725	690.0250	REMARKS
		DRILLED TIE BARS EACH	DRILLED DOWEL BARS EACH	CONCRETE PAVEMENT REPAIR SHES SY	CONCRETE PAVEMENT REPLACEMENT SHES SY	SAWING CONCRETE LF			
55	350	right	6	-	16	9.33	-	34	
55	860	right	15	6	16	23.33	23.33	43	
55	2220	right	15	6	16	23.33	23.33	43	
55	2300	right	30	12	16	-	46.67	58	
55	2500	left	6	-	16	8.00	-	30	
55	3090	right	50	20	16	-	77.78	78	
55	3181	right	20	8	16	-	31.11	48	
55	3269	right	20	8	16	-	31.11	48	
55	3420	right	30	12	16	-	46.67	58	
55	3500	right	60	24	16	-	93.33	88	
55	3620	right	45	18	16	-	70.00	73	
55	3700	right	15	6	16	23.33	23.33	43	
55	3720	right	30	12	16	-	46.67	58	
55	3840	right	30	12	16	-	46.67	58	
55	3940	right	15	6	16	23.33	23.33	43	
55	3940	left	6	-	16	8.00	-	30	
55	3940	right	30	12	16	-	46.67	58	
55	4200	left	6	-	16	8.00	-	30	
55	4300	right	6	-	16	9.33	-	34	
55	4400	left	6	-	16	8.00	-	30	
55	4500	right	8	4	16	12.44	-	36	
55	4520	right	8	4	16	12.44	-	36	
55	4530	right	8	4	16	12.44	-	36	
55	4550	right	45	18	16	-	70.00	73	
55	4690	left	6	-	16	8.00	-	30	
55	4730	right	30	12	16	-	46.67	58	
55	4999	right	60	24	16	-	93.33	88	
55	5080	left	6	-	16	8.00	-	30	
55	5129	right	30	12	16	-	46.67	58	
55	5200	right	45	18	16	-	70.00	73	
56	50	right	60	24	16	-	93.33	88	
56	220	right	60	24	16	-	93.33	88	
56	430	right	10	4	16	15.56	-	38	
56	500	right	15	6	16	23.33	23.33	43	
56	530	right	15	6	16	23.33	23.33	43	
56	570	left	6	-	16	8.00	-	30	
56	780	right	45	18	16	-	70.00	73	
56	780	left	6	-	16	8.00	-	30	
56	900	right	30	12	16	-	46.67	58	
56	980	right	75	30	16	-	116.67	103	
SUBTOTAL 1 =				382	640	276	1,423	2,097	

EB MILE MARKER	PLUS	EASTBOUND LOCATION		416.0610	416.0620	416.1715	416.1725	690.0250	REMARKS
		DRILLED TIE BARS EACH	DRILLED DOWEL BARS EACH	CONCRETE PAVEMENT REPAIR SHES SY	CONCRETE PAVEMENT REPLACEMENT SHES SY	SAWING CONCRETE LF			
56	1130	right	60	24	16	-	93.33	88	
56	1270	right	105	42	16	-	163.33	133	
56	1400	right	30	12	16	-	46.67	58	
56	1600	left	6	-	16	8.00	-	30	
56	1800	right	60	24	16	-	93.33	88	
56	1890	right	30	12	16	-	46.67	58	
56	1920	right	12	5	16	18.67	-	40	
56	1920	left	6	-	16	8.00	-	30	
56	1950	right	45	18	16	-	70.00	73	
56	2000	left	6	-	16	8.00	-	30	
56	2060	right	30	12	16	-	46.67	58	
56	2088	right	12	5	16	18.67	-	40	
56	2110	left	6	-	16	8.00	-	30	
56	2144	right	12	5	16	18.67	-	40	
56	2200	left	6	-	16	8.00	-	30	
56	2220	right	45	18	16	-	70.00	73	
56	2370	right	75	30	16	-	116.67	103	
56	2430	left	6	-	16	8.00	-	30	
56	2566	right	30	12	16	-	46.67	58	
56	2590	left	6	-	16	8.00	-	30	
56	2640	right	60	24	16	-	93.33	88	
56	2740	right	45	18	16	-	70.00	73	
56	2950	right	45	18	16	-	70.00	73	
56	2980	left	6	-	16	8.00	-	30	
56	3120	right	30	12	16	-	46.67	58	
56	3190	right	30	12	16	-	46.67	58	
56	3500	right	75	30	16	-	116.67	103	
56	3620	right	45	18	16	-	70.00	73	
56	3670	left	6	-	16	8.00	-	30	
56	3730	right	15	6	16	23.33	23.33	43	
56	3730	left	6	-	16	8.00	-	30	
56	3750	left	6	-	16	8.00	-	30	
56	3800	right	15	6	16	23.33	23.33	43	
56	3860	right	30	12	16	-	46.67	58	
56	3890	left	6	-	16	8.00	-	30	
56	3950	right	20	8	16	-	31.11	48	
56	4100	right	30	12	16	-	46.67	58	
56	4266	left	6	-	16	8.00	-	30	
56	4280	both	6	-	32	17.33	-	58	
56	4350	left	6	-	16	8.00	-	30	
SUBTOTAL 2 =				395	656	232	1,478	2,164	

CONCRETE REPAIR SUMMARY (CONTINUED)

CONCRETE REPAIR SUMMARY (CONTINUED)

CONCRETE REPAIR SUMMARY (CONTINUED)										CONCRETE REPAIR SUMMARY (CONTINUED)											
EB MILE		EASTBOUND LOCATION			416.0610	416.0620	416.1715	416.1725	690.0250	REMARKS	EB MILE		EASTBOUND LOCATION			416.0610	416.0620	416.1715	416.1725	690.0250	REMARKS
MARKER	PLUS	SIDE	LENGTH	DRILLED TIE BARS EACH	DRILLED DOWEL BARS EACH	CONCRETE PAVEMENT REPAIR SHES SY	CONCRETE PAVEMENT REPLACEMENT SHES SY	SAWING CONCRETE LF		MARKER	PLUS	SIDE	LENGTH	DRILLED TIE BARS EACH	DRILLED DOWEL BARS EACH	CONCRETE PAVEMENT REPAIR SHES SY	CONCRETE PAVEMENT REPLACEMENT SHES SY	SAWING CONCRETE LF			
56	4444	right	30	12	16	-	46.67	58		57	3110	right	30	12	16	-	46.67	58			
56	4566	right	6	-	16	9.33	-	34		57	3555	right	6	-	16	9.33	-	34			
56	4610	right	6	-	16	9.33	-	34		57	3666	right	30	12	16	-	46.67	58			
56	4655	right	6	-	16	9.33	-	34		57	3699	right	8	4	16	12.44	-	36			
56	4766	right	6	-	16	9.33	-	34		57	3800	right	8	4	16	12.44	-	36			
56	4799	left	6	-	16	8.00	-	30		57	3910	right	45	18	16	-	70.00	73			
56	4830	left	6	-	16	8.00	-	30		57	3910	left	6	-	16	8.00	-	30			
56	4850	right	12	5	16	18.67	-	40		57	3955	left	6	-	16	8.00	-	30			
56	4888	left	6	-	16	8.00	-	30		57	3999	right	6	-	16	9.33	-	34			
56	4900	left	6	-	16	8.00	-	30		57	4030	right	6	-	16	9.33	-	34			
57	100	right	45	18	16	-	70.00	73		57	4040	both	6	-	32	17.33	-	58			
57	200	right	30	12	16	-	46.67	58		57	4100	right	6	-	16	9.33	-	34			
57	310	left	6	-	16	8.00	-	30		57	4177	right	8	4	16	12.44	-	36			
57	310	right	15	6	16	23.33	23.33	43		57	4222	left	6	-	16	8.00	-	30			
57	355	right	15	6	16	23.33	23.33	43		57	4299	left	6	-	16	8.00	-	30			
57	355	left	6	-	16	8.00	-	30		57	4315	right	6	-	16	9.33	-	34			
57	400	right	15	6	16	23.33	23.33	43		57	4355	right	45	18	16	-	70.00	73			
57	630	right	135	54	16	-	210.00	163		57	4577	right	12	5	16	18.67	-	40			
57	1010	right	90	36	16	-	140.00	118		57	4630	left	6	-	16	8.00	-	30			
57	1188	right	6	-	16	9.33	-	34		57	4377	right	12	5	16	18.67	-	40			
57	1222	right	75	30	16	-	116.67	103		57	4699	left	6	-	16	8.00	-	30			
57	1400	right	6	-	16	9.33	-	34		57	4780	left	6	-	16	8.00	-	30			
57	1477	right	60	24	16	-	93.33	88		57	4810	left	6	-	16	8.00	-	30			
57	1555	right	6	-	16	9.33	-	34		57	4920	right	6	-	16	9.33	-	34			
57	1720	right	60	24	16	-	93.33	88		57	4930	right	6	-	16	9.33	-	34			
57	1800	left	6	-	16	8.00	-	30		57	5050	right	30	12	16	-	46.67	58			
57	1930	left	6	-	16	8.00	-	30		57	5100	right	45	18	16	-	70.00	73			
57	1940	right	12	5	16	18.67	-	40		57	5100	left	6	-	16	8.00	-	30			
57	1950	right	12	5	16	18.67	-	40		57	5140	right	6	-	16	9.33	-	34			
57	1970	right	6	-	16	9.33	-	34		58	160	right	6	-	16	9.33	-	34			
57	2020	right	30	12	16	-	46.67	58		58	300	right	15	6	16	23.33	23.33	43			
57	2090	both	6	-	32	17.33	-	58		58	310	left	6	-	16	8.00	-	30			
57	2400	left	6	-	16	8.00	-	30		58	320	left	6	-	16	8.00	-	30			
57	2400	right	30	12	16	-	46.67	58		58	330	right	30	12	16	-	46.67	58			
57	2700	left	6	-	16	8.00	-	30		58	366	both	6	-	32	17.33	-	58			
57	2740	left	6	-	16	8.00	-	30		58	430	left	6	-	16	8.00	-	30			
57	2750	right	35	14	16	-	54.44	63		58	750	right	12	5	16	18.67	-	40			
57	2788	left	6	-	16	8.00	-	30		58	790	right	15	6	16	23.33	23.33	43			
57	2833	left	6	-	16	8.00	-	30		58	850	right	15	6	16	23.33	23.33	43			
57	2920	left	6	-	16	8.00	-	30		58	960	right	15	6	16	23.33	23.33	43			
SUBTOTAL 3 =				281	656	330	1,034	1,927		SUBTOTAL 4 =				153	672	401	490	1,633			

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CONCRETE REPAIR SUMMARY (CONTINUED)

CONCRETE REPAIR SUMMARY (CONTINUED)

EB MILE MARKER	PLUS	EASTBOUND LOCATION SIDE	LENGTH	416.0610	416.0620	416.1715	416.1725	690.0250	REMARKS
				DRILLED TIE BARS EACH	DRILLED DOWEL BARS EACH	CONCRETE PAVEMENT REPAIR SHES SY	CONCRETE PAVEMENT REPLACEMENT SHES SY	SAWING CONCRETE LF	
58	1000	right	6	-	16	9.33	-	34	
58	1020	right	12	5	16	18.67	-	40	
58	1050	right	15	6	16	23.33	23.33	43	
58	1200	right	12	5	16	18.67	-	40	
58	1300	right	30	12	16	-	46.67	58	
58	1350	right	90	36	16	-	140.00	118	
58	1380	right	6	-	16	9.33	-	34	
58	1400	both	6	-	32	17.33	-	58	
58	1450	right	30	12	16	-	46.67	58	
58	1450	left	6	-	16	8.00	-	30	
58	1515	left	6	-	16	8.00	-	30	
58	1515	right	35	14	16	-	54.44	63	
58	1575	right	15	6	16	23.33	23.33	43	
58	1600	right	12	5	16	18.67	-	40	
58	1699	right	45	18	16	-	70.00	73	
58	1900	right	6	-	16	9.33	-	34	
58	2000	right	6	-	16	9.33	-	34	
58	2050	right	30	12	16	-	46.67	58	
58	2100	both	6	-	32	17.33	-	58	
58	2160	right	15	6	16	23.33	23.33	43	
58	2300	right	75	30	16	-	116.67	103	
58	2400	right	30	12	16	-	46.67	58	
58	2488	right	6	-	16	9.33	-	34	
58	2600	right	6	-	16	9.33	-	34	
58	2650	right	6	-	16	9.33	-	34	
58	2700	both	6	-	32	17.33	-	58	
58	2850	right	30	12	16	-	46.67	58	
58	3000	right	6	-	16	9.33	-	34	
58	3120	right	20	8	16	-	31.11	48	
58	3200	right	6	-	16	9.33	-	34	
58	3400	right	8	4	16	12.44	-	36	
58	3500	right	60	24	16	-	93.33	88	
58	3800	right	30	12	16	-	46.67	58	
58	3860	right	45	18	16	-	70.00	73	
58	3960	right	15	6	16	23.33	23.33	43	
58	4000	right	15	6	16	23.33	23.33	43	
58	4120	right	30	12	16	-	46.67	58	
58	4200	right	6	-	16	9.33	-	34	
58	4260	right	6	-	16	9.33	-	34	
58	4360	right	6	-	16	9.33	-	34	
SUBTOTAL 5 =				281	688	365	1,019	1,985	

EB MILE MARKER	PLUS	EASTBOUND LOCATION SIDE	LENGTH	416.0610	416.0620	416.1715	416.1725	690.0250	REMARKS
				DRILLED TIE BARS EACH	DRILLED DOWEL BARS EACH	CONCRETE PAVEMENT REPAIR SHES SY	CONCRETE PAVEMENT REPLACEMENT SHES SY	SAWING CONCRETE LF	
58	4375	right	6	-	16	9.33	-	34	
58	4480	right	6	-	16	9.33	-	34	
58	4500	right	6	-	16	9.33	-	34	
58	4520	right	6	-	16	9.33	-	34	
58	4600	right	30	12	16	-	46.67	58	
58	4620	right	6	-	16	9.33	-	34	
58	4700	right	30	12	16	-	46.67	58	
58	4800	right	30	12	16	-	46.67	58	
58	4900	right	6	-	16	9.33	-	34	
59	18	right	6	-	16	9.33	-	34	
59	30	left	6	-	16	8.00	-	30	
59	80	right	30	12	16	-	46.67	58	
59	170	right	6	-	16	9.33	-	34	
59	222	right	6	-	16	9.33	-	34	
59	290	right	30	12	16	-	46.67	58	
59	450	right	6	-	16	9.33	-	34	
59	460	right	6	-	16	9.33	-	34	
59	480	left	6	-	16	8.00	-	30	
59	530	right	6	-	16	9.33	-	34	
59	588	right	30	12	16	-	46.67	58	
59	666	right	15	6	16	23.33	23.33	43	
59	733	right	15	6	16	23.33	23.33	43	
59	733	left	6	-	16	8.00	-	30	
59	800	right	30	12	16	-	46.67	58	
59	827	right	30	12	16	-	46.67	58	
59	827	left	6	-	16	8.00	-	30	
59	888	right	6	-	16	9.33	-	34	
59	922	right	6	-	16	9.33	-	34	
59	1000	both	6	-	32	17.33	-	58	
59	1020	right	6	-	16	9.33	-	34	
59	1070	right	6	-	16	9.33	-	34	
59	1090	left	6	-	16	8.00	-	30	
59	1150	right	30	12	16	-	46.67	58	
59	1250	right	6	-	16	9.33	-	34	
59	1260	left	6	-	16	8.00	-	30	
59	1300	right	12	5	16	18.67	-	40	
59	1444	left	6	-	16	8.00	-	30	
59	1255	right	8	4	16	12.44	-	36	
59	1530	right	45	18	16	-	70.00	73	
59	1600	right	75	30	16	-	116.67	103	
SUBTOTAL 6 =				177	656	310	653	1,706	

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CONCRETE REPAIR SUMMARY (CONTINUED)

CONCRETE REPAIR SUMMARY (CONTINUED)

CONCRETE REPAIR SUMMARY (CONTINUED)										CONCRETE REPAIR SUMMARY (CONTINUED)													
		416.0610		416.0620		416.1715		416.1725		690.0250				416.0610		416.0620		416.1715		416.1725		690.0250	
		EASTBOUND		DRILLED TIE		DRILLED		CONCRETE		CONCRETE				EASTBOUND		DRILLED TIE		DRILLED		CONCRETE		CONCRETE	
EB MILE	PLUS	LOCATION	LENGTH	BARS	DOWEL BARS	PAVEMENT	REPLACEMENT	REPAIR SHES	SHES	SAWING	REMARKS	EB MILE	PLUS	LOCATION	LENGTH	BARS	DOWEL BARS	PAVEMENT	REPLACEMENT	REPAIR SHES	SHES	SAWING	REMARKS
MARKER		SIDE		EACH	EACH	SY	SY	LF		CONCRETE		MARKER		SIDE		EACH	EACH	SY	SY	LF			
59	1700	right	30	12	16	-	46.67	58				60	1585	right	30	12	16	-	46.67	58			
59	1800	right	6	-	16	9.33	-	34				60	1644	both	6	-	32	17.33	-	58			
59	2100	right	6	-	16	9.33	-	34				60	1800	right	30	12	16	-	46.67	58			
59	2110	right	6	-	16	9.33	-	34				60	1850	right	8	4	16	12.44	-	36			
59	2266	right	6	-	16	9.33	-	34				60	1900	right	6	-	16	9.33	-	34			
59	2330	right	6	-	16	9.33	-	34				60	1955	right	30	12	16	-	46.67	58			
59	2360	right	6	-	16	9.33	-	34				60	2040	right	6	-	16	9.33	-	34			
59	2370	left	6	-	16	8.00	-	30				60	2060	both	6	-	32	17.33	-	58			
59	2610	right	30	12	16	-	46.67	58				60	2255	right	30	12	16	-	46.67	58			
59	2744	right	6	-	16	9.33	-	34				60	2355	left	6	-	16	8.00	-	30			
59	3200	right	6	-	16	9.33	-	34				60	3100	right	6	-	16	9.33	-	34			
59	3555	right	15	6	16	23.33	23.33	43				60	3344	right	30	12	16	-	46.67	58			
59	3800	right	30	12	16	-	46.67	58				60	3450	right	30	12	16	-	46.67	58			
59	3860	left	6	-	16	8.00	-	30				60	3500	right	30	12	16	-	46.67	58			
59	3888	right	30	12	16	-	46.67	58				60	3700	right	6	-	16	9.33	-	34			
59	4090	right	6	-	16	9.33	-	34				60	3777	right	15	6	16	23.33	23.33	43			
59	4240	right	6	-	16	9.33	-	34				60	3850	right	6	-	16	9.33	-	34			
59	4370	right	6	-	16	9.33	-	34				60	3900	left	6	-	16	8.00	-	30			
59	4500	right	30	12	16	-	46.67	58				60	4300	right	30	12	16	-	46.67	58			
59	4590	right	20	8	16	-	31.11	48				60	4420	left	6	-	16	8.00	-	30			
59	4620	right	6	-	16	9.33	-	34				60	4500	both	6	-	32	17.33	-	58			
59	4750	right	90	36	16	-	140.00	118				60	4600	right	6	-	16	9.33	-	34			
59	5040	right	30	12	16	-	46.67	58				60	4700	right	12	5	16	18.67	-	40			
60	100	right	60	24	16	-	93.33	88				60	4740	right	15	6	16	23.33	23.33	43			
60	188	right	6	-	16	9.33	-	34				60	4760	right	10	4	16	15.56	-	38			
60	233	right	30	12	16	-	46.67	58				60	4850	both	6	-	32	17.33	-	58			
60	355	right	15	6	16	23.33	23.33	43				60	4940	right	75	30	16	-	116.67	103			
60	500	right	45	18	16	-	70.00	73				60	5100	right	6	-	16	9.33	-	34			
60	588	right	75	30	16	-	116.67	103				61	5	right	60	24	16	-	93.33	88			
60	620	left	6	-	16	8.00	-	30				61	450	right	6	-	16	9.33	-	34			
60	920	right	15	6	16	23.33	23.33	43				61	460	both	6	-	32	17.33	-	58			
60	955	right	30	12	16	-	46.67	58				61	570	left	6	-	16	8.00	-	30			
60	1044	right	6	-	16	9.33	-	34				61	650	right	30	12	16	-	46.67	58			
60	1111	right	30	12	16	-	46.67	58				61	750	right	6	-	16	9.33	-	34			
60	1177	right	45	18	16	-	70.00	73				61	850	right	30	12	16	-	46.67	58			
60	1200	left	6	-	16	8.00	-	30				61	950	right	6	-	16	9.33	-	34			
60	1444	left	6	-	16	8.00	-	30				61	1300	right	6	-	16	9.33	-	34			
60	1460	left	6	-	16	8.00	-	30				61	1600			0	16	0.00	-	28			
60	1490	left	6	-	16	8.00	-	30				61	1900			0	16	0.00	-	28			
60	1555	right	12	5	16	18.67	-	40				61	2200	right	30	12	16	-	46.67	58			
SUBTOTAL 7 =				265	640	275	1,011	1,880				SUBTOTAL 8 =				211	720	315	770	1,869			

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CONCRETE REPAIR SUMMARY (CONTINUED)

CONCRETE REPAIR SUMMARY (CONTINUED)

EB MILE MARKER	PLUS	EASTBOUND LOCATION		DRILLED TIE BARS EACH	DRILLED DOWEL BARS EACH	CONCRETE PAVEMENT REPAIR SHES SY	CONCRETE PAVEMENT REPLACEMENT SHES SY	SAWING CONCRETE LF	REMARKS
		SIDE	LENGTH						
61	2300	right	60	24	16	-	93.33	88	
61	2300	left	6	-	16	8.00	-	30	
61	2420	right	30	12	16	-	46.67	58	
61	2620	left	6	-	16	8.00	-	30	
61	2666	both	6	-	32	17.33	-	58	
61	2700	left	6	-	16	8.00	-	30	
61	2800	left	6	-	16	8.00	-	30	
61	2969	right	15	6	16	23.33	23.33	43	
61	3010	both	6	-	32	17.33	-	58	
61	3170	right	20	8	16	-	31.11	48	
61	3310	right	6	-	16	9.33	-	34	
61	3360	right	6	-	16	9.33	-	34	
61	3370	right	6	-	16	9.33	-	34	
61	3420	both	6	-	32	17.33	-	58	
61	3525	left	6	-	16	8.00	-	30	
61	3666	right	45	18	16	-	70.00	73	
61	3820	both	6	-	32	17.33	-	58	
61	3833	right	6	-	16	9.33	-	34	
61	3860	both	6	-	32	17.33	-	58	
61	3870	both	6	-	32	17.33	-	58	
61	4000	right	30	12	16	-	46.67	58	
61	4130	right	15	6	16	23.33	23.33	43	
61	4400	right	6	-	16	9.33	-	34	
61	4970	left	6	-	16	8.00	-	30	
61	5050	right	10	4	16	15.56	-	38	
62	269	right	6	-	16	9.33	-	34	
62	280	right	6	-	16	9.33	-	34	
62	466	right	10	4	16	15.56	-	38	
62	510	right	30	12	16	-	46.67	58	
62	650	left	6	-	16	8.00	-	30	
62	744	right	8	4	16	12.44	-	36	
62	880	right	6	-	16	9.33	-	34	
62	910	right	30	12	16	-	46.67	58	
62	1000	left	6	-	16	8.00	-	30	
62	1130	left	6	-	16	8.00	-	30	
62	1277	right	6	-	16	9.33	-	34	
62	1315	right	30	12	16	-	46.67	58	
62	1380	right	15	6	16	23.33	23.33	43	
62	1590	right	45	18	16	-	70.00	73	
62	1730	right	6	-	16	9.33	-	34	
SUBTOTAL 9 =				140	704	374	498	1,664	

EB MILE MARKER	PLUS	EASTBOUND LOCATION		DRILLED TIE BARS EACH	DRILLED DOWEL BARS EACH	CONCRETE PAVEMENT REPAIR SHES SY	CONCRETE PAVEMENT REPLACEMENT SHES SY	SAWING CONCRETE LF	REMARKS
		SIDE	LENGTH						
62	1790	right	75	30	16	-	116.67	103	
62	1860	left	10	4	16	13.33	-	34	
62	2060	right	45	18	16	-	70.00	73	
62	2160	right	30	12	16	-	46.67	58	
62	2260	right	20	8	16	-	31.11	48	
62	2400	both	6	-	32	17.33	-	58	
62	2440	right	6	-	16	9.33	-	34	
62	2480	right	6	-	16	9.33	-	34	
62	2699	left	6	-	16	8.00	-	30	
62	2800	right	8	4	16	12.44	-	36	
62	2800	left	6	-	16	8.00	-	30	
62	2820	left	6	-	16	8.00	-	30	
62	2930	right	6	-	16	9.33	-	34	
62	3000	left	6	-	16	8.00	-	30	
62	3028	right	8	4	16	12.44	-	36	
62	3028	left	6	-	16	8.00	-	30	
62	3035	right	6	-	16	9.33	-	34	
62	3092	right	6	-	16	9.33	-	34	
62	3230	right	6	-	16	9.33	-	34	
62	3266	right	45	18	16	-	70.00	73	
62	3310	left	6	-	16	8.00	-	30	
62	3333	left	6	-	16	8.00	-	30	
62	3400	right	6	-	16	9.33	-	34	
62	3510	right	6	-	16	9.33	-	34	
62	3555	right	15	6	16	23.33	23.33	43	
62	3820	left	8	4	16	10.67	-	32	
62	3866	right	8	4	16	12.44	-	36	
62	3899	left	8	4	16	10.67	-	32	
62	4410	left	6	-	16	8.00	-	30	
62	4499	right	6	-	16	9.33	-	34	
62	4600	left	6	-	16	8.00	-	30	
62	4669	right	6	-	16	9.33	-	34	
62	4999	right	30	12	16	-	46.67	58	
62	5140	right	15	6	16	23.33	23.33	43	
63	300	left	6	-	16	8.00	-	30	
63	569	left	8	4	16	10.67	-	32	
63	700	left	6	-	16	8.00	-	30	
63	840	right	6	-	16	9.33	-	34	
63	888	left	6	-	16	8.00	-	30	
63	940	right	6	-	16	9.33	-	34	
SUBTOTAL 10 =				138	656	355	428	1,563	

CONCRETE REPAIR SUMMARY (CONTINUED)

CONCRETE REPAIR SUMMARY (CONTINUED)

CONCRETE REPAIR SUMMARY (CONTINUED)										CONCRETE REPAIR SUMMARY (CONTINUED)													
		416.0610		416.0620		416.1715		416.1725		690.0250				416.0610		416.0620		416.1715		416.1725		690.0250	
EB MILE MARKER	PLUS	EASTBOUND LOCATION		DRILLED TIE BARS	DRILLED DOWEL BARS	CONCRETE PAVEMENT REPAIR SHES	CONCRETE PAVEMENT REPLACEMENT SHES	SAWING CONCRETE	REMARKS	WB MILE MARKER	MINUS	WESTBOUND LOCATION		DRILLED TIE BARS	DRILLED DOWEL BARS	CONCRETE PAVEMENT REPAIR SHES	CONCRETE PAVEMENT REPLACEMENT SHES	SAWING CONCRETE	REMARKS				
		SIDE	LENGTH	EACH	EACH	SY	SY	LF				SIDE	LENGTH	EACH	EACH	SY	SY	LF					
63	1111	left	6	-	16	8.00	-	30		71.6	225	right	6	-	16	9.33	-	34					
63	1150	left	6	-	16	8.00	-	30		71.6	460	left	6	-	16	8.00	-	30					
63	1177	right	30	12	16	-	46.67	58		71.6	490	right	6	-	16	9.33	-	34					
63	1220	left	6	-	16	8.00	-	30		71.6	510	left	6	-	16	8.00	-	30					
63	1320	left	6	-	16	8.00	-	30		71.6	770	right	6	-	16	9.33	-	34					
63	1400	left	6	-	16	8.00	-	30		71.6	1030	right	6	-	16	9.33	-	34					
63	1480	right	30	12	16	-	46.67	58		71.6	1055	right	60	24	16	-	93.33	88					
63	1555	right	15	6	16	23.33	23.33	43		71.6	1090	left	6	-	16	8.00	-	30					
63	1944	right	6	-	16	9.33	-	34		71.6	1315	right	15	6	16	23.33	23.33	43					
63	2030	left	6	-	16	8.00	-	30		71.6	1390	right	30	12	16	-	46.67	58					
63	2069	right	6	-	16	9.33	-	34		71.6	1440	right	30	12	16	-	46.67	58					
63	2400	left	6	-	16	8.00	-	30		71.6	1560	right	8	4	16	12.44	-	36					
63	2477	right	6	-	16	9.33	-	34		71.6	1595	right	8	4	16	12.44	-	36					
63	2666	right	6	-	16	9.33	-	34		71.6	1745	right	8	4	16	12.44	-	36					
63	2850	left	6	-	16	8.00	-	30		71.6	1760	right	8	4	16	12.44	-	36					
63	2900	left	6	-	16	8.00	-	30		71.6	1780	right	10	4	16	15.56	-	38					
63	2999	right	6	-	16	9.33	-	34		71.6	1940	right	45	18	16	-	70.00	73					
63	3150	right	6	-	16	9.33	-	34		71.6	2025	right	6	-	16	9.33	-	34					
63	3277	right	6	-	16	9.33	-	34		71.6	2110	right	15	6	16	23.33	23.33	43					
63	3333	right	6	-	16	9.33	-	34		71.6	2125	right	15	6	16	23.33	23.33	43					
63	3488	right	15	6	16	23.33	23.33	43		71.6	2130	left	6	-	16	8.00	-	30					
63	3630	both	6	-	32	17.33	-	58		71.6	2250	right	10	4	16	15.56	-	38					
63	3850	left	6	-	16	8.00	-	30		71.6	2315	right	6	-	16	9.33	-	34					
63	3940	right	45	18	16	-	70.00	73		71.6	2370	right	6	-	16	9.33	-	34					
										71.6	2490	right	10	4	16	15.56	-	38					
										71.6	2525	right	6	-	16	9.33	-	34					
										71.6	2665	left	6	-	16	8.00	-	30					
										71.6	2780	left	6	-	16	8.00	-	30					
										71.6	2875	right	15	6	16	23.33	23.33	43					
										71.6	2925	left	6	-	16	8.00	-	30					
										71.6	3010	right	8	4	16	12.44	-	36					
										71	155	left	6	-	16	8.00	-	30					
										71	355	right	6	-	16	9.33	-	34					
										71	385	right	15	6	16	23.33	23.33	43					
										71	550	right	6	-	16	9.33	-	34					
										71	745	right	6	-	16	9.33	-	34					
										71	790	right	6	-	16	9.33	-	34					
										71	865	right	6	-	16	9.33	-	34					
										71	1050	right	45	18	16	-	70.00	73					
										71	1130	left	6	-	16	8.00	-	30					
SUBTOTAL 11 =			54	400	219	210	905			SUBTOTAL 12 =			146	640	419	443	1,571						

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CONCRETE REPAIR SUMMARY (CONTINUED)

CONCRETE REPAIR SUMMARY (CONTINUED)

WB MILE MARKER	MINUS	WESTBOUND LOCATION		416.0610	416.0620	416.1715	416.1725	690.0250	REMARKS	
		DRILLED TIE BARS EACH	DRILLED DOWEL BARS EACH	CONCRETE PAVEMENT REPAIR SHES SY	CONCRETE PAVEMENT REPLACEMENT SHES SY	SAWING CONCRETE LF				
71	1260	left	6	-	16	8.00	-	30		
71	1280	left	6	-	16	8.00	-	30		
71	1295	right	8	4	16	12.44	-	36		
71	1310	right	6	-	16	9.33	-	34		
71	1430	right	6	-	16	9.33	-	34		
71	1455	right	6	-	16	9.33	-	34		
71	1540	left	6	-	16	8.00	-	30		
71	1650	right	6	-	16	9.33	-	34		
71	1715	right	8	4	16	12.44	-	36		
71	1715	left	6	-	16	8.00	-	30		
71	1745	left	6	-	16	8.00	-	30		
71	1780	right	6	-	16	9.33	-	34		
71	1810	right	6	-	16	9.33	-	34		
71	1830	left	6	-	16	8.00	-	30		
71	1865	right	8	4	16	12.44	-	36		
71	1980	right	6	-	16	9.33	-	34		
71	2120	right	6	-	16	9.33	-	34		
71	2270	left	6	-	16	8.00	-	30		
71	2320	right	6	-	16	9.33	-	34		
71	2380	left	6	-	16	8.00	-	30		
71	2450	left	6	-	16	8.00	-	30		
71	2490	right	10	4	16	15.56	-	38		
71	2515	left	6	-	16	8.00	-	30		
71	2560	right	6	-	16	9.33	-	34		
71	2660	left	6	-	16	8.00	-	30		
71	2750	right	6	-	16	9.33	-	34		
71	2790	left	6	-	16	8.00	-	30		
71	2820	left	6	-	16	8.00	-	30		
71	2880	left	6	-	16	8.00	-	30		
71	2975	left	6	-	16	8.00	-	30		
71	3050	left	6	-	16	8.00	-	30		
71	3090	right	8	4	16	12.44	-	36		
71	3180	left	6	-	16	8.00	-	30		
71	3230	left	6	-	16	8.00	-	30		
71	3300	left	6	-	16	8.00	-	30		
71	3380	left	6	-	16	8.00	-	30		
71	3410	right	6	-	16	9.33	-	34		
71	3430	right	8	4	16	12.44	-	36		
71	3935	right	30	12	16	-	46.67	58		
71	4000	right	15	6	16	23.33	23.33	43		
SUBTOTAL 13 =				42	640	373	70	1,327		

WB MILE MARKER	MINUS	WESTBOUND LOCATION		416.0610	416.0620	416.1715	416.1725	690.0250	REMARKS	
		DRILLED TIE BARS EACH	DRILLED DOWEL BARS EACH	CONCRETE PAVEMENT REPAIR SHES SY	CONCRETE PAVEMENT REPLACEMENT SHES SY	SAWING CONCRETE LF				
71	4030	right	6	-	16	9.33	-	34		
71	4200	left	6	-	16	8.00	-	30		
71	4250	left	6	-	16	8.00	-	30		
71	4325	left	6	-	16	8.00	-	30		
71	4390	left	6	-	16	8.00	-	30		
71	4405	right	15	6	16	23.33	23.33	43		
71	4435	right	6	-	16	9.33	-	34		
71	4625	both	6	-	32	17.33	-	58		
71	4660	right	6	-	16	9.33	-	34		
71	4675	left	6	-	16	8.00	-	30		
71	4685	left	6	-	16	8.00	-	30		
71	4815	left	6	-	16	8.00	-	30		
71	4865	right	6	-	16	9.33	-	34		
71	4885	left	6	-	16	8.00	-	30		
71	4930	left	6	-	16	8.00	-	30		
71	5050	right	75	30	16	-	116.67	103		
71	5225	right	6	-	16	9.33	-	34		
71	5250	right	6	-	16	9.33	-	34		
70	2185	right	30	12	16	-	46.67	58		
70	2270	right	6	-	16	9.33	-	34		
70	2290	right	6	-	16	9.33	-	34		
70	2365	right	6	-	16	9.33	-	34		
70	2430	right	6	-	16	9.33	-	34		
70	2740	left	6	-	16	8.00	-	30		
70	2875	right	6	-	16	9.33	-	34		
70	2960	right	6	-	16	9.33	-	34		
70	3030	left	6	-	16	8.00	-	30		
70	3040	left	6	-	16	8.00	-	30		
70	3180	left	6	-	16	8.00	-	30		
70	3200	right	6	-	16	9.33	-	34		
70	3440	right	6	-	16	9.33	-	34		
70	3460	right	6	-	16	9.33	-	34		
70	3610	right	6	-	16	9.33	-	34		
70	3880	right	6	-	16	9.33	-	34		
70	4330	right	6	-	16	9.33	-	34		
70	4800	right	6	-	16	9.33	-	34		
70	4810	right	6	-	16	9.33	-	34		
70	4960	right	6	-	16	9.33	-	34		
70	5220	left	6	-	16	8.00	-	30		
70	5230	right	6	-	16	9.33	-	34		
SUBTOTAL 14 =				48	656	358	187	1,430		

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CONCRETE REPAIR SUMMARY (CONTINUED)

CONCRETE REPAIR SUMMARY (CONTINUED)

WB MILE MARKER	MINUS	WESTBOUND LOCATION		416.0610	416.0620	416.1715	416.1725	690.0250	REMARKS
		DRILLED TIE BARS EACH	DRILLED DOWEL BARS EACH	CONCRETE PAVEMENT REPAIR SHES SY	CONCRETE PAVEMENT REPLACEMENT SHES SY	SAWING CONCRETE LF			
69	0	left	6	-	16	8.00	-	30	
69	10	left	6	-	16	8.00	-	30	
69	185	right	6	-	16	9.33	-	34	
69	210	left	6	-	16	8.00	-	30	
69	340	right	6	-	16	9.33	-	34	
69	370	left	6	-	16	8.00	-	30	
69	390	left	6	-	16	8.00	-	30	
69	640	left	6	-	16	8.00	-	30	
69	715	right	6	-	16	9.33	-	34	
69	740	left	6	-	16	8.00	-	30	
69	815	left	6	-	16	8.00	-	30	
69	850	left	6	-	16	8.00	-	30	
69	1110	both	6	-	32	17.33	-	58	
69	1150	right	6	-	16	9.33	-	34	
69	1165	right	6	-	16	9.33	-	34	
69	1185	both	6	-	32	17.33	-	58	
69	1200	left	6	-	16	8.00	-	30	
69	1310	right	6	-	16	9.33	-	34	
69	1380	right	6	-	16	9.33	-	34	
69	1445	left	6	-	16	8.00	-	30	
69	1460	left	6	-	16	8.00	-	30	
69	1540	right	6	-	16	9.33	-	34	
69	1560	right	6	-	16	9.33	-	34	
69	1615	left	6	-	16	8.00	-	30	
69	3060	right	20	8	16	-	31.11	48	
69	3160	right	6	-	16	9.33	-	34	
69	3310	right	6	-	16	9.33	-	34	
69	3350	left	6	-	16	8.00	-	30	
69	3420	right	20	8	16	-	31.11	48	
69	3550	left	6	-	16	8.00	-	30	
69	3590	right	6	-	16	9.33	-	34	
69	3750	right	6	-	16	9.33	-	34	
69	4070	left	6	-	16	8.00	-	30	
69	4165	right	6	-	16	9.33	-	34	
69	4240	right	6	-	16	9.33	-	34	
69	4285	right	6	-	16	9.33	-	34	
69	4345	right	6	-	16	9.33	-	34	
69	4380	right	6	-	16	9.33	-	34	
69	4430	left	8	4	16	10.67	-	32	
69	4480	right	6	-	16	9.33	-	34	
SUBTOTAL 15 =				20	672	351	62	1,370	

WB MILE MARKER	MINUS	WESTBOUND LOCATION		416.0610	416.0620	416.1715	416.1725	690.0250	REMARKS
		DRILLED TIE BARS EACH	DRILLED DOWEL BARS EACH	CONCRETE PAVEMENT REPAIR SHES SY	CONCRETE PAVEMENT REPLACEMENT SHES SY	SAWING CONCRETE LF			
69	4550	right	8	4	16	12.44	-	36	
69	4625	right	6	-	16	9.33	-	34	
69	4735	right	8	4	16	12.44	-	36	
69	4925	right	6	-	16	9.33	-	34	
69	4980	right	6	-	16	9.33	-	34	
69	5105	right	45	18	16	-	70.00	73	
68	260	right	15	6	16	23.33	23.33	43	
68	370	left	6	-	16	8.00	-	30	
68	575	right	6	-	16	9.33	-	34	
68	600	left	6	-	16	8.00	-	30	
68	715	right	6	-	16	9.33	-	34	
68	800	left	6	-	16	8.00	-	30	
68	880	right	6	-	16	9.33	-	34	
68	920	right	6	-	16	9.33	-	34	
68	940	right	6	-	16	9.33	-	34	
68	960	right	6	-	16	9.33	-	34	
68	1225	right	6	-	16	9.33	-	34	
68	1490	right	6	-	16	9.33	-	34	
68	1810	right	6	-	16	9.33	-	34	
68	1855	right	6	-	16	9.33	-	34	
68	1925	left	6	-	16	8.00	-	30	
68	2115	right	15	6	16	23.33	23.33	43	
68	2160	left	6	-	16	8.00	-	30	
68	2240	left	6	-	16	8.00	-	30	
68	2850	right	8	4	16	12.44	-	36	
68	2875	right	8	4	16	12.44	-	36	
68	2890	right	30	12	16	-	46.67	58	
68	3590	left	6	-	16	8.00	-	30	
68	3620	right	6	-	16	9.33	-	34	
68	3715	left	6	-	16	8.00	-	30	
68	3840	right	6	-	16	9.33	-	34	
68	3880	left	6	-	16	8.00	-	30	
68	3930	right	10	4	16	15.56	-	38	
68	4190	right	6	-	16	9.33	-	34	
68	4250	right	6	-	16	9.33	-	34	
68	4360	right	6	-	16	9.33	-	34	
68	4380	right	6	-	16	9.33	-	34	
68	4460	right	6	-	16	9.33	-	34	
68	4480	right	6	-	16	9.33	-	34	
68	4650	left	6	-	16	8.00	-	30	
SUBTOTAL 16 =				62	640	388	163	1,413	

CONCRETE REPAIR SUMMARY (CONTINUED)

CONCRETE REPAIR SUMMARY (CONTINUED)

WB MILE MARKER	MINUS	WESTBOUND LOCATION		416.0610	416.0620	416.1715	416.1725	690.0250	REMARKS
		DRILLED TIE BARS EACH	DRILLED DOWEL BARS EACH	CONCRETE PAVEMENT REPAIR SHES SY	CONCRETE PAVEMENT REPLACEMENT SHES SY	SAWING CONCRETE LF			
68	4740	right	8	4	16	12.44	-	36	
68	4780	left	6	-	16	8.00	-	30	
68	4860	right	8	4	16	12.44	-	36	
68	4975	left	6	-	16	8.00	-	30	
68	5060	left	6	-	16	8.00	-	30	
68	5100	left	6	-	16	8.00	-	30	
67	55	right	6	-	16	9.33	-	34	
67	175	left	6	-	16	8.00	-	30	
67	310	right	6	-	16	9.33	-	34	
67	350	left	6	-	16	8.00	-	30	
67	575	left	6	-	16	8.00	-	30	
67	670	right	8	4	16	12.44	-	36	
67	1015	right	8	4	16	12.44	-	36	
67	1115	right	6	-	16	9.33	-	34	
67	1260	right	6	-	16	9.33	-	34	
67	1615	left	6	-	16	8.00	-	30	
67	1695	left	6	-	16	8.00	-	30	
67	1795	right	20	8	16	-	31.11	48	
67	2020	left	8	4	16	10.67	-	32	
67	2135	right	6	-	16	9.33	-	34	
67	2210	right	6	-	16	9.33	-	34	
67	2230	left	6	-	16	8.00	-	30	
67	2305	right	6	-	16	9.33	-	34	
67	2745	right	45	18	16	-	70.00	73	
67	2830	right	6	-	16	9.33	-	34	
67	2845	left	6	-	16	8.00	-	30	
67	2870	left	6	-	16	8.00	-	30	
67	3060	left	6	-	16	8.00	-	30	
67	3105	right	6	-	16	9.33	-	34	
67	3325	left	6	-	16	8.00	-	30	
67	3505	left	6	-	16	8.00	-	30	
67	3550	right	6	-	16	9.33	-	34	
67	3560	both	6	-	32	17.33	-	58	
67	3585	left	6	-	16	8.00	-	30	
67	3600	left	6	-	16	8.00	-	30	
67	3610	right	6	-	16	9.33	-	34	
67	3630	right	6	-	16	9.33	-	34	
67	3800	left	6	-	16	8.00	-	30	
67	3820	right	6	-	16	9.33	-	34	
67	3875	right	6	-	16	9.33	-	34	
SUBTOTAL 17 =				46	656	352	101	1,371	

WB MILE MARKER	MINUS	WESTBOUND LOCATION		416.0610	416.0620	416.1715	416.1725	690.0250	REMARKS
		DRILLED TIE BARS EACH	DRILLED DOWEL BARS EACH	CONCRETE PAVEMENT REPAIR SHES SY	CONCRETE PAVEMENT REPLACEMENT SHES SY	SAWING CONCRETE LF			
67	3930	left	6	-	16	8.00	-	30	
67	4180	left	6	-	16	8.00	-	30	
67	4290	left	6	-	16	8.00	-	30	
67	4345	right	6	-	16	9.33	-	34	
67	4375	left	6	-	16	8.00	-	30	
67	4415	right	6	-	16	9.33	-	34	
67	4435	right	6	-	16	9.33	-	34	
67	4615	right	8	4	16	12.44	-	36	
67	4645	right	8	4	16	12.44	-	36	
67	4660	left	6	-	16	8.00	-	30	
67	4745	left	6	-	16	8.00	-	30	
67	4770	right	6	-	16	9.33	-	34	
67	4790	left	6	-	16	8.00	-	30	
67	4970	right	6	-	16	9.33	-	34	
67	5080	right	6	-	16	9.33	-	34	
66	65	left	6	-	16	8.00	-	30	
66	340	left	6	-	16	8.00	-	30	
66	485	right	6	-	16	9.33	-	34	
66	545	right	6	-	16	9.33	-	34	
66	685	right	6	-	16	9.33	-	34	
66	760	left	6	-	16	8.00	-	30	
66	950	left	6	-	16	8.00	-	30	
66	1045	left	6	-	16	8.00	-	30	
66	1100	right	6	-	16	9.33	-	34	
66	1275	right	6	-	16	9.33	-	34	
66	1340	left	6	-	16	8.00	-	30	
66	1610	right	6	-	16	9.33	-	34	
66	1660	right	6	-	16	9.33	-	34	
66	1710	right	6	-	16	9.33	-	34	
66	1750	right	6	-	16	9.33	-	34	
66	1780	left	6	-	16	8.00	-	30	
66	2250	right	8	4	16	12.44	-	36	
66	2250	left	6	-	16	8.00	-	30	
66	2320	right	6	-	16	9.33	-	34	
66	2495	right	6	-	16	9.33	-	34	
66	2540	right	6	-	16	9.33	-	34	
66	2570	left	6	-	16	8.00	-	30	
66	2665	right	6	-	16	9.33	-	34	
66	2800	right	6	-	16	9.33	-	34	
66	2935	left	6	-	16	8.00	-	30	
SUBTOTAL 18 =				12	640	360	0	1,298	

CONCRETE REPAIR SUMMARY (CONTINUED)

CONCRETE REPAIR SUMMARY (CONTINUED)

WB MILE MARKER	MINUS	WESTBOUND LOCATION		416.0610	416.0620	416.1715	416.1725	690.0250	REMARKS
		DRILLED TIE BARS EACH	DRILLED DOWEL BARS EACH	CONCRETE PAVEMENT REPAIR SHES SY	CONCRETE PAVEMENT REPLACEMENT SHES SY	SAWING CONCRETE LF			
64	2230	both	6	-	32	17.33	-	58	
64	2305	both	6	-	32	17.33	-	58	
64	2370	left	6	-	16	8.00	-	30	
64	2440	left	6	-	16	8.00	-	30	
64	2510	both	6	-	32	17.33	-	58	
64	2780	right	6	-	16	9.33	-	34	
64	2840	left	6	-	16	8.00	-	30	
64	3150	right	6	-	16	9.33	-	34	
64	3480	right	6	-	16	9.33	-	34	
64	3540	left	6	-	16	8.00	-	30	
64	3575	right	6	-	16	9.33	-	34	
64	3700	left	6	-	16	8.00	-	30	
64	3765	right	6	-	16	9.33	-	34	
64	3900	left	6	-	16	8.00	-	30	
64	3950	right	8	4	16	12.44	-	36	
64	4010	left	6	-	16	8.00	-	30	
64	4050	left	6	-	16	8.00	-	30	
64	4245	right	6	-	16	9.33	-	34	
64	4285	left	6	-	16	8.00	-	30	
64	4355	left	6	-	16	8.00	-	30	
64	4425	left	6	-	16	8.00	-	30	
64	4515	right	6	-	16	9.33	-	34	
64	4685	right	6	-	16	9.33	-	34	
64	4740	left	6	-	16	8.00	-	30	
64	5005	left	6	-	16	8.00	-	30	
64	5100	left	6	-	16	8.00	-	30	
64	5145	left	6	-	16	8.00	-	30	
63	280	left	6	-	16	8.00	-	30	
63	350	right	6	-	16	9.33	-	34	
63	740	left	6	-	16	8.00	-	30	
63	1260	left	6	-	16	8.00	-	30	
63	1450	right	6	-	16	9.33	-	34	
63	1520	right	6	-	16	9.33	-	34	
63	1550	right	6	-	16	9.33	-	34	
63	1600	right	6	-	16	9.33	-	34	
63	1750	right	6	-	16	9.33	-	34	
63	1850	left	8	4	16	10.67	-	32	
63	2000	left	6	-	16	8.00	-	30	
63	2040	left	6	-	16	8.00	-	30	
63	2060	left	6	-	16	8.00	-	30	
SUBTOTAL 21 =				8	688	374	0	1,348	

WB MILE MARKER	MINUS	WESTBOUND LOCATION		416.0610	416.0620	416.1715	416.1725	690.0250	REMARKS
		DRILLED TIE BARS EACH	DRILLED DOWEL BARS EACH	CONCRETE PAVEMENT REPAIR SHES SY	CONCRETE PAVEMENT REPLACEMENT SHES SY	SAWING CONCRETE LF			
63	2145	both	6	-	32	17.33	-	58	
63	2450	both	6	-	32	17.33	-	58	
63	2740	left	6	-	16	8.00	-	30	
63	3100	right	6	-	16	9.33	-	34	
63	3140	right	6	-	16	9.33	-	34	
63	3199	right	30	12	16	-	46.67	58	
63	3222	left	6	-	16	8.00	-	30	
63	3308	right	8	4	16	12.44	-	36	
63	3337	right	15	6	16	23.33	23.33	43	
63	3688	right	6	-	16	9.33	-	34	
63	3700	right	6	-	16	9.33	-	34	
63	3820	left	6	-	16	8.00	-	30	
63	3900	left	6	-	16	8.00	-	30	
63	4020	right	6	-	16	9.33	-	34	
63	4040	right	6	-	16	9.33	-	34	
63	4100	right	45	18	16	-	70.00	73	
63	4125	left	6	-	16	8.00	-	30	
63	4200	right	6	-	16	9.33	-	34	
63	4240	right	6	-	16	9.33	-	34	
63	4400	right	15	6	16	23.33	23.33	43	
63	4540	right	8	4	16	12.44	-	36	
63	4640	left	6	-	16	8.00	-	30	
63	4730	right	6	-	16	9.33	-	34	
63	4750	left	6	-	16	8.00	-	30	
63	4960	right	20	8	16	-	31.11	48	
63	5050	right	6	-	16	9.33	-	34	
63	5140	left	6	-	16	8.00	-	30	
63	5230	right	6	-	16	9.33	-	34	
63	5250	right	6	-	16	9.33	-	34	
62	230	right	20	8	16	-	31.11	48	
62	290	right	6	-	16	9.33	-	34	
62	370	right	15	6	16	23.33	23.33	43	
62	390	left	6	-	16	8.00	-	30	
62	460	right	6	-	16	9.33	-	34	
62	566	right	8	4	16	12.44	-	36	
62	1120	left	6	-	16	8.00	-	30	
62	1190	right	6	-	16	9.33	-	34	
62	1400	left	6	-	16	8.00	-	30	
62	1470	left	6	-	16	8.00	-	30	
62	1500	left	6	-	16	8.00	-	30	
SUBTOTAL 22 =				76	672	386	249	1,480	

CONCRETE REPAIR SUMMARY (CONTINUED)

CONCRETE REPAIR SUMMARY (CONTINUED)

WB MILE MARKER	MINUS	WESTBOUND LOCATION		416.0610	416.0620	416.1715	416.1725 CONCRETE PAVEMENT REPLACEMENT	690.0250	REMARKS
		DRILLED TIE BARS EACH	DRILLED DOWEL BARS EACH	CONCRETE PAVEMENT REPAIR SHES SY	CONCRETE PAVEMENT REPAIR SHES SY	SAWING CONCRETE LF			
62	1580	both	6	-	32	17.33	-	58	
62	1800	left	6	-	16	8.00	-	30	
62	2166	left	6	-	16	8.00	-	30	
62	2269	both	6	-	32	17.33	-	58	
62	2340	right	15	6	16	23.33	23.33	43	
62	2480	right	8	4	16	12.44	-	36	
62	3950	right	6	-	16	9.33	-	34	
62	4140	right	6	-	16	9.33	-	34	
62	4600	left	6	-	16	8.00	-	30	
62	4900	left	6	-	16	8.00	-	30	
62	5080	left	6	-	16	8.00	-	30	
61	370	left	6	-	16	8.00	-	30	
61	730	left	6	-	16	8.00	-	30	
61	940	right	15	6	16	23.33	23.33	43	
61	1160	left	6	-	16	8.00	-	30	
61	2900	right	8	4	16	12.44	-	36	
61	3880	left	6	-	16	8.00	-	30	
61	3970	left	6	-	16	8.00	-	30	
61	4030	left	6	-	16	8.00	-	30	
61	4270	right	6	-	16	9.33	-	34	
61	4405	left	6	-	16	8.00	-	30	
61	4777	right	6	-	16	9.33	-	34	
60	69	left	6	-	16	8.00	-	30	
60	160	right	15	6	16	23.33	23.33	43	
60	330	left	6	-	16	8.00	-	30	
60	530	right	30	12	16	-	46.67	58	
60	666	right	75	30	16	-	116.67	103	
60	820	right	60	24	16	-	93.33	88	
60	969	right	120	48	16	-	186.67	148	
60	1244	left	6	-	16	8.00	-	30	
60	1244	right	30	12	16	-	46.67	58	
60	1300	right	25	10	16	-	38.89	53	
60	1320	right	15	6	16	23.33	23.33	43	
60	1350	right	25	10	16	-	38.89	53	
60	1388	right	10	4	16	15.56	-	38	
60	1750	right	90	36	16	-	140.00	118	
60	2188	right	6	-	16	9.33	-	34	
60	2269	left	6	-	16	8.00	-	30	
60	2269	right	30	12	16	-	46.67	58	
60	2350	right	12	5	16	18.67	-	40	
SUBTOTAL 23 =				235	672	362	848	1,825	

WB MILE MARKER	MINUS	WESTBOUND LOCATION		416.0610	416.0620	416.1715	416.1725 CONCRETE PAVEMENT REPLACEMENT	690.0250	REMARKS
		DRILLED TIE BARS EACH	DRILLED DOWEL BARS EACH	CONCRETE PAVEMENT REPAIR SHES SY	CONCRETE PAVEMENT REPAIR SHES SY	SAWING CONCRETE LF			
60	2488	right	45	18	16	-	70.00	73	
60	2488	left	6	-	16	8.00	-	30	
60	2515	right	8	4	16	12.44	-	36	
60	2515	left	15	6	16	20.00	20.00	39	
60	2550	right	45	18	16	-	70.00	73	
60	2588	right	12	5	16	18.67	-	40	
60	2600	right	30	12	16	-	46.67	58	
60	2680	left	6	-	16	8.00	-	30	
60	2700	left	8	4	16	10.67	-	32	
60	2767	left	6	-	16	8.00	-	30	
60	2800	right	15	6	16	23.33	23.33	43	
60	2860	left	6	-	16	8.00	-	30	
60	2929	left	6	-	16	8.00	-	30	
60	3000	left	6	-	16	8.00	-	30	
60	3100	left	6	-	16	8.00	-	30	
60	3120	left	6	-	16	8.00	-	30	
60	3150	left	6	-	16	8.00	-	30	
60	3190	right	15	6	16	23.33	23.33	43	
60	3269	right	15	6	16	23.33	23.33	43	
60	3420	right	75	30	16	-	116.67	103	
60	3520	left	6	-	16	8.00	-	30	
60	3777	right	6	-	16	9.33	-	34	
60	3888	right	6	-	16	9.33	-	34	
60	3977	right	30	12	16	-	46.67	58	
60	4088	right	30	12	16	-	46.67	58	
60	4120	left	6	-	16	8.00	-	30	
60	4300	right	30	12	16	-	46.67	58	
60	4380	left	6	-	16	8.00	-	30	
60	4400	left	6	-	16	8.00	-	30	
60	4500	right	15	6	16	23.33	23.33	43	
60	4570	left	6	-	16	8.00	-	30	
60	4600	right	30	12	16	-	46.67	58	
60	4720	left	6	-	16	8.00	-	30	
60	4810	right	15	6	16	23.33	23.33	43	
60	4990	right	20	8	16	-	31.11	48	
60	5100	left	6	-	16	8.00	-	30	
60	5120	right	6	-	16	9.33	-	34	
60	5240	right	15	6	16	23.33	23.33	43	
60	5320	right	15	6	16	23.33	23.33	43	
59	90	right	15	6	16	23.33	23.33	43	
SUBTOTAL 24 =				201	640	404	728	1,660	

CONCRETE REPAIR SUMMARY (TOTALS)

	416.0610	416.0620	416.1715	416.1725	690.0250	
	DRILLED TIE BARS EACH	DRILLED DOWEL BARS EACH	CONCRETE PAVEMENT REPAIR SHES SY	CONCRETE PAVEMENT REPLACEMENT SHES SY	SAWING CONCRETE LF	REMARKS
SUBTOTAL 1	382	640	276	1,423	2,097	EASTBOUND
SUBTOTAL 2	395	656	232	1,478	2,164	
SUBTOTAL 3	281	656	330	1,034	1,927	
SUBTOTAL 4	153	672	401	490	1,633	
SUBTOTAL 5	281	688	365	1,019	1,985	
SUBTOTAL 6	177	656	310	653	1,706	
SUBTOTAL 7	265	640	275	1,011	1,880	
SUBTOTAL 8	211	720	315	770	1,869	
SUBTOTAL 9	140	704	374	498	1,664	
SUBTOTAL 10	138	656	355	428	1,563	
SUBTOTAL 11	54	400	219	210	905	
SUBTOTAL 12	146	640	419	443	1,571	WESTBOUND
SUBTOTAL 13	42	640	373	70	1,327	
SUBTOTAL 14	48	656	358	187	1,430	
SUBTOTAL 15	20	672	351	62	1,370	
SUBTOTAL 16	62	640	388	163	1,413	
SUBTOTAL 17	46	656	352	101	1,371	
SUBTOTAL 18	12	640	360	0	1,298	
SUBTOTAL 19	56	656	393	171	1,400	
SUBTOTAL 20	82	656	382	163	1,459	
SUBTOTAL 21	8	688	374	0	1,348	
SUBTOTAL 22	76	672	386	249	1,480	
SUBTOTAL 23	235	672	362	848	1,825	
SUBTOTAL 24	201	640	404	728	1,660	
SUBTOTAL 25	93	656	483	233	1,484	
SUBTOTAL 26	482	832	470	764	3,669	
TOTAL 0010	4,086	17,104	9,306	13,198	43,498	

ASPHALT AND SHOULDER SUMMARY

STATION	TO	STATION	LOCATION	204.0120 ASPHALTIC SURFACE MILLING SY	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	415.6000.S ROUT AND SEAL LF	455.0605 TACK COAT GAL	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	460.8624 HMA PAVEMENT 4 SMA 58-28 V TON	465.0400 ASPHALTIC SHOULDER RUMBLE STRIPS LF	624.0100 WATER MGAL	REMARKS
235+11	-	697+60	EB Inside	30,800	1,000	46,249	-	4,100	-	46,249	100	
235+11	-	697+60	EB Outside	41,100	1,000	46,249	-	8,100	-	46,249	150	
235+01A	-	1107+64A	WB Inside	58,200	1,900	87,263	-	7,700	-	87,263	150	
235+01A	-	1107+64A	WB Outside	77,600	1,900	87,263	-	15,300	-	87,263	250	
574+00	-	576+00	EB ON RAMP GORE AREA	400	-	200	-	50	-	200	-	
588+50	-	591+50	EB OFF RAMP GORE AREA	570	-	300	-	60	-	300	-	
570+00A	-	577+00A	WB OFF RAMP GORE AREA	1,260	-	700	-	130	-	700	-	
590+00A	-	593+00A	WB ON RAMP GORE AREA	570	-	300	-	60	-	300	-	
1170+50A	-	1171+50A	Pavement Repair Section	500	-	-	32	-	90	200	-	
TOTAL 0010				211,000	5,800	268,524	32	35,500	90	268,724	650	

EROSION CONTROL SUMMARY

STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.2004 EROSION MAT CLASS I TYPE B SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0130 SEEDING MIXTURE NO. 30 LB	630.0200 SEEDING TEMPORARY LB	REMARKS
	UNDISTRIBUTED	100	100	100	2	2	500	0.10	2	1	3	
TOTAL 0010		100	100	100	2	2	500	0.10	2	1	3	

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PAVEMENT MARKING SUMMARY

STATION	TO	STATION	LOCATION	646.1020	646.3020	646.9400	REMARKS
				MARKING LINE EPOXY 4-INCH LF	MARKING LINE EPOXY 8-INCH LF	MARKING REMOVAL PLOWABLE RAISED PAVEMENT MARKERS EACH	
235+11	-	697+60	EB LT EDGELINE	46,249	-	-	YELLOW
235+11	-	697+60	EB RT EDGELINE	46,249	-	-	WHITE
235+11A	-	1107+64A	WB LT EDGELINE	87,253	-	-	YELLOW
235+11A	-	1107+64A	WB RT EDGELINE	87,253	-	-	WHITE
235+11	-	697+60	EB CL SKIPS	11,562	-	462	WHITE
235+01A	-	1107+64A	WB CL SKIPS	21,816	-	873	WHITE
SUBTOTAL MAINLINE:				300,400	0	1,400	

CONSTRUCTION STAKING

650.8000	650.9911.01
CONSTRUCTION STAKING RESURFACING REFERENCE LF	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (01. 1016-01-61) EACH
133,512	1

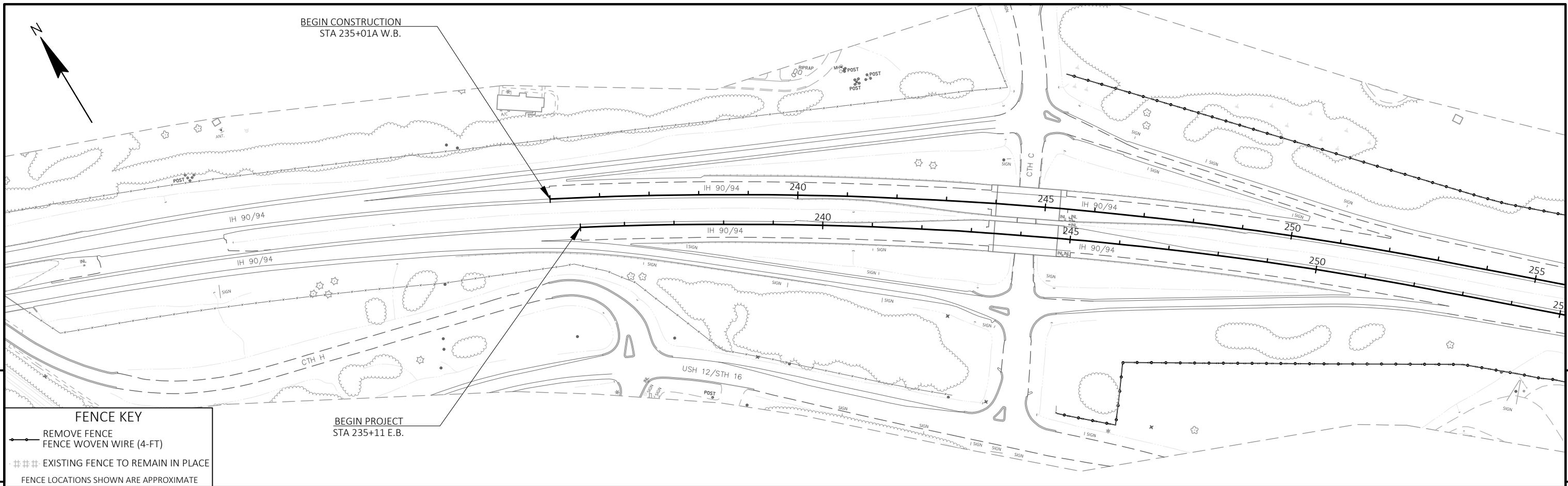
PAVEMENT MARKING SUMMARY (RAMPS)

LOCATION	646.1020	646.3020	646.9400	REMARKS
	MARKING LINE EPOXY 4-INCH LF	MARKING LINE EPOXY 8-INCH LF	MARKING REMOVAL PLOWABLE RAISED PAVEMENT MARKERS EACH	
NEW LISBON EXIT 61				
EB OFF RAMP LT	547	-	-	YELLOW
EB OFF RAMP	117	-	-	3' MINI SKIPS, WHITE
EB MAINLINE @ OFF RAMP	-	262	-	
EB OFF RAMP	-	262	-	
EB ON RAMP LT	573	-	-	YELLOW
EB RT EDGE: GORE TO GORE	1136	-	-	WHITE
EB MAINLINE @ ON RAMP	-	674	-	
EB ON RAMP	-	674	-	
WB OFF RAMP LT	657	-	-	YELLOW
WB OFF RAMP	153	-	-	3' MINI SKIPS, WHITE
WB MAINLINE @ OFF RAMP	-	261	-	
WB OFF RAMP	-	261	-	
WB ON RAMP LT	551	-	-	YELLOW
WB RT EDGE: GORE TO GORE	1239	-	-	WHITE
WB MAINLINE @ ON RAMP	-	851	-	
SUBTOTAL RAMPS:		5,000	4,100	0
SUBTOTAL MAINLINE:		300,400	0	1,400
TOTAL 0010		305,400	4,100	1,400

TRAFFIC CONTROL SUMMARY

STATION	TO	STATION	LOCATION	SERVICE DAYS	643.0300	643.0420	643.0705	643.0715	643.0800	643.0900	643.1051	643.4100.S	REMARKS							
					TRAFFIC CONTROL DRUMS QTY DAY	TRAFFIC CONTROL BARRICADES TYPE III QTY DAY	TRAFFIC CONTROL WARNING LIGHTS TYPE A QTY DAY	TRAFFIC CONTROL WARNING LIGHTS TYPE C QTY DAY	TRAFFIC CONTROL ARROW BOARDS QTY DAY	TRAFFIC CONTROL SIGNS QTY DAY	TRAFFIC CONTROL SIGNS PCMS WITH CELLULAR COMMUNICATIONS QTY DAY	TRAFFIC CONTROL INTERIM LANE CLOSURE EACH								
235+11	-	697+60	EB	30	462	13,860	35	1,050	70	2,100	4	120	2	60	16	480	2	60	-	
235+01A	-	1107+64A	WB	50	873	43,650	66	3,300	132	6,600	4	200	2	100	16	800	2	100	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	DAILY SETUP/TEARDOWN (EASTBOUND)
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50	DAILY SETUP/TEARDOWN (WESTBOUND)
TOTAL 0010					57,510	4,350	8,700	320	160	1,280	160	80								

3

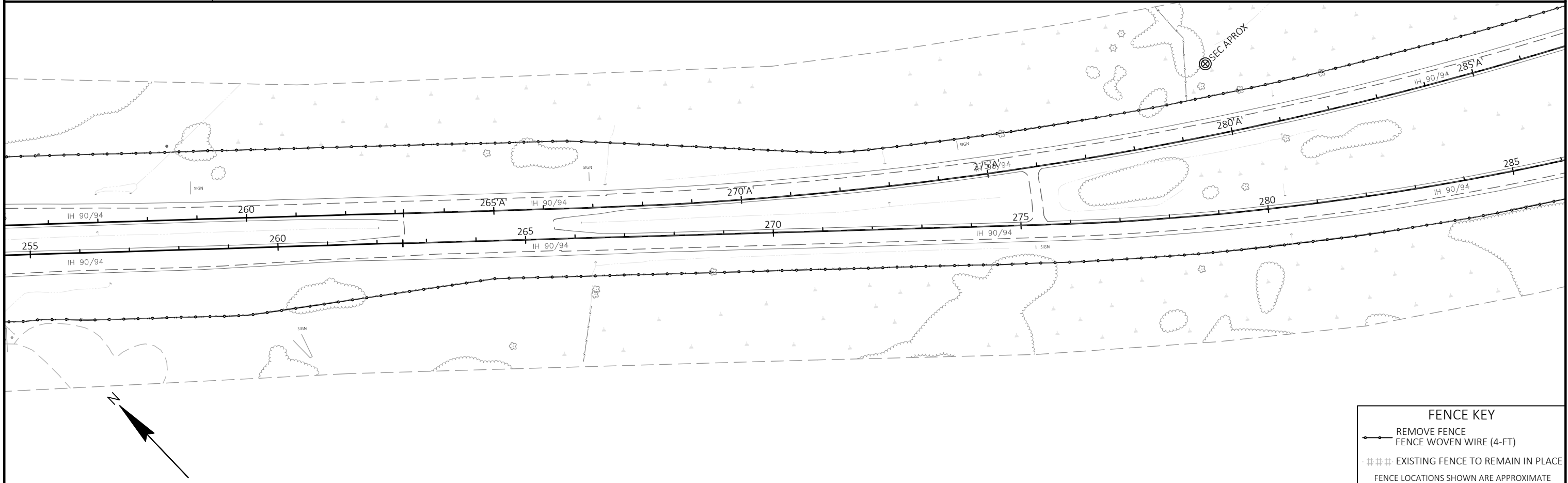


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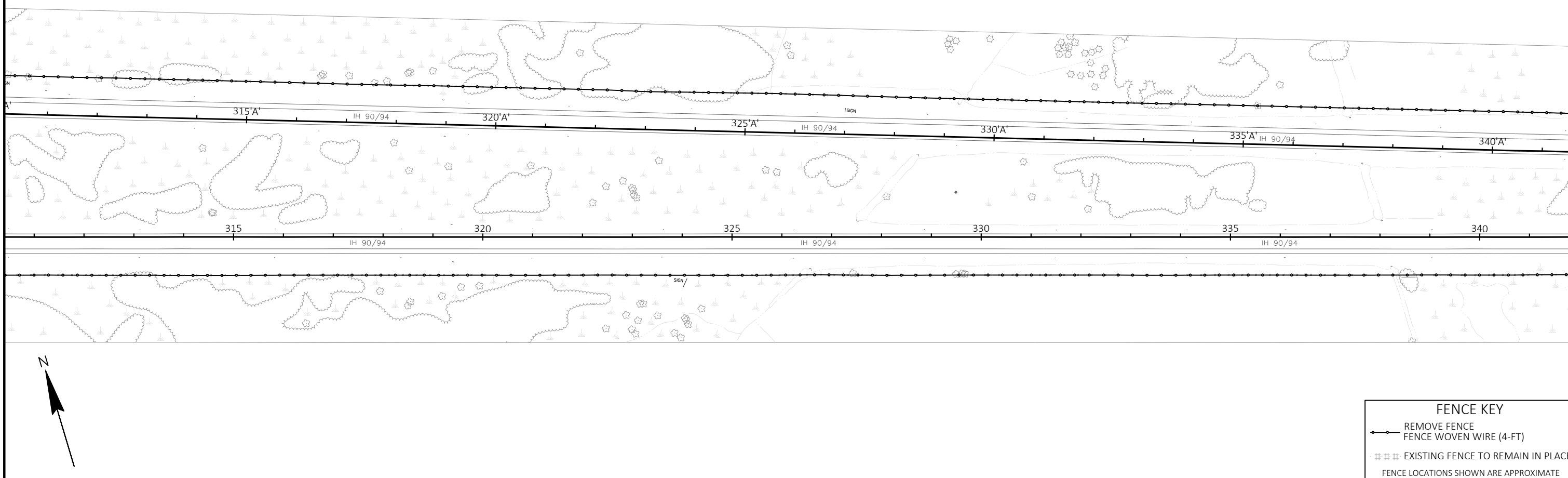
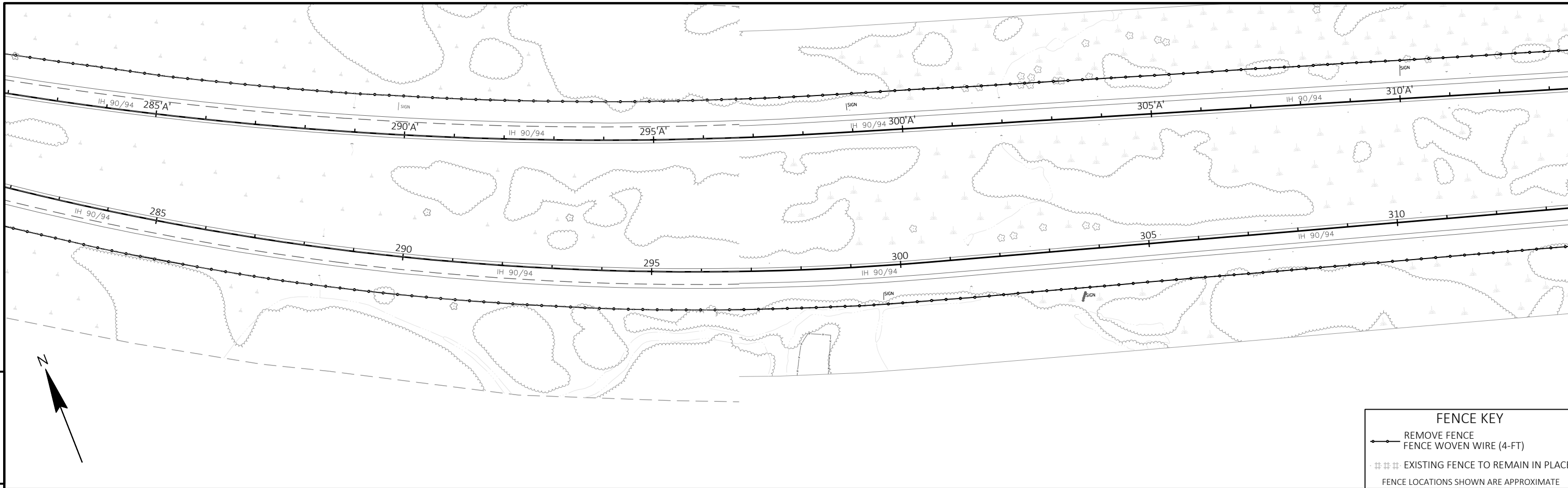
FENCE KEY
 —●— REMOVE FENCE
 —●— FENCE WOVEN WIRE (4-FT)
 ### EXISTING FENCE TO REMAIN IN PLACE
 FENCE LOCATIONS SHOWN ARE APPROXIMATE

BEGIN PROJECT
 STA 235+11 E.B.

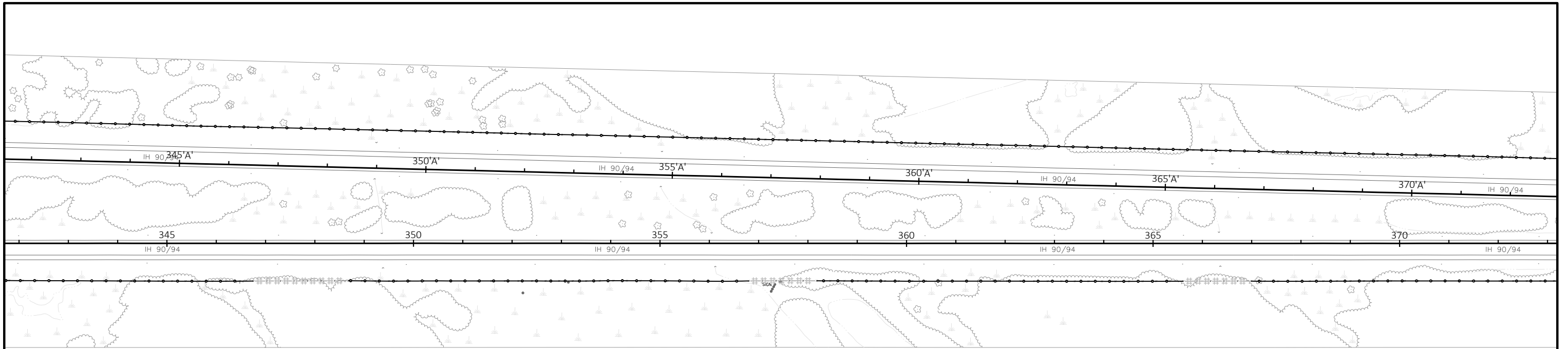


FENCE KEY
 —●— REMOVE FENCE
 —●— FENCE WOVEN WIRE (4-FT)
 ### EXISTING FENCE TO REMAIN IN PLACE
 FENCE LOCATIONS SHOWN ARE APPROXIMATE

PROJECT NO: 1016-01-61	HWY: IH - 90	COUNTY: JUNEAU	PLAN	SHEET	E
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PROJECT NO: 1016-01-61	HWY: IH - 90	COUNTY: JUNEAU	PLAN	SHEET	E
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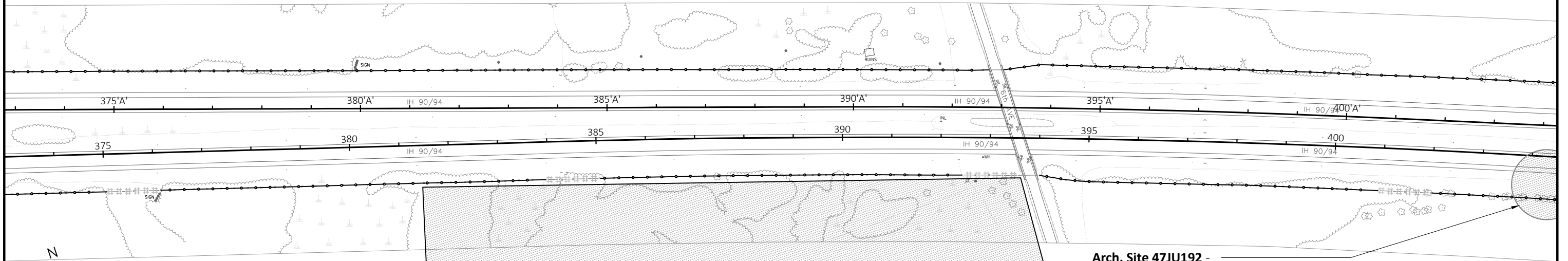


FENCE KEY

- REMOVE FENCE
- FENCE WOVEN WIRE (4-FT)
- ###— EXISTING FENCE TO REMAIN IN PLACE

FENCE LOCATIONS SHOWN ARE APPROXIMATE

5



Arch. Site 47JU99 -
 If the undertaking includes ground disturbance beyond the existing right of way limits, it is recommended that a qualified archaeologist monitor the construction related ground disturbing activities.

Arch. Site 47JU192 -
 If the undertaking includes ground disturbance beyond the existing right of way limits, it is recommended that a qualified archaeologist monitor the construction related ground disturbing activities.

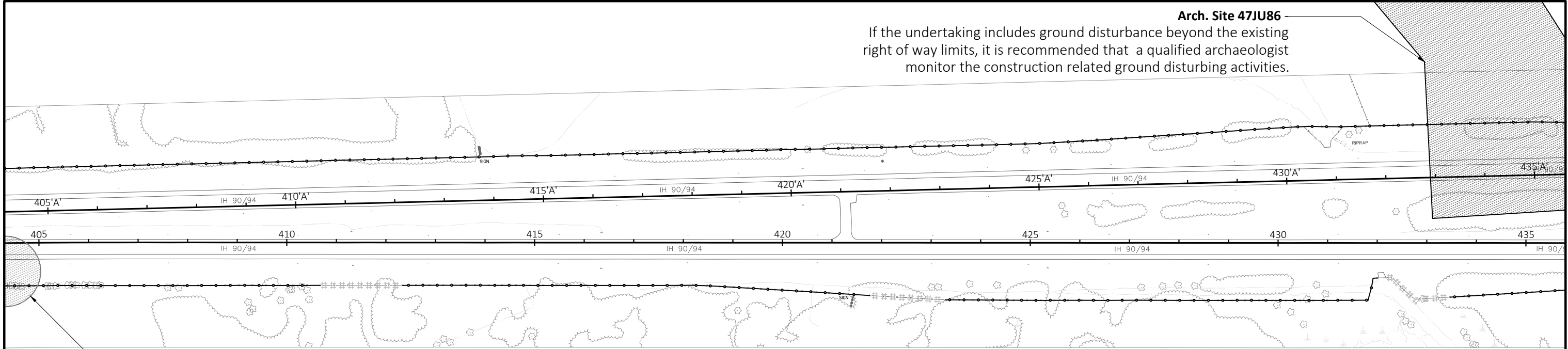
FENCE KEY

- REMOVE FENCE
- FENCE WOVEN WIRE (4-FT)
- ###— EXISTING FENCE TO REMAIN IN PLACE

FENCE LOCATIONS SHOWN ARE APPROXIMATE

PROJECT NO: 1016-01-61	HWY: IH - 90	COUNTY: JUNEAU	PLAN	SHEET	E
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Arch. Site 47JU86
 If the undertaking includes ground disturbance beyond the existing right of way limits, it is recommended that a qualified archaeologist monitor the construction related ground disturbing activities.



Arch. Site 47JU192 -
 If the undertaking includes ground disturbance beyond the existing right of way limits, it is recommended that a qualified archaeologist monitor the construction related ground disturbing activities.

FENCE KEY

- REMOVE FENCE
- FENCE WOVEN WIRE (4-FT)
- - - - - EXISTING FENCE TO REMAIN IN PLACE

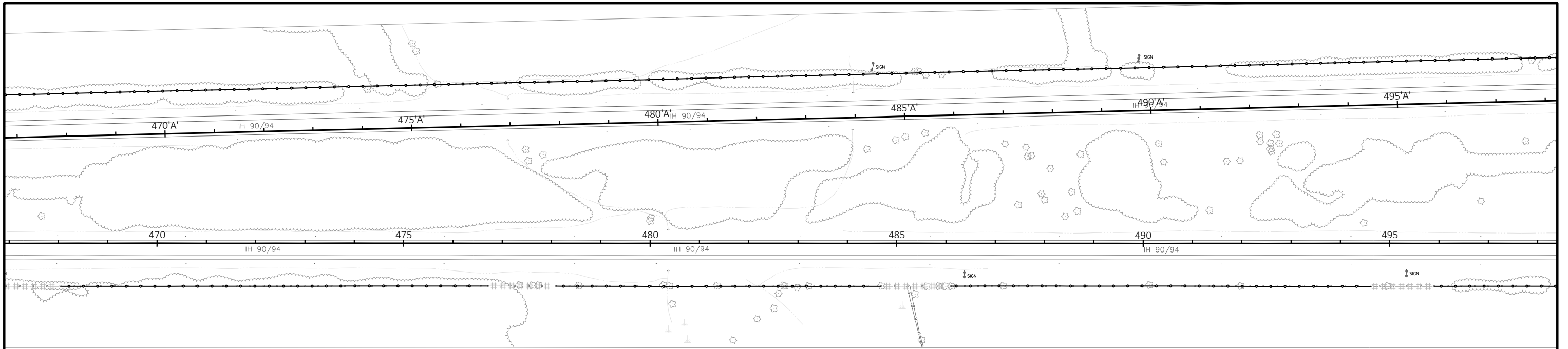
FENCE LOCATIONS SHOWN ARE APPROXIMATE



FENCE KEY

- REMOVE FENCE
- FENCE WOVEN WIRE (4-FT)
- - - - - EXISTING FENCE TO REMAIN IN PLACE

FENCE LOCATIONS SHOWN ARE APPROXIMATE



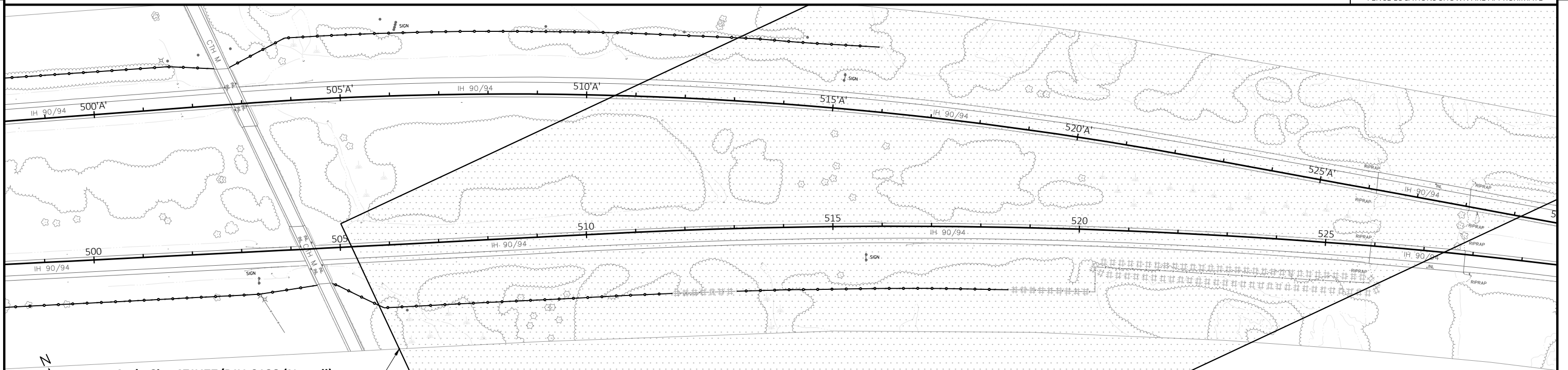
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FENCE KEY

- REMOVE FENCE
- FENCE WOVEN WIRE (4-FT)
- ###— EXISTING FENCE TO REMAIN IN PLACE

FENCE LOCATIONS SHOWN ARE APPROXIMATE

5



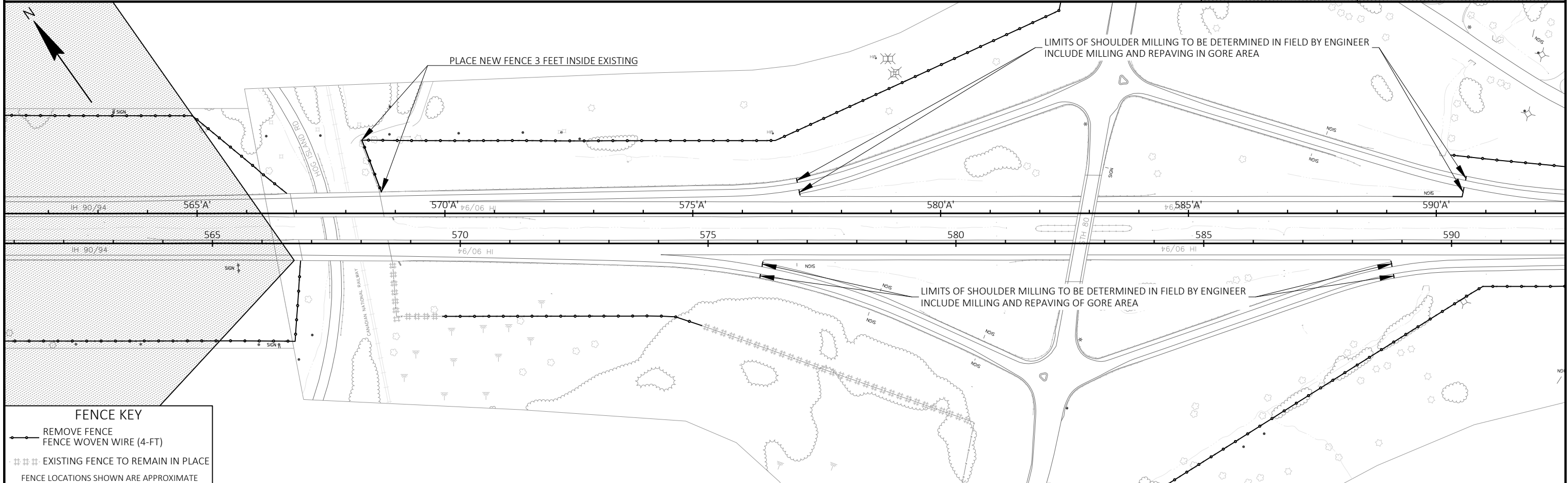
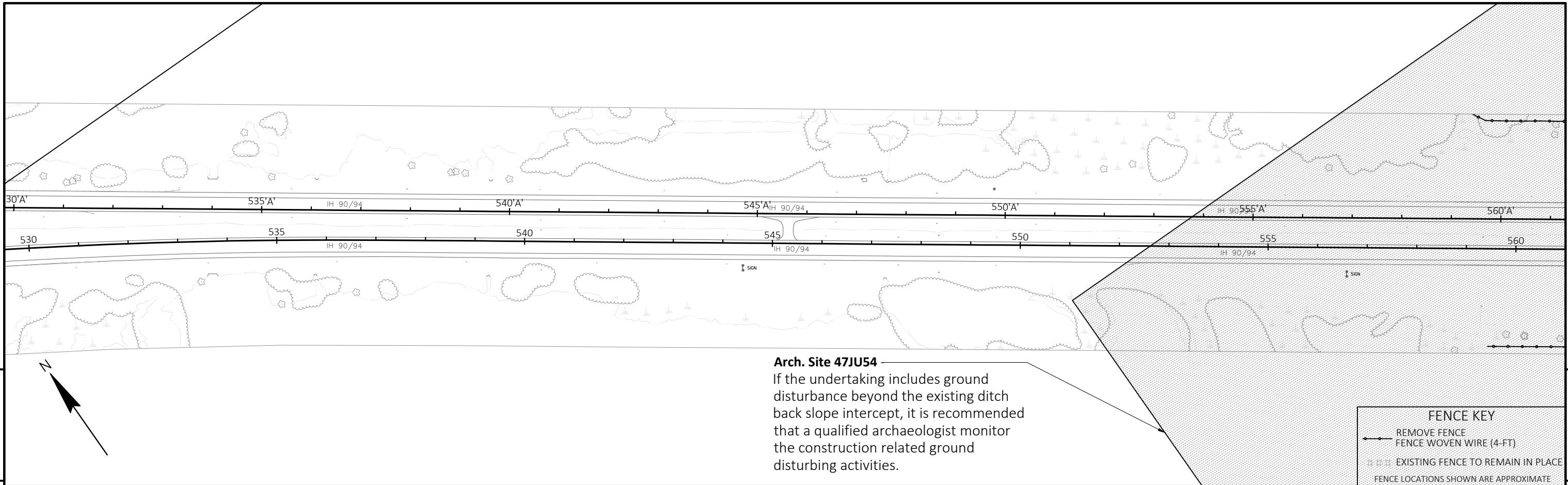
Arch. Site 47JU77/BJU-0128 (Nytzell)
 If the undertaking includes ground disturbance beyond the existing road cut back slope intercept, it is recommended that a qualified archaeologist monitor the construction related ground disturbing activities.

FENCE KEY

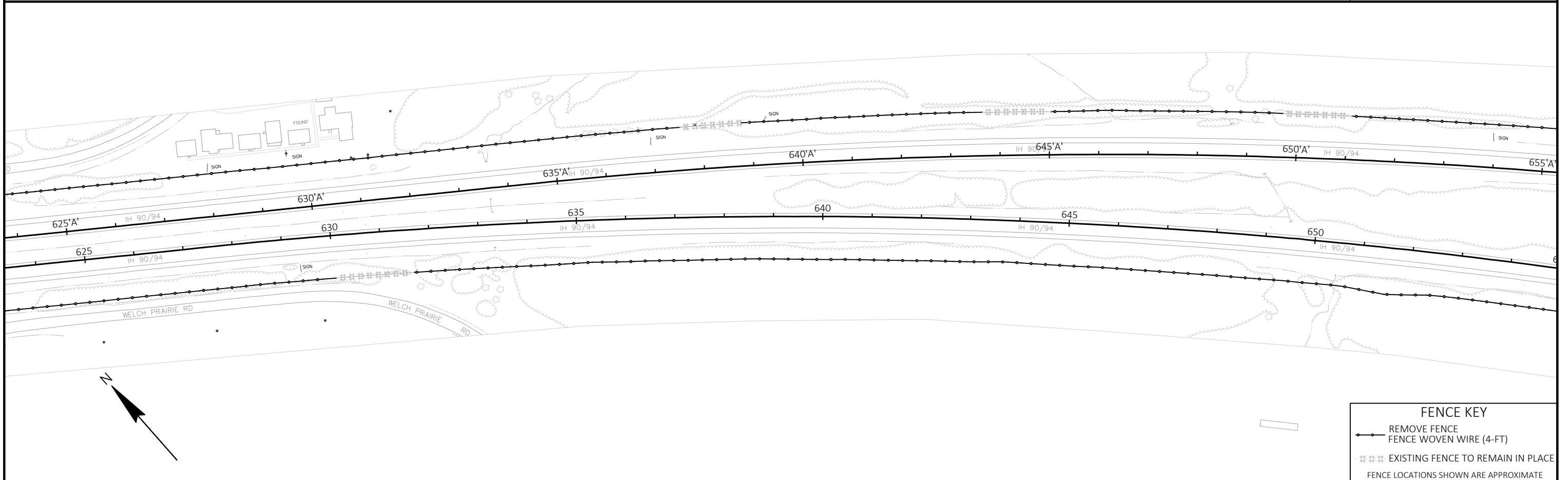
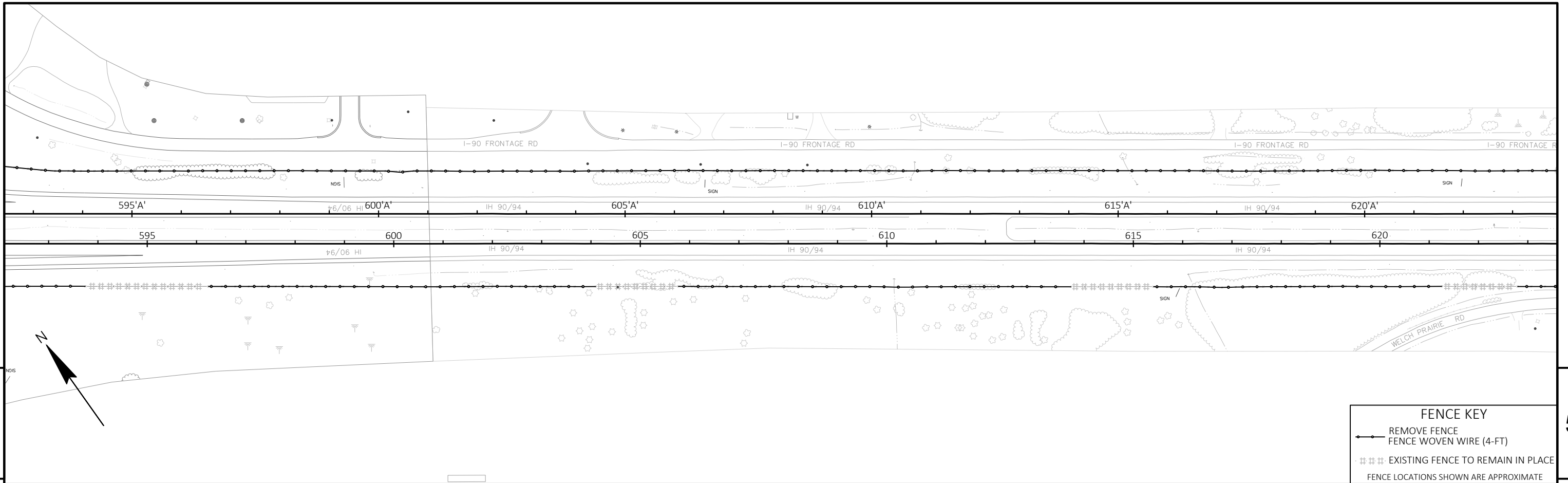
- REMOVE FENCE
- FENCE WOVEN WIRE (4-FT)
- ###— EXISTING FENCE TO REMAIN IN PLACE

FENCE LOCATIONS SHOWN ARE APPROXIMATE

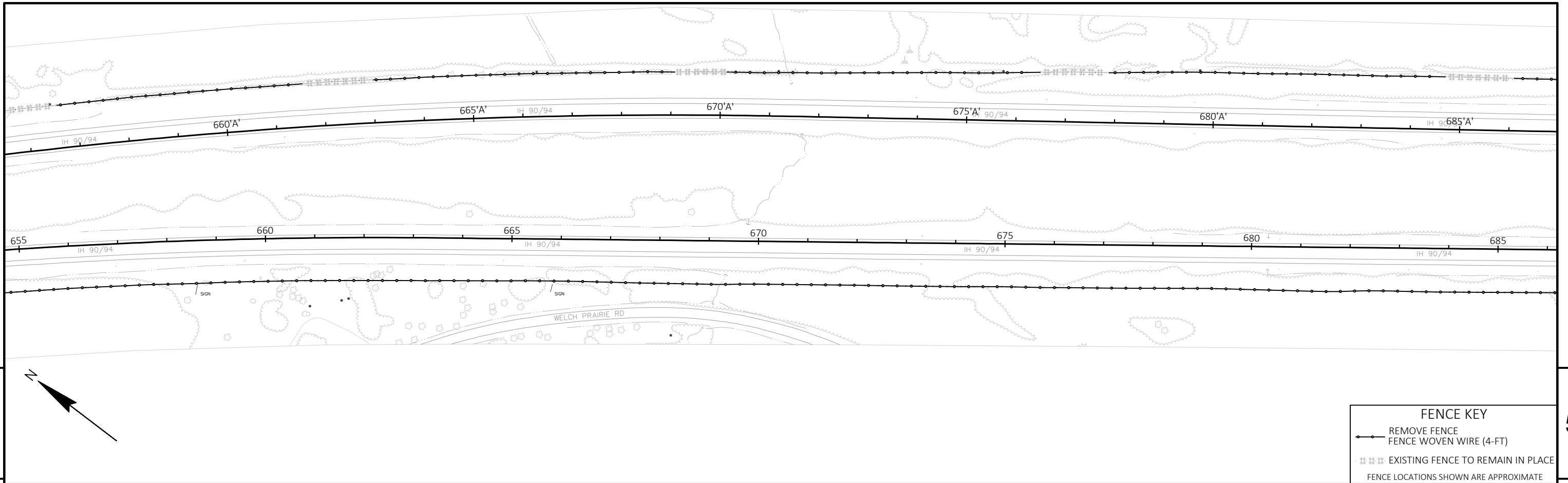
PROJECT NO: 1016-01-61	HWY: IH - 90	COUNTY: JUNEAU	PLAN	SHEET	E
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PROJECT NO: 1016-01-61	HWY: IH - 90	COUNTY: JUNEAU	PLAN	SHEET	E
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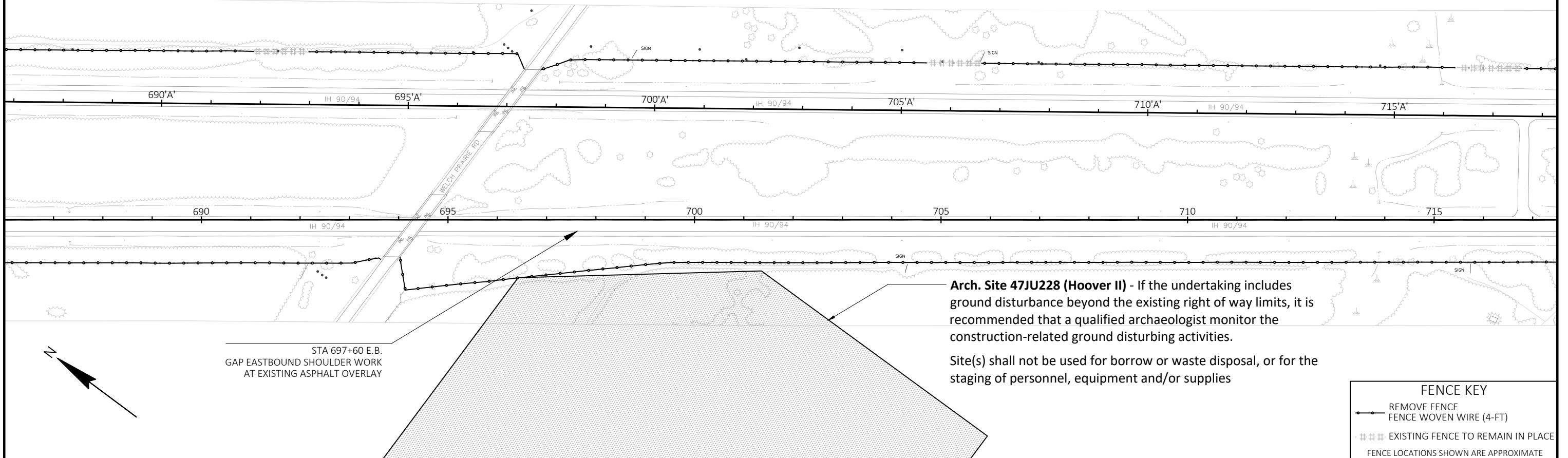


PROJECT NO: 1016-01-61	HWY: IH - 90	COUNTY: JUNEAU	PLAN	SHEET	E
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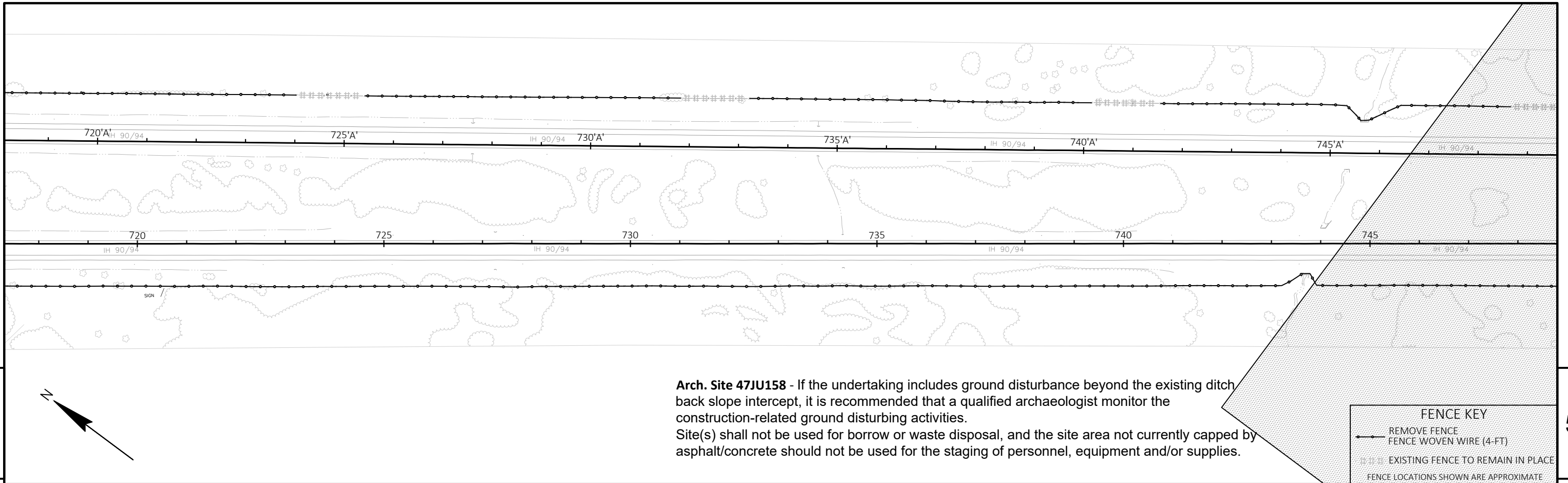


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PROJECT NO: 1016-01-61	HWY: IH - 90	COUNTY: JUNEAU	PLAN	SHEET	E
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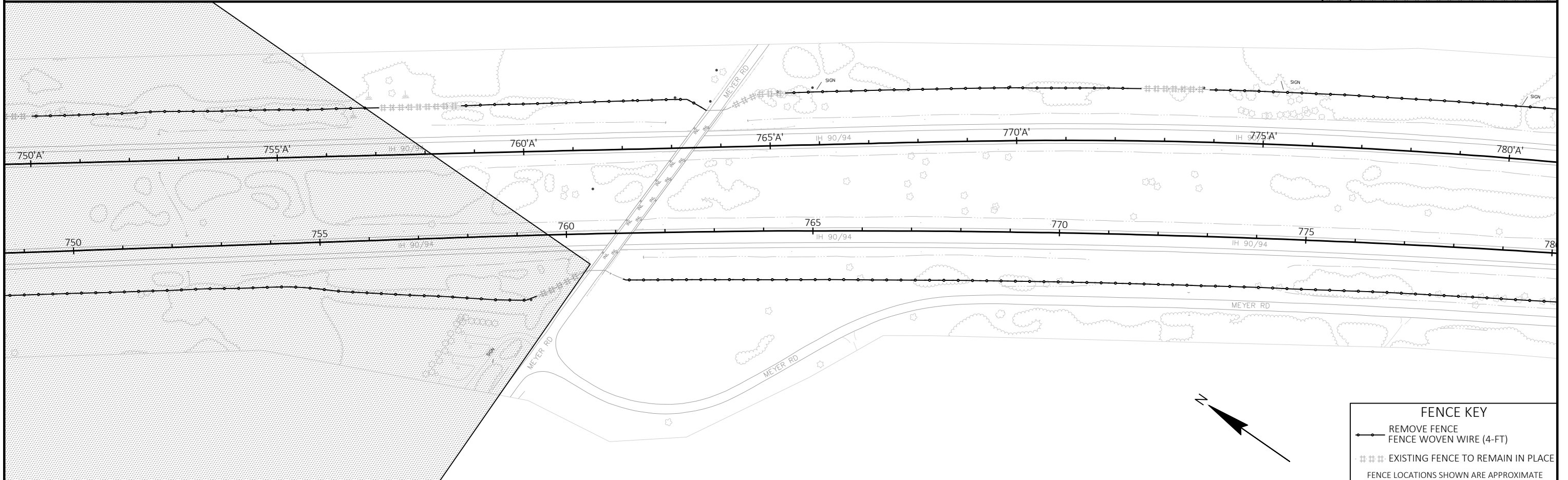


Arch. Site 47JU158 - If the undertaking includes ground disturbance beyond the existing ditch back slope intercept, it is recommended that a qualified archaeologist monitor the construction-related ground disturbing activities. Site(s) shall not be used for borrow or waste disposal, and the site area not currently capped by asphalt/concrete should not be used for the staging of personnel, equipment and/or supplies.

FENCE KEY

- REMOVE FENCE
- FENCE WOVEN WIRE (4-FT)
- ### EXISTING FENCE TO REMAIN IN PLACE

FENCE LOCATIONS SHOWN ARE APPROXIMATE

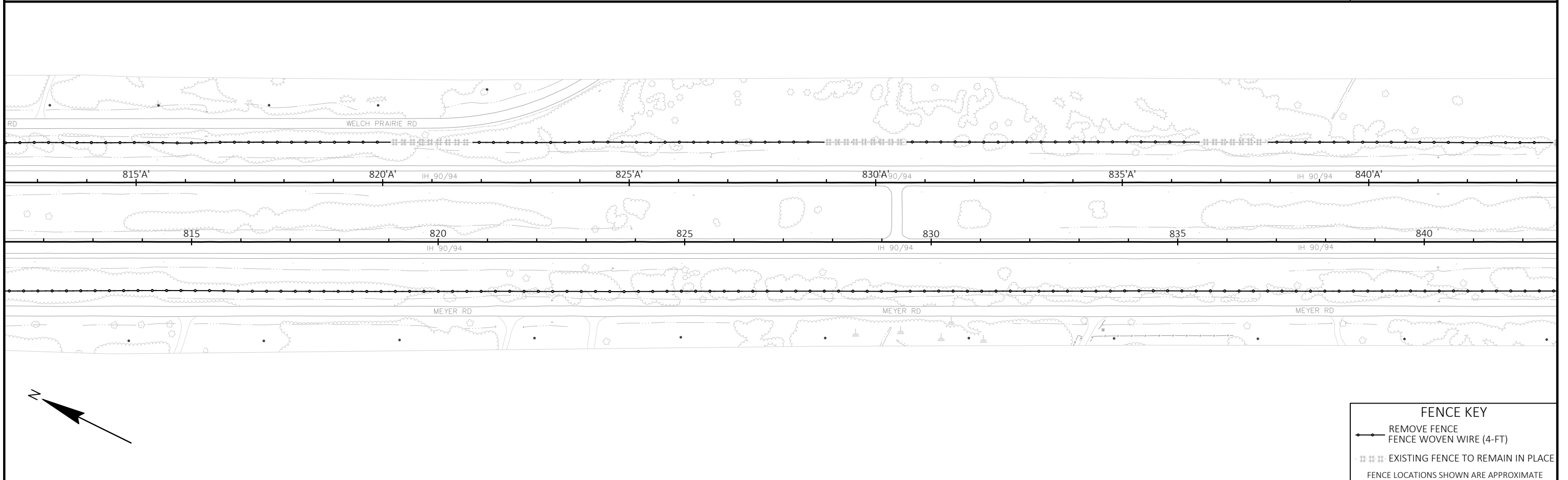
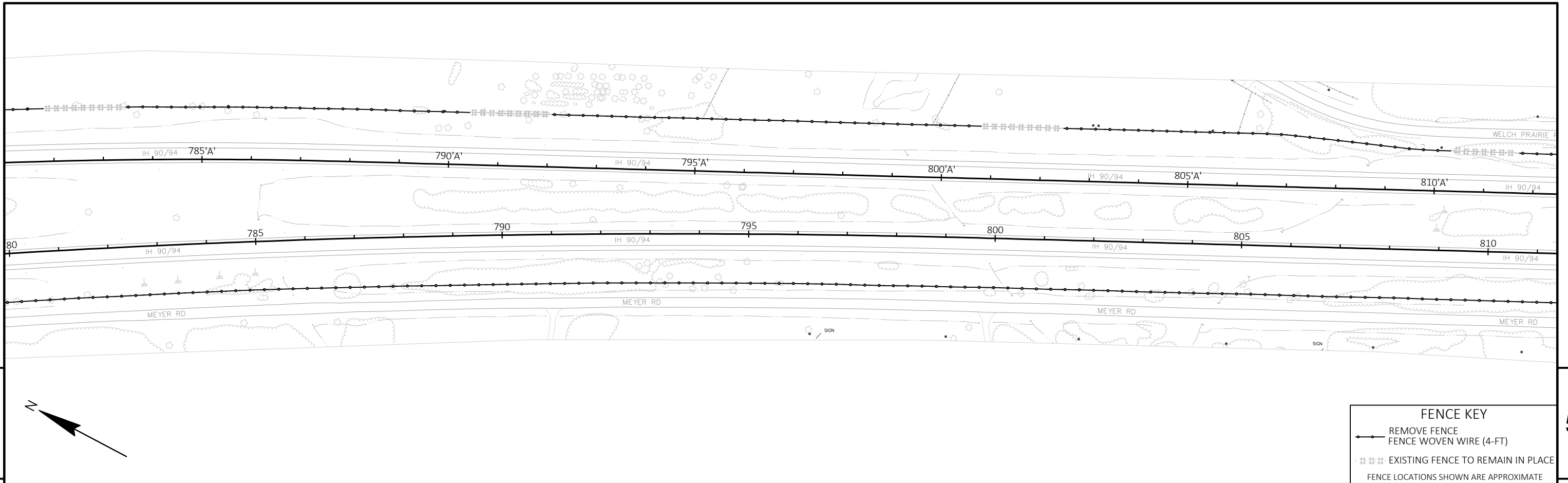


FENCE KEY

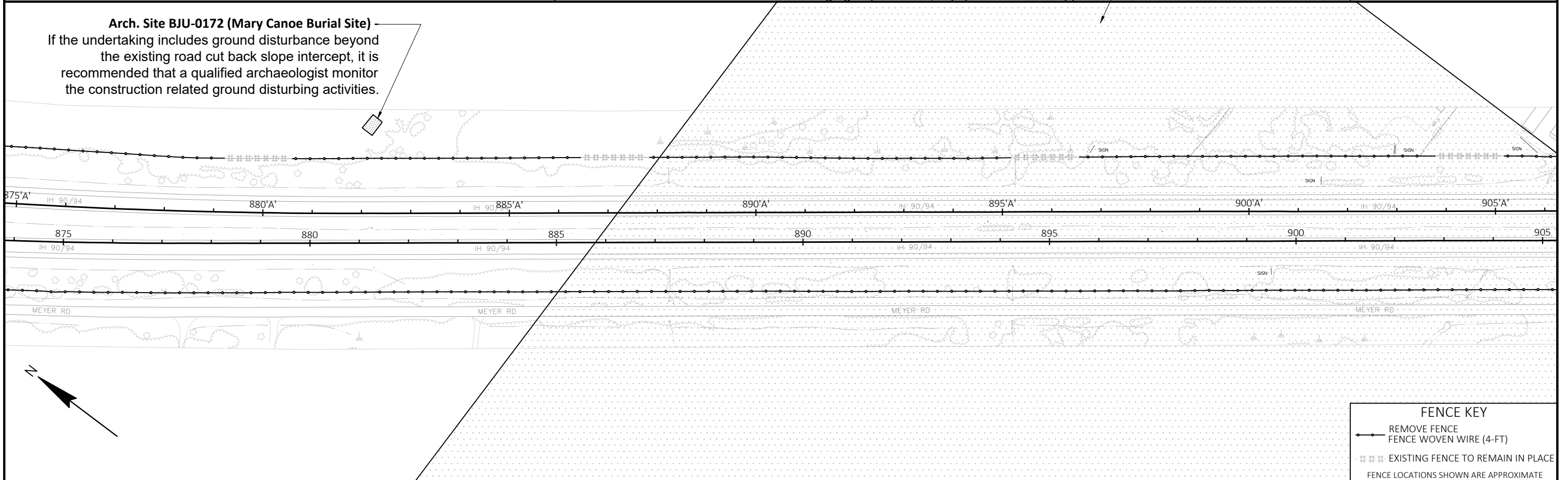
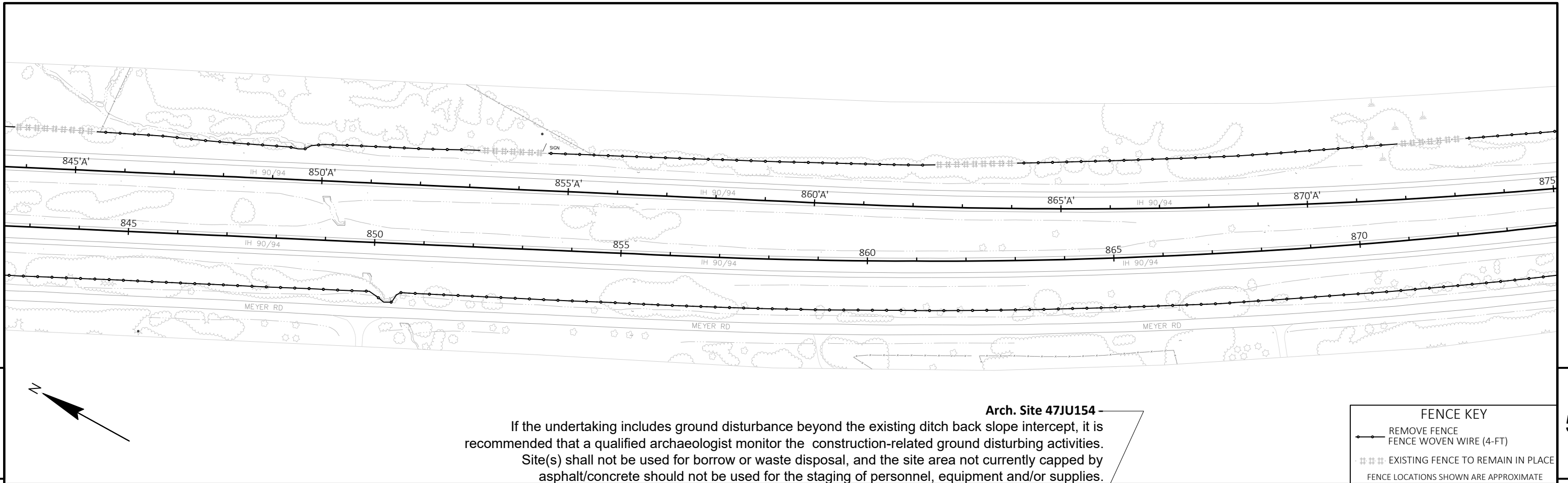
- REMOVE FENCE
- FENCE WOVEN WIRE (4-FT)
- ### EXISTING FENCE TO REMAIN IN PLACE

FENCE LOCATIONS SHOWN ARE APPROXIMATE

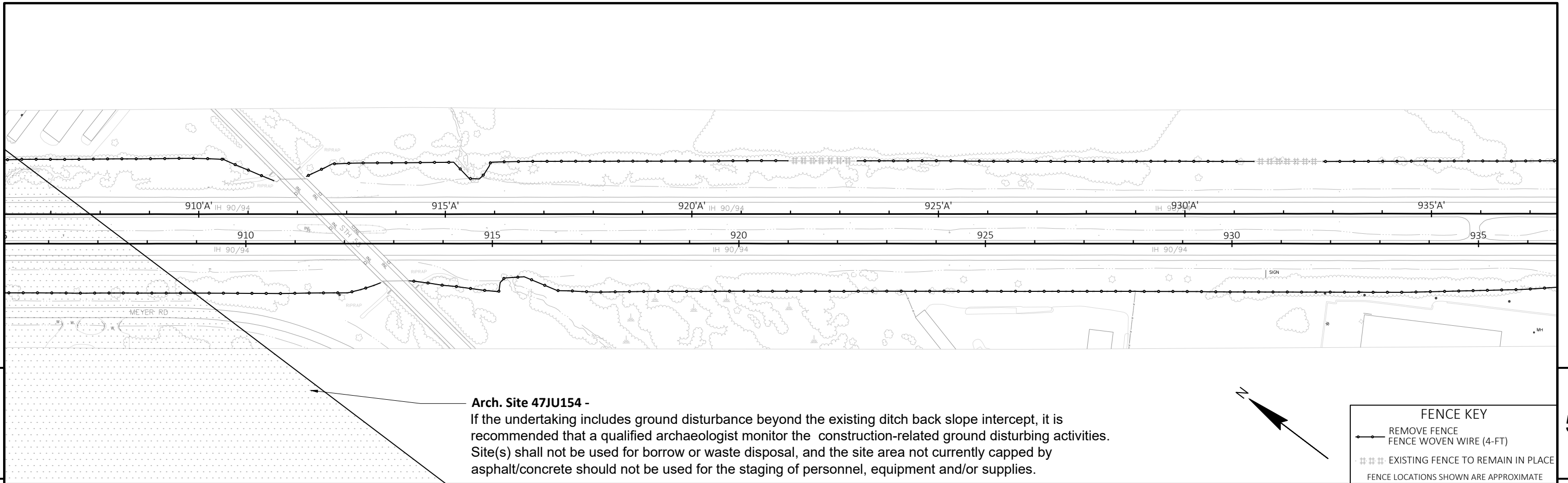
PROJECT NO: 1016-01-61	HWY: IH - 90	COUNTY: JUNEAU	PLAN	SHEET	E
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PROJECT NO: 1016-01-61	HWY: IH - 90	COUNTY: JUNEAU	PLAN	SHEET	E
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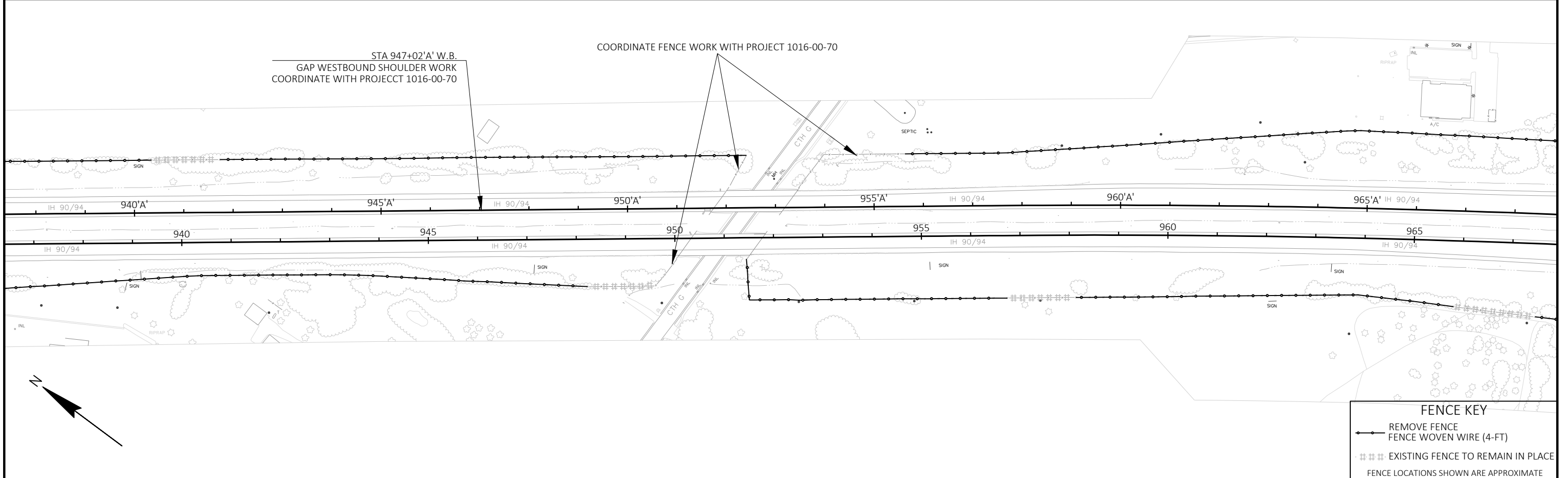


PROJECT NO: 1016-01-61	HWY: IH - 90	COUNTY: JUNEAU	PLAN	SHEET	E
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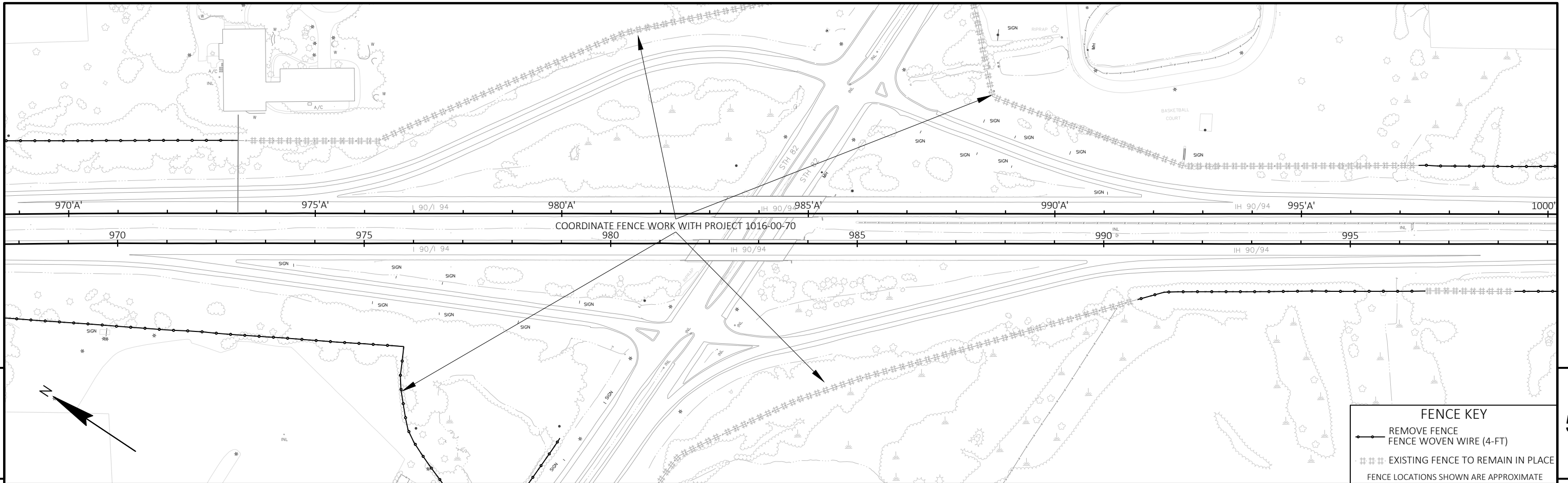


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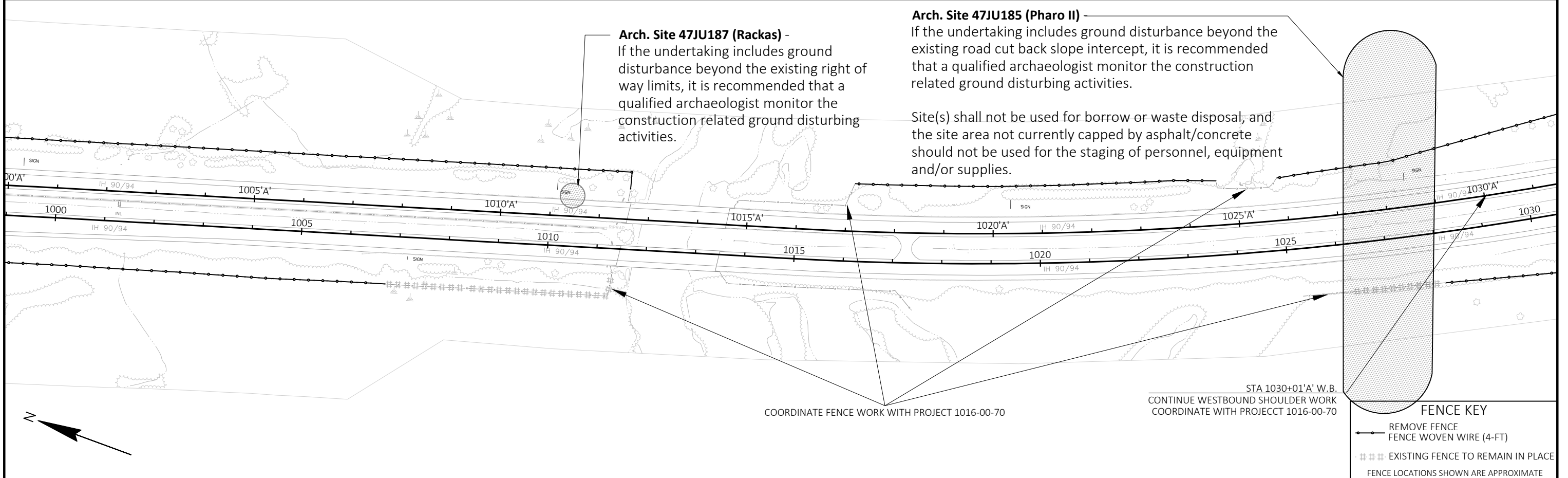


PROJECT NO: 1016-01-61	HWY: IH - 90	COUNTY: JUNEAU	PLAN	SHEET	E
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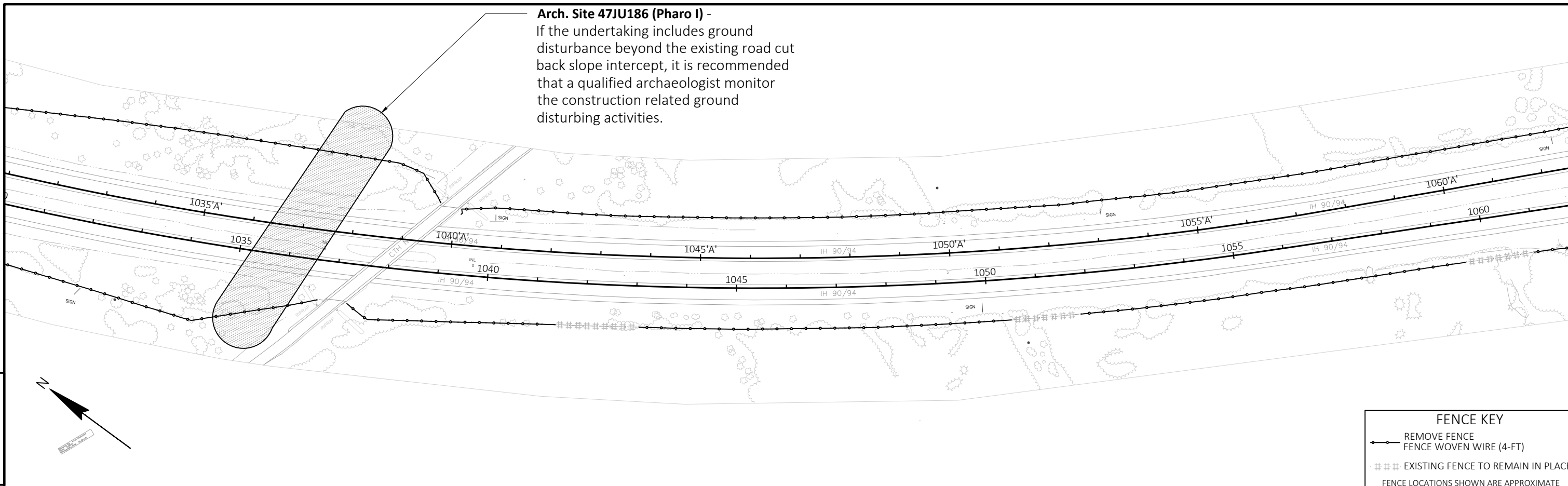
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PROJECT NO: 1016-01-61	HWY: IH-90	COUNTY: JUNEAU	PLAN	SHEET	E
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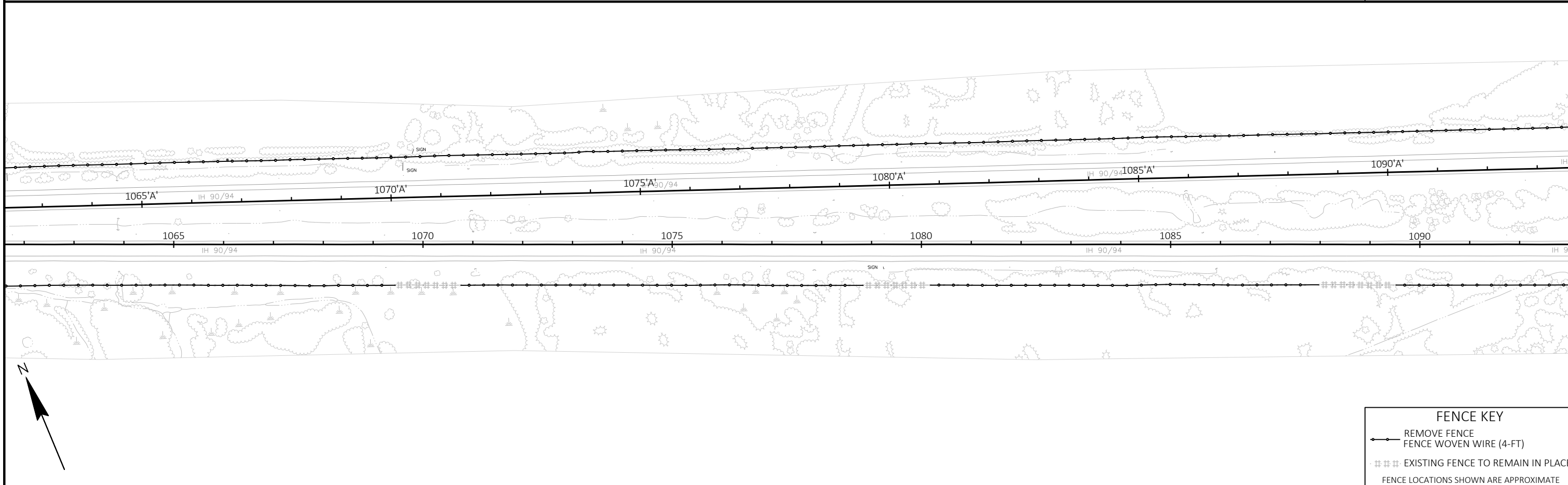
Arch. Site 47JU186 (Pharo I) -
 If the undertaking includes ground disturbance beyond the existing road cut back slope intercept, it is recommended that a qualified archaeologist monitor the construction related ground disturbing activities.



FENCE KEY

- REMOVE FENCE
- FENCE WOVEN WIRE (4-FT)
- ### EXISTING FENCE TO REMAIN IN PLACE

FENCE LOCATIONS SHOWN ARE APPROXIMATE

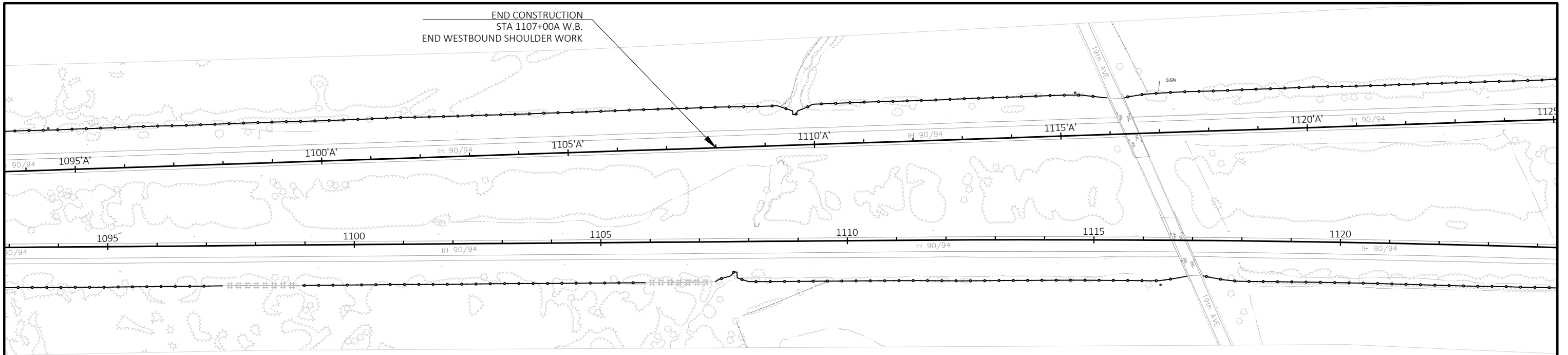


FENCE KEY

- REMOVE FENCE
- FENCE WOVEN WIRE (4-FT)
- ### EXISTING FENCE TO REMAIN IN PLACE

FENCE LOCATIONS SHOWN ARE APPROXIMATE

PROJECT NO: 1016-01-61	HWY: IH - 90	COUNTY: JUNEAU	PLAN	SHEET	E
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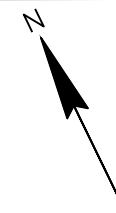
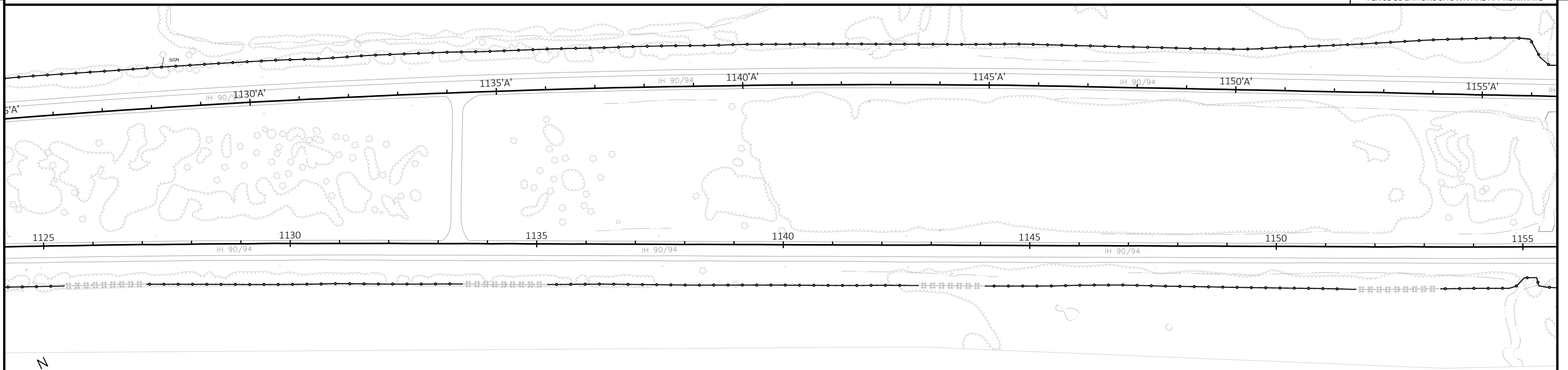


FENCE KEY

- REMOVE FENCE
- FENCE WOVEN WIRE (4-FT)
- ###— EXISTING FENCE TO REMAIN IN PLACE

FENCE LOCATIONS SHOWN ARE APPROXIMATE

5

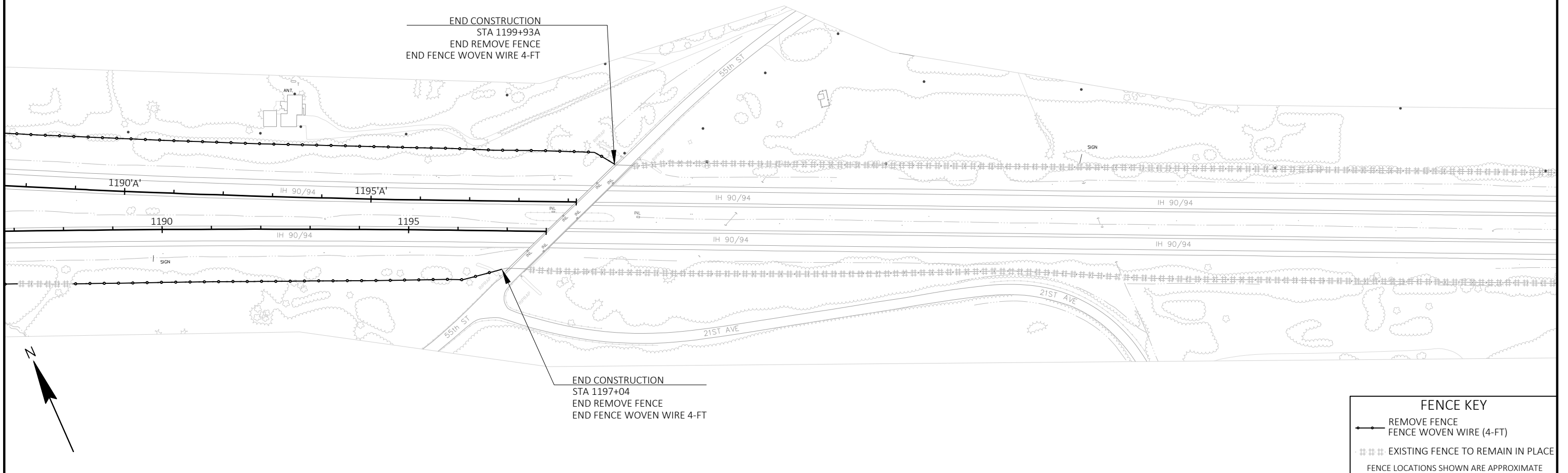
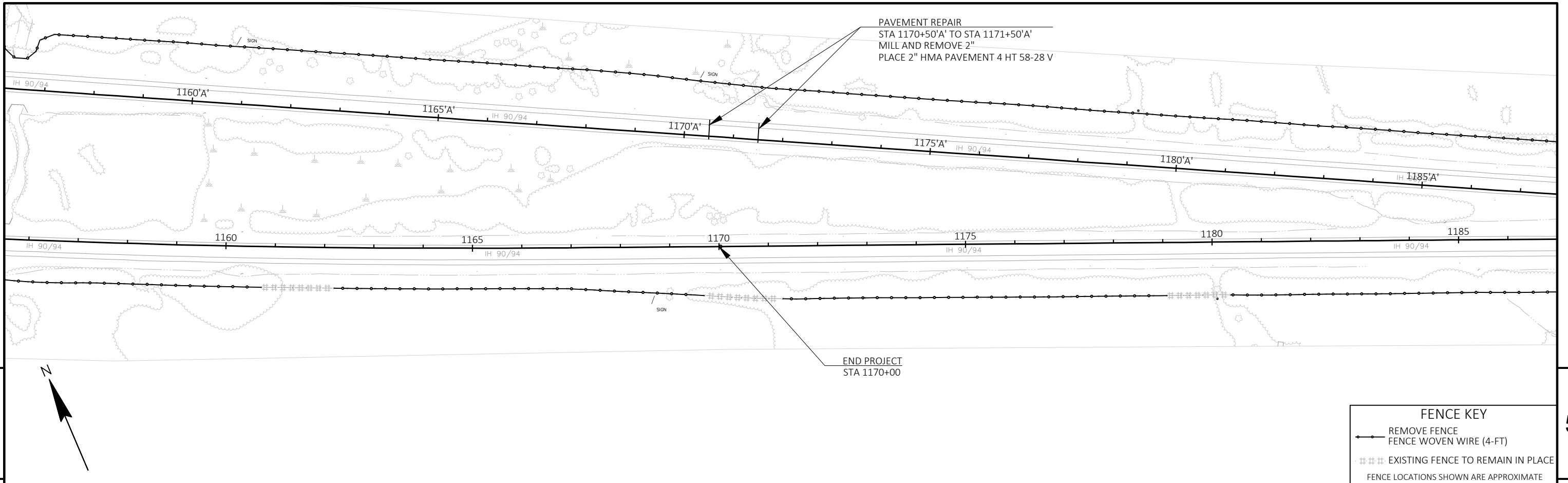


FENCE KEY

- REMOVE FENCE
- FENCE WOVEN WIRE (4-FT)
- ###— EXISTING FENCE TO REMAIN IN PLACE

FENCE LOCATIONS SHOWN ARE APPROXIMATE

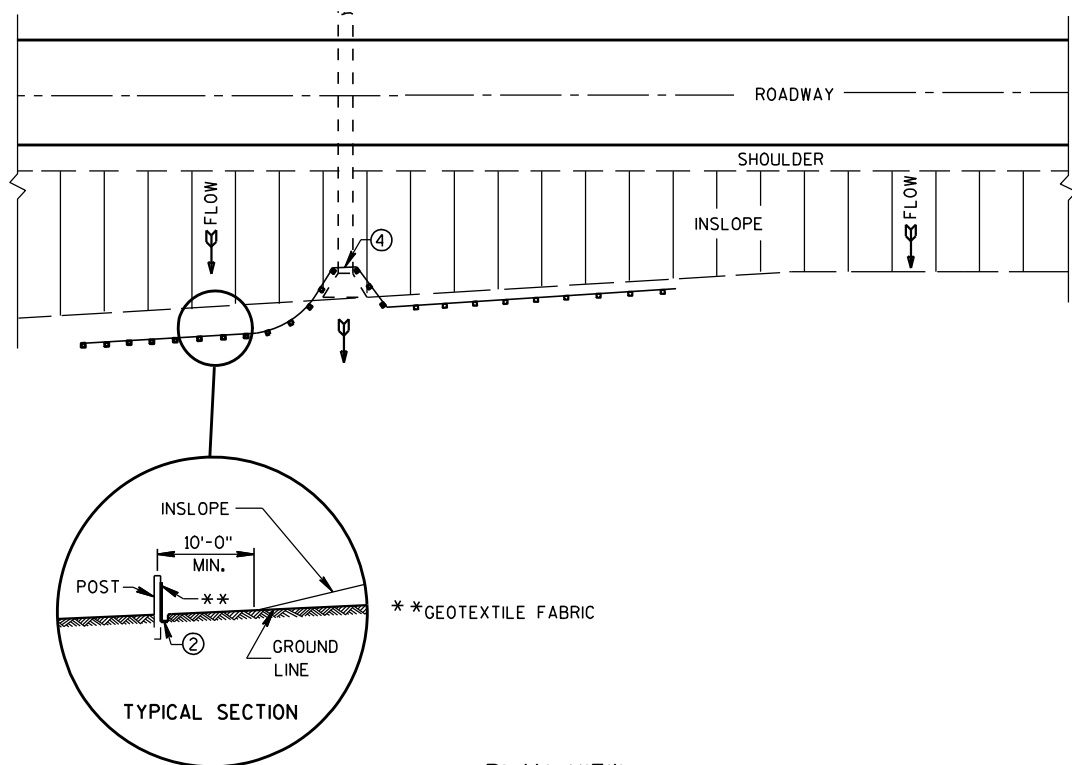
PROJECT NO: 1016-01-61	HWY: IH - 90	COUNTY: JUNEAU	PLAN	SHEET	E
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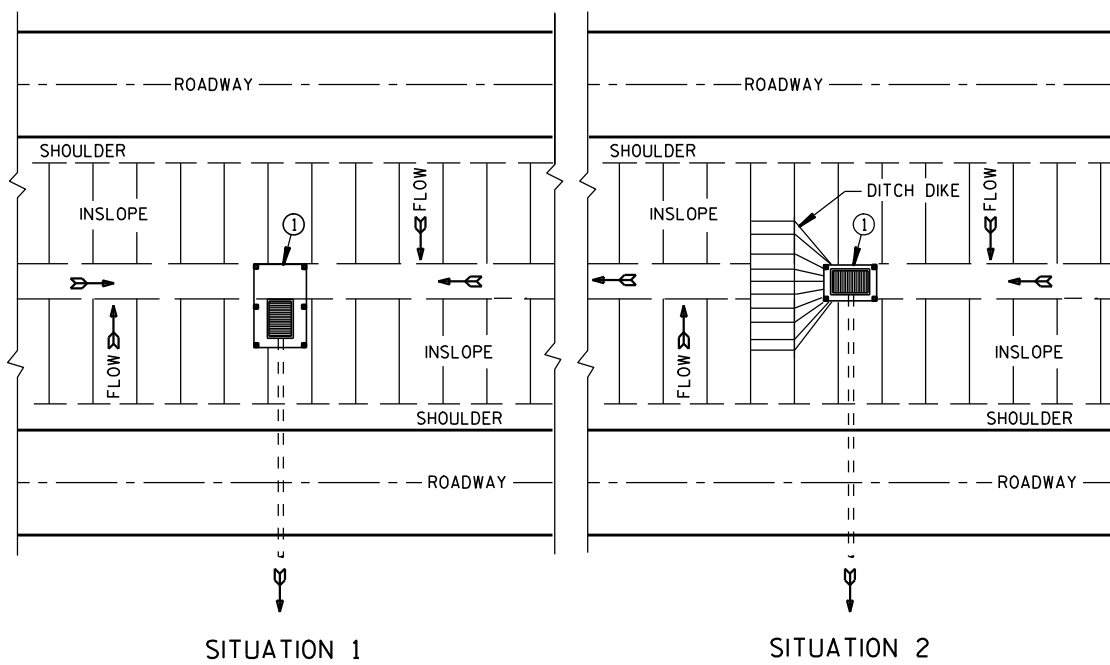
PROJECT NO: 1016-01-61	HWY: IH - 90	COUNTY: JUNEAU	PLAN	SHEET	E
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Standard Detail Drawing List

08E09-06	SILT FENCE
13C09-16A	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-16B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-16C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
15B01-08A	FENCE WOVEN WIRE
15B01-08B	FENCE WOVEN WIRE
15C08-21A	LONGITUDINAL MARKING (MAINLINE)
15C19-07C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15D12-10A	TRAFFIC CONTROL, LANE CLOSURE
15D12-10B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D12-10D	TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM
15D15-06B	TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-06E	TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH



PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE

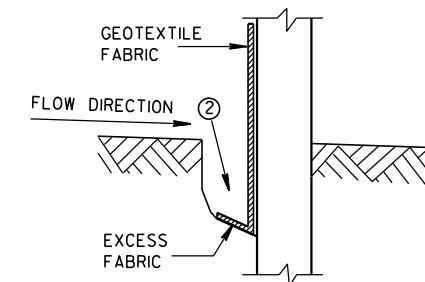


SITUATION 1 SITUATION 2
PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

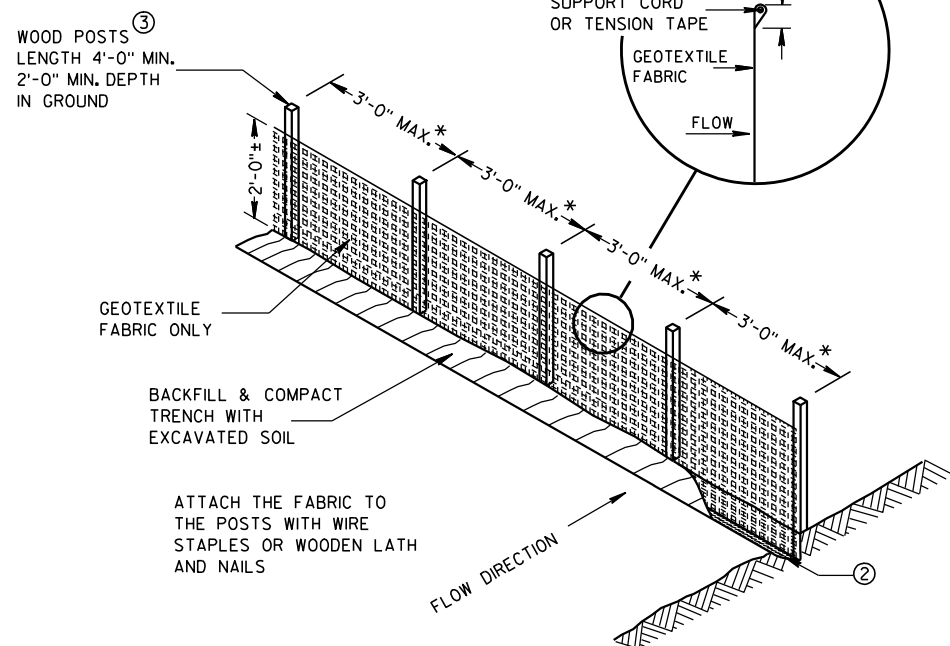
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



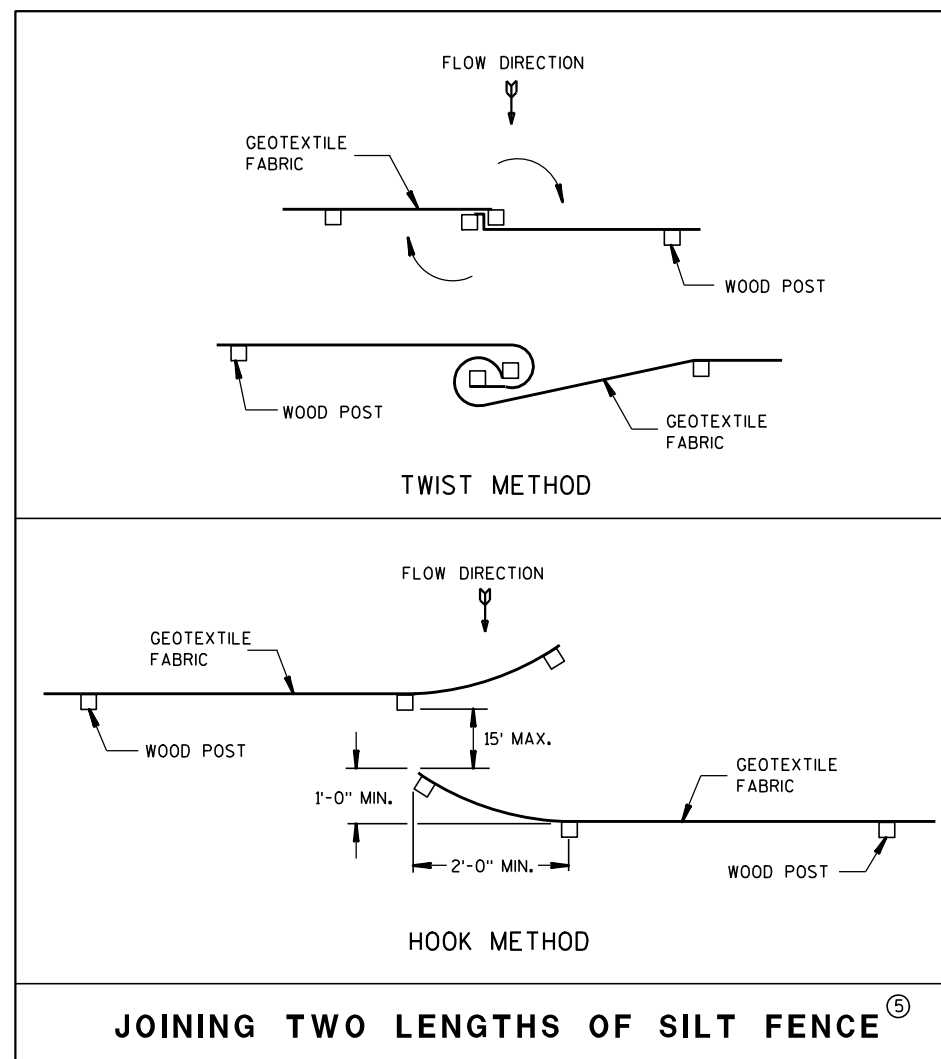
TRENCH DETAIL

NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

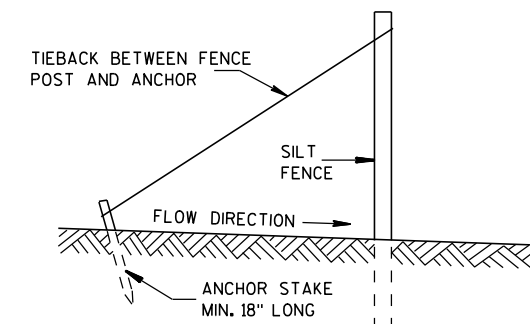


SILT FENCE

* NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.



JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

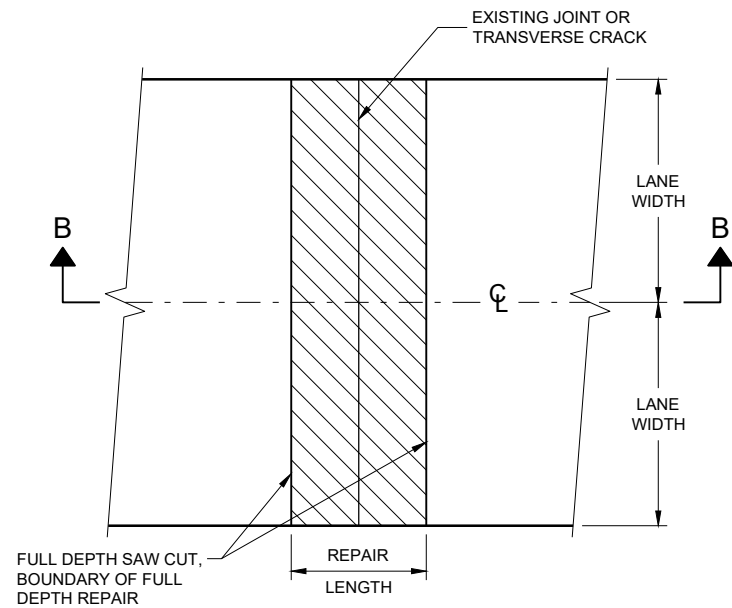
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

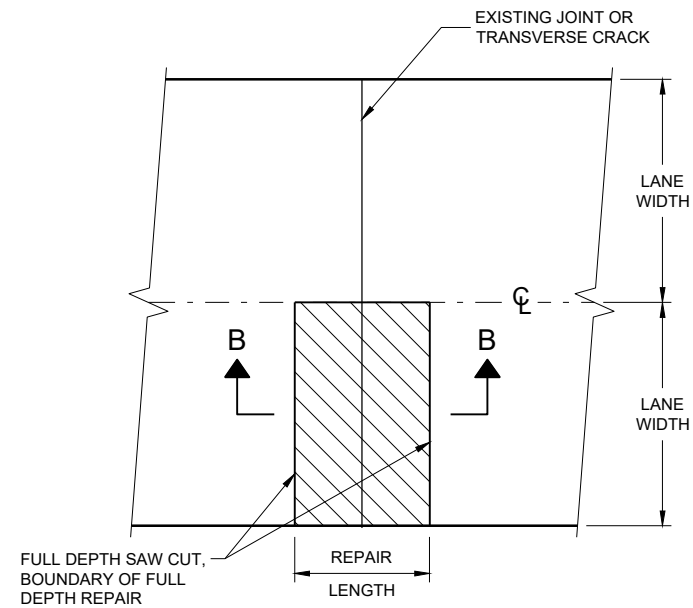
4-29-05
DATE

FHWA

/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

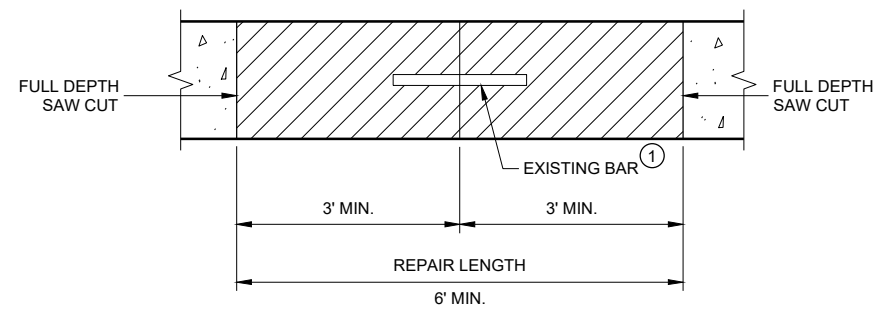


**PLAN VIEW
(DOUBLE LANE REPAIR)**



**PLAN VIEW
(SINGLE LANE REPAIR)**

FULL DEPTH CONCRETE PAVEMENT REMOVAL



**SECTION B - B
CONCRETE REMOVAL**

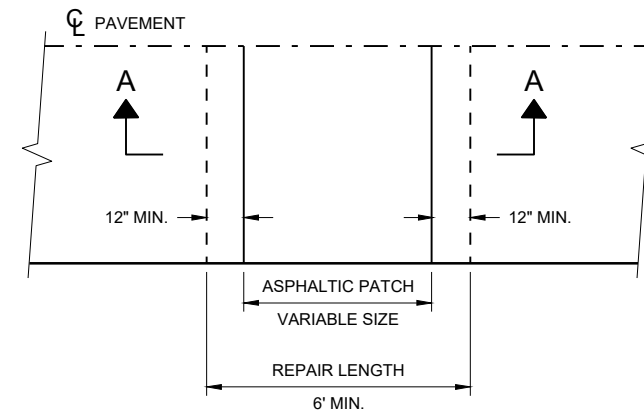
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

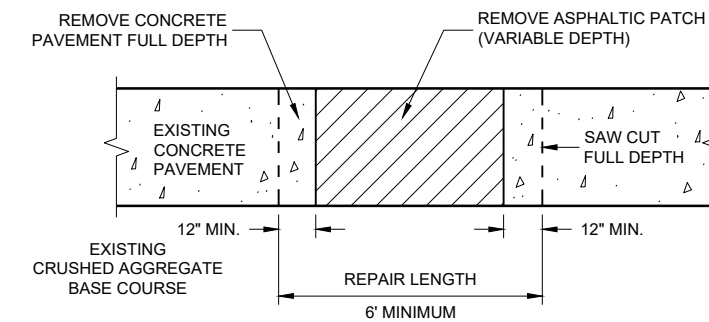
PROVIDE A 6 FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREA TO ADJACENT TRANSVERSE JOINT OR CRACK.

THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NON-DOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

① DOWEL BARS MAY NOT BE PRESENT.



PLAN VIEW

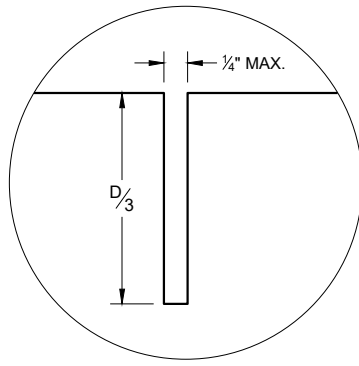


SECTION A - A

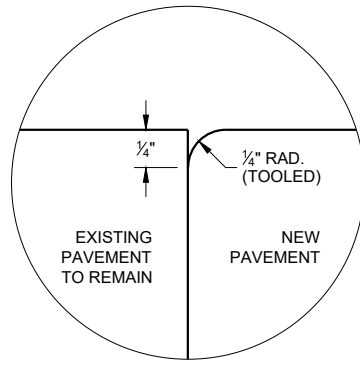
HMA PATCH REMOVAL

**CONCRETE PAVEMENT
REPAIR AND REPLACEMENT**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

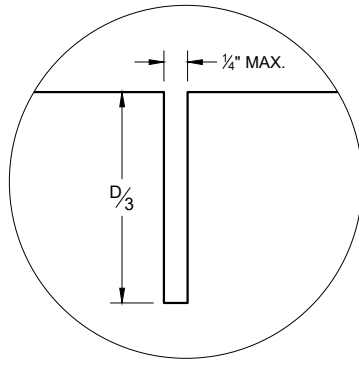


C1

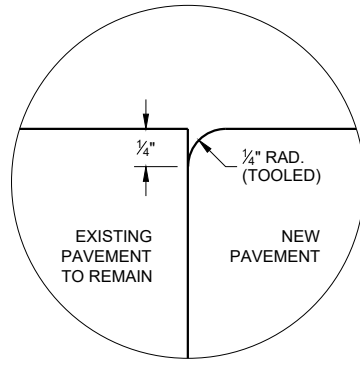


C2

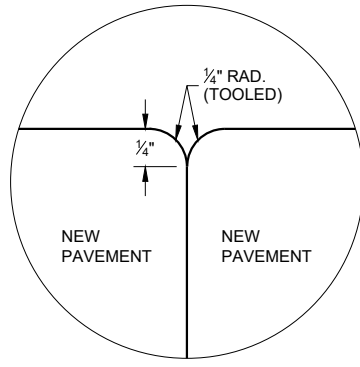
TRANSVERSE JOINTS



L1

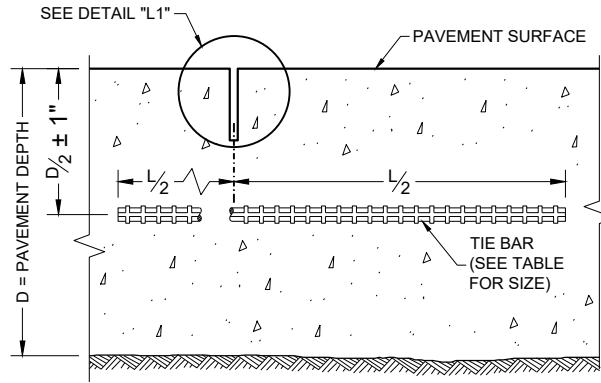


L2

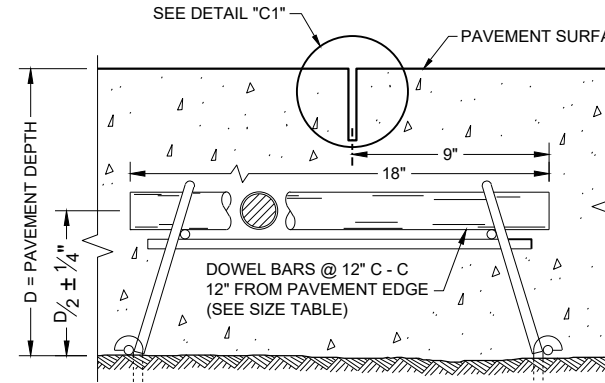


L3

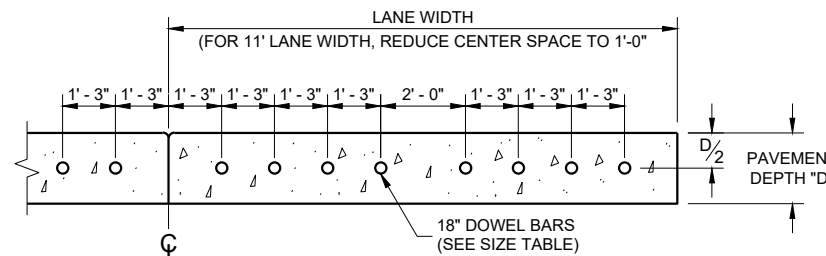
LONGITUDINAL JOINTS



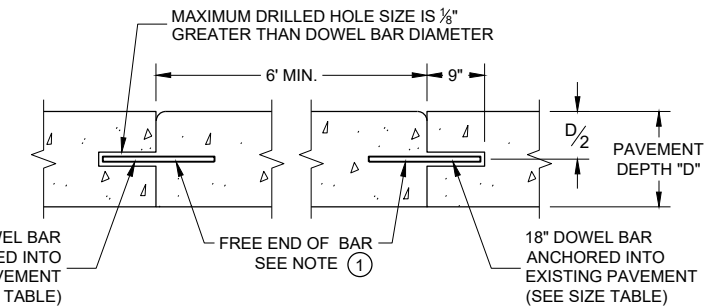
**SECTION C - C
SAWED LONGITUDINAL JOINT**



**SECTION F - F
DOWELED CONTRACTION JOINT**



**SECTION E - E
DRILLED DOWEL BAR CONSTRUCTION JOINT**



SECTION D - D

GENERAL NOTES

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

CONCRETE PAVEMENT REPAIRS OF EXISTING NON-DOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

FOR MULTI-LANE CONCRETE PAVEMENT REPLACEMENTS, PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

- ① APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

TIE BAR TABLE

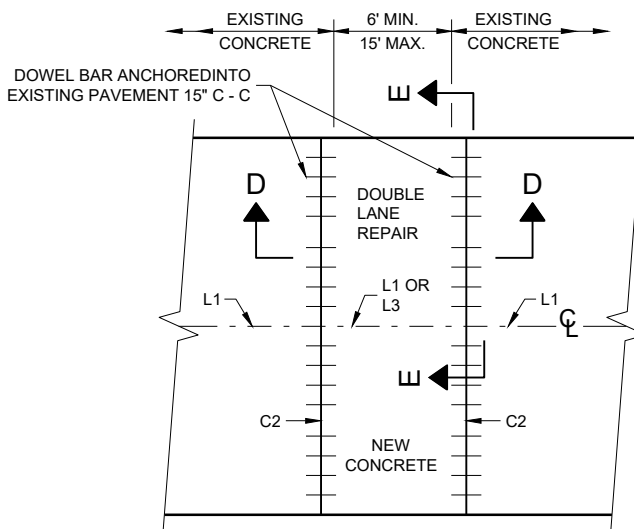
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4*	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

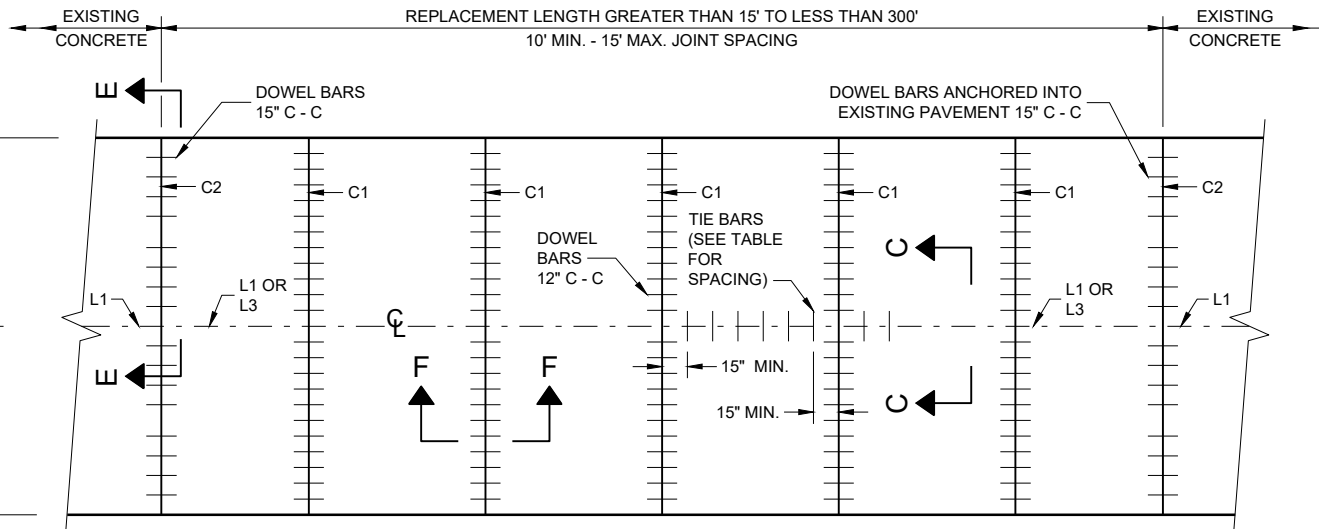
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	DRILLED DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 1/2", 6", 6 1/2"	NONE	NONE	12'
7", 7 1/2"	1"	1"	14'
8", 8 1/2"	1 1/4"	1 1/4"	15'
9" & ABOVE	1 1/4"	1 1/4"	15'



PLAN VIEW

MULTILANE CONCRETE PAVEMENT REPAIR

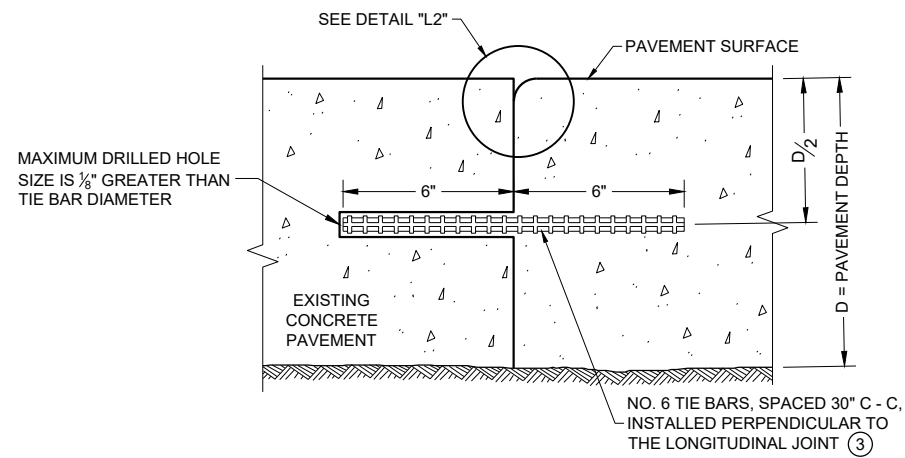


PLAN VIEW

MULTILANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

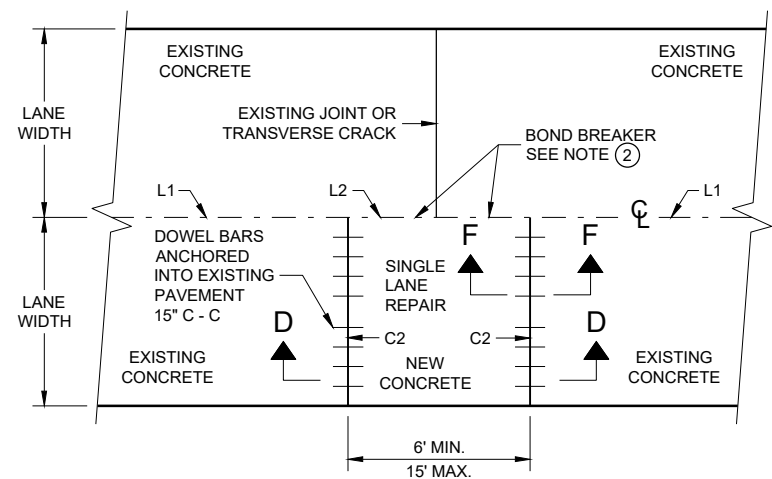
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



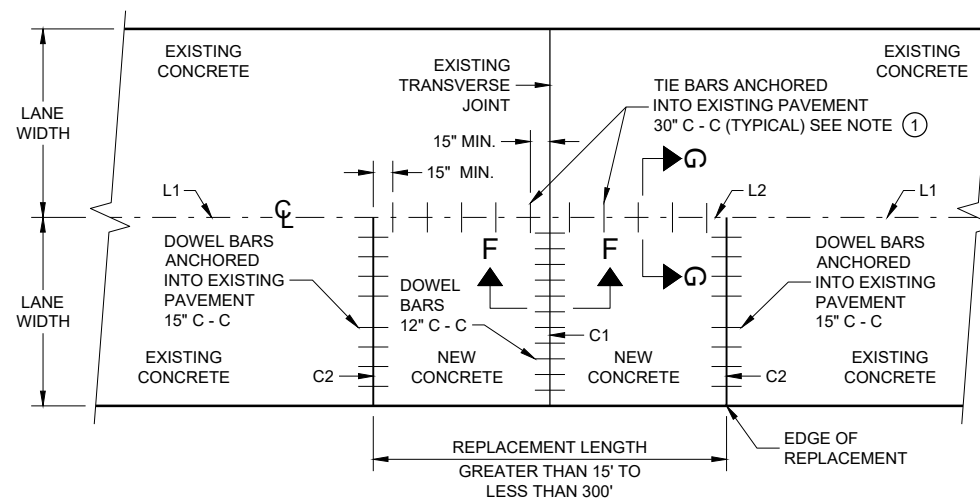
SECTION G - G
TIE BARS ANCHORED INTO EXISTING PAVEMENT

GENERAL NOTES

- ① WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.
- ② USE AN ENGINEER APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.
- ③ ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW
SINGLE LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW
SINGLE LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE REPAIR AND REPLACEMENT

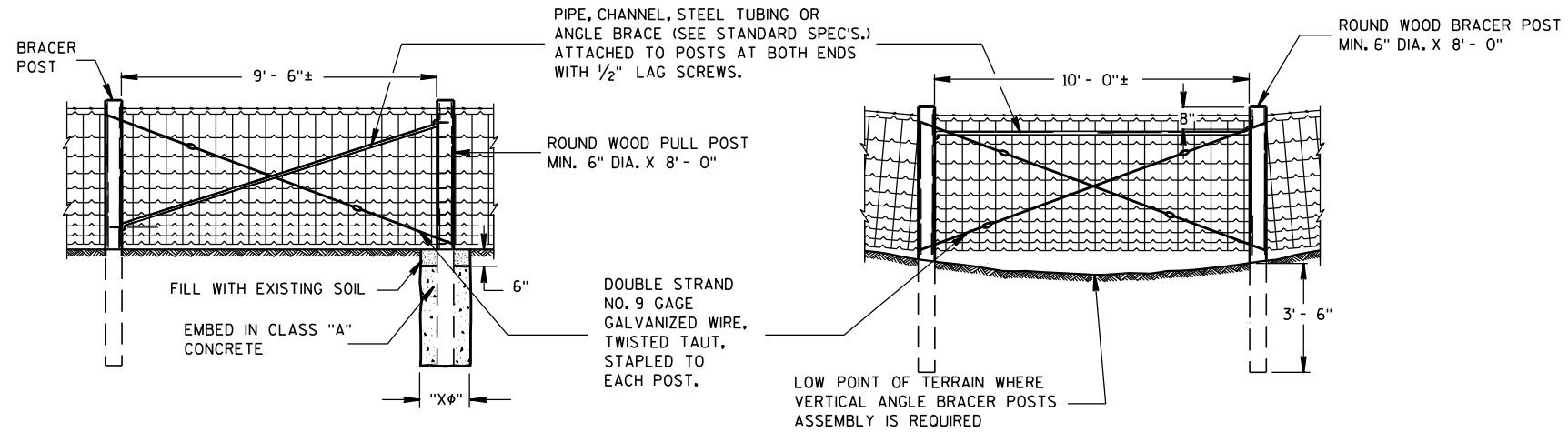
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE: May 2022 /S/ Peter Kemp P.E.
PAVEMENT SUPERVISOR

FHWA

NOTE: PULL OR STRETCHER POST ASSEMBLIES SHALL BE PLACED MIDWAY BETWEEN END POSTS AND CORNER POSTS WHERE A RUN OF FENCE EXCEEDS 660' BUT IS LESS THAN 1,320'. FOR RUNS OF FENCE IN EXCESS OF 1,320' MAXIMUM SPACING OF PULL OR STRETCHER POST ASSEMBLIES SHALL BE 660'± C-C.

ILLUSTRATION SHOWS POSITION OF STANDARD STEEL BRACE, DOUBLE STRAND GALVANIZED WIRE, AND THE POST TO BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM LEFT TO RIGHT. THE BRACES SHALL BE POSITIONED ON THE OPPOSITE DIAGONALS AND THE OPPOSITE POST SHALL BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM RIGHT TO LEFT.



PULL OR STRETCHER POSTS ASSEMBLY

VERTICAL ANGLE BRACER POSTS ASSEMBLY

GENERAL NOTES

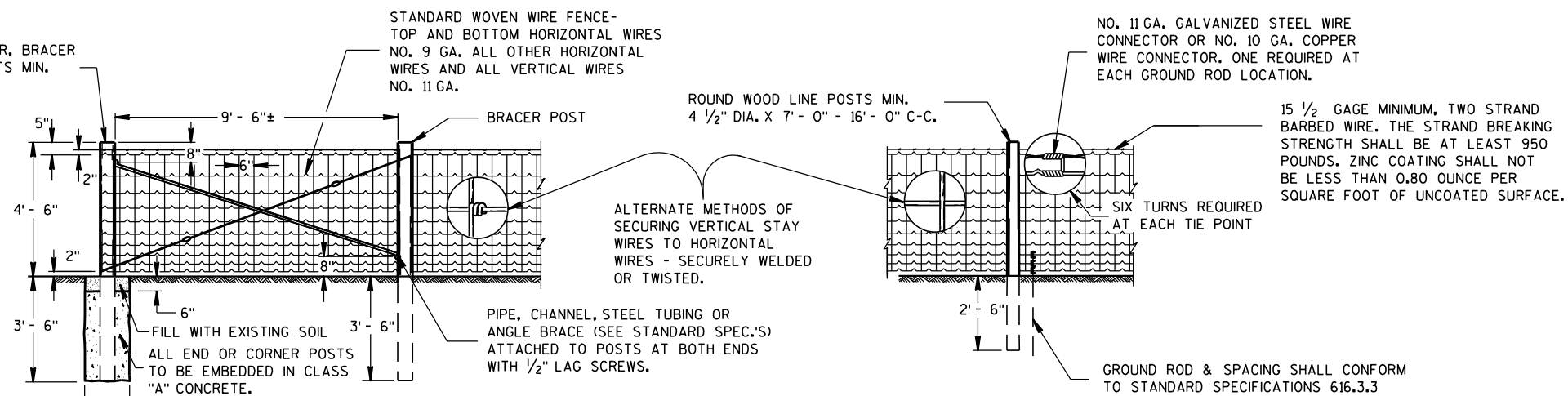
"Xφ" = DIAMETER OF THE POST PLUS 12".

FENCE STAPLES SHOULD NEVER BE DRIVEN VERTICALLY INTO WOOD POSTS (WITH BOTH LEGS PARALLEL WITH THE WOOD GRAIN). DOING SO CAN SEPARATE THE GRAIN AND SIGNIFICANTLY REDUCE THE HOLDING POWER. ROTATING THE STAPLES SLIGHTLY OFF VERTICAL STRADDLES THE GRAIN AND PROVIDES MORE RESISTANCE TO PULL-OUT.

DO NOT STAPLE WIRE TIGHT TO THE LINE POSTS. ALLOW MOVEMENT OF WIRE FOR EXPANSION AND CONTRACTION. STAPLE ARRANGEMENT SHALL BE THE SAME FOR ALL OTHER POSTS EXCEPT THAT THEY SHALL BE DRIVEN TIGHT TO POSTS. ALL STAPLES SHALL BE 2" X 9 GAGE AND SHALL BE MANUFACTURED FROM GALVANIZED WIRE OR HOT DIP GALVANIZED AFTER FORMING. STAPLES SHALL HAVE SLASH-CUT POINTS.

FENCE SHALL BE LOCATED 3'-0" INSIDE THE RIGHT OF WAY LINE UNLESS OTHERWISE INDICATED ON THE PLANS.

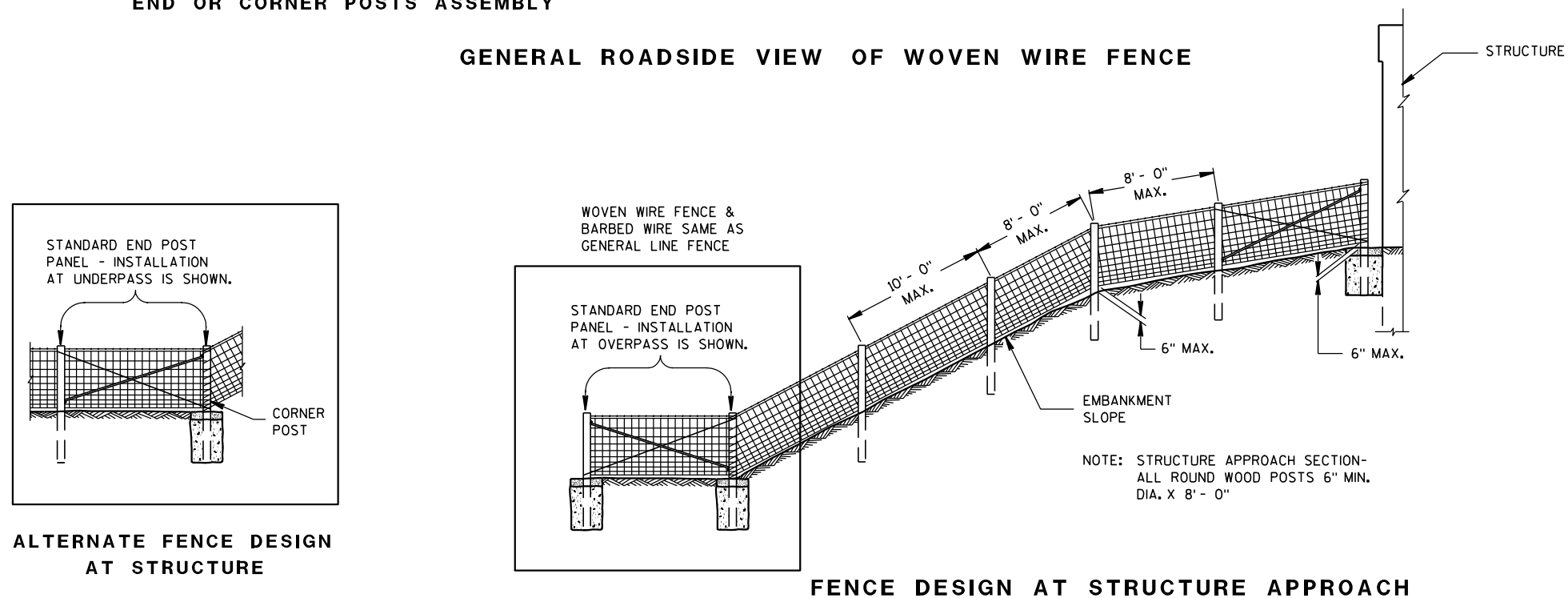
ROUND WOOD END, CORNER, BRACER OR VERTICAL ANGLE POSTS MIN. 6" DIA. X 8' - 0"



END OR CORNER POSTS ASSEMBLY

LINE FENCE CONSTRUCTION

GENERAL ROADSIDE VIEW OF WOVEN WIRE FENCE



ALTERNATE FENCE DESIGN AT STRUCTURE

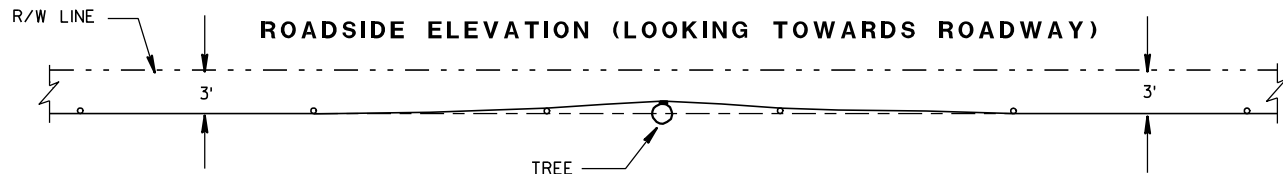
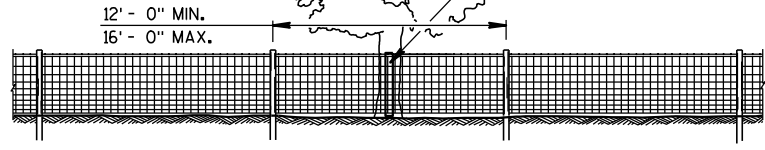
FENCE DESIGN AT STRUCTURE APPROACH

FENCE WOVEN WIRE

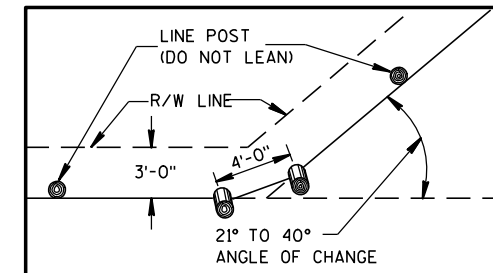
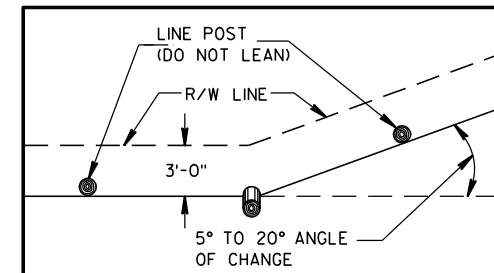
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

NOTE: TREE IN NORMAL FENCE LINE SPECIFICALLY ORDERED BY ENGINEER TO REMAIN IN PLACE.

2" X 6" DOUGLAS FIR OR SO. YELLOW PINE PLACED BETWEEN TREE AND WOVEN WIRE FENCE. WOVEN WIRE FENCE AND BARBED WIRE TO BE STAPLED TO 2" X 6" LIKE AS TO LINE POST. 2" X 6" NOT FASTENED TO TREE.



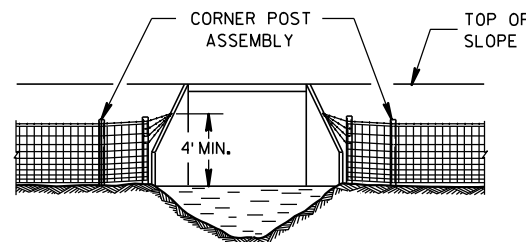
PLAN VIEW
FENCE DESIGN AT TREES REMAINING
IN NORMAL FENCE LINE



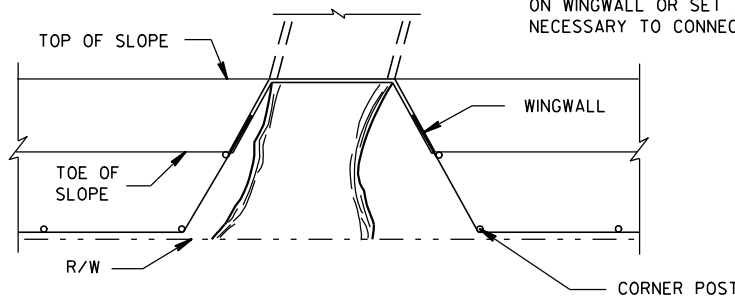
PLAN VIEW
SINGLE POST CORNER
PLAN VIEW
DOUBLE POST CORNER
RIGHT OF WAY LINE CHANGE 40° AND LESS

NOTE: SINGLE AND DOUBLE POSTS SHALL BE A MIN. 6" DIA. X 8'-0" WITH A LEAN OF 4" TOWARD THE OUTSIDE OF THE CURVE.

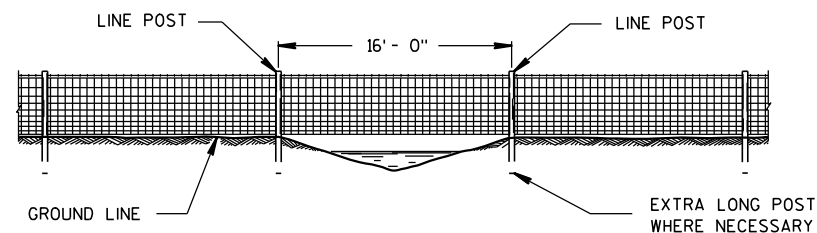
WHEN THE RIGHT OF WAY LINE CHANGE IS MORE THAN 40° USE THE CORNER OR STRETCHER POSTS ASSEMBLY.



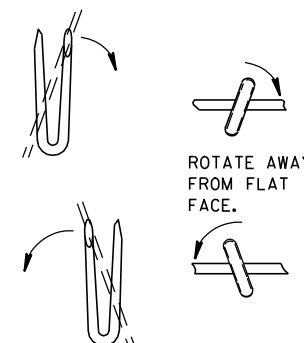
NOTE: PLACE A MINIMUM OF 4 STRANDS OF BARBED WIRE, 6" MAXIMUM CENTERS IN FAN SHAPE CONNECTED TO AN EYE BOLT ON WINGWALL OR SET A LONE POST WHEN NECESSARY TO CONNECT BARBED WIRE.



FENCE INSTALLATION TO WINGWALLS

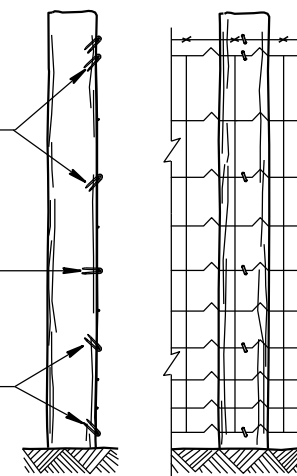


FENCE CONSTRUCTION OVER STREAM
COURSES OF 15 FT. OR LESS IN WIDTH



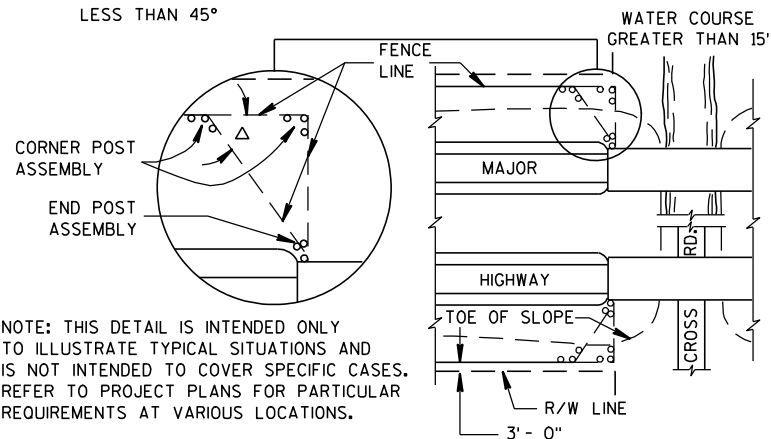
LINE POST

NOTE: WHEN POSTS ARE DRIVEN THE SMALL END SHALL BE DOWN.

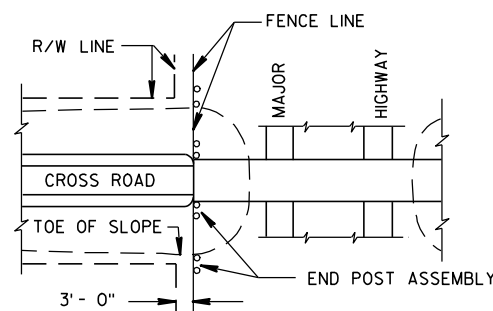


END ELEVATION
FARM SIDE ELEVATION
FENCE MOUNTING DETAIL

NOTE: Δ NOT LESS THAN 45°



PLAN VIEW
MAJOR HIGHWAY OVERPASS OR STREAM COURSE
CROSSING OF GREATER THAN 15 FT. IN WIDTH



PLAN VIEW
MAJOR HIGHWAY UNDERPASS

FENCE LOCATION AT STRUCTURES

FENCE WOVEN WIRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION




APPROVED
4/4/2008 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA

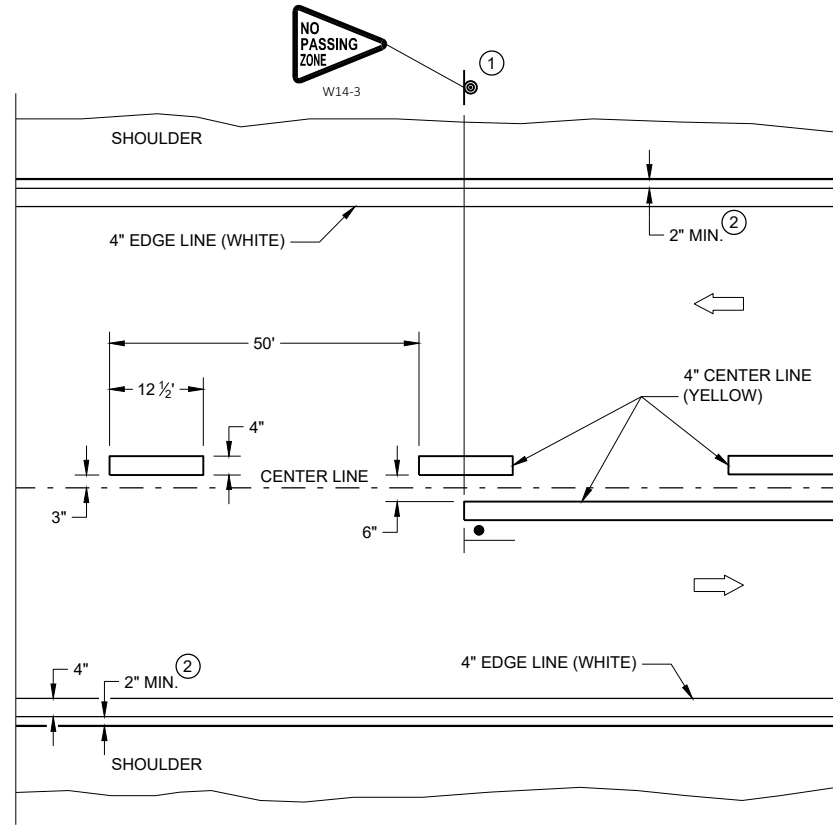
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

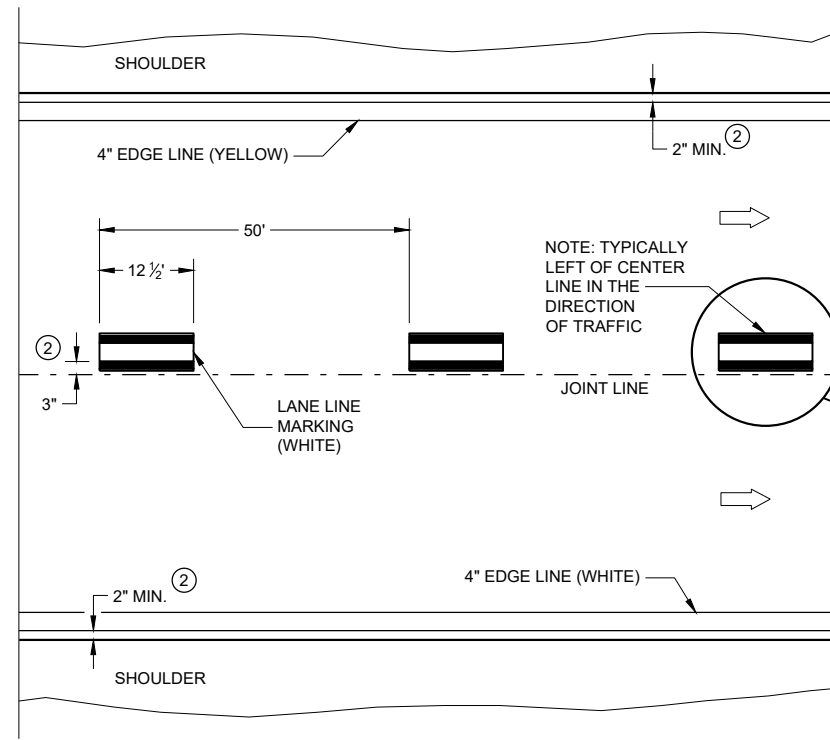
- ① LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
- ② MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

-  "T" MARKING
-  SIGN ON PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC

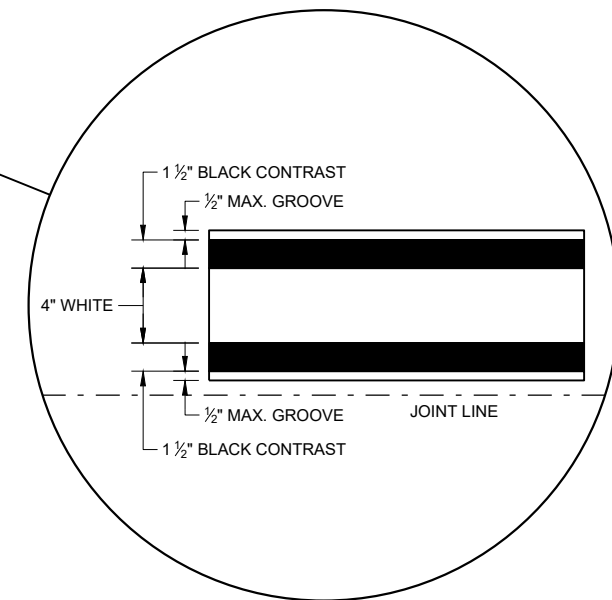


TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING








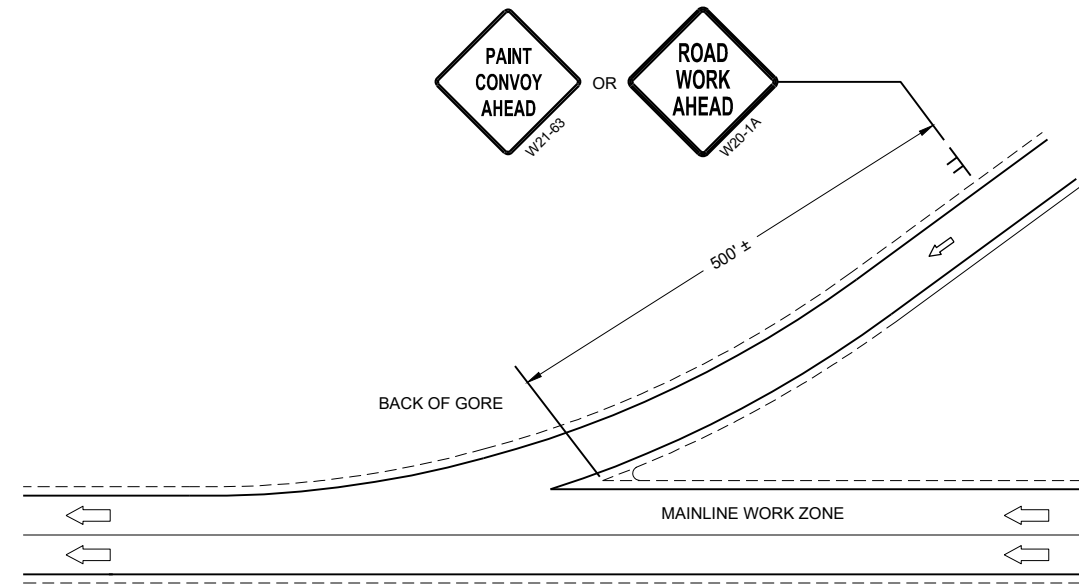
PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE: May 2022 /S/ Jeannie Silver
STATEWIDE SIGNING AND MARKING ENGINEER

LEGEND

- V1 MARKING VEHICLE
- V2 SHADOW VEHICLE
- V3 TRAIL VEHICLE
-  TRUCK MOUNTED ATTENUATOR (TMA)
-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC
-  FLASHING ARROW PANEL (MERGE)
-  FLASHING ARROW PANEL (CAUTION)



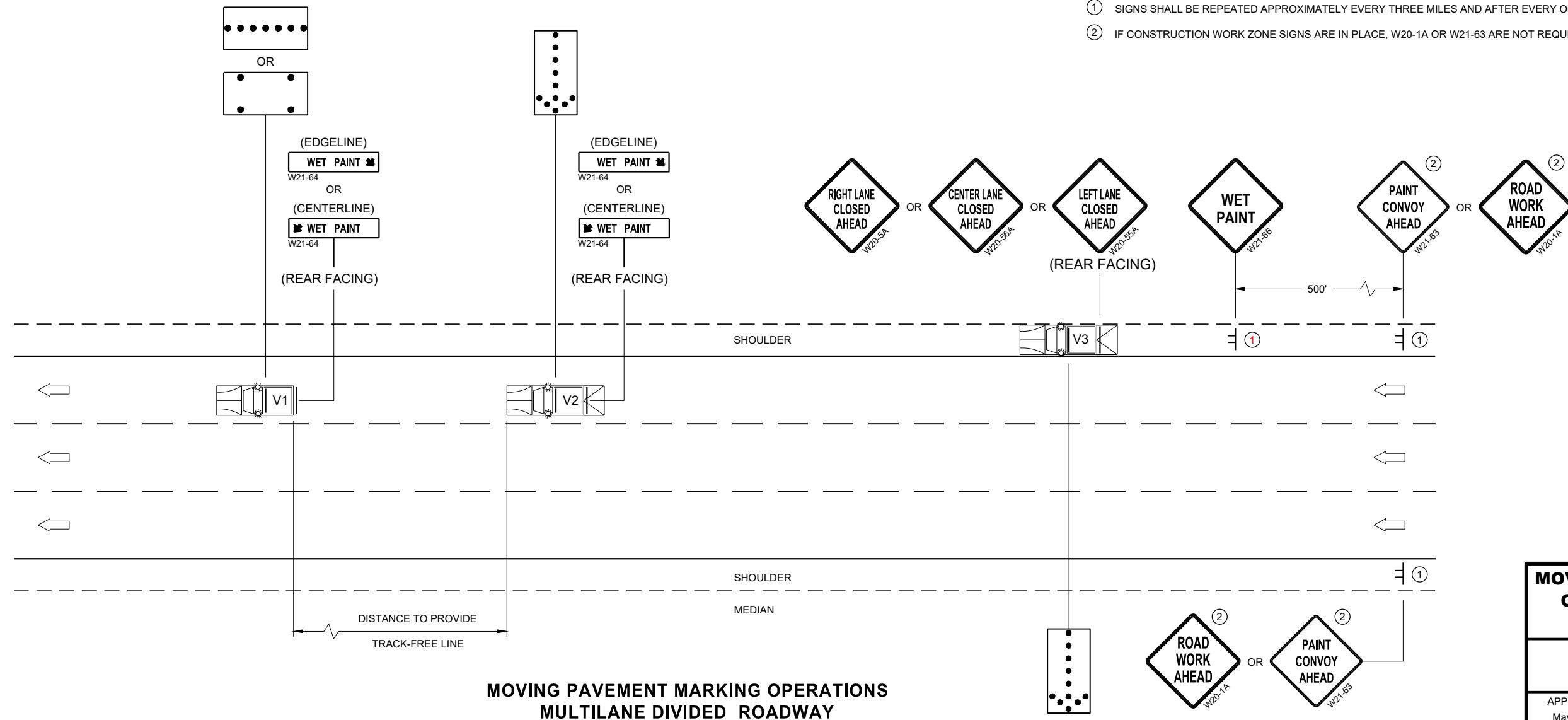
GENERAL NOTES

- ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.
- ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.
- DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.
- WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.
- WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.
- USE AN ATTENUATOR ON THE REAR MOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.
- IF THE SHOULDER IS TOO NARROW TO ACCOMMODATE THE LAST TRAILING VEHICLE, THE VEHICLE SHOULD STRADDLE THE EDGE LINE.
- WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC
- CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.
- CONES SHALL BE A MINIMUM HEIGHT OF 28" FOR WET PAVEMENT MARKINGS

- ① SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY ON RAMP.
- ② IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.

6

6



SDD 15C19 - 07C

SDD 15C19 - 07C

**MOVING PAVEMENT MARKING OPERATIONS
MULTILANE DIVIDED ROADWAY**

MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2022 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
<small>FHWA</small>	

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48" x 48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED OR AS APPROVED BY THE ENGINEER.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.










WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

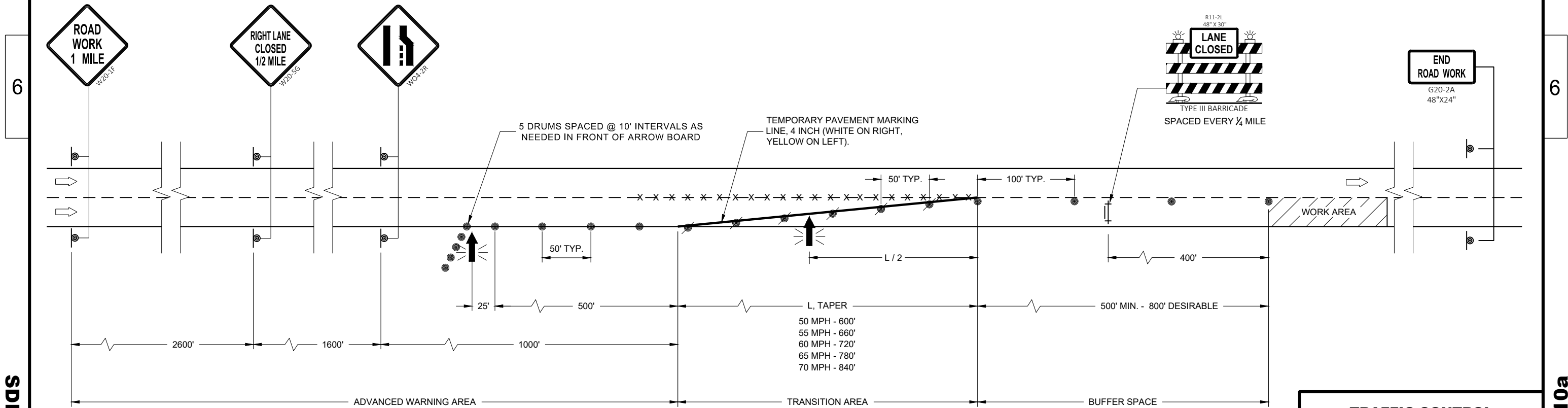
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS

NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  TRAFFIC CONTROL DRUM
-  TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
-  TYPE III BARRICADE WITH ATTACHED SIGN
-  TYPE "A" WARNING LIGHT (FLASHING)
-  REMOVING PAVEMENT MARKINGS
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLASHING ARROW BOARD



TRAFFIC CONTROL LANE CLOSURE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED February 2022 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

SDD 15D12 - 10a

SDD 15D12 - 10a

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED OR AS APPROVED BY THE ENGINEER.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.










WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

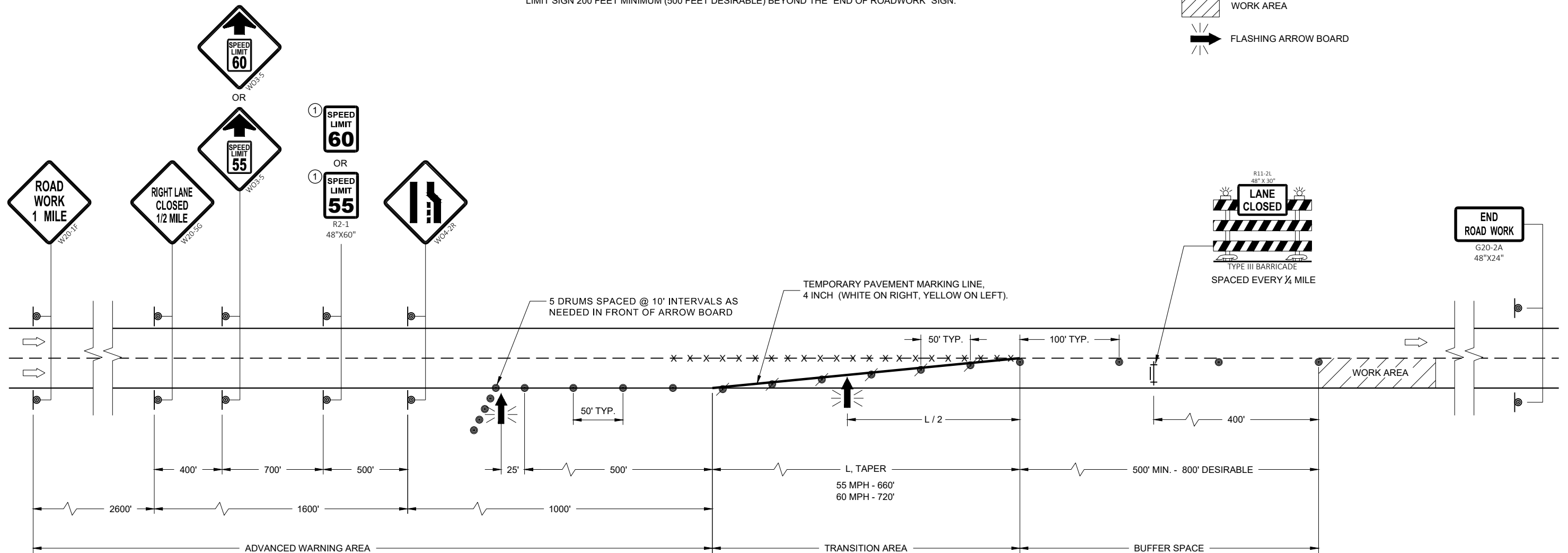
① A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES. INCLUDE A RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIRABLE) BEYOND THE "END OF ROADWORK" SIGN.

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  TRAFFIC CONTROL DRUM
-  TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
-  TYPE III BARRICADE WITH ATTACHED SIGN
-  TYPE "A" WARNING LIGHT (FLASHING)
-  REMOVING PAVEMENT MARKINGS
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLASHING ARROW BOARD

6

SDD 15D12 - 10b














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SDD 15D12 - 10b

TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED February 2022 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  TRAFFIC CONTROL DRUM
-  TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
-  TYPE III BARRICADE WITH ATTACHED SIGN
-  TYPE "A" WARNING LIGHT (FLASHING)
-  REMOVING PAVEMENT MARKINGS
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLASHING ARROW BOARD
-  PORTABLE TRAFFIC SENSOR (PTS)
-  FLASHING BEACON SIGN

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS, INCLUDING FBS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48" x 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED OR AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINE IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS

AND NIGHTS.
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

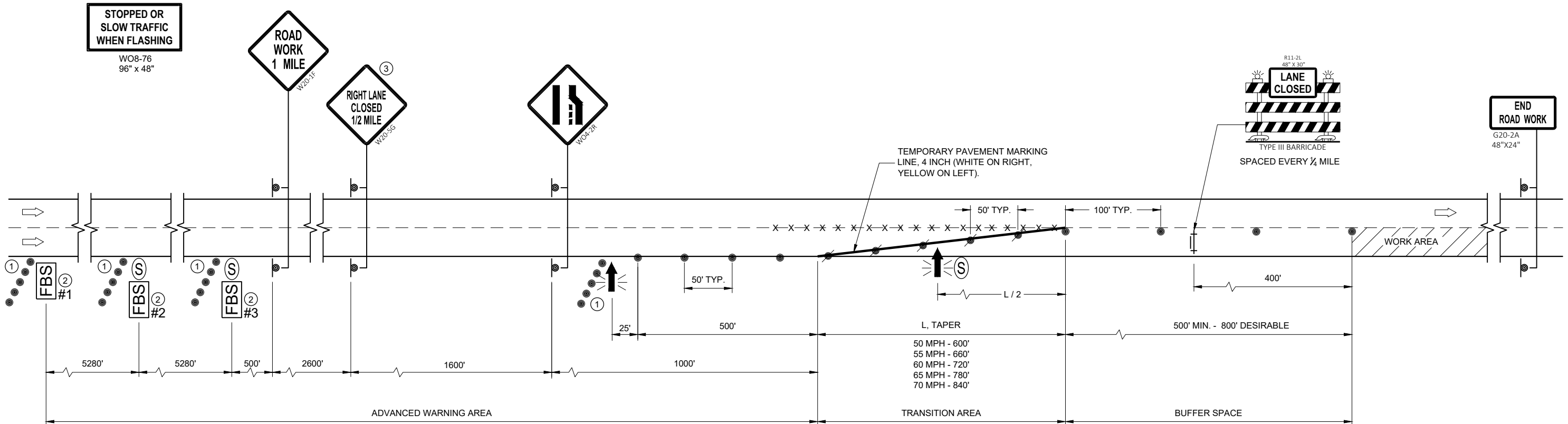
CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

PORTABLE TRAFFIC SENSOR (PTS) MAY BE MOUNTED ON THE FBS, ARROW BOARD OR OTHER TRAILER DEVICES.

- ① 5 DRUMS SPACED AT 10 FOOT INTERVALS AS NEEDED.
- ② IF THERE ARE MORE THAN TWO LANES OR IF SPECIFIED IN THE PLANS, PLACE FBS ON BOTH SIDES OF THE ROADWAY.
- ③ IF THERE IS AN APPROVED TEMPORARY SPEED DECLARATION, ADD WO-3-5 SIGNS 400 FEET AFTER THE W20-5G SIGNS AND ADD R2-1 SIGNS (48"x60") 700 FEET AFTER THE WO3-5 SIGNS. A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES. INCLUDE A "RESUME SPEED LIMIT" SIGN 200 FEET MINIMUM (800 FEET DESIRABLE) BEYOND THE G30-3A "END ROAD WORK" SIGN.

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SDD 15D12 - 10d

SDD 15D12 - 10d








TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022 /S/ Erin Schwark
DATE WORK ZONE ENGINEER

FHWA

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  SIGN ON TEMPORARY SUPPORT
-  TRAFFIC CONTROL DRUM
-  TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
-  REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
-  TYPE III BARRICADE WITH ATTACHED SIGN
-  DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS /OR DRUMS IN THE GORE BETWEEN THE EXIT RAMP AND MAINLINE TRAFFIC.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

- ① EXTEND THE LENGTH OF THE MERGE AREA IF THE ENTERING (DESIGN) SPEED OF THE RAMP IS LESS THAN 50 MPH OR IF THE MAINLINE GRADE EXCEEDS ±2.2%.
- ② END TEMPORARY PAVEMENT MARKING LINE AT ½ THE LENGTH OF FULL WIDTH OF THE ACCELERATION LANE.

(PLACE 800' IN ADVANCE OF GORE)



TEMPORARY PAVEMENT MARKING LINE, 8 INCH WHITE

REPAVE EXISTING SHOULDER IF INDICATED ELSEWHERE IN PLANS

50:1 TAPER

LANE CLOSED

15' (TYP.)

50' (TYP.)

TEMPORARY PAVEMENT MARKING LINE, 4 INCH WHITE (3' LINE, 9' GAP)

600' MIN. ①

100' (TYP.)

12'

25' (TYP.)

TEMPORARY PAVEMENT MARKING LINE, 4 INCH WHITE

300' TAPER



(PLACE 1000' IN ADVANCE OF WO3-2)



(PLACE 500' IN ADVANCE OF GORE)

300'

RAMP PAVEMENT

TYPICAL 5' ASPHALT SHOULDER

TYPICAL 3' GRAVEL SHOULDER

REPAVE EXISTING SHOULDER IF INDICATED ELSEWHERE IN PLANS

TEMPORARY PAVEMENT WIDENING REQUIRED

TEMPORARY PAVEMENT DETAIL

(EXISTING RAMP DIMENSIONS MAY VARY, ADJUST TEMPORARY PAVEMENT ACCORDINGLY)

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

LEGEND

- ⊙ SIGN ON PERMANENT SUPPORT
- ⊞ SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- ⦿ TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- ×-×-× REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- ⊞ TYPE III BARRICADE WITH ATTACHED SIGN
- ➡ DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

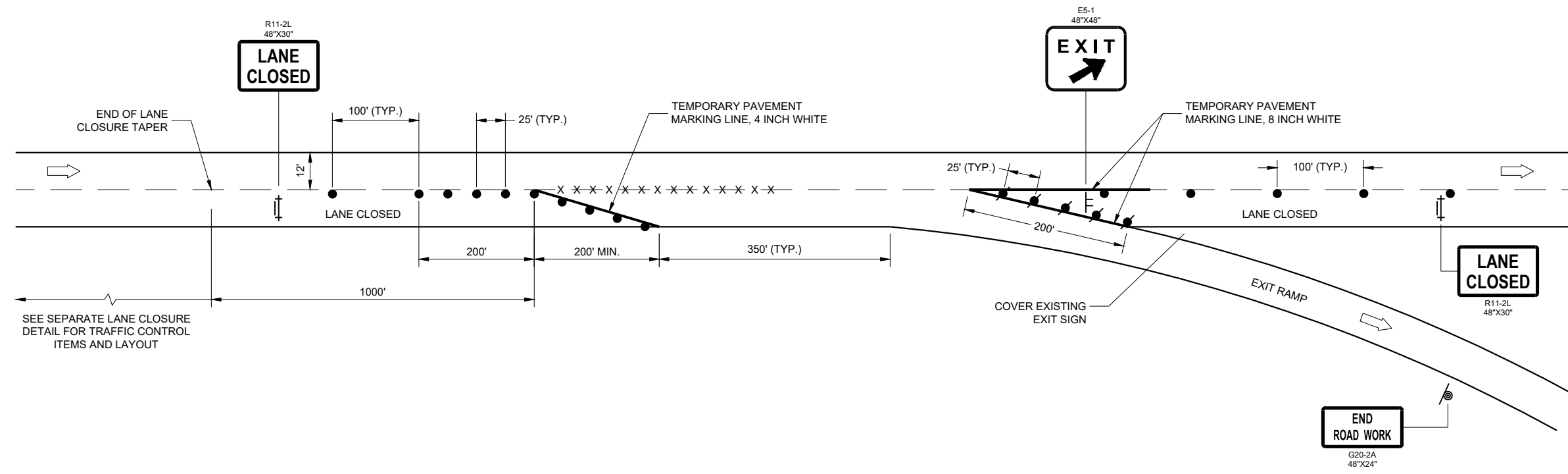
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE EXIT RAMP AND MAINLINE TRAFFIC.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.



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SDD 15D15 - 06e

SDD 15D15 - 06e

TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED February 2022 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

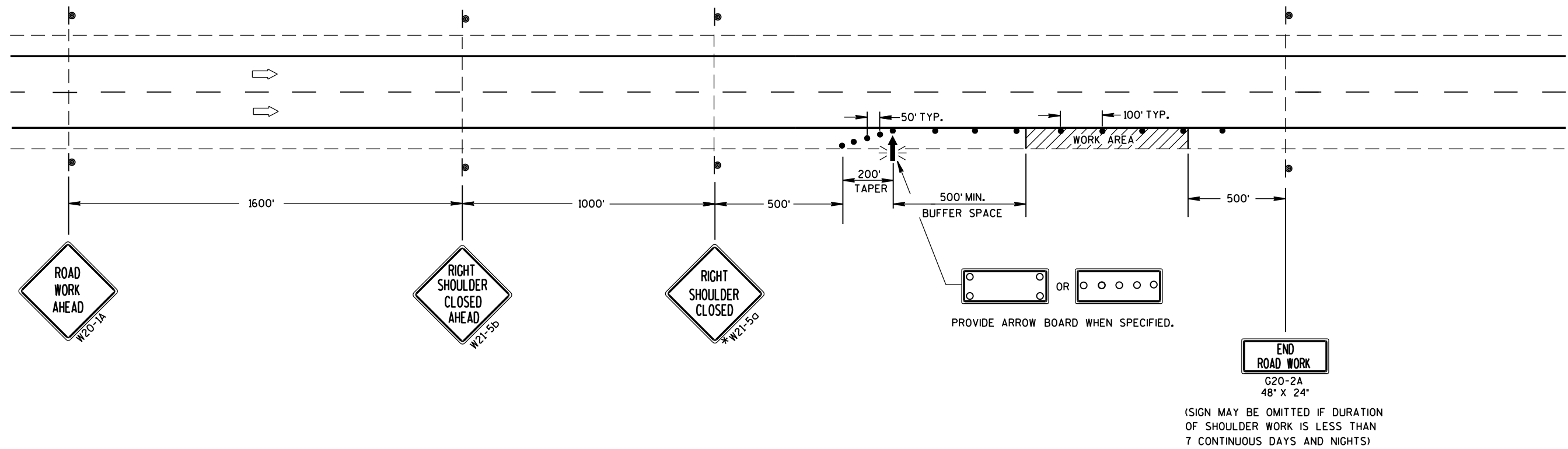
CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-50 SIGN MAY BE OMITTED.

LEGEND

- TRAFFIC CONTROL DRUM
- ⊙ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ⚡ FLASHING ARROW BOARD
- ▨ WORK AREA



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2016 DATE	/s/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	

Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions through innovation and exceptional service.

<http://www.dot.wisconsin.gov>